AGRIFIN ACCELERATE PROGRAM

Tanzania Ecosystem Study Presentation

Leesa Shrader
Program Director, AgriFin Accelerate

July, 2016
Dar es Salaam, Tanzania
AGENDA

- Keynote Speakers
- Introduction to AFA Program
- Tanzania Ecosystem Study: Summary
- Tanzania Smallholder Research
- Farmer Capability Lab
- Panel of Experts: Digital Partnerships
- Discussion – Q&A
The Challenge and the Opportunity for AgriFin Accelerate

Agriculture can play a powerful role in poverty reduction, especially when focused on smallholder farmers.

1% increase in crop productivity reduces the number of poor people by 0.72% in Africa. (CGIAR)

A recent McKinsey study estimates that mobile and internet technology can drive up to $3 billion in annual agricultural productivity gains by 2025. [iii]

Sub-Saharan Africa is also expected to see the strongest growth of any global region in the number of smartphone connections over the next six years, reaching 525 million by 2020.

Sub-Saharan Africa's unique mobile subscriber base has grown by 18% annually over the last five years, the fastest growing region globally. By June 2014, there were 329 million unique mobile subscribers and connections, but women in sub-Saharan Africa are 23% less likely to own a mobile phone.

At an estimated $450 billion, the global demand for smallholder agricultural finance is largely unmet. Lenders are estimated to reach no more than two percent of demand. (Dalberg)
AFA Program Objectives

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.
# Tanzania Program Launch

## Tech Innovation & Agriculture

<table>
<thead>
<tr>
<th>Value chain stage</th>
<th>Inputs</th>
<th>SHF Production</th>
<th>Transport and storage</th>
<th>Post harvest processing</th>
<th>Marketing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial services</td>
<td>Mobile vouchers</td>
<td>Savings</td>
<td>Lending</td>
<td>Agricultural information services on mobile</td>
<td>Smart logistics</td>
</tr>
<tr>
<td>Info. services</td>
<td>Digitally supported extension services</td>
<td>Farmer helplines</td>
<td>Traceability systems</td>
<td>Supplier management</td>
<td>Cooperative management systems</td>
</tr>
<tr>
<td>Supply chain services</td>
<td></td>
<td></td>
<td></td>
<td>Distribution management</td>
<td></td>
</tr>
<tr>
<td>Market access services</td>
<td></td>
<td></td>
<td></td>
<td>Trading platforms</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Maturing</td>
<td>Emerging</td>
<td>Nascent</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Source: Mercy Corps*
Tanzania Program Launch

Innovation Focus

FOCAL AREAS FOR INNOVATION

- Products & Services for SHF
- Last Mile Distribution
- Farmer Capability Tools
- Technology Start Up Acceleration
- Alternative Data & Credit Scoring
EXPECTED OUTCOMES

Outcome 1:
Market actors expand, improve and continue to offer high-impact digital financial services products and services that are tailored to the needs of smallholders;

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

Outcome 3:
Ecosystems emerge supporting provision of digital financial and informational services to SHFs.

Rapid iteration engagement model to drive innovative, client-centric product development; and

Work with partners to develop “bundles” of digitally-enabled services offering farmers affordable access to financial and informational services.
Bundling Approach
AgriFin Mobile Bundling Experience

ZIMBABWE

Core Partner Offer
EcoNet EcoFarmer Wallet providing remittance and payment services

First Bundle
EcoFarmer wallet solution with farmer information provided by Ministry of Agriculture, with training from Zim Farmer Union

Second Bundle
Value Chain payments with Kaite reaching 500 subsistence farmers

Third Bundle
Weather index Insurance provided with Cell Insurance

Outreach: 800,000 Farmers
Tanzania Program Launch

AgriFin Accelerate Engagement Model

1. Conduct initial country level ecosystem and farmer need research

2. Select core platform partners
   - Banks
   - MNOS

3. Bundle value added providers and link them to core platform partners
   - Farmer Coop Network/ MFI
   - Insurer
   - Buyer
   - Ministry of ARRG with content
   - Tech & data platform

4. Link service delivery to farmer capability lab

5. Shared learning made available through public site and other mediums
TANZANIA PROGRAM LAUNCH

Country Engagement Model

Year 1 and 2: Establishment and partner selection
- Platform partner and VAS providers selected and bundled

Year 3 and 4: Solution development and rollout
- Promising services provided continued support

Year 5 and 6: Scale and replication
- Some services and models truly scale

Some products and services may fail early

1. Country research
2. Partner selection/establishment
3. Product development and support for VAS providers
4. Product bundling and marketing through platform partners
5. Digital farmer training lab established and SHFs connected to services
6. Alternative data model research and service design iteration with select VAS partners
7. Monitoring and evaluation of program
8. Annual country ecosystem convening and learning agenda products developed

[Diagram showing timeline and key milestones with process flow and notes]
TANZANIA PROGRAM LAUNCH

The AFA Team
In a “digitally-enabled system” SHFs become connected and can gain access to a range of new services delivered directly to support their needs; New service providers use new channel infrastructure to design and deliver new services.
**Human Centered Approach: Personas**

**THE ACHIEVER**

"Farming is my business. I earn money for myself and help my boys finish school."

The achiever is doing well, maintaining a growing farm business and stable home environment, meeting education, health and business goals. He or she envisions expanding the business by acquiring more land, more productive assets, etc.

He/she has established a good system to manage the farm, cashflows and multiple financial partners/products, and regularly acts on technical advice to improve productivity, while always looking for ways to improve and earn more.

**FINANCIAL BEHAVIOR**
- Has bank & Mpesa accounts (Mpesa is safer than cash)
- Is part of several informal savings groups
- Dedicated member of Coop – appreciates lump sum payments
- Embraces products like insurance

**TECH BEHAVIOR**
- Already has a smartphone (or is buying one)
- SMS notification from Coop is important and helps track business performance & finances
- Mobile phone is a tool for information and entertainment
Tanzania Program Launch

Human Centered Approach: Personas

THE STRIVER

“When I needed to know what to do with my farm, I used to be able to go to my Father. Since he passed away, I go on Google to learn.”

The striver is a young and passionate farmer, but still learning how to farm. He is driven, but not sure who to trust. The Internet and youth support groups are key resources.

The key challenge for the striver is decision making related to farming, how to use precious resources and deciding who to listen to. He is still building market contacts, hands-on experience and struggling to understanding how to best save and invest for his future. Animals fertility, productivity and farm security are needs.

FINANCIAL BEHAVIOR

HAS MPESA ACCOUNT, BUT RELUCTANT ABOUT MSHWARI
WORKS WITH YOUTH SAVINGS GROUP, DOESN’T TRUST COOPERATIVE
SIDESELLS TO INCREASE CASH
NEEDS FINANCIAL ACCESS FOR LARGE PRODUCTIVE ASSETS TO GROW

TECH BEHAVIOR

SMARTPHONE USER: A BUSINESS TOOL FIRST, SOCIAL TOOL SECOND
 DOESN’T LIKE SMS TIPS FOR FARMERS BECAUSE THEY DON’T ANSWER QUESTIONS WHEN HE NEEDS IT
WILLING TO PAY CASH FOR NEW SMARTPHONE
Tanzania Program Launch

Human Centered Approach: Personas

**TRAPPED**

Trapped is the pillar of his/her household but with tight cash and low family support, struggles to invest what is needed for the business and still feed the family.

"We know what we are supposed to feed our cows, but sometimes we feed them half or we go hungry."

**FINANCIAL BEHAVIOR**

- MPESA ACCOUNT (DORMANT)
- COOP BANK ACCOUNT (FOR MONTHLY COOP PAYMENT) BUT DOESN'T USE THE ATM
- IS PART OF A CHURCH SACCO
- USING MANY FINANCIAL INSTRUMENTS, BUT NONE MEET HER NEEDS

**TECH BEHAVIOR**

- LOVES THE RADIO AGRI PROGRAM
- OWNS A FEATURE PHONE, BUT RARELY USES
- CHILDREN HAVE FB ACCOUNTS
- CAN'T AFFORD PAY TV, BUT LIKED THE FARMER TV SHOWS
WFP: Digital Pilot for the Patient Procurement Platform

PPP Partner Engagement Recommendations

July 4, 2016 | Dar es Salaam, Tanzania
The PPP is a consortium of public and private partners that facilitates forward-buying contracts to support farmers from seed to delivery.

The WFP Patient Procurement Platform aims to create an integrated, stable market for maize

3 years 750 million USD in aggregated demand 75 thousand farmers supported 60+ partners engaged

Partners involved in the PPP include:

**Extension Service Providers**
- Biten
- NCA
- Agha

**Input Suppliers**
- Yara
- Syngenta
- Seedco

**Offtakers/Buyers**
- WFP
- ETG

- Basic Element Limited
- Kijenge Animal Products
- Ken Millers
- Kibajigwa Maize Flower
- International Tan Seeds Limited
- Silverlands Tanzania Limited
- New Bugaloo
- Ruaha Millers

**Banks**
- CRDB Bank
- NMB

**Guarantors/Financiers**
- GAFSP
- IFC

**Aggregation Providers**
- GROWAFRICA
- DAI

**Advisors**
- World Bank
- IFC

**Insurers (future)**
- Acre Africa

**Others**
- Imperial College
- London
### Partner Groups and Organizations

<table>
<thead>
<tr>
<th>Partner Group</th>
<th>Organization Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Banks</strong></td>
<td>CRDB</td>
</tr>
<tr>
<td></td>
<td>NMB</td>
</tr>
<tr>
<td>**Extension service providers/</td>
<td>BRITEN Tanzania</td>
</tr>
<tr>
<td>Aggregators**</td>
<td>Rural Urban Development Initiatives (RUDI)</td>
</tr>
<tr>
<td></td>
<td>AGRA</td>
</tr>
<tr>
<td></td>
<td>Norwegian Church Aid (NCA)</td>
</tr>
<tr>
<td><strong>Guarantee providers</strong></td>
<td>PASS Trust</td>
</tr>
<tr>
<td><strong>Buyers/Off-takers</strong></td>
<td>Basic Element Limited</td>
</tr>
<tr>
<td></td>
<td>WFP</td>
</tr>
<tr>
<td></td>
<td>Kijenge Animal Products</td>
</tr>
<tr>
<td><strong>Input suppliers</strong></td>
<td>Yara</td>
</tr>
<tr>
<td></td>
<td>Syngenta</td>
</tr>
<tr>
<td></td>
<td>Seed Co.</td>
</tr>
<tr>
<td></td>
<td>Bayer</td>
</tr>
<tr>
<td>**Other financiers / financial</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>service providers**</td>
<td>Imperial College London (insurance provider)</td>
</tr>
<tr>
<td></td>
<td>Rabobank</td>
</tr>
</tbody>
</table>

---

### Week 2 - North Tanzania

- **2** AMCOS (FO) leaders
- **17** independent, **18** FO-based farmers
- **30/70** female/male interviewees
- **35** total interviewees

---

### Week 3 - South Tanzania

- **3** APEX (FO) leaders
- **2** buyers
- **3** extension officers
- **13** independent, **44** FO-based farmers
- **50/50** female/male interviewees
- **65** total interviewees

---

**MERCY CORPS**
Across this ecosystem, we see 7 opportunities for the PPP

1. Transparent Information Flows
2. Streamlined Financial Transactions
3. The Empowered Farmer
4. Broader Financial Product Portfolio
5. Efficient Partner Operation
6. Market Extension
7. Logistics Improvements
## Partner Engagement Recommendations | Enabling Solutions and Next Steps

<table>
<thead>
<tr>
<th></th>
<th>Partner coordination &amp; communication</th>
<th>Strong marketing of PPP</th>
<th>Standardized extension resources</th>
<th>Lower-burden loan requirements</th>
<th>Disaggregated inputs ordering</th>
<th>Earlier product payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Banks</td>
<td>Extension service providers</td>
<td>Extension service providers</td>
<td>Banks</td>
<td>Extension service providers</td>
<td>Banks</td>
</tr>
<tr>
<td></td>
<td>Guaran tors</td>
<td>Input suppliers</td>
<td>Off takers</td>
<td>Guarantors</td>
<td>Input suppliers</td>
<td>Guarantors</td>
</tr>
<tr>
<td></td>
<td>Input suppliers</td>
<td>Off takers</td>
<td>Farmer organizations</td>
<td>Extension service providers</td>
<td>Banks</td>
<td>Extension service providers</td>
</tr>
<tr>
<td></td>
<td>WFP coordinates creation and signing of MOUs</td>
<td>Each partner nominates POC</td>
<td>Partners agree on meeting frequency and attendance</td>
<td>Providers jointly align content quality and facts, with advising from partners</td>
<td>Banks provide loan application document list to FOs, PASS Trust, other partners</td>
<td>Build FG capacity</td>
</tr>
<tr>
<td></td>
<td>WFP coordinates creation and signing of MOUs</td>
<td>Each partner nominates POC</td>
<td>Partners agree on meeting frequency and attendance</td>
<td>Partners do more farmer training</td>
<td>Banks review option for digital document submit</td>
<td>Partners help link FGs to input suppliers</td>
</tr>
<tr>
<td></td>
<td>WFP coordinates creation and signing of MOUs</td>
<td>Each partner nominates POC</td>
<td>Partners agree on meeting frequency and attendance</td>
<td>Partners identify resources for FG and FO training in management</td>
<td>WFP integrates other banks or FIs as partners</td>
<td>Input suppliers agree to deliver upon loan deposit of individual FG</td>
</tr>
<tr>
<td></td>
<td>WFP, FOs broker options for earlier pickup/payment with offtakers</td>
<td>WFP, FOs broker options for earlier pickup/payment with offtakers</td>
<td>WFP, FOs broker options for earlier pickup/payment with offtakers</td>
<td>WFP, extension service providers integrate agro-dealers into PPP</td>
<td>WFP, extension service providers integrate agro-dealers into PPP</td>
<td>WFP, extension service providers integrate agro-dealers into PPP</td>
</tr>
</tbody>
</table>
TANZANIA ECOSYSTEM STUDY

INTRODUCTION

AFA Tanzania Ecosystem Survey: completed from September 2015 to January 2016 by Dalberg Development Advisors

Survey included ecosystem stakeholder interviews, value chain analysis, agricultural payment study, desk review and field farmer focus groups

AFA Tanzania Ecosystem White Paper: completed by AFA based upon the survey, CGAP 2015/2016 Farmer Diaries, InterMedia 2015 study and initial program activity.

Study Objectives:

- build a strong evidence base for AFA program activity
- share analysis with ecosystem stakeholders to inform DFS activities
Tanzania Ecosystem Study

Importance of Agriculture

Major agricultural categories

1. **Food Crop Production (2013)**
   - Maize: 35.3%
   - Sweet Potatoes: 13.2%
   - Cassava: 14.3%
   - Beans: 11.2%
   - Banana: 9.4%
   - Rice: 9.1%
   - Other: 7.5%

2. **Cash Crop Production (2013)**
   - Sugar: 34.0%
   - Cotton (bales): 27.6%
   - Cashew Nuts: 14.4%
   - Tobacco: 14.4%
   - Coffee: 9.8%
   - Sisal: 5.5%
   - Other: 4.5%

3. **Livestock**
   - Livestock accounts for 18% of Tanzania's agriculture activity or ~4% of national GDP
   - In 2013, livestock production was as follows:
     - 0.55 million tonnes of meat
     - 1.92 million litres of milk
     - 3.73 million chicken eggs
     - 7.20 million hides and skins

Maize is the single largest crop by production volume, grown by ~3.4 million smallholder farmers accounting for 70% of total maize output

Source: AFA Ecosystem Study, Dalberg 2015.
Tanzania Ecosystem Study

SHF Segmentation

61.5 million smallholder households

## Tanzania Ecosystem Study

### SHF Segmentation

<table>
<thead>
<tr>
<th>Segment</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>n= 2,795</td>
<td>557</td>
<td>393</td>
<td>826</td>
<td>628</td>
<td>391</td>
</tr>
</tbody>
</table>

### Educational attainment of household head

<table>
<thead>
<tr>
<th>Educational attainment</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never attended school</td>
<td>41%</td>
<td>25%</td>
<td>37%</td>
<td>6%</td>
<td>2%</td>
</tr>
<tr>
<td>Preprimary</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Primary</td>
<td>57%</td>
<td>69%</td>
<td>54%</td>
<td>85%</td>
<td>66%</td>
</tr>
<tr>
<td>Secondary</td>
<td>1%</td>
<td>5%</td>
<td>7%</td>
<td>8%</td>
<td>25%</td>
</tr>
<tr>
<td>Higher education</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>7%</td>
</tr>
</tbody>
</table>

### Socioeconomic status

<table>
<thead>
<tr>
<th>Socioeconomic status</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Above the poverty line</td>
<td>4%</td>
<td>4%</td>
<td>13%</td>
<td>12%</td>
<td>43%</td>
</tr>
<tr>
<td>Below the poverty line</td>
<td>96%</td>
<td>96%</td>
<td>87%</td>
<td>88%</td>
<td>57%</td>
</tr>
</tbody>
</table>

### Access to emergency funds: Can come up with 100,000 shillings within the next month

<table>
<thead>
<tr>
<th>Access to emergency funds</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very possible</td>
<td>9%</td>
<td>16%</td>
<td>17%</td>
<td>21%</td>
<td>51%</td>
</tr>
<tr>
<td>Somewhat possible</td>
<td>17%</td>
<td>26%</td>
<td>31%</td>
<td>27%</td>
<td>49%</td>
</tr>
<tr>
<td>Not possible</td>
<td>73%</td>
<td>57%</td>
<td>52%</td>
<td>52%</td>
<td>0%</td>
</tr>
<tr>
<td>Don't know</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### Mobile phone ownership – at least one phone in the household

<table>
<thead>
<tr>
<th>Mobile phone ownership at least one phone in the household</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>54%</td>
<td>38%</td>
<td>2%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Yes</td>
<td>46%</td>
<td>62%</td>
<td>98%</td>
<td>100%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### Attitude: The future will take care of itself

<table>
<thead>
<tr>
<th>Attitude: The future will take care of itself</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agree</td>
<td>38%</td>
<td>41%</td>
<td>32%</td>
<td>27%</td>
<td>28%</td>
</tr>
<tr>
<td>Disagree</td>
<td>61%</td>
<td>59%</td>
<td>67%</td>
<td>72%</td>
<td>72%</td>
</tr>
<tr>
<td>Don't know</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

### In the past 12 months, experienced any unexpected events (including, but not limited to death, illness, accidents, etc.)

<table>
<thead>
<tr>
<th>In the past 12 months, experienced any unexpected events</th>
<th>Farming for sustenance</th>
<th>Battling the elements</th>
<th>Diversified and pragmatic</th>
<th>Options for growth</th>
<th>Strategic agricultural entrepreneurship</th>
</tr>
</thead>
<tbody>
<tr>
<td>No, I didn’t</td>
<td>9%</td>
<td>5%</td>
<td>7%</td>
<td>10%</td>
<td>7%</td>
</tr>
<tr>
<td>Yes, I did</td>
<td>91%</td>
<td>95%</td>
<td>93%</td>
<td>90%</td>
<td>93%</td>
</tr>
</tbody>
</table>

Tanzania Ecosystem Study

Explosion of Mobile Money

**Active financial account holders**
(Shown: Percentage of Tanzanian adults)

- Any financial service: 40% (2013), 45% (2014), 54% (2015)
- Mobile money: 38% (2013), 34% (2014), 53% (2015)
- Bank: 8% (2013), 16% (2014), 5% (2015)
- Nonbank financial institution: NA, 2% (2013), 0.9% (2014)

**Active financial account holders**
(Shown: Percentage of registered users for each type of account, by year)

- Mobile money: 86% (2013), 89% (2014), 87% (2015)
- Nonbank financial institution: N/A, 86% (2014), 87% (2015)

Types of accounts are not mutually exclusive.

Source: InterMedia Tanzania FII Tracker surveys Wave 1 (N=2,997, 15+), November 2013-March 2014; Wave 2 (N=3,000 15+), August-October 2014; Wave 3 (N=3,001, 15+), September-October 2015.
Tanzania Ecosystem Study

MM Reaching Rural Areas, Poor & Women

Source: Financial Inclusion Insights Tanzania, InterMedia 2015
Tanzania Ecosystem Study

SHF Financial Inclusion by Segment

- Farming for sustenance: 1%
- Battling the elements: 14%
- Diversified and pragmatic: 57%
- Options for growth: 76%
- Strategic agricultural entrepreneurship: 90%

Total: 49%

* Financial Inclusion defined as having a full-service bank, mobile money or nonbank financial institution account with access in one's own name.

Tanzania Ecosystem Study

Growth in DFS Targeting SHF

**SUMMARY**

- There are a significant number of digital and non-digital financial products available for smallholder farmers.
- The most common financial products are working capital loans, followed by crop and livestock insurance, general non-agriculture loans, and asset financing.
- Commercial banks had the highest number of digital and non-digital products, followed by insurance providers, and donor/NGO service providers. Banks had the highest percentage of digital products (50%).
- Commercial banks have 88 agri-specific products; these tend to be value chain specific, such as livestock, dairy, and cotton.

<table>
<thead>
<tr>
<th>Number of service providers by type of products</th>
<th>Number of products by type of service provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working capital</td>
<td>Commercial Bank</td>
</tr>
<tr>
<td>Crop and livestock insurance</td>
<td>Insurance Provider</td>
</tr>
<tr>
<td>Non-agriculture general loan</td>
<td>Donor/ NGO</td>
</tr>
<tr>
<td>Asset financing</td>
<td>Microfinance Institutions</td>
</tr>
<tr>
<td>C2B transactions</td>
<td>Other</td>
</tr>
<tr>
<td>General savings products</td>
<td>MNOs</td>
</tr>
<tr>
<td>Index insurance</td>
<td>Start-up/Unaffiliated</td>
</tr>
<tr>
<td>B2C transactions</td>
<td></td>
</tr>
<tr>
<td>Seasonal based loan</td>
<td></td>
</tr>
<tr>
<td>C2C transactions</td>
<td></td>
</tr>
<tr>
<td>Warehouse receipt</td>
<td></td>
</tr>
<tr>
<td>Personal insurance</td>
<td></td>
</tr>
<tr>
<td>Trade financing</td>
<td></td>
</tr>
<tr>
<td>Trading platforms</td>
<td></td>
</tr>
</tbody>
</table>

Sample providers of common financial products:
- **Working capital**: CRDB, NMB, Akiba
- **Crop & livestock insurance**: APA, UAP, Outassurance, Jubilee
- **Non-agriculture general loans**: CRDB, NMB, Akiba, Mwango, Maendeleo

<table>
<thead>
<tr>
<th>Source: AFA Ecosystem Study, Dalberg 2015.</th>
<th>Sample service providers:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Commercial Banks: NMB, CRDB, Akiba, Mwango, Maendeleo</td>
</tr>
<tr>
<td></td>
<td>Insurance: Outassurance, APA, UAP, Jubilee, Heritage</td>
</tr>
<tr>
<td></td>
<td>MFI: Pride, FINCA</td>
</tr>
<tr>
<td></td>
<td>Tech: Esoko, Sibesonke</td>
</tr>
<tr>
<td></td>
<td>Donor/NGO: CFA, ACRE, Opportunity International</td>
</tr>
<tr>
<td></td>
<td>MNO: Vodacom, Airtel, Tigo</td>
</tr>
</tbody>
</table>
## Tanzania Ecosystem Study

### Growth in DFS Targeting SHF

<table>
<thead>
<tr>
<th>Potential partner</th>
<th>Number of retail customers</th>
<th>Size of distribution network</th>
<th>Geographic coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vodacom</strong></td>
<td>&gt;12M subscribers&lt;br&gt;&gt;7M-Pesa users&lt;br&gt;&gt;1.8M-Pawa users</td>
<td>85,000 agents&lt;br&gt;10,000 Lipa na M-PESA merchants</td>
<td>85% of Tanzania’s population covered by 2G, 3G and fiber network</td>
</tr>
<tr>
<td><strong>Airtel</strong></td>
<td>7.5M subscribers&lt;br&gt;&gt;4M Airtel Money users&lt;br&gt;Timiza users unknown</td>
<td>20,000 agents&lt;br&gt;No data on Airtel chap chap</td>
<td>2G and 3G networks as prevalent as Vodacom</td>
</tr>
<tr>
<td><strong>Tigo</strong></td>
<td>&gt;8.2M subscribers&lt;br&gt;&gt;3.4M Tigo Pesa users&lt;br&gt;100,000 Tigo Kilimo users</td>
<td>~41,000 agents&lt;br&gt;50,000 Lipa na Tigo-Pesa merchants</td>
<td>2G service nationwide&lt;br&gt;3G services only in Dar es Salaam, Morogoro, Tanga, Dodoma, Moshi, Mwanza and Arusha</td>
</tr>
<tr>
<td><strong>NMB</strong></td>
<td>2M customers&lt;br&gt;500,000 m-banking users</td>
<td>165 branches&lt;br&gt;50% of all ATMs</td>
<td>Tanzania</td>
</tr>
<tr>
<td><strong>CROB Bank</strong></td>
<td>No data on customers available&lt;br&gt;1.2M sim banking users</td>
<td>119 branches&lt;br&gt;130 ATMs&lt;br&gt;700s POS devices&lt;br&gt;2200 agents</td>
<td>Tanzania, with 400 MFIs and 225 AMCOs</td>
</tr>
<tr>
<td><strong>ABC</strong></td>
<td>177,000 depositors&lt;br&gt;27,000 borrowers</td>
<td>17 branches</td>
<td>Only has a presence in Tanzania; mostly urban with interest in rural expansion through agency banking</td>
</tr>
<tr>
<td><strong>Commercial Bank</strong></td>
<td>No data on customers available&lt;br&gt;10,000 businesses</td>
<td>1 branch&lt;br&gt;129 ATMs&lt;br&gt;3 service centres</td>
<td>Only has a presence in Tanzania, with one branch and three service centers in the Kilimanjaro region</td>
</tr>
</tbody>
</table>

Source: AFA Ecosystem Study, Dalberg 2015.
Meeting Smallholder Needs

- Net income
- Household expenses

Source: Smallholder Farmer Diaries. CGAP 2016
Tanzania Ecosystem Study

Mapping SHF Value Chains

Source: AFA Ecosystem Study, Dalberg 2015.
# Tanzania Ecosystem Study

## Growth in Digital VAS Targeting SHF

### SUMMARY

- While the space is developing, Tanzania has few at-scale digital information service products.
- The most common products are information and extension services. Over 50% of the information and extension service products are bundled with trading or tendering platforms.
- Donor-NGO and start-up providers are overwhelmingly the most common non-financial service provider followed by mobile network operators who are beginning to adapt traditional non-financial services to digital platforms.

### Number of Service Providers by Types of Services Offered

<table>
<thead>
<tr>
<th>Type of Service</th>
<th>Number of Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture Information Services</td>
<td>18</td>
</tr>
<tr>
<td>Supplier management</td>
<td>2</td>
</tr>
<tr>
<td>Trading platforms</td>
<td>2</td>
</tr>
<tr>
<td>Tendering platform</td>
<td>1</td>
</tr>
<tr>
<td>Digital extension services</td>
<td>1</td>
</tr>
<tr>
<td>Farmer helplines</td>
<td>1</td>
</tr>
<tr>
<td>Traceability systems</td>
<td>1</td>
</tr>
<tr>
<td>Distribution management</td>
<td>1</td>
</tr>
</tbody>
</table>

### Number of Existing Products by Service Provider

<table>
<thead>
<tr>
<th>Service Provider</th>
<th>Number of Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start-Up</td>
<td>9</td>
</tr>
<tr>
<td>Donor/ NGO</td>
<td>9</td>
</tr>
<tr>
<td>MNO</td>
<td>2</td>
</tr>
<tr>
<td>Commercial Bank</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample providers of common non-financial products:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Ag. Info: Vodacom, Tigo, Esoko, Habari Mazao, Sibsonke</td>
</tr>
<tr>
<td>- Supplier mgmt.: Esoko</td>
</tr>
<tr>
<td>- Trading platform: One2Two, m-Kilimo</td>
</tr>
<tr>
<td>- Tendering platform: Sibsonke</td>
</tr>
<tr>
<td>- Digital extension services: Tigo</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sample service providers:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Tech: Esoko, Sibsonke, Habari Mazao, Kopo Kopo</td>
</tr>
<tr>
<td>- MNO: Tigo, Vodacom</td>
</tr>
<tr>
<td>- Other: Radio One International (Media)</td>
</tr>
</tbody>
</table>
Tanzania Ecosystem Study

Growth in Digital VAS Targeting SHF

Source: AFA Ecosystem Study, Dalberg 2015.
Opportunities

- Design products tailored to SHF need
  - Women & Youth
  - Specific Risks
- Ensure great SHF user experience
- Digitize value chain processes/payments
- Help poorest commercialize & diversify
- Leverage interoperability
- Expand rural agent & merchant networks
- SHF aggregation & direct service models
- Bundle DFS + DIS for impact
- Optimize markets with digital tools
- Build farmer capability
- Leverage data
Thank You!