2021

AgriFin Accelerate

5TH ANNUAL LEARNING EVENT REPORT

APRIL 26 - 29 | 2021

› Impact and Innovation

CONTENTS

EXECUTIVE SUMMARY

In the past year, under the tremendously difficult situation created by COVID-19, Mercy Corps global teams have reached more than 37 million people in over 40 countries. AgriFin plays a vital role in this great effort to support the most vulnerable communities in the midst of COVID-19 and Desert Locust emergencies. Mercy Corps AgriFin represents $33 million programs working in 5 countries: Kenya, Tanzania, Ethiopia, Zambia and Nigeria. These programs work with underserved smallholder farmers living on less than $2.50/day, with outreach to 40% women. AgriFin worked with more than 150 partners in the last 6 years to help them design, test and scale digital services.

AgriFin's 5th Annual Learning Event (ALE) was a virtual event held from Monday 26 – Thursday 29 April 2021 and brought together over 850 participants engaging in 2 plenaries, 12 thematic sessions, 12 award presentations and 147 marketplace booths.

This four-day conference focused on impact & innovation and convened the industry's top experts and practitioners. It hosted over 80 speakers, representing a diverse group of organizations dedicated to driving transformational change in the agriculture sector around the globe. The themes explored ranged from the impact of COVID-19 and Desert Locusts, to the role of digital platforms in technology innovation, bundled financial and non-financial services, and impact research.

While a key focus of the week was reflecting on lessons learnt, it also looked to the future and key shifts in the areas of gender transformation and climate change – reflected in the opening and closing plenaries. The AgriFin team also used the opportunity to highlight the exceptional work of it's partners through 12 recognition awards, presented by it's Advisory Council and Donors.

Huge thanks to AgriFin's major funders, the Mastercard Foundation and Bill & Melinda Gates Foundation.

Learn more

Mercy Corps AgriFin

Access ALE 2021

Recordings and resources

AGRIFIN IMPACT STATISTICS

A summary of key figures and milestones for the program

OVERVIEW OF AGRIFIN PROGRAM

Mercy Corps AgriFin represents

$33,000,000

programs working in 5 countries: Kenya, Tanzania, Ethiopia, Zambia and Nigeria.

These programs work with underserved small-holder farmers living on less than $2.50/day.

AgriFin worked with more than 150 partners in the last 6 years to help them design, test and scale digital services.

FIVE CORE AREAS OF INNOVATION

- **Smart Farming & Ag Advisory**
- **Alternative Data & Credit Scoring**
- **Financial Products & Services**
- **Digital Markets**
- **Logistics & Distribution**

40%
outreach to women

5.6M
farmers registered

16M+
smallholder farmers were reached with regards to important information, services and support on digital channels

With the target being to reach out to 2,000,000 Smallholder Farmers on digital channels and services in the past 6 years, AgriFin has proudly exceeded the goal with 98% active use.

AFA website

IMPACT STUDIES CARRIED OUT IN YEAR 6

Note that 2020/2021 might be the least desirable year to measure impact because of COVID-19 and Desert Locusts.

This year, AgriFin has launched 10 agile impact studies, an ecosystem evaluation, 4 gender deep dives, and a panel study with DigiFarm.

Some high-level learnings and examples were shared, with more detailed impact evidence coming through during the 3 day learning event.

YEAR 6 STATISTICS

15
Major impact studies

10
Lean data impact studies

4
Gender impact studies

EVENT STATISTICS

A snapshot of the 5th Annual Learning Event in figures

2
Plenaries

12
Sessions

12
AgriFin Awards

80+
Speakers

136
Online attendees for each session on average

140+
Youtube (records) reviews per session on average

140+
AgriFin partners engaged

850
Registered attendees

CONFERENCE AGENDA

DAY ONE

Opening Plenary

Six Years of AgriFin Evidence, Impact and Innovation

Leesa Shrader - *Moderator*
H.M. Queen Máxima of the Netherlands (Pre-recorded), Tjada D'Oyen McKenna, Thule Lenneiye,

Gender | Panel Discussion | Plenary

APRIL 26, 2021 | 5:00 - 6:30 PM EAT

DAY TWO

The Future of Rural Employment & Building Back Better

Leesa Shrader | Ben Taylor, Chandrakanth PS, Christabell Makokha, Elena Holtkotte, Hafsah Jumare, Jamie Anderson, Mikael Hook, Nathanial Peterson, Peninah Wanja, Ravi Chhatpar

Gender | Panel Discussion | Plenary

APRIL 27, 2021 | 11:00 - 12:30 PM EAT

Improving Agriculture Data Sharing to Increase Digital Climate Smart Agriculture Adoption

Victoria Clause - *Moderator* | Boniface Akuku, Beza Bogale, Georgia Barrie, Inbal Becker-Reshef, Matthew Shakhovskoy,

AI | Big Data | Climate Change | Insights | Panel Discussion

APRIL 27, 2021 | 1:00 - 2:00 PM EAT

Moonshot technology innovations tackling climate change with smallholder farmers

Victoria Clause - *Moderator* | John Mundy - *Moderator*
Aadith Moorthy, Aaron Jay Fossett, Alex Zhuk, Annalyse Kehs, Beth Woodlams, David Hughes, Jeremy Cordingley, Katie Reberg, Tom Mason

Technology | Panel Discussion | Climate Change | Innovation | Pre-recorded video

APRIL 27, 2021 | 3:00 - 4:00 PM EAT

Farmer Level Impact

Evidence base for innovations reaching smallholder farmers

Collins Marita - *Moderator* | Joseph Dalley, Albert Wasike, David Bergvinson, Folu Okunade, Jan Willem, Karen Vandergaag, Lang Gao, Patricia Gichinga, Prashant Maheshwary

Impact | Panel Discussion

APRIL 27, 2021 | 4:00 - 5:00 PM EAT

Gender Impact and Learning

Exploring Key Insights and Next Steps

Lydia Wafula - *Moderator* | Albert Wasike, Edna Gathigia, Hannah Reed, Jessica Chisompola, Lonah Wanjama, Mary Wanjohi, Maryam Yusuf, Maureen Gitata, Osman Siddiqi

Gender | Impact | Panel Discussion

APRIL 27, 2021 | 6:00 - 7:00 PM EAT

DAY THREE

Digitizing Field Force
The Opportunities and Challenges

Emmanuel Makau - *Moderator*
Abidah Ferej, Charlie Habershon, Emmanuel Makau, Jennifer Githinji, Karen Vandergaag, Sriram Bharatam

Field Force | Insights | Interactive Session

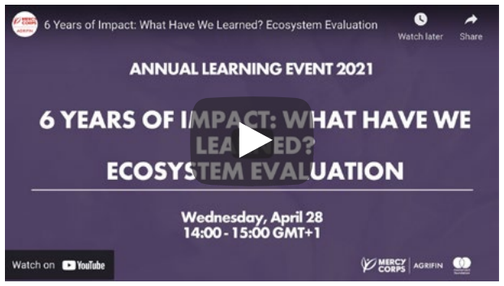
APRIL 28, 2021 | 1:00 - 2:00 PM EAT

Digital Platforms for Agriculture

Sieka Gatabaki - *Moderator*
Clara Colina, Flavia Howard, Marc Hümmer

Platforms | Insights | Interactive Session

APRIL 28, 2021 | 2:00 - 3:00 PM EAT



6 years of Impact: What Have We Learned?
Ecosystem Evaluation

Collins Marita - *Moderator* | Jerioth Mwaura, Matthew Klick, Mikael Hook, Nathanial Peterson, Philip Thigo

Impact | Panel Discussion | Strategy

APRIL 28, 2021 | 4:00 - 5:00 PM EAT

Designing for Gender Transformation and Equity

Leesa Shrader - *Moderator* | Collins Marita- *Moderator*
Betty Muriithi - *Moderator* | Jamie Anderson - *Moderator*
Elias Nure - *Moderator* | John Mundy - *Moderator*
Lydia Wafula - *Moderator* , Vicki Wilde, Ravi Chhatpar, Kristin Peterson

Gender | Interactive Session | Strategy

APRIL 28, 2021 | 5:00 - 6:30 PM EAT

DAY FOUR

Climate Change, Financial Inclusion and Digital Climate Smart Agriculture: Research and Evidence Based Strategies

John Mundy - *Moderator* | Victoria Clause - *Moderator*
Cristina Rumbaitis Del Rio, Matthew Shakhovskoy, Sonia Kuguru, Tyler Ferdinand,

Climate Change | Panel Discussion | Strategy

APRIL 29, 2021 | 12:00 - 1:00 PM EAT

An introduction to the Open Content Agriculture Platform (OCAP): A Digital Public Good

Elias Nure - *Moderator*
Boniface Akuku, Elizabeth Mudogo, Kalvince Otieno, Kristin Peterson, Maída Hernández, Phil Abrahams, Ravi Chhatpar

Stategy | Insights | Interactive Session

APRIL 29, 2021 | 2:00 - 3:00 PM EAT

Emergency Digital Response: What we have learned from the combined COVID-19 and Desert Locust Emergencies?

John Mundy - *Moderator* | Claire Rhodes, Guy Mondjii, Katie Reberg, Kristin Peterson, Louis Graham, Patricia Gichinga, Temesgen Gebeyehu

COVID-19 | Insights | Interactive Session | Emergency Response

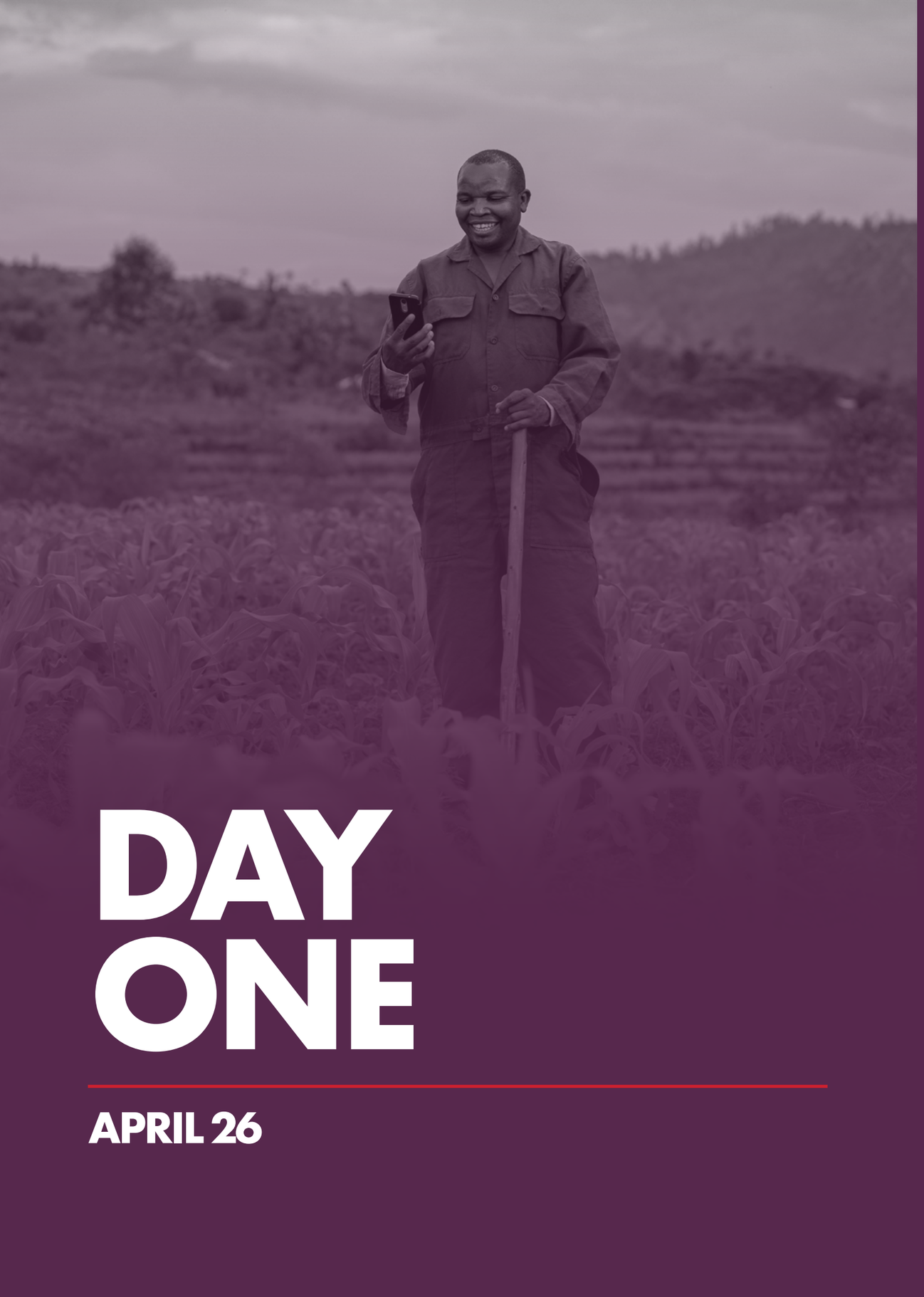
APRIL 29, 2021 | 4:00 - 5:00 PM EAT

Closing Plenary: Leaning into Climate Solutions

Victoria Clause - *Moderator* Leesa Shrader - *Moderator*
Sieka Gatabaki - *Moderator* | Bill Gates (Pre-recorded), Stewart Collis, Wanjira Mathai, Boniface Akuku, Georgina Cambell Flatter, Andrew Lala, Ranveer Chandra, Samir Ibrahim, Stefan Wilhelm, Bradley D. Doorn, PhD. Tamer El-Raghy.

Climate Change | Panel Discussion | Plenary

APRIL 29, 2021 | 12:00 - 1:00 PM EAT



DAY ONE

APRIL 26

OPENING PLENARY

Six Years of AgriFin Evidence: Impact and Innovation

Watch session online

05:00 - 06:30 PM EAT

Moderator

Leesa Shrader
AgriFin Program Director
Mercy Corps AgriFin

Attendance

239
People online

157
Youtube viewers

Keynote Speakers:

H.M. Queen Máxima of the Netherlands
United Nations Secretary-General's Special Advocate (UNSGSA) for Inclusive Finance for Development
(Pre-recorded message)

Tjada D'Oyen McKenna
CEO
Mercy Corps

Thule Lenneiye
ATO Coordinator
Agriculture Transformation Office, Ministry of Agriculture, Livestock, Fisheries & Cooperatives, Kenya

Opening Plenary

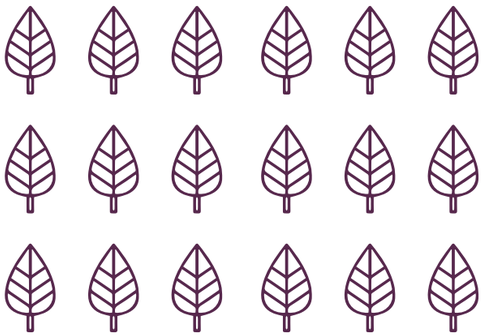
SIX YEARS OF AGRIFIN EVIDENCE, IMPACT AND INNOVATION

Introduction

The Opening Plenary of AgriFin's 5th Annual Learning Event presented the culmination of the past year of impact evidence from program work, and AgriFin partnerships from the last six years with a strong focus on impact for women. After presenting the main highlights of progress and impact, Leesa Shrader, the Director of AgriFin Program and the moderator of the opening plenary, handed the floor over to three keynote speakers.

H.M. Queen Máxima of the Netherlands, United Nations Secretary General's Special Advocate for Inclusive Finance for Development (UNSGSA), highlighted technology-based services as game changing solutions to challenges smallholder farmers in Sub-Saharan Africa (SSA) are faced with a pre-recorded video. The session further explored how digital innovation can drive scale, impact and inclusion, as well as agricultural systems transformation. It included addresses from Tjada D'Oyen McKenna, Mercy Corps CEO, and Thule Lenneiye, leading the development Agricultural Transformation Office for the Government of Kenya.

The agenda for the full event from April 26th to April 29th was presented for the audience to plan on attending with interest. The plenary closed with recognition awards celebrating AgriFin's partners on their work reaching women with the Mastercard Foundation. There were 12 categories of rewards, and the winners for "Impact for Farmers" were announced: DigiFarm, Hello Tractor, and SunCulture.



Key takeaways

Emergency Response

- ➔ Responding to COVID-19 and Desert Locust emergencies, AgriFin and its Partners have reached over 16 million smallholder farmers with important information, services and support on digital channels.
- ➔ The approach started with HCD (human-centered design), partnered with IDEO.org and Producers Direct, to understand farmers and how they perceived and reacted to COVID-19.

DigiFarm Agriculture Platform (DAP) Blueprint:

- ➔ 3 types of DAPs are most developed in SSA, with the platform ownership determining the initial product offering, business model and target market
  - Telco-led (lead platform: DigiFarm)
  - Agribusiness led (lead platform: Flour Mills of Nigeria (FMN), Twiga)
  - Bank-led (lead platform: Sterling, Bank of Kigali Techouse, Stanbic Bank)
  - Gov-led (lead platform: Kenya Agricultural & Livestock Research Organization (KALRO), Ethiopian Agricultural Transformation Agency (ATA))

Partners like DigiFarm have deployed digitally-enabled field forces to reach farmers. Evidence from the field shows that trusted human interaction is necessary and critical to get farmers beyond owning or using a phone to become comfortable with more complex digital services.

Data Hub and Strategy Moving Forward

- ➔ ATA has been a long-time leader of digital innovation in SSA with their 8028 IVR solution reaching more than 5 million farmers.
- ➔ When COVID-19 hit, ATA took the initiative to consolidate various farmer data into a hub, cleaned data and tested it within 3 month, then made it accessible and actionable through API.
- ➔ ATA showcases transformative leverage points to drive forward the broader data strategy, catalyze innovation in the ecosystem, and create lasting impact on smallholder farmers.

Digital Data Sharing Service Models

- ➔ AgriFin has been on the forefront of pioneering data partnerships with 3 types of service models:
  - Multilateral service provision (e.g. Arifu, AgroMall, Halotel, Ignitia, Pula, vodacom
  - Platforms: (e.g. DigiFarm, Wefarm, CoAmana, FtMA)
  - Open data initiatives: KALRO, ATA, PlantVillage)

AgriFin Gender Transformational Approach

- ➔ The gender target has been the hardest in the past 6 years. Some partners have excelled in reaching women farmers while most have struggled.
- ➔ One key learning of reaching women farmers is that taking a proactive gender transformational approach is vital.
- ➔ In this year, AgriFin continues to invest in developing a transformational approach for AgriFin Gender Strategy, which will change how it works with partners moving forward and the evidence-based gender strategies.

Interaction of Gender & Climate Change

- AgriFin has a diverse set of partners that can use digital innovations to support women and address climate resilience challenges:
  - Market access innovations
  - Land related innovations
  - Skill development innovations
  - Capital and infrastructure innovations
  - Cross-cutting platforms

DigiFarm impact were highlighted as a showcase:

- DigiFarm users have been able to expand farm businesses, save more, gain knowledge of good farming practices, and build capacity to respond to external shocks.
- Bundled services are driving enhanced impact.

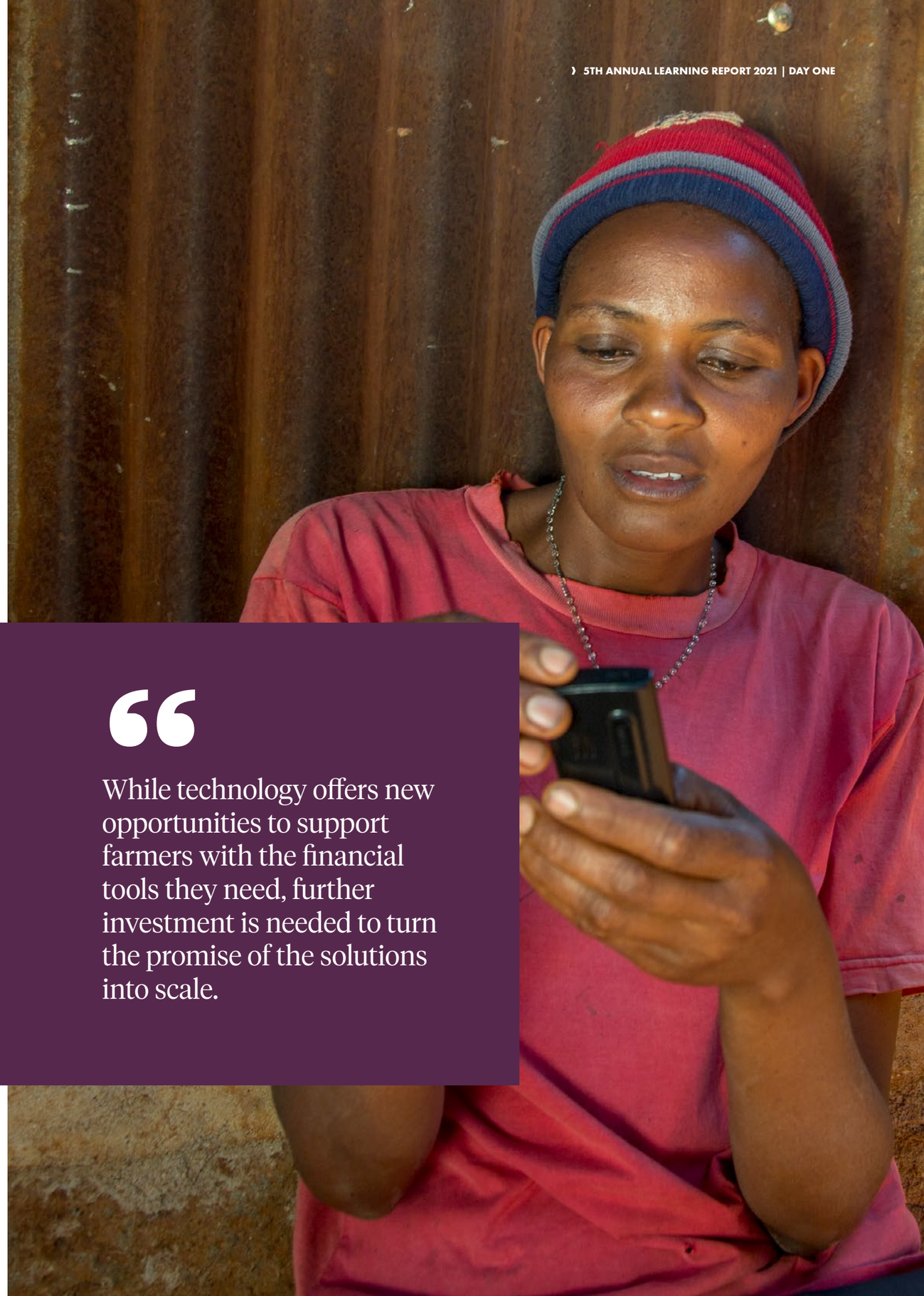
Key messages

H.M Queen Máxima of the Netherlands

United Nations Secretary-General's Special Advocate (UNSGSA) for Inclusive Finance for Development **(Pre-recorded message)**

- It is time for the game-changing solutions to challenges smallholder farmers in SSA are faced with, including technology-based digital farming solutions.
- The efforts AFA and its partners made in helping smallholder farmers go through COVID and Desert Locust emergencies were acknowledged.
- It is important to prioritize policies to sustainably scale the positive impact that technology-based solutions could bring to farmers. This includes implementation of adequate operational and financial incentives across stakeholders and reviewing financial schemes to achieve sustainability once donor funding endes.

> "While technology offers new opportunities to support farmers with the financial tools they need, further investment is needed to turn the promise of the solutions into scale.



Tjada D'Oyen Mckenna

Mercy Corps

- The work in food security and hunger is on the rise. But the pandemic leaves unsolved challenges in the development agenda which are more serious than ever, and include gender inequality.
- To meet the needs, collective actions should be taken:
  - Advocacy for COVID-19 vaccines to be distributed equitably and inclusively, making sure populations in rural and remote areas are not left out.
  - Strong collaboration between governments, food system actors and global health providers to facilitate the roll-out of vaccination.
  - The continuity of public and private actors acting together to leverage digital services to support the food system and smallholder farmers especially during post-pandemic recovery.
  - Increase cash assistance to help local communities to keep going and allow families the dignity and opportunity to make their own choices.

Thule Lenneiya

Ministry of Agriculture

- The process of digitization and coordination of Kenya's agriculture sector data is anchored on the 10-year Agricultural Sector Transformation and Growth Strategy (ASTGS), which supports 100% food security.
- 3 case studies were presented to emphasize the importance of data as various initiatives rely on and request quality data.
- Another 3 case studies were introduced to showcase how collaboration in agricultural sector data has been done among various entities including development partners and NGOs, private sector players, and government agencies and associations.

> Now is the time to increase cash assistance. Cash can help rural households invest in their farms, purchase food, and meet other needs. Cash assistance helps local economies to keep going, and helps smallholder farmers meet the needs of growing populations while allowing them dignity and opportunity to make their own choices.
>
> *Tjada D'Oyen McKenna, CEO, Mercy Corps*

> Digital tools alone are insufficient to solve all the challenges identified, but they will support more holistic solutions.
>
> *Thule Lenneiye, ATO Coordinator, Ministry of Agriculture, Livestock, Fisheries & Cooperatives, Kenya*

DAY TWO

APRIL 27

SESSION 1

The Future of Rural Employment & Building Back Better

Rethinking Rural Employment 9 Months On

Watch recording online | Pt 1 | Pt 2 | Pt 3

11:00 - 12:30 PM EAT

Videos

- **Rural Jobs 1:** Practitioner Reactions - The Future of Rural Employment & Building Back Better (Panel 1)
- **Rural Jobs 2:** Practitioner Reactions - The Future of Rural Employment & Building Back Better (Panel 2)
- **Rural Jobs 3:** The Future of Work Panel (Panel 3)

Reading materials

- Joint Mercy Corps AgriFin & CGAP webinar on "The Future of Work: Remaking Rural Employment after COVID-19"
- Mercy Corps AgriFin Report "Rural Jobs Landscape Study: Exploring Rural Job Opportunities for Youth in Agriculture (Full Report)"
- Mercy Corps AgriFin "Rural Jobs Landscape Study: Exploring Rural Job Opportunities for Youth in Agriculture (Report Summary)"

Attendance

146
People online

140
Youtube viewers

Keynote Speaker:

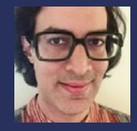
Leesa Shrader
AgriFin Program Director
Mercy Corps AgriFin

Ben Taylor
CEO
Agora Global

Jamie Anderson
Senior Financial Sector Specialist
CGAP

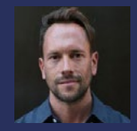
Christabell Makokha
Head of Partnerships
Aceli Africa

Peninah Wanja
Founder & Managing Director
Farmingtech Solutions Ltd



Ravi Chhatpar
Founder and Partner,
Dalberg Design

Chandrakanth PS
Director Sales, Africa & Latin America
CropIn Technology



Mikael Hook
Director,
RAF Learning Lab

Nathanial Peterson
Vice President of Partnerships
Busara

Hafsah Jumare
CEO
CoAmana

Day Two | Session 1

THE FUTURE OF RURAL EMPLOYMENT AND BUILDING BACK BETTER

Introduction

The objective of this session was to highlight AgriFin's work in rural employment, youth, and convening transformative practitioners and thinkers around the future of work in a post-pandemic landscape, observing changes in the agricultural landscape of rural employment 9 months down the line, and moving the conversation around transformative rural employment change forward.

Key takeaways

Leesa Shrader

Mercy Corps Agrifin

Where we are 9 months after the previous webinar:

- The AgriFin program related to COVID-19 was able to reach 16 million farmers on digital channels.
- COVID-19 has affected farming and jobs.
- The study with Digifarm found that women smallholder farmers in the Digifarm marketplace were able to increase productivity and income, and also hire more labour.
- 60 decibels study on Kenyan farmers show that the vast majority of them are draining resources, inputs prices are still high and sales are low
- Markets are still very much disruptive as farmers have a hard time accessing credit.
- COVID-19 has been affecting farming and affecting jobs.

Jamie Anderson

CGAP

- Financial services have to connect to people's working lives and whatever else is happening in their households.
- CGAP is putting much more of its attention on how financial services relate to MSEs and workers in the digital economy.
- The two areas that CGAP is emphasizing are in labour and markets. How can financial services, inventions, improvements start to make a meaningful difference in the way women in rural livelihoods are hiring labour in their farms and businesses, and using labour saving tools and assets and the sort of decent work that they have access to, and ofcourse markets, local markets, markets on digital platforms.

Christabel Makokha

Aceli Africa

- AgriFin and Dalberg, conducted a study to understand the scale of the challenge of youth unemployment in Kenya and identify opportunities to create meaningful employment opportunities for youth. The challenge is significant and we estimate that by 2024, about 10 million rural youth will be out of jobs and looking to get employment. A number that by now could be exacerbated by COVID. (sourced 1 year ago)
- Agriculture can play a significant role
- The role that youth play and create job opportunities as value addition.
- One of the biggest challenges women face is poverty - not being able to go to the market. Youth can act as a field force and increase market access through logistic services and filling gaps in the agricultural value chain.
- While the opportunities are there, the challenges remain the same:
  - Limited access to land
  - Access to capital is tied to owning assets which women and youth do not have
  - Farming is seen as a failure by youth

There were two panels for this session, one focused on **practitioners** and the other on the **future of work**

Nathanial Peterson
Busara

- East African farmers have learned an incredible amount about climate change, often through digital platforms, and then shared amongst each other.
- Farmers are testing platforms and have a strong desire for access to them, even if they use only a limited set of products or services available.

Peninah Wanja
DigiCow

- Accessing farmers was difficult due to COVID-19 constraints. Virtually trained agents did not fully understand how the platforms work, and had to visit farmers door to door since group gathering was forbidden.
- As a result, Farmingtech solutions used digital platforms including its app, IVRs, SMS, WhatsApp, and Facebook groups to keep the communication on.
- Additionally, this involved a change in marketing strategies by fully relying on digital platforms. The situation opened business opportunities from corporate and development organizations that are keen on capacity building farmers and using digital platforms.building farmers and they also had to use digital platforms.

Ravi Chhatpar
Dalberg Design

- In 2018, Dalberg worked with Mercy Corps to develop a youth pathways model which described personas and their pathways in rural employment and what their key enablers of agricultural success could be.
- These insights will fundamentally change how rural employment pathways are thought of, moving forward. For example,
  - COVID-19 affecting people's ability to network which is really key for some personas like the opportunistic mover
  - COVID-19 impacting side businesses, putting financial pressure which may change people's risk profiles and willingness to experiment with new things
  - Due to COVID-19, there are people taking advantage of new business opportunities

Hafsah Jumare
CoAmana

- At some point last year, CoAmana realized it was costing at least 4 times more to onboard and engage a woman agent. This resulted in taking deliberate steps in targeting Northern Nigeria women farmers. However, this group has the least exposure to the value of digital for reasons like social norms around culture and religion, constant hassle factors, as well as mistrust.
- With COVID-19, there is more curiosity and interest from potential women agents and even encouragement from their husbands.

Chandrakanth PS
CropIn Technology

- Data has become the new oil. It has enabled organizations to make better decisions, especially with farmers and it has helped them increase product value. It has helped farmers link to markets where they get better prices, obtain access to inputs and grow better.

Mikael Hook
RAF Learning Lab

- Agriculture is important for the rural economy in terms of employment, food and nutrition.
- Young populations are less likely to be involved in farming activities as they prefer to run a business, seek formal employment or migrate to urban areas to explore other opportunities.
- Those who are interested in entrepreneurship are more likely to want to diversify and expand their businesses compared to older people. These young entrepreneurs are also more likely to save money and use credit for purchasing products and assets compared to older people. While young people are motivated to start and grow their businesses, they often lack the right enablers to achieve these goals. The research found that access to credit, training of business skills and financial management as well as mentoring and networking were particularly important to young people.

Ben Taylor
Agora Global

- COVID-19 led to certain constraints on the supply chains and constraints in movement of people
  - We have seen a number of digital innovations within systems that have been beneficial to poor people. There have been opportunities for digital platforms to replace these physical means driven by necessity.
- **Moving forward**
  - Rebuild movement of people,
  - Digital really is a viable alternative in many regards to physical exchange of goods, services and information.

SESSION 2

Improving Agriculture Data Sharing to Increase Digital Climate Smart Agriculture Adoption

Watch recording online

01:00 - 02:00 PM EAT

Resources

- Mercy Corps AgriFin event as part of the African Union Cultivate Africa summit on “Riding the Digital Data Wave: Barriers and Innovation in Agricultural Data Sharing”
- Mercy Corps AgriFin Case Study on “Digital Data Sharing in Agriculture”
- AgriFin MCAF “Organizational Data Readiness Tool”

Moderators

Victoria Clause
Senior Technology and Agriculture Expert
Mercy Corps AgriFin

Attendance

157
People online

54
Youtube viewers

Panelists

Matthew Shakhovskoy
Director
ISF Advisors

Georgia Barrie
Co-founder
Learn.ink

Inbal Becker-Reshef
Program Director
NASA Harvest

Beza Bogale
DAAS Product Director
Digital Green

Boniface Akuku
Director of Information and Communication Technology (ICT),
Kenya Agricultural & Livestock Research Organization, KALRO

> This extends all the way back to what sort of data do you have in your organization, how does that need to be codified and collected, how can that be linked to product services insights, decision making and other use cases.
>
> *Matthew Shakhovskoy - Director ISF Advisors*

Day Two | Session 2

IMPROVING AGRICULTURE DATA SHARING TO INCREASE DIGITAL CLIMATE SMART AGRICULTURE ADOPTION

Introduction

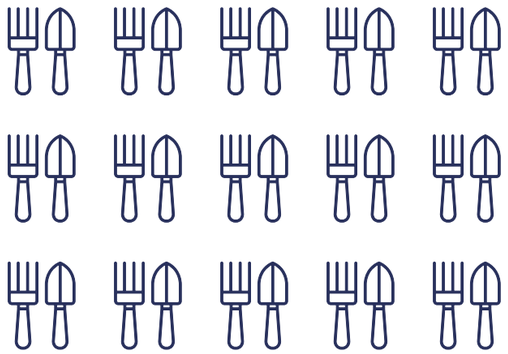
The first part of this session presented the highlights from AgriFin's work on digital data sharing in agriculture. It also launched a Data Readiness Tool that provides a holistic way of assessing organizational readiness to start working with data internally or in data-sharing partnerships.

The second part of this session invited a panel of experts to share insights from the private and public sector perspectives and debate on how agriculture data sharing can increase adoption of Digital Climate Smart Agriculture practices, services, products and tools.

AgriFin's learning brief "Digital Data Sharing in Agriculture", published in 2020, summarized the important role data plays in agriculture and key data trends, identified common barriers faced by data sharing arrangements, and provided practical guidance on overcoming data barriers.

3 practical tools were created through the work of the learning brief, which would be useful for the rest of sector:

- A framework for what data is and how it is used (understanding data fundamentals)
- An organizational readiness tool, including a practical survey
- A blueprint of the process of establishing data sharing



Key takeaways

AgriFin has been pioneering data partnerships with 3 types of service delivery models

- **Multilateral Service Provision:** partners jointly deliver services to the same target farmers and share data on the farmers
- **Platforms:** multiple partners provide bundled services to farmers through a central platform and data is shared
- **Open Data Initiatives:** data is publicly available to improve public service delivery and to enable other actors

Key takeaways on data sharing in agriculture:

- Most institutions are at an early stage in their understanding and work with data in the area of agricultural service provision. Support is often needed to spark interest in what can be done around specific use cases.
- Data-related opportunities typically require sharing agreement organizations that are often costly in terms of time to establish, complex to navigate, and require capabilities that few organizations have in house.
- Regulatory compliance and consumer protection is often a significant part of data related use cases and requires a nuanced legal understanding.
- It calls for common understanding of, and taxonomy for data sharing in agriculture:
  - AgriFin has identified 9 categories of data: social-economics, natural resource earth and environment, demographics, administration and legislation, transactional, online, machine, agronomic, and psychometric
- Typical use cases include: access to markets, access to services, and access to assets.

Data Readiness Tool:

- The purpose of this tool is to help organizations assess how ready they are to use data to improve their work, to partner with others, and to identify areas that need more attention.

Panel Discussion

Question: Could you provide some examples of the types of data you need at your organization, and what have you found to be the main barriers of accessing that data?

Inbal Becker-Reshef (NASA Harvest)

- ➔ NASA Harvest translates satellite data into spatial data to map out the location of crop lands, how the planting has changed over time, and how different crop lands look like.
- ➔ Accuracy is a key for inferences in policy or decision making.
- ➔ Barriers of accessing the data: data collection is expensive and challenging.
  Suggestions:
  - Build trusted relationships to enable data sharing
  - Make sure data collected by multiple partners always come with has GPS location with high accuracy
  - Standardize data quality check on control

Boniface Akuku (KALRO)

- ➔ Barriers
  - Data is costly to collect and analyze
  - There are a lot of fears about (interacting with) the data
  - There is a lack of understanding in open data and people have not recognized the benefit of open data.
  - There is a lack of incentives to share data.
  - A large amount of data in agricultural sector needs to be digitized first before being shared

Question: What is your organization doing to address these shared barriers?

Georgia Barrie (Learn.ink)

- ➔ Learn.ink created a user-centric, user-friendly, and interactive learning interface to onboard farmers through the whole process. The cost has been reduced to significantly less than $1 per farmer to collect data.

Beza Bogale (Digital Green)

- ➔ At the early stage of our implementation, we talk to different partners in the ecosystem to understand their data availability and shareability.
- ➔ Specific challenges are identified in the conversation and a customized data sharing protocol is created accordingly.

Question: With the urgency of climate change in mind, what does your organization (plan to) do to accelerate data sharing in the agricultural sector?

Inbal Becker (NASA Harvest)

- ➔ Prioritize on data accuracy and data sharing
- ➔ Work with every stakeholder to build capacity to do so
- ➔ To show the values of sharing data
- ➔ Continue and boarden partnerships and build trusted partnerships

Georgia Barrie (Learn.ink)

- ➔ Massively accelerate data collection
- ➔ Help its customers (the organizations) to create (innovative) ways of collecting instant data
- ➔ Create tools to store cleaned data in real-time dashboard
- ➔ Encourage the customers to share data

Beza Bogale (Digital Green)

- ➔ Build trust with partner organizations
- ➔ Help its customers (the organizations) to create (innovative) ways of collecting instant data
- ➔ Create tools to store cleaned data in real-time dashboard
- ➔ Encourage the customers to share data

Q&A / Comments

Questions received from participants on chat during the session

➔ Question: what do panelists see as the big opportunities for private sector service providers to work with open data initiatives to open up new data-led service possibilities?

- **Boniface Akuku (KALRO)**: develop innovation around data. Look globally, like FB and Twitter. Create innovative use cases of data.

➔ Question: how can the great actors on the stage today collaborate to leverage data to attract banks to the agricultural sector through risk sharing, and how can we better engage financial institutions?

- **Inbal Becker (NASA Harvest)**: in general, to promote the understanding that the open or public data at high accuracy level will be there into the future and to make these public goods a reliable source of information for use.

- **Georgia Barrie (Learn.ink):** it is the role of the private sector to bring affordable solutions that can work across sectors.

SESSION 3

Moonshot Technology Innovations Tackling Climate Change with Smallholder Farmers

Watch recording online

03:00 - 04:00 PM EAT

Moderators

John Mundy
Digital Climate-Smart Agriculture Lead
Mercy Corps AgriFin

Victoria Clause
Senior Technology and Agricultural Expert
Mercy Corps AgriFin

Attendance

169
People online

50
Youtube viewers

Keynote Speakers

Aadith Moorthy
CEO
ConsurWater

Aaron Jay Fossett
Partnerships
Cloud Agronomics

Annalyse Kehs
CEO,
PlantVillage

David Hughes
Professor,
Pennsylvania State University
PlantVillage

Katie Reberg
Manager,
60 Decibels

Tom Mason
MD
Dudu Tech

Beth Woodlams
Research Fellow
University of Leeds

Jeremy Cordingley
Founder
Cropnuts

> My moonshot technology is not necessarily new technology, but my moonshot idea is let's get this technology in the hands of millions of farmers across Kenya and across Africa. To do that we have to make things more affordable.
>
> *Samir, Ibrahim, Co-Founder SunCulture*

Day Two | Session 3

MOONSHOT TECHNOLOGY INNOVATIONS TACKLING CLIMATE CHANGE WITH SMALLHOLDER FARMERS

Quick Summary of Technologies

Nuru App

By Analyse Kehs and David Hughes - PlantVillage

- The main aim of PlantVillage is to disseminate information to farmers, expose them to new technology and enhance productivity.
- Nuru is a monitoring tool on pests and diseases. Farmers can use the artificial intelligence of the App to diagnose pests and diseases especially for maize and cassava. The farmer can take a photo and send it to an expert and get feedback on how to deal with the plant problem.
- It also provides satellite information data to farmers, extension workers and researchers on planting patterns and rainfall patterns in previous years.

SunCulture

Samir Ibrahim

Co-Founder

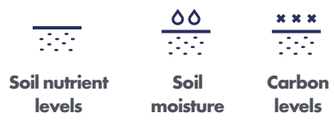
- At SunCulture solar powered irrigation is a proven tech that works and helps increase incomes in a clean way.
- Things need to be made more affordable. For the policy makers listening in, reduce the tax, doing so can reduce the cost by 26%. For all the funders listening in, consider a 100 million dollar irrigation subsidy in Kenya. With all this what Bill Gates calls a climate change disaster can be avoided.

ConserWater

Aadith Moorthy

Founder & CEO

- Use satellites and AI to help farmers grow more with less water and substantially increase their incomes through the carbon stored in the soil, all without using sensors or hardware or soil sampling. Our technology, through the combination of data from over 100 satellites and our proprietary AI, is able to measure:



- With this technology we are able to help smallholder farmers achieve scale and efficiency. Many governments and businesses around the world are looking for low cost carbon removal solutions in order to reduce their net carbon emissions.

> We believe that successful pest control is more than products and it is a philosophy that is supported by a number of crop management techniques, physical interventions and biological control. Our team works closely with farmers in Kenya to find non-chemical solutions.
>
> *Thomas Mason, MD, DuduTech*

Thomas Mason
Managing Director

- Farmers are facing more and more increasing pressures not only from regulators but also from the customers they sell to. Working with an integrated pest management company like Dudu Tech is becoming more and more important.
- Integrated pest management is trying to combine the smallest amount of chemical use with the largest amount of biological use.
- Dudu Tech is Africa's leader in pest management and is developed by growers for growers. It's work is to research and supply zero residue biological controlled products for environmentally and socially intelligent farming.
- Dudu tech has the largest biological production facility in Sub-Saharan Africa employing over 250 staff among them experienced agronomists

FASTA

Forecasting African Storms Application

Beth Woodhams
Research Fellow

- Real-time observation of high impact rainfall events can provide more accurate information and can even be used to make an estimation of the storm path over a few hours. This is called Nowcasting and is the latest frontier in weather prediction in tropical africa.
- Through the Global Challenges Research Fund, African SWIFT project, scientists have now been using satellite images for nowcasting over Africa with great success.
- FASTA is taking cutting edge research from the SWIFT project and transforming it into practical solutions. By extracting information from satellite data by EUMETSAT, FASTA will make nowcasting information available by an application programming interface (API).
- FASTA is keen to partner with African initiatives to explore the utility of nowcasting.

Aaron Jay Fossett
Partnerships

- The basis of our insights is called hydro spectral imaging initially used by NASA to study other planets. However the complexity and cost associated with this has meant its use has been restricted.
- Cloud Agronomics has minturised this and applied this technology to the greater agricultural sector. Farmers can expect $20-$30 dollars per acre in addition per year. In the context for smallholder farmers this increase in income is very substantial.
- It promotes accountability in:

- Cloud Agronomics empowers stakeholders, policy makers and farmers to transform how food is grown today. This is done by collaborating with private sector and legislators to use remote sensing as a methodology to verify the scale of implementation and the outcomes of sustainable farming practices.

Jeremy Cordingley
Founder & Managing Director

- Many farmers in Kenya are losing money out in their farming due to using the wrong farming inputs and techniques because farmers do not have good access to soil testing. In the same way you would not walk into a chemist and prescribe your own medication. Farmers should not purchase fertilizers from the agrodealers blindly.
- Buying correct inputs that are informed by the soil tests and advice from AgVizas social specialists will lead to greater financial empowerment.

Katie Reberg
Manager

- 60 Decibels is a tech-enabled impact measurement and customer research company designed to help innovations to understand their current impact, their potential for impact and ultimately make strategic decisions that catalyze a more climate smart agricultural sector.
- Over the past six years, 60 Decibels has developed a low-cost repeatable standardized approach to impact measurement. Its network of 750+ researchers means the ability to speak to end users anywhere in the world in their local language. This standard survey approach means the capacity to get insightful data to companies in around 10 weeks relying on primarily phone surveys, sometimes online surveys and sms.
- As such, 60 Decibels is able to measure smallholder farmers' climate risk and resilience based on three Rs: Routines, Resources, Recovery.

Q&A

Questions received from participants on chat during the session

Question: What does the future look like for digitally smart agricultural tech?

David Hughes, PlantVillage

The world is truly on fire and we need a fire response. It is in their interest to roll out technology at scale to millions of farmers. You cannot cope with climate change without irrigation, we need to consider this as a continent.
When we think of moonshot we need to think about the cost of this. Everyone wants a moonshot on a tiny budget and that is not how it works.

Beth Woodlams, Fasta

There are 2 parts from this; firstly forward projection of storms, looking at things like machine learning and AI and new data sources and crowd source data the second part is. The information from satellites is more accurate than weather models.

Aaron Jay Fosset, Cloud Agronomics

There are few things that are really critical 1. Multilayered partnerships with the commercial and community aspect but also on the finance side. The financing component is not advancing at the same pace. Integration of other components like blockchain in these models would be really useful and the data components.

Katie Rieberg, 60 Decibels

Data is super important and we have a lot of macro data on countries, but we do not really know what the risk looks on the individual level. We are keen to partner with other technologies.

Question: On the topic of soil testing - how do you see soil testing and what does the future look like

Jeremy Cordingley, Cropnuts

Our approach is to use soil testing as the starting point to increase their yields, using soil testing as a technology to mitigate the risks.

Addith Moorthy, ConserWater

We are trying to accelerate digital agriculture maybe 10 -20 years, maybe it will be made completely digital for farmers but not today. We adopted a hybrid model where there is a personal touch through extension staff and the automated SMS voice message or using the smart phone app interface. It is a hybrid to build a holistic model. Soil moisture and nutrient process we are trying to measure the impact with a hybrid approach and slowly we reduce the hybrid until we go completely digital.

Aaron Jay Fosset, Cloud Agronomics

There are few things that are really critical 1. Multilayered partnerships with the commercial and community aspect but also on the finance side. The financing component is not advancing at the same pace. Integration of other components like blockchain in these models would be really useful and the data components.

Question: What are the various models to increase uptake of these technologies by farmers? What are the costs that farmers pay for using these technologies? Or are the costs paid by others and if so who?

Jeremy Cordingley, Cropnuts

We bring down the cost of soil testing through machine learning to be able to take this information to our partners whether financial lender or aggregators.

David Hughes, PlantVillage

We build partnerships with shamba shape up. Shamba shape up has been in existence for 12 years. The real challenge is getting people on board.

Katie Reberg, 60 Decibels

In our interview and conversations with farmers, we find that technologies that have really great customer service have the highest rate of user retention.

SESSION 4

Farmer Level Impact

Evidence Base for Innovations Reaching Smallholder Farmers

Watch recording online 1 2 3

04:00 - 05:00 PM EAT

Videos

- **Farmer Level Impact:** Voices from our Partners-Training and Ag Advisory
- **Farmer Level Impact:** Voices from Our Partners-Mechanization and Value Chain Support
- **Farmer Level Impact:** Voices from our Partners-Resilience/Financial Inputs

Reading materials

- Agile Impact Case Studies with 60 Decibels
- Farmer Voices Shaping Private Sector Support (ICT4Ag Event-Video)

Moderators

Collins Marita
Director, Research and Impact Assessment
Mercy Corps AgriFin

Presenters

Lang Gao
Senior Associate
Busara Center for Behavioral Economics

Joseph Dalley
Associate
Busara Center for Behavioral Economics

Prashant Maheshwary
Senior Associate
60 Decibels

Attendance

142
People online

58
Viewers

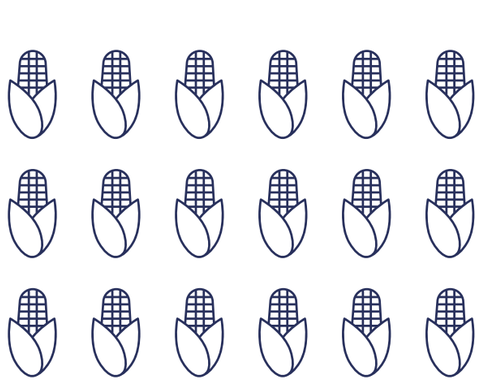
> Human contact is highly preferred and valued during onboarding and any forms of follow-up. Follow-up is believed to be essential for not only addressing technical challenges but also to demonstrate a sense of care to users.
>
> *Lang Gao, Busara Center for Behavioral Economics*

Day Two | Session 4

FARMER LEVEL IMPACT

Introduction

This session aimed to highlight AgriFin's impact among smallholder farmers over the past 6 years by digging through the client and farmer insights, analyzing key data points and charting the way forward. It focused on evidence from 11 impact studies conducted by 60 Decibels and Busara Center for Behavioral Economics.



Key Takeaways

Prashant Maheshwary

60 Decibels

How was the research carried out

- Randomly selected farmers from each partner and conducted phone interviews.
- Deployed a mix of qualitative and quantitative questions focusing on;
  - AgriFin has identified 9 categories of
  - Gender and economic status
  - Farm revenue and overall quality of life
  - Experience with partner's products or services
  - Farmer experiences with products or services
  - Impact of partner products having on farmers way of farming
  - Challenges
- Interviewed 2514 farmers

8 key findings

- Partners are reaching underserved populations, half of whom are living in poverty and a third of whom are women.
- The products and services being provided to these underserved populations are unique and they do not have many alternatives.
- Overall, farmers are satisfied and reported to be positively impacted by the products and services. They outperformed the 60 Decibels agriculture benchmark on metrics of farmer experience and impact.
- There are no discernible differences in how women farmers are experiencing the products and services and being impacted by them compared to their male counterparts.
- Bundle services have a greater impact.
- Operational challenges might be limiting impact. Resolving those will also improve farming outcomes.
- Companies providing farm mechanization perform strongly on satisfaction and impact but have a predominantly larger male farmer base.
- Impact of village-level saving on the livelihood of the members especially among farming households is widely observed and recognized.

Key statistics:

- 7 AFA partners
- 6 countries in Sub-Saharan Africa
- 32561 farmers
- Across 20 crop value chains

Three types of impact pathways were identified in these cases, through which the partners influence smallholder farmers:

- Providing mechanization services and integrating farmers into more sustainable value chains
- SMS-based agronomic advisory services
- Risk mitigation through insurance

Key findings can categorised into 5 areas

- **Gender inclusions:** increased representation was observed in both agent and direct user models. This is partially contributed by the gender transformative approaches taken by partners.
- **Digital transformations:** digital farming has become a more common practice among smallholder farmers through various products and services provided by AgriFin partners.
- **Adoption of technology:** farmers have greatly benefited from technologies that have reduced manual labour on farms. These services have leveraged the rapidly increasing mobile phone penetration in these countries.
- **Awareness of risk mitigation:** more farmers have adopted insurance to mitigate potential losses. This is more attractive when bundled with loan products.
- **Financial inclusion:** access to digital mobile credit has been made easier for farmers. Increasing access to credit for purchasing farming related inputs is also observed. This has allowed farmers to invest in more machinery for farm.

Joseph Dalley

Busara

Impact assessment used administrative data held by selected AgriFin partners, aimed to understand 4 aspects:

- Farmer profiles
- Farmers experience with and perception of products or services
- Impacts of products or services on farming practices, farming outcomes and resilience to shocks
- Factors that drive adoption and usage of digital products

Lang Gao

Busara

Results were from a 5-month quantitative panel study with DigiFarm users in Kenya, complemented by a qualitative follow-up. This study was aimed to understand:

- DigiFarm user profiles
- Product adoption, usage, and experience
- Factors driving adoption and usage
- Factors driving adoption and usage

Key statistics:

- 1439 DigiFarm users in quantitative panel study
- 52 DigiFarm users in qualitative study
- 11 countries in Kenya
- 4 services investigated

Key findings:

- Arifu and Loan are the two stand-alone services being used and valued most. When bundled, the most common bundle contains 2 services. Arifu is among the top popular ones.
- Onboarding through DVA, receiving training, and practicing crop farming significantly drive the usage of DigiFarm services. Human contact is highly preferred and valued during onboarding and any forms of follow-up.
- Impacts
  - DigiFarm users have been able to expand farm or agricultural businesses, gain knowledge on good farming practices, save more, pay for school fees, and build capacity for external shocks.
  - Farmers who have been using multiple services from DigiFarm have reported positive impacts in more dimensions.
  - Positive experience with a service has inspired and encouraged some farmers to explore and try out other types of digital services.
  - They start seeking digital solutions to fulfill long-term purposes including learning, resilience for shocks, and saving.
- Several bundled services are found significantly powerful in driving perceived impacts. Arifu and DigiFarm Loan stand out in these bundles.

SESSION 5

Gender Impact and Learning

Exploring Key Insights and Next Steps

Watch recording online

06:00 - 7:00 PM EAT

Reading material

Human Account Study: Women Farmer Segments

Moderators

Lydia Wafula
Research and Impact Assessment Officer
Mercy Corps

Attendance

146
People online

32
Youtube viewers

Presenters

Jessica Chisompola
Head Alliances
Zanaco PLC

Osman Siddiqi
Director of Research and Impact
Arifu

Hannah Reed
Program Officer, Integration, Evidence & Learning
The Bill & Melinda Gates Foundation

Lonah Wanjama
Regional Gender Advisor, Africa
Mercy Corps Africa

Albert Wasike
Manager, Research & Insights
DigiFarm, Safaricom

Maryam Yusuf
Associate
Busara

Edna Gathigia
Associate
DigiFarm, Safaricom

Mary Wanjohi
Monitoring, Evaluation and Learning Lead
Farm to Market Alliance (FtMA), World Food Programme

Wafa Masood Khan
Senior Research Analyst
Arifu

> We aim to extend our reach and impact on women in 2021 by creating more awareness about digital training and by deploying strategic reminder campaigns to reach out to women when they are more likely to be free.
>
> *Wafa Masood Khan, Senior Research Analyst, Arifu*

Day Two | Session 5

GENDER IMPACT AND LEARNING

Introduction

AgriFin and its ecosystem members have been seeking to understand factors affecting adoption and usage of digital technologies and services by women smallholders and their impact on this segment. AgriFin engaged its research and design partners to carry out gender impact studies on adoption and usage of digital agricultural platforms among women farmers.

This session aimed to unpack AgriFin's past engagements through gender lens and glean lessons that players in our ecosystem can adopt. It focused on impact of selected digital solutions on the livelihoods and resilience of women smallholder farmers, women's attitudes towards using digital solutions, and factors that affect digital services.

Key Takeaways

Maryam Yusuf

Busara

Study summary:

- 73 HCD interviews
- Worked with 4 partners for the study: Digifarm, FtMA, Arifu and Agripay.

Trends in engagement

- Agripay - Men tend to perform approximately 3 times as many transactions as women. We see that women tend to engage more with Agripay for its savings value proposition as they have more in flows and less out flows.
- Arifu - Most men interact at higher levels than women. Women tend to perform better, have higher interaction rates, and completion rates with learning programs around the poultry value chain, as well as those that relate to the planting and pre-planting phases of the crop value chain.
  - Arifu is successful in delivering content that is well understood.
- Digifarm - Less women users compared to Agripay.
  - More women engaging with the access to market module
- FTMA - Women participate more on farming training around agricultural best practices and less on the technical events and training around crop protection, pesticides, and chemicals.
  - Women tend to take less credit from digital providers like far drive and more credit from more commercial bank lenders like KCB

Factors that influence adoption and usage

- Trust: Women are more receptive to digital solutions that they trust more than men.
- Access to flexible credit/input, as well as access to guaranteed market helped to drive adoption and sustained usage
- A combination of both e-learning as well as in person touch points work best to help women along their learning journey
- Digital literacy and simplicity: Women tend to have challenges with the more complex USSD platforms, which is a barrier to continued usage
- Savings and financial independence: Most women see savings as a way to retain their resilience during down times. They therefore seek platforms like Digifarm that guarantee safe storage.
- Gendered roles: Women tend to be anchored on or explore those learning programs that are already in line with their perceived gender roles, even if they do want to expand their learning and engage in new value chains.

Women segments

- Super users: driven by cognitive models based on evidence and logic.
- Average users: They are a little bit more hesitant and don't act on the digital solutions as much as the super users.
- Low users: We classify them as uninterested skeptics. They rely heavily on spousal approval to engage with new services and products. They have cognitive models based on faith and instinct.

Impact on women:

- Improved farming participation by women due to access to credit and input loans.
- Higher disposable incomes from guaranteed markets and competitive prices.
- Improved financial discipline and independence as a result of digital banking solutions.

Recommendations

- Marketing: Use both above the line and below the line marketing, because that works well.
- Engaging husbands is key in the awareness and onboarding stage.
- Access to market: We should support women with their mobility, through e.g. agent support, discounted transportation to move their products to the markets.
- SMS has worked very well to engage women remotely but women still seek those in person interactive learning experiences interaction which can be provided through IVR or agent networks.

Jessica Chisompola
Zanaco PLC

- Women are withdrawing less and receiving more as compared to men. As a result they are using agripay as a savings account, rather than a transactional account.
- Accessibility to agency network: women have to travel long distances to reach agents, and because they are time constrained because of household chores, they don't get to use the services.
  - Zanaco is onboarding more people to be used as platforms for transactions
  - Working with community leaders and using agents as community champions so that they assist during the pre and post registration by ensuring women have all requirements

Wafa Masood Khan
Arifu

- Using the recommendations from this study, Arifu aims to extend its reach and impact on women in 2021, by creating more awareness on digital training and by deploying strategic reminder campaigns to reach out to women when they are more likely to be free.
- It also aims to invest in other easy to use modes of content delivery including IVR.

Elizabeth Mudogo
DigiFarm, Safaricom

- Farmers have gone out of their way to increase the fields as well as improve productivity.
  - Constant use of inputs that Digifarm has provided. This has resulted to them having more income for themselves and the household
- Women now have a voice in terms of what needs to be done within the household.
- Women have saved time - because extension officers go to the farm

Hannah Reed
Bill & Melinda Gates Foundation

- Data and evidence is needed to understand what works and how to improve programming to make a difference in the lives of the people BGMF serve.
- Invest in farmer facing solutions and ecosystem enablers which increase the availability, quality, and reach of digital agricultural solutions which benefit small scale producers.
- Particular interest is in learning how to increase access and use by women.
- Understand what value added services women value most and why, which product offerings, channels and aspects of the customer experience resonate most and where do they see room for improvement.
- We will share the findings with our network. We will also leverage these insights and hold these best practices in front of our minds when we look at our strategy and work with partners to design grants.
- All findings with the BGMF network will be shared and the insights from them leveraged to ensure that, each time the strategy and work with partners to design grants is considered best practices will be at the forefront.

Osman Siddiqi
Arifu

- Phone availability and bandwidth is limited.
- In Kenya, women are predominantly engaging more with poultry, pre-planting and planting activities

Moving forward
- There is need for more low cost in person touch points and bridge the trust gap to bring in more women
- Credit scoring - How can we enhance women's financial inclusion?

Jessica Chisompola
Zanaco PLC

- Women saving more is interesting to note - what additional products can we innovate based on this finding that can satisfy some of their needs?

Moving forward
- Providing small loans to women and how to guarantee those
- Enhancing our focus on savings groups

Mary Wanjohi
Farm to Market Alliance
FtMA, World Food Programme

- Focus on human agents to deliver the last mile solutions to small scale farmers
- Female led FSCs had a greater reach to women farmers. Women FSCs are low - this needs to increase and capacity also needs to increase to ensure they can deliver end to end solutions.

Albert Wasike
DigiFarm, Safaricom

- Impact measurement - if you make a promise to a user then have in place something for impact measurement of that solution that you are providing
- Access to the market is one of the very important modules that you can have.

Moving forward
- We have Digifarm Village advisors - a network on the ground that can be leveraged for in person training. We do need to equip them first.
- Engage the gatekeepers, that is the husbands.

Q&A / Comments

Questions received from participants on chat during the session

Question: Given the inclusion results, the roughly 35% of farmers being women (among AgriFin partners) - do panelists see this as a positive result, a neutral result or a disappointing result? Was it surprising, given the partner strategies? (MaryPat McVay, Opportunity International)

> 
> **Leesa Shrader, Mercy Corps AgriFin**
>
> Some of our partners reached between 50-60% and others between 10 and 20%. Nigeria has been tough and around 20% of our partners don't have gender disaggregated data. Please join our gender sessions tomorrow to explore! also to note Mary Pat - those numbers come from only 10 of our partners and the 60 decibels report. Across the Gates portfolio, we are up to 45% women in Kenya.

Question: In terms of characterizing the segments: I wonder if you might consider a different voice. The description of the low users is very negative, and doesn't speak to the future potential market, or their desire/capacity to engage if specific barriers were overcome. Especially the comment that they make decisions without logic. (MaryPat McVay, Opportunity International)

> 
> **Maryam Yusuf, Busara**
>
> Thank you for the feedback on the tone used to characterise women in the lower segments and we will take this onboard. Just to add a bit of clarity to the statement on logic. From our assessment we see that when it comes to uptake of digital solutions women within these lower segments although that exercised logic and evidence in their appraisal for uptake they relied more on instinct and default beliefs systems around farming more than women in the super or average segments.

Question: Is there a link to this report? Rima Mekdaschi Studer, University of Bern, Center for Development and Environment (CDE), World Overview of Conservation Approaches and Technologies (WOCAT)

> 
> **Leesa Shrader, Mercy Corps AgriFin**
>
> These studies are just in early stages of finalization and happy to take your suggestions onboard and will be putting them online in the next few weeks when we address them!

Question: How do you determine who an entrepreneur is? (Kathy Hurly, GeneSmart)

> 
> **Maryam Yusuf, Busara**
>
> Great question. Entrepreneurship can really be defined in multiple ways. What we did was assess women based on the entrepreneurial characteristics they reported, such as seeking credit to hire more labour or expand their value chain or minimising their costs to maximise revenue. This is how we made inferences on how entrepreneurial different segments of women were.

Question: For all panelists - would you agree that it is more expensive to provide services to women smallholders? (Leesa Shrader, Mercy Corps)

> 
> **Jessica Chisompola, Zanaco PLC**
>
> It is expensive, passing on cost to the off takers

Question: To what degree are the more entrepreneurial women also younger women?(Vicki Wilde, Bill and Melinda Gates Foundation)

> 
> **Maryam Yusuf, Busara**
>
> We saw that the more entrepreneurial women were mostly middle aged 35-50.

DAY THREE

APRIL 28

SESSION 1

Digitizing Field Force

The Opportunities and Challenges

Interactive Session | Watch recording online

01:00 - 02:30 PM EAT

Reading material

- Mercy Corps AgriFin & Dalberg Event as part of the African Union Cultivate Africa summit on "What it Takes to Develop and Manage a Digitally-enabled Field Force"
- Mercy Corps AgriFin Case Study on "Field Force Models for Agriculture: Key Learnings and Insights"
- Mercy Corps AgriFin Case Study on "Agriculture Logistics in Kenya: Landscape and Solutions"

Moderators

Emmanuel Makau
Technology Product and Kenya Country Lead
Mercy Corps AgriFin

Attendance

115
People online

38
Youtube viewers

Keynote Speakers

Abidah Ferej
Consultant
Dalberg Global Development Advisors

Jennifer Githinji
Founder
Africa Instore Solutions

Sriram Bharatam
Founder
Kuza

Hafsah Jumare
CEO
CoAmana

Charlie Habershon
Associate Partner
Dalberg Advisors

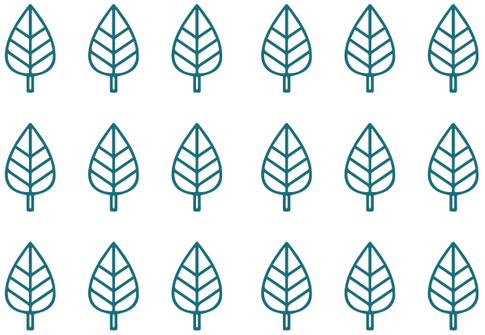
Karen Vandergaag
Product Manager
Chomoka / CARE

Day Three | Session 1

DIGITIZING FIELD FORCE

Introduction

Mercy Corps AgriFin has supported several partners in developing digital field force strategies and the technology required to merge agricultural field teams and digital tools. This session explored the challenges, breakthroughs and lessons learned, starting with a presentation on opportunities and challenges of digitizing field force, followed by a panel of experts sharing emerging insights and key considerations to successfully manage and deploy digitally-enabled field force to maximise impact for smallholder farmers and bottom line for farmer-facing organizations.



> The EFT (emotional, functional, technical) support system is extremely important to the agents out there. It doesn't matter whether they are employees or entrepreneurs.
>
> *Sriram Bharatam, Founder, Kuza*

Key takeaways

Abidah Ferej

Dalberg Global Development Advisors

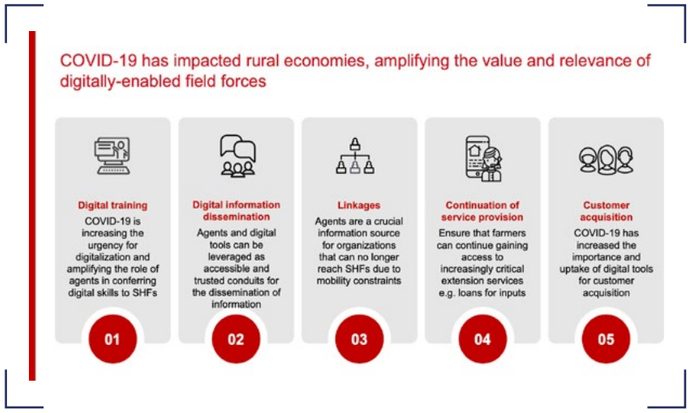
A field force is the gateway between innovation organizations (and their solutions), markets, and smallholder farmers. They come in several forms, including:

- Agri-entrepreneurs
- Field officers
- Agents
- Aggregatetors

The role of field forces typically centers around:

- Data capture (e.g. register farmers and collect farmer data)
- Awareness and trust building
- Farmer education and support
- Issue identification and escalation

COVID-19 has significantly impact rural economies, amplifying the value and relevance of digitally-enabled field forces in the following aspects:



10 principles for adopting and successfully implementing a digitally-enabled field force model:

- When establishing a field force, the model should be aligned with the organization's objectives and vision
- The field force design and desired outcome should inform the agent persona that an organization recruits
- It is crucial to make early investment in a strong management and support network around agents
- Investment in training and onboarding should be made upfront to ensure agents are fully prepared and supported in their role
- Incentive schemes should be designed to drive right behaviors to achieve desired outcomes and be clearly communicated to all actors
- Digital tools are critical success enablers, but need to be underpinned by clearly defined process
- Identify and plan for agents' critical touch point throughout the season to ensure the experience of agents and farmers is optimized
- Map the agent journey throughout the season and plan for both busy and quiet periods to mitigate against the associated risks
- Understand local complexities, adapting products and ways of working to meet the needs of agents and farmers
- Monitor and evaluate agent and farmer performance and put agile processes in place to allow for pivots in the model

Karen Vandergaag

Chomoka

There are 3 top characteristics Chomoka looks for in the agents include: patience, persistence and curiosity

- Experience with teaching or digital tools are helpful, but the soft skills like curiosity are more important and can go far.
- Having an entrepreneurial background is more likely to make the candidate a good fit.
- Owning a smartphone is not an exclusive criterion, but owning a smartphone can serve as a proxy indicator that they have already engaged in the digital space.

Charlie Habershon

Dalberg Advisors

To decide the size of field force, the calculation based case studies done by Dalberg suggests that 1 agent for every 100 smallholder farmers is a general ratio, but it really varies by season, linked back to one of the 10 principles about planning according to seasons. A few considerations were suggested:

- One key consideration is to avoid pushing agents to be 100% busy during harvest time. Typically, an agent can be 70% busy during harvest season and 30% busy during low season.
- Another consideration is to think about what additional capacity can be brought to the agent team during harvest time.
- Also need to consider the travel time from one farmer to the other, which is determined by rural population density and the complexity of value chains - certain value chains require more support than others.
- In the end, it is to get a balance between busy and quiet time.

Sriram Bharatam

Kuza

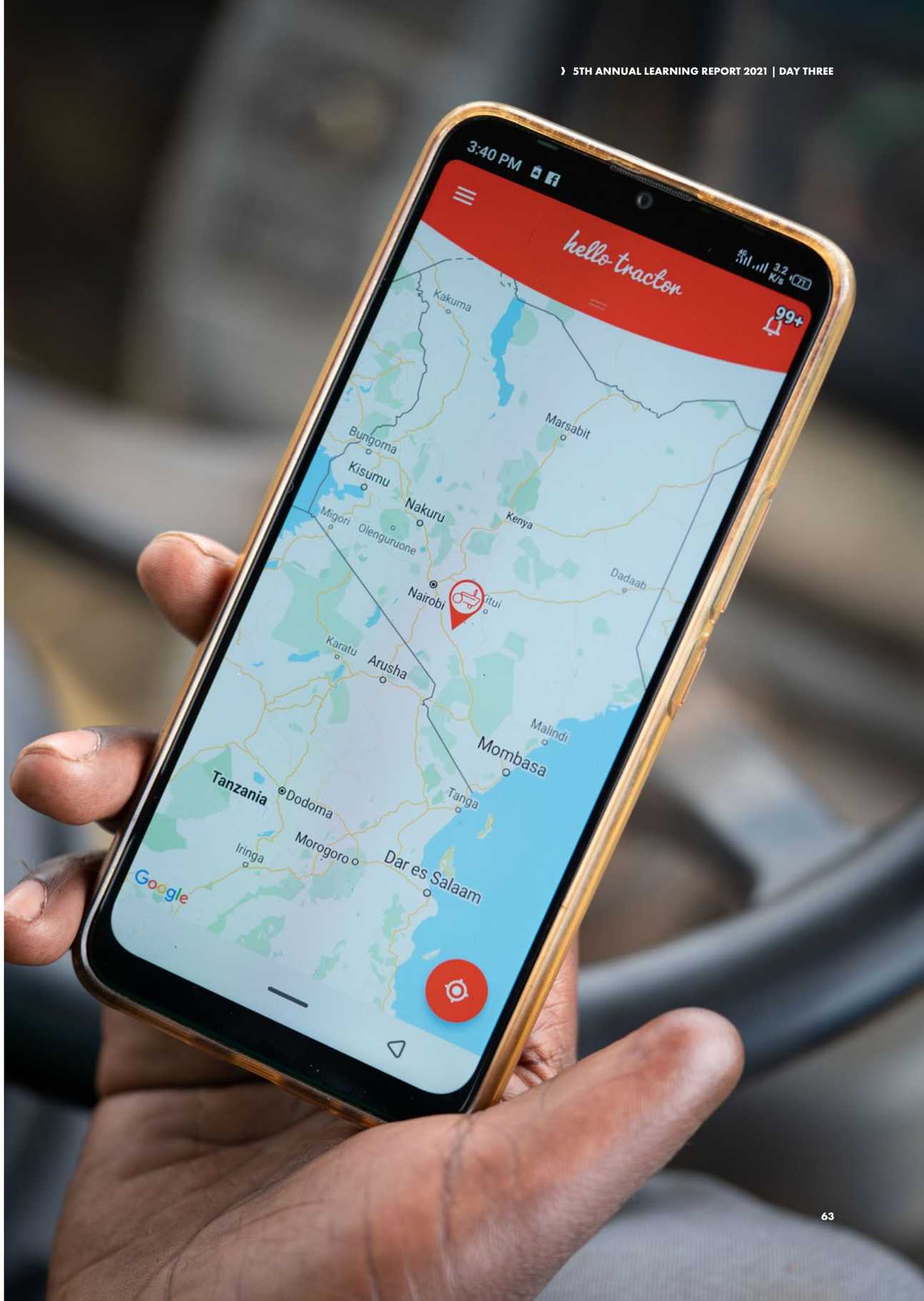
To achieve the balance, Kuza finds their magical number to start with is 1:150: for every 150 business owners. Kuza further created an entrepreneur-led model to opt in young agri-entrepreneurs, through 3 steps:

- Set up a selection process to get the right candidates
- Incubate them through Rural Entrepreneurship Development Incubator set up by Kuza
- Invest upfront to put them through a structured learning process so that they can practice the learnings during incubation
- In the end, it is to get a balance between busy and quiet time.

The optimal ratio has increased as the program accelerates. 250 - 300 now is a good number to go with.

Using digital tools to train field forces and scale is a 2% successful story. It requires a lot of attempts to get a successful case in countries including Tanzania and India.

- Digital tools are great, selection is important, but incubation and creating a support system for agri-entrepreneurs is extremely important. Kuza has created an EFT (emotional, functional, technical) support system.



Jennifer Githinji

Africa Instore Solutions

To manage the costs, a few considerations were highlighted:

- Digitizing the process will reduce the cost to reach out at a large scale
- Take into account specific organization and its models and vision
- Design the incentive schemes that invoke proactivity, ownership and autonomy in agents
- Create and maintain the linkage between agentes and assigned farmers and inform farmers about the upcoming visits to minimize unnecessary waste in transportation cost related to travel

On the topic of recruiting female agents:

- Charlie Habershon (from Dalberg): all work we have done on gender and smallholder farmers points to agents, from recruitment where we see high trust in female agents to interaction and to start using the digital products.
  - There are lots of opportunities for females to get into the agent network, but it does not necessarily lead to high or positive results in recruiting female agents.
  - Double the target number will help recruit and retain female agents.

- Jennifer Githinji (from Africa Instore Solutions):
  - Most of the time, farmers have the fear of using the phone or digital technology especially in agriculture. They usually ask agents:"Can you do this for me?". When agents are female, farmers will be more likely to relax and even laugh about it.
  - Meanwhile, female agents are using their social networking and in-person skills to gather farmers, invite them for tea, then have group conversations.
  - Some women have progressed from being an agent to running her business. She started recommending her children and *relatives to the program*.

Recruiting female agents

Charlie Habershon

Dalberg Advisors

All work Dalberg has done on gender and smallholder farmers points to agents, from recruitment where we see high trust in female agents, to interaction and the start of using the digital products.

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- Design the incentive schemes that invoke proactivity, ownership and autonomy in agents
- Some women have progressed from being an agent to running their business.

Q&A / Comments

Questions received from participants on chat during the session

Question: Which agent incentive models have proven effective to keep them engaged?

Abidah Ferej, Dalberg Advisors

You need to look at the models. Then, look at the chart of (not) busy periods. Also organisations do not always pay agents on time. Delayed payments may cause trust issues and raise challenges for keeping agents onboard.

Question: For Chomoka, how do you test for soft skills?

Karen Vandergaag, Chomoka

Getting technology on their hands, looking at how they respond to the challenges. The way they approach the challenges is more important than the fact whether they run into problems. Also take into account the surrounding environment and total time they take to solve problems. Observe their patience, Persistence and curiosity in troubleshooting.

SESSION 2

Digital Platforms for Agriculture

Interactive Session | Watch recording online

02:00 - 03:00 PM EAT

Reading material

- Mercy Corps AgriFin Digital Platform Blueprint series, including a White Paper, Reports, and Blogs.
- Mercy Corps AgriFin event part of the African Union Cultivate Africa summit on "Scaling AgTech Innovation through Digital Platforms"
- ISF Advisors & Rural and Agricultural Finance Learning Lab Report on Agricultural "Platforms" in a Digital Era"

Moderators

Sieka Gatabaki
Deputy Program Director
Mercy Corps AgriFin

Presenters

Marc Hümmer
Advisor
GIZ

Clara Colina
Program Manager
RAF Learning Lab

Flavia Howard
Global Climate & Environment Practice Manager
Dalberg

Attendance

157
People online

43
Youtube viewers

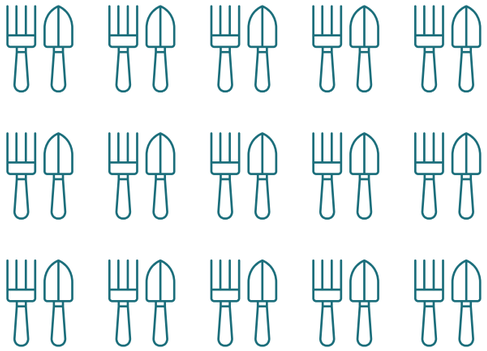
> Just because a business is digitized doesn't mean it's a platform... the linkages are important
>
> *Clara Colina, Program Manager, RAF Learning Lab*

Day Three | Session 2

DIGITAL PLATFORMS FOR AGRICULTURE

Introduction

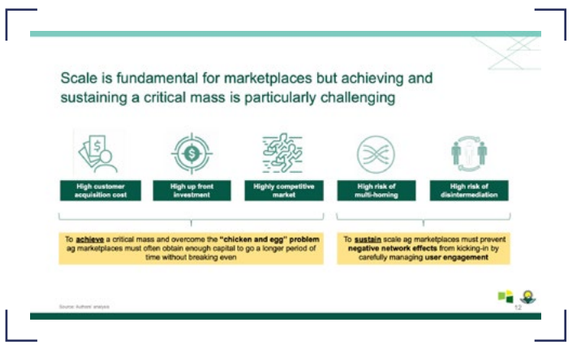
This session provided the audience with insights into digital platforms for agriculture from a taxonomic perspective as well as operators that have initiated these platforms. The session presented 2 research pieces done by Dalberg and ISF Advisors that looked at digital platforms from both the above perspectives. This was an interactive session that allowed the audience the opportunity to share their experiences with digital platforms and tackle some of the pertinent issues facing digital platforms for small-holder farmer agriculture.



Key takeaways

Clara Colina

RAF Learning Lab



> Digital can be a driver of user acquisition at low cost.
>
> *Leesa Shrader, AgriFin Program Director, Mercy Corps*

- GSMA report- over 700 digital solutions
- 3 Platforms:
  - Digital platforms
  - Digital solutions (software)
  - Multi stakeholder platforms

- Concentrate on digital platforms
  - What is a platform?
    - Create value by enabling interactions
    - Platforms help markets clear
  - In agriculture, digital platforms have been emerging/growing slowly
  - There are cost and scale challenges for providers
- In India and Kenya- there is an enabling ecosystem so more solutions have popped up. They have been more in smallholder markets.
- Well designed solutions:
  - Make markets more inclusive, sustainable and commercially viable
  - Reduce transaction costs

Moving forward

- The hype on digital platforms has had negative outcomes for some stakeholders e.g. rural women
- There should be systemic thinking on how platforms shape markets
- Link funding with specific theses

- Pipeline models vs. platforms:
  - Pipeline- most traditional businesses and they like to control the journey as much as possible
  - Platform- middle man// producers and consumers join to create networks
- There is a grey area- a pipeline can also be a platform
- Agric- there is a lot of experimentation of models..with time we can see what will work
- Focus on the broader enabling ecosystem- for growth of DAPs
- Highly curated who can join the platforms- users are more partners. Success of the platform relies on these partnerships
- Logistic service providers are important

Flavia Howard

Dalberg Global Development Advisors

Summary:

- Systemic issues affect SHF livelihoods e.g. capital
- The study looked at gender and climate

- How can emerging digital innovations help tackle these issues?
  - The study looked at gender and climate
- There are 4 types of DAPs:
  - Agri business led,
  - Bank led (finances essential for success),
  - Telco operator led,
  - Govt institution led (position)
- 4 leading platforms (e.g. digifarm,):
  - Target small holder farmers;
  - Start with small set of services then grow to expand offerings;
  - Don't always develop a business model but that's very important;
  - Core capabilities e.g. leadership, data & tech are important to keep in house;
- There are 2 different types of partnerships-- product and implementing partnerships
- Government regulations can enable or restrict growth of DAPs

Moving forward

- Working with DAPs:
  - Revenue sharing
  - Platform should be intentional to: share Smart agric practices with farmers, information sharing
- Women have challenges- be intentional about helping women/ engaging them
- Challenges in scaling for DAPs
  - Depends on the type of platforms
  - Products--how are products going to evolve

- Enabling role of government makes a difference
- Digital literacy: users can engage with different functions-- this makes a difference in how a platform can grow in scale

GROUP 1

Breakout Discussion

Topic
About Pipeline Business Model vs. Platform Business Model

Participants
10

Clara Colina

RAF Learning Lab

- Everybody (DAPs) is struggling to reach the same SHFs
- Platform: a few key questions to explore: can you rely on the last-mile services or do I need to create one myself? What services do I offer? How do I engage producers and consumers?
- New platforms pop up on a weekly basis.

Q&A

Questions received from participants on chat during the session

Question: Who owns the relationship with SHF? (e.g. if I use DigiFarm by Safaricom)

Clara Colina, RAF Learning Lab

Competition can destroy the relationship.

Sieka Gatabaki, Mercy Corps AgriFin

DigiFarm is moving towards a pure platform for quality input. It is not there working as Airbnb and Uber. But there is an opportunity and potential.

Question: Should or can a growing business pivot (with their product/new product) in order to scale or is it a risky move?

Clara Colina, RAF Learning Lab

Definitely a tricky one. More broadly speaking, we see that (pivoting) all the time.

Question: from a technology and development perspective, do we see a future of platform technology to become alive and sustainable especially through SHF?

Clara Colina, RAF Learning Lab

We do stay optimistic. Platforms do transform markets, but there are a lot of dangers we need to keep in mind. Platforms do open doors for small businesses to bigger markets, if you look at Alibaba. But micro or small businesses may also miss out on the opportunity because they do not have access to these digital technologies. Another risk lies in the not so profitable sectors, where women are largely presented. What is the support they need? (it is not servicing everyone in the same way). Gig work might be better than what they already have.

Question: Which are the main income drivers in these platforms?

Clara Colina, RAF Learning Lab

We do not have much insight in the platform economy. What we can say is that some do have higher margins than others.

GROUP 2

Breakout Discussion

Topic
The opportunities and challenges for organisations joining established and emerging agricultural platforms

Participants
10 - 13

Sriram Bharatam
Kuza

- Everybody (DAPs) is struggling to reach the same SHFs
  - For Kuza, the startups, digital innovators etc have one single user interface for agents
- There are limited resources for youth so their energies should be used on understanding pains and gains rather than reaching farmers. We try to connect farmers to them.

Mary Pat
Opportunity International

- There should be alignment on missions - tech companies
- There should be women empowerment strategies
- There are different types of farmers, so different DAPs can target different farmer groups. We shouldn't be struggling to reach the same farmers.
- Mostly young men are on the platform, so reach to men has been high but there is a challenge to reach different segments of women or women in general

Leesa Shrader
Mercy Corps AgriFin

- We are always looking for firms targeting women
- Targeting women can make a difference

David Hughes
Plant Village, Pennsylvania State University

Moving forward

- There should be an easier way of contracting- right now it's the one sided terms and conditions. outcomes for some stakeholders e.g. rural women

Q&A

Questions received from participants on chat during the session

Question: would you say that bigger more established companies with their own platforms are hesitant to join platforms that unify services under one umbrella, with the perception that this might take away from their market share/monopoly?

Flavia Howard, Dalberg

There is a tendency for banks to be risk averse and have their own platforms because of control. But not just because of unwillingness to participate.

Leesa Shrader, Mercy Corps

I agree with the question of control-- every platform wants to control something, especially the data because that is a core asset. It is also sometimes high cost for the big companies, e.g. It is high cost for Digifarm that has 15 partners on the platform.

Sriram Bharatam, Kuza

Market development would be good for both big and small companies.

SESSION 3

6 Years of Impact

What Have We Learned?

Watch recording online

04:00 - 05:00 PM EAT

Moderators

Collins Marita
Director, Research and Impact Assessment
Mercy Corps AgriFin

Attendance

76
People online

38
Youtube viewers

Presenters

Matthew Klick
Director of Research & Learning
Causal Design

Mikael Hook
Director
RAF Learning Lab

Jerioth Mwaura
T4D Advisor
Mercy Corps

Nathanial Peterson
Vice President of Partnerships
Busara

Philip Thigo
Senior Adviser, Data, Innovation and Open Government
Office of the Deputy President of Kenya, Government of Kenya

Day Three | Session 3

6 YEARS OF IMPACT

Introduction

The AgriFin Accelerate (AFA) Final Ecosystem Review and Program Evaluation was designed to answer a series of evaluation questions that gauge AFA's influence at the client, institutional and ecosystem level as the program concludes. It combines extensive document review with key informant interviews through a case study design, coding both sources of data through a structured process, that yields nuanced findings. These findings were then mapped to the evaluation questions.

The purpose of this session was to have dialogue on the findings and recommendations from the exercise, achieving a way forward in enhancing ecosystem effects at the Agribusiness level, gender, climate, policy and youth levels.

Key takeaways

About AFA Ecosystem Review

➔ Background
- The purpose was to assess the ecosystems as well as the influence of AFA over institutions and support of other institutions.
- It was a qualitative inquiry: there were two key pillars that underpin the analysis:
  - Existing evaluations
  - Primary data collections with partners and institutions
- We had responses from Zambia, Kenya and Tanzania

➔ Four Key Findings/Recommendation
- Enhancing active use and use of products
  - HCD was deployed to gauge what farmers face, despite this we still see gaps in why farmers are not utilizing the tools.
  - Recommendation: we need to move beyond HCD because there may be other prisms such as a political economy analysis that can help fill in the gaps in utilisations of tools.

- **Agent Network:**
  - There is evidence that they need support. We see that farmers sometimes take this role of agents themselves but lack liquidity to prosper. The youth unemployment challenge can be addressed driving more investment in building agent networks.

- **Targeting SHF (smallholder farmers)**
  - Tighten the theory of change to avoid the idea of leakage in resources to non farmers who are not in need and serve actual smallholder farmers. Agents can help identify these SHF and ensure they are targeted.

- **Policy Advocacy:** what is next for AgriFin?
  - Given the depth of its activities and engagements, AgriFin is able to move away from MVPs to supporting research around customer journeys. Working with governments and government actors was an element missing from the ecosystem that AFA could take up to help understand the infrastructure needs to help support the process of helping SHF. AFA would be a good broker between the government.

> Limiting the potential of exhaustion [of farmers during data collection] is best done by identifying the indicators you truly care about, and asking things that might be predictors that would allow basic segmentation.

Nathanial Peterson, Vice President of Partnerships, Center for Behavioral Economics

Panel Discussion

On HCD and other tools used at Busara

Nathaniel Peterson, Busara

- ➔ HCD has been proven to be effective but not the only tool that can address the gaps in our research. At Busara, we have augmented the HCD approach with cognitive interviews to not just ask them what they think but how they think
- ➔ What we at Busara have done with the cognitive interview approach is presented it in a mental model framework:
  - Mental model is the sum of beliefs and their perceptions of causal linkages and making a map of how that individual is thinking. This is helpful in completing our design process when we do use HCD.
- ➔ We also like to use experimental games that allow people to reveal their actual behavior and social preferences that are usually not well elicited through survey questions, such as taking on new technologies and risk mitigation.
- ➔ Finally we are able to design best for companies that have good data.
  - Getting good causal social preference data through cognitive interviews and behavioural games.
  - Using the data to optimise designs and idnet yung trends in usage and drop off can help in redesigning and improving tools and technologies for better uptake.

On how to affect different value chains

Philip Thigo, Office of the Deputy President of Kenya, Government of Kenya

- ➔ It is a collaboration, it really must be a co-creation approach. It is not about advocacy. Rather, it is about how you co-create with the government. If you do not, policy will be nuanced to other sectors and not targeted at SHF.
- ➔ This is what happened with fintechs and how they worked with regulators to put up a fintech sandbox and AgriFin can get into this space.

On youth unemployment and providing more agent support

Jerioth Mwaura, Mercy Corps

- ➔ An important intersection of tech and young people is that young people are early adopters of tech and pulling their relatives and parents to try new tech.
- ➔ It is important for AgriFin to understand youth, give them jobs that are exciting and relevant for them and take advantage of the desire to learn new technologies.

On serving SHF

Mikael Hook, RAF Learning Lab

- ➔ Insights on smallholder farmers
  - There are many different types of smallholder farmers who are pursuing different livelihood strategies. They need different types of products and services to achieve their goals
  - For example, (1) we have subsistence smallholder farmers who have small plots of land, farm primarily subsistence crops for consumption in the home. They focus on increasing production and need farm inputs and access to capital so that they can lease more farmland. (2) We also have commercializing smallholder farmers who have larger farms and primarily grow cash crops for sale on the market. They need access to capital to invest in productive assets such as irrigation or tractors, and access to markets to secure better prices

Implications for service providers

- ➔ Service providers need to start thinking about:
  - How to design different types of products and services for these different types of smallholder farmers
  - How to enable smallholder farmers to transition along these pathways and sequencing the provision of products and services to support their transitions

- ➔ By working together, organizations that service different types of farmers can develop an integrated approach to help subsistence farmers transition to become commercializing farmers over time
- ➔ Role for donors and governments: donors and governments have an important role to play in creating incentives for service providers to continue working with subsistence smallholder farmers and enabling their pathway transitions

On data collection and management

Nathaniel Peterson, Busara

- ➔ It is important to identify the predictors early on so you do not continue going to the farmers.
- ➔ This is going to happen by groups of us working together.

On pathways for SHF to achieve their goals

Mikael Hook, RAF Learning Lab

- ➔ The pathway is not linear. Some pathways are very messy and some pathway transitions are subject to shocks such as Covid. Factors like aspirations, climate shocks, and health shocks can affect the transitions.
- ➔ Households can pursue multiple pathways at the same time

SESSION 4

Designing for Gender Transformation and Equity

Interactive Session | Watch recording online

05:00 - 06:30 PM EAT

Reading material

Gates Gender Equality Toolbox

Moderators

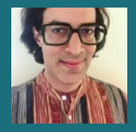
Leesa Shrader
AgriFin Program Director
Mercy Corps AgriFin

Jamie Anderson
Senior Financial Sector Specialist
CGAP

Presenters

Vicki Wilde
Senior Program Officer
Bill & Melinda Gates Foundation

Kristin Peterson
Senior Technical Advisor
Mercy Corps AgriFin



Ravi Chhatpar
Founder and Partner
Dalberg Design

Moderators for breakout sessions

Betty Muriithi
Digital Banking Manager
Mercy Corps

Collins Marita
Director, Research and Impact Assessment
Mercy Corps AgriFin

Elias Nure
Project Manager and Regional Tech Expert
Mercy Corps AgriFin

John Mundy
Digital Climate-Smart Agriculture Lead
Mercy Corps AgriFin

Lydia Wafula
Research and Impact Assessment Officer
Mercy Corps AgriFin

Attendance

128
People online

46
Youtube viewers

> Still today, no matter where in the world you were born, your life is going to be harder if you were born a girl.
>
> *Vicki Wilde, Senior Program Officer, Bill & Melinda Gates Foundation*

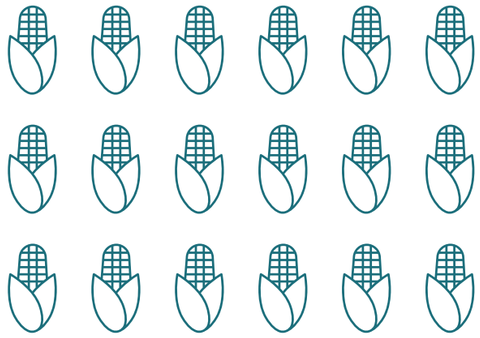
Day Three | Session 4

DESIGNING FOR GENDER TRANSFORMATION AND EQUITY

Introduction

Gender transformative approaches (GTAs) are programs and interventions that create opportunities for individuals to actively challenge gender norms, promote positions of social and political influence for women in communities, and address power inequities between persons of different genders. While there are methodologies, tools and practices to help design for gender transformation, using them effectively requires starting with an awareness of the gender transformation journey we're all on.

This session introduced ways to think about gender transformation in the context of your own organization, programs and journeys. In the latter half of the session, attendees were divided into several breakout sessions to share experiences and thoughts on GTAs.



Key takeaways

Leesa Shrader

Mercy Corps AgriFin

On AgriFin's journey with GTAs in the past 6 years

- The context and landscape 6 years ago was very different from today. The focus back then was being farmer-centric by deploying farmer-centred design and UX testing afterwards. The strategy in the early stage was mostly centered around the value chain.
- In the following few years, the AgriFin team observed the missing part of gender in the strategies and began to chase the 50% target of women farmers. AgriFin started promoting Gender Transformative Approaches (GTAs) among its partners, especially those who did not have a gender-disaggregated strategy.
- What did not work: allowing partners to just think about farmers generally and put women for later consideration.
- What really has worked:
  - HCD (human-centered design) and UX test - they worked best when we did 100% focus on women (in terms of product design).
  - Using data analytics to inform strategy.

Leesa Shrader

Mercy Corps AgriFin

Design should not be limited to women only, but should be for all farmers to achieve gender equity and gender transformation.

Gender-focused, human-centered approaches are helpful starting points, but there 4 aspects of shortcomings revealed by placing an equity lens:

- Power rests with the strategy, planning and design teams and funders, whether in priority setting, planning or resource allocation. "We assume that an expert's empathy can replace the lived experience."
- Equity and impact are secondary to market viability and/or institutional interests, often making social impact reliant on expanding private revenue, profit, and influence, and rarely bringing up the existing priorities of women and communities.
- Maintains the power of status-quo institutions when making critical decisions that directly impact lives, rather than shifting power and resources to women and their communities.
- Women and community participation are deliberately limited, whether as research subjects whose "voices" need to be elevated, or as "end users" or "customers" whose ultimate role is to consume, rather than participate as co-equal stakeholders.

A key step for next is moving from human-centered to equity-centered approach. 6 principles of equitable design:

- Community anchored: recognize context, history and community expertise.
- Question driven: account for your team's identity and biases to prevent slipping into stereotypes.
- Co-creation based: use creative facilitation methods to foster collaboration, co-invention and collective responsibility.
- Empathy & humility focused: create space for the process to be led by women and community experts

The attendees were then randomly assigned into 5 breakout sessions to discuss:

1. Where would you place your organization on the gender equity continuum, and why?

2 What specific action do you think your organization can take in the next year to move toward the right on the continuum?

3 Reflecting on what you've just shared, what ideas inspire you? What ideas concern you?

Most of the organizations attendees represented were falling under 2 categories on the gender equity continuum:

- Gender Responsive: acknowledges and considers women's and men's specific needs
- Gender Transformative: addresses the causes of gender-based inequality and works to transform harmful gender roles, norms, and power relations

Examples of actions take

- Identify gaps:
  - Define gender indicators
  - Classify which partners are gender aware, identify those who (want to) serve women
  - Identify unconscious biases
- Set target:
  - Set baseline and relevant targets with timeline
- Deploy various tools:
  - Run data analysis
  - Leverage data to develop business cases to serving
  - Conduct gender workshops
  - Improve feedback system
  - Include men in the strategy (equity design)
  - Continue innovation
  - Incentive scheme design
  - Have internal gender champions
  - Accelerate high-level advocacy
- Measure:
  - Assess the incentives towards achieving targets
  - Organizations hold gender-disaggregated data as a minimum to allow impact assessment
- Learn:
  - Review what others are doing to be transformative
  - More holistic research on gender
  - Seek guidance and support form experts

Inspirations

- Bring both women and men into the design phase
- Apply zero tolerance policy for partners who don't have gender intentionality
- Be more constructive to measure milestones not just the end state

Concerns

- Gender transformation will take quite some time, while there is reliance on donor support which is time bound
- Cultural transformation takes even longer
- Limited data

we perpetuating the status quo? 95% of what is happening is probably just reproducing the status quo. If we do not build on ramps for transformative, we are reinforcing pre-existing inequalities.

COVID-19 has dramatically threatened the lives and livelihoods of everyone, but especially that of women and girls. It is reported by data that we are losing the entire generation of progress on gender issues in the past 1 year. (it is fragile)

A few reasons why BMGF started a huge focus on gender inclusive agriculture:

- Among smallholder farmers, who are already overrepresented in the lowest percentile of national income distribution, women are poorer than men.
- Growth, which is not inclusive, will be benefited from a border participation. But growth and opportunities do not automatically lift the barriers.

The gender gap or women disempowerment is not from the biological differences between genders, but a failure of the system - market system, financial system, information network, and a failure of policy.

> If we don't support more transformative programing and more radical work, gender equality will take way too long - in fact, it might not even come at all.
>
> *Vicki Wilde, Senior Program Officer, Bill & Melinda Gates Foundation*

Vicki Wilde

Bill & Melinda Gates Foundation

Building for inclusion, equality and gender transformation in agriculture is a historical challenge. It is important to ask ourselves constantly: are we building for transformation, or are

DAY FOUR

APRIL 29

SESSION 1

Climate Change, Financial Inclusion & Digital Climate Smart Agriculture

Research and Evidence Based Strategies

Watch recording online

12:00 - 01:00 PM EAT

Reading material

- Climate Policy Initiative - Examining the climate finance gap for small-scale agriculture

Moderators

John Mundy
Digital Climate-Smart Agriculture Lead
Mercy Corps AgriFin

Attendance

114
People online

20
Youtube viewers

Keynote Speaker:

Matthew Shakhovskoy
Director
ISF Advisors

Sonia Kuguru
Senior Associate + Climate Lead
60 Decibels

Victoria Clause
Senior Technology and Agriculture Expert
Mercy Corps AgriFin

Cristina Rumbaitis Del Rio
Senior Adaptation and Resilience Advisor
World Resources Institute

Tyler Ferdinand
Associate, Climate Resilience Practice
World Resources Institute

Day Four | Session 1

CLIMATE CHANGE, FINANCIAL INCLUSION & DIGITAL CLIMATE SMART AGRICULTURE

Introduction

This session featured the latest research and sector overviews from the World Resources Institute (WRI), Initiative for Smallholder Finance (ISF) and 60 Decibels and a short presentation from AgriFin describing next steps on it's strategy for climate change over the next 4 years.

The presentations highlighted the latest research on the climate change gaps and needs for smallholder farmers from the finance, digital advisory and pathways perspectives, as well as innovative measurement approaches.

> If we do not have the measurement in place to understand if the digital solutions are impactful, we are all flying blind.
>
> *John Mundy, Digital Climate Smart Agriculture Lead, AgriFin*

Key takeaways

Matthew Shakhovskoy

ISF Advisors

- This research links SHF and climate change and is the 3rd of deep dive series from our state of the sector report in 2019 on SHF service delivery
- 500 million SHF produces 30-40% of the world's food supply, they are key constituents in relation to climate change.

How should we think of SHF in respect to climate change?

- 26% of global greenhouse gas emissions are related to agriculture
- Over 70% of water is used for agriculture
- The average 2 acre farmer in Kenya produces 50% less carbon than the average farmer in the US
- SHF are disproportionately affected by climate shocks, Climate change will force them to migrate because the land is no longer arable by 2050. For farmers that choose to remain on their land there will be more pressure on the agricultural activity
- We have been trying to advance the thinking of different segments of farmers. We have defined 7 starting points for farming families and households on how they earn a livelihood. Adaptation challenges will be most difficult for subsistence farmers. Mitigation we should be focusing on medium sized farmers that have a carbon footprint that is even more significant
- Looking at agro ecological zones

Climate resilience practice, world resources institute print is still in the works

- Product - Blueprint for digital client informative advisory services - These solutions allow adaption
- For those agricultural users that are less digitally savvy
- DCAS co developed the world business council, the world food program,
- The blueprint is still in the works and will be launched in junes. It will estimate the investment needed
- Bundling is the best way to achieve impact

Sonia Kuguru

60 Decibels

- We are a leading impact management firm. We take conversations into data and insights to support people that are below the poverty line
- Focusing on insurance, water source and water conservations
- Farmers have a demand for training. 60 Decibels recently did a study with farmers in Kenya and training on farming practices what wahat farmer expressed as what they wanted the most
- They do not have good access to agronomists and vets. In Africa there is one agronomist for every 100 farmers. There is an opportunity for digital solutions to enable farmers to improve training.

AgriFin digital climate strategy for the next 4 years

- Why digitising: digital platforms can provide opportunities for multiple partners
- A key step is to design digital solutions for climate solutions
- Through digital learning, we expect to bundle climate smart solutions

SESSION 2

An Introduction to the Open Content Agriculture Platform (OCAP)

A Digital Public Good

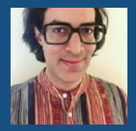
Interactive Session | Watch recording online

02:00 - 03:30 PM EAT

Moderators

Elias Nure
Project Manager and Regional Tech Expert
Mercy Corps AgriFin

Kristin Peterson
Sr. Technical Advisor
Independent Consultant



Ravi Chhatpar
Founder and Partner
Dalberg Design

Presenters

Maída Hernández
Coordinator #SmartDevelopmentFund Africa
GIZ

Kalvince Otieno
Founder and Assistant Director
FSPN

Elizabeth Mudogo
Product Development Lead
M-Agri, Safaricom

Phil Abrahams
Strategic Business Development Director
CABI

Boniface Akuku
Director of Information and Communication Technology (ICT)
Kenya Agricultural & Livestock Research Organization, KALRO

Attendance

103
People online

59
Reviewers

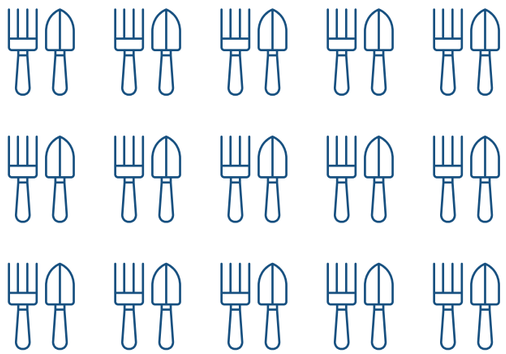
Day Four | Session 2

AN INTRODUCTION TO THE OPEN CONTENT AGRICULTURE PLATFORM (OCAP)

Introduction

The majority of smallholder farmers have little access to a wide range of quality and updated agricultural information. However, based on it's numerous engagements and experiences, AgriFin have learned that digital solutions have emerged as a scale pathway to reach large numbers of farmers. Mercy Corps AgriFin Program is designing, developing and piloting an Open Content Agriculture Platform (OCAP), where a range of digital ready, farmer friendly, high quality (and free) content can be used by organizations for the SHF they serve to use as is or adapt/contextualize and deliver through farmer facing communication channels where the information can be used to build capacity and improve their resilience.

OCAP is currently a concept under development. Elias Nure and Kristin Peterson gave the opening and introduction of OCAP. Ravi Chhatpar moderated further discussion with a panel of experts to share their thoughts and how OCAP could work. The attendees were then divided into groups to share their respectives and questions around OCAP.



Key Takeaways

The OCAP is intended to be leveraged as an agricultural information exchange or marketplace where content providers can upload and share information and content distribution partners can identify the content that is most suitable and needed for their smallholders before disseminating the content through their distribution channels.

There is a clear need of more contents - more in every way, including:

- More topics
- Covering more value chains
- Contents being more relevant across all regions
- More contents that are digitally ready
- More contents that are scientifically validated
- More contents that are free to as inexpensive as possible:

The open partnership that underlies OCAP has the real opportunities to make the above features possible.

It is important to find more effective ways to deliver quality content to smallholder farmers, as many organizations have been doing today through their own way, through product and services, through extension services, through training and other tools and so on. But it is also important to recognize that all organizations are resource-constrained, which require organizations to focus on other parts of the business and delivery model. Therefore, by getting organizations more and better contents in the digitally ready format, OCAP will allow organizations to focus on what they do best and their core businesses.

OCAP creates another pathway of benefit smallholder farmers:

- The way how OCAP is created, through multiple partnerships, allows it to create a learning environment in this multi-partner ecosystem. Through OCAP, organizations can learn from each other and fill gaps in knowledge
- It also creates opportunities for other initiatives inspired by these interactions.
- These ultimately will benefit smallholder farmers.

Despite the compelling potential of OCAP, it is important to stay realistics - it is a concept right now, and there will be learning curves and pains. We have to take it step by step moving forward.

SESSION 3

Emergency Digital Response - What Have We Learned from the Combined COVID-19 and Desert Locust Emergencies?

The Impact on Farmers and How to Prepare for Future Emergencies and Shocks utilizing Digital Tools

Watch recording online

04:00 - 05:30 PM EAT

Reading material

- Mercy Corps AgriFin event hosted by African Union Cultivate Africa on "Digital Technology & Data-Led Citizen Reporting: Emergency Response to the Desert Locust Crisis in East Africa"
- Mercy Corps AgriFin webinar on "Digital Technology & Data-Led Citizen Reporting"
- Mercy Corps AgriFin "Desert Locust Citizen Reporting Case Study"
- Mercy Corps AgriFin & Busara Report on "The Impact of Digital Channels on Behaviors During an Emergency Response Effort"
- Mercy Corps AgriFin & 60 Decibels partnership: "Interactive Dashboard on "How are Kenyan Farmers Faring in the Face of COVID-19?"

Moderator

John Mundy
Digital Climate-Smart Agriculture Lead
Mercy Corps AgriFin

Speaker/Panelist

Claire Rhodes
CEO
Producers Direct

Katie Reberg
Manager
60 Decibels

Patricia Gichinga
Head of Production
The Mediae Company/ iShamba

Guy Mondjii
Country Director
Viamo

Louis Graham
Engagement Director
Busara

Temesgen Gebeyehu
Director for Digital Agriculture
Ethiopian Agricultural Transformation Agency (ATA)

Attendance

94
People online

13
Youtube viewers

> "There is no right or wrong digital channel... and especially in an emergency, it is important to let farmers access different channels.
>
> *John Mundy, Digital Climate Smart Agriculture Lead, AgriFin*

Day Four | Session 3

EMERGENCY DIGITAL RESPONSE

Introduction

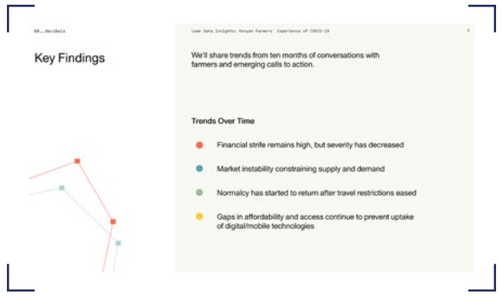
This session will first explore the impacts on smallholder farmers through groundbreaking research from 60 decibels, drawing from their farmer dashboard. Then the Busara center for behavioural economics will detail the evidence behind digital channels efficacy on behaviour change in times of crisis. Following these presentations there will be a panel discussion exploring themes of future preparedness for shocks to the smallholder farmer systems - including AgriFin's research partners as well as leading implementers: Mediae, Producer's Direct and the Agricultural Transformation Agency of Ethiopia (ATA).

Key Takeaways

Katie Reberg

60 Decibels

The study was on the effects of COVID 19 on SHFs. It was a 1 year study (from June) where the firm spoke to 500 farmers per month. 80% of the farmers interviewed earned income from agricultural products.



Findings:

- ➔ Financial strife:
  - Financial status worsened but got better as travel restrictions/lock down easened.
  - Farmers lost at least one source of income
  - There are more people relying on financial coping mechanisms (loans, savings, relying on family). 60% have relied on 2 or more mechanisms. There are more people relying on savings; more taking loans and using assets which are the riskier or dire options
- ➔ Market instability:
  - Market access worsened because of travel and lock down restrictions. Good buyers could not get to the farmers or even sometimes afford to buy from the farmers.
  - Farmers reduced crop or livestock production in order to cope. Though 80%+ farmers would like to sell more, they can't. Farmers are selling less produce in order to keep some produce for their households.
  - Farmers ae receiving low prices
  - There are higher prices for inputs, one reason is because ports were closed
- ➔ Normalcy
  - Market may be bouncing back so we are hoping for better prices
  - Farmers are starting to hire labor back to their farms
  - Farmers are selling (about) back to normal produce, as before COVID
  - Farming is becoming more important-- both for food and to sell
- ➔ Gaps in digital platforms
  - Digital methods remain underutilized-- due to lack of devices and cost
  - Digital methods were mostly used for connecting with people-- on lower cost methods e.g. radio and decrease on higher cost apps e.g. FB because of the need to spend on bundles
- ➔ **Moving forward**
  - Cash transfers have been critical in getting people to cope- liquidity is important so we can leverage on this
  - Low access to inputs needed by farmers e.g seeds, fertilizers
  - We need to help get enterprises back on track-- policy makers to get economy back in shape

Louis Graham

Busara

Did providing COVID-19 info shift knowledge, attitudes and behaviors. The answer is yes, it did. The improvements were far stronger than in a control group that did not receive any information. The experiment was done for IVR, a combination of SMS+TV; SMS+IN-PERSON (this had strong effects) and IVR+RADIO+AGENT.

Findings;

- ➔ Information was useful: farmers agree that their knowledge increased; attitudes and behaviors also improved
- ➔ Livelihoods were the biggest concern for people. The study monitored SMS that people sent to the partner organizations. Examples of the concerns are as below:
  - People requested financial assistance like loans
  - How to improve access to markets
- ➔ SMS was most impactful and most trusted
  - People trust this method more than other sources (because the other sources could have misinformation)
  - No internet requirement
- ➔ **Moving forward**
  - Farmers' behaviors started reverting back to poor behaviors as soon as the information stopped being given

Guy Mondjii
Viamo

About the program: Viamo disseminates information via mobile technology i.e. SMS and IVR (phone surveys/hotlines etc). There were 3,000 trained extension agents, programmed before COVID. After COVID, we found that there was more need for tools for remote training

Reactions to COVID & Locust invasions:

➔ Information line:
- Truce champions in the community that hear false rumours would send SMS. Viamo then tracked messages to listen to the audio recordings. We thereafter called back the champions with correct information which they shared with the community.
- Safe farming- with 57 farmers. They are free phone calls for airtel sim (airtel representing the private sector and Viamo representing the).

➔ Messaging:
- Sent out COVID 19 messaging- to debunk myths, and share symptoms

➔ **Moving forward**
- Using a mixture of different channels of SMS and IVR is better. It's good to find the right mix.
  - IVR has worked well in Nigeria (90% have a simple phone). It's useful to know whether they know how to use the phone/IVR, and whether they know who's calling, among other things.
- Sensitization: We would like to prepare partners better for the intervention

Patricia Gichinga
The Mediae Company/ iShamba

About the program: There are TV programs, and there is iShamba.

Reactions to COVID & Locust invasions:

Locust invasions

➔ Locust map:
- How to identify and control locusts
- Not to eat them

➔ Shamba shape up whatsapp hotline
- Farmer leaves message and gets contacted
- 8 million viewers reached weekly
- 17,000 messages to people who asked
- 1,000 new users in marginalized areas

COVID-19

➔ Hosted a QnA to address concerns from people including demystifying myths, talking to people that can't get market.
- 20,000 new farmers
- 6.7 mill messages to farmers on ways to cope

Moving forward

➔ Combination of channels: SMS+TV worked well and a cheap way to reach a lot of people

➔ Collaboration of different partners: Owners of digital platforms can work together--collaborations were found to be strong

Temesgen Gebeyehu
Ethiopian Agricultural Transformation Agency (ATA)

About the program: It was a government initiative started in 2010, set up to target bottlenecks for SHFs. There was digital agriculture established, i.e. digital tools.

Reactions to COVID & Locust invasions:

➔ Using 8020 hotline (IVR/SMS- 5.5 mill users). Though some modules were not working for some time:
- SMS survey/ IVR survey
- 1.5mill users warned about movement of desert locusts
- Incorporated COVID-19 content in the platform e.g. safe interactions; creating awareness etc

➔ Whatsapp (With AgriFin):
- to get information about types of desert locusts/ warning farmers

➔ Media campaign in radio and TV:
- to create awareness about desert locusts--this registered success

➔ **Moving forward**
- We would like to collaborate with everyone to add tools and make the IVR smarter (more localized/contextualized/ more languages)

Claire Rhodes
Producers Direct

About the program: There is an International network of SHFs. Focus on farmer led design--working with farmers and youth

Reactions to COVID & Locust invasions:

➔ Rapid farmer led research (Partnered with IDA.org):
- Check misinformation

➔ COVID-19 digital (multimedia) campaign (with farmer and youth):
- Visually engaging posters, whatsapp, radio, SMS platforms
- Shared with 4mill farmers (UG, KE, TZ)
  - 92% saying the information was helpful and 89% reporting a change in their behavior (e.g. hand washing).
- SMS was preferred

➔ **Moving forward**
- Farmer led design is critical
- Paired with ground truthing data from SHFs
- Bundled support services are critical so as SHFs take action

Q&A

Questions received from participants on chat during the session

Question: Are you seeing any increase in access to finance? (Leesa Shrader, Mercy Corps)

Katie Reberg, 60 Decibels

In terms of financial access, we have seen an increase in reliance on borrowing as a way to cope with the pandemic, that being said we haven't dug deeper into whether this borrowing is through low-cost loans or if this borrowing has been through riskier lenders like money markets.

Question: Do you have any insights into impacts across smallholders in other African markets? (Leesa Shrader, Mercy Corps)

Katie Reberg, 60 Decibels

@Leesa, we have focused the panel research in Kenya specifically. But our public dashboard at 60decibels.com does have more general insights across different African markets. I encourage folks to take a look at our Financial Inclusion dashboard which has research related to MFI clients, many of which are farmers.

Question: Hi Just wondering what the impact of the pandemic was on food security and access to support services. (Robert Magala, SKYMARK)

Katie Reberg, 60 Decibels

@Robert, we saw some interesting trends in food consumption. About 44% of farmers say their food consumption per person has decreased. A lot of this was driven by higher costs of food, as well as more members of the family being home and needing to be fed. This was especially true for children who were not in school. In addition 50% of farmers have said they are relying on 'less preferred' food in order to cut costs.

For anyone who would like to access speaker content

Producers Direct/ Wefarm/ Ideo.org COVID-19 materials

60 Decibels Deck

CLOSING PLENARY

Leaning Into Climate Solutions

Watch recording online

12:00 - 01:00 PM EAT

Moderators

Leesa Shrader
AgriFin Program Director
Mercy Corps

Victoria Clause
Senior Technology and Agriculture Expert
Mercy Corps AgriFin

Sieka Gatabaki
Deputy Program Director
Mercy Corps AgriFin

Keynote Speakers

Bill Gates
Co-chairman and co-founder
Bill & Melinda Gates Foundation
(Pre-recorded message)

Wanjira Mathai
Vice President and Regional Director for Africa
World Resources Institute

Stewart Collis
Senior Program Officer
Digital Agriculture Solutions, Bill and Melinda Gates Foundation

Attendance

111
People online

31
Youtube viewers

Panelists

Boniface Akuku
Director of Information and Communication Technology (ICT)
KALRO

Dr. Bradley D. Doorn
Program Manager
NASA Applied Sciences, Water Resources and Agriculture Research

Andrew Lala
Chief Strategy and Growth Officer
Ignitia AB

Samir Ibrahim
CEO & Co-Founder
SunCulture

Georgina Campbell-Flatter
Executive Director
TomorrowNow.org

Tamer El-Raghy
Managing Director
Acumen Resilient Agriculture Fund

Ranveer Chandra
Chief Scientist
Microsoft Azure Global

> If we are serious about addressing climate change, we have to invest aggressively in two goals. First, advancing the technology and policies to get to net-zero emissions by 2050. Second, protecting the livelihood and families in danger of losing them to an already-rapidly-changing climate.
>
> *Bill Gates, Co-chairman and co-founder, Bill & Melinda Gates Foundation*

Closing Plenary

LEANING INTO CLIMATE SOLUTIONS

Introduction

The Closing Plenary of AgriFin's 5th Annual Learning Event leaned forward into the next four years of AgriFin programming across Africa, with a focus on climate change and the critical role of digital innovation addressing the challenges and opportunities facing smallholders around the globe.

This session opened with a taped address by Bill Gates, Co-Founder and Chairman of the Bill and Melinda Gates Foundation on the climate imperative delivered by Stewart Collis, Senior Program Officer for Digital Agriculture Solutions, exploring technology approaches the agricultural sector must leverage. The opening address was followed by Wanjira Mathai, Vice President and Regional Director for Africa at the World Resources Institute, speaking to the expected impacts of climate change on agriculture across Africa. It was followed by a diverse expert panel on climate technology for agriculture in developing markets, discussing roles of governments, agribusinesses, investors, technology innovators to protect farmers and help them become part of climate solutions. The ALE closed with recognition awards celebrating AgriFin's partners' climate-smart achievements with the Bayer Foundation.

> We certainly see that bundling these services makes sense and there is the multiplier effect by combining different services together.
>
> *Stewart Collis, Senior Program Officer, Bill & Melinda Gates Foundation*

Key takeaways from keynote speakers

Bill Gates
Bill & Melinda Gates Foundation

- ➔ Agriculture is vital to the whole economy. It is essential to continue building stronger agricultural resilience.
- ➔ Innovation is a key to achieve the goal of making agriculture and smallholder farmers adapt to the changing conditions.
- ➔ There are two goals of aggressive investment to address climate change:
  - First, advancing the technology and policies to get to net-zero emissions by 2050.
  - Second, protecting the livelihood and families in danger of losing them to an already-rapidly-changing climate.

Stewart Collis
Bill & Melinda Gates Foundation

- ➔ The most highlighted impacts of climate on smallholder farmers include:
  - COVID-19 and food inflation (food price volatility)
  - Extreme events resulted such as droughts and flood
  - Gradually changes across seasons (e.g. rainfall)
  - Pest and disease
- ➔ There are broader solutions BMGF has considered for agriculture and then stressed on a few digital tools for climate adaptation.
  - Broader solutions:
    - Research crop, livestock and best practices
    - Predictive modeling for early action
    - Water resource management
    - Diversification (of crop varieties or livestock breeds)
  - Digital and data tools:
    - Earth observation remote sensing
    - IN-SITU sensors and IOT
    - Data analytics, AI and machine learning
    - Data collection, ag-data platform, and interoperability
    - Various digital tools (with 400+ agtech ventures in Africa) with majority focusing on:
      - Digital advisory services
      - Digital market linkages
      - Digital financial services
- ➔ Mercy Corps teams are very strong at the broader digital solution system and the ecosystem and at helping partners scale. The achievements made today are attributed to the Mercy Corps team, the MasterCard Foundation, and the whole community for the everyday effort to address these challenges and make changes.

Wanjira Mathai
World Resources Institute

- ➔ this level of investment is worthwhile, especially for youth and women who are the most economically disadvantaged groups.

Key takeaways from panel discussion

Samir Ibrahim
SunCulture

- Climate changes make the rains more unpredictable and unreliable, pushing SHF further into poverty. Because SHF needed water to make money, we decided that solar-based irrigation would work.
- To scale the impacts, there are 2 kinds of partnership that do not currently exist but will help the scale:
  - Government partnership: we need to remove newly added VAT. Removing the tax in our system would reduce the prices by 26% , increasing our addressable market by 150%.
  - Donor partnership: we need subsidies, which are always a part of involving the rural population in technologies. We recently partnered with the Togolese government to roll out Africa's first commercial solar irrigation subsidy system. This is helpful, but we need more grants like this to go towards fully implementing this type of intervention.

Boniface Akuku
KALRO

Several ways to make data effective for farmer-facing organizations:

- Enable policy environment: like in Kenya, we have the Ministry of Ag and digital transformation strategy
- Data protects and acts. If it works, it will reduce the cost and increase the value
- Provide investment: the current challenge is the government has been focusing more on crisis response; it should be more proactive, have "proactive response" instead of only "crisis response".

Ranveer Chandra
Microsoft Azure Global

- Looking at data's role, farmers know a lot and are the experts of their farms. Yet a lot of decisions they make were based on guesswork. If we can provide more data-driven information, we can equip them with the tools to make data-informed decisions.

Bradley D. Doorn
PhD, NASA

- **Moving forward**, AI has to be a solution to handle the huge amount of data we have collected, more than we ever had
- NASA is not designed to deliver the data to end users or SHF. It relies on partners like AFA and MS to take the data for use. None of this will work without local ownership. It does not work if there is no trust from the ground.more than we ever had

Andrew Lala
Ignitia

- Farmers know how to farm. They need access to better info and advisory. We provide weather information and advisory aligned with the right timing when farmers make decisions.
- We also need to get the accuracy right.
- We are looking at bundled services to scale. For instance, farmers are looking at a platform for traceability, then we can work with a platform to have weather SMS.

Tamer El-Raghy
Acumen

- Money is important but is not the most important thing. Organizations need access to diverse and long-term funding. Farmers need more than one service.
- Scalability and sustainability is a key for investment. The proven impact is another key. Impact needs to be measured in multiple dimensions.

Leesa Shrader
Mercy Corps AgriFin

- In the next 4 years, AgriFin will have 2 focuses: gender transformation and climate change

Georgina Cambell Flatter
TomorrowNow.org

- The location-based, on-time forecast has become the essential part of the digital toolkit for businesses, governments and individuals, especially for operational decision-making for farmers. Even with the changing climate, we believe a lot can be done to mitigate the climate risks with the knowledge of what is going to happen tomorrow.
- Accessible, on-time weather forecasts are absolutely critical to empower farmers through climate actions, such as boosting yields through better water and pest management, or turning locusts into animal feeds.

AWARDS AND WINNERS

As AFA draw to the end of six years of AgriFin programming with 150 partners and 6 years of successfully reaching more than 5 million farmers in 5 countries, AFA wishes to recognize the remarkable achievement of AFA partners across 12 Awards categories.

1

Impact for Farmers: Building Income, Productivity and Resilience

Presenter
Leesa Shrader
| AgriFin Program Director - *Mercy Corps*

Winners
- DigiFarm
- Hello Tractor
- SunCulture

3

Building Sustainable Scale in Digital Innovation for Smallholders

Presenter
Leesa Shrader
| AgriFin Program Director
Mercy Corps

Winners
- Sunculture
- Pula
- iProcure

2

Use of Digital Data to Serve Smallholders

Presenter
Matthew Shakhovskoy
| Director
ISF Advisors

Winners
- KALRO
- eProd
- ATA

4

Farmer Capability Solutions

Presenter
Scott Onder
| Founder & Senior Managing Director
Mercy Corps Ventures

Winners
- Mediae
- Arifu
- AgroMall

5

Driving Financial Inclusion for Smallholders

Presenter
Tamara Cook
| CEO
FSD Kenya

Winners
- DigiFarm
- Zanaco
- AgriWallet

7

Linking Farmers to Market

Presenter
Sieka Gatabaki
| Deputy Program Director
Mercy Corps AgriFin

Winners
- FtMA
- CoAmana
- mShamba

6

Logistics and Last Mile Service Delivery

Presenter
Mwombeki Baregu
| Senior Investment Officer - *IFC*

Winners
- Hello Tractor
- iProcure
- Vitalite

8

Leading in Outreach and Impact for Women on digital channels

Presenter
Jamie Anderson
| Senior Financial Sector Specialist - *CGAP*

Winners
- Zanaco
- Chomoka
- DigiFarm

9

Building Regional Digital Ecosystems for Farmers

Presenter
Sean Krepp
| Senior Program Manager
Google

Winners
- Pula
- CropIn
- WeFarm

11

Innovating for impact and resilience during COVID-19 & Desert Locust

Presenter
Erin Connor
| Senior Manager *Cisco Crisis Response*

Winners
- PlantVillage-Mediae
- Producers Direct
- Farmer Facebook Groups

10

Innovations in Public-Private Partnerships Benefiting Smallholder Farmers

Presenter
Philip Thigo
| Senior Adviser *Office of the Deputy President of Kenya*

Winners
- KALRO OMFP
- Plant Village - Mediae
- ATA-Turn.io-Mercy Corps Ethiopia

12

Climate-Smart farming and advisory

Presenter
Jamie Anderson
| Senior Financial Sector Specialist
CGAP

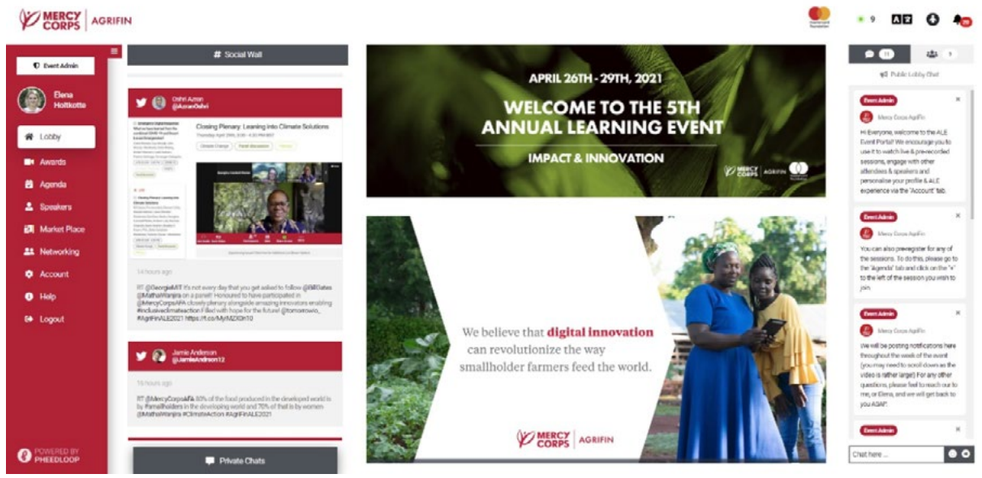
Winners
- Ignitia
- aWhere
- ACRE Africa

SOCIAL MEDIA

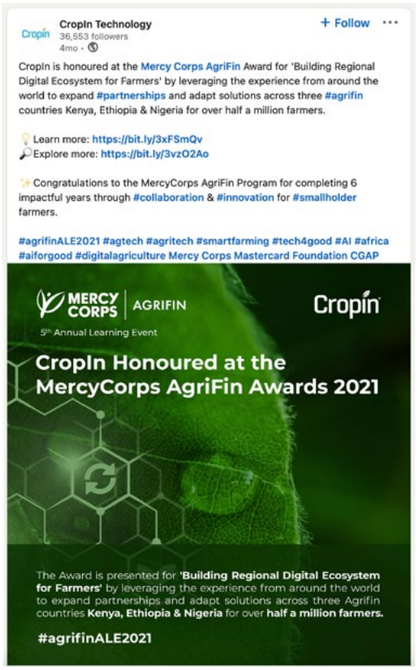
During the Virtual ALE 2021, our social media campaign focused on promoting the sessions and celebrating partners for their impact achievements throughout the past 6 years of engagement. The hashtag #AgriFinALE2021 was used to publicize and track online engagement and #AgriFinAwards2021. Twitter and LinkedIn pages were linked to our event platform, Pheedloop, with a live content reel displayed on the Lobby Page to update participants about social media activities in real-time.

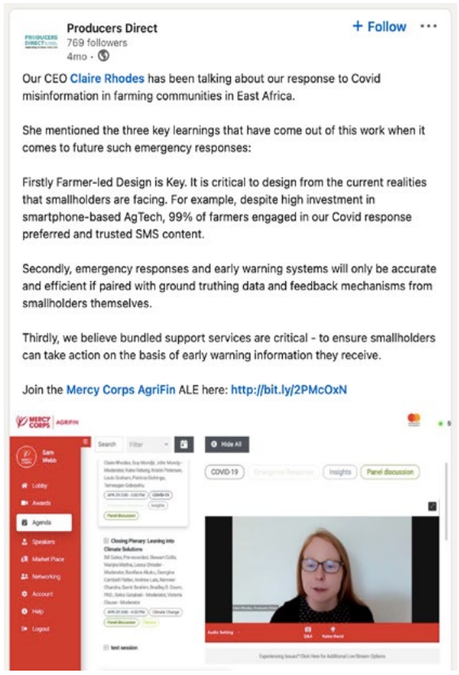
SAMPLE SOCIAL MEDIA CARDS

SOCIAL MEDIA INTEGRATION AND CHAT ON PHEEDLOOP

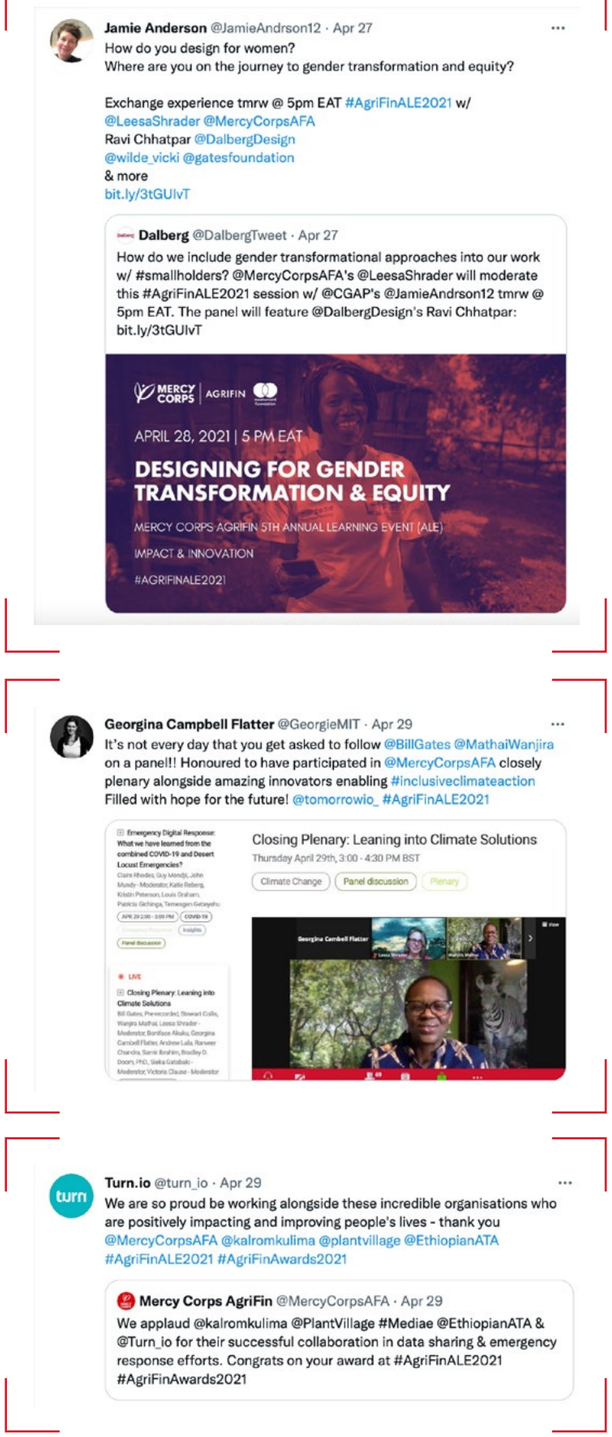


LINKEDIN



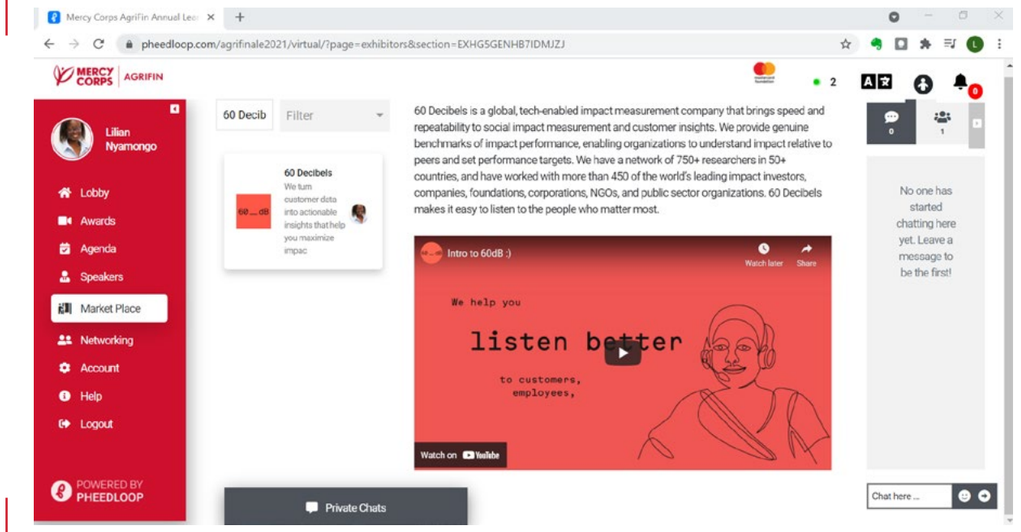


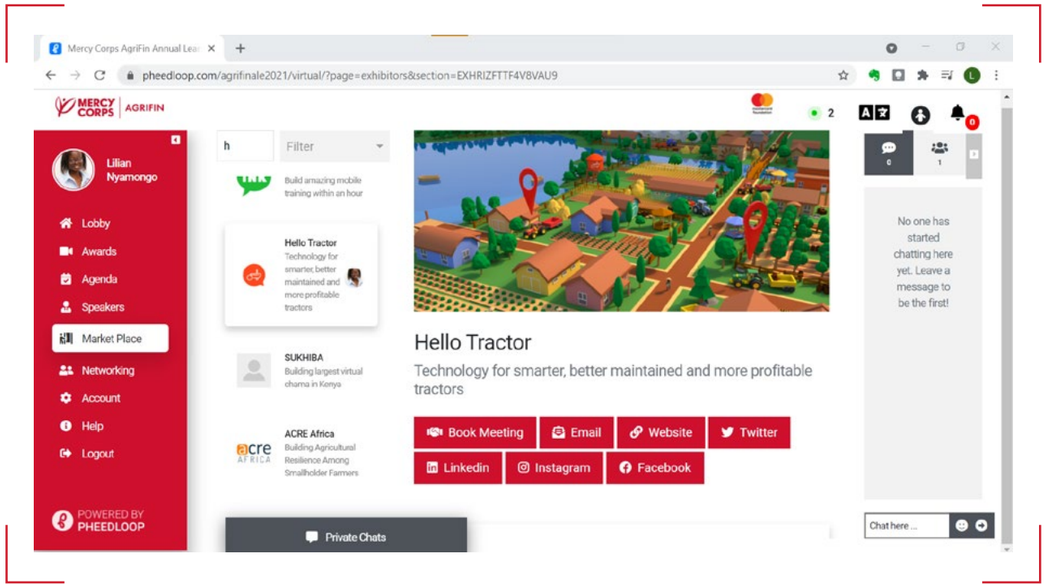
TWITTER



MARKET PLACE

The Marketplace was a virtual venue on the event platform, Pheedloop for AgriFin Partners to showcase their work and connect. They could populate information about their organizations including video links. Attendees also had the opportunity to get in touch with the exhibitors via email or via the chat function. Here are two examples.





APPENDIX FOR RESOURCES

VIDEOS

Day 1

Opening Plenary - Six Years of AgriFin Evidence, Impact & Innovation

Day 2: Session 1

The Future of Rural Employment & Building Back Better - Rethinking Rural Employment 9 months on | Part 1

Day 2: Session 1

The Future of Rural Employment & Building Back Better - Rethinking Rural Employment 9 months on | Part 2

Day 2: Session 1

The Future of Rural Employment & Building Back Better - Rethinking Rural Employment 9 months on | Part 3

Day 2: Session 2

Improving Agriculture Data Sharing to Increase Digital Climate Smart Agriculture Adoption

Day 2: Session 3

Moonshot technology innovations tackling climate change with smallholder farmers

Day 2: Session 4

Farmer Level Impact - Evidence base for innovations reaching smallholder farmers | 1

Day 2: Session 4

Farmer Level Impact - Evidence base for innovations reaching smallholder farmers | 2

Day 2: Session 4

Farmer Level Impact - Evidence base for innovations reaching smallholder farmers | 3

Day 2: Session 5

Gender Impact and Learning - Exploring Key Insights and Next Steps

Day 3: Session 1

Digitizing Field Force - The Opportunities and Challenges

Day 3: Session 2

Digital Platforms for Agriculture

Day 3: Session 3

6 years of impact - What Have We Learned?

Day 3: Session 4

Designing for Gender Transformation and Equity

Day 4: Session 1

Climate change, financial inclusion & digital climate smart agriculture - Research and Evidence Based Strategies

Day 4: Session 2

An introduction to the Open Content Agriculture Platform (OCAP) - A Digital Public Good

Day 4: Session 3

Emergency digital response - What have we learned from the combined COVID-19 and Desert Locust Emergencies? - The impact on farmers and how to prepare for future emergencies and shocks utilizing digital tools

Day 4

Closing Plenary - Leaning into climate solutions

READING MATERIALS

1. The Future of Work: Remaking Rural Employment after COVID-19
2. Rural Jobs Landscape Study: Exploring Rural Job Opportunities for Youth in Agriculture (Full Report)
3. Rural Jobs Landscape Study: Exploring Rural Job Opportunities for Youth in Agriculture (Report Summary)
4. Mercy Corps AgriFin event as part of the African Union Cultivate Africa summit on Riding the Digital Data Wave: Barriers and Innovation in Agricultural Data Sharing
5. Digital Data Sharing in Agriculture
6. Organisational Data Readiness Tool
7. Agile Impact Case Studies with 60 Decibels
8. Farmer Voices Shaping Private Sector Support (ICT4Ag Event-Video)
9. Human Account Study: Women Farmer Segments
10. Mercy Corps AgriFin & Dalberg Event as part of the African Union Cultivate Africa summit on What it Takes to Develop and Manage a Digitally-enabled Field Force
11. Field Force Models for Agriculture: Key Learnings and Insights
12. Agriculture Logistics in Kenya: Landscape and Solutions
13. Mercy Corps AgriFin Digital Platform Blueprint series including a White Paper, Reports, and Blogs.
14. Mercy Corps AgriFin event part of the African Union Cultivate Africa summit on Scaling AgTech Innovation through Digital Platforms
15. ISF Advisors & Rural and Agricultural Finance Learning Lab Report on Agricultural "Platforms" in a Digital Era
16. Gates Gender Equality Toolbox
17. Examining the climate finance gap for small-scale agriculture
18. Mercy Corps AgriFin event hosted by African Union Cultivate Africa on Digital Technology & Data-Led Citizen Reporting: Emergency Response to the Desert Locust Crisis in East Africa
19. Mercy Corps AgriFin webinar on Digital Technology & Data-Led Citizen Reporting
20. Desert Locust Citizen Reporting Case Study
21. Mercy Corps AgriFin & Busara Report on The Impact of Digital Channels on Behaviors During an Emergency Response Effort
22. Mercy Corps AgriFin & 60 Decibels partnership: Interactive Dashboard on "How are Kenyan Farmers Faring in the Face of COVID-19?

AGRIFIN'S PARTNERS

1. 60 Decibels
2. ACRE Africa
3. AFEX
4. Africa Farmers Club
5. Agora Global
6. Agriconneckt Services
7. Agricultural Transformation Agency (ATA)
8. Agri-wallet
9. AgroCares
10. AgroMall
11. Ag Transformational Office
12. Airtel
13. Akiba Commercial Bank PLC
14. Alliance for a Green Revolution in Africa (AGRA)
15. Apposit
16. Arifu
17. Astral Aerial
18. AtlasAI
19. aWhere
20. Bayer Crop Science
21. Belkash
22. Busara Center for Behavioral Economics
23. CABI
24. Causal Design
25. Cellulant
26. Chomoka
27. ClimateKic
28. CoAmana
29. ConserWater
30. Consultative Group to Assist the Poor (CGAP)
31. Cooperative Bank
32. Copia
33. CRDB Bank
34. Credit Factory
35. CropIn
36. Cropnuts
37. Dalberg

38. Dalberg Design
39. DigiCow
40. DigiFarm
41. Digital Farmers Kenya (DFK)
42. Digital Green
43. DMA
44. Dudutech
45. eCom Technologies
46. Econet
47. Efficiency for Access Coalition
48. Enhancing Financing Innovation Access (EFInA)
49. Enviu
50. eProd
51. Equitel
52. Equity Bank
53. Ethiopian Telecom
54. Facebook
55. FarmCrowdy
56. FarmDrive
57. Farm to Market Alliance (FtMA)
58. FASTA - the Forecasting African STorms Application
59. FINCA
60. FIPS Africa
61. Flour Mills of Nigeria
62. Food and Agriculture Organization of the United Nations (FAO)
63. Food Security for Peace and Nutrition-Africa (FSPN-Africa)
64. FSD Zambia
65. Fund for Rural Prosperity
66. Gatsby Africa
67. Geckos United
68. GiveDirectly
69. GoogleX
70. GSMA
71. Halotel
72. Heifer International
73. Hello Tractor
74. Ignitia
75. Imperial College London
76. Indorama
77. International Center for Tropical Agriculture (CIAT)
78. iProcure
79. ISF Advisors
80. Jumia
81. KAIOS
82. KCB Bank
83. Kenya Dairy Farmers Federation
84. Kenya Livestock Producers
85. Kenya Tea Development Association
86. Kifiya
87. Kobo 360
88. Kuza
89. Learn.ink
90. Litenga
91. Lloyds Bank
92. Lynk
93. Mediae
94. mfarmPay
95. Microsoft
96. Ministry of Agriculture - Ethiopia
97. MITI Ecommerce
98. Mozilla
99. mShamba
100. MTN
101. Musoni
102. NASA Harvest
103. National Potato Council of Kenya
104. NMB Bank
105. OLX
106. One Acre Fund
107. Oromia International Bank
108. PlantVillage
109. Praekelt Foundation

110. Precision Agriculture for Development (PAD)
111. Producer's Direct
112. Pula
113. QuickCheck
114. Rent to Own
115. Rungwe Tea Cooperative
116. Rural and Agricultural Finance Learning Lab
117. Safaricom
118. Sidai
119. Social Lender
120. Somali MFI
121. Stanbic
122. Sterling Bank
123. SUKHIBA
124. SunCulture
125. Syngenta
126. Tanzania Agricultural Development Bank (TADB)
127. The Kenya Agricultural and Livestock Research Organization (KALRO)
128. Thrive Agric
129. Tigo
130. TomorrowNow.org
131. TruTrade
132. Turn.Io
133. Twiga Foods
134. Uliza
135. Viamo
136. Virtual City
137. Vitalite
138. Vodacom
139. Wageningen Institute
140. WeFarm
141. World Bank
142. World Food Programme (WFP)
143. Yara International
144. Zanaco Bank
145. Zoona

MERCY CORPS | AGRIFIN