



# Rural transformation, agriculture & digital technologies

25<sup>st</sup> Nov 2022

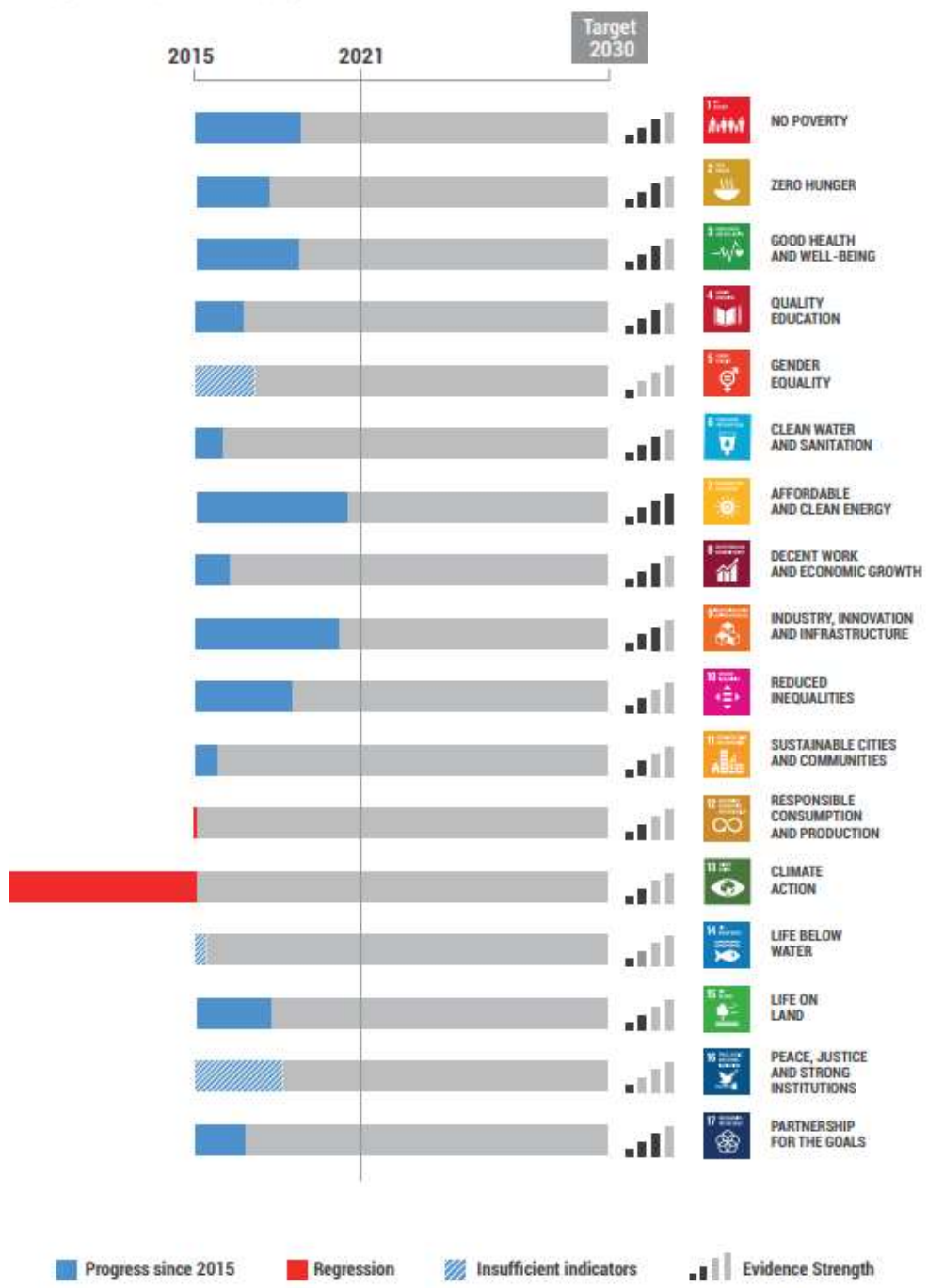
*Sci-Tech Empowering Rural Transformation Thematic Study and Knowledge Sharing*



**Food and Agriculture  
Organization of the  
United Nations**



# SDG progress in Asia and the Pacific, 2021



The number of people in the world affected by hunger increased in 2020 under the shadow of the COVID-19

Increasingly irreversible losses caused by climatic change

Healthy diets are out of reach for 3 billion people

Smallholder farmers are central to new food security interventions

# HOLISTIC APPROACH TO ADDRESSING CHALLENGES

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*Data-driven policies*

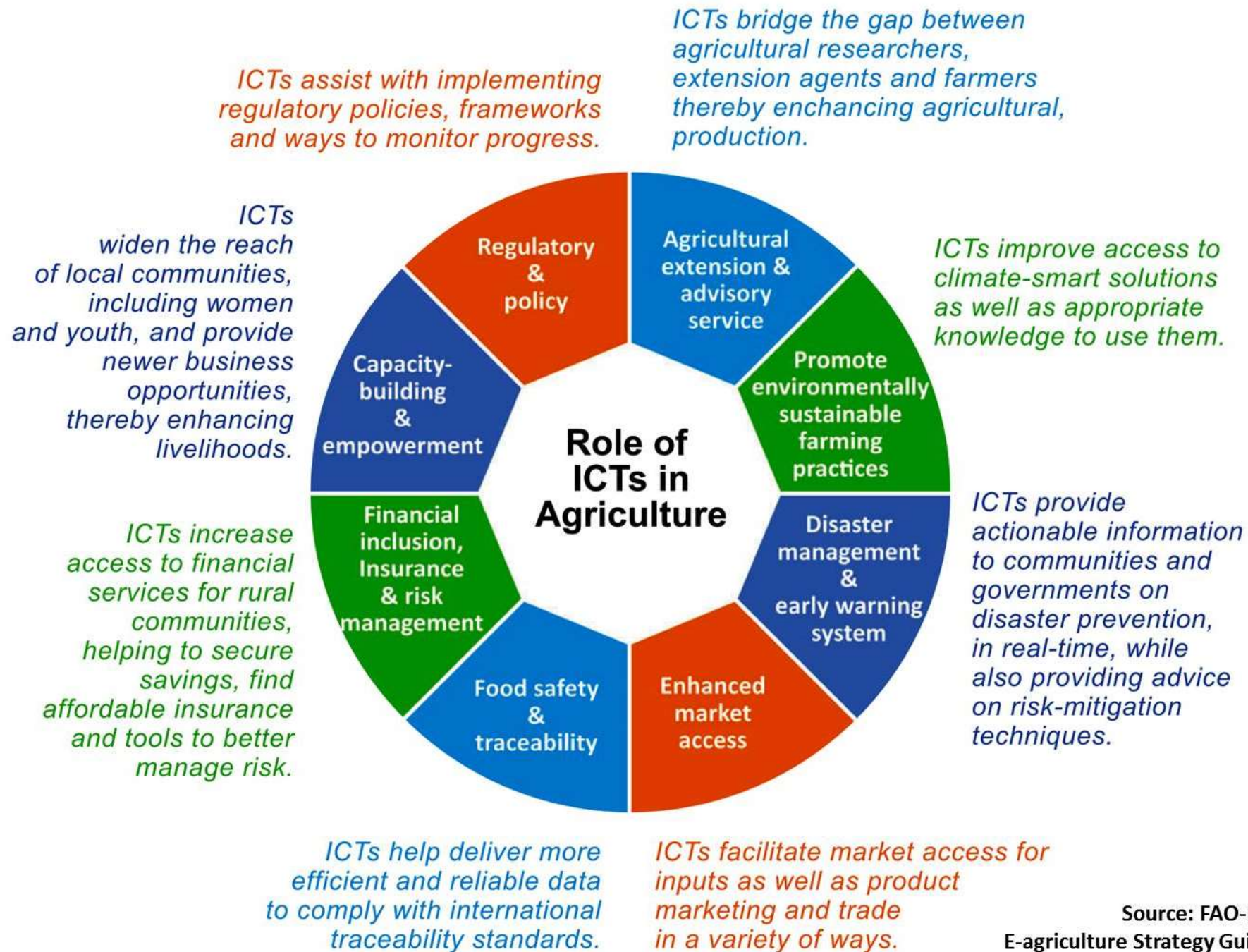
*Innovation ecosystem*

*Process reengineering*

*Capacity Development*

*Effective partnerships*





# Focus on DIGITIZATION

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- Digitization of agri value chain, actors, transactions (pre-condition for digital solution implementation)
- Data 4 Services ecosystem; linear to circular model
- Data Governance – privacy, security & big data (& small data) analysis capabilities, digital inclusion policies
- Incentive framework for sharing data
- Reuse building blocks
- Capacity development at all levels

# Invest and Strengthen **BIG DATA ANALYTICS**

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- **Big data analytics** to strengthen government service identification, delivery, strategy, planning & monitoring
- **Digital identification**, yield prediction, credit profiling, supply chain bottlenecks; aligning policies on food prices, market forecasts
- **Data as a Service (DaaS)** ecosystem building; various engagement models
- **Data governance**
- Ability to tap into **non-traditional data sources**

## Read

E-agriculture in Action: Big Data for Agriculture  
<http://www.fao.org/3/ca5427en/ca5427en.pdf>

## See

FAO's Hand-in-Hand Initiative  
<https://www.youtube.com/watch?v=xKON7YWWXUI>

# Improve access to **DIGITAL FINANCIAL SERVICES**

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- Preference for cash -> Value creation by DFS
- Capacity | Next mile connectivity
- **Innovative & relevant financing models** – peer-to-peer lending
- Supports building **agri-services** (subsidies, insurance, logistics, mechanization)
- Managing **diverse partnerships**; opportunities for newer actors providing financial services
- **Regulations, KYC, AML**

*Globally, value chain actors provide 44% of the total supply of financing across all financing needs of farmers (GSMA)*

[Read](#)

UNCDF Global Strategy: Leaving No One Behind in the Digital Era  
ITU Focus Group on Digital Financial Services

# Way forward **KEY CONSIDERATIONS**

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- Leverage **existing systems** & linkages
- Support to **incubators**, accelerators; **rural entrepreneurs**
- **Gender** and gender-digital divide
- Strengthen **capacities**, **infrastructure** and regulations
- **Multi-stakeholder** approach; Innovative **partnerships**







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# THANK YOU



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