

Trade Facilitation: Improved Sanitary and Phytosanitary (SPS) Handling in Greater Mekong Subregion (GMS) Trade

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Overview

- Trends in GMS Trade
- GMS Regional SPS Project
- Roles of IT in food safety and trade facilitation
 - Lessons from Japan
 - Lessons from Lao PDR

Greater Mekong Subregion Regional Cooperation Program

Sectors

- Trade and Transport
- **Agriculture**
- Energy
- Environment
- Human Resource Development
- Telecommunications
- Tourism



Increased GMS trade and trade integration

- Recorded GMS intra-regional trade is growing faster than external trade (588% and 417%)
- More so in Agriculture, Food and Forestry (AFF) trade (465% and 240%)
- Clear trend in GMS trade integration, especially for AFF

Recorded GMS Exports 2000 and 2009 by destination

Value (Billion US\$)	2000	2009	% increase
Total trade	336.4	1423	423
GMS	12.2	71.7	588
Non-GMS	324.2	1351.3	417
Total AFF	29.7	76.9	259
GMS	2	9.3	465
Non-GMS	27.7	66.6	240
Food & live animals	25.9	67.2	259
GMS	1.2	5.4	450
Non-GMS	24.7	61.8	250
Non-food	3.8	9.7	255
GMS	0.8	3.8	475
Non-GMS	3	5.9	197

AFF Trade Growth in GMS

- Main reasons for AFF growth in GMS:
 - Much improved connectivity
 - Economic growth and demand
- Sources for increased AFF trade
 - Rapid economic growth in the region
 - Tourism
 - Urbanization, retail revolution
 - Adding value; shift to better price/quality segments

Potentials for 'Green' Growth

- GMS is endowed with good natural resources : land, water, biodiversity,...
- 60% of population in GMS are smallholder farmers
- Cross-border inclusive 'green' supply chain can lead to equitable growth along the corridors

Obstacles for tapping unrealized AFF trade potential

- Competition from outside GMS
- Underdeveloped supply chains in GMS
 - Scattered production, small volumes of varying quality, seasonality, informal trade
- Obstacles / weaknesses in SPS field:
 - Procedures more costly and requirements more restrictive to trade than necessary
 - Health protection insufficient

Main deficiencies GMS SPS handling

- Transparency – weak regulatory framework; insufficient information
- Not risk-based – poor data on pest and disease situation; same requirements for low and high risk products
- Widespread use of **precautionary principle**
- **Lack of trust** and information about each others' systems
- **Lack of capacities** in managing SPS

Project Rationale, Outcome And Scope

- **Response:** Regional Investment Projects to upgrade SPS capacities in Cambodia, Lao PDR, Viet Nam; and Regional TA
- Investment logic derives from GMS Regional Cooperation Strategy and Program (RCSP)
- Primary need is to address institutional capacity and issues surrounding handling of AFF trade
- **Impact:** AFF products become safer, more efficiently produced, and traded in greater quantities
- **Outcome:** an enhanced SPS management system in Lao PDR, Cambodia and Viet Nam

Major Design Features

- Current SPS capacity is very low; technical approaches have adopted simple and cost-effective designs (e.g., rapid test kits) based on pilot-testing and scaling-up over time
- Emphasis on university teaching, NOT research (to scale-up human resources) and selective regional engagement
- Significant subregional orientation; supports regional AFF trade development, engages with variety of institutions and resources etc (regional activities are about 20% of all technical activities by cost)
- Recurrent funding of SPS systems is unavoidable.

Project Outputs

- 1. Strengthened plant, animal and food safety surveillance programs** (improved data collection and analysis, field surveys, annual programs of monitoring and response capacity, application of risk-based approaches)
- 2. Enhanced Education Levels/University**
Training of SPS Specialists (curricula development, improved quality of teachers, improved laboratory and teaching facilities)
- 3. Improved Regional Cooperation and Harmonization** (participation in regional fora, technical twinning arrangements, bilateral working groups etc)

CLV Project Benefits

Difficult to quantify impact of SPS projects, BUT:

- Without project:
 - AFF trade will remain informal/unregulated and low-value (major specific opportunities for PRC trade will be lost);
 - exposure to disease risks will increase;
 - CL may become 'dumping ground';
 - CLV will remain subregional weak link
- Range of potential benefits estimated to be around \$10 million in each country annually

Size of Projects

- GMS regional SPS project is \$36 million
- Approved in June 2012:
 - Cambodia: \$11 million loan
 - Lao PDR: \$11 million grant+3 million loan
- To be approved in Nov 2012:
 - Viet Nam: \$11 million loan
- Regional TA: \$0.75 million.

Roles of IT in Food Safety and Trade Facilitation

Globalization & Market Trends

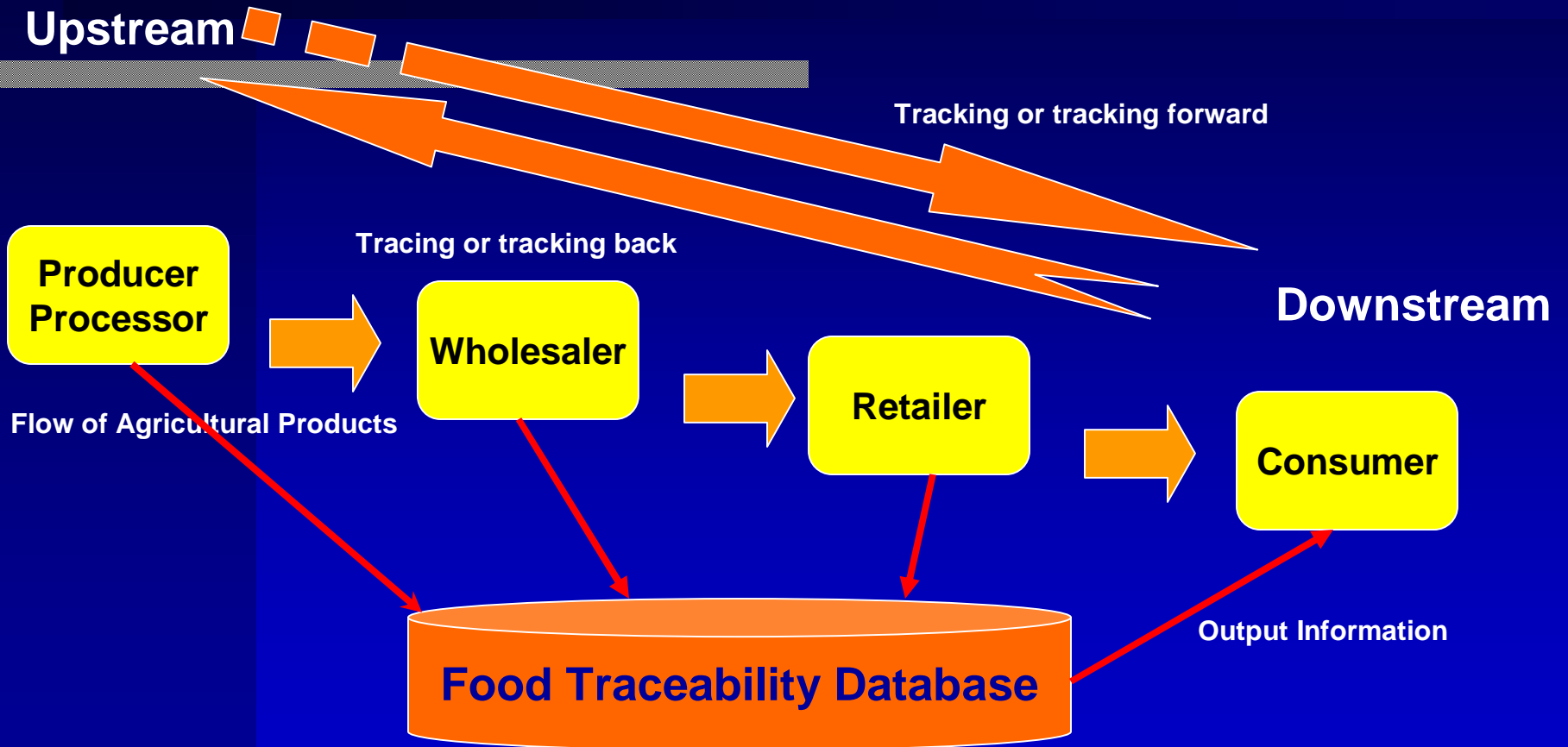
- Increased international food trade
- Global Concerns on food safety and quality
- Increased requirement of documentation (WTO, FTAs)
- Developing countries need to comply with food traceability requirements

Traceability Systems

Definition of traceability (ISO 22005:2007):

“The ability to follow the movement of a feed or food through specified stage (s) of production, processing and distribution”

Food Traceability System



Traceability Requirements & Developing Countries

- Exported food must conform to GAP, GMP and HACCP standards under WTO
- Different importers may have varying traceability requirements
- Increased burden for producing countries
- Smallscale farmers can be further marginalized

Information Requirement

- Requirements for record-keeping & documentation on food product
- Labeling
- Origin-labeling
- Requirements related to product removal, recall, and notification

Systems in Supply Chain

- Systems that cover operators at several stages in the supply chain
 - Quality Management System
 - Safety Management System
 - Inventory Management System
 - Production History Information Disclosure System

Case Studies from Japan

- Strict Market Requirements
- High volume of food importation
- Relatively quick response in public sector to food safety issues
- Overall high rates of IT adoption
- Small farms with IT adoption gap in rural areas
- Strong private and public sector collaboration

Examples of ICT used

- Integrated Circuit (IC) tag
- Handheld devices
- Web-based service technology



Traceability System in Supermarket



Information on crops (name & place of production, fertilizers & chemicals applied, other product specifications)

栽培情報 Information on cultivation & product



生産者名	井出農園	Name of farm (producer)
生産地	神奈川県藤沢市	Place of production
栽培方法	露地栽培	Cultivation method
肥料	鶏糞、牛糞、豚糞を使う有機肥料を使用	Fertilizer applied
農薬	スピノエース顆粒水和剤、アブマイヤーフロアブル、アファーム乳剤、ラービンプロアブルなどを使用	Chemical applied

品名	キャベツ	Name of product
品種	しずはま2号	Variety

Comments and specifications of products

外見の特徴	みずみずしく、新鮮です。
味の特徴	歯ざわりがよく、噛むとほんのり甘みがあります。
生産者からのコメント	☆私の好きな食べ方☆ 1. サラダにして、ごまドレッシングやマヨネーズをかける 2. 野菜炒めにする おいしく栄養価の高いキャベツの芯を、上手に活用して下さい。
産地特性	『新鮮なままお届けできます！』 鮮度はどこにも負けません！！温度変化のないおいしさが味わえます。
栽培上のこだわり	消費者の方が食べておいしいと思うものを作ること。そして作った作物を、新鮮なうちに食べてもらうこと。この2点にこだわっています。

栽培・流通映像（約60秒）



Video of farmer and his farming practice **ADB**

Information on producers

My motto
私の主張

地場野菜は、新鮮なのでおいしいです。

Profile

生産者のプロフィール



生産者	井出農園	Name of farm
代表者氏名	井出 茂康	Name of producer
住所	神奈川県藤沢市	Address
電話番号	XXXX-XXXX-XXXX	Phone
メールアドレス	OO@mpd.biglobe.ne.jp	Mail address
ホームページ		Home page

私のこだわり野菜作り

堆肥(糞糞、牛糞、豚糞)をバランスよく使い、野菜が上手に栄養を給出来るようにしています。また、同じ土地で同じ作物は作らず、順番に栽培作物を変えていき、土の栄養が偏らないように工夫しています。『新鮮でおいしい野菜を食べてもらうのが、心遣いからしています。』

Greetings from producer (my policy to produce vegetables)

Tracking information on delivery history and route

お店に到着するまでの経路と時間の経過

Route of transportation

農家	---	出荷
山武農園	---	7月29日 9:14:27

Time/Date of arrival

流通経路	入荷	出荷
JACO	7月29日 9:15:22	7月29日 9:17:32

Time/Date of departure

流通経路	入荷	出荷
搬送車A	7月29日 9:17:32	7月29日 9:17:54

流通経路	入荷	出荷
市場	7月29日 9:17:54	7月29日 9:22:43

流通経路	入荷	出荷
搬送車B	7月29日 9:22:43	7月29日 9:23:07

店舗	入荷	---
小売店	7月29日 9:23:07	---

合計時間	0:08:40	
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Elapsed time



Traceability system in production & distribution processes

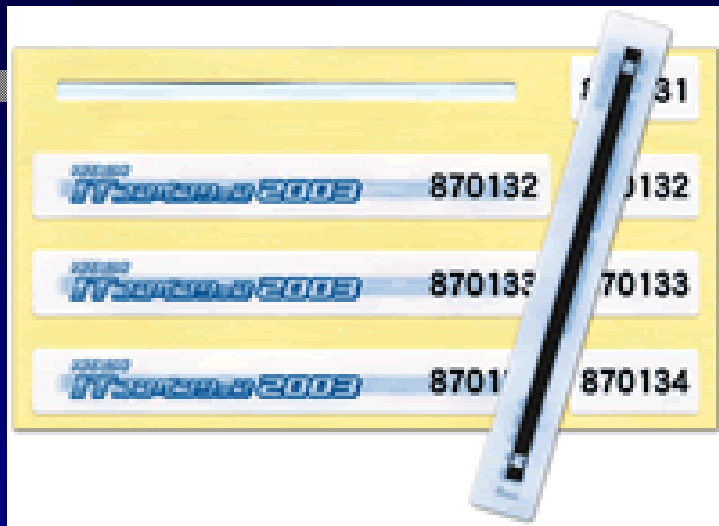


IC chip



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Barcode and Tag



Scheme of Certification and Distribution of Product

Ministry of Agriculture, Forestry and Fisheries

Registration

Application of registration

Certification

Registered Certification Organization

Application of Certification

Certification

Application of Certification

Certified Production Process Manager

- Breeder
- Feeder
- Slaughter

Recording, keeping, publishing or production information

Certified Subdivider

- Process (Block, Meat)
- Retailer

Publishing information about production of subdivided meat in each animal or each unit

Consumers

Get product information by label, internet or FAX

Attachment of JAS mark

Attachment of JAS mark

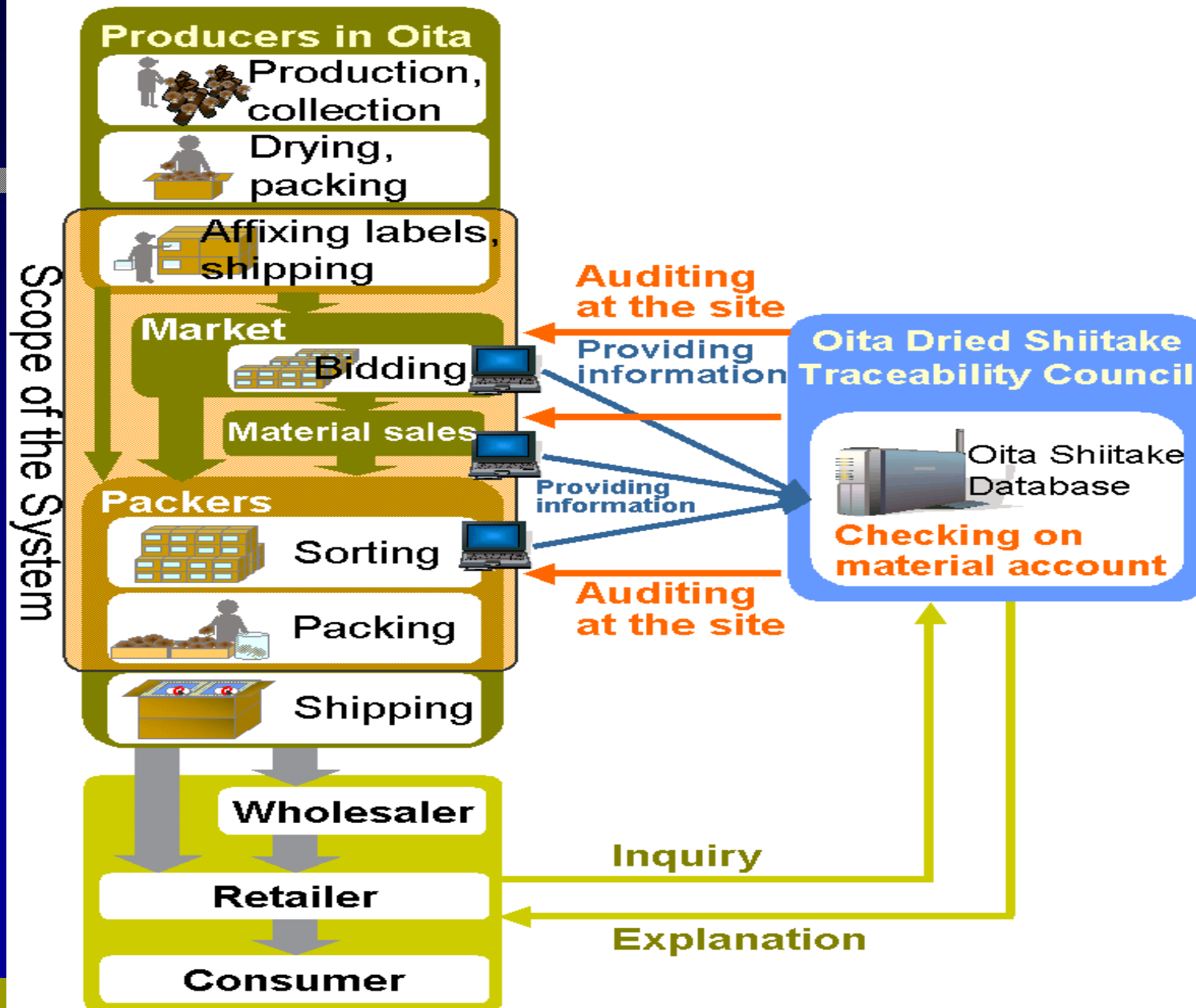
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Case Study: Dried shiitake mushroom in Oita Prefecture

- Fraud in labeling of origin of products
- Oita Prefecture produces about 30% of domestic mushroom
- Packers and District markets formed a council to introduce the system



Scope of Traceability System in Oita



Role of Council

- Managing the "Made in Oita" symbol mark and operator ID number
- Auditing place-of-origin labeling
- Publicity
- Respond to inquiries regarding traceability

Costs of Investment

- Operating system
 - \$ 10,000
- Hardware and software
 - \$ 4,000
- Additional labor costs
 - 10-15 mins/day
- Management fee for council
 - \$100/year



Benefits

Increased in price

- Year 2000 : 2,432 yen/kg
- Year 2005 : 3,449 yen/kg
- Year 2007 : 4,000 yen/kg



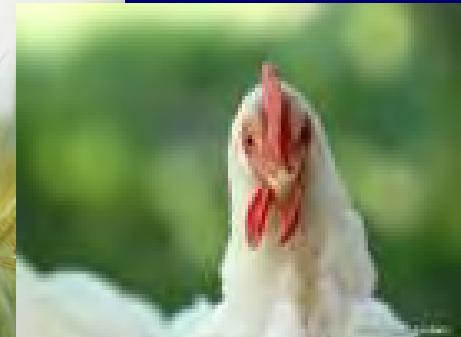
Case Study: Poultry in Kyoto Prefecture

- Avian flu caused damaged to the industry
- Producers, distributors, and Poultry Safety Promotion Council of Kyoto Local Government formed a Council
- Consumer survey
- Reliability not the details



Scope of System

- Farm
- Slaughtering house
- Processing house
- Retailer



Costs

Production and processing site

- Hardware and software: \$20,000/site
- Running costs: \$2,000/yr
 - Membership fee \$500/yr
 - Printing and supply of label \$400/yr
 - Hardware maintenance fee \$500/yr
 - Usage fee of software (Mistubishi) \$600/yr

Retail store running cost: \$2,000/yr



Benefits

- Feedback shows that consumers are satisfied with the system
- No price increase but sale of poultry resumed

Lessons from Japan

- Traceability Systems is essential in gaining market access
- Traceability systems promotes consumer confidence
- Traceability Systems improves business efficiency throughout the supply-chain
- ICT lead to efficient data management and access

Case Study from Lao PDR

- Pilot project to enable smallholder producer association to apply 'cloud based' software to implement paperless trade to export coffee
- Training time is about 30 mins
- Transaction cost declined by about \$200 USD per consignment

GMS Regional Program for E-Trade of AFF

- Regional farm assurance , Participatory Guarantee System, e-certification systems
- Regional traceability systems, starting with organic rice
- Pilot cross-border e-trade platform, starting with two products for each GMS countries

Lessons for CAREC

- Private and public sector collaboration is essential
- Public sector funding is required to kick start SPS and IT system development
- Industry association should take a leading role in establishment of the systems
- Extensive consultation of stakeholders along the supply chain to required
- Less extensive IT systems at the farmer level

**Thank you
for your
attention**

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