Digital Technologies for Advancing Food Security, Climate Action and Environmental Sustainability

Southeast Asia Department, ADB

14-15 March 2019, Courtyard by Marriott, Bangkok

Objectives of the Workshop

Overall objective:

- To determine **critical areas for support** to the GMS countries in harnessing the digital technologies for sustainable development

Specific Objectives:

- To assess current **status of application** of digital technologies in four areas:
  1. Sustainable agriculture
  2. Food traceability
  3. Climate action (mitigation and adaptation)
  4. Environmental sustainability
- To solicit views from the representatives of the government, private sector, development partners and academia on most appropriate technologies, needs and gaps, and future priorities for action
- To identify opportunities for **public-private partnerships** in deployment of digital technologies

Broad context

- Climate change, environmental sustainability, resource use efficiency, food security and safety are all interrelated and need systems-thinking and integrated response.
- Circular economy, water-food-energy nexus, urban-rural linkages etc. provides analytical and response framework for integrated solutions.
- Ability track, monitor, and inform is essential for **behavioral change** (sustainable agriculture, demand and supply for safe food, or climate actions) and **change management** (understanding of risks, and appropriate policy interventions-incentives and penalties).
- Digital technologies (Tools) have created opportunity to track, monitor, and inform in efficient, cost-effective, and transparent manner.

Uptake of digital technologies—common treads across different applications

- **Technology is a tool—not a magic bullet to solve all the problems**
- **Simple is better**! Break down complex information needs to easy to use modules (e.g. App interface or barcoding)
- Application focusing on “solutions to relevant and easy to relate problem” tends to be successful (e.g. KYC/ KYF)—should be part of **workable business model**
- Common platform, interchangeability, standardization, and data sharing are crucial to maximize the impact of efforts (Partnership models)
- Digital literacy
- Inclusivity: efficiency vs benefit distribution

Uptake of digital technologies—common treads (cont.)

- Technology disruption—unknown territory with uncertainties
  - What is the value addition? (It is available does not mean it is useful)
  - What is to be regulated and what not?
  - Who regulates what?
  - What are the bottle necks for adoption (maturity of technology, readiness—in terms of capacity)?

Other considerations

- Diverging interest of different user groups
- Disruption vs monopolization
- Monetization vs. democratization of data (trade-offs)
- Transparency vs Privacy