

2023 MALAWI AGRICULTURAL PRODUCTIVITY & COMMERCIALIZATION CONFERENCE

Role of Digitalization in Agriculture Commercialization

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“Diversified agricultural value chains for improved trade balances & foreign currency reserves”



AGRICULTURE CONTEXT

- Agriculture is important for household, national food, income and nutrition security & economic transformation
- The sector generates 29% of GDP, 65% of employment and 67% of export earnings
- However, Agriculture is estimated at 40% below potential
- Limited extension services for the smallholder sector and lack of dedicated extension and advisory services for the commercial sector in the country is a challenge
- Extension to farmer ratio estimated at 1:3,000 farmers
- Of that high ratio approximately 37% of the extension staff time is dedicated to farmer field support



Agriculture context.....

- The provision of advisory services is irregular and infrequent: Information is heavily focused on crop production:
- Only 7% received market access information and only 11% on post harvest information
- Of that high ratio approximately 37% of the extension staff time is dedicated to farmer field support



OPPORTUNITY FOR DIGITALIZATION

- Approximately 70% of the population is below 35 years
- 58.4% of the youth are employed in the agriculture sector
- Access to internet in Malawi is low but steadily increasing
- Ownership of mobile phones is increasing estimated at 60% of the population
- Approximately 5.04 million people use internet
- Approximately 7 million people are on airtel network and about 4.4 million use mobile money for transaction
- Combined with other mobile networks, approximately 12 million people have access to mobile phones
- High reach of mobile phones presents an opportunity to access agric information and services



PATHWAYS FOR DIGITALIZATION

- Internet of things
- Mobile techniques
- Digital solutions
- Artificial Intelligence (AI)



Who are we?

Farm Radio Trust (FRT) is A knowledge broker and national leader in the provision of ICT based extension services across all key development sectors in Malawi.

FRT is a registered non-profit, non-governmental organization

Registered under the Trustees Incorporation in 2009 and CONGOMA in 2010



FRT DIGITAL MODEL

Mass Awareness & Engagement

Customized Targeted Services

Mlimi Radio
Public Radio
Private Radio
Community Radio
Community of Interest

Call Center
IVR
Mlimi App
SMS
MACoP



EXAMPLES OF DIGITALIZATION IN AGRICULTURE

- Provision of accurate and relevant extension information and advisories
- Monitoring and evaluation: e.g. Remote sensing combined with mobile apps
- Provision of service: e.g. drones for mapping, pests management, access to banking services
- Accurate documentation
- Informed decision making
- Efficiency gain- increased reach
- Precision in targeting SMS



EXPERIENCES OF FRT IN DIGITALIZATION



INTERACTIVE RADIO PROGRAMMING

Over 30 radio stations engaged



Interactive Radio Programming.....



- 4 Million Adult farmers reached
- Radio - 2nd main source of agriculture information



CALL CENTRE AND INTERACTIVE VOICE RESPONSE



Imbani:  airtel **8111**  **7111**

1 Million farmers reached through Mlimi hotline call center



3 Million farmers reached through IVR



CALL CENTRE AND IVR INTERACTIONS



Horticultural Crops

9.1%

Legumes

25.5%

Grains

33.7%

Marketing

16.0%



SMS PULL & PUSH SERVICES



- Platform for targeted extension services
- A total of approximately 400,000 dedicated farmer contacts
- Aggregated based on gender, value chains and ecological zone



MLIMI APP

- The app uses a low cost android phones
- One stop information access and repository system for all information in agriculture value chains
- Able to provide real time information at the click of the button
- Integration with media services: radio, IVR and Video-interopability
- Provide vertical and horizontal feedback and information highway and availability of analytics



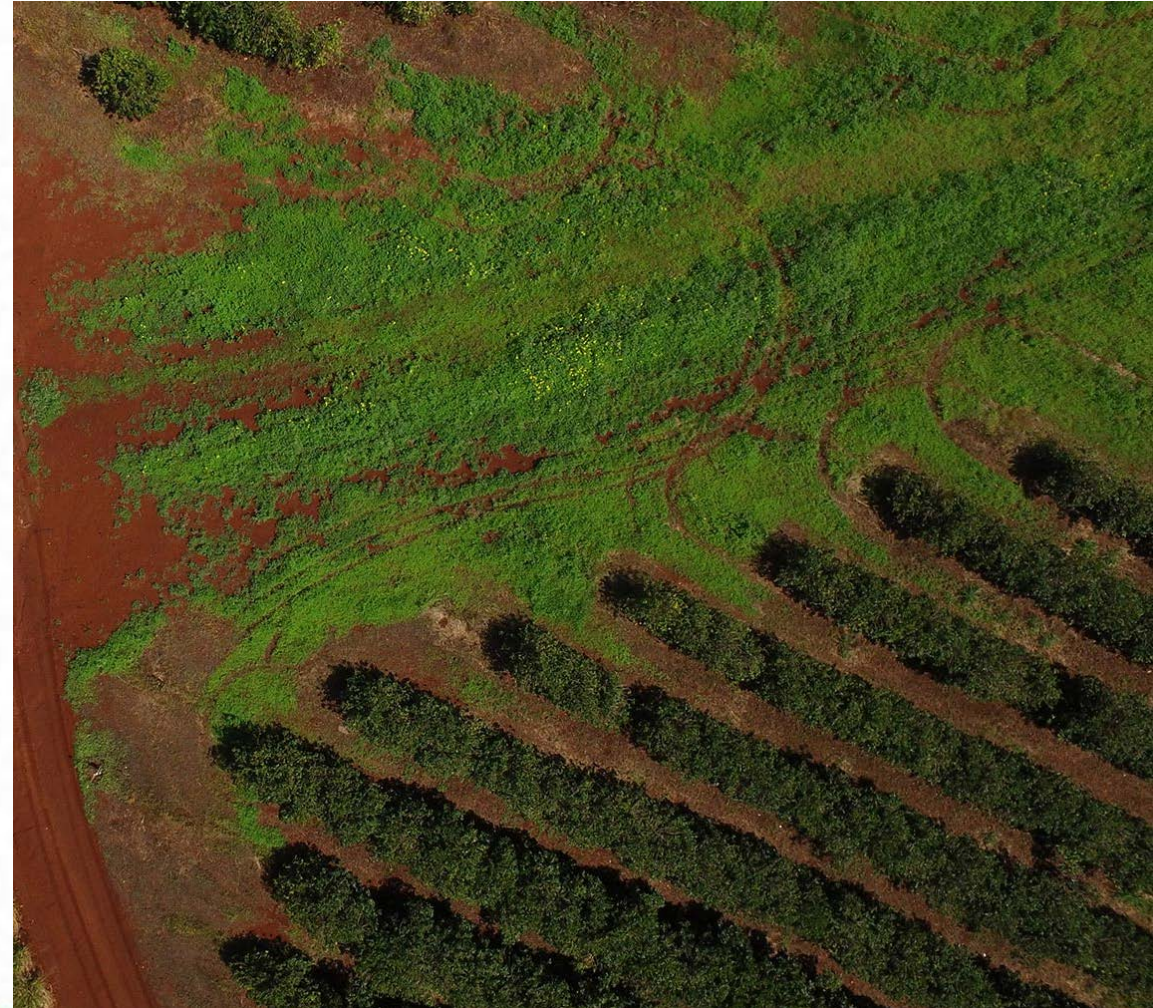
Mlimi App.....

- Platform for transactional interactions with services: input and output markets, payments, farm mobile markets etc
- Deliver interactive information services concerning good agricultural practices, linkages to input and output markets.
- Provide linkages to financial services and
- Allows farmers to payments for services.



REMOTE SENSING EXTENSION

- Field level monitoring through satellite
- Watch it grow and customized extension
- Yield estimates



PATHWAYS FOR SCALE

- Upscale and innovate services in digital extension and finance e.g. Airtel money, credit and banking services,
- Invest in digital literacy
- Promote and upscale youth digital champions
- Promote interoperability of digital platforms
- Promote B2B in digital services
- Promote B2B2F in agric commercialization
- Create free wifi zones in agric centres/ farmers bundles
- Upscale use provision of extension and advisory services
- Reduce mobile data taxes for agricultural transformation services



THANK YOU



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