

DIGITALIZING AGRICULTURAL EXTENSION & ADVISORY SERVICES IN NIGERIA

By

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Trillion-Dollar market Africa Agriculture by 2030

- Digital services to transform African agriculture worth up to \$2.6 billion
- 400 D4Ag solutions for 33 million registered farmers in sub-Saharan Africa
- 6% penetration worth \$143million dollars

What's Digitalisation for agriculture (D4Ag)

- is the use of digital technologies, innovations, and data to transform business models and practices across the agricultural value chain and address bottlenecks in;
- productivity, postharvest handling, market access, finance, insurance and supply chain management

Digitally delivered Advisory and information services

- Crops, livestock, and fisheries farmers on best practices, pests and diseases, weather, and market prices
- make decisions, maximise output from their land, Product quality , high revenues and profits, improved ability to identify markets
- Jobs for Youth, Women and men

Investment in Digital Infrastructure

- Specialization
- Digital literacy
- Communication strategy
- Policy framework

Human Capital

- Mobile phone
- Farm radio
- SMS
- Interactive voice Response
- Social Media

Database

SOFTWARE
AND
ANALYTICS
TOOLS

HARDWARE
to
CAPTURES
DATA

- Mobile app
- Finance
- Insurance
- Transportation

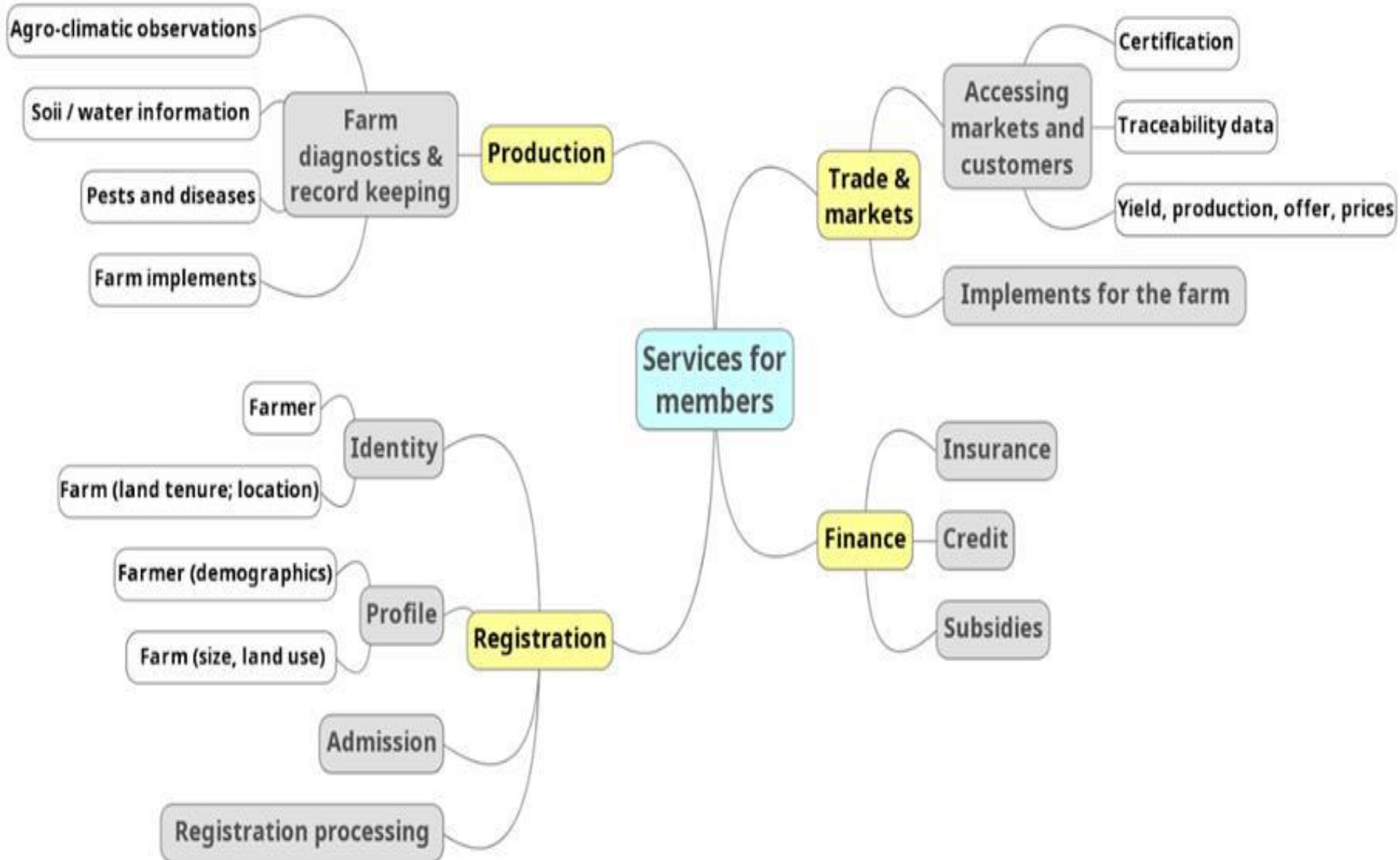
- Drones
- Sensors
- Diagnostics equipment

Drivers of Digital Success



A model for data-driven services and related farmer profiles:

Source, *CTA*



Benefits of Data at Farmer Levels



Public Scenario in D4Agric

FMARD D4Agric

- National farmers' database of 4.5 million farmers
- E-wallet System or Paper Vouchers
- Distribute inputs of seeds and fertilizers to 1.2 million crop farmers within 120 days by SMS alert
- Moribund for some years now
- Needs reactivation & mainstream into E-extension platform

NAERLS

- E-Extension platform
- Operating National Farmers Helpline Initiated by ATA through AETA08139890090 & 6 NARIS
- 45 value chains are being worked
- E-extension tools support delivery of information in diverse styles such as voice, image, motion, instant messages, and applications
- Under utilisation of potential
- Not proactive & robust database of farmers

Anambra States & ADPs

- Developed farmers database
- Registered 153,137 farmers on yam, rice, maize, cassava, livestock,
- Use database to distribute inputs, credit scheme, document beneficiaries on IFAD, & FADAMA projects
- Low Advisory services to farmers

Private D4Agric in Nigeria

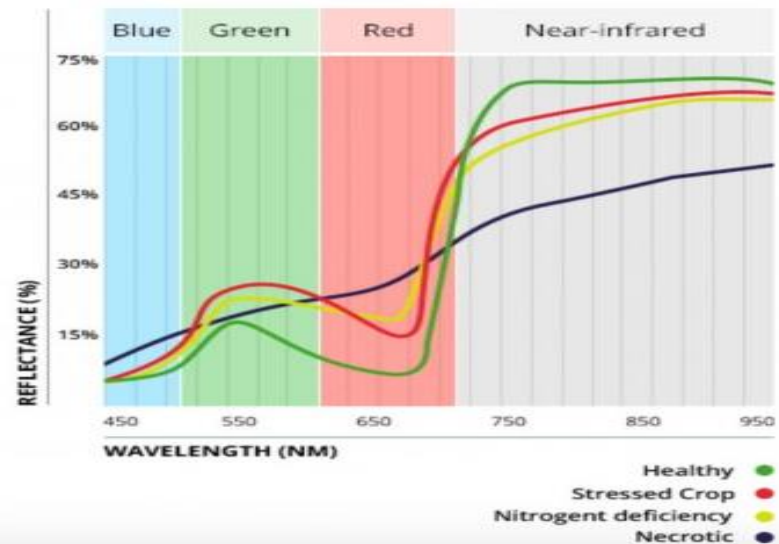
Zenvus SMART tech on **Soil Fertility Measurement**

Geospatial Research Limited



Precision agriculture through digitalization of agribusiness for critical crop management decision using drone technology in Nigeria. GIS and Mapping, data management, software development, training.

www.georeslimited.com



Some digital tools

Soil sensor



Farm radio



Camera for vegetative health of crops



Soil nutrient sensor



EA with Mobile phone & Drone



Soil fertility sensor



IITA D4Agric on Agronomic Measures to Control Weeds

- ▶ Implemented in collaboration in 2018 with
 - 2 universities
 - NARS
 - Viamo to set up the IVR system
 - GSM providers
- ▶ **Delivery methods**
 - developed a toolkit known as the Six Steps to Cassava Weed Management
 - interactive voice response (IVR),
 - short messaging service (SMS),
 - mobile phone applications (WhatsApp, smartphone applications),
 - plus radio, Television programs,
 - video screenings and social media platforms such as Facebook.
- ▶ **Results**
- ▶ 73,000 persons through training
- ▶ 124000 materials Agro-dealer networks
- ▶ 220,000 farmers digital social media
- ▶ 2.9M on radio-call interactive sharing
- ▶ 20,000,000 television

Recommendations

- ▶ Specialization & training
 - ▶ New training curriculum & Departments of Extension Communication
 - ▶ Investment in digital tools
 - ▶ NAERLS as regulatory agencies
 - ▶ Thanks for listening
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