

## Scope of Work

<b>Consultant:</b>	Firm
<b>Program:</b>	AgriFin Digital Farmer (ADF II)/GIZ DAA/ OKTA
<b>Scope of Project:</b>	Sprout Platform Product Development
<b>Country:</b>	Ethiopia, Kenya, Nigeria
<b>From:</b>	30 Feb 2022
<b>To:</b>	28 Feb 2024
<b>Task Manager:</b>	D-CSA Program Director and Sprout Lead
<b>Technical Support:</b>	ADF II Technical Team

### 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 livelihood<sup>1</sup>. An estimated 70 million Small Holder Farmers (SHF) live in Sub Saharan Africa, over half of whom are women<sup>2</sup>. 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 security<sup>3</sup>. 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.

Given increasing world populations and demand for food, SHFs occupy an important segment of the global agricultural value chain<sup>4</sup>. Multinational buyers will increasingly rely on smallholders to secure their supply of commodities and to help satisfy consumer sustainability preferences<sup>5</sup>. 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<sup>6</sup>. Impact driven smallholder agricultural lenders, such as Root Capital in Kenya and elsewhere, currently satisfy less than two percent of the demand.<sup>7</sup> 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 iShamba and Arifu direct specific, timely information on agricultural production

#### 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

<sup>1</sup> IFAD, Smallholders, food security, and the environment, 2013

<sup>2</sup> IFAD, "Sub-Saharan Africa: The state of smallholders in agriculture", Schonberger and Delaney 2011.

<sup>3</sup> Peck, Anderson, "Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families", CGAP Focus Note #85, April 2013.

<sup>4</sup> Dalberg, 2013

<sup>5</sup> Dalberg, 2013

<sup>6</sup> MasterCard Foundation, "Inflection Point: Unlocking growth in the era of farmer finance", April 2016

<sup>7</sup> Dalberg, 2013

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.

### AgriFin Digital Farmer (ADF II) Program Overview

AgriFin Digital Farmer II currently represents a **\$12 million, four-year program working in Kenya, Tanzania, Ethiopia and Nigeria**, with potential to expand to other markets (Uganda+). In partnership with Bayer Foundation, ADF 2 seeks to support the expansion of digitally-enabled services to 5 million smallholder farmers, delivered by growing ecosystems of diverse service providers and building farmer income, productivity and resilience across by 50% while reaching 40% women.

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. Our support programming is focused on enabling the following critical areas of innovation, that will follow an ecosystem and market facilitation approach supported through partnership activities and dissemination of evidence-based learning to ecosystem actors following a Market Systems Development (MSD) approach, with a strong gender focus:

- *Agricultural Advisory and Smart Farming Solutions, drawing on Climate Smart Agriculture (dCSA)*
- *Appropriate Digitally-Enabled Financial Services for SHF*
- *Digital Platform Models Providing Market Access, Financing, Information and Resources*
- *Digital Channels, Logistics and Mechanization*
- *Use of Digital Data for Decisioning, Product Development & Risk Management.*

The Program targets the core 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.*

Building on the AgriFin approach, partnerships and experience to date, ADF II will build on existing approaches and partnerships, leveraging in new programming to:

- **Design, Test & Scale Digitally-Enabled Climate Smart Agriculture Solutions (dCSA)** focus alongside other innovation areas: Climate change is already causing yield declines for staple crops exacerbating food insecurity on the African continent. Farmers are struggling to know more and more to know how best to manage their farms. ADF II will continue to maintain a focus on the original ADF I (five) focus areas of innovation i.e. (a) smart farming & ag advisory; (b) financial products & services; (c) digital markets; (d) logistics & distribution; and (e) alternative data & credit scoring leverage climatic data;
- **Deliver on Digital for Women:** AgriFin is committed to address the digital divide by designing products and services specifically for women farmers and women in agricultural value chains. Designing for women ensures uptake, active use and impact, while increasing agricultural productivity, inclusion,

poverty reduction and climate resilience. AgriFin impact evidence on gender points forward to the importance of digitizing groups, building meaningful financial bundles that are savings-led, building farm skills, market linkages and ensuring a trusted human support role as women build decisioning power, digital access and digital literacy;

- **Address Impacts of COVID-19 and Desert Locust:** Recognizing the dramatic impact of COVID-19 and Desert Locust across our markets, we have seen that digital solutions are a lifeline to create safe, transparent, efficient and scalable solutions for farmers and the value chains in which they work. AgriFin has already successfully leveraged and will continue to engage existing agile programming, technology innovation and partnerships to scale services for farmers, while protecting the companies and markets serving them, working to rebuild livelihoods and food systems;
- **Crack the Digital Platform Code** by building on existing and developing new platform partners, continuing to leverage digital data and diverse bundles of products and partnerships. AFD II will support existing partners, including platforms like DigiFarm, KALRO, WeFarm, World Bank Million Farmer Platform, WhatsApp for Business, One Acre Fund, Vodacom, GoogleX and ATA along with new partners like Yara/IBM, Digital Green. Each of these partners have explicitly stated the need for platform and dCSA approaches;
- **Support Breakthrough Models for Digital Data Sharing and Usage:** Leveraging a strategic approach with AgriFin partners, including government, private sector, academics and development agencies to break down data silos and build collaborative data agendas and learning areas, leveraging closer relationships with other key think-tanks and Open-Data initiatives to shape the data opportunity in agriculture. AgriFin will develop and disseminate actionable data toolkits that can be refined directly in work with partners and available externally as a public good, continuing to push sustainable business models, open data sharing environments, farmer inclusion and research and learning around data and data sharing.
- **Support Ecosystem Learning, Impact Evaluation & Reporting.** Market ecosystem actors and the development community lack sufficient information, proven products and tools, and effective partnership models to successfully provide effective digitally-enabled services to farmers. AgriFin serves as a public information resource related to digitally-enabled services for smallholder farmers, share program research, tools and project engagement learning, as well as disseminate lessons learned through a dedicated website and social media.

### Country Focus

In response to farmer needs and ADF program learning, Mercy Corps aims to leverage current AgriFin partnerships and learning to expand and deepen our work to address the looming food security and climate change crisis to **extend high-impact, digitally-enabled services for over 5 million smallholders** and the agricultural value chains they work across our existing markets in **Kenya, Tanzania, Ethiopian and Nigeria, with expanded service support services in adjacent markets** with national, regional and global partners over the next four years. As our hub markets in Kenya and Tanzania mature, ADF 2 will extend models, funders, Mercy Corps' African footprint in 16 countries and regional partners like AGRA, CGIAR and FSD to drive growth in new and former AgriFin markets, including Uganda, Mozambique, Zambia, Zimbabwe, Ghana, Senegal, Sudan and DRC.

## GIZ Digital Agriculture Africa

The challenges in agriculture in Africa, particularly for the smallholder farmers producing 80% of its' food for consumption, are complex, and no single solution exists to reverse age-old issues around markets, infrastructure, poverty and exclusion. Digital solutions can provide relatively low-cost solutions that reach scale quickly, open new markets, and surpass the traditional brick-and-mortar approach to customer acquisition and the distribution and sales of products and services. Over the past five years, AgriFin has worked both to build capacity of fintech and agtech innovators to scale and also worked to broker partnerships for them onto larger digital platforms, typically hosted by banks, mobile network operators, large agricultural enterprises and government. Digital platforms are evolving as drivers for impact and viability in delivery of key services for agriculture and also for scale up of young, breakthrough technology providers. Digital platforms can host multiple service providers, working to offer “end to end” services to drive transformation in agricultural markets and impact for smallholders, while decreasing risks and increasing revenue models for fintechs, agtechs and other market actors.

## OKTA- Sprout Smart Farmer Innovation (SSFI) Program Overview

Smallholder farmers feed 1/3rd of the world's population, but studies project agricultural productivity throughout sub-Saharan Africa will not be able to meet growing demands. In addition to growing population, environmental shocks, major market disruptions and reliance on outdated agronomic practices, the majority of smallholder farmers have little access to updated agricultural information that addresses the causes of climate change and how best to adapt to its effects. There is a vast pool of this modern agriculture information and content, but it's not easily accessible to many of these smallholder farmers. The **Sprout Smart Farmer Innovation (SSFI) Program** intends the Sprout Platform to play the role of a global public good, where content can be consolidated and shared with farmer-facing organizations and distributed to smallholders through their various digital channels, supporting farmers to leverage the information to build their capacity and become more resilient. As part of the initial pilot we have launched the Sprout Platform - <https://sproutopencontent.com>, an open data platform and Sprout Learning - <https://wa.me/254711943939?text=hi> , a white labeled WhatsApp for Business platform open to all partners to utilize and share with the smallholders they support.

## Purpose of Engagement

This GIZ Digital Agriculture Africa (DAA) and smart development fund aims to promote zero contact and prevent the spread of COVID-19 by utilizing technology to expand access to food, improve distribution of agriculture outputs by consumers through support farmers utilize updated agriculture extension information to bolster production, cultivation, marketing and distribution of food in Kenya and Nigeria.

Over the past three years, World Bank (WB) and Mercy Corps AgriFin (MCAF) programming in Kenya have collaborated on a number of projects to support implementation of technology-led, scaled services to smallholder farmers. MCAF serves as a technical support provider to build active linkages between government and technology innovators, undertake related mapping, broker relationships, build capacity and provide support for implementation, viability and learning. WB and MCAF have also been informal collaborators to develop the Kenyan Agriculture and Livestock Research Organization (KALRO), working in close coordination to pilot and scale precision agronomy services, develop a data and digital product strategy and develop private sector partnerships to drive scale and impact. WB and MCAF have also informally collaborated on the digitally enabled response to the COVID-19 and Desert Locust crises, which ultimately resulted in MC AgriFin outreach to more than 16 million farmers in six African countries with support services.

Building on previous engagements, the key objective of this partnership will be to accelerate and scale implementation of digitally enabled initiatives resulting in high impact service delivery to smallholder farmers in order to build their income, productivity and resilience. With KALRO as a key collaborator for both World Bank and ADF2, we would seek to address the challenges of coordination across a wide range of actors and to build the capacity and long-term viability of digital services through KALRO through its data hub and support for the Sprout Platform, which KALRO is a major contributor.

The firm will support the development and rollout of various Sprout Platform products and tools. The firm will also assist the Sprout Platform team role out in updated product strategy and implement updated content and services. [Sprout](#) is the open content data portal where global agriculture experts and farmer facing organizations meet to share and discover farmer-friendly, digital ready content and services designed to build smallholder skills, resilience and income earning opportunities.

### Scope of Work

Sprout is a **B** (content/service creator) to **B** (content user/farmer facing organizations) **platform**. The Sprout Platform is not primarily intended to serve farmers directly. Currently, Sprout offers a wide range of high quality, digital ready, farmer friendly agriculture and cross cutting content in flat files that can be searched, downloaded and used as is or contextualized by the organization for their farmers. Sprout also offers Sprout Learning, a WhatsApp for Business service that has content available in English that can be copied by the content using organizations to their own WhatsApp platforms.

Sprout is currently built on DKAN, but the project team is in the process of moving to CKAN shortly. Sprout Learning WhatsApp for business service is built on Turn.io. The selected firm will support the Sprout Platform team and connect with potential service and content partners to design and determine how to integrate smart farming services and other prescribed services into the Sprout Platform. The firm will also support the project team and connect with potential content partners to determine what content is needed to support expansion into new markets: Ethiopia, Nigeria, Tanzania, Uganda, DRC, Zimbabwe, etc.

This firm will also support the Sprout Platform team by developing a strategic plan for Sprout Platform. They will also lead in the designing of new products and features via inputs from partnering organizations. The firm will also support the Sprout platform with business/partner development by identifying new use cases and organizations that can leverage the Sprout platform, this will also include supporting the identification and customization of content sets to be integrated into the sprout platform. The firm will also support the development of a new and sustainable business model and support the project team in raising funds for future phases of the project.

In addition to the services listed above, the tech firm will support Sprout Platform team development and rollout of various Sprout Platform products, services, and tools. The firm will work directly with the AgriFin Program team members and Sprout Platform to integrate these products on the Sprout Platform and the respective partners who've expressed interest to leverage and utilize these services.

[Sprout](#) is the open content data portal where global agriculture experts and farmer facing organizations meet to share and discover farmer-friendly, digital ready content and services designed to build smallholder skills, resilience and income earning opportunities.

## Deliverables

The firm will provide the following deliverables, with specific timelines to be agreed in the approved work plan:

1. Weekly check-ins minutes with the Task Managers and Sprout Lead
2. Monthly report updating Sprout Platform Project status, potential risks, and any other updates from partnership implementation in the month.
3. Delivery of short/long term digital technology vision, road map
4. Delivery of short/long -term Sprout Platform Strategy
5. Design and development of Sprout Platform products (technology and content) and features
6. Lead and support in the implementation of new Sprout Platform products and services
7. Support and lead the Sprout Platform in user acceptance testing and validating
8. Support Sprout Platforms partners plug in and utilize the content and services from the platform
9. Provided support to partners learning how to leverage and utilize the new Sprout Platform products and services

## Required Qualifications

1. Experience managing small teams across different programming disciplines
2. Experience designing and developing products for open data portals
3. Experience working with CKAN and DKAN open-source data portal platforms
4. Experience working with WhatsApp for Business services, and previous experience working with Turn.io a highly preferable
5. Experience working remotely with a distributed team across time zones
6. Experience designing content taxonomies and implement these as schemas in knowledge management systems
7. Experience in implementing and working with WordPress
8. Previous experience working with MC AgriFin, and their network of 150 partners highly preferred
9. Previous experience supporting partners integrate, port, and leverage the Sprout Platform and the Sprout Learning services
10. Able to manage team and clients remotely

## Project Learning Agenda

The following Key ADF II Learning Agenda questions will be addressed:

1. What financial and value-added products and services do SHFs, including women and youth, value most and why?
2. How does bundling of products and services impact uptake and usage of digital financial services?
3. What capacity building tools have the highest impact on SHFs willingness and ability to use digital financial services?
4. How and to what extent have ADF II partners have been successful to achieve scale and commercial sustainability?
5. What are the main drivers of success and failure of different partnership and bundled approaches?

## Ownership/Control of Work Product/Publication

Matters relating to ownership and control of work product and publication of materials produced during course of this engagement are addressed in the main contract agreement entered between Mercy Corps and the firm for performance of services for the Sprout Platform.

### **Authorship and Acknowledgement**

Matters relating to authorship and acknowledgment of any materials produced by the firm during the course of this engagement are addressed in the main contract agreement entered into between Mercy Corps and the firm for performance of services for AgriFin Digital Farmer II.

### **Task Manager/Coordination/Reporting**

The Task Manager for this engagement is the Mercy Corps AgriFin's Program Deputy Director with oversight from Mercy Corps AgriFin's Program Director. The firm will direct all communications to the Task Manager. All invoices will be received by Task Manager, with final approvals by the program Director.

### **Endnotes**

1. IFAD, Smallholders, food security, and the environment, 2013
2. Peck, Anderson, "Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families", 2013.
3. New Partnership for Africa's Development, & <http://www.ipsnews.net/2012/12/the-industrialisation-of-africas-smallholder-agriculture/>
4. Peck, Anderson, CGAP 2013
5. AgriFin Facility Strategy. World Bank. 2010.
6. Agriculture sector strategy 2010–2014, African Development Bank; World development report 2008: Agriculture for development, World Bank
7. Dalberg, 2012
8. McKinsey, "Lions Go Digital; The Internet's Transformative Potential in Africa", 2013.
9. McKinsey, "Lions go digital: The internet's transformative potential in Africa", Nov 2013.
10. Schmidhuber, J., Bruinsma, J., and Boedeker, G, "Capital requirements for agriculture in developing countries to 2050," Paper presented at the Expert Meeting on How to Feed the World in 2050 of the Food and Agriculture Organization of the United Nations, Rome, Italy. Retrieved from <ftp://ftp.fao.org/docrep/fao/012/ak974e/ak974e00.pdf>