AFRICAN DEVELOPMENT BANK
Digital Agriculture Flagship

"Promoting Data-driven and Tech-enabled Agriculture in Africa"

Kemi Afun-Ogidan

Principal Agribusiness Officer

2nd June 2021

BANQUE AFRICAINE DE DEVELOPPEMENT
AFRICAN DEVELOPMENT BANK

AFRICAN DEVELOPMENT FUND
FONDS AFRICAIN DE DEVELOPPEMENT

AFRICAN DEVELOPMENT BANK GROUP
GROUPE DE LA BANQUE AFRICAINE DE DÉVELOPPEMENT

Africa’s agriculture in context

STATE OF AGRICULTURE IN AFRICA

65%
of the world’s
uncultivated arable land
is in Africa

51%
of Africans are engaged in
agriculture
but contribute only one quarter of Africa's GDP

US$ 47 billion
was spent on
food imports
into Sub-Saharan Africa in 2017

MEGATRENDS

POPULATION GROWTH & EXPANDING MIDDLE CLASS

URBANIZATION & TECHNOLOGICAL CHANGES

EVOLVING DIETARY PREFERENCES

IMPACT BY 2050

2.5 billion
people living in Africa

over 60%
increase in Africa’s food demand

By 2030, African food market will be worth
US$ 1 trillion

The rise of digitalization in Africa

Increasing **internet connectivity** and **mobile phone adoption**

	Unique mobile subscribers in Africa		Mobile internet users in Africa	
	477 million	614 million	272 million	475 million
Penetration rate	45%	50%	26%	39%
Year	2019	2025	2019	2025

Policy changes

Digital Transformation Strategy for Africa (AU)

Regional digital and e-commerce strategies

Country level Digital economy strategies

Business opportunity

Rwanda: up to **85%** of rural consumers will have access to mobile services in 5 years (Sce: AfDB-FAO-CIAT)

Mobile Money
548 million of mobile money accounts in Africa (12% growth)
(Sce: GSMA, 2021)

COVID-19 & e-commerce
Jumia: 50% increase in transactions YoY (mid 2020)

Club Kossam (Agribusiness in Senegal): Turnover doubled

GSMA. The Mobile Economy Africa 2020

The opportunity to digitalize African food systems

Agriculture in Africa

- **African smallholder farmers who produce 80%** of Africa's food supply
- **Increasing prevalence of extreme weather events –** droughts, flooding, cyclones, FAW, locust invasion
- **Climate change threatens 56%** of crop production in Africa.

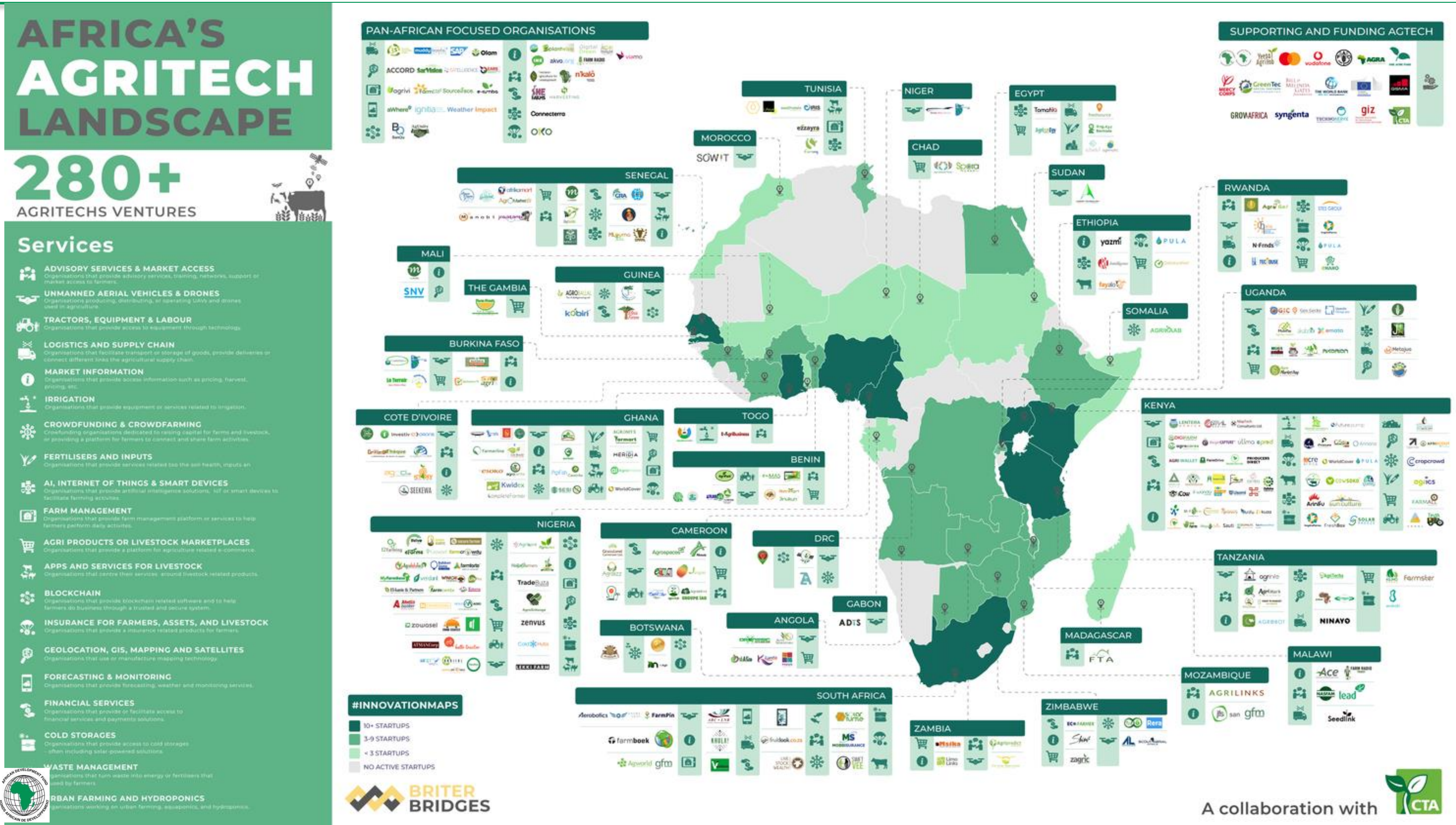
Tech evolution in Food & Agri

- **Technology is rapidly changing** the way food is produced, transformed, and distributed.
- **40 – 70% increase in agri yield and income** when digital solutions are used.
- **Opportunity to leapfrog transformation** of African agriculture and address climate concerns.

Challenges to scale Digital Agriculture in Africa

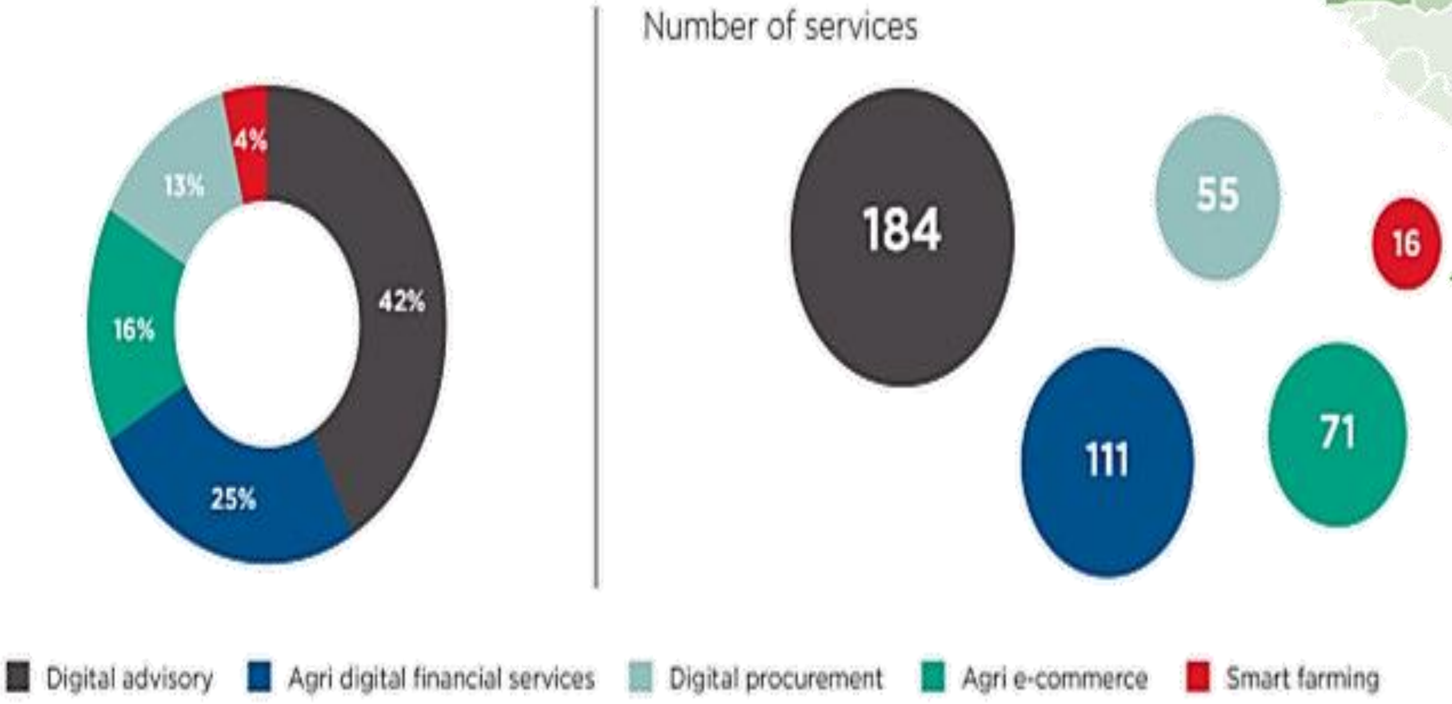
- **High cost of delivery**, limited digital
- infrastructure and insufficient enabling policy/
- incentive environment
- **DigitAg solutions are still small-scale**, dependent on donor funding and in the pilot stage in SSA
- **Only 13-35% of African farmers use digital solutions** (~32mn), of which only 25% are women
- **More than 70% of registered users** of digitAg services are youth and most digital innovations are being developed by young tech start-ups

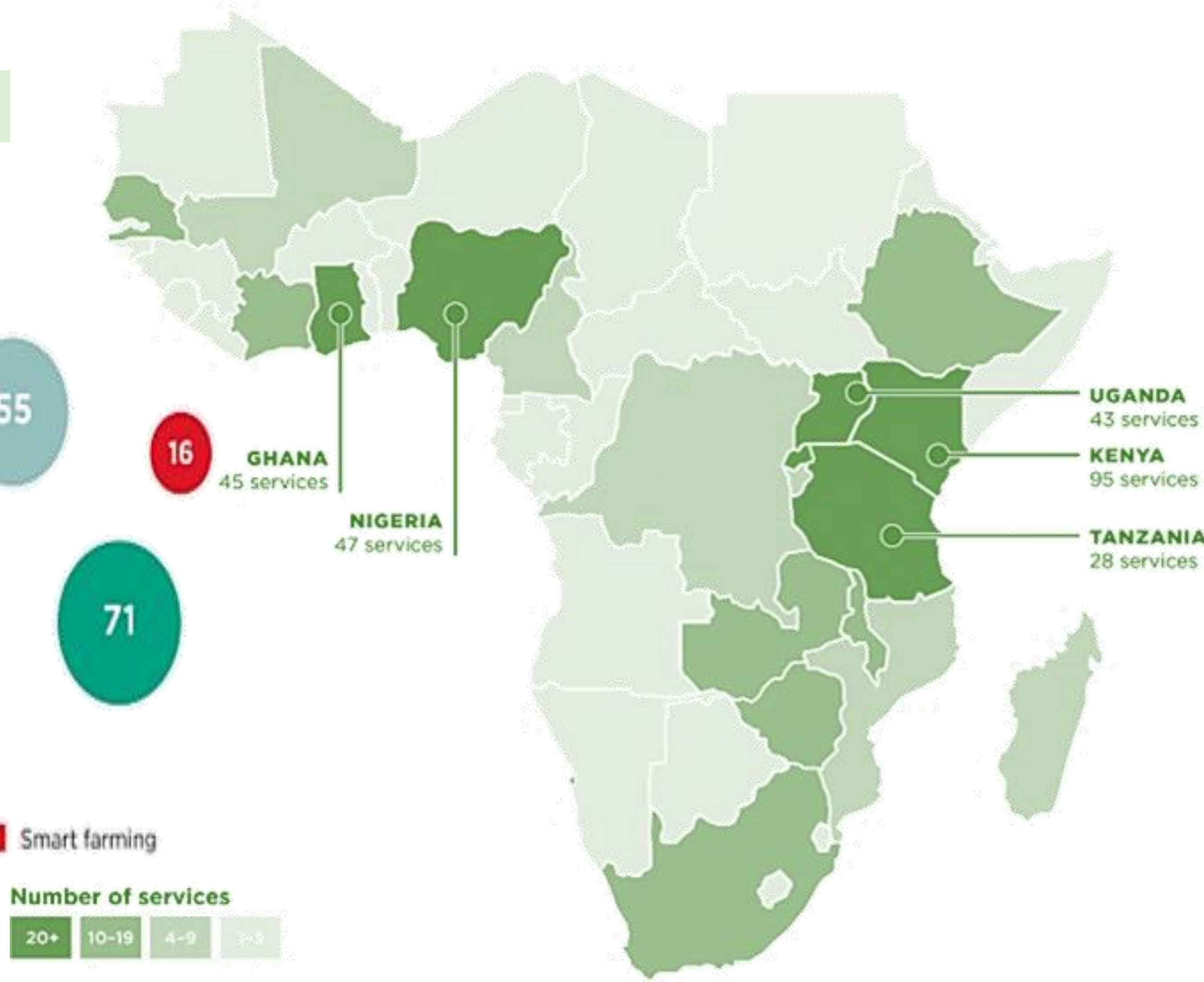
Growth of agritech solutions across Africa - 2019



Growth of agritech solutions across Africa - 2020

As at 2020, 437 services in Sub-Saharan Africa

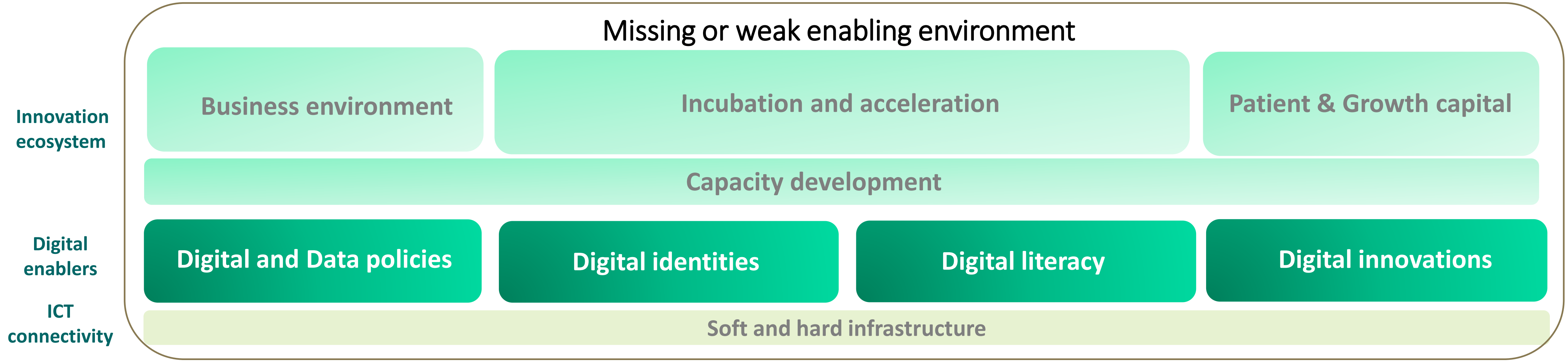




GSMA. Digital Agriculture Maps 2020

Barriers to scale digital ag solutions in Africa

- **Digital infrastructure, regulatory frameworks and data policies** needed to support innovators reach the last mile are insufficient or lacking in some cases.
- **Digital literacy and human capacity** to develop, access and utilize digital Ag solutions is still nascent.
- Many **Agtech companies are yet to find a commercially viable business model** to deliver digital solutions to smallholders and agri-SMEs.



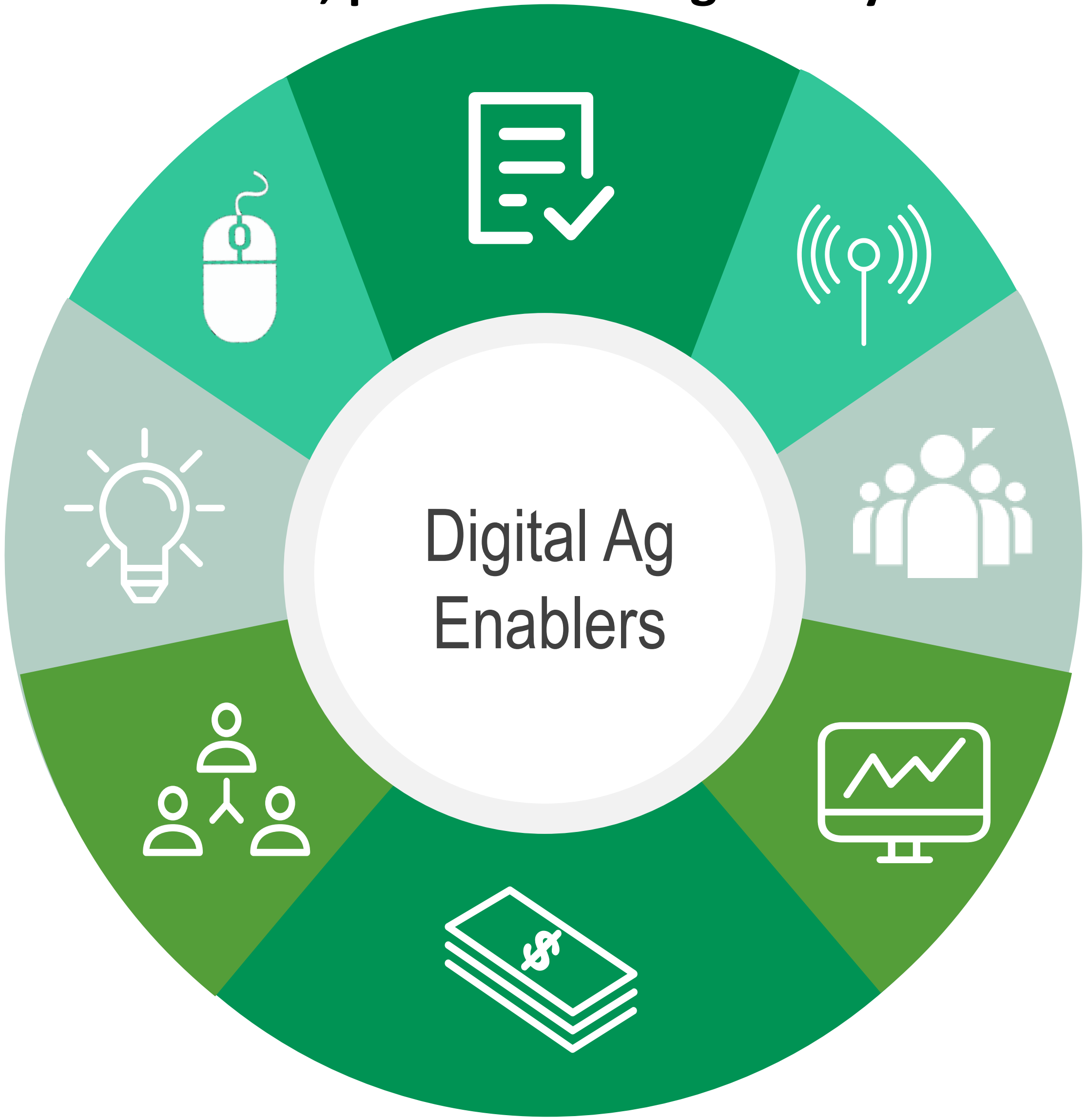
Public sector enablers for Digital Agriculture in Africa

Agriculture data, policies and regulatory framework

IT skills & digital literacy

Emerging tech innovation & research

ICT4Ag incubator and accelerator ecosystem



Digital infrastructure

Digital IDs & mapping

Data collection & analytics

Financing for Agtech startups & businesses

Digital innovations integrated into all Feed Africa Investments

AfDB invests US$ 1 – 2 billion in African agriculture per annum

Tech. for African Agriculture Transformation

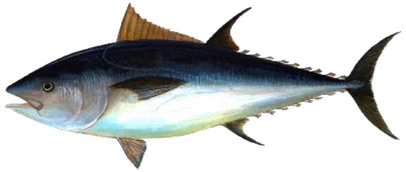
Africa Fertilizer Financing Mechanism

ENABLE Youth

Special Agro-Industrial Processing Zones

Climate Smart Agriculture

TAAT – Savannahs



Blue Economy

Livestock Flagship

Post Harvest

Digital Agriculture

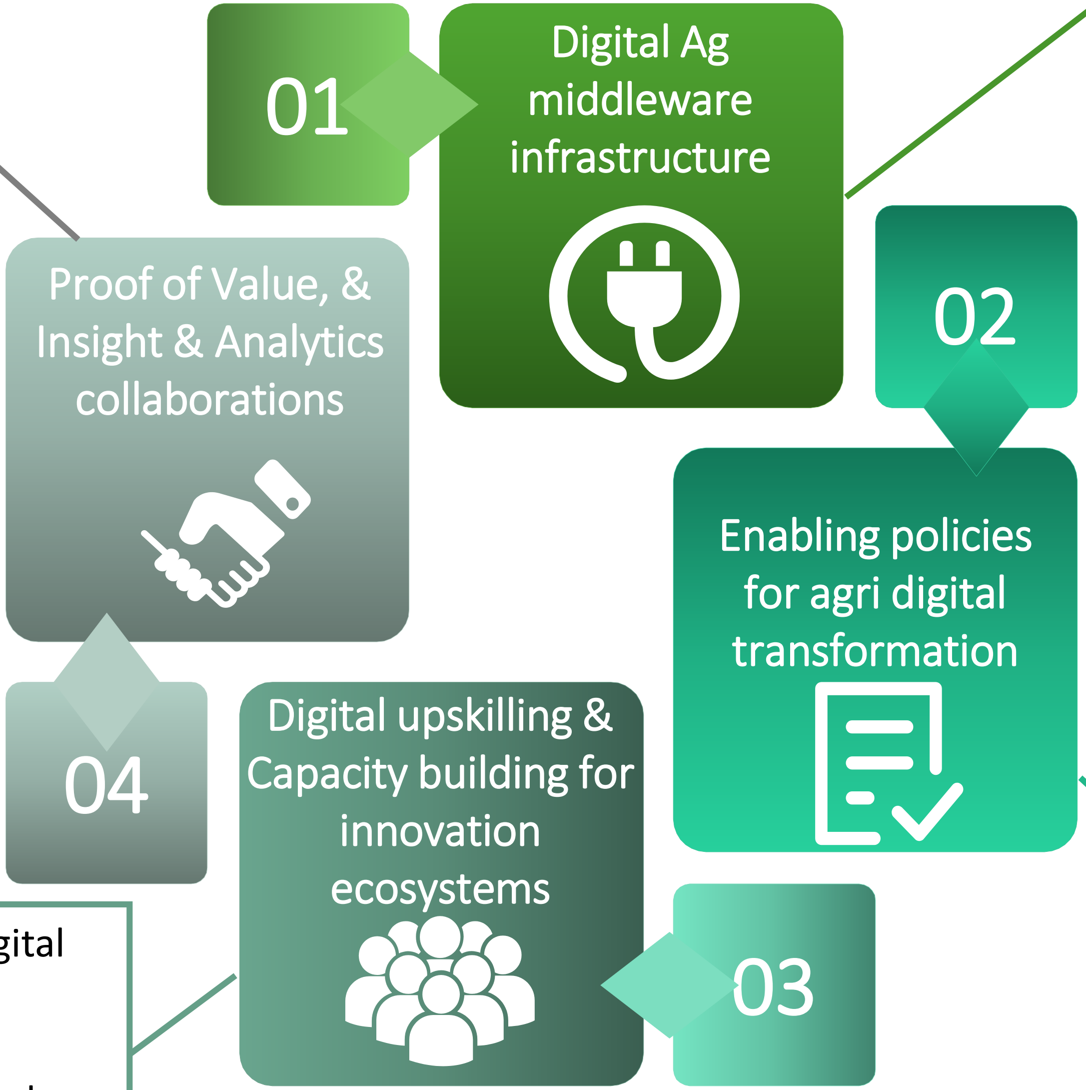
African Leaders for Nutrition

Global Agriculture and Food Security Program

Feed Africa Digital Agriculture Flagship

Digital Ag Use Cases

- Integrated big data platforms for input-output advisory and marketplaces;
- Blockchain for traceability and supply chain efficiencies
- Automated systems for smart farm operations and precision agriculture
- Fintech for agriculture

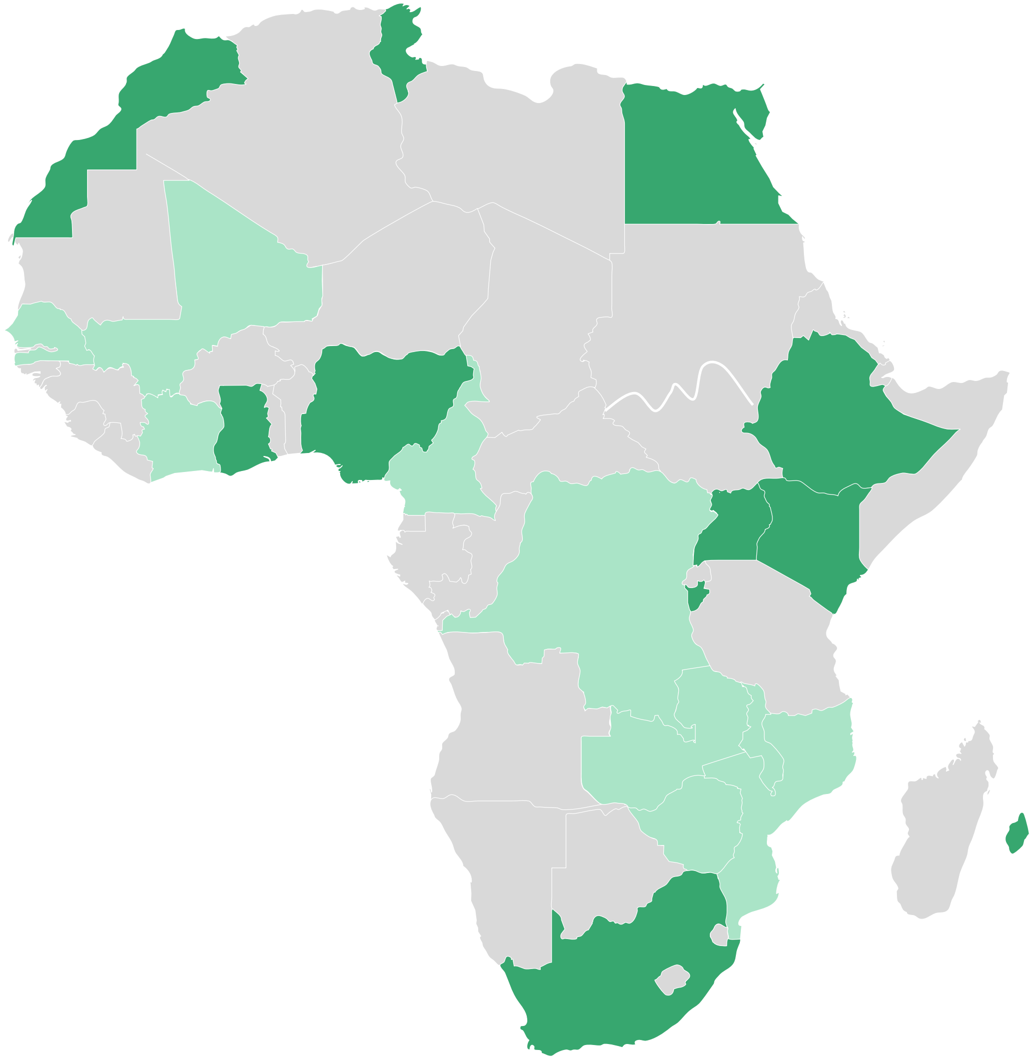


- Farmer digital IDs for G2P, B2B and B2C payments
- E-registries as building blocks for advisory and planning
- Digital agronomy data surveillance/observatories and management systems

- Digital agriculture strategies;
- Policies for data governance and stewardship;
- Digital innovation teams;

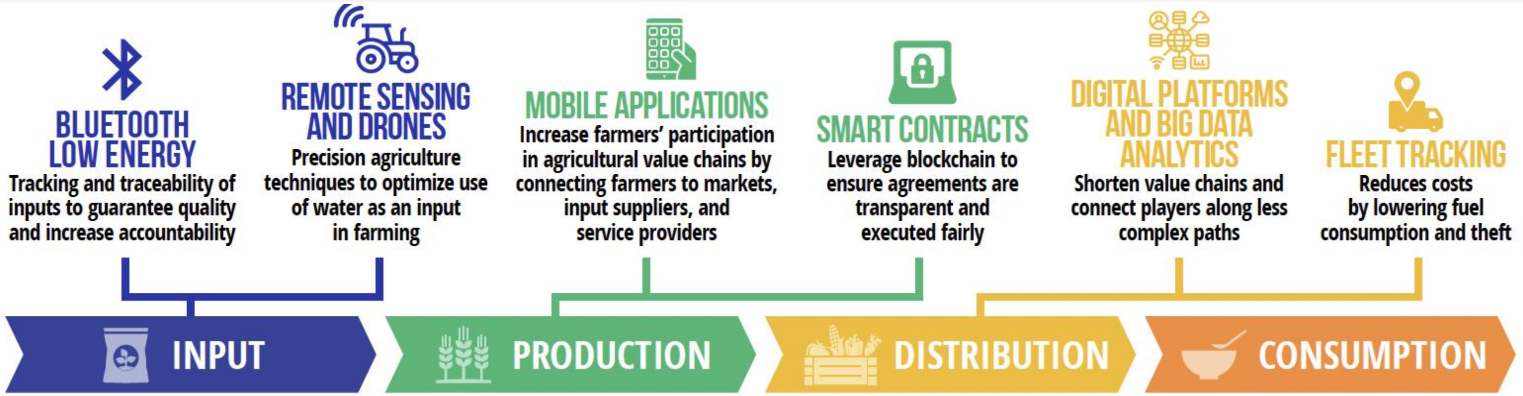
- Smallholder farmer digital literacy programs
- Youth techpreneur incubation and accelerator ecosystems

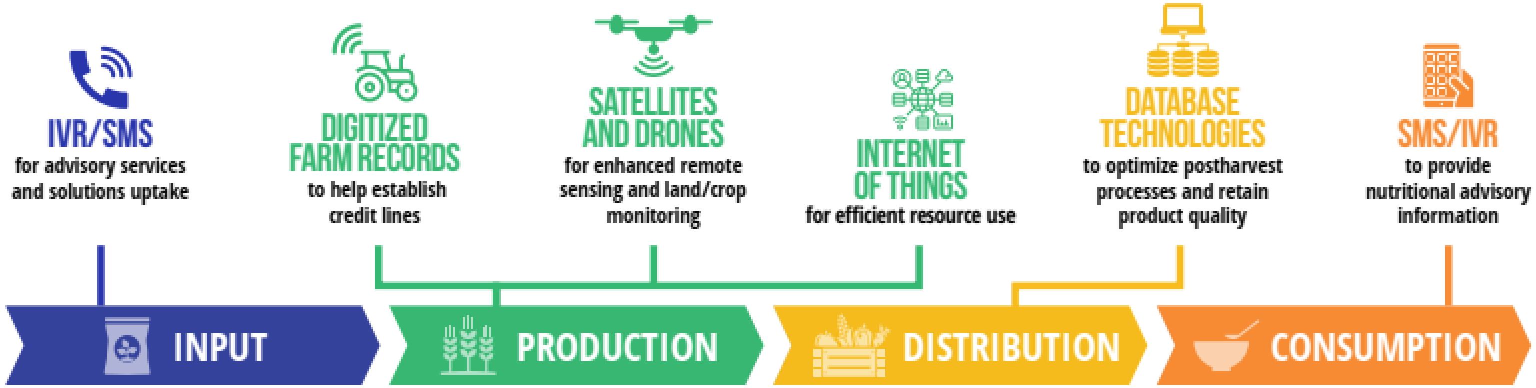
AFDB Digital Agriculture Investment Roadmap



Champion Countries	Mid-Track Countries	Early Starter Countries
Countries leading Africa’s digital agenda	Countries with growing tech services	Countries at the nascent stage of digital development
Kenya, Nigeria, South Africa, Tunisia, Morocco, Egypt, Rwanda, Ethiopia, Ghana, Uganda, Mauritius	Cote d’Ivoire, Cameroon, DRC, Mozambique, Senegal, Mali, Malawi, Zambia, Zimbabwe	Other countries where there is opportunistic demand

Country level digital transformation





Digital Agricultural Profiles, AfDB, FAO, CGIAR, 2020. Available here

Partnership Opportunities

Africa is rapidly digitalizing and open for business

Investments to scale

- Climate Smart digital technologies
- Equitable digital Agri-marketplaces
- Fintech for Agriculture
- Inclusive, gender-focused digital upskilling and job creation

Potential partner institutions

- ICT & Tech private companies
- Agritech impact investment funds
- Global FMCGs digitalizing their supply chain
- Development partners, Philanthropies, Family Offices
- Governments

THANK YOU!

Contact :

Kemi Afun-Ogidan
O.AFUN-OGIDAN@AFDB.ORG