

6 November 2023

Innovations Session N°15

Technological innovations in the
agrifood sector:
adoptions by SMEs and entrepreneurs



INNOVATIONS
SERIES





Stephen Muchiri
CEO

9th November 2023



“e-Granary is unique in many ways, First and foremost **it is by farmers and for farmers;** Secondly it **helps facilitate farmers access markets and create a financial history;** Thirdly it **facilitates access to credit by farmers** as it will provide tailor made credit based upon future production and expected sales/profit; **access certified inputs** and lastly **it is easy to interact with the platform** this is why I support the e-Granary and request many farmers to support it”..
Chairperson e-Granary committee; Mbadfa -Ug

OUTLINE



- EAFF
- E-Granary implementation
- How it works; value proposition
- Results
- Sustainability
- To note



- We have a **3rd strategic plan 2021-2028**
-Transforming small scale agriculture into a rewarding investment

EAFB
membership

EAFB Vision

A Prosperous and Cohesive Farming Community in Eastern Africa

Currently (> 25 million farmers)

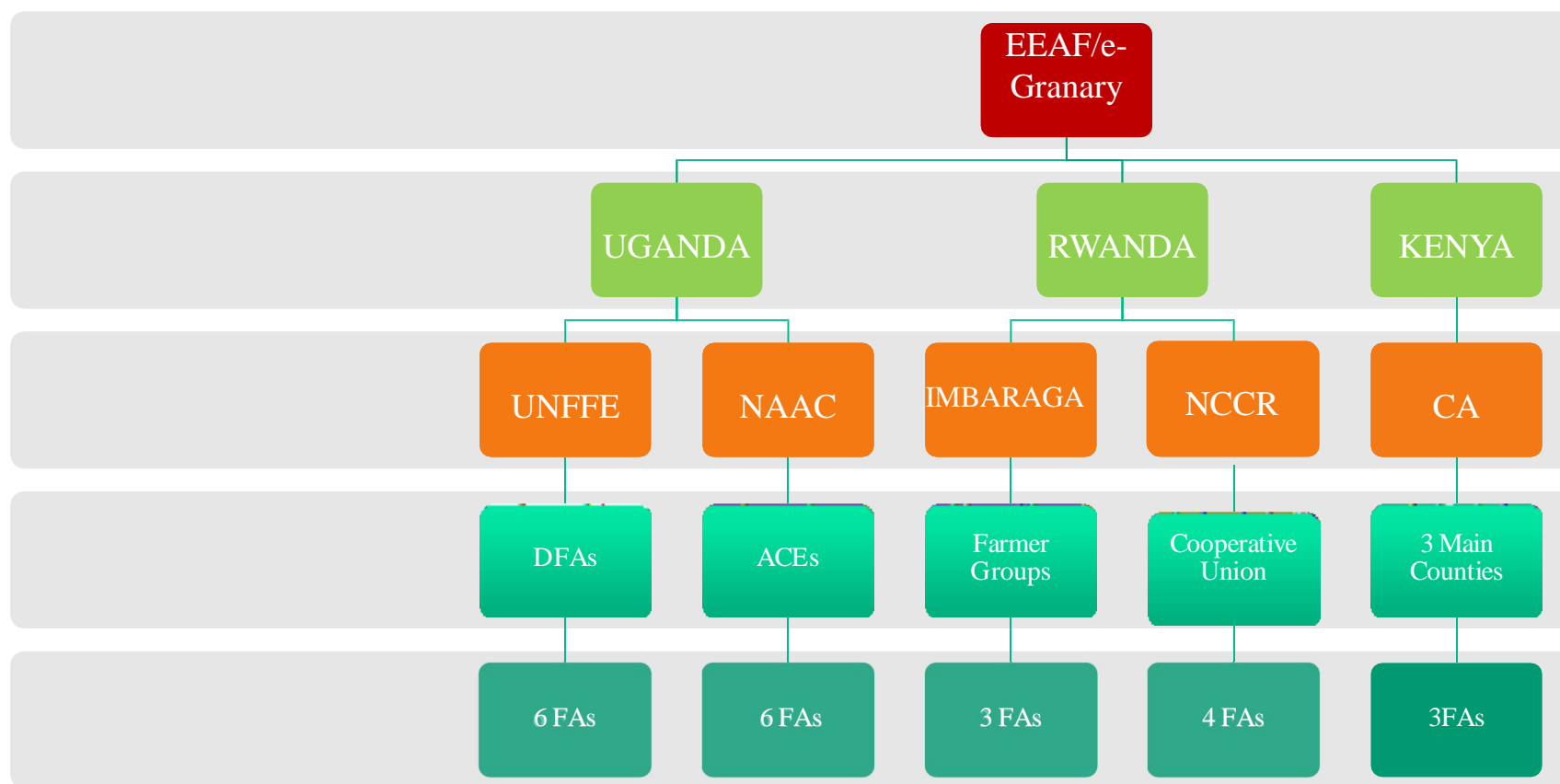
- Member **-PAFO**; is recognized as the highest representative body of African farmers at the continental level; representing about 80million of farmers from 73 National Farmers Organizations in 48 African countries.



- **Strategic plan PILLARS**

- This transformation will be realized through investment in the following 5 mutually reinforcing thematic thrusts:
 - I. Taking aggregation in use to scale;
 - II. **leveraging digital technology;**
 - III. taking provision of economic services to scale;
 - IV. advocating for supportive policies; and
 - V. improving capacity of members to discharge their representation mandate.

E-Granary IMPLEMENTATION FRAMEWORK

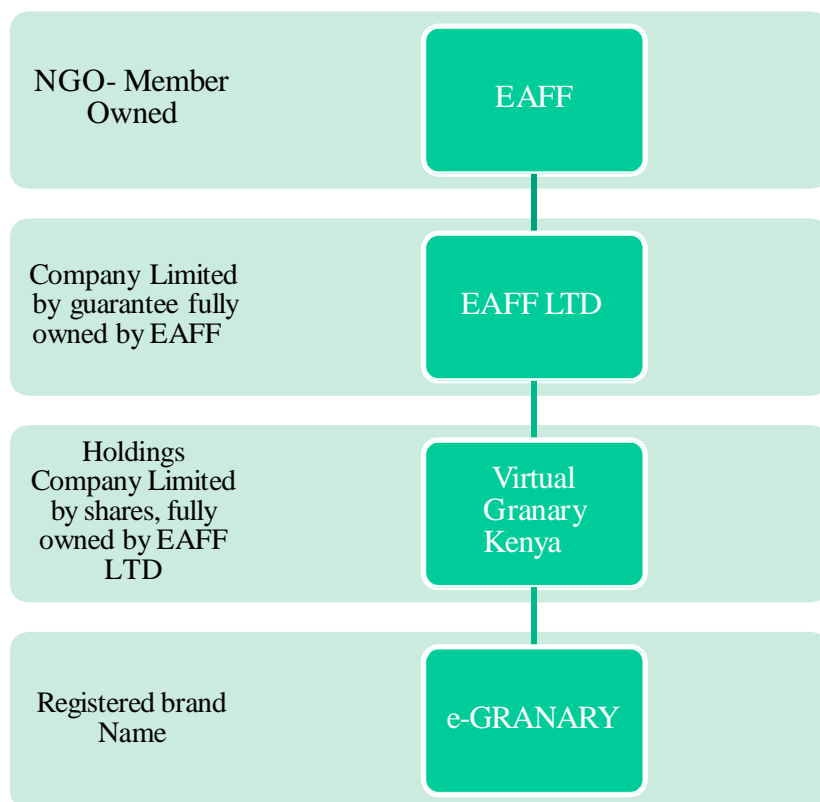


LEGAL STRUCTURE

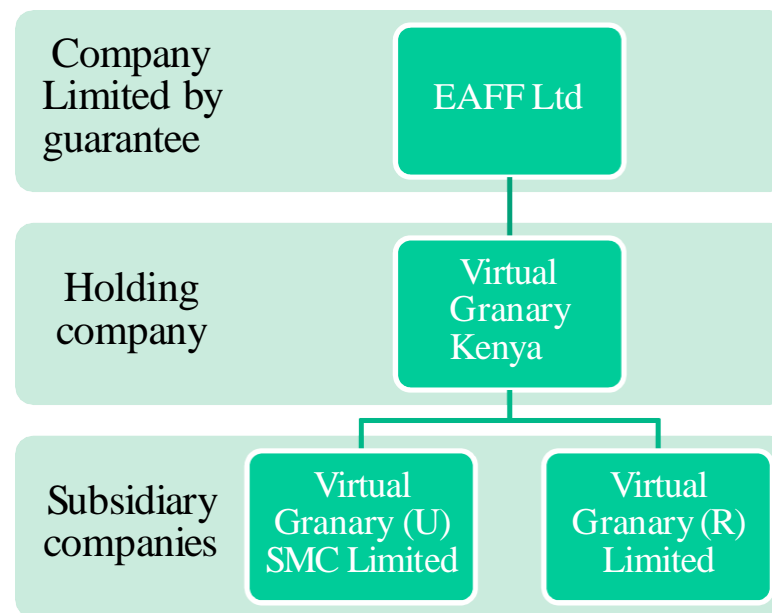


- E-GRANARY operates on a subsidiarity principle with core staff at the HQ in Nairobi supported by country managers in Uganda and Rwanda and seconded staff from National Farmers Organizations (NFOs)

HOLDING COMPANY



REGIONAL STRUCTURE



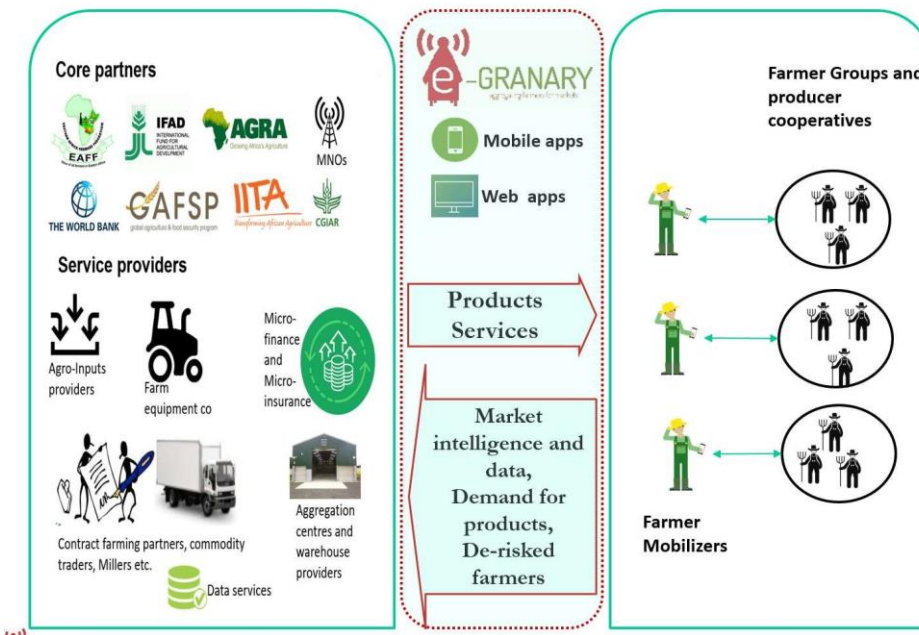
HOW eGRANARY WORKS



e-GRANARY platform is a multi-stakeholder farmer led partnership that takes a full ecosystem approach to supporting smallholder farmers

Approach

- The e-GRANARY 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 certified quality inputs at preferential rates through input as credit in partnership with FSPs
 - Access to agronomic training** – eGRANARY together with relevant research institutions has implemented a text and voice based e-extension services that accessible to all our farmers.
 - Access to market for marketable surplus** – through forward contracts secured with large offtakers.



Country operations (since):



Rwanda (2019)



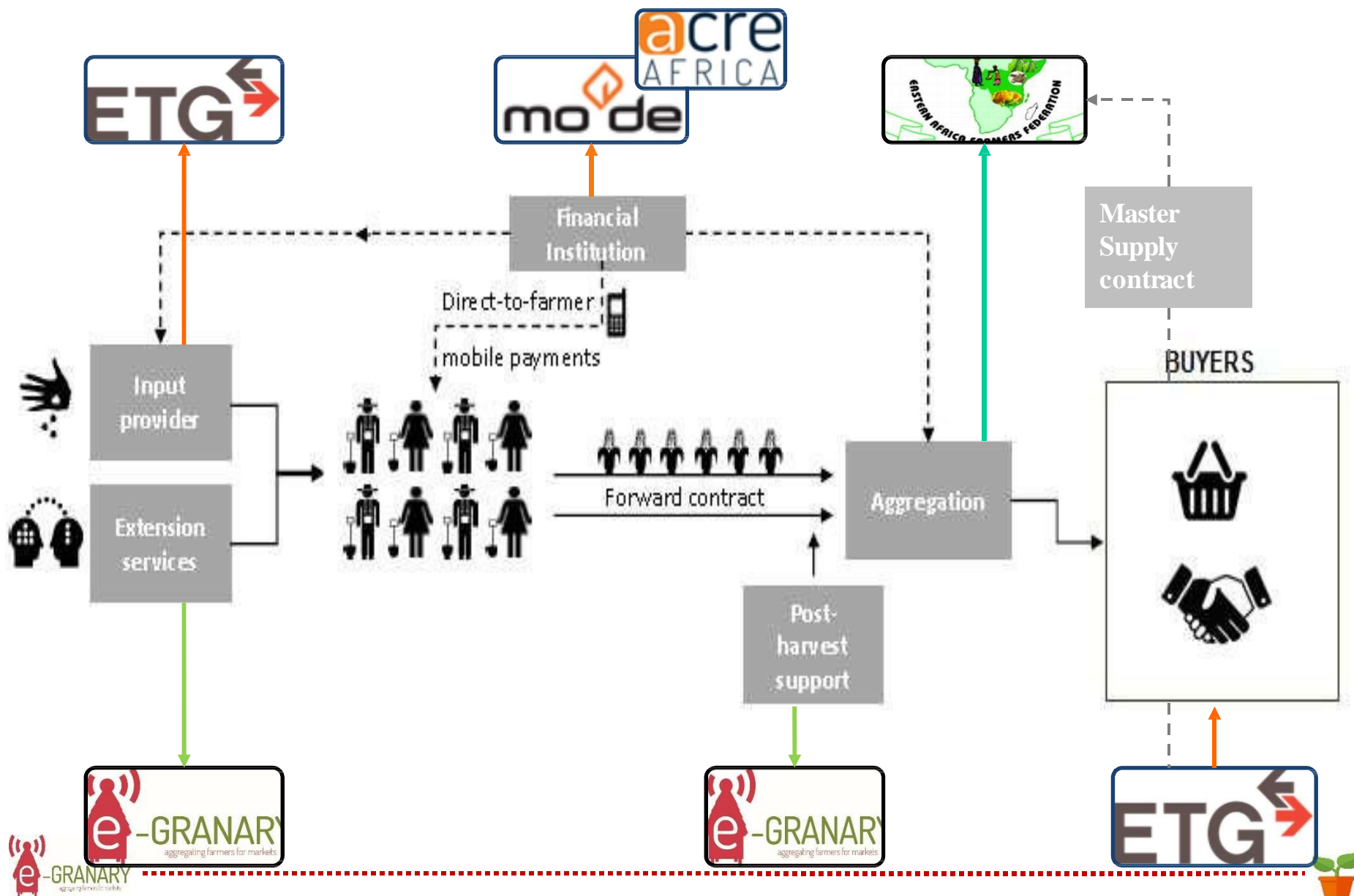
Uganda (2019)



Kenya (2016)

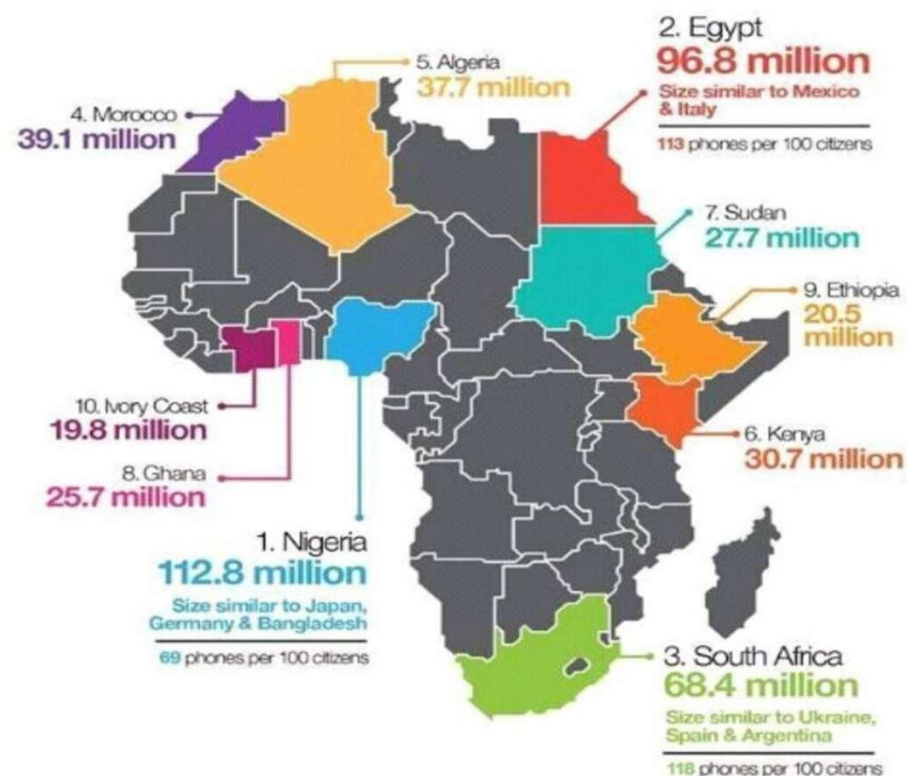


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African Mobile Subscriptions

With annual growth of 44% since 2000, African mobile subscription numbers are higher than ever.



Source
<http://www.gsma.com>
en.wikipedia.org

afrographique.tumblr.com
Infographic designed by @Ivanisawesome



FARMERS' BIO DATA



Show 100 ▾ entries

Search: Nzoia grain

Name ▲	Phone Number	Nearest Town	County	National ID	Organization	Year of Birth	Gender	Time Registered
Arthur Mbatii Iyadi	+254722608347	NZOIA GRAIN MARKETING	TRANS NZOIA	59	NZOIA GRAIN MARKETING	1947	male	19:13 PM 22/11/16
David Kiptanui Lagat	+254729364775	kitale	Trans nzoia	8333598	nzoia grains Cooperative	1965	male	11:57 AM 23/11/16
Dinah n wangila	+254728396067	kitale	Trans nzoia	7595595	nzoia grains	1963	female	16:54 PM 12/11/15
Donald barasa	+254716823856	Kitale	Transnzoia	9298492	Nzoia grains	1968	male	16:56 PM 21/11/15
Edward Wamukota Osanya	+254724105644	Kitale	Trans Nzoia	6539056	Nzoia Grain Cooperative	1963	male	12:02 PM 17/04/18
Francis Kedogo adeh	+254721272831	kitale	Transnzoia	5723265	amuka marketing. Nzoia grains	1955	male	08:10 AM 23/11/16
GEORGE MBAGU	+254725331321	KITALE	TRANS NZOIA	7248737	NZOIA GRAIN	1961	male	14:26 PM 19/11/15
Hilda Nyukuri	+254723635794	Kitale	Trans Nzoia	16010929	Nzoia Grains	1954	female	14:30 PM 19/11/15

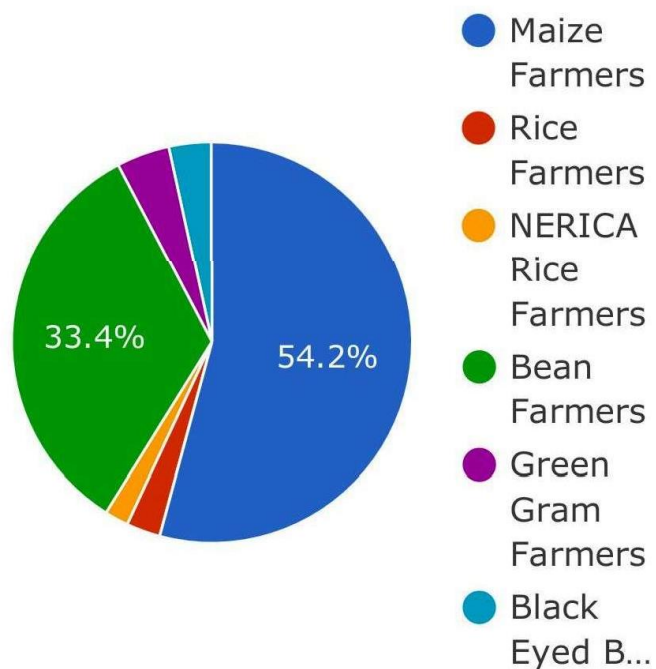
<u>Total Farmers</u>	19693
<u>Maize Farmers</u>	4,925
<u>Rice Farmers</u>	249
<u>NERICA Rice Farmers</u>	174
<u>Bean Farmers</u>	3,038
<u>Green Gram Farmers</u>	389
<u>Black Eyed Bean Farmers</u>	310
<u>Total Maize Bags Harvested</u>	833,633.0
<u>Total Rice Bags Harvested</u>	11,652.0
<u>Total NERICA Rice Bags Harvested</u>	11,163.0
<u>Total Bean Bags Harvested</u>	41,647.6
<u>Total Green Gram Bags Harvested</u>	1
<u>Total Black Eyed Bean Bags Harvested</u>	5,830.0
<u>Total Maize Planted</u>	1,020,555.3



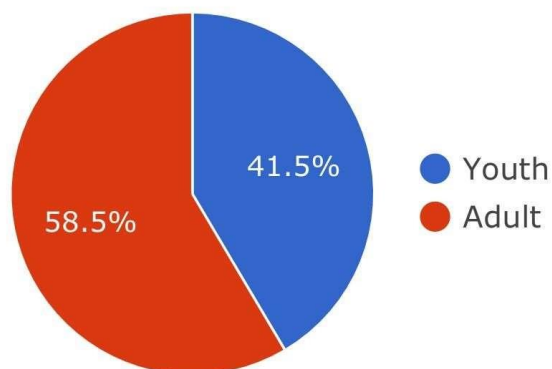
Report **generated by the** **dash board**

1. Farmers per enterprise
2. Total plantings
3. Total harvest (per grade)
4. Archived data helps e-Granary create a “pay-slip”

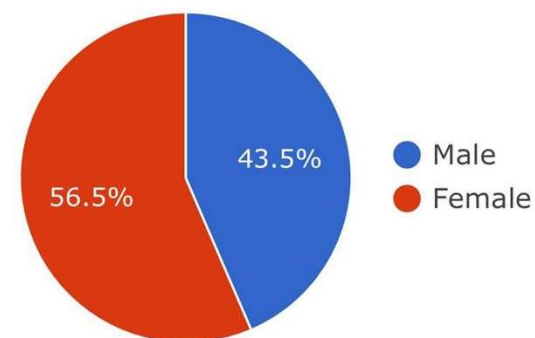
Farmer Crop Distribution



Farmer Age Distribution



Farmer Gender Distribution



All





Maize Farmers
Rice Farmers
Bean Farmers
Green Gram Farmers
Black Eyed Bean Farmers

All ▼

Send


VALUE PROPOSITION



	Roles	Drivers of value	Costs
 Financial service providers	<ul style="list-style-type: none"> • Provide payment product, • Manage loan book - application, credit scoring, and repayment • Farmer group risk profiling 	<ul style="list-style-type: none"> • New farmer and aggregated customers, • improved lending margin and transaction fees • Access to trade finance channels 	<ul style="list-style-type: none"> • Agent network • Marketing & branding • Customer service (call center)
 Input providers	<ul style="list-style-type: none"> • Provide and deliver inputs to farmers • Provide extension services to farmers to improve know-how • Extension 	<ul style="list-style-type: none"> • Guaranteed New business, improved profit margin • Reduction in dealer financing • Bulk selling 	<ul style="list-style-type: none"> • Warehousing/ delivery vehicles and logistics • Ordering platform • Customer service and marketing
 Buyers	<ul style="list-style-type: none"> • 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 • Extension 	<ul style="list-style-type: none"> • Margin increase from quality / aggregation efficiencies, new sales volume, secure supply • Reduction in buyer financing costs • Quantity of commodities procured 	<ul style="list-style-type: none"> • Warehousing/pickup vehicles and logistics
	<ul style="list-style-type: none"> • SDM operator • Facilitation of service provision/ organize B2Bs • Liaise with farmer groups to provide extension services • Provide training and coordination • Assist with post-harvest services • farmer onboarding, and communications platform 	<ul style="list-style-type: none"> • Commission for fertilizers • Commission on sales of commodities • Subscription fees 	<ul style="list-style-type: none"> • SDM operations costs • Farmer group coordination • Trainings



VALUE PROPOSITION CONTD.....

	Roles	Drivers of value	Costs
 Farmers	<ul style="list-style-type: none"> • Owns the production process - land preparation, planting, growing, harvesting and aggregating • Provision of data on the e-GRANARY platform 	<ul style="list-style-type: none"> • Increased production from high-quality inputs and right application • Increased production area • Increased household income from higher quality and volume of commodities traded • Improved food security • Guaranteed markets for produce • Access to relevant training on GAPs, structured trade, digital literacy and financial literacy. • Affordable products and services. 	<ul style="list-style-type: none"> • Cost of services and products • Tech access costs • Production and aggregation costs including labour

RESULTS TO DATE



Problem

Market

Farmers lack access to organized and predictable markets

Solution

Aggregation and forward contracts

Buyers enter into stable buying relationships with smallholder farmers through supply contracts

Outcome

>2.6M USD worth of maize, beans and soya traded

Problem

Farmers are unable to access financing

Solution

Alternative collateral solutions

- based on forward contracts, group guarantees and use of alternate non-traditional data for credit scoring process.

Outcome

Farmers received bundled input loans (with insurance).

About \$1,195,000 has been disbursed to farmers to date in the three countries!



RESULTS TO DATE



Problem

expensive,
inaccessible and
ineffectual
extension services

Solution

eGRANARY e-extension solution eGRANARY has implemented a text and voice based e-extension services that accessible to all our farmers.

Outcome

>70,000 farmers have received training to date – 50,000 farmers have received digital training and 20,000 through physical training .

Problem

Non existence data on farmers - Lack of bio data, traceable financial and production history

Solution

eGRANARY data platform- eGRANARY has implemented a farmer led data management solution

Outcome

>263,321 small holders already registered on e-GRANARY platform in Kenya, Uganda and Rwanda



e-GRANARY TECHNOLOGIES



A USSD application that helps farmers register themselves, report production data and request a loan.



A web app that helps field assistant and group champions collect data on inputs required



Outbound Voice web app for sending audio messages to farmers. Messages can be customized to farmers local language



Call centre application for managing support to the farmers



Web dashboard- for managing reports and users.



Payment gateway integrated with MPESA - Farmers now receive payments via mobile money.



PARTNERSHIP STATUS



e-GRANARY Partners in Uganda	
Financial Partners	Agreement status
Equity Bank Uganda	MOU signed
Vision Fund Uganda	MOU signed
Post Bank	MOU at final stages of review
Agro Consortium	MOU signed
Input supplying Partners	Agreement status
ETG Uganda	Regional MOU under review at their Nairobi office
Balton corp	Letter of undertaking
NASECO seeds	letter of undertaking
Offtake Partners	Agreement status
Grain Pulse Limited	Supply contract
Over Land	MOU signed
Barya United Agencies Ltd	MOU signed
Inland Commodities/Malcom	MOU signed
Public Sector Partners	Agreement status
UCC	MOU signed

e-GRANARY Partners in Kenya	
Financial Partners	Agreement status
Coop Bank in Kenya	Onboarding letter signed
Vision Fund Kenya	MOU signed
AFC bank	MOU signed
Acre Africa	MOU signed
Offtaking Partners	Agreement status
ETG Kenya	Regional MOU under review at their Nairobi office
Jungle Nut Kenya	Agreement signed - supply contract
Input supplying Partners	Agreement status
ETG Kenya	Regional MOU under review at their Nairobi office
Farmer Centre	Letter of undertaking

e-GRANARY Partners in Rwanda	
Financial Partners	Agreement status
KCB Bank Rwanda	MOU signed
Vision Fund Rwanda MFI	No agreement. MOU under review
Offtaking Partners	Agreement status
EAX	MOU under discussion
SARURA	MOU under discussion
Minimex	MOU under discussion
Input Partner	Agreement status
YARA	MOU under discussion



E-GRANARY SUSTAINABILITY

e-GRANARY sustainability strategy has three main objectives:

1) Financial sustainability:

At farmer level: Yield increment, growth in land under cultivation and income improvement

At e-GRANARY - To ensure steady flow of funds by generating revenue to maintain and continue with e-GRANARY activities.

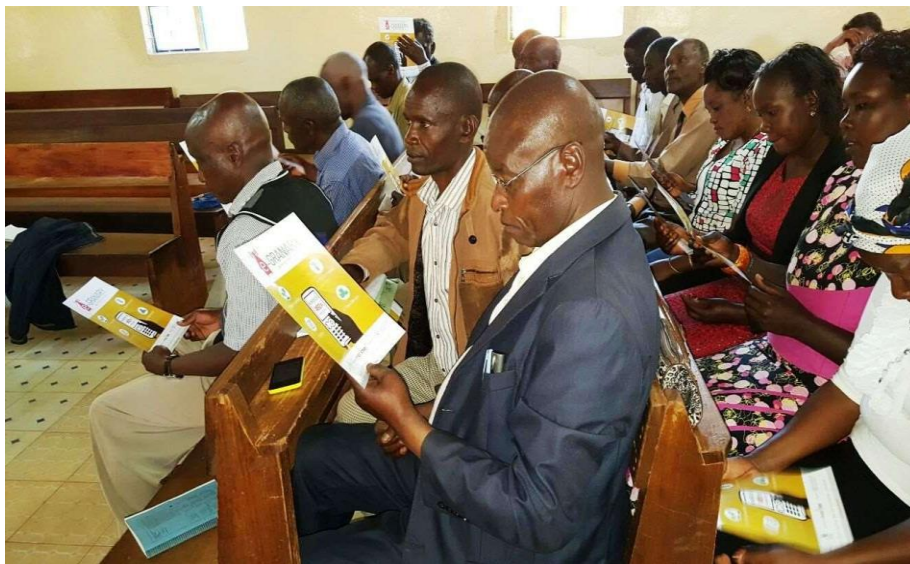
2) Institutional/organisational sustainability

Ensuring all organization structures and systems are working well and are ready to support the company growth. e-GRANARY has already developed key structures which are:

- a) **The hub structure** - At the local community level eGRANARY sets up operational hubs where a network of Field mobilizer are contracted to reach out and manage farmers.
- b) **Leadership and management** - The e-GRANARY board provides leadership and the technical team is in place for implementation and operations.
- c) **e-GRANARY corporate structure** - limited subsidiary companies have already been set up in countries of operation
- d) **Processes and procedures** - To achieve efficiency, quality output and uniformity of performance, while reducing miscommunication, e-GRANARY has developed some standard procedures

3) Partnership development - Key commercial partnerships (offtakers, banks, Microfinance inst. etc) are in place and e-GRANARY continues to look for more relevant partnerships

Farmer Registration on e-Granary



Aggregation centres (GPS located) & Traceability





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KENYA

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Thank You **for listening**
merci beaucoup votre attention



*This series of events is organised by PAFO and COLEAD.
COLEAD operates within the framework of development cooperation
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(OACPS) and the European Union.*



Thank you

