



AGRIFIN ACCELERATE PROGRAM

Tanzania Ecosystem Study Presentation

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July, 2016

Dar es Salaam, Tanzania



TANZANIA PROGRAM LAUNCH

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 connections² over the next six years, reaching **525 million** by **2020.**

Sub-Saharan Africa's unique mobile subscriber base has grown by



over the last five years, the fastest growing region globally. By June 2014, there were **329 million** unique mobile subscribers and **608 million** 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)

Tanzania Program Launch

AFA Program Objectives



THE GOAL

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

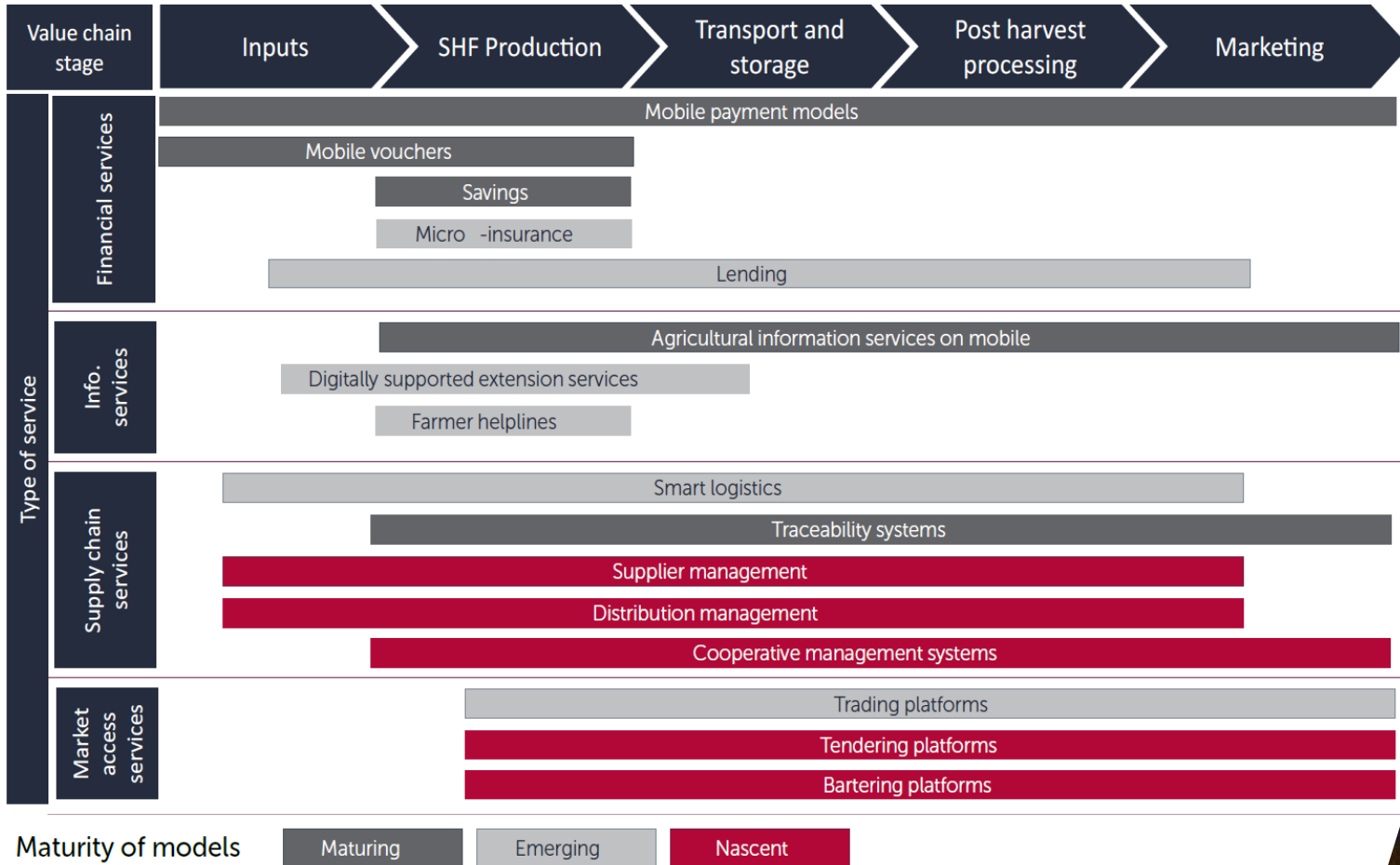
AgriFin Accelerate will **support the expansion of digital financial services to one million farmers in Sub-Saharan Africa over six years, delivered by growing ecosystems of diverse service providers.**

TARGET GROUP

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



Tech Innovation & Agriculture



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;

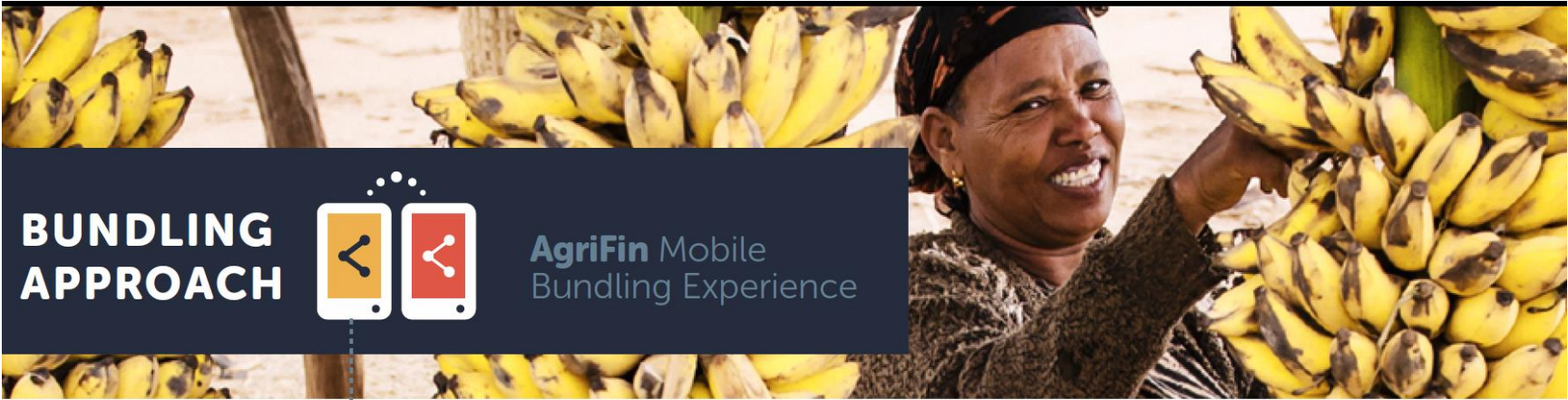
Outcome 3:

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

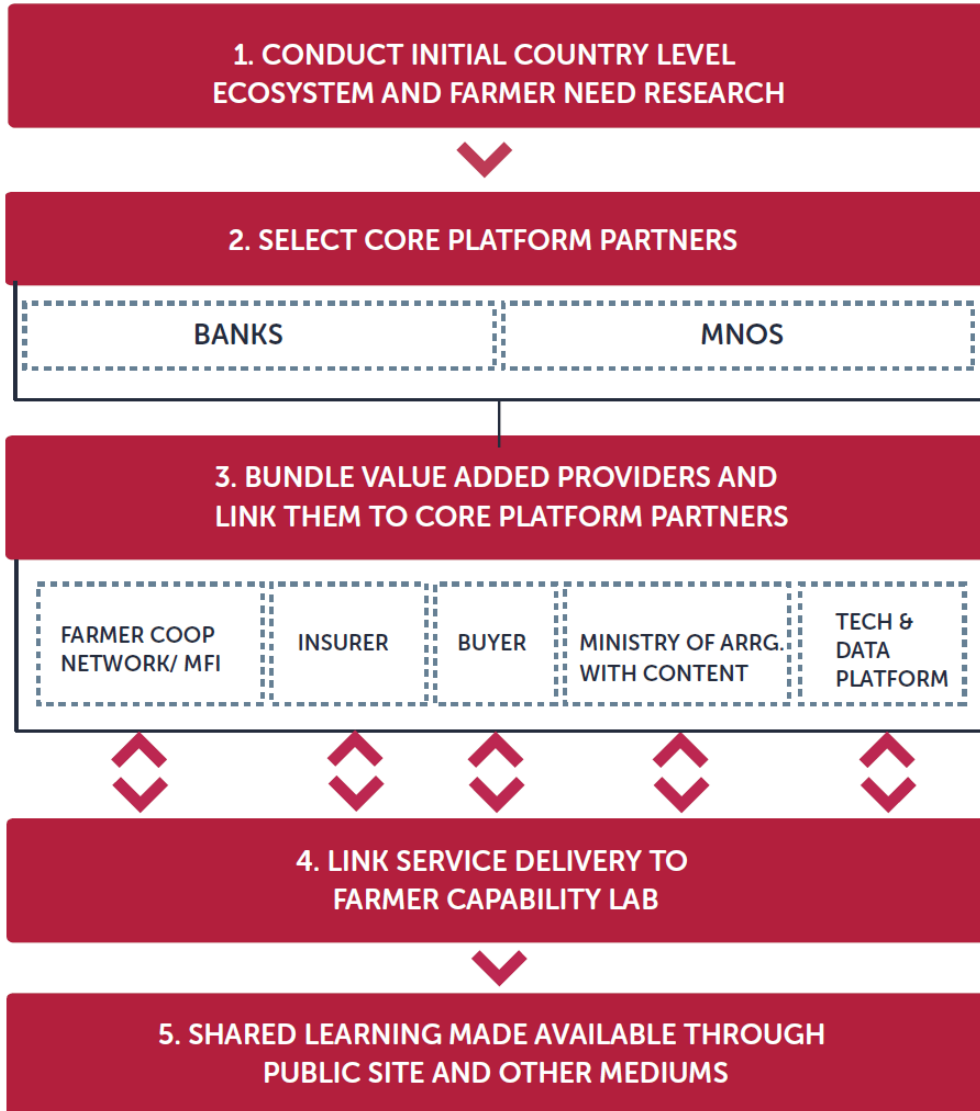


THIRD BUNDLE

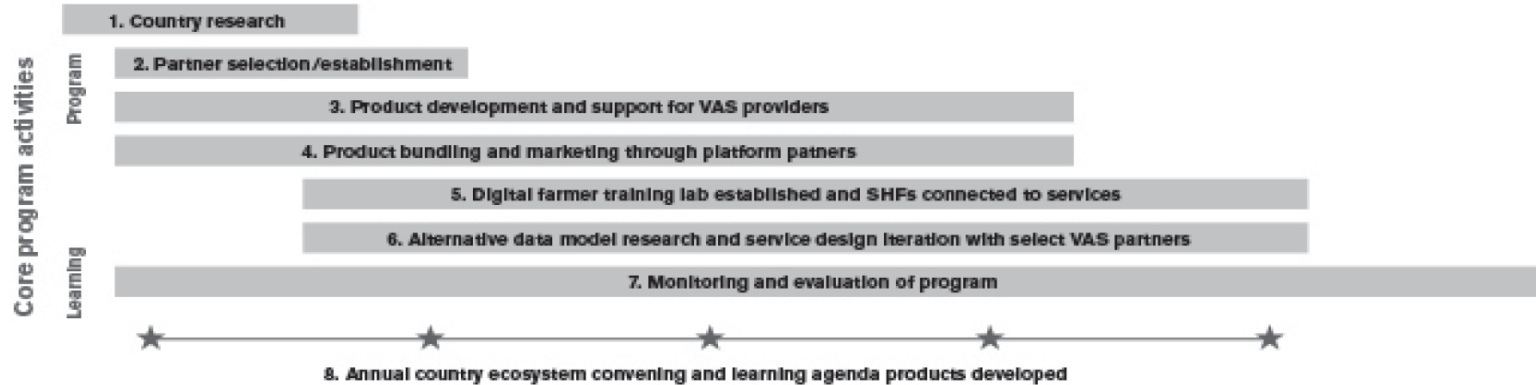
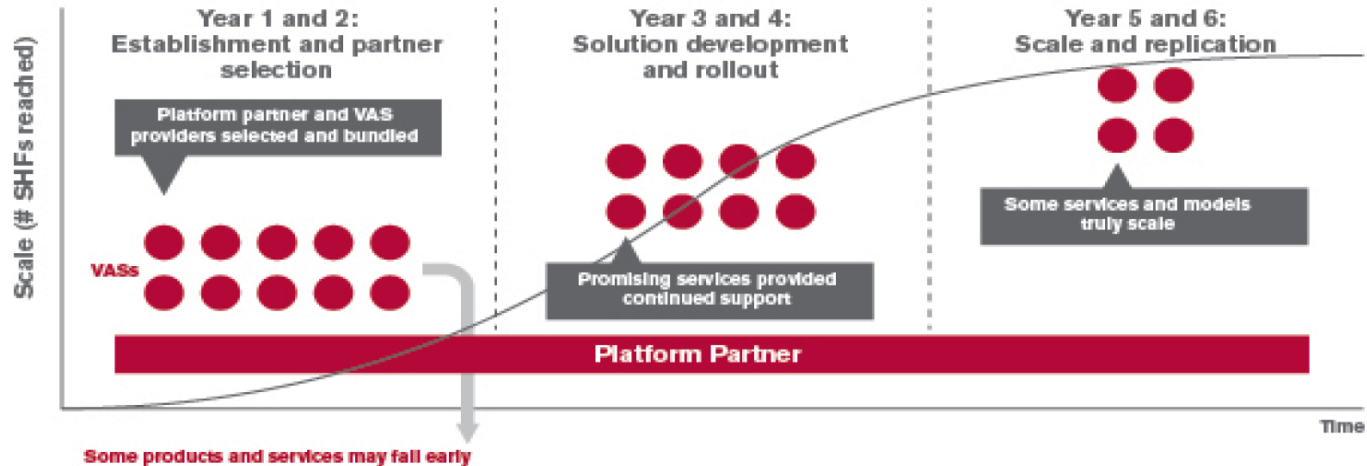
Weather index Insurance provided with Cell Insurance

**Outreach:
800,000 Farmers**

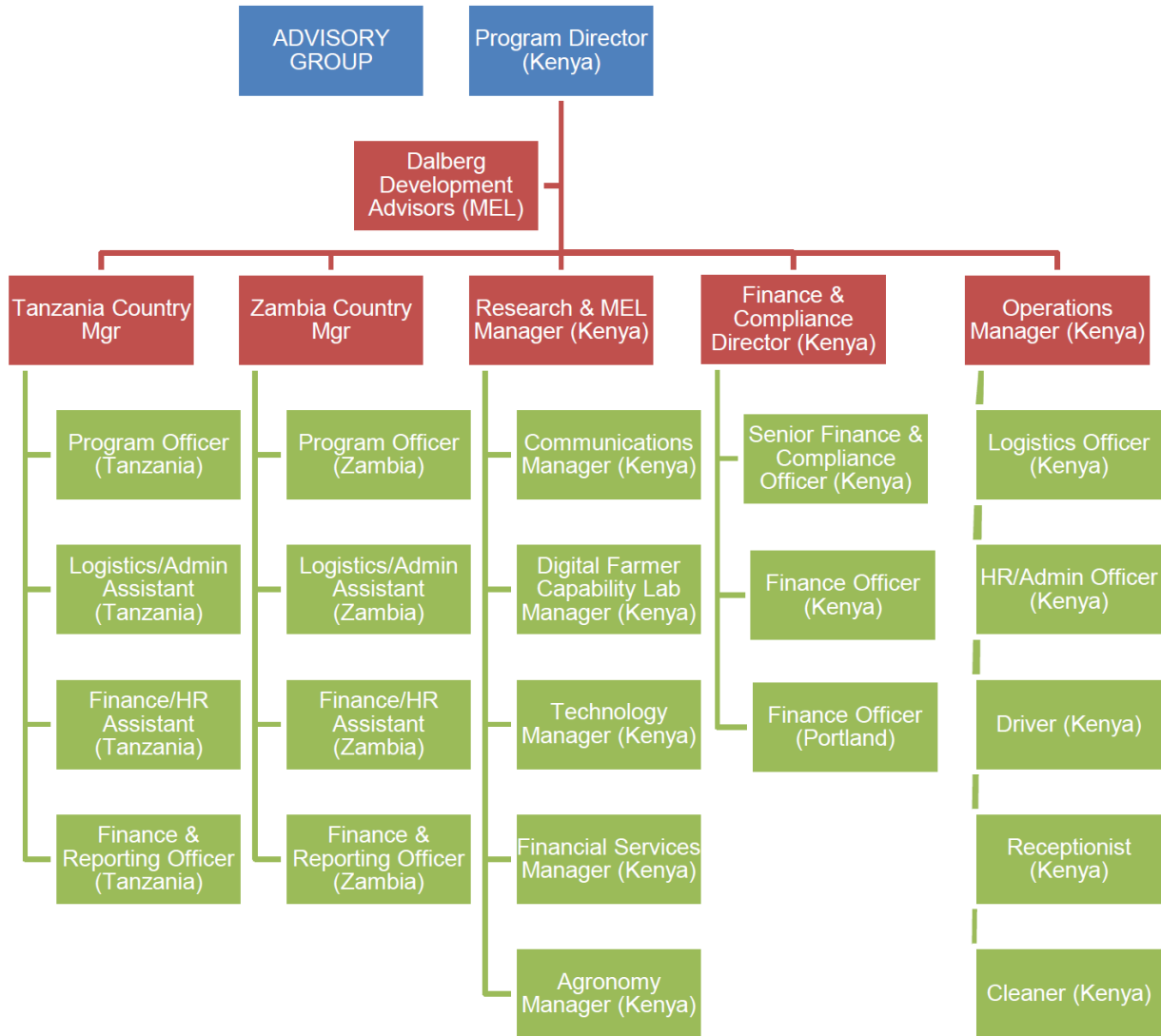
AgriFin Accelerate Engagement Model



Country Engagement Model

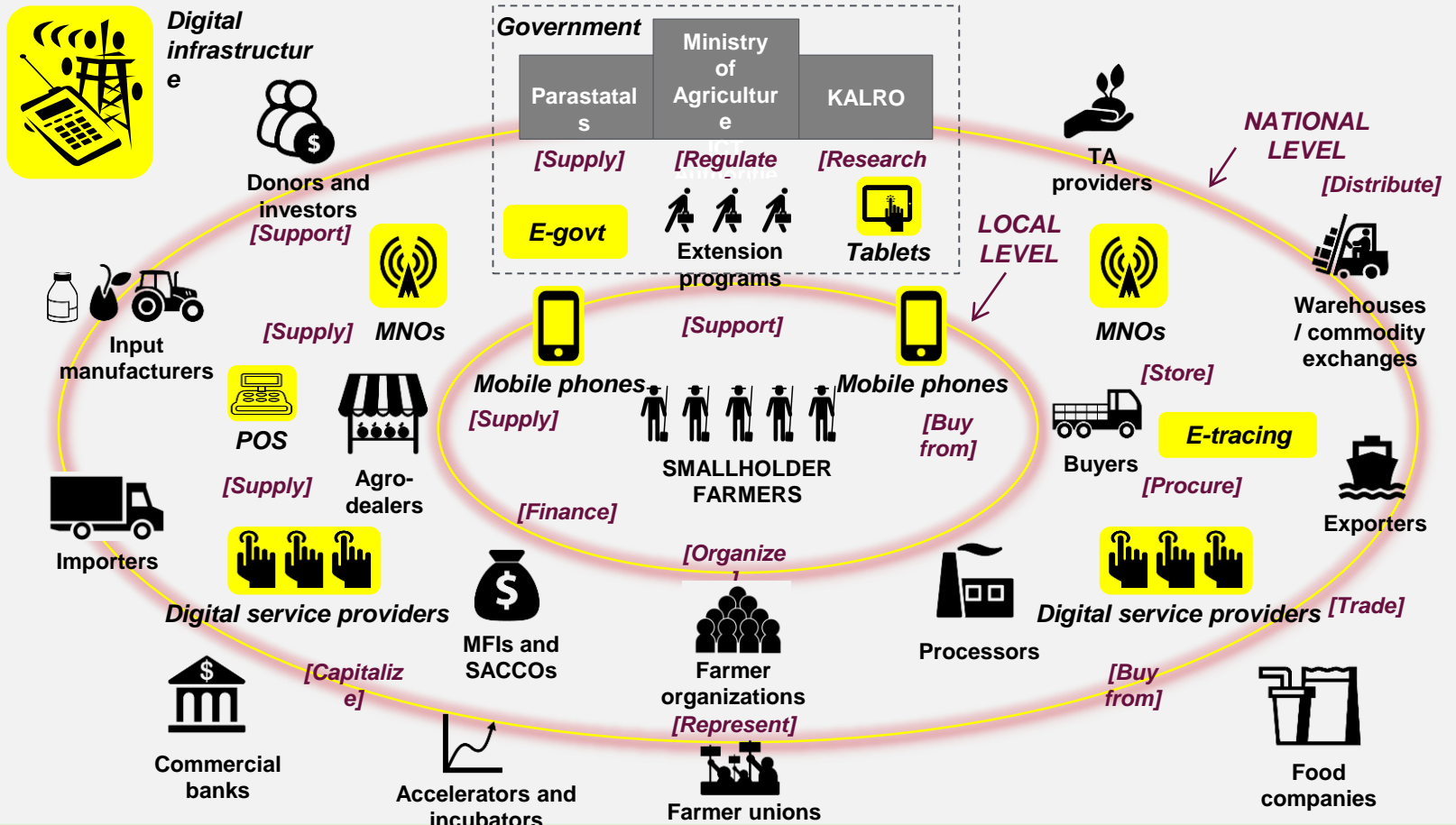


The AFA Team



Ecosystem Approach

ECOSYSTEM FRAMEWORK: A DIGITALLY ENABLED AGRICULTURAL SECTOR



What changes? 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

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 understand 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
SIDE SELLS 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

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Human Centered Approach: Personas



TRAPPED

"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

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.

Trapped is aware of the things that need to be done to help the farm become more productive, but cannot afford to take any action. Although the farm supports a large family, there is lack of adequate support from family members and it is difficult to support the growing number of children. With multiple generations living on the farm, there is little need for mobile phones for transfers or communications.

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	Input Suppliers	Offtakers/Buyers	Advisors
 <p>BITEN BUILDING RURAL INCOMES THROUGH ENTERPRISE</p> <p>NCA</p> <p>AGRA Growing Africa's Agriculture</p>	 <p>YARA</p> <p>syngenta</p> <p>BAYER</p> <p>Seedco</p>	 <p>WFP</p> <p>ETG EXPORT TRADING GROUP</p> <ul style="list-style-type: none">• Basic Element Limited• Kijenge Animal Products• Ken Millers• Kibaijwa Maize Flower• International Tan Seeds Limited• Silverlands Tanzania Limited• New Bugaloo• Ruaha Millers	 <p>WORLD BANK</p> <p>IFC International Finance Corporation WORLD BANK GROUP</p>
Banks	Guarantors/Financiers	Aggregation Providers	Insurers (future)
 <p>CROB BANK The bank that listens</p> <p>NMB</p>	 <p>GAFSP the global agriculture & food security program</p> <p>PASS</p> <p>IFC International Finance Corporation WORLD BANK GROUP</p> <p>Rabobank</p>	 <p>GROWAFRICA</p> <p>DAI</p> <p>UKaid from the British people</p>	 <p>acre AFRICA</p> <p>Imperial College London</p>



Week 2 - North Tanzania

2 AMCOS (FO) leaders

17 independent, **18** FO-based farmers

30/70 female/male interviewees

35 Total interviewees



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



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



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

	1	2	3	4	5	6
	Partner coordination & communication	Strong marketing of PPP	Standardized extension resources	Lower-burden loan requirements	Disaggregated inputs ordering	Earlier product payment
Partners Involved	<ul style="list-style-type: none"> Banks Extension service providers Guarantors Input suppliers Off takers Farmer organizations 	<ul style="list-style-type: none"> Extension service providers 	<ul style="list-style-type: none"> Extension service providers Banks Guarantors Input suppliers Off takers 	<ul style="list-style-type: none"> Banks Extension service providers Guarantors 	<ul style="list-style-type: none"> Banks Extension service providers Guarantors Input suppliers 	<ul style="list-style-type: none"> Banks Guarantors Off takers
Suggested Next Steps	<ul style="list-style-type: none"> WFP coordinates creation and signing of MOUs Each partner nominates POC Partners agree on meeting frequency and attendance 	<ul style="list-style-type: none"> Extension service providers jointly develop or align sensitization materials Extension service providers agree on early timeline for sensitization 	<ul style="list-style-type: none"> Providers jointly align content quality and facts, with advising from partners Partners do more farmer training Partners identify resources for FG and FO training in management 	<ul style="list-style-type: none"> Banks provide loan application document list to FOs, PASS Trust, other partners Banks review option for digital document submit WFP integrates other banks or FIs as partners 	<ul style="list-style-type: none"> Build FG capacity Partners help link FGs to input suppliers Input suppliers agree to deliver upon loan deposit of individual FG WFP, extension service providers integrate agro-dealers into PPP 	<ul style="list-style-type: none"> WFP, FOs broker options for earlier pickup/payment with off takers FOs and FGs work with extension service providers to create system for emergency early sales

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

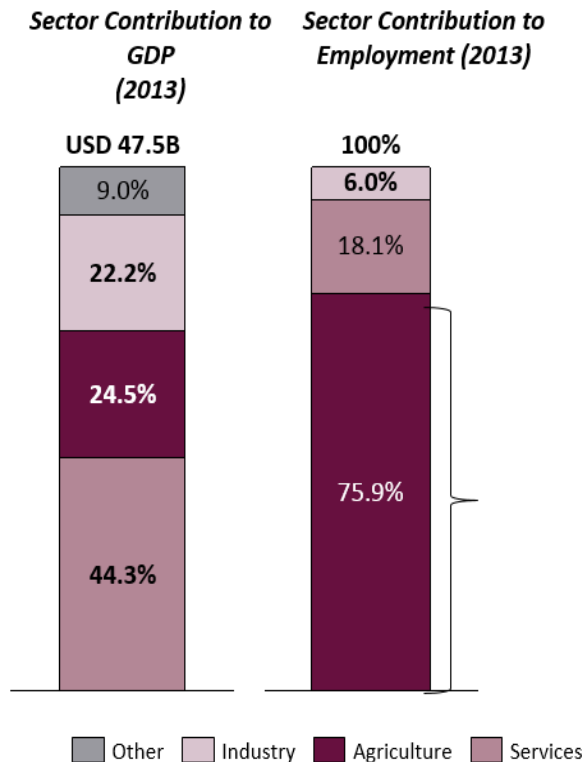
AFA Tanzania Ecosystem White Paper: completed by AFA based upon the survey, CGAP 2015/2016 Farmer Diaries, InterMedia 2015 study and initial program activity.

Study Objectives:

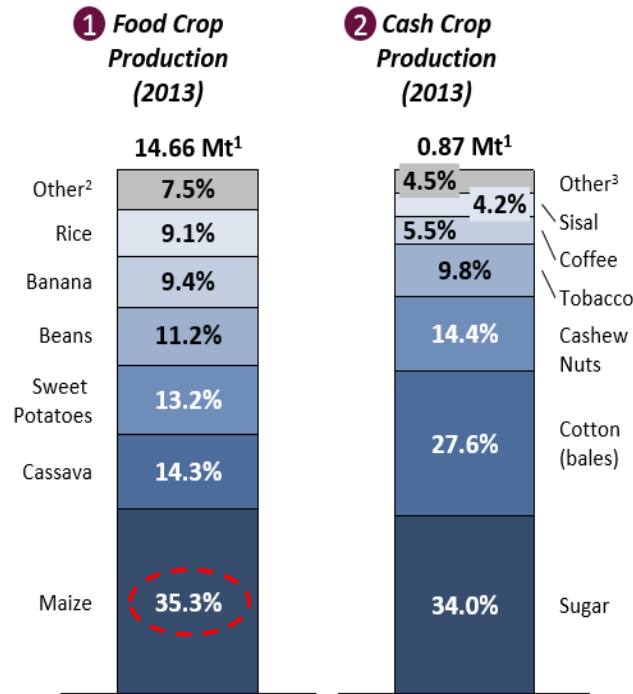
- build a strong evidence base for AFA program activity
- share analysis with ecosystem stakeholders to inform DFS activities



Importance of Agriculture



Major agricultural categories

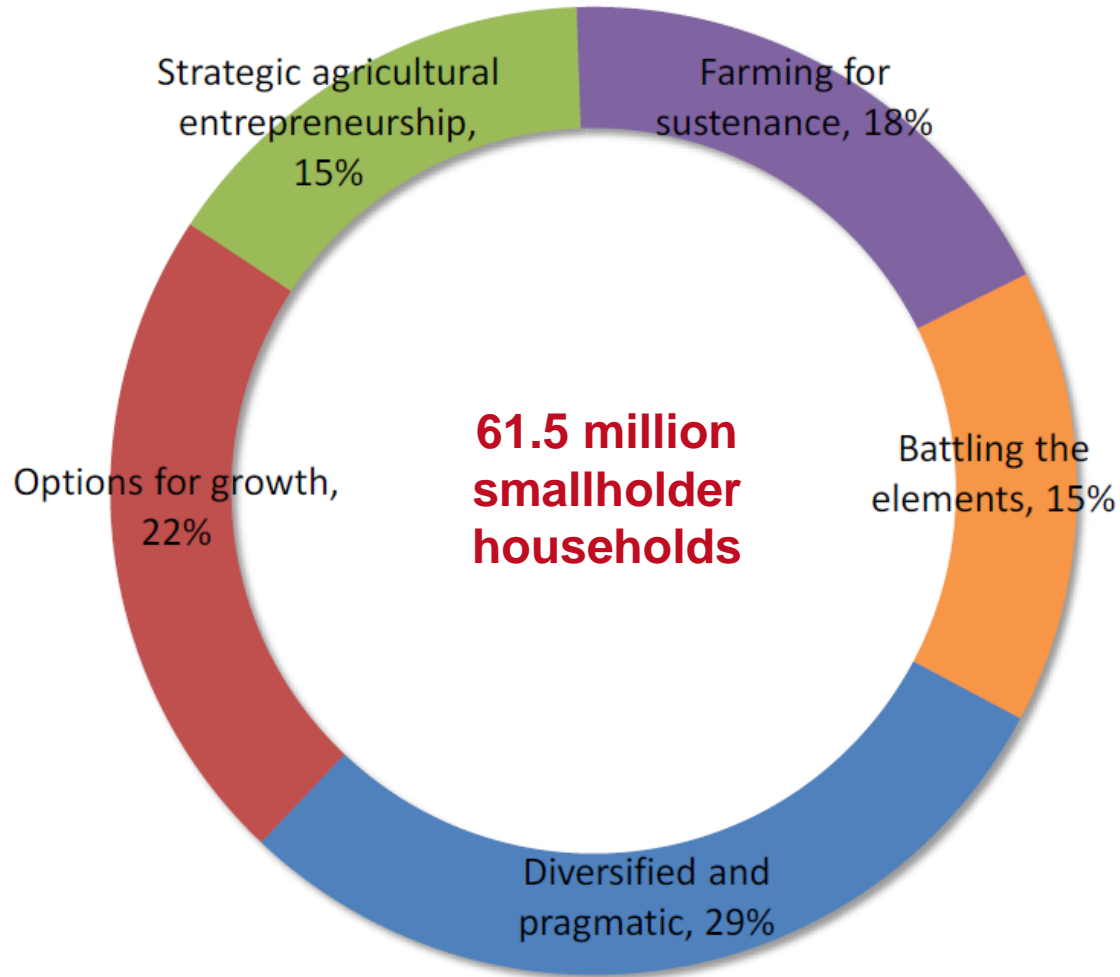


3 Livestock

- **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

SHF Segmentation



Tanzania Ecosystem Study

SHF Segmentation

Segment= n= 2,795	Farming for sustenance	Battling the elements	Diversified and pragmatic	Options for growth	Strategic agricultural entrepreneurship
	557	393	826	628	391
Educational attainment of household head					
Never attended school	41%	25%	37%	6%	2%
Preprimary	1%	0%	1%	0%	0%
Primary	57%	69%	54%	85%	66%
Secondary	1%	5%	7%	8%	25%
Higher education	0%	1%	0%	1%	7%
Socioeconomic status					
Above the poverty line	4%	4%	13%	12%	43%
Below the poverty line	96%	96%	87%	88%	57%
Access to emergency funds: Can come up with 100,000 shillings within the next month					
Very possible	9%	16%	17%	21%	51%
Somewhat possible	17%	26%	31%	27%	49%
Not possible	73%	57%	52%	52%	0%
Don't know	0%	0%	0%	1%	0%
Mobile phone ownership – at least one phone in the household					
No	54%	38%	2%	0%	0%
Yes	46%	62%	98%	100%	100%
Attitude: The future will take care of itself					
Agree	38%	41%	32%	27%	28%
Disagree	61%	59%	67%	72%	72%
Don't know	1%	0%	1%	1%	0%
In the past 12 months, experienced any unexpected events (including, but not limited to death, illness, accidents, etc.).					
No, I didn't	9%	5%	7%	10%	7%
Yes, I did	91%	95%	93%	90%	93%



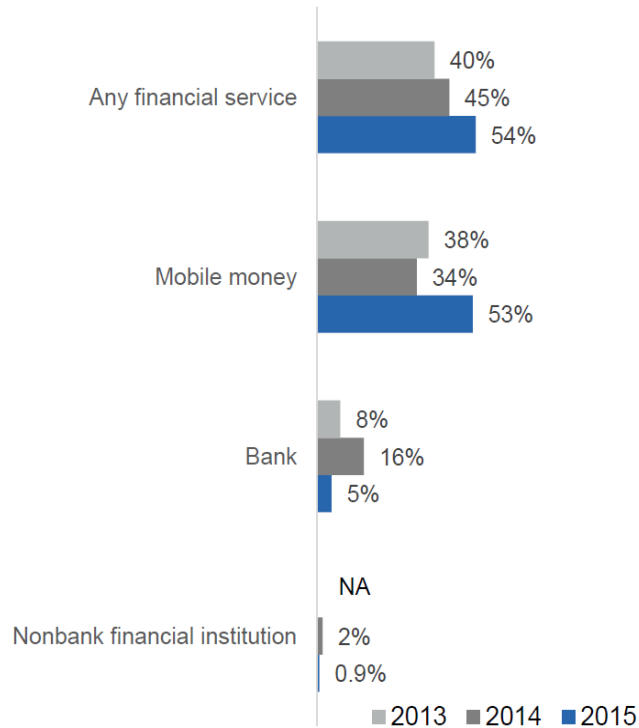
Source: National Survey and Segmentation of Smallholder Households in Tanzania. CGAP 2016.

Tanzania Ecosystem Study

Explosion of Mobile Money

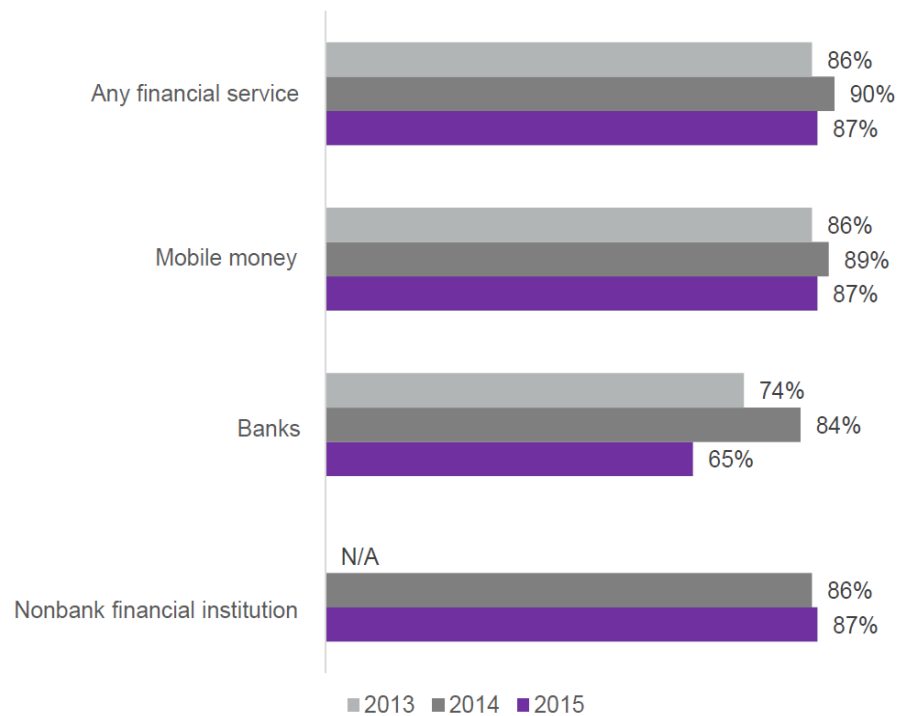
Active financial account holders

(Shown: Percentage of Tanzanian adults)



Active financial account holders

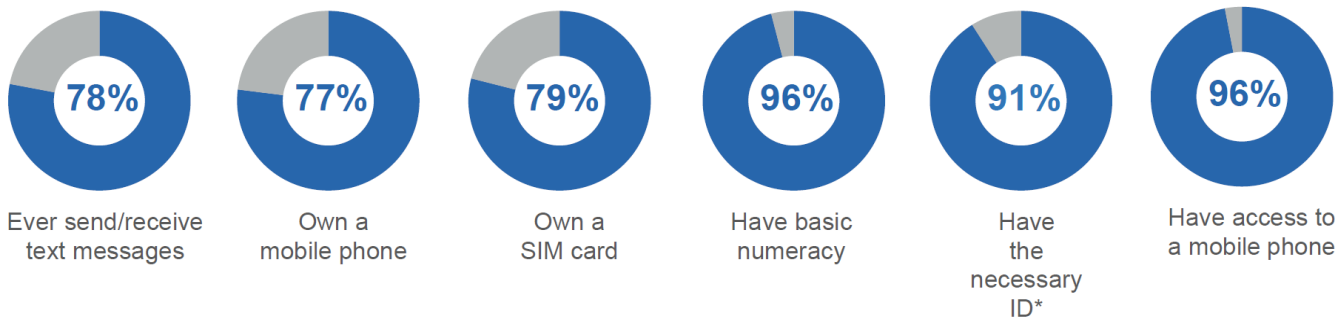
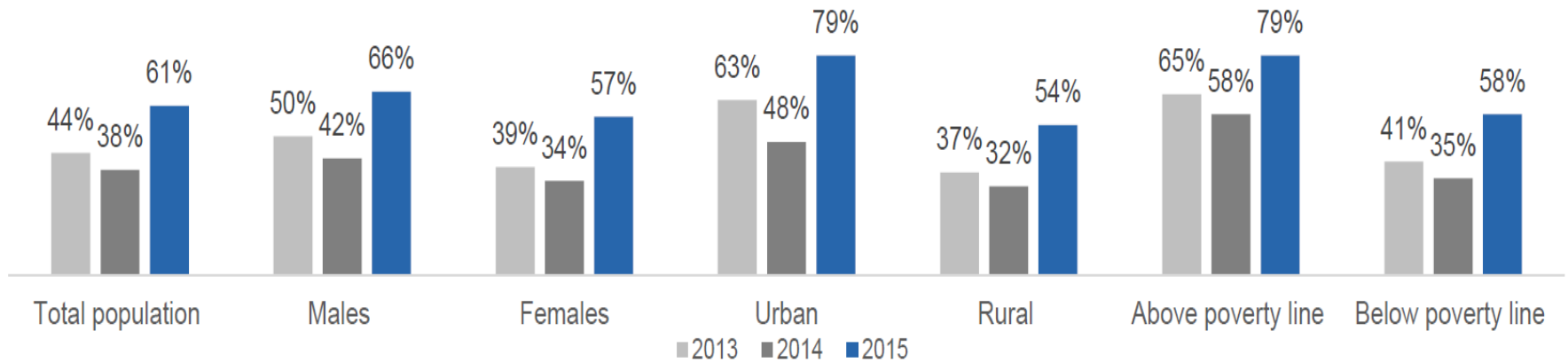
(Shown: Percentage of registered users for each type of account, by year)



Types of accounts are not mutually exclusive.

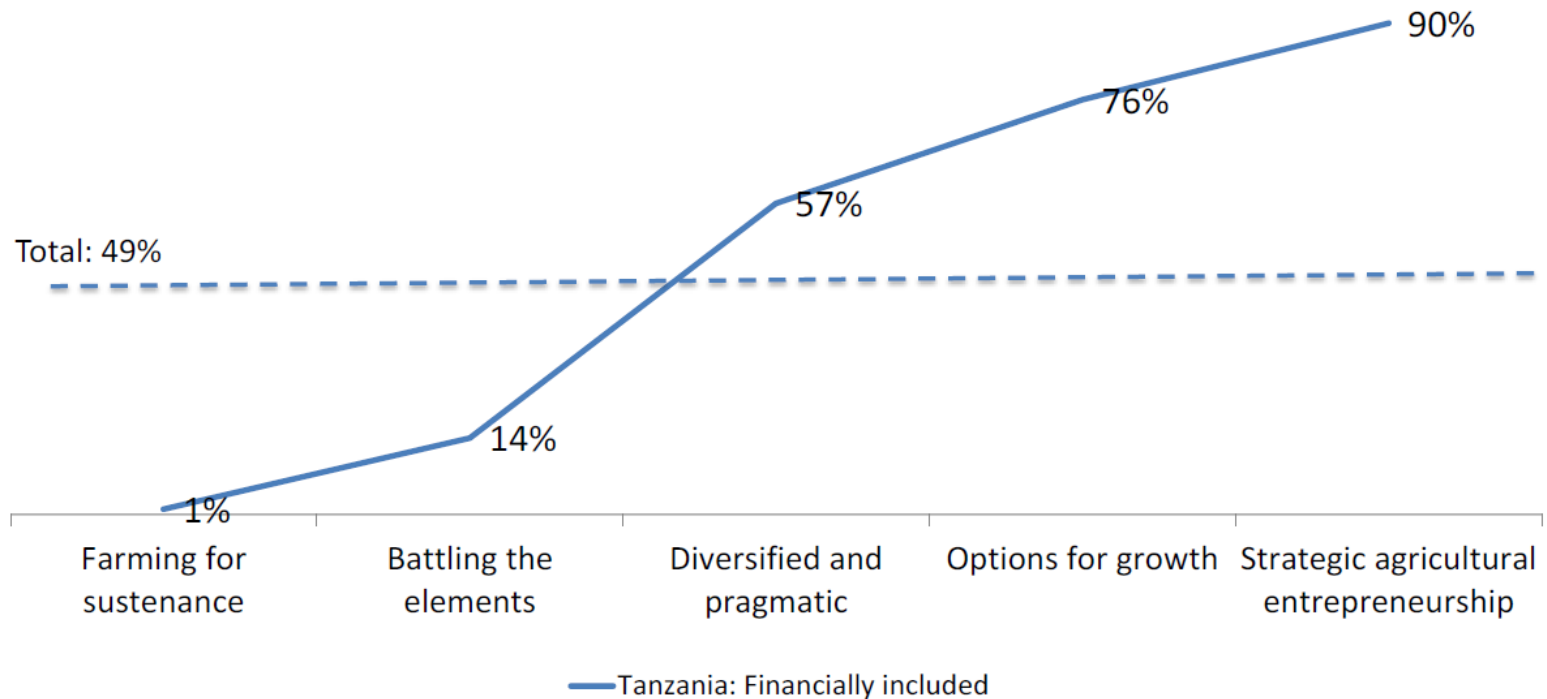
Source: InterMedia Tanzania FII Tracker surveys Wave 1 (N=2,997, 15+), November 2013-March 2014; Wave 2 (N=3,000 15+), August-October 2014; Wave 3 (N=3,001, 15+), September-October 2015.

MM Reaching Rural Areas, Poor & Women



	Ever send/receive text messages	Own a mobile phone	Own a SIM card	Have basic numeracy	Have the necessary ID*	Have access to a mobile phone
2014	61%	72%	64%	93%	61%	89%
2013	NA	67%	70%	79%	66%	87%

SHF Financial Inclusion by Segment



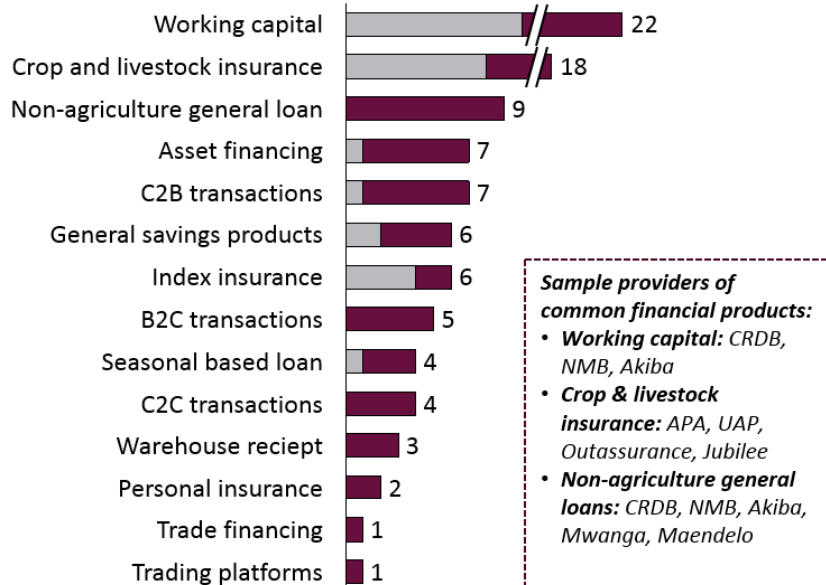
* Financial Inclusion defined as having a full-service bank, mobile money or nonbank financial institution account with access in one's own name.

Growth in DFS Targeting SHF

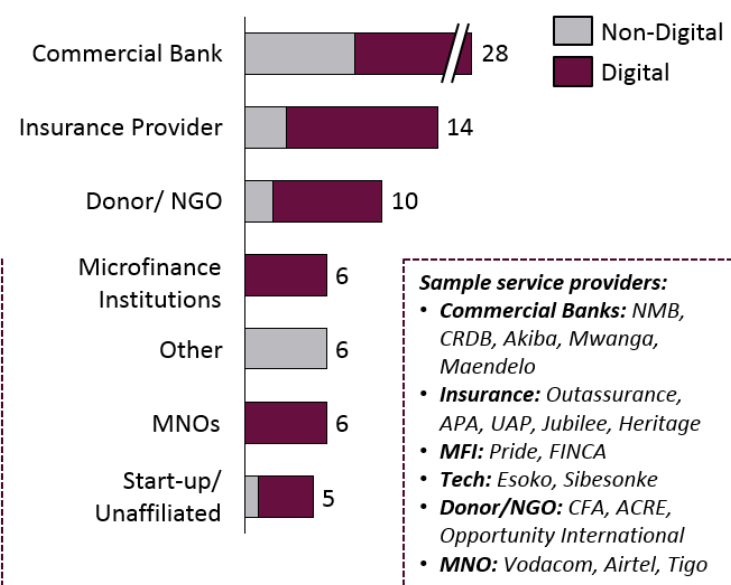
SUMMARY

- 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

Number of service providers by type of products










Number of products by type of service provider



Tanzania Ecosystem Study

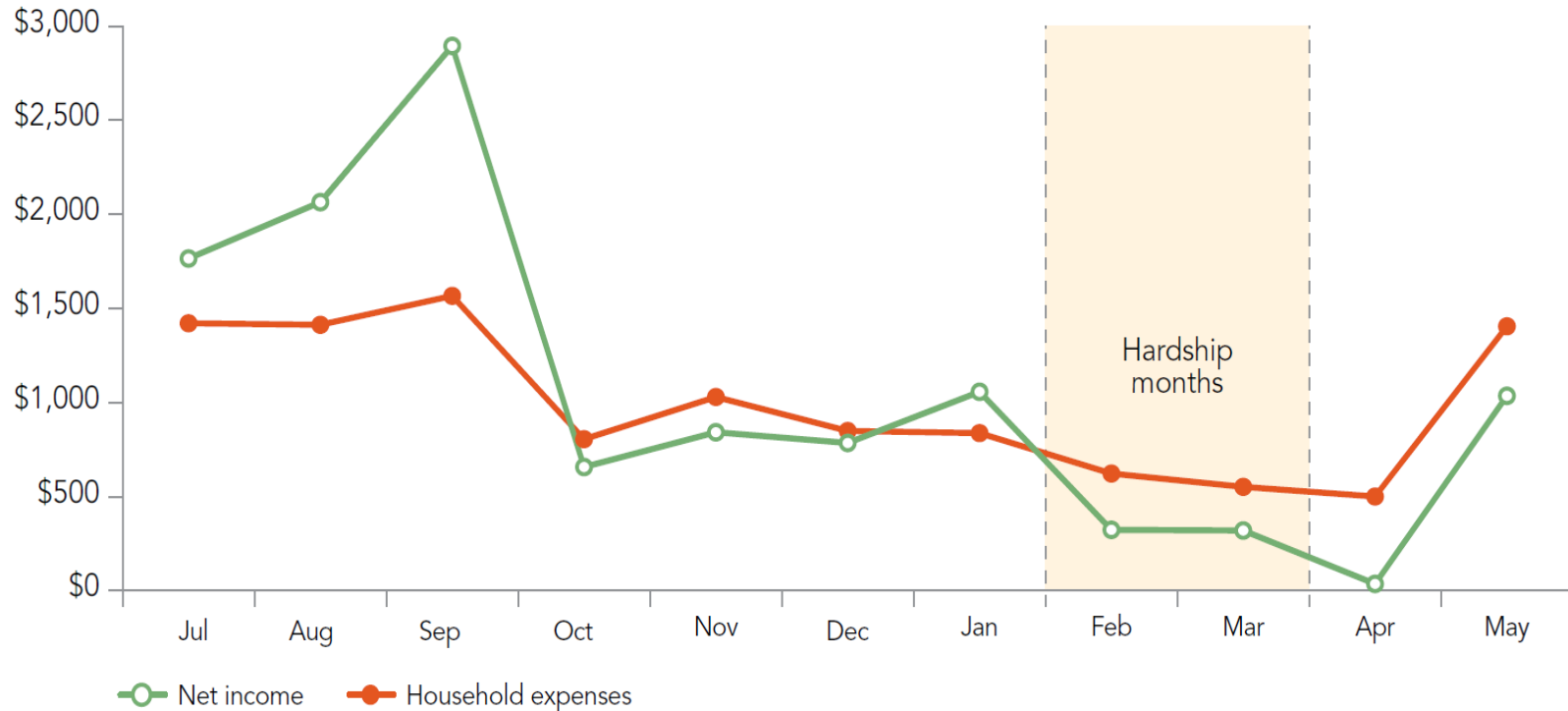
Growth in DFS Targeting SHF

Potential partner	Number of retail customers	Size of distribution network	Geographic coverage
	<ul style="list-style-type: none"> >12M subscribers >7M-Pesa users >1.8M-Pawa users 	<ul style="list-style-type: none"> 85,000 agents 10,000 Lipa na M-PESA merchants 	<ul style="list-style-type: none"> 85% of Tanzania's population covered by 2G, 3G and fiber network
	<ul style="list-style-type: none"> 7.5M subscribers >4M Airtel Money users Timiza users unknown 	<ul style="list-style-type: none"> 20,000 agents No data on Airtel chap chap 	<ul style="list-style-type: none"> 2G and 3G networks as prevalent as Vodacom
	<ul style="list-style-type: none"> >8.2M subscribers >3.4M Tigo Pesa users 100,000 Tigo Kilimo users 	<ul style="list-style-type: none"> ~41,000 agents 50,000 Lipa na Tigo-Pesa merchants 	<ul style="list-style-type: none"> 2G service nationwide 3G services only in Dar es Salaam, Morogoro, Tanga, Dodoma, Moshi, Mwanza and Arusha
	<ul style="list-style-type: none"> 2M customers 500,000 m-banking users 	<ul style="list-style-type: none"> 165 branches 50% of all ATMs 	<ul style="list-style-type: none"> Tanzania
	<ul style="list-style-type: none"> No data on customers available 1.2M sim banking users 	<ul style="list-style-type: none"> 119 branches 130 ATMs 700s POS devices 2200 agents 	<ul style="list-style-type: none"> Tanzania, with 400 MFIs and 225 AMCOs
	<ul style="list-style-type: none"> 177,00 depositors 27,000 borrowers 	<ul style="list-style-type: none"> 17 branches 	<ul style="list-style-type: none"> Only has a presence in Tanzania; mostly urban with interest in rural expansion through agency banking
	<ul style="list-style-type: none"> No data on customers available 10,000 businesses 	<ul style="list-style-type: none"> 1 branch 129 ATMs 3 service centres 	<ul style="list-style-type: none"> Only has a presence in Tanzania, with one branch and three service centers in the Kilimanjaro region

Source: AFA Ecosystem Study, Dalberg 2015.

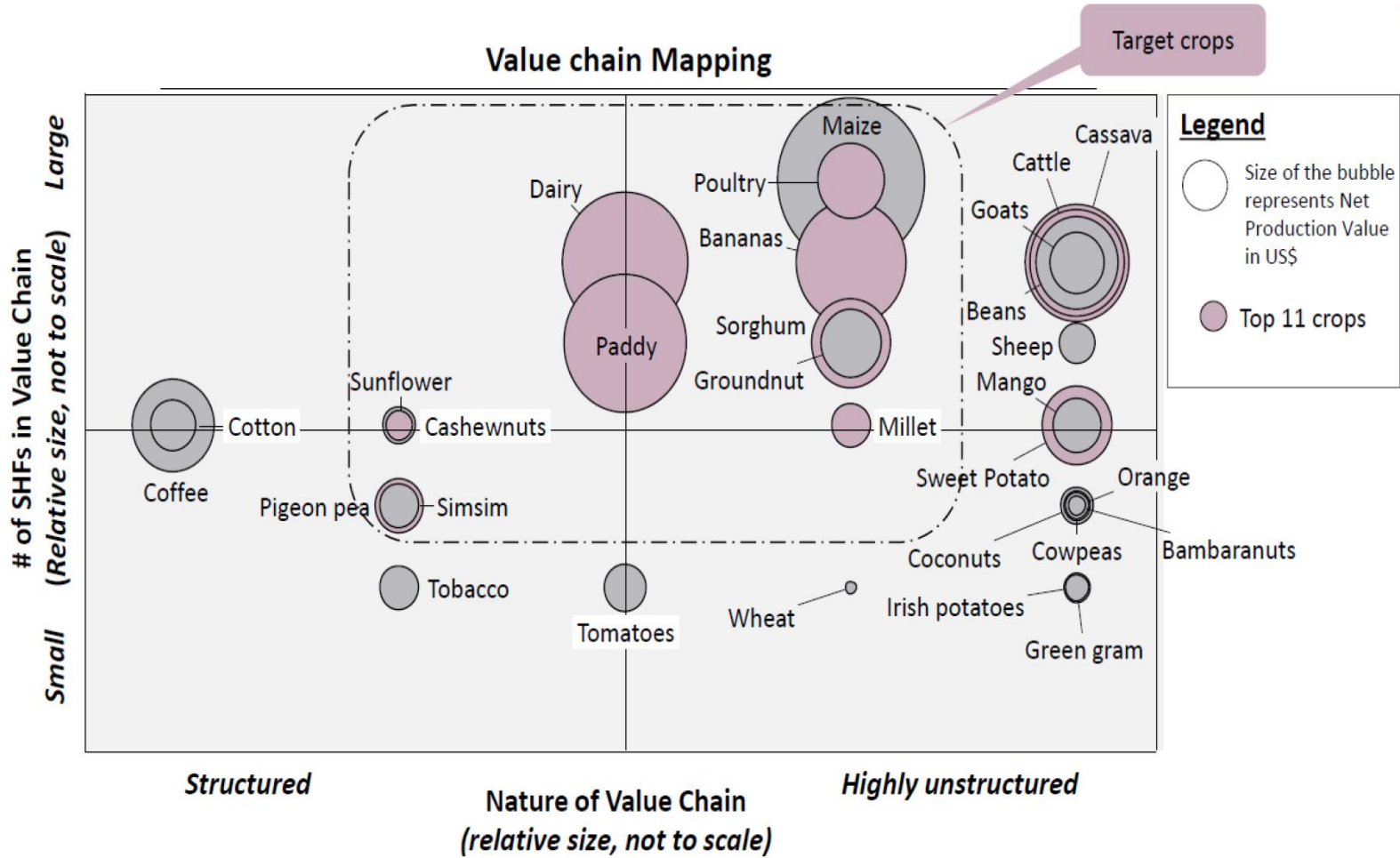
Tanzania Ecosystem Study

Meeting Smallholder Needs



a. The green income line refers to net income. For agricultural production, and small businesses in particular, income refers to revenue less related expenditures. The red expenses line refers to operational expenses of the household separate from income or financial transactions (e.g., spending on groceries, clothes, education, transportation).

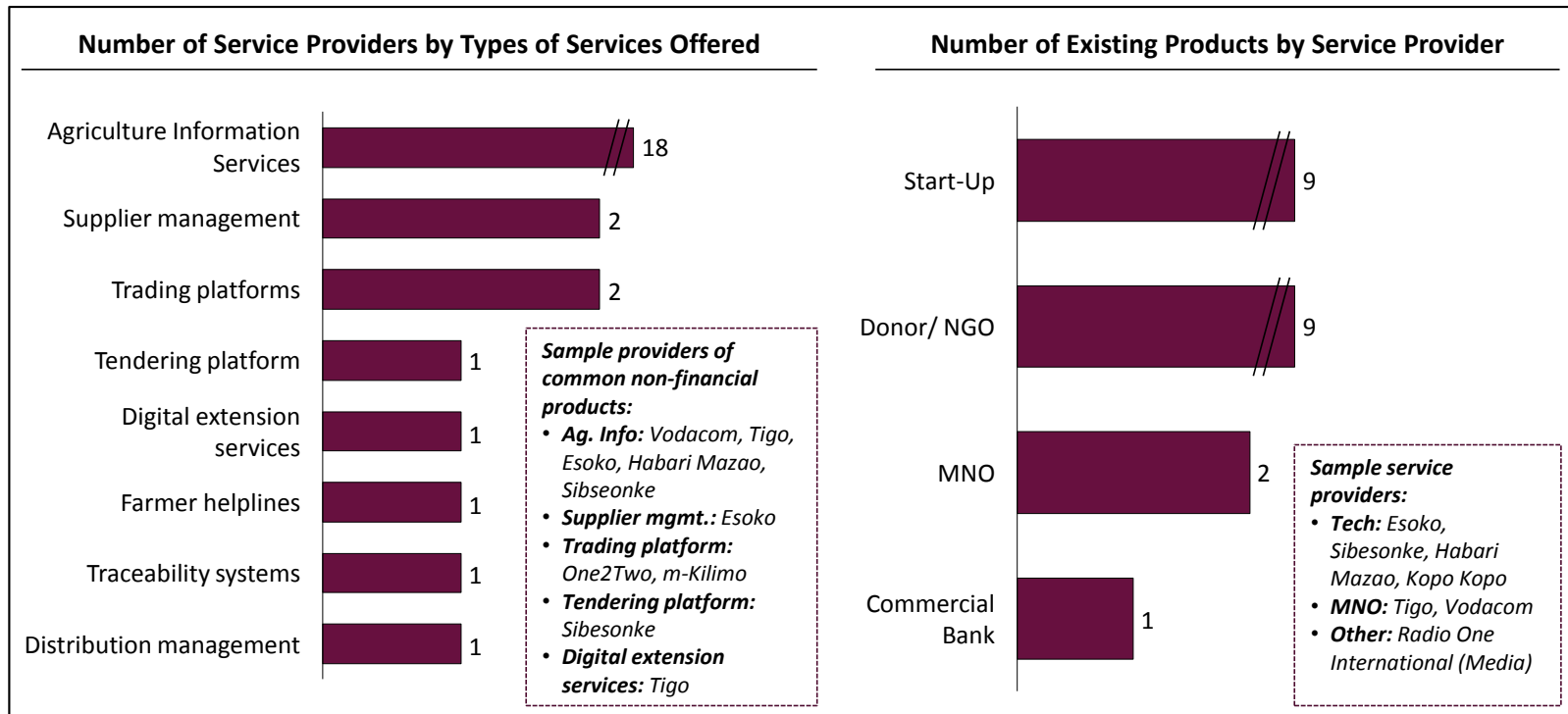
Mapping SHF Value Chains





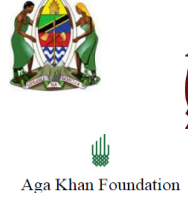
Growth in Digital VAS Targeting SHF

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



Growth in Digital VAS Targeting SHF

		Direct to farmer training	General training	
				
				
	Poultry	Bananas	Dairy	Sunflower
VC partners	<ul style="list-style-type: none">MuvekBRAC	<ul style="list-style-type: none">RECODABanana Investment LtdCrop BioScience	<ul style="list-style-type: none">EADDIIASAS DairyTanga CooperativeFaida Mali	<ul style="list-style-type: none">Mt. Meru Oli MillersSNVCEZOSOPATASUPA
Agriculture experts	<ul style="list-style-type: none">Ministry of Livestock and FisheriesILRI	<ul style="list-style-type: none">Crop BioScience	<ul style="list-style-type: none">Heifer InternationalILRITanzania Dairy BoardMinistry of Livestock and Fisheries	<ul style="list-style-type: none">Ministry of Agriculture and Food cooperativesTEOSA

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!