

Enhancing Paperless Trade for SME Exports

Session 1: e-Trade for SME Integration in Regional/Global Value Chains



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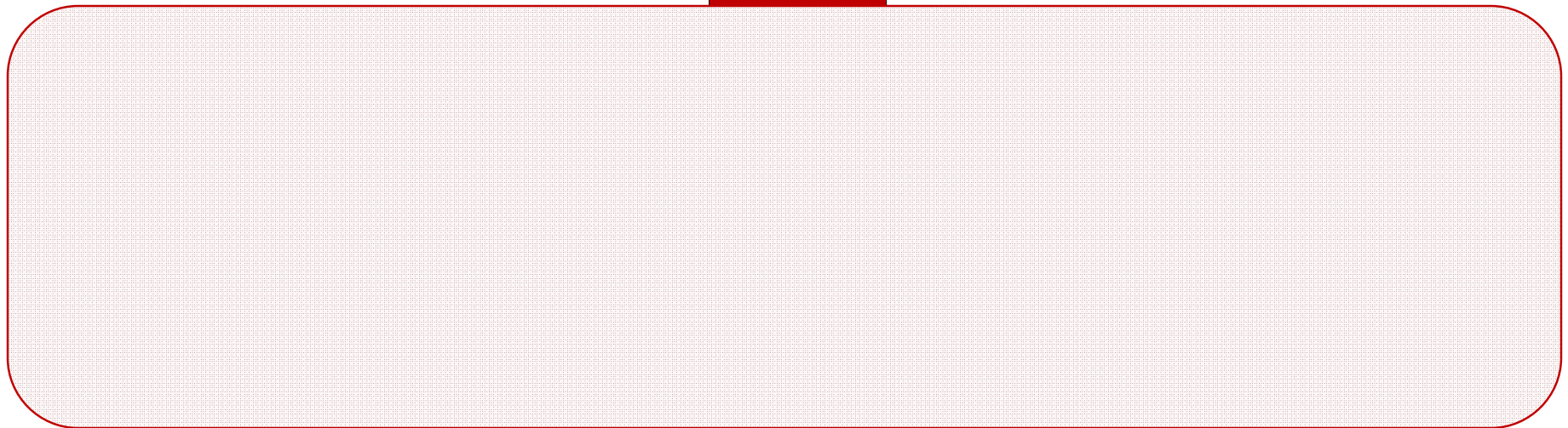
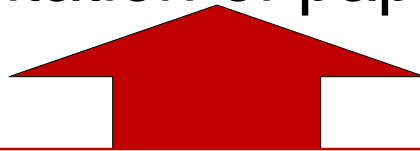


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Objectives of this presentation

1. To discuss **how electronic trade facilities** can facilitate **SME value chain integration** and **access to global markets**.
2. To address **the challenges for SMEs** to gain benefits from the implementation of paperless trade systems



Key Strategies for Successful Trade

based on value chain management (with examples on agriculture trade)

1. Demand-driven:

Understand the needs & requirements of buyers and consumers, e.g.

- Food quality, food safety (chemical-free) & traceability are key requirements of major importing countries.

2. Production Capability: Produce the products that meet the requirements of the consumers with differentiation, e.g.

- Chemical-free agricultural produces, e.g. organic vegetables

3. Sound business models: Self-sustained financially viable, e.g.

- Association of smallholder farmers sharing cost & effort for internal control, external certification, post-harvesting, bargaining power,...

4. Efficient business processes and good management, e.g.

- Farm & crop information management, quality inspection support systems with traceability, trade & logistics support, etc.

Applying ICT as enabling tools to realize the above strategies

What is food traceability?

q The ability to track any food, feed, food producing animal or substance that will be used for consumption, through **all stages of supply chain** from raw materials, production, distribution/logistics and reaching consumers (*EU*), by means of **recorded identifications** (*ISO, 1995*).

- **Consumers** expect their foods to be **safe & traceable**.
- **Certification bodies/schemes** require some forms of evidential documents about product and process information.



Smallholder farmers working together through a Cooperative

sharing cost & efforts on post-harvesting, traceability, trading and export management

Farmers bring 70-75%-maturity bananas to the coop for selection, traceability, trade and transport operations.



cleaning



tagging



transport

Ready for truck transportation and exporting to Japan by ships

Traceability information, e.g. each banana package coming from which farm, is available on the internet for international consumers to access and check.

ICT system managing

members & crop
Information management,
packaging & barcode labeling with traceability features

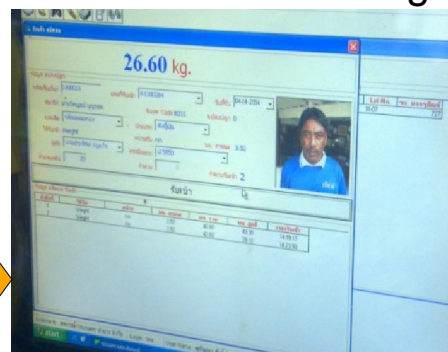


selection



bar-coding

data-entry



Value Chain for Exporting Banana (Thayang Agriculture Cooperative Ltd.)

About 400 individual banana farmers/smallholders

Production
(Chemical-free
banana)

Contract Farming
with price guarantee and
also annual revenue sharing
from the co-op

Post Harvest & Export
(Cleaning/Packaging/Trading)

Thayang Cooperative
Petchaburi Province, Thailand

Otento (Thailand)
Co., Ltd

Selling

**Land Transport/
Freight Forwarding**

Transport Company with
Controlled-Temperature Container

Transport Company with
Controlled-Temperature Container

Transport

Sea Transport

Sea Carrier

Import

WAGO Co., Ltd.
Japan

Consumption

**Toto Consumer
Cooperative Society**
Japan

**Tops Supermarket,
Hotels,
Retailers,
Bakery,
Farmer Markets.**

**Market/
Consumption**

International Market

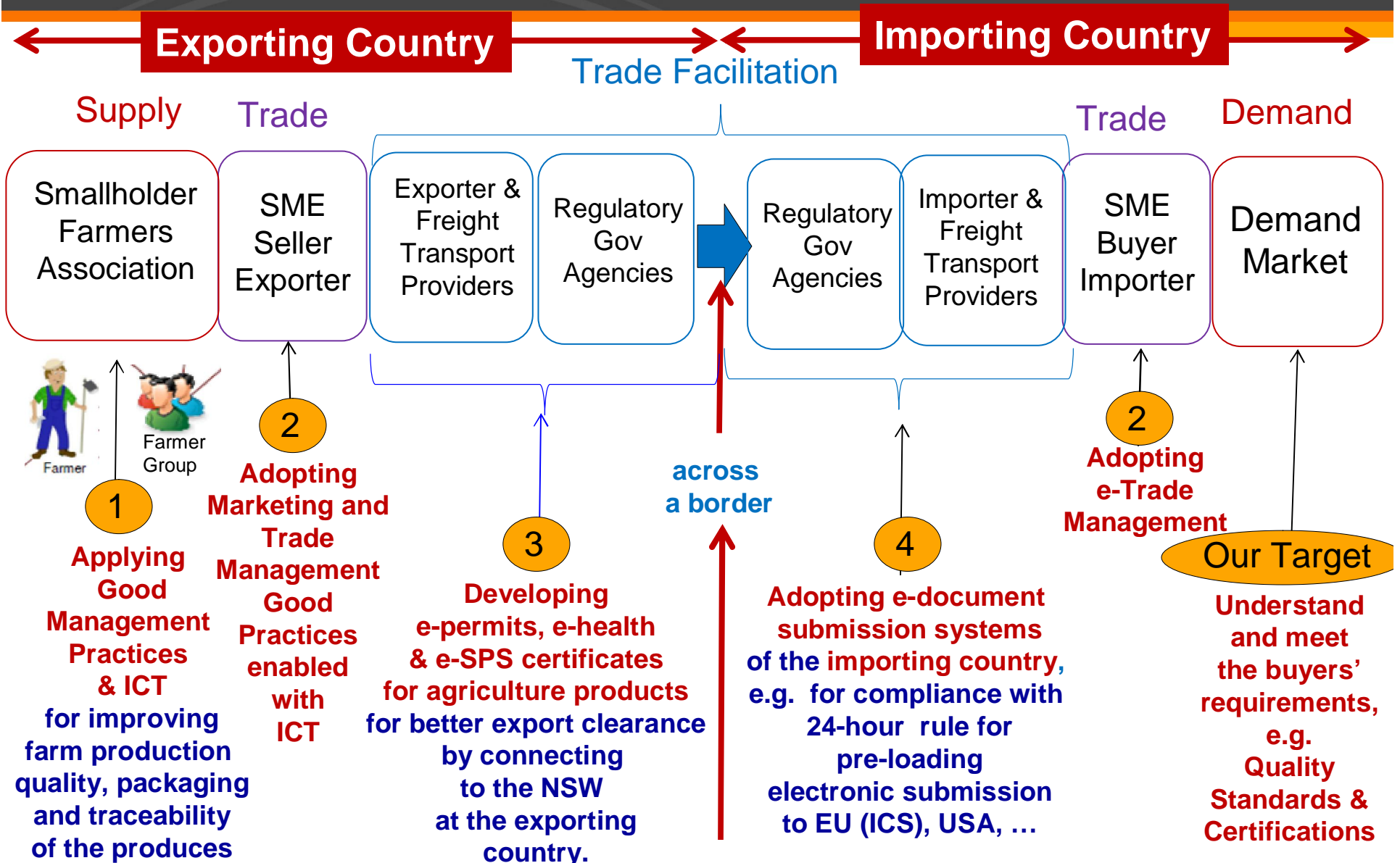
Domestic Market

Proposed Development Opportunities



for smallholder farmers and SME traders/exporters
to be able to export their agriculture products
to the global markets

Development Opportunities for Cross-border Value Chain Agriculture Trade



Proposed Development Components

(need to be developed for each different group of farmers and products)

1. Building capacity on **management practices** and **ICT systems** for smallholder associations and traders for improving farm quality production, packaging and traceability management.
2. Building capacity on **marketing/trade management** and **ICT systems support**, and **e-marketplace engagement**, e.g. market information access, e-catalog of products, order transactions and fulfillment operations...
3. **[Ministry of Agriculture]** Developing **e-permits, e-health & e-SPS certificates for agriculture products** for better export clearance and also by connecting to the **NSW** of the exporting country.
4. Adopting **e-document submission systems** to fulfill the electronic information requirements of several major importing countries, e.g. for compliance with the 24-hour rule of pre-loading electronic submission for EU (ICS – Import Customs System), USA,

NSW = National Single Window is an government e-document exchange system including e-Customs and other government agencies for better trade facilitation.

Examples of Pilot Projects



National Governments with the collaboration with funding agencies should host the pilot development projects on key strategic products

Examples of Pilot Projects

identifying key strategic export products with potential groups of farmers

National Levels

q Thailand:

- Organic rice value chain: A Community Association of 1,380 organic rice farmers in Amnat Charoen Province

q Cambodia:

- Organic cashew nuts: An Association of 4,000 households of organic cashew nuts in Cambodia

Sub-regional levels

q Lao PDR, Thailand, Vietnam Collaboration

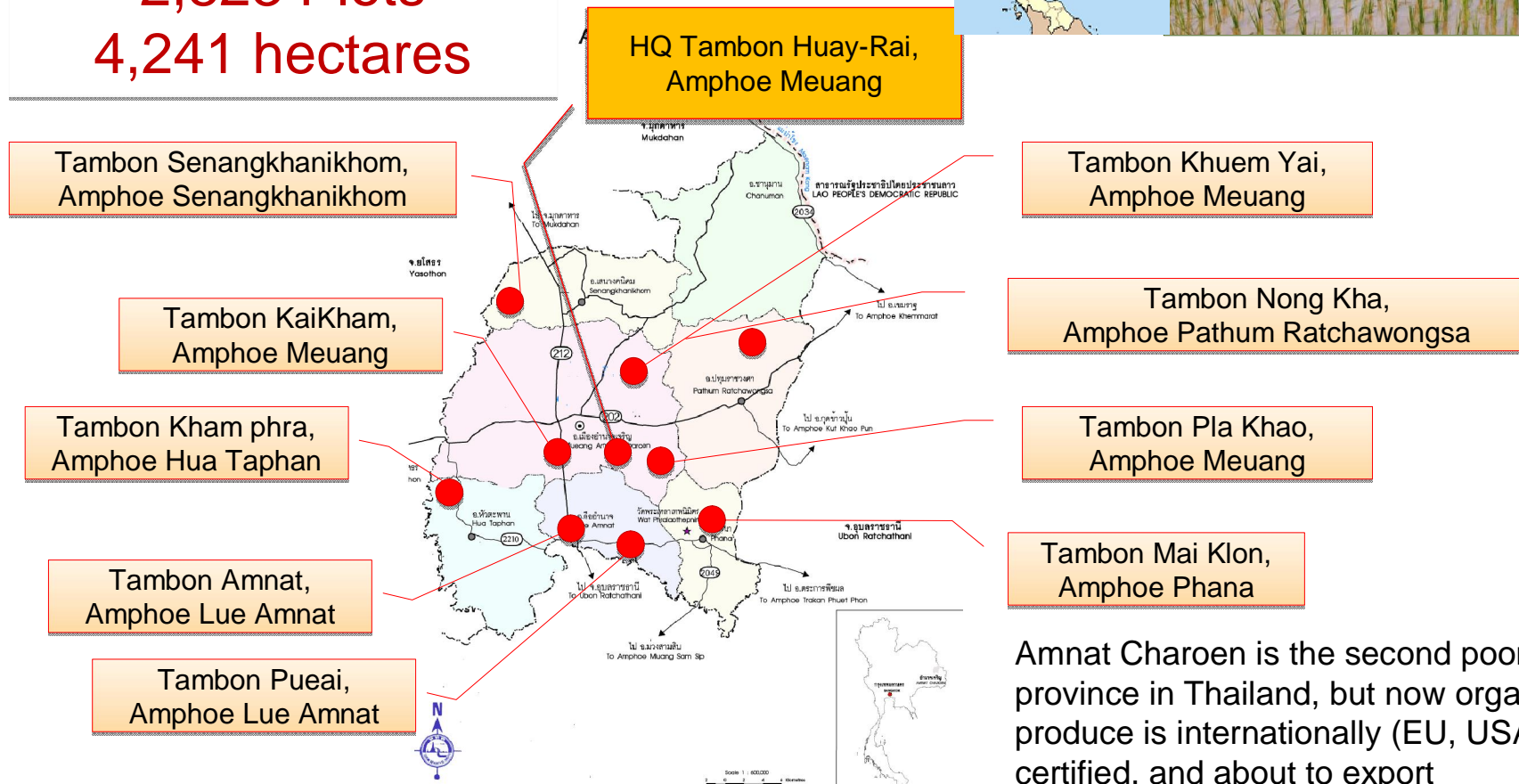
- Organic Vegetables: A Cluster of Smallholder Organic Farmers along the GMS East-West Economic Corridor



Amnat Charoen Organic Community Enterprise Association

in Amnat Charoen Province

1,380 Farmers
2,823 Plots
4,241 hectares



Amnat Charoen is the second poorest province in Thailand, but now organic rice produce is internationally (EU, USA) certified, and about to export with a better price.

Farm Management and Traceability System

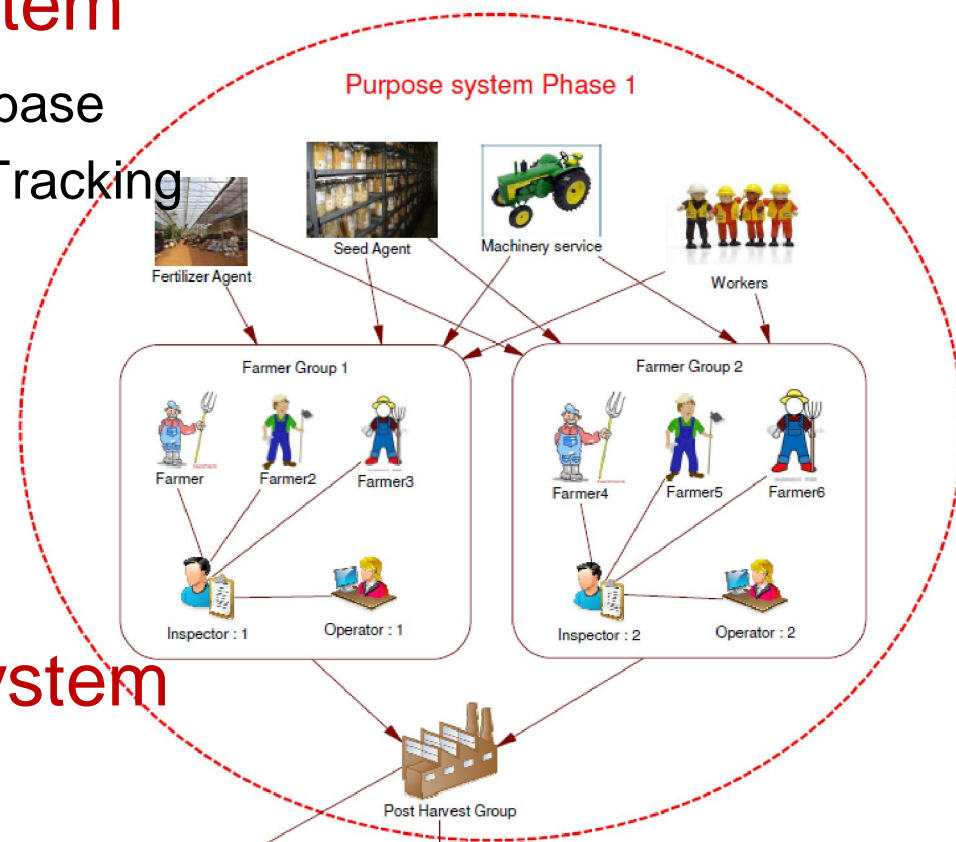
for promoting agriculture good practices and quality assurance

q Farm Management System

- Farmers, farms and land database
- Internal Control & Inspection Tracking
- Crop control system
 - (Chemical-free) Fertilized tracking
 - Tracking Machinery Usage
 - Accounting Record
 - Calculate irrigation expense
- Inventory tracking

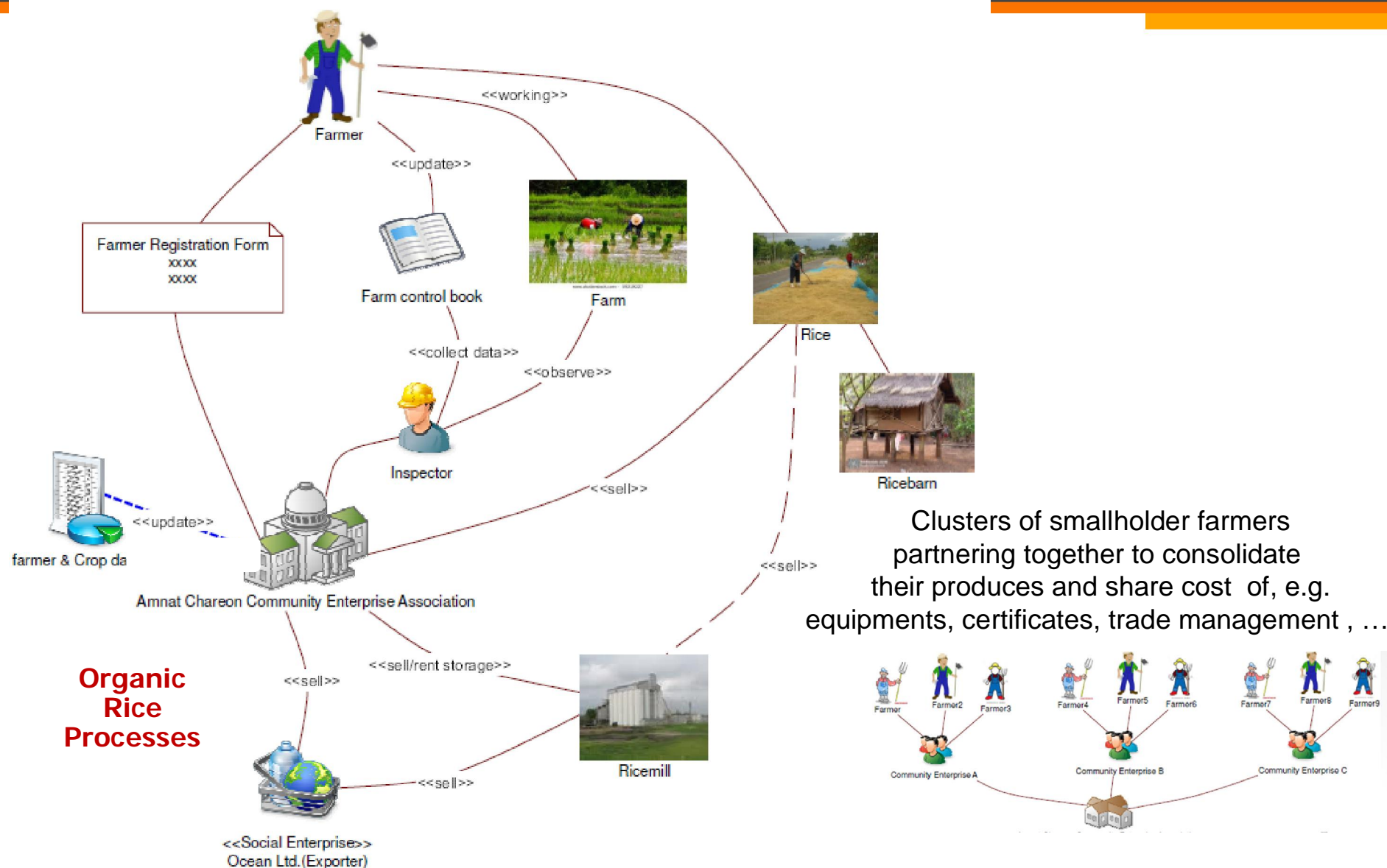
q Post Harvest Control system

- Packaging Control
- ID tag Control
- Traceability system accessible by consumers/buyers



Bar code for traceability

A Pilot Project – Developing farm information management and traceability systems for quality rice production



Clusters of smallholder farmers partnering together to consolidate their produces and share cost of, e.g. equipments, certificates, trade management , ...

A Pilot Project – Developing farm cluster management and traceability system for organic vegetable productions along the GMS economic corridor

- q For example, piloting with the East-West Economic Corridor (EWEC) cluster of organic vegetable farmers, e.g.
- Ban Pak Ka Organic Farming Group, Lao PDR
 - Organic vegetable farms in Phetchabun, Thailand
 - Tran Que Herb Village, Viet Nam

Promoting
safe and climate-friendly agriculture,
and good quality produces.



Recommendations (1/2)

q For UNESCAP and ADB:

- Collect detailed case studies, and if possible, sponsor the development of national or regional pilot projects for smallholder clusters, e.g. household farmers and SME traders to engage in cross-border agriculture trade including marketing, trade, logistics and finance issues.
- Develop policy recommendations and guidelines on how to formulate and implement national agriculture value chain/logistics master plan
- Develop guidelines on
 - how to develop e-SPS/e-Health Certificates and related import/export e-permits issuing systems,
 - how to adopt UNCEFACT standards on traceability, etc.
- Provide related capacity building/training workshops

Recommendations (2/2)

q For a national policy decision makers:

- The corresponding ministry, should host **a pilot development project** and provide **extension services/capacity building** in the appropriate sectors, e.g.
 - **Dept of Export Promotion:** to provide training for SME management & e-marketplace practices
 - **Dept of Agriculture Cooperative:** to sponsor pilot development projects of management best practices and software development for farm management and traceability.
 - **Dept of Agriculture:** to develop the e-SPS certificates and related import/export e-permits systems to be interconnected with the National Single Window (NSW) platform.
 - **SME Banks & Export-Promotion Banks:** to provide conducive schemes that favor the financial support for smallholder producers and SME exporters.

Thank you for your kind attention.



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Speaker - Dr. Somnuk Keretho



Somnuk Keretho is a faculty member of Computer Engineering Department, and the founding Director of Institute for IT Innovation (INOVA), a research and development institute of Kasetsart University, Thailand, specializing in ICT-enabled innovation, trade facilitation, traceability and e-logistics initiatives including National Single Window strategic planning and implementation, enterprise information architecture for e-government and e-business, business process analysis and improvement, data harmonization and modeling, ICT-related standards and interoperability, e-transaction related laws, and process-oriented quality software engineering.

He has led several ICT strategic projects at organizational, national and regional levels. For the past seven years, he has assisted Ministry of Information and Communication Technology, National Economic and Social Development Board, Ministry of Transport, Port Authority of Thailand, and Ministry of Agriculture in architecting “Thailand Single-Window e-Logistics” related projects including its national e-logistics strategy, implementation plans, interoperability and standards, harmonization and simplification of trade and transport-related documents and procedures, automatic electronic-gate systems development for the Bangkok Port and the Leamchabang Sea Port, and other software development projects.

Several of those projects are being aligned with some regional and international collaborations, in which Dr. Keretho has actively engaged mostly related to trade facilitation, single window and paperless trading initiatives through UNESCAP, UNECE, APEC, ASEAN and GMS. He has played several roles in catalyzing the creation of and actively contributing to the United Nations Network of Experts for Paperless Trade in Asia and the Pacific (www.unescap.org/unnext), and providing several technical supports to the APEC Paperless Trading and ASEAN Single Window Initiatives. He is the main author of the UNNExT Business Process Analysis Guide, the UNNExT Data Harmonization Guide and the UNNExT Guide for Single Window Planning and Implementation.