Mercy Corps AFA Agile Impact study for aWhere

Report completed by Busara on behalf of Mercy Corps AgriFin

April 2020









About Mercy Corps AgriFin

We work with over 9 million farmers and 130 partners across Africa

- Mercy Corps' AgriFin Accelerate Program (AFA) was created with the goal of supporting the expansion of digital financial services to one million farmers in Sub-Saharan Africa (SSA).
- Objective to develop services that increase farmer income, productivity and resilience, with 50% outreach to women.
- Work with **private & public sector scale partners** such as **banks**, **mobile network operators**, **agribusinesses**, **technology innovators** and **governments**.
- We help our partners develop bundles of digitally-enabled services, including smart farming, financial services, market access and logistics supporting data-driven partnerships.
 - AFA and its partners provides increased access to digital services that help address some of farmers' pressing challenges. Over the years it has become important to assess the importance of increased access to digital services.

To this end, Busara and Mercy Corps AgriFin worked together to assess and quantify the impact of increased access to digital services through these partners on smallholder farmers outcomes







Agile Impact Study Objectives

Impact evaluation based on in-house data provided by partner organizations

This **Agile Impact Study** aims to assess the impact of MercyCorps partners under the AFA program on smallholder farmers' outcomes. More specifically, it seeks to uncover:

- What impact have AFA partners had on SHF income, productivity and resilience to shocks?
- What financial and value-added products and services do SHFs, including women and youth, value most and why?
- How does bundling of products and services impact uptake and usage of digital financial services?
- What capacity building tools have the highest impact on SHFs willingness and ability to use digital financial services?
- What distribution channels are most effective for delivery of services to SHFs

To achieve the learning objectives, Busara Center for Behavioral Economics used existing administrative data provided by each partner to assess and quantify the trackable impact for each partner.





Partners onboarded with this study:

aWhere

ACRE

eProd

Hello Tractor

Ignitia

SunCulture

TruTrade

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Executive Summary

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This report presents the findings of the data analytics conducted on aWhere's administrative data, analyzed by Safaricom and the primary data, analyzed by Busara to answer key learning questions on behalf of Mercy Corps AgriFin. We sought to understand aWhere's influence on smallholder farmers outcomes using two data sets.



Primary data

County, Age, phone usage, economic activity, farmers' outcomes etc.

The report contains two sections:

- The first section captures the administrative analysis of 3,651 farmers
- The second section includes the analysis of the primary data that captures
 - 354 aWhere farmers' opinion on the services they have received
 - □ reported impact the service has had on their income, yields and resilience



Over half of the interviewed users think aWhere has urged them to make changes with respect to the way they plant, when to farm and how they apply fertilizers. For most of the users, they found the messages most useful at the germination and establishment growth stage in the planting lifecycle.

Users who confirmed that they received both planting date suggestions along with messages on weather conditions and planting advice rated their experience higher than users who confirmed that they received only one of the messages.



Alignment call	Safaricom mined data	Data analysis and findings report
Alignment call with aWhere team to understand aWhere's theory of change, proposed research questions and data availability	Safaricom mined and shared data gaps with Busara and Busara suggested proxies	Busara analyzed the data from the primary survey and put the findings together
•	•	
Shared Data request	Primary data collection	Dissemination of findings
Busara shared a Pre-analys with Safaricom for adminis data analysis	is plan Instrument was shared wi trative aWhere. aWhere provide feedback and data was co	ith Presentation of findings to the d team ollected



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Introduction

The objective of this engagement is to gauge farmers' perception of **aWhere's services and its influence on smallholder farmers' outcomes**



- aWhere provides **agronomic contents** to farmers through **SMS** during the entire farming life cycle
- aWhere's theory of change is that by providing agronomic contents, smallholder farmers will improve their farming practices, productivity, and be more resilient to shocks
- aWhere's service was rolled out to Digifarm users in the sorghum, soybean, green grams, maize and sunflower value chains
- Given aWhere's theory of change, we sought to understand aWhere's influence on key farmers' outcomes like farming practices, productivity and resilience



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Findings: Administrative Data Analysis

Migori has the largest representation of users but Makueni has a larger proportion of female farmers

Administrative data



Source: administrative data

- Majority of the users pulled from the administrative data come from Migori, Makueni and Bomet
- Of note, Makueni has the largest female representation across the counties
- Countries where female users takes up more than 50%: Makueni, Machakos, and Kitui
- Migori is largely presented by male users, with 72% in the county being male

Majority of the users sampled from the administrative data are above 35 years of age

Administrative data



- Approximately 20% of the farmers in the administrative data are considered "youth", below 35 years old
- Within either age bracket (i.e. < 35; >= 35), the number of male users is about 1.5 times of the number of female users



Majority of the farmers stopped receiving messages in August 2020



 Over 80% of the farmers stopped receiving messages as at August 2020



Almost all the farmers received messages at least 21 times since 2019

Administrative data



- Over half of the farmers received between 21 to 30 messages in total
- Approximately 40% of the farmers received 31-40 messages
- Few users are skewed on both end of the spectrum being "extremely inactive" (i.e. receiving <= 20 messages) or "extremely active" (i.e. receiving >= 40 messages)



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Findings: Primary Data Analysis

Sample Overview





A snapshot of the farmers interviewed



We interviewed farmers from seven counties



- We interviewed farmers from Bomet, Bungoma, Kakamega, Makueni, Meru, Migori and Tharaka-Nithi
- Majority of the farmers came from Migori, Bomet and Makueni.
- The sampling was allocated based on the proportion of aWhere users in the different counties



Over half of the sampled farmers say they make decisions themselves



Kenya (2020 survey)

- Overall, more than half of the farmers make decisions on their own. Of note, most of the male farmers are more likely to make decisions on their own compared to female farmers
- Female farmers are more likely to jointly make decisions with their spouse compared to male farmers



Phone Usage





Half of the farmers reported that they can read and speak in English



- 62% of the respondents mentioned that they understand English to an extent
- The remaining 38% said they don't understand English. It is important, that future messages are sent in languages all of the farmers can understand.



Most sampled aWhere farmers use their phones to send and receive money, and get information on agriculture



- Almost all farmers sampled, send and receive money through their phones, make payments for goods and services and get information on farming
- 1 in 3 farmers use their phones to access the internet
- 100% of the farmers said they own their phones



Economic Activity on the Farm





Most of the farmers interviewed own a business as a secondary source of income



94% of the aWhere users interviewed farm as their primary source of income, and own businesses as their secondary source of income



More female farmers were more likely to have not earned an income from agric activities last season relative to male farmers



Kenya (2020 survey)

Kenya (2020 survey)



- 1 in every 3 female farmers interviewed mentioned that they did not earn any income in the last farming season, compared to
 1 in every 4 male farmers
- There is a group of male farmers who on average earned more than 70K Kshs from farm last season, accounting for 8% of male farmers interviewed



Majority of the farmers in Bomet, Migori and Kakamega counties did not earn income or earned less than KSH20,000 in the last agric season



Majority of the farmers in Bomet and Kakamega earn less than Ksh20,000 to no income



Farmers in Meru and Tharaka-Nithi county earned relatively more than the farmers in other counties



Kenya (2020 survey)

Kenya (2020 survey)

- Majority of the farmers sampled in Meru and Tharaka-Nithi earned at least Ksh20,0001 in the last planting season.
- Approximately half of the farmers in Makueni and Bungoma earned less than Ksh20,000 or nothing in the last planting season



Over half of the farmers recalled receiving messages on both planting date suggestions and weather conditions



- Over half of the farmers received messages on both planting date suggestions, SMS on weather conditions and planting advice
- **36%** recalled receiving messages on weather conditions and planting advice but not planting date suggestions



Majority of the farmers received messages at least 3 months before the survey was conducted



Kenya (2020 survey)

- Most of the farmers interviewed heard about Digifarm through Digifarm's Village Advisors
- Almost all the respondents received a message last from aWhere 3 to 5 months before the interview



Farmers received planting advice for mostly maize, sorghum, and sunflower planting

Kenya (2020 survey)



 Majority of the respondents received messages for planting maize. Farmers planting sorghum and sunflower were also well represented in the sample



The regular messages on weather conditions and planting advice were found more useful than planting date suggestions



Kenya (2020 survey)



Kenya (2020 survey)

The respondents thought the SMSs on the weather conditions and planting advice were the most useful

Farmers felt these messages were most useful during the germination phase of the crops



Majority of the farmers in Tharaka-Nithi found the planting date suggestions most useful

Kenya (2020 survey)



 While majority of the respondents in other counties found the messages on weather conditions most useful, farmers in Tharaka-Nithi found the planting date suggestions most useful



Despite the messages being in English, most respondents found the messages clear and easy to understand



Kenya (2020 survey)

- Base: 332
 - 84% of the respondents agreed that the messages were clear and easy to understand. This proportion is higher than the percentage of farmers who say they understand English
 - 88% of the farmers thought the messages were clear and easy to understand even though they don't understand English.

