



Scope of Work

Firm or Individual:	Technology provider to build multi-messaging platform to drive uptake of digital Insurance tool.
Program:	AgriFin Accelerate
Scope of Project:	Insurance messaging and technology build for direct smallholder engagement
Country:	Zambia
From:	5 th March, 2018
To:	30 th June, 2019
Task Manager:	Christabell Makokha, Country Director

Program Context

Nearly one and a half billion poor people live on less than US\$1.25 a day. One billion of them live in rural areas where agriculture is their main source of livelihoodⁱ. An estimated 70 million Small Holder Farmers (SHF) live in Sub Saharan Africa, over half of whom are womenⁱⁱ. Smallholders, who typically farm two hectares or less, provide over 80% of the food consumed in a large part of the developing world, contributing significantly to poverty reduction and food securityⁱⁱⁱ. However, increasing fragmentation of landholdings, especially in infrastructure, coupled with reduced investment support, growing competition for land and water, rising input prices and climate change threaten this contribution, leaving many smallholders increasingly vulnerable.

Transformational Potential of Agriculture

Agriculture has been found to play a powerful role in poverty reduction, especially when agricultural development has focused on small farms grow. It is estimated that a 1% increase in crop productivity reduces the number of poor people by 0.72% in Africa.

Given increasing world populations and demand for food, SHFs occupy an important segment of the global agricultural value chain^{iv}. Multinational buyers will increasingly rely on smallholders to secure their supply of commodities and to help satisfy consumer sustainability preferences^v. At an estimated \$450 billion, the global demand for smallholder agricultural finance is large—and largely unmet. Credit provided by informal and formal financial institutions, as well as value chain actors, currently only meets an estimated USD 50 billion of the more than USD 200 billion need for smallholder finance in the regions of sub-Saharan Africa, Latin America, and South and Southeast Asia^{vi}. Impact driven smallholder agricultural lenders, such as Root Capital in Kenya and elsewhere, currently satisfy less than two percent of the demand.^{vii} The volume and value of savings, lending and payment transaction SHFs in most African countries is not specifically measured.

Mobile phones are a powerful tool to access the electronic national retail payments system and enable vast numbers of clients to use a range of financial and informational services at lower cost. In agriculture, progressively more services are being delivered via mobile phone and as it was revealed in the 2015 Farmer Benchmark and Payment Study, 92% of the respondents owned at least one mobile phone. Applications such as iCow and Farpal direct specific, timely information on agricultural production methods to farmers through their mobile phones. Moving beyond one-to-one communication, M-Farm is an Internet- and SMS-based service in Kenya that allows farmers to aggregate; it publishes wholesale price information on 42



crops and provides a platform for smallholders to collectively sell crops and buy inputs, thereby lowering costs and accessing new markets.^{viii}

AgriFin Accelerate Program Overview

Drawing on Mercy Corps' experience implementing the AgriFin Mobile program and years of work in the agriculture, finance and ICT sectors, AgriFin Accelerate will **support the expansion of digital financial services (DFS) to one million farmers in Sub-Saharan Africa (SSA) over six years, delivered by growing ecosystems of diverse service providers**. AgriFin Accelerate's primary target group is unbanked smallholder farmers living on less than \$2 per day in Kenya, Tanzania and Zambia.

Three outcomes will contribute to the achievement of this goal:

Outcome 1: Market actors expand, improve and continue to offer high-impact DFS products and services that are tailored to address the expressed needs of SHFs;

Outcome 2: Farmers increase capability to access and utilize demand-driven, high impact technology-enabled financial products and services relevant to SHFs;

Outcome 3: Ecosystems around both supplier and farmers emerge supporting provision of digital financial and informational services to SHFs that are used at scale.

The program's core innovations are: 1) a **rapid iteration engagement model** to drive innovative, client-centric product development; and 2) our work with **partners to develop "bundles"** of mobile-enabled services offering farmers affordable access to digital financial and market informational services. Specific focal areas for innovation will include the use of **digital technology to educate and inform farmers to achieve financial health**, **tech start up acceleration**, the use of new and **alternative data** to support financial service design and the use of **human centered design** techniques to ensure products are closely linked to the needs of farmers, particularly women and youth.

Monitoring, evaluation and learning (MEL) will focus on supporting the building of high impact services at the farmer level, expanded and sustainable delivery at the partner level, and development of related market-oriented interventions supporting ecosystem development. The program will collaborate closely around learning with Mercy Corps' existing AgriFin Mobile program, already working in Uganda, Zimbabwe and Indonesia for 2.5 years.

Purpose of Engagement

Farmers experience risks every day as an inherent part of their livelihood, whether caused by climate shocks such as drought or flooding or pest and disease. These risks currently prevent farmers from investing in their farms, resulting in low yields, food insecurity and poverty. Although insurance can help SHF manage these risks, SHF in Zambia have typically lacked access to crop insurance due to the higher risk, expensive processes, unsuitable products, **lack of understanding of what is and how insurance works**, among other factors.



The objective of this engagement is to **increase the intrinsic value of an agricultural insurance product**, specifically by developing and testing a WhatsApp, IVR and SMS based push-messaging add-on to the platform which would send SHF agronomic tips tailored to SHF location, climate conditions, variety and specific planting date. Information such as how to increase their yields, combat pests and disease, and prepare themselves for harvest—based on the weather conditions of their location. We envision this timed series of 3-7 messages will be sent to **all SHF** who register for the insurance, regardless of if they received a payout. Tips will continue beyond the initial insurance date up through harvest, continuing to support SHF with timely and pertinent information that they value deeply. This system can potentially act as a model for direct farmer information, which could be used to deliver financial information and tips to SHF

Mercy Corps AFA would hence like to contract a tech-based service provider to build, iterate, and implement a messaging system for direct engagement with smallholder farmers. This engagement will start from March 2018 to encompass part of the 2017/2018 maize season, through the end of the 2019 maize season in March 2019. The products for these customers will be deployed nationwide in Zambia as well as in project specific areas for these customers respectively and will target maize farmers.

Scope of Work

1. Product Development:

- Build upon an insurance platform to harness the power of rainfall data and couple it with the vast farmer database to produce customized messages for the smallholder farmer's unique situation.
- Utilize expertise to codify and expand the use of WhatsApp as a direct-messaging platform for smallholder farmers, and the agribusinesses that directly serve them.
- Develop and testing of a scheduler for SMS, IVR and WhatsApp messages building on an existing database system.

2. A/B testing of content and channels:

- Develop content based on 2017/2018 in-season learnings
- A/B test messages with farmers from the database to see which are more effective at influencing smallholder behaviour.
- A/B test delivery channels, using WhatsApp for business, direct SMS campaigns, and push-pull SMS services
- Deliver highest resonating messages through the highest impact channel to all farmers (both seed and fertilizer customers) during the 2018/2019 maize season.

3. Development of WhatsApp business product

- Close work with ecosystem partners to become an early adopter of the WhatsApp Business platform.
- Will require integration into current system, as well as a staff person to manage the relationship with WhatsApp



Deliverables

Workplan: Contractor will develop a work plan for the engagement to include resources and time allocated to the assignment.

Progress updates: within the course of engagement the contractor will provide AFA a brief verbal or written progress status and ensure timeliness of delivery of final product. This will include updates on uptake and use of the products developed

Final report: which will include uptake and use of the products developed as well as key lessons learnt

Budget and Terms of Payment

Mercy Corps is open to working with suppliers within this budget; broken down according to the supplier's terms. The proposed budget should be broken down according to the following categories:

1. Product development
2. A/B testing of content and channels
3. Development of WhatsApp business product

Necessary Skills and Experience

The firm must have demonstrated subject matter expertise as is related to design and delivery of technology solutions for development in Zambia, particularly in building solutions targeted at smallholder farmers. Experience working with AFA and/or other partners that work with farmers on a similar assignment is a plus.

Ownership/Control of Work Product/Publication

Ownership and control of all work products related to this scope of work and partner engagement will belong to AFA and any learnings or publications derived from the work product will require prior written approval from AFA.

Authorship and Acknowledgement

Matters relating to authorship and acknowledgment of any materials produced by AFA during the course of this engagement will be addressed in the main contract agreement entered into between Mercy Corps and the chosen supplier.

Task Manager/Reporting

The Task Managers for this engagement are AFA Zambia Country Director, Christabell Makokha and AFA Zambia Project Coordinator, Samantha Malambo. The chosen supplier will direct all communications to these parties who will have final sign off on all project deliverables.



ⁱ IFAD, Smallholders, food security, and the environment, 2013

ⁱⁱ IFAD, "Sub-Saharan Africa: The state of smallholders in agriculture", Schonberger and Delaney 2011.

ⁱⁱⁱ Peck, Anderson, "Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families", CGAP Focus Note #85, April 2013.

^{iv} Dalberg, 2013

^v Dalberg, 2013

^{vi} MasterCard Foundation, "Inflection Point: Unlocking growth in the era of farmer finance", April 2016

^{vii} Dalberg, 2013

^{viii} Peck, Anderson, "Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families", CGAP Focus Note #85, April 2013.