

### Presentation outline

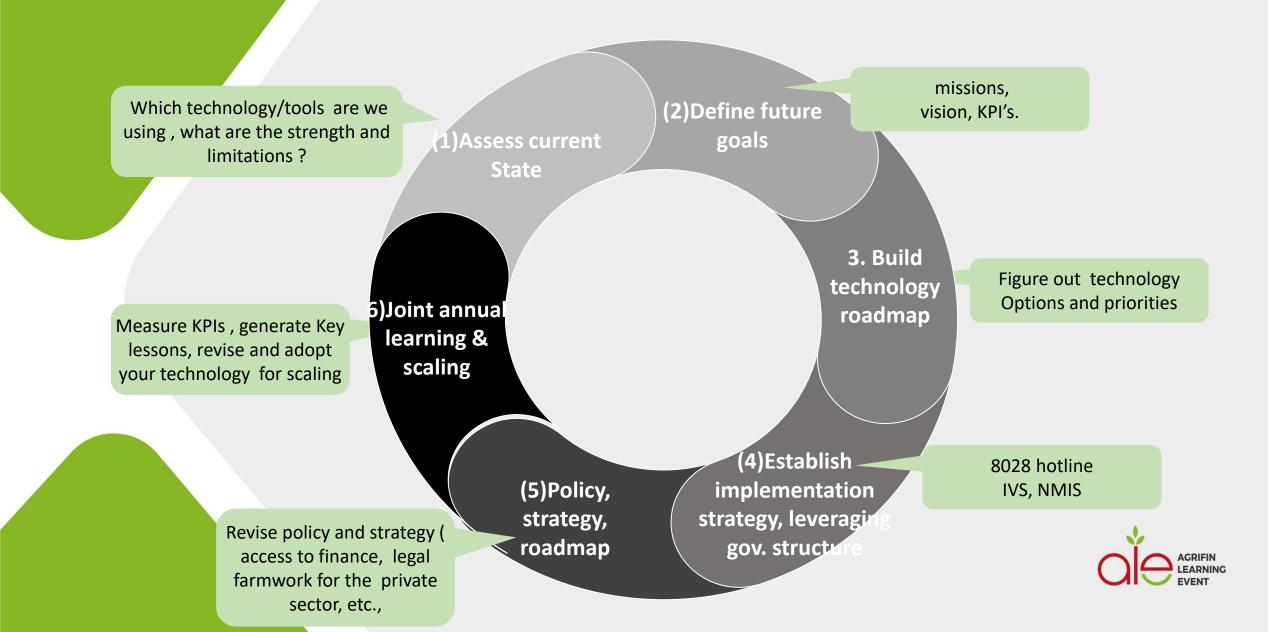
- Introduction
- Key steps to leverage technology in increasing access to information, and finance
- Key Benefits realized by farmers
- Main challenges
- Conclusion



### Introduction

- Agriculture is the backbone of the Ethiopian economy contributing
  - 33% of the GDP,
  - 70% of the export earnings, and
  - 80% of the employment
- Subsistence farming, rainfed based production system, Climate change and variability, low input- out marketing, poor access to finance, limited private sector engagement are among the major problems
- At present, different initiatives are being taken by Gov, to transform the agriculture sector of which home-grown economic reform agenda, ACC, low land irrigated wheat production, 10 in 10 program, የሌማት ቱሩፋት, green legacy are among the major ones for A Pathway to Prosperity.
- To feed the growing population & transform Ethiopian Economy to digital economy,
  - leveraging technology for improved access to information & financial services and climate Risk management must become a reality

## Key steps to leverage technology



## DAEAS Roadmap 2030 prepared:

**Objectives** to improve Ethiopian agricultural sector by providing high-quality, customized and costefficient data and advisory information

**DAEAS** ROADMAP to deliver impact across three key dimensions of the digital agriculture ecosystem

**Solutions Pipeline** 

Accelerate development of digital innovations for **priority farmer use cases** 

#### **Digital Stack**

Establish Digital Data hubs **to support product development** and utilization (hardware and connectivity, software, database, ...)

### **Enabling Environment**

Develop policies, human capital and private sector to enable digitalization of the sector



## 30 actions have been identified across 6 pillars



#### Highest priority within roadmap



Solutions Pipeline



- Competitive incubation / product dev. environment with forum
- Partner with Mobile Network Operator (MNO) to create a farmer facing DAEAS

Support market entry of international products into Ethiopia (in partnership with local players)





- Device access for Development Agents (DAs)
- Free access for DAs to key apps
- Phone payment plan for farmers
- Free access for farmers to key apps
- Telco service targets and incentives for rural areas
- Off-grid electricity access expansion in rural areas
- Internet kiosk at woreda office/FTC run by women/youth groups

#### Data and analytics



- Farmer profiles
- Input demand & supply tracking



- Integrated ag. data access point (decentralized data hub)
- Data sharing incentives
- Ag. data quality standards and assurance system



#### W Governance and Policy



- Fast-track pluralistic extension and ag. data sharing policies ratification
- DAEAS National Forum linked to PMO
  - Streamline content approval process
- Working space and targeted training for ag techs

#### W Human Capital



- Digital training platform for DAs
  - Digital skills at ATVETs
- 22 Improve DA management
- 23 Financial and digital literacy for farmers



- Expand dig. capacity MoA extension team
- MoA ICT human capacity building
- Digital training platform for MoA / BoA

#### M Business Environment



- Digitize payments at rural service points
- Scale warehouse receipt financing
- Digital contract farming platform
- Support innovative digital finance products targeting farmers





# The Roadmap is aligned with both internal and external policies and national targets for Ethiopia

## Internal (MoA) alignment

### Ministry of Agriculture

Category 1: Existing policies, strategies, or plans

- Agricultural Extension Strategy of Ethiopia
- ICT Strategy of MoA
- Gender Equality Strategy for Ethiopia's Agriculture Sector
- 10 Years Plan of Ministry of Agriculture

Category 2: Upcoming policies, strategies, laws, or plans

- Agricultural & Rural Development Policy of Ethiopia
- Pluralistic Agricultural Extension Proclamation
- Enabling Effective Private Sector Participation in Agriculture



### External alignment

Category 1: Existing policies, strategies, laws, or plans

Ministry of Innovation and Technology

Digital Ethiopia 2025

**Prime Minister Office** 

Homegrown Economic Reform Agenda National ID Program

Ministry of Planning and Development

Ten Years Perspective Plan 2030

National Bank of Ethiopia

National Digital Payments Strategy Electronic Transaction Proclamation

Category 2: Upcoming policies, strategies, laws, or plans

Ministry of Innovation and Technology

National Open Data Policy
Personal Data Protection Proclamation
Start-up Business Proclamation
EVENT

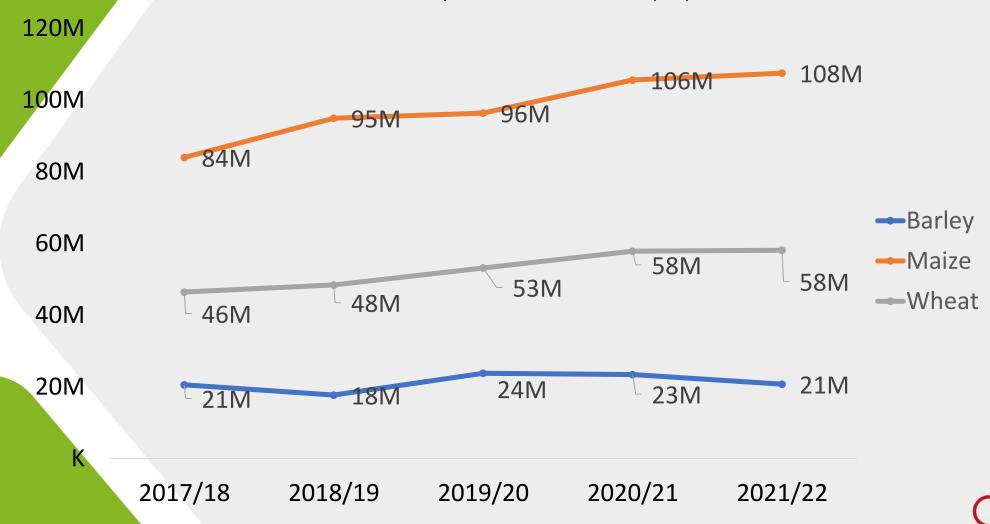
# Key Benefits at framer's level

- Improved farmers advisory services using 8028 farmers hotline
- Improved access to finance for Agri input (IVS)
- Customized and efficient out put market information to SHF (NMIS)-enhanced bargaining power
- Increased farmers' production and productivity



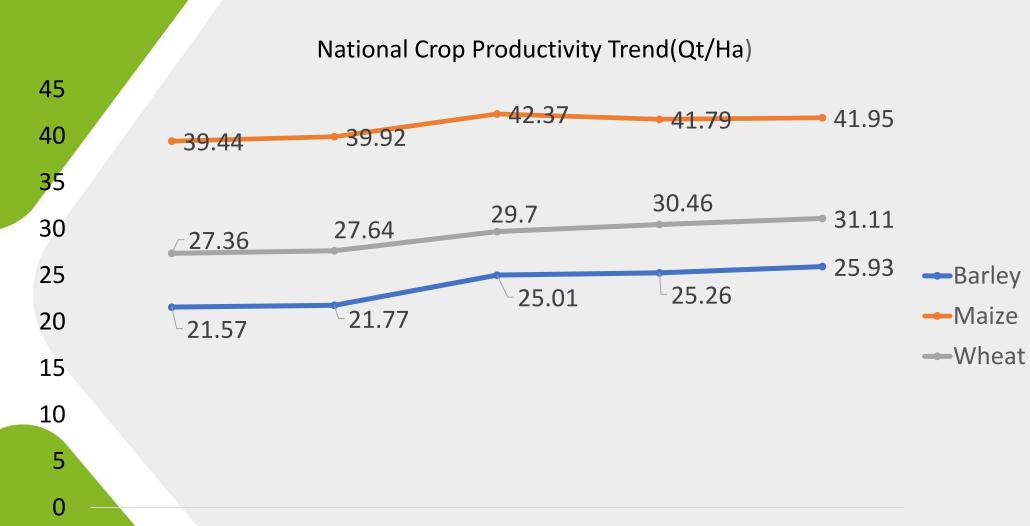
# The last 5 years National Major Cereals Crop Production(Qt)

National Crop Production Trend(Qt)



# The last 5 years National Major Cereals Crop <a href="Productivity">Productivity</a>(Qt/Ha)

2020/21



2019/20

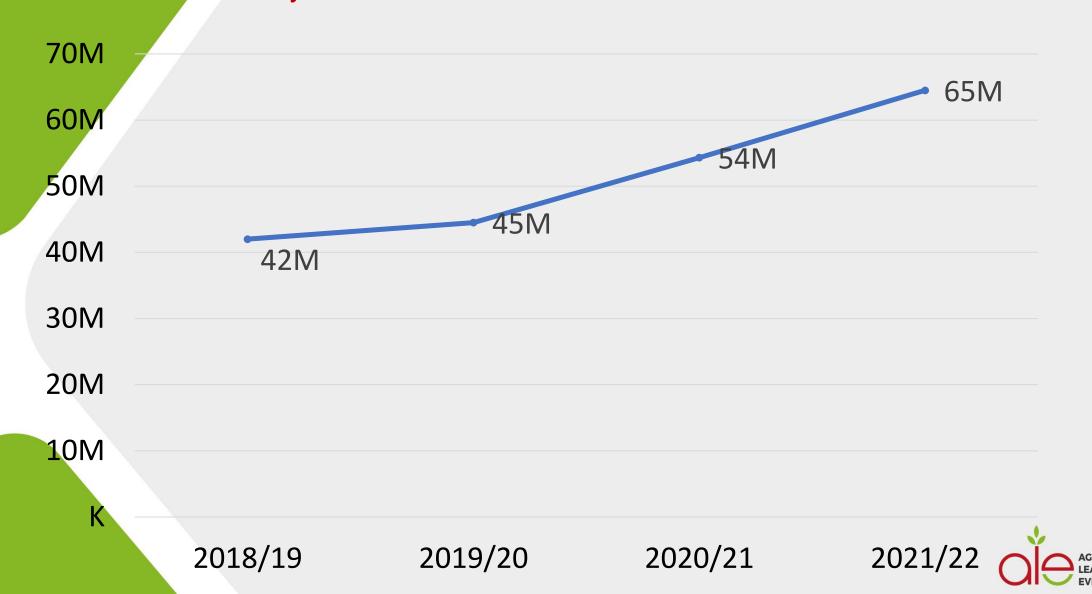
2017/18

2018/19



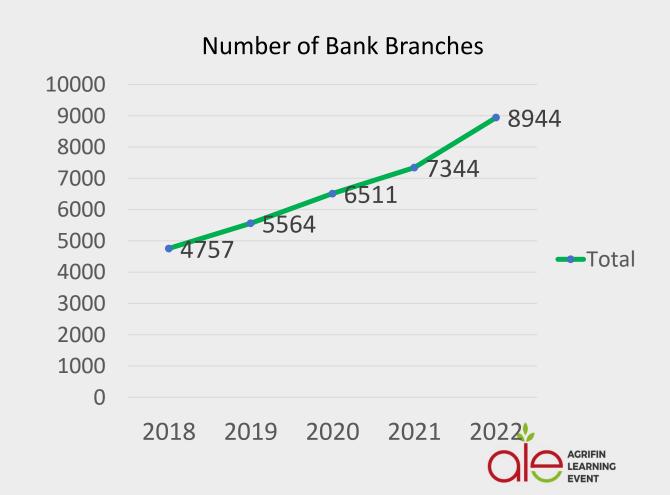
2021/22

# Number of Mobile Voice Subscribers over the past four years



## Growth of bank branches over time

Financial Institution	Total Number
Commercial banks	30
Insurance companies	18
Microfinance institutions	54
Capital goods Finance/Lease companies	6
Payment instrument issuers/system operators	8
Development bank	1
Re-insurance company	1



## Institutional collaborations and key achievements













Improved advisory services



IVS/ evoucher



Enable farmers access to loans for inputs



NMIS



Provide accurate & time market data



## What gaps exists



Hardware and connectivity

- Poor infrastructure and facilities
- High device and connectivity cost



Data and analytics

- Hesitancy for data sharing
- Lack of integrated data access point



Governance and policy

- Incentives for private startups and players
- Weak coordination & collaboration



**Human Capital** 

- Limited digital and financial literacy of SHFs
- Limited digital and soft skills of DA's , SMSs



- Limited digital payment options for farmers
- low literacy level



## Public, private and development actors actively working With ATI to digitize the agriculture sector

## **Public sectors**













## **Private Sectors**









## **Development** partners























GATES foundation



**Association** 











Conclusion: To leverage technology in increasing access to information and financial Services

- Enhancing collaborations to scale digital solutions
- More opportunity for climate financing and risk management
- Ensure woman and youth engagement in agriculture and climate risk management
- More chances to the growth and development of the Privat sectors



## Thank You!