



# FARM TO MARKET ALLIANCE: DIGITIZING A BUYING PLATFORM FOR SMALLHOLDERS & LESSONS LEARNED

## An AgriFin Accelerate Partner Case Study

AgriFin Accelerate Program

September 2018

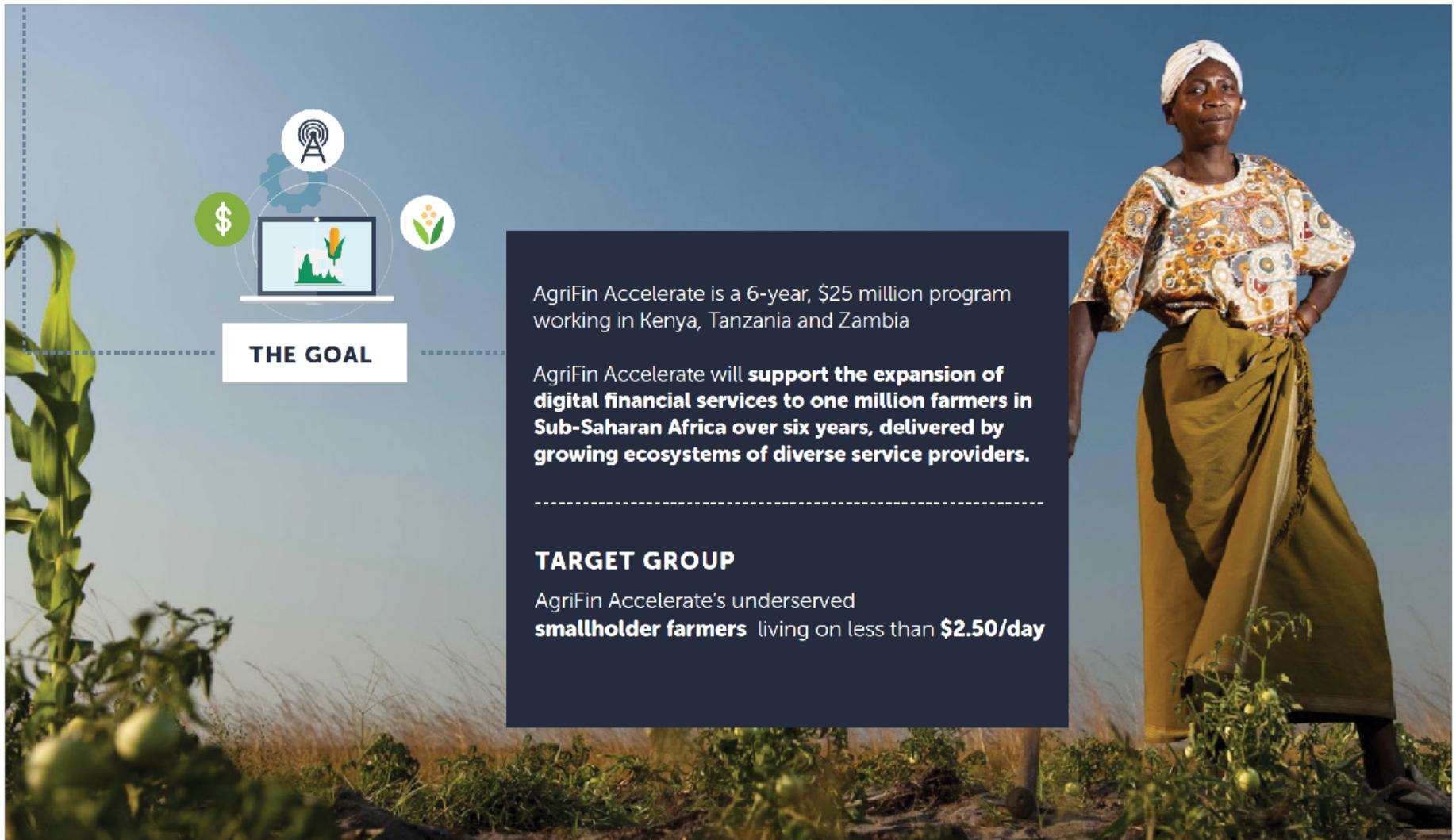


Dalberg



FARM TO MARKET  
ALLIANCE

# Introduction to AgriFin Accelerate (AFA)



The graphic overlay on the left side of the slide features a central laptop icon with a plant growing on its screen. Above the laptop is a signal tower icon, and to its left is a green circle with a white dollar sign. To the right of the laptop is a white circle containing a green plant icon. Below these icons is a white rectangular box with the text 'THE GOAL' in bold black letters. A dashed line extends from the box to the right, leading to a dark blue text box containing the program details.

**THE GOAL**

AgriFin Accelerate is a 6-year, \$25 million program working in Kenya, Tanzania and Zambia

AgriFin Accelerate will **support the expansion of digital financial services to one million farmers in Sub-Saharan Africa over six years, delivered by growing ecosystems of diverse service providers.**

**TARGET GROUP**

AgriFin Accelerate's underserved **smallholder farmers** living on less than **\$2.50/day**

## AgriFin Accelerate Program Approach

- Mercy Corps' AgriFin Accelerate Program (AFA) is a **USD 25 million, six-year** initiative funded by the MasterCard Foundation to support delivery of digitally-enabled services to more than 1 million smallholder farmers across Kenya, Tanzania and Zambia
- Our objective is to support service development and scale that **helps smallholders increase income and productivity by 50%**, working to ensure **50% outreach to women**
- AFA works as an innovation partner with **private sectors scale partners** such as banks, mobile network operators, agribusinesses and technology companies committed to serving smallholders at scale
- We help our partners develop, prototype and scale bundles of **digitally-enabled financial and non-financial services**
- We support **partnership development** between groups of market actors that can leverage each other's strengths
- The program focuses on the following **key areas of innovation**:
  - Product and Service Development for Smallholders
  - Last Mile Distribution Networks
  - Farmer Capability Tool Development and Testing
  - Technology Startup Acceleration
  - Alternative Data & Credit Scoring
- We combine AFA team expertise with strategic resources to jointly implement series of **iterative, fail-fast engagements** with partners on a cost-share basis
- We work to **share key learnings** from our engagements to expand services to farmers through growing ecosystems of providers
- Since 2015, we have completed more than **100 engagements with over 50 private sector partners**
- Over the past three years, AFA has supported the **Farm to Market Alliance (FtMA)** on its' journey to digitize and grow its buying platform for smallholders across Tanzania, Zambia and Kenya
- This case study **highlights learning from this partnership** over more than 15 engagements in three countries

## Executive summary (1/2)

- **Overview of Farm to Market Alliance (FtMA):** FtMA is a public-private sector led consortium of actors seeking to transform food value chains in emerging markets by building long-term linkages between farmers, buyers, financiers, and input providers. It currently operates in four countries – Rwanda, Tanzania, Kenya and Zambia – with plans to scale up across Sub-Saharan Africa. FtMA seeks a unified approach to transforming agricultural ecosystems through a market-based model anchored on four key “services” to farmers: (i) access to predictable markets, (ii) access to affordable finance, (iii) access to technology and quality inputs and (iv) access to storage and handling solutions.
- **Overall FtMA impact to date:** FtMA has expanded to reach over 142,000 farmers in 2017/18, providing training to over 100,000 farmers and 696 aggregator managers. FtMA partners supplied nearly 5,000 MT of inputs and nearly USD 3 million in input financing. In the 2016/17 season, sales of produce reached 26,000MT.
- **Support from AgriFin Accelerate (AFA):** AFA has supported FtMA across countries and different areas of product innovation, including:<sup>1</sup>

Digitization of FtMA and UX testing

*to enable FtMA’s service offering to be lower cost and more scalable*

Digital credit product design and partnership development

*to enhance loan product offerings to better serve the needs of farmers*

Aggregator model development, financing and coordination

*to address challenges around access to finance and aggregation of produce*

Data strategy development

*to optimize data value to alliance partners and ultimately help FTMA better serve its farmers*

<sup>1</sup> Note these are snapshots of select support provided by AFA. They are not exhaustive of the entire scope of AFA engagement.

## Executive summary (2/2)

**Key success factors:** AFA's experience supporting FtMA in building an innovative market-led digital solutions has led to a number of key learnings for digital buying platforms targeting smallholders:

- 1. Country context really matters** – FtMA has had to adapt its model significantly across each of its markets to account for country differences, e.g., in the maturity of financial sector, the strength of aggregator networks, and mobile money penetration
- 2. Solving for aggregation is critical to making end-to-end solutions work**– Identifying, organizing, and adapting to different aggregators, whether they are agro-dealers, cooperatives, traders, or off-takers – is key to connecting farmers to market and de-risking transactions
- 3. Market development investments, where market is not mature, need to precede / run in parallel to digitization** – Rolling out fully digital end-to-end solutions requires a degree of market development – specifically, relationships between value chain actors and effective aggregation channels
- 4. Digital platforms require planning and an iterative approach to scaling** – Digital platforms require upfront efforts with well-targeted pilot groups and phasing in of service layers / functionality to succeed
- 5. Significant organizational effort is required to transition existing analogue structures to digital** – Converting existing analogue structures to digital ones involves a higher level of effort than building out “native digital” processes.
- 6. A purposeful data strategy needs to be established upfront** – Digital data strategies, including data sharing protocols, need to be an early part of partnership development processes to truly tap the digital opportunity provided by emerging platforms.

# Smallholder farmers across Africa face challenges with access to market, inputs, finance, agricultural know-how, and modern technologies

## The role of smallholder farmers in African agriculture

- Nearly 1.5 billion people live on less than USD 1.25 a day; c1 billion of them live in rural areas where agriculture is their main livelihood
- There are an estimated 70 million smallholder farmers (SHFs) in Africa, over half of whom are women
- These SHFs typically farm two hectares or less, yet provide over 80% of the food consumed
- Given increasing global population and demand for food, SHFs occupy an important segment of the global agricultural value chain
- Multinationals increasingly rely on SHFs to secure supply of commodities

## Key challenges faced by smallholder farmers



**Poor access to market** leads to low bargaining power and post-harvest losses



**Expensive and poor quality inputs** reduce crop yields



Large proportions of produce are **wasted in post harvest losses**



Existing lending practices and offerings **limit access to finance**



**Limited awareness** of best agricultural practices

*The problem faced is systemic in nature; the path to commercializing smallholder farming requires a focus on end to end market-based solutions – the thesis at heart of Farm to Market Alliance*

Source: IFAD, Smallholders, food security, and the environment, 2013; IFAD, “Sub-Saharan Africa: The state of smallholders in agriculture”, Schonberger and Delaney 2011; Peck, Anderson, “Segmentation of Smallholder Households: Meeting the Range of Financial Needs in Agricultural Families”, CGAP Focus Note #85, April 2013.

# The Farm to Market Alliance (FtMA) is a multi-stakeholder partnership that takes a full ecosystem approach to supporting smallholder farmers

FtMA is a public-private sector led consortium of organisations seeking to transform food value chains in emerging markets by building long-term linkages between suppliers (farmers), buyers and other key market players



## Global Partners



Knowledge grows



Rabobank

syngenta



World Food Programme

GROWAFRICA



International Finance Corporation  
WORLD BANK GROUP

Creating Markets, Creating Opportunities

## Approach

- The FtMA platform seeks a unified approach to transforming the agricultural ecosystems of target countries through a comprehensive demand driven model featuring four key elements:
  - **Access to finance** – from Financial Service Providers (FSPs) employing innovative lending models to deliver input loans to farmers
  - **Access to inputs** – through access to quality inputs and machinery at preferential rates through contracted input providers
  - **Access to agronomic training** – from enabling NGO partners and input providers to improve farmer know how and reduce post-harvest loss
  - **Access to market for marketable surplus** – through forward contracts secured with buyers

## Country operations (since):



Rwanda (2015)



Tanzania (2015)



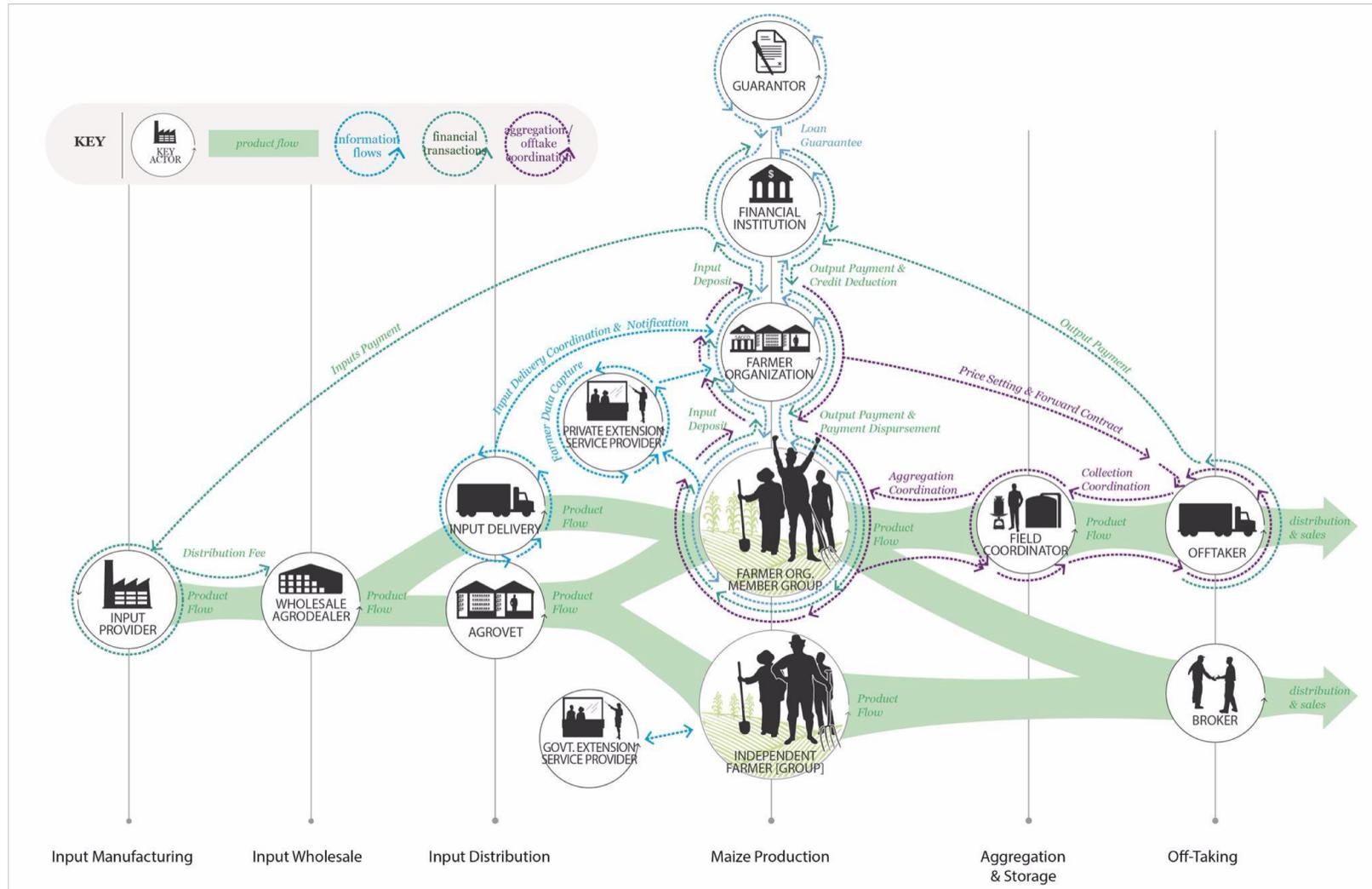
Zambia (2015)



Kenya (2017)

*FtMA's ultimate goal is to create a new agricultural ecosystem and market-based platform to empower 1.5 million farmers with the resources needed to increase their productivity, profitability, and capacity to scale by 2022*

# FtMA brings together global and local partners to ensure smallholder farmers have a fair and reliable access to market



# FtMA offers a compelling value proposition for its partners across the value chain; its model de-risks the farmer and unlocks a new market for products and services

	Roles	Drivers of value	Costs
 <b>Financial service providers</b>	<ul style="list-style-type: none"> <li>• Provide payment product, farmer onboarding, and communications platform</li> <li>• Manage loan book - application, credit scoring, and repayment</li> </ul>	<ul style="list-style-type: none"> <li>• New farmer and aggregator customers, improved lending margin and transaction fees</li> <li>• Access to trade finance channels</li> </ul>	<ul style="list-style-type: none"> <li>• Agent network</li> <li>• Marketing &amp; branding</li> <li>• Customer service (call center)</li> </ul>
 <b>Input providers</b>	<ul style="list-style-type: none"> <li>• Provide and deliver inputs to farmers</li> <li>• Provide extension services to farmers to improve know-how</li> </ul>	<ul style="list-style-type: none"> <li>• New business, improved profit margin</li> <li>• Reduction in dealer financing</li> </ul>	<ul style="list-style-type: none"> <li>• Warehousing/ delivery vehicles and logistics</li> <li>• Ordering platform</li> <li>• Customer service and marketing</li> </ul>
 <b>Buyers</b>	<ul style="list-style-type: none"> <li>• Enter into forward contracts to buy set volumes of offtake at an agreed price floor and no ceiling – prices are set by market prices at time of harvest</li> </ul>	<ul style="list-style-type: none"> <li>• Margin increase from quality / aggregation efficiencies, new sales volume, secure supply</li> <li>• Reduction in buyer financing costs</li> </ul>	<ul style="list-style-type: none"> <li>• Warehousing/pickup vehicles and logistics</li> </ul>
 <b>Field partner (e.g. NGOs)</b>	<ul style="list-style-type: none"> <li>• Liaise with farmer groups to provide extension services</li> <li>• Provide training and coordination</li> <li>• Assist with post-harvest services</li> </ul>	<ul style="list-style-type: none"> <li>• N/a</li> </ul>	<ul style="list-style-type: none"> <li>• Farmer group coordination</li> <li>• Trainings</li> </ul>

*Partners derive value from joining FtMA through increased sales of products and services, increased farmer yields of consistent high quality, and de-risking through secure access to market for the farmers*

# FTMA aims to enhance farmer livelihoods through productivity gains and secure income streams



## Yield uplift and increased food security

- **Agronomic training** – Empowering farmers to farm more effectively
- **Improved inputs + financing** - Boosting yield / quality per acre
- **Extension services** - Maximizing the plant-to-harvest ratio
- **Output loans** - Enabling farmers to harvest at the optimal time



*Access to quality inputs, training and post-harvest loss equipment also improve household food security by increasing surplus production that can be safely stored for future use or sold to purchase other foods*



## Income improvement

- **Improved produce quality** - Farmers command higher Prices
- **Reduced post-harvest loss** - Farmers suffer less waste / sell more
- **Guaranteed markets** - Farmers can plant more crops with confidence
- **Better prices & crop insurance** - Farmers earn more per unit of produce



*With access to inputs and training, farmers can produce higher quality produces which they can then sell through the platform avoiding middlemen and receiving a fair price through pre-negotiated forward contracts*

# Although FtMA is early in its evolution, there have already been promising results towards achieving scale, sustainability, and impact

## Sales of produce

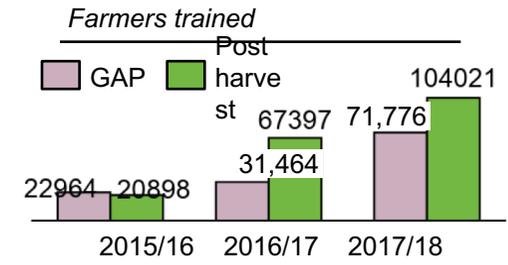
The volume of total aggregated sales reached over 26,000 metric tons in 2016/17

Total aggregated sales, 2016/17

**USD 6.97 million**

## Farmers trained

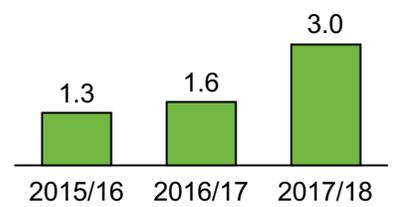
The number of farmers completing training increased to 72k for GAP<sup>1</sup> and 104k for PHHS<sup>2</sup> in 2017/18



## Farmer financing

Total finance value to farmers has increased to USD 3m in 2017/18, indicating nearly a doubling of investment from the previous year

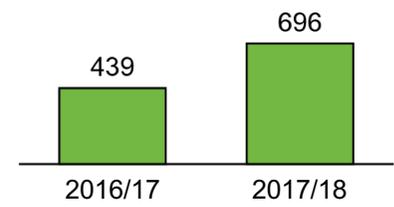
Farmer finance value, USD M



## Aggregators trained

696 Individual aggregator managers were directly trained in 2017/18 of which 274 were female farmers

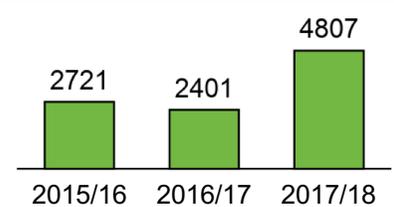
Aggregator managers trained



## Inputs provided

The volume of inputs purchased has more than doubled to 4,807MT in 2017/18, at a total value of USD 3.7M

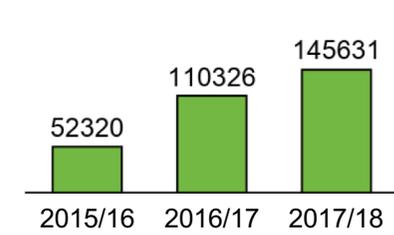
Volume inputs purchased, MT



## Farmers reached

Annual number of farmers benefiting from FtMA program is up to 145,631. **57,000 in Kenya and Tanzania are registered and using the digital platform**

Total farmers reached



**Note:** Sales for 2017/18 not completed at the time of this report; <sup>1</sup> Good Agricultural Practices ; <sup>2</sup> Post Harvest Handling and Storage



# FtMA has prioritized building relationships and trust with farmers and partners in the alliance before leveraging technology as a full-scale tool

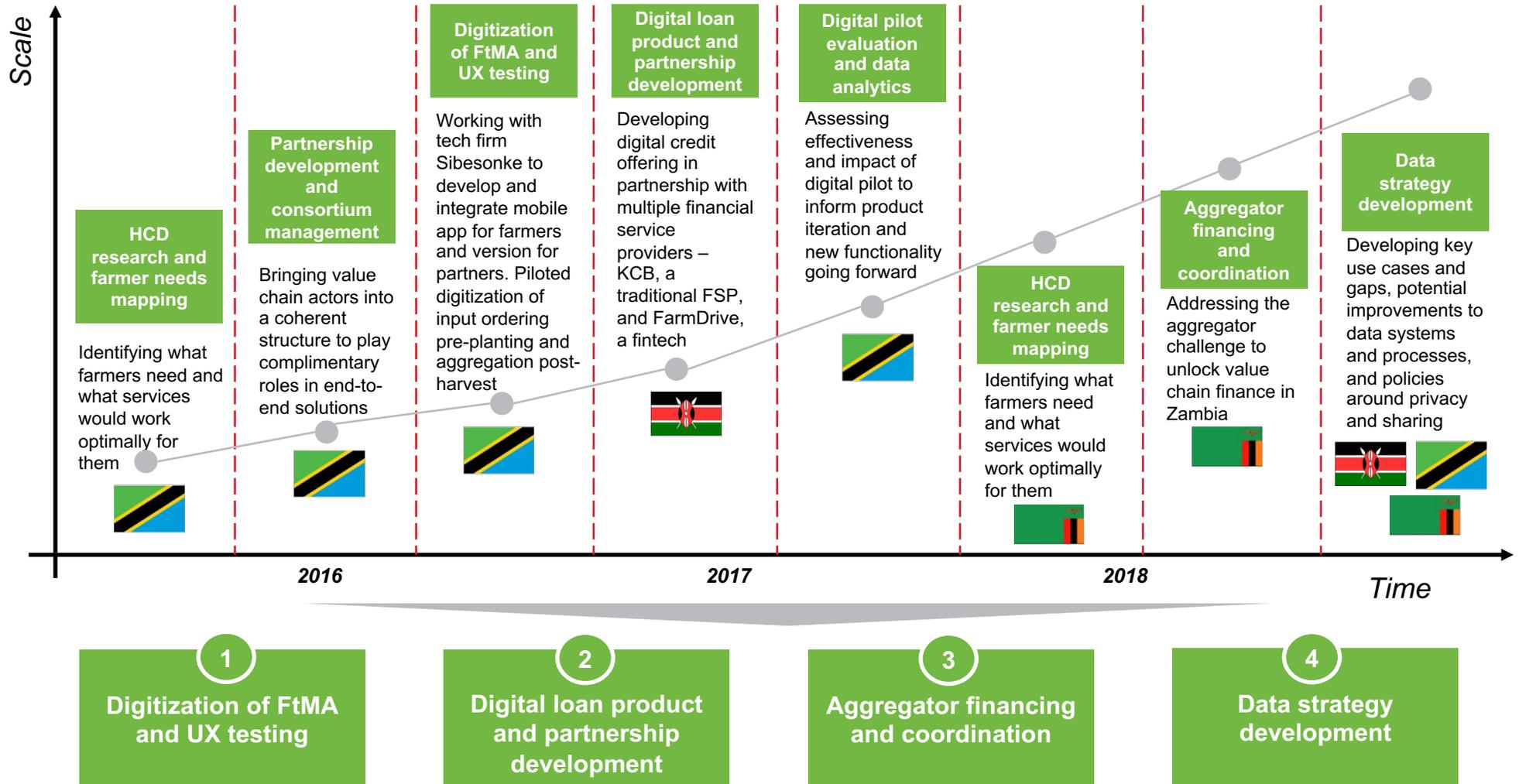
## FtMA's Digitization Journey

- With support from AgriFin Accelerate, FtMA launched the minimum viable product of its mobile app for farmers and aggregators in Tanzania in 2016, with a focus on input ordering and aggregation data
- The app aims to be a full service platform for FtMA farmers to provide seamless digitization of information and transaction flows with an objective to:
  1. Understand and better **fulfil client needs**
  2. Enable **stronger communication** with and between members
  3. Serve as a **digital marketplace**
  4. Run internal FtMA operations more efficiently and effectively to **prepare for scale**
- FtMA has gained strong interest from **financial providers** who are interested in obtaining **longitudinal data** from the app focused on **transaction data** and **individual lending behaviours** of smallholder farmers
- The app also has improving farmer **credit scores** for **increased access to lending** implications
- **Input providers** aim to use the platform to access information about **input demand, agro-dealer sales**, and to **digitize invoice and receipt processes** with banks who pay them on behalf of farmers for group input loans
- **Off-takers** also aim to access aggregation records in the future to better **determine sales volumes, process payments to banks**, and more optimally **coordinate logistics for crop collections**
- To ensure that the FtMA app is functional for all intended audiences, FtMA adopted a lean and human-centred design (HCD) approach while developing both the Android and web apps, with support from Mercy Corps and the MasterCard Foundation. The FtMA also has a skilled technical team to work on regular iterations of the platform



*FtMA and its platform partners have deliberately taken a “slow-burn” approach towards the use of digital technology as a tool for ecosystem growth in order to lay the market preparation groundwork*

# Agrifin Accelerate (AFA) has supported FtMA in a phased approach across Tanzania, Kenya, and Zambia



Note: These are snapshots of select support provided by AFA that are further explained in the following slides

1

*The transition of FtMA's model to a digital platform enables it to reduce cost to serve, generate value to partners, and position itself to scale to 1.5m farmers by 2022*

## Digitization of platform and UX testing



### Improves effectiveness and efficiency

- Provide more, better, and real-time data on farmers, enabling FTMA to tailor and target its service offering, ensure operational efficiency, and track its impact



### Reduces cost to serve

- Reduce field staff quotas, improve overall sustainability of FTMA, and to reach more farmers through the use of digital channels



### Creates value for farmers and FTMA partners

- Enable farmers to generate a databank that can help them to access finance and inputs, and provide FtMA partners with data to forecast demand for and tailor their products

## AFA's focus has been to support digitization of FtMA's platform and service offering to drive scale and increased value both for farmers and platform partners

### Objectives

- **Support FtMA in designing, building out, testing, and taking to market a digital platform.** FtMA had identified digitalization as central to its model going forward and in making significant efficiency gains to deliver greater value to its farmers and partners

### Support provided

- **Product development** to enhance the uptake, usage, and effectiveness of the loan offering. Identified key features for the platform MVP, prototyping, product/UX design, pilot planning and support, and UX evaluation
- **Business planning** including financial planning, and business model review
- **Partnership development and coordination** – including the assessment of priority financial service providers and tech partners
- **Tech build out with Sibesonke** focused on building mobile based agriculture solutions that can be delivered via SMS and USSD and training users on how to use applications
- **Definition of the learning approach and key metrics** and KPIs in order to understand and evaluate impact

### Key insights

- **The following digital opportunities were identified:**
  - Leverage digital tools and systems data to offer new financial products and services, such as **insurance** and **digital payments**
  - **Improve information flow and UX** by refining user roles and tailoring digital tools and dashboards across user types<sup>1</sup>
  - **Reduce post-harvest loss and improve UX though:** (1) capture and share of real-time farmer production data with off-takers; (2) storage tech pilots; and (3) improved forward contract re-design
  - **Improve coordination and efficiency of back-end service** provision across partner processes

### Impacts on FtMA

- MVP digital product developed, built out, and piloted
- FtMA dashboards, reports, and aggregation tools were created
- 57,000 farmers across Kenya & Tanzania who have been digitally registered and engaging on the platform to date

<sup>1</sup> Service and input providers, farmer organization administrators, extension officers, farmer group leaders and smallholder farmers

## Illustrative snapshot: AFA supported FtMA to conduct digital pilots for registration, input ordering and credit application and later at harvest/aggregation in Tanzania

AFA aimed to digitize and optimize delivery of FtMA to increase farmer productivity and reduce related risks, with the goal of digitizing work for 250,000 farmers in Tanzania within three years. Sibesonke, a technical partner based in Finland, provided expertise in delivering empowering mobile services to lower-income people with only basic phones.

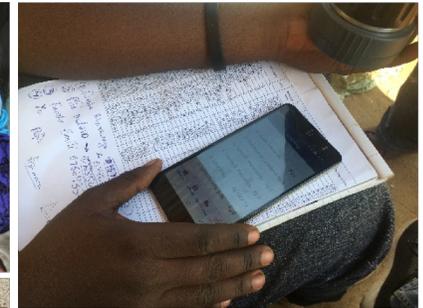
### Tanzanian pilot

**Objective** Increase efficiency, improve transparency, enhance coordination of FtMA and generate positive outcomes for farmers, as a proof of concept that ultimately expands the digital platform to all farmers and partners

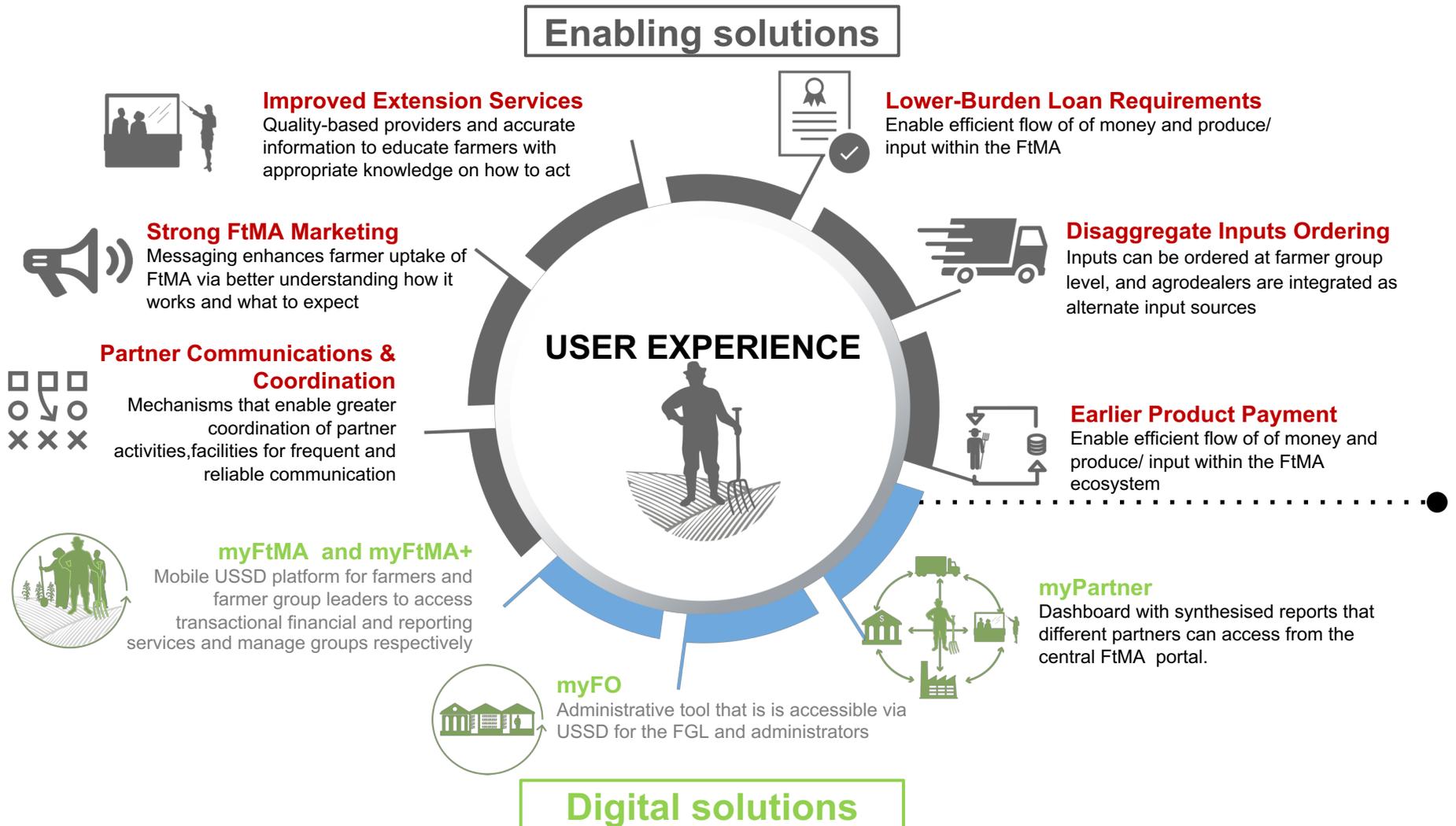
**Approach** Developed pilot mobilization and training strategy and tools through in-context interviews, intercept interviews, user testing and participatory design activities; rapid prototyping in southern and central Tanzania working closely with tech partners to rapidly prototype, test and refine tech functionality and UX features

**Results** Improved user experience and value-added to farmers; provided recommendations on app access to accelerate uptake, improve information flows, broaden financial product portfolio and streamline financial transactions, improve, partner operations, market extension, logistics, and receipting

**Impact** *Allowed FtMA to redesign and enhance their digital offering in Tanzania and spread learnings to other countries*



## Illustrative snapshot: Digital solutions have worked in tandem with other enabling solutions to enhance user experience at various levels of the FtMA ecosystem



2

*AFA assisted FtMA with developing digital credit partnerships in Kenya, supporting product innovation and process mapping for input loan products*

## Digital credit product design and partnership development



### Ensure the product fit is right

- Understand farmer needs and preferences through human centered design (HCD); design the right product and develop loan terms in line with target market



### Identify lenders with appetite and help adapt existing credit processes

- Assess whether lending partners have ability and appetite to serve smallholder farmers; conduct end-to-end loan process mapping and advise how existing credit processes should be adapted



### Effective field force, farmer onboarding and aggregation make digital credit work

- Leverage the advantages of physical channels such as farmer groups and cooperatives to optimize the delivery of digital lending

## AFA assisted FtMA with developing digital credit partnerships in Kenya, supporting product innovation and process mapping for input loan products

### Objectives

- **Support FtMA in identifying appropriate financing partners** with appetite and institutional profile to serve smallholder farmers with digital credit
- **Ensure loan products are tailored for target market** and partners work effectively to drive uptake and repayments

### Support provided

- **Partnership development** to identify and prioritize potential financing and value-added service partners and develop partnership structure, roles, and responsibilities
- **End-to-end loan process and farmer / customer journey mapping** with financing partners, outlining arrangements between FtMA and third parties and establishing data sharing and reporting norms
- **Advising on field staff requirements** to provide physical touchpoint with farmers to compliment digital product offering
- **Advising on use of alternative data for credit scoring**, including farmer group membership and farm-level data

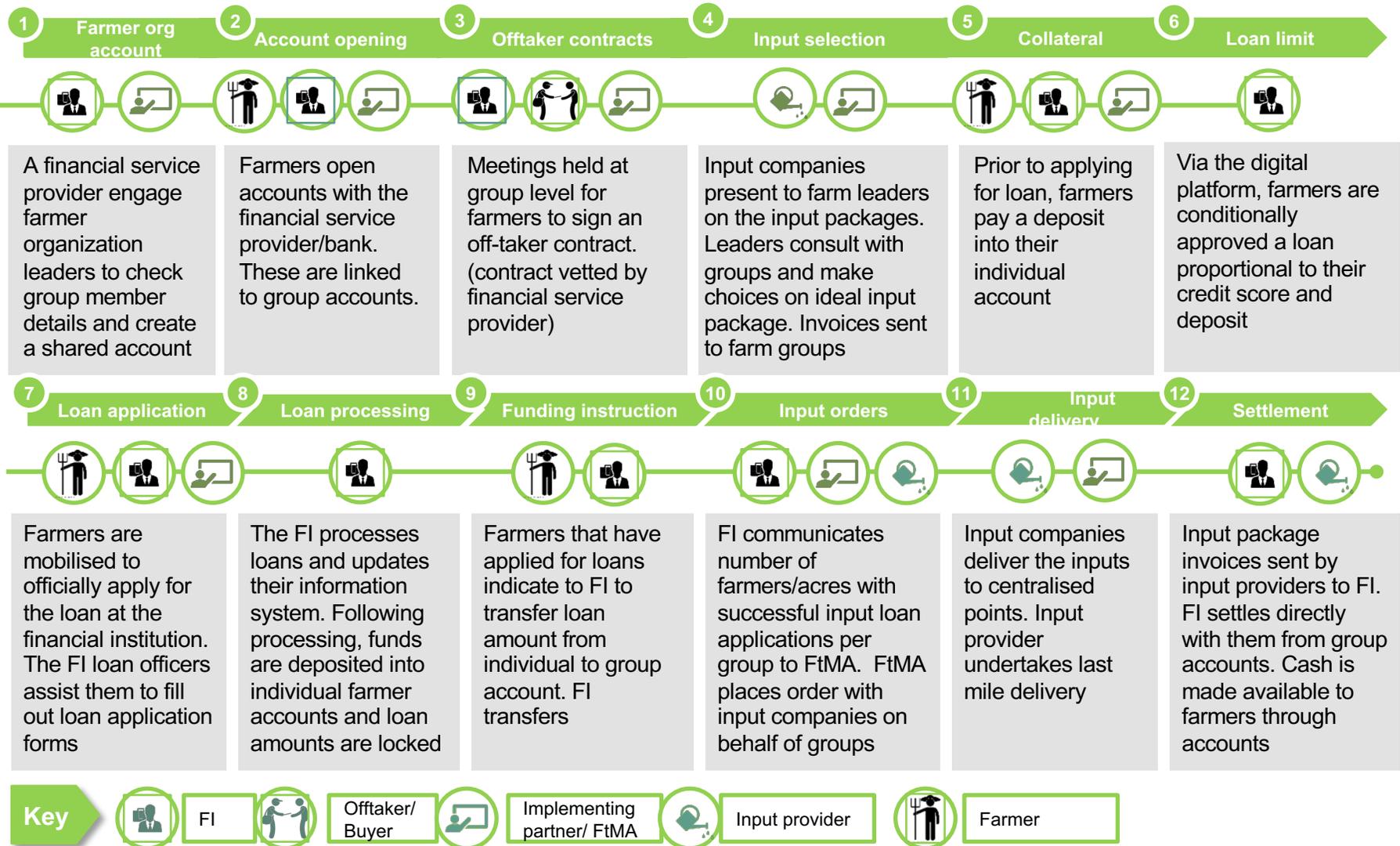
### Key insights

- There is a **wide range of alternative digital lenders** beyond banks that can be leveraged
- **Terms of digital credit** must be well communicated, avoid collateral and have loan applications at the same time as off-taker contracting to minimise mobilisation costs
- **Farmer customer journey** should prioritize a simple user experience that maintains farmers' trust in the partners, be clear in messaging, have rapid response times, and maintain continuous contact with the farmer
- **Data sharing agreements** should ensure commensurate value is realized for the investment made in data collection processes and lending, as well as guarantee protection of consumer privacy

### Impacts on FtMA

- The number of farmers accessing input finance has **increased from 8,464** in 2015 **to 13,036** in 2018
- The value of input financing has **grown from USD 940k to USD 4.8 million** in that same period
- The number of **aggregators who gained access** to input **loans multiplied 6-fold** from 15 at inception to 91 during the second quarter of 2018

## Illustrative snapshot: The marketing, evaluation, approval and disbursement of the loan product is a step-wise process with clear roles for each partner



3

To solve for the aggregation challenge in Zambia, AFA supported FtMA to identify alternative, trusted aggregation points (agrodealers) and connect them with financial institutions for trade finance

## Aggregator financing and coordination



### Expand access to financial and non-financial services for SHFs

- First by aggregating and connecting them to large off-takers, then by facilitating access to finance through formal financial institutions



### Ensure that the model is executed to mitigate risks for aggregators

- Provide assurance through forward contracts to help aggregators access the cash flow needed to re-pay loans



### Share the relevant data with financial institutions

- Reduce risk for financial institutions by nominating a selection of the best aggregators and supplying data have collected on sales history, asset base, management, etc.

## To solve for the aggregation challenge in Zambia, AFA supported FtMA to identify and connect alternative aggregators with financial institutions for trade finance

### Objectives

- Given maturity of market and challenges with direct farmer financing, **AFA supported FtMA to connect financial institutions offering trade finance with aggregators** who have established forward contracts with off-takers
- **Primary objective was to test proof of concept that aggregator financing is viable** and can ensure farmers gain access to formal market at scale, and the means for financial institutions to distribute financial solutions to farmer networks at scale

### Support provided

- **Assessment of key enablers of success, challenges and risks for scale up** of aggregator financing model
- **Selection of low risk aggregator clients through** extensive review of potential aggregators; stakeholder interviews with alliance members, value chain actors and industry experts, and workshops to gather input on the toolkit development
- **Assessment and improvements to role of the aggregator** beyond that of coordination, including stock management, accounting, quality control, contract fulfilments, and customer service through immersive in-country research and HCD work
- **Pilot design for aggregator financing pilot**, including partnership structure, terms of engagement, operational support, and success metrics

### Key insights

- **Assurance provided by forward contracts** helped aggregators access the cash flow needed to repay loans for two of three pilot aggregators; the third was not able to repay after 90 days due to lower than expected off-taker purchases
- **Short loan-maturity periods** created pressure for the aggregators to **sell their produce earlier than normal**, even if they could realize **higher prices by waiting**
- **Mandated crop insurance was inappropriate** for the aggregators, as they were not involved in production

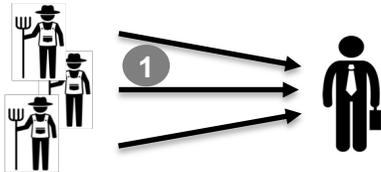
### Impacts on FtMA

- In 2017, FtMA's partnership with Madison Finance led to the extension of trade finance to three aggregators:
  - **USD 18,300 total trade finance distributed** through 90-day loans;
  - **95% of total loan principal paid off** after five months;
  - **USD 117,000 sold by aggregators** to off-takers (386MT of soya; 70MT of maize);
  - **733 farmers sold to the three pilot contracted aggregators** (one farmer for every USD 23 of financing)

## Illustrative snapshot: FTMA's trade finance model addresses key hurdles for farmers to gain access to markets in Zambia, through linkages with aggregators and offtakers

### Finance in traditional system

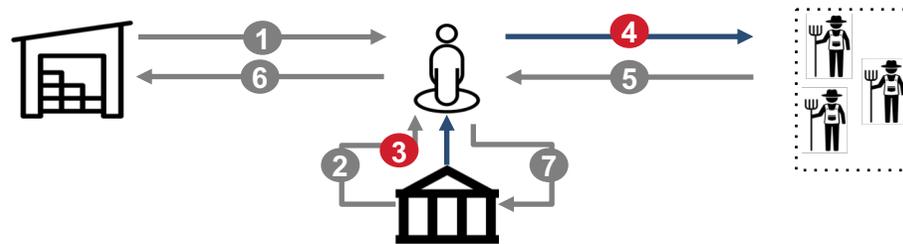
SHFs are fragmented and locked out of formal financing due to low income, lack of collateral, and poor financial infrastructure. Risks and costs of accessing banks are often too high because of lack of physical access and an early stage agent banking system



- 1 Farmers individually sell their produce to small and medium-scale traders because of low population density and large distances and high costs of reaching farmers with services.

### Finance enabled by FTMA

FTMA expands financial and non-financial access for smallholders – first by aggregating and connecting them to large off-takers, then by facilitating access to finance through formal FIs



- 1 Off-takers agree with aggregators on forward contract
- 2 FI provides trade finance<sup>1</sup> to aggregator based on forward contract<sup>2</sup>
- 3 Potential expansion: FI provides input credit to SHF based on forward contract
- 4 Potential expansion: Aggregator provides farmers inputs using out-grower model<sup>3</sup>
- 5 Farmers sell produce to aggregator
- 6 Aggregator sells produce to off-taker
- 7 Aggregator pays back loan(s) to FI

Notes: (1) While the loan is facilitated based on the off-takers' intent to pay for the aggregators' produce, the capital may be used by the aggregator for other purposes (2) Though the forward contracts are an indicator of a future cash flow, the loans are not secured by the produce (3) Under this model, aggregators would provide farmers inputs, which would be paid back through a portion of the farmers' output

4

*AFA supported FtMA to develop a comprehensive data strategy, focusing on how it can create greater value for partners and farmers, improve efficiency, tailor its service offering, and ensure farmer data is protected*

## Data strategy development



### Optimize data for value-creating use cases

- Assess different data use cases, including possible opportunities to create customer and company value through credit scoring and demand forecasting



### Ensure that data is being captured effectively and comprehensively

- Identify new data points and prioritize high impact metrics to be collected to deliver maximum value to farmers and partners



### Establish robust processes to ensure data is secure and managed responsibly

- Develop a data policy to set approaches to data processes and systems, govern how rights of data subjects can be protected, and what data can be shared

## AFA supported FTMA to develop a data strategy to optimize value to alliance partners and help FTMA to better serve its farmers

### Objectives

- To **develop a data strategy** to determine what data is captured, how, for whom, and for what use cases
- To establish robust data policies including guidelines on **ownership, consent, access, security and privacy**
- To **determine the human resource and infrastructure requirements** for the strategy to be effectively implemented

### Support provided

- **Assessment of types of data demanded** internally by FtMA and externally by market and identification of high-potential use cases for FtMA data
- **Appraisal of FtMA's data supply** including current data types, formats, and means of presenting data to identify areas for improvement
- **Evaluation of policies** surrounding data use (e.g., on privacy and access)
- **Identification of human and technical capacity required** for effective data collection, management, and use

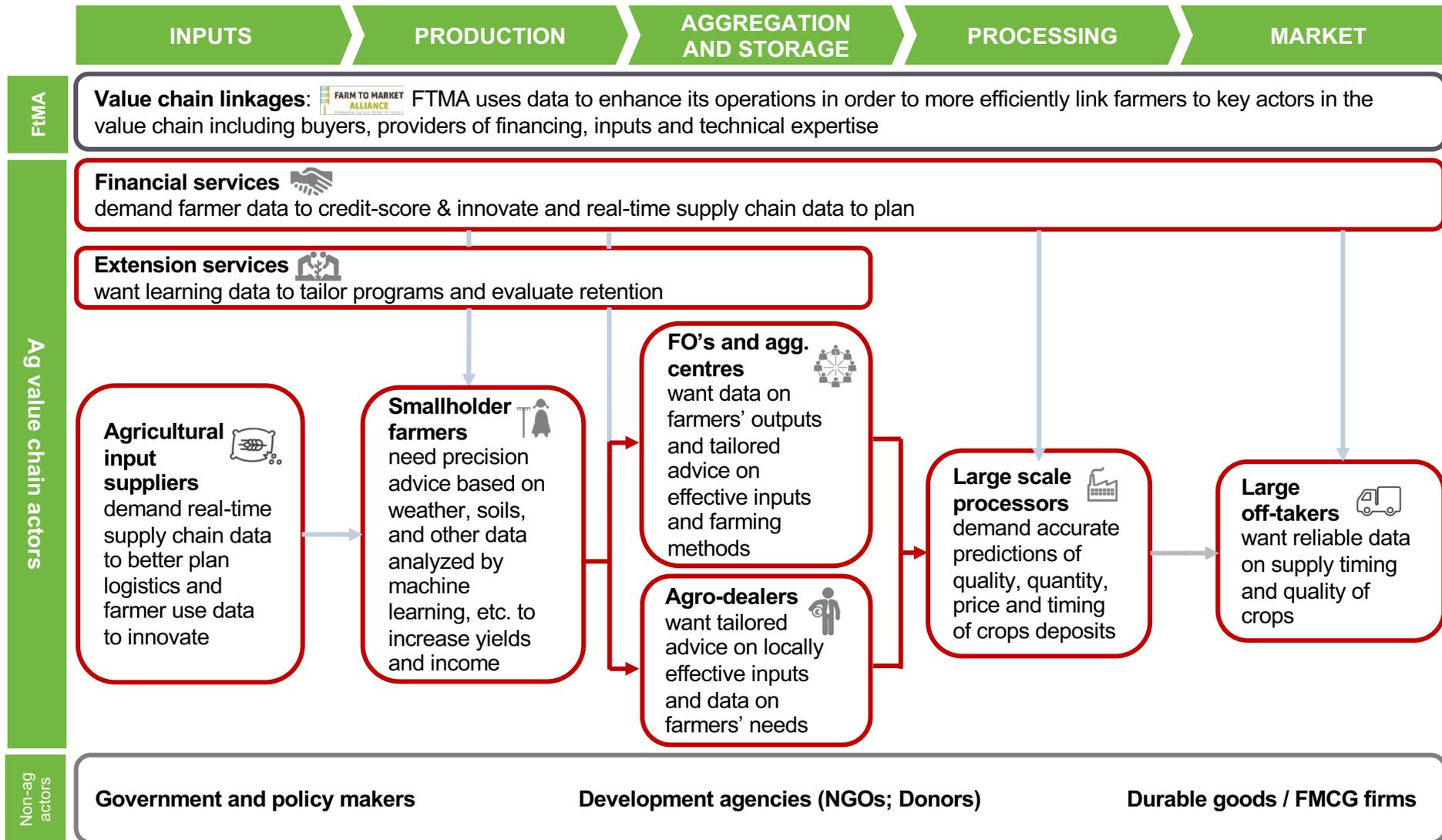
### Key insights

- There were **4 high priority use cases for data** in demand by FtMA partners: (i) **supply chain visibility**, (ii) **credit scoring**, (iii) **precision rural advisory services**, and (iv) **optimizing FtMA internal operations**
- Based on current data collection and analytic capabilities, there were **3 further quick-win use cases**: (i) **customer verification support**, (ii) **loan and performance monitoring**, and (iii) **demand forecasting**
- FtMA's current data offering can be improved to meet minimum baseline requirements by (i) collecting **new types** of data, (ii) transitioning all data to **fully structured formats**, and exploring **tailored ways to present data**

### Impacts on FtMA

- Data strategy currently being implemented.
- FtMA is making improvements to data capture and management systems and developing initial use cases

## Illustrative snapshot: Along the FTMA value chain, partners have different data needs and priorities



# AFA's experience assisting FtMA in building an innovative market-led digital solution offers some key learnings to guide future replication (1/2)



## Country context really matters

**FtMA has had to adapt its model significantly across each of its markets to account for country differences**, e.g., in the maturity of financial sector, the strength of aggregator networks, mobile money penetration, existence of farmer organizations.

These factors have important implications for ecosystem readiness for digital solutions, and should be used to manage expectations for the pace of progress from a given country baseline and model which needs to be adopted. A cookie-cutter approach does not work across markets



## Digital platforms require upfront efforts and an iterative approach to scaling

**Digital platforms require upfront efforts with well-targeted pilot groups that set up subsequent stages of scaling for success.**

Given low levels of digital literacy, significant effort will be required to train farmers' and aggregators' understanding and trusting of new platforms like FtMA.

Evaluation of pilots that are manageable in sample size will provide opportunities to re-strategize and fix areas of weakness, as well as support the achievement of more sustainable and scalable digital platform usage thereafter



## Adapted aggregation strategies are important for end-to-end farmer solutions

**Identifying, organizing, and adapting to different aggregators – whether they are agro-dealers, cooperatives, traders, or off-takers – is key to connecting farmers to market and de-risking transactions.**

Optimal aggregators will be different across markets and value chains. Strong farmers groups make it easier to coordinate training and input delivery. However, these structures may not always formally exist e.g. in Zambia, and so country context will necessitate adaptation of aggregation strategies to other types of local actors

## AFA's experience assisting FtMA in building an innovative market-led digital solution offers some key learnings to guide future replication (2/2)



### Market development investments need to precede digitization

**Rolling out fully digital end-to-end solutions is only possible once the market development work has been done.**

Digital solutions are ineffective if there are limited existing touchpoints with farmers. Digitizing down to the aggregator level is feasible, but overall, FtMA and its platform partners have deliberately taken a “slow-burn” approach towards the use of digital technology as a tool for ecosystem growth. They have prioritized relationships and building trust with farmers and partners, before leveraging technology as a full-scale tool



### Significant organizational effort is required to transition existing analogue structures to digital

**Converting existing analogue structures to digital ones involves a higher level of effort than building out “native digital” processes.**

In Tanzania, running both analogue and digital processes in parallel undermined the goal of having a centralized data management system. In Kenya, where FtMA has been able to start off with digital processes from the outset, this has been significantly less challenging. Running both systems in tandem requires strong organizational implementation capacity and senior buy-in to drive the necessary efforts



### A purposeful data strategy needs to be established upfront with data sharing protocols

**Data rich platforms like FTMA amass a lot of useful information to partner banks, insurers, buyers, input providers and organizations working to understand the impact of these interventions.**

Digital data strategies, including data sharing protocols, need to be an early part of partnership development processes to truly tap the digital opportunity provided by emerging platforms. FtMA collected data but was not as well positioned as it could have been to use or share it with partners

# Key contacts for further information

**Leesa Shrader**, Program Director

[lshrader@mercycorps.org](mailto:lshrader@mercycorps.org)

**Andrew Karlyn**, Strategic Learning Lead

[akarlyn@mercycorps.org](mailto:akarlyn@mercycorps.org)



*Thank you*



**Dalberg** 30