

Workshop

Food traceability: Current regulations of Vietnam, international experiences, and proposed intervention areas

August 12th, 2021



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Introduction

- Overview of the Project and the Workshop
- Workshop agenda

Introduction to the Project and the Workshop

General information

1. **Project name:** Assessment of the Use of Digital Technologies to Improve Traceability and Monitoring of Food Safety Standards Compliance in Fruit and Vegetable Value Chains in Vietnam
2. **Donor:** The World Bank

Objectives & Tasks

Objectives:

- To assess the needs to improve product traceability in Vietnam's F&V value chains,
- To lay out (technology, institutional, regulatory) options to create or strengthen such traceability systems
- To assist stakeholders to make decisions regarding these options so that specific investments might be piloted or scaled up during Agri-Food System Project implementation

Task 1: Review of the current status of existing traceability systems in Vietnam's fruit and vegetable value chains and of pertinent policies and regulations

Task 2: Review international practices and their potential applicability to Vietnam

Task 3: Knowledge dissemination and linking technology providers with potential clients and policy makers

Deliverables

- Reports for Task 1, 2, 3
- Recommendations for improvement of application of digital-technology based traceability in F&V supply chains.

Introduction to the Project and the Workshop

Workshops and Training courses under the Project

No.	Workshop/Training courses	Date
1	National workshop	July 28 th
2	Sensitization workshop with the Government agencies to discuss the draft policy and regulatory reform recommendations as well as recommendations for pertinent IT infrastructure investments	August 12 th
3	Focused trainings for food operators	September 1 st , 6 th , 8 th , 10 th , 13 th

Objectives of this Workshop

Current legal and institutional framework for food traceability in Vietnam and gaps

International practices on developing legal and institutional framework for food traceability

Potential intervention areas for Vietnam

AGENDA

No.	Time	Content	Speaker
1	14:00 - 14:10	Opening remarks	Representative of The World Bank
2	14:10 - 14:40	Introduction to food traceability and food traceability system	Representatives of Ernst & Young
3	14:40 - 15:00	Current legal and institutional framework for food traceability in Vietnam and gaps	
4	15:00 - 15:15	Break time	
5	15:15 - 16:00	International practices on developing legal and institutional framework for food traceability	Representatives of Ernst & Young
6	16:00 - 16:15	Potential intervention areas for policy and regulatory reform	
7	16:15 - 16:45	Q&A session	
8	16:45 - 17:05	Closing remarks	Representative of the World Bank



Section I.

Introduction to food traceability and food traceability system

Traceability as one solution for enhancing food safety situation



Food safety requires implementation of several solutions in conjunction.



Traceability is one solution

Regarding food safety, traceability can be utilized and/or is necessary for a variety of purposes, including but not limited to:

Product Recalls/ Market Withdrawals



In case of food safety incident, product recalls/market withdrawals are effective solutions to remove unsafe food from the market.

Quality Assurance



By connecting the product movements, the supply chain becomes connected which helps to mitigate the risk of food fraud such as counterfeiting, mis-labelled, mis-represented, etc.

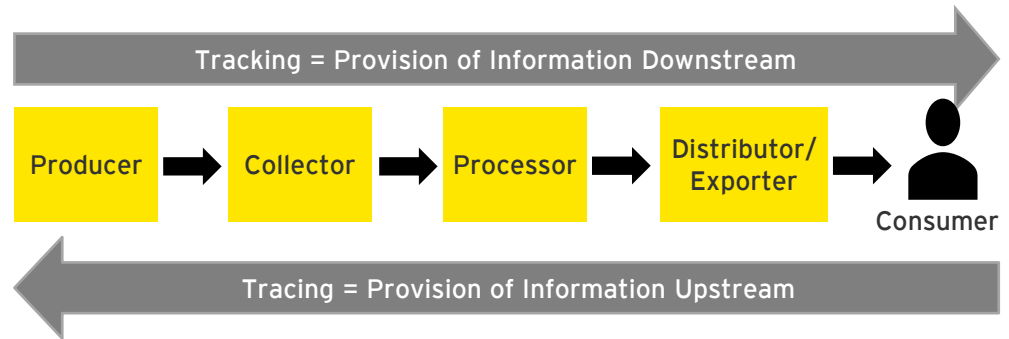
What is traceability?

Global:

- *ISO and GS1: "Traceability is the ability to trace the history, application or location of an object" (ISO 9001:2015 and GS1 Global traceability standard)*

Vietnam:

- *Law on Food Safety: traceability is defined as "tracing the process of forming and circulating food" (Clause 28, Article 2)*
- *National technical standard: "Traceability is the ability to identify a product/service unit throughout each stage, time, location of production, processing, storage, transportation, distribution, and selling processes" (TCVN 12850:2019)*

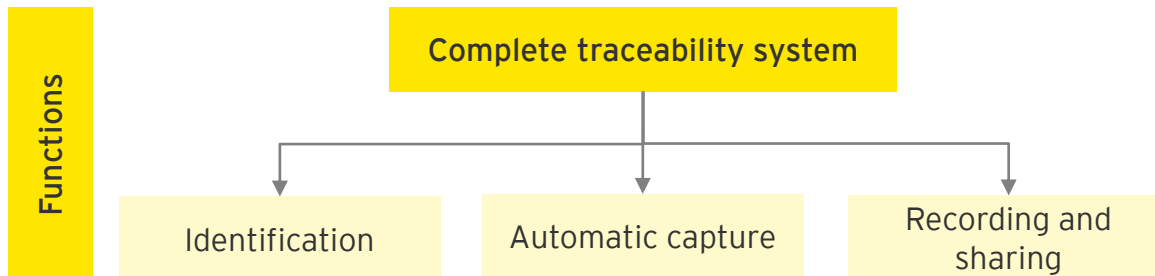


Source: EY

Legend

➡ Physical flow ➡ Information flow

Traceability system



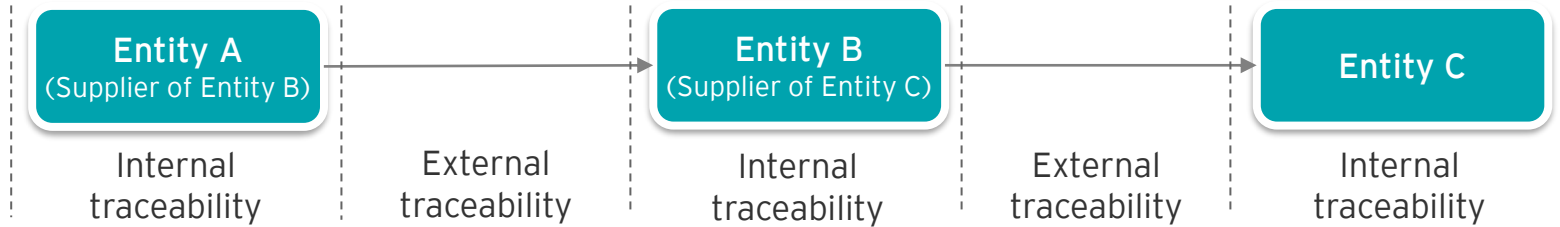
Supported by:

- Documented rules, procedures, and processes
- Machinery equipment, software, technologies, techniques and human

Introduction to food traceability (3/6)

Internal traceability and external traceability

Two types: internal traceability and external (chain) traceability.



Internal traceability

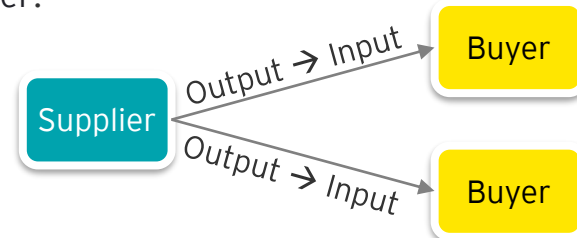
Internal traceability takes place within an entity when the entity receives one or several inputs that are subjected to internal processes to generate one or several outputs.



Purpose: To ensure the necessary linkages between raw materials and finished products after internal processes are performed.

External traceability

External traceability takes place when a traceable item is physically handed over from one entity to another.



Purpose: To ensure the necessary linkages of traceable item(s) when being handed from one entity to others.

Legend

→ Physical flow of food products

Source: GS1 Global and EY

Introduction to food traceability (4/6)

Benefits

For consumers

- Meet consumer demand for food production transparency

For food operators

- Enhance the ability to identify, respond to and prevent food safety issues
 - Identify and isolate the source causing unsafe/non-compliant food products
 - Minimize the cost of product recalls
- Reduce food loss through effectively identifying vulnerabilities
- Support other systems in managing operation of an entity and of the whole supply chain
- Enhance consumers' confidence in the food products and in the food operators

For policy makers

- Better control, supervise and response to food safety issues
- Support other sustainability goals through validating and verifying the sources of production
- Accurately measure the social and environmental footprint of production at lower costs and within less time

Traceability principles

1

One step back - one step forward



Food operator must be able to:

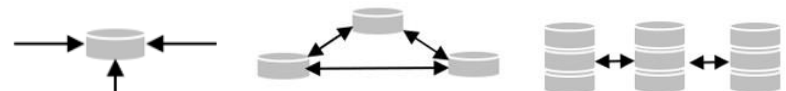
- identify the **buyer** to which their products have been supplied, and
- trace back their inputs to its' immediate **supplier**.

Only **external** traceability data are required.

Examples: applied in Vietnam and EU markets.

2

Full-chain



Food operators must provide access to information of a food product in all of its forms, across every step in the supply chain, and **other stakeholders have the ability to access those data when necessary**.

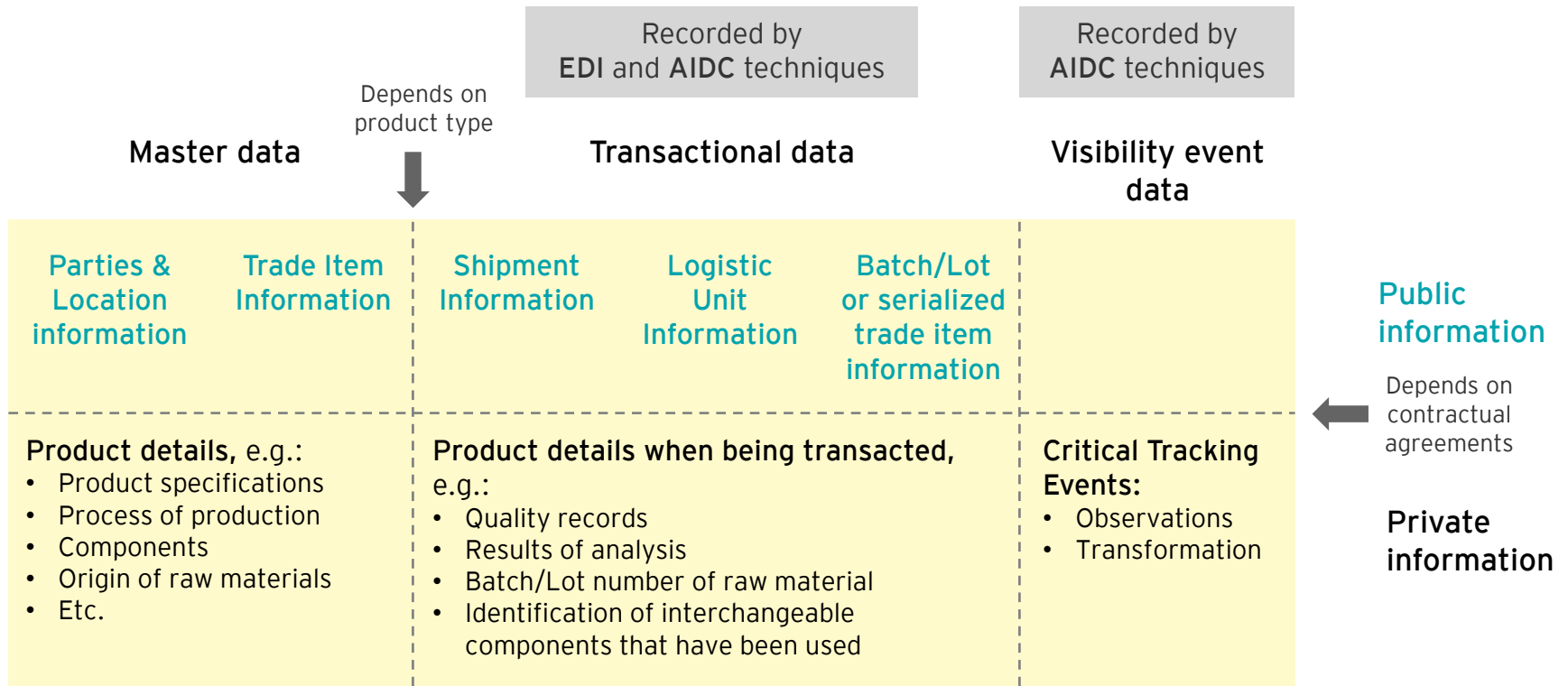
Both external and internal (not all) data are required.

Example: applied in Korea (pork supply chain)

Introduction to food traceability (5/6)

Traceability data

Traceability data can be **master** (constant across time) or **transactional** (changing with each case or shipment) **data** depending on product type, and can be **public** or **private information** depending on contractual agreements.



Notes:

- **EDI**: Electronic Data Exchange
- **AIDC**: Automatic Identification and Data Capture (e.g. RFID, barcode, etc.)

Introduction to food traceability (6/6)

Some applicable digital technologies

Functions covered	Barcode	RFID	NFC	Blockchain	IoT sensors	Mobile application
Identifications	Barcode	RFID tag	NFC tag	-	-	(*)
Automatic capture	Barcode scanner	RFID reader & antenna	NFC reader	-	-	Mobile application (acting as tag/code reader)
Recording & Sharing	-	-	-	Blockchain database	IoT sensors	Mobile application

Some recommended technical standards on food traceability





Section II.

Current legal and institutional framework for food traceability in Vietnam and gaps

- Regulations on agri-food traceability in Vietnam
- Findings on the current state of food traceability application of Vietnam F&V supply chains

II.1. Regulations on agri-food traceability in Vietnam (1/2)

Regulations on agri-food traceability

Circular 74/2011/TT-BNNPTNT requires that traceability is mandatory for:

- all stages and subjects of the value chain of agricultural products.
- each stakeholder, in which they shall record and keep information in compliance with the "one step forward - one step back" principle.

Recommended technical standards:

- TCVN 12850:2019 on general requirements for the traceability system;
 - TCVN 12827:2019 on requirements for traceability systems for fresh fruits and vegetables;
 - TCVN 12851:2019 on requirements for traceability conformity assessment bodies;
 - TCVN 13166-2020 on traceability requirements for supply chain of meat and poultry which includes specific standards towards poultry, pork, lamb and sheep meat, buffalo meat and beef;
 - TCVN 13167:2020 on traceability compliance criteria for food traceability system which provides a checklist for food traceability system divided into 12 groups with 72 control points;
 - TCVN 13274:2020 one traceability guidance for formatting tracing codes,
 - TCVN 13275:2020 on traceability relating to the format of data carriers.
- However, there are still no regulations focusing on specific F&V product or group of F&V products.

Regulations enabling the application of technologies

Vietnam Government has established:

- regulations on digital traceability systems to facilitate the application of technologies for development of food traceability system, and
- regulations on the technologies (e.g. RFID, QR code) for traceability systems.

II.1. Regulations on agri-food traceability in Vietnam (2/2)

Institutional framework for food traceability

- At national level**, ministries responsible for food safety management including traceability:
- **MARD**: agricultural, fishery, agro-forestry products, and packaging materials
 - **MOH**: functional food, nutrients, packaging materials, etc.
 - **MOIT**: products such as beer, soft drinks, confectionery etc; management of markets and supermarkets

At provincial level, local departments are responsible for:

- disseminate, implement and supervise the implementation of local circulars and programs,
- carry out the inspection and examination of food safety

Initiatives by the Government

At national level, Decision No. 100/QĐ-TTg approving the Scheme on the implementation, application and management of the traceability system.

At provincial level, in alignment with Decision 100, as being reported by the NBC, by April 2021, 54/63 provinces/cities have carried out several activities (Thuy, 2021). In which,

- 48 provinces have approved decisions to implement the Scheme,
- 41 provinces have organized number of workshops, events, and training courses to disseminate knowledge relating to traceability for relevant stakeholders,
- 23 provinces have been preparing information technology infrastructure enabling digital food traceability, including Tra Vinh, Ca Mau, Gia Lai, Tay Ninh, Khanh Hoa, Ba Ria Vung Tau, Soc Trang, Kien Giang, Quang Ninh province, etc.,
- 25 provinces have implemented traceability system and applied traceability stamp for some specific products (e.g. OCOP products, specialties, etc.).

Up to 2019, **initiatives on traceability** were implemented in some provinces:

- **An Giang**: Project on building a model of pork management, identification and traceability
- **Hanoi**: Plan to maintain and develop an electronic information system using QR codes to trace the origin of agricultural and foodstuff products in the period of 2018-2020.

II.2 Findings on the current state of food traceability application of Vietnam F&V supply chains (1/2)

Initial findings

1. Legal and institutional framework

Lack of guidance/ standards for some specific group of F&V products

Vietnam has mandatory provision on traceability for all agricultural products and recommended national technical standard on traceability of general F&V products. However, no detailed guidance on traceability has been issued for specific group of F&V products.

Lack of resources for inspection/check on the compliance with traceability regulations

- ▶ **Human resources:** with a total of 10,603 communes, Vietnam lacks capacity for ensuring control and management at every administrative level.
- ▶ **Inspection mechanism:** Mechanism for checking traceability compliance in the less formal distribution channels, such as traditional wet markets is rather loose.

2. Application of traceability technology and systems

Public traceability system

- ▶ National traceability system is not implemented (planned only).
- ▶ Provincial traceability systems are being implemented in some provinces (e.g. systems of Hanoi, Quang Ninh, Hung Yen, Hoa Binh, etc.). However, number of users are still limited.

Private traceability system

- ▶ Private traceability systems are mainly applied by exporters and some domestic large-scale companies

II.2 Findings on the current state of food traceability application of Vietnam F&V supply chains (2/2)

Initial findings

3. Existing capacities of supply chain stakeholders

Financial capacities	Vietnam F&V sector still largely depends on small-scale and fragmented production areas and distribution channels who face shortage of finance. F&V products produced by farmers are mostly low value commodities due to low quality, hence, the total sales cannot offset the incurred costs.
Technical capacities	<ul style="list-style-type: none">▶ Vietnam F&V sector still largely depends on small-scale and fragmented production areas and less formal distribution channels who lack:<ul style="list-style-type: none">• Technical knowledge and need lot of training to implement digital traceability systems• Existing digital infrastructure▶ Amongst existing traceability systems being implemented in Vietnam, there is a lack of interoperability.▶ Vietnam is lagging behind the world in cybersecurity and require further investment to keep up with the rising demand for security and privacy in cyberspace.
Ability to access international standards and export markets' requirements	<ul style="list-style-type: none">▶ Some interviewees said that they encounter language barriers when accessing international standards, as well as the requirements of the export market.

4. Public awareness

Low consumer's trust in safe fruits and vegetables: The demand for products with traceability features is not significant enough for consumers to purchase high cost products (increases in price due to application of digital traceability system), especially in less formal sector of Vietnam.



Section III.

International practices on developing legal and institutional framework for food traceability

- Case of European Union, Italy, China and Korea
- Lessons learnt for Vietnam

III.1. Developing legal and institutional framework for food traceability - The case of EU (1/2)

Regulations on food traceability

- ▶ **Mandatory** (Regulation 178/2002) for a broad range of food and animal products (both domestic and imported origin).
- ▶ **Detailed mandatory requirements** for specific products: (1) animal origin and (2) high-risk agro-products (i.e. sprouts and seeds intended for the production of sprouts).

Regulations enabling the application of technologies

Recommended technical standards for some digital technologies regarding their application in food traceability systems:

- ▶ The European Article Number (EAN) standard on barcode symbology and numbering system to identify a specific retail product type.
- ▶ GS1 Global standard on GTINs

Institutional framework for food traceability

At EU level, the EU Commission shall:

- ▶ Establish sector-specific legislation on traceability as appropriate,
- ▶ Carry out regular inspections on compliance with food traceability standards,
- ▶ Alert members of the Rapid Alert System for Food and Feed of the risk,
- ▶ Request information from operators to enable traceability and coordinates action by national authorities.
- ▶ May impose import/export restrictions.

At member states level:

- ▶ Monitor traceability applications of food and feed operators.
- ▶ Fix and enforce appropriate penalties for operators that do not meet EU requirements on traceability.

III.1. Developing legal and institutional framework for food traceability - The case of EU (2/2)

Initiatives by the government

Established 2 following systems to enhance food safety (including traceability) situation:

- ▶ **The Rapid Alert System for Food and Feed (RAFF)** - A warning system enables rapid exchange of information whenever a risk to food or feed safety is identified.
- ▶ **The Trade Control and Expert System (TRACES)** - supports tracking movements of livestock for the purposes of preventing the spread of livestock diseases.



The Trade Control and Expert System (TRACES)

- Established in 2004 by the European Commission.
- Multilingual online platform for sanitary and phytosanitary certification required for the importation of animals, animal products, food and feed of non-animal origin and plants.
- Aims to streamline the certification process and all linked entry procedures and to offer a fully digitized and paperless workflow
- Provides central database for tracking the movement of animals and animal products within and outside the EU.
- Allows for the quick detection of fake certificates helps to enhance trust and ensure better collaboration.
- In the event of a disease outbreak, all potentially affected animals can be quickly identified.
- When a decision or a measure is taken on a consignment, the involved parties are notified and have access to the relevant documents.



Rapid Alert System for Food and Feed (RAFF)

- Established in 1979 and enhanced in 2002 when the General Law on Food was issued.
- The system has the participations from 26 member countries, European Commission, European Food Safety Authority, Iceland, Liechtenstein and Norway.
- This alert system supports the traceability system by allowing sharing information when there is a food or feed safety hazard identified by the member countries.
- If a member country identifies a food safety risk, it may notify the European Commission; then the Committee will pass on this information to other members for timely actions.

III.2. Developing legal and institutional framework for food traceability - *The case of Italy (1/2)*

Regulations on food traceability

Follows EU regulations:

- ▶ **Mandatory** (Regulation 178/2002) for a broad range of food and animal products (both domestic and imported origin).
- ▶ **Detailed mandatory requirements** for specific products: (1) animal origin and (2) high-risk agro-products (i.e. sprouts and seeds intended for the production of sprouts).

Regulations enabling the application of technologies

Recommended technical standards for digital technologies regarding their application in food traceability systems:

- ▶ GS1 Global standard

Institutional framework for food traceability

At national level: 2 competent ministries

- ▶ Ministry of Health
- ▶ Ministry of Agriculture, Foodstuff and Forestry Policies and of Tourism (MIPAAFT)

At provincial level:

- ▶ Regions, autonomous provinces have responsibility, within their territories, for planning, co-ordination, guidance, authorization, and verification
- ▶ Operational implementation of controls is handled at local level by 123 Local Health Units (ASL) with a high degree of managerial autonomy.

III.2. Developing legal and institutional framework for food traceability - The case of Italy (2/2)

Initiatives by the government

Invested in and established 2 national traceability systems:

- ▶ **Olive oil electronic register (RTO - Registro Telematico Olio)** managed by the MIPAAFT, the system enables the official control bodies to monitor online individual movements of olives, olive oil, pomace oil and pomace for each plant/warehouse. There are 21,000 active electronic registers.
- ▶ **Wine electronic register (RTV - Registro Telematico Vino)** managed by the MIPAAFT, the systems monitors the movements and processing of wine products. There are about 17,000 registered operators on RTV.

Olive oil electronic register (RTO - Registro Telematico Olio)

- The computerized register of oil is a system managed by the ICQRF under the MIPAAFT, for accurate traceability of the olive oil supply chain at national level.
- It enables the official control bodies to monitor online individual movements of olives, olive oil, pomace oil and pomace for each plant/warehouse.
- As of 31 December 2020, there are approximately 21,000 active electronic registers.
- Since 2018, the ICQRF published the data of RTO in a report called "Frantio Italia" in an aggregated form every two weeks available on its website.

Wine electronic register (RTV - Registro Telematico Vino)

- In 2017, Italy the only country in the world posses the electronic register of wine (RTV).
- The operators in the wine supply chain shall register online the movements and processing of wine products.
- As of 31 December 2020, 17,000 registered operators on RTV and around 10% of them produce 1,000 or more hectoliters per year.
- Registered wine storing containers are about 615,000 and over 30 million operations are recorded annually.
- Since 2018, the ICQRF published the data of RTV in a report called "Cantina Italia" in an aggregated form every two weeks available on its website.

III.3. Developing legal and institutional framework for food traceability - The case of China (1/2)

Regulations on food traceability

- ▶ **Mandatory provisions** for all food producers and traders of all kinds of food.
- ▶ **Manuals on food traceability systems** to guide food operators on recording and documenting the specific information. And **National technical standards on traceability systems (Guobiao)** for voluntary application of traceability, including:
 - General requirements for traceability system
 - Specifications for traceability management platform construction
 - Management requirement for traceability in food cold chain logistics
 - General specification for traceability of E-commerce transaction product.

Regulations enabling the application of technologies

- ▶ Recommended technical standards on some applicable technologies (e.g. QR code, RFID, etc.)
- ▶ Recommended national technical standards on implementing digital traceability system: Guobiao national standards: General technical requirement for QR code of food traceability

Institutional framework for food traceability

At national level: 2 competent ministries

- ▶ **SAMR:** responsible for
 - coordination of China's food safety system;
 - development of major food safety related laws, policies, and regulations
 - implementation of market inspections; and registration of special foods.
- ▶ **MARA:** responsible for regulating the quality and safety of domestic agricultural products (at pre-processing stages).

At provincial level: provinces, cities, counties.

- ▶ Responsible for formulating measures, conducting pilot projects tailored for local conditions.

III.3. Developing legal and institutional framework for food traceability - The case of China (2/2)

Initiatives by the government

Invested in and established national and provincial traceability systems:

- ▶ **The National Agricultural Products Quality and Safety Traceability Management Information Platform** - connect all traceability systems into one singular database to provide the public a singular unified query portal to quickly, and in real-time, identify the traceable data of agricultural products.
- ▶ **Other provincial traceability systems** for meat and vegetable supply chains have also been set up in about 50 cities since 2010.

National Agricultural Products Quality and Safety Traceability Management Information Platform

- ❖ Effort of the China Government to connect all traceability systems into one singular database for better control and monitor of regulatory agencies.
- ❖ The data of provincial traceability platforms can be exchanged and shared with the national platform so the consumer can query the detailed traceability data from a single database.
- ❖ There are 4 main stakeholders that use this system:
 - Agricultural products producers
 - Law enforcement agencies
- ❖ The system provides the public a singular unified query portal to quickly, and in real-time, identify the traceable data of agricultural products. The technologies includes: 2D codes (QR code), mobile apps and ICT cloud systems.

Pilot Project for a System to Trace the Quality of Beijing Vegetable Products (2004)

- ❖ Earliest project to create a food traceability system in China.
- ❖ The project selected 6 counties in Hebei as a base of vegetable production to implement unified packaging and product traceability labels.

Meat and Vegetable Distribution Traceability System (2010 - Present)

- ❖ Aim to cover all cities with a population of more than million (50 cities)
- ❖ Aim to cover meat, vegetables, livestock, marine products, fruit, edible fungi, soy products, and other types of food
- ❖ GOV spent 1.86 billion yuan (approximately 300 million USD / 6,600 billion VND) to promote the system.

Beijing Olympics Food Traceability System (2008)

- ❖ Integrated use of numerous technologies: RFID, GPS, automatic temperature recording and control, humidity control, and encrypted communication.
- ❖ Track and record a host of information on food, including its production, processing, transportation, and storage.

III.4. Developing legal and institutional framework for food traceability - The case of Korea (1/2)

Regulations on food traceability

- ▶ **Mandatory for specific products:** (1) high-risk products (i.e. baby formula, livestock products and health functional food), (2) products of large-scale operators, (3) products relating to Government. Other food operators are encouraged to participate.
- ▶ **Detailed traceability standards** regarding traceability information, traceability requirements.

Regulations enabling the application of technologies

- ▶ **Mandatory:** Requiring the application of electronic devices. For livestock products, ear tag at production stage is compulsory
- ▶ **Recommended technical standards** on implementing digital traceability system: GS1 Korea

Institutional framework for food traceability

At national level: 2 competent ministries

- ▶ **MFDS:** responsible for registered foods under the Act on Food Sanitation
- ▶ **MAFRA:** responsible for registered foods under the Act on Agricultural and Fishery Products Quality Control.

At provincial level: responsible for registration of traceability products, inspection on their compliance regularly, supervise product recall outcome of food operators, reporting to ministries.

- ▶ Local Food and Drug Administrations (working under MFDS)
- ▶ National Agricultural Product Quality Management Service (NAQS)
- ▶ Related local government agencies.

III.4. Developing legal and institutional framework for food traceability - The case of Korea (2/2)

Initiatives by the government

Invested in and established 2 national traceability systems:

- ▶ **Agricultural History Tracking Management System** (under MAFRA) - central portal to identify and track traceability products.
- ▶ **Unsafe Product Screening System - UPSS** (under MFDS) for banning sales of non-compliant products as reported by government inspectors.

Agricultural History Tracking Management System (AHTM)

Total investment on the Agricultural History Tracking Management System is KRW 1.8 billion (approx. VND 37.2 billion). The system is operated under the management of the MAFRA; however, it is not mandatory.

Participants: Currently the system has voluntary participants from producers (Individual farmhouse, agricultural association, cooperatives), collectors (cooperatives, manufacturing companies, exporters), sale Channels (agricultural cooperatives, supermarkets, minimarts, exporters, etc.).



Unsafe Product Screening System (UPSS)

UPSS is designed to utilize information about unsafe products reported and shared by government inspectors to block the sale of unsafe products. The system is operated by GS1 Korea (under KCCI) in collaboration with three relevant government bodies (including MFDS), this system is also not mandatory.

Participants: As of 2019, a total of 173,708 stores use the UPSS across the country, ranging from large scale retailers including hypermarkets and department stores to small to medium sized businesses such as supermarkets and convenience stores.



III.5. Developing legal and institutional framework for food traceability - Lessons learnt for Vietnam (1/3)

Challenges in applying traceability for F&V supply chains in Vietnam		International practices review
Policy and Regulations	Lack of guidance/ standards for some specific group of F&V products	<p>EU, Italy, Korea and China have requirements towards high-risk, high-value or signature F&V products.</p> <ul style="list-style-type: none"> ▶ EU has specific requirements on traceability towards high-risk products: sprouts and seeds intended for the production of sprouts. ▶ Italy follows EU requirements regarding traceability of sprouts and seeds intended for the production of sprouts, and also focuses on traceability of their signature and high-value products: olive oil and wine. ▶ Korea has specific requirements on traceability for products relating to government: agro-products purchased or imported or processed by/on behalf of the Government. ▶ China has specific national standards on traceability for their signature product: tea. Besides, China Government also promotes traceability standards for cold-chain activities and e-commerce transactions.
	Lack of resources for inspection/check on the compliance with traceability regulations	<ul style="list-style-type: none"> ▶ Italy: performing thousands of checks on compliance of food operators with traceability every year. The inspectors are well trained with traceability requirements. ▶ China: after recent issuance of national technical standards on traceability, has planned to conduct training for their inspection workforce.

III.5. Developing legal and institutional framework for food traceability - Lessons learnt for Vietnam (2/3)

Challenges in applying traceability for F&V supply chains in Vietnam		International practices review
Application of traceability technology and systems	Public traceability system: (i) National traceability system is not implemented (planned only); (ii) Provincial systems are implemented but with limited users.	<p>National traceability systems help reduce the costs of product recall and enhance information transparency.</p> <ul style="list-style-type: none"> ▶ EU: (i) system for animal products and (ii) system for sharing food safety information among EU members ▶ Italy: systems for (i) olive oil and (ii) wine ▶ China: (i) national system agricultural product and (ii) provincial systems for meat and vegetable products. ▶ Korea: (i) systems for banning sales of non-compliant products and (ii) systems for agricultural products.
	Private traceability systems are mainly applied by exporters and some domestic large-scale companies	

III.5. Developing legal and institutional framework for food traceability - Lessons learnt for Vietnam (3/3)

Challenges in applying traceability for F&V supply chains in Vietnam		International practices review
Existing capacities of supply chain stakeholders	<p>Lack of financial and technical capacities from supply chains stakeholders to implement digital traceability system</p> <p>Lack of ability to access international standards and export markets' requirements</p>	<p>Regarding financial capacities</p> <ul style="list-style-type: none"> ▶ Users with lack of financial capacities may join the national traceability systems invested and implemented by the government that meet minimum requirements to perform traceability. In China, the fees are offered at low rate <p>Regarding technical capacities</p> <ul style="list-style-type: none"> ▶ These markets establish guidance on the application of traceability system and digital traceability systems for user to learn from. ▶ In China, QR-code are widely promoted and used by both major retailers and street markets due to its low implementation costs and ease of application.
Public awareness	Low public awareness	<ul style="list-style-type: none"> ▶ In Korea, for 20 years, annual Food Safety Day has been held by MFDS to raise public interest in food safety and promote safety awareness of food-related workers.



Section IV.

Potential intervention areas for policy and regulatory reform

- Potential intervention areas
- Proposed plan for key intervention areas

IV.1. Potential intervention areas (1/5)

Policy and Regulations

Challenges	International practices review	Proposed intervention areas for Vietnam
Lack of guidance/ standards for some specific group of F&V products	<p>EU, Italy, Korea and China have requirements towards high-risk, high-value or signature F&V products.</p> <ul style="list-style-type: none">▶ EU has specific requirements on traceability towards high-risk products: sprouts and seeds intended for the production of sprouts.▶ Italy follows EU requirements regarding traceability of sprouts and seeds intended for the production of sprouts, and also focuses on traceability of their signature and high-value products: olive oil and wine.▶ Korea has specific requirements on traceability for products relating to government: agro-products purchased or imported or processed by/on behalf of the Government.▶ China has specific national standards on traceability for their signature product: tea. Besides, China Government also promotes traceability standards for cold-chain activities and e-commerce transactions.	<ul style="list-style-type: none">▶ Develop specific traceability guidance (voluntary technical standards) targeting signature products, including those are provincial specialty (including products under OCOP program) and those awarded with geographic indications by Vietnam Government or by other countries.▶ Specific guidance for activities which largely involved in F&V supply chains and having potential to apply digital technologies are also encouraged.

IV.1. Potential intervention areas (2/5)

Policy and Regulations

Challenges	International practices review	Proposed intervention areas for Vietnam
Lack of resources for inspection/check on the compliance with traceability regulations	<ul style="list-style-type: none"> ▶ Italy: performing thousands of checks on compliance of food operators with traceability every year. The inspectors are well trained with traceability requirements. ▶ China: after recent issuance of national technical standards on traceability, has planned to conduct training for their inspection workforce. 	<ul style="list-style-type: none"> ▶ Mainstreaming training of traceability requirements into food safety regulations for the inspection workforce by conducting trainings.

Application of traceability technology and systems

Challenges	International practices review	Proposed intervention areas for Vietnam
Private traceability systems are mainly applied by exporters and domestic large-scale companies		<ul style="list-style-type: none"> ▶ Raising awareness of supply chain stakeholders (especially those operating in less formal segment) regarding traceability application via conducting national/regional events or coordinating with existing food safety program to include traceability contents.

IV.1. Potential intervention areas (3/5)

Application of traceability technology and systems

Challenges	International practices review	Proposed intervention areas for Vietnam
<p>Public traceability system: (i) National traceability system is not implemented (planned only); (ii) Provincial systems are implemented but with limited users.</p>	<p>National traceability systems help reduce the costs of product recall and enhance information transparency.</p> <ul style="list-style-type: none"> ▶ EU: (i) system for animal products and (ii) system for sharing food safety information among EU members ▶ Italy: systems for (i) olive oil and (ii) wine ▶ China: (i) national system agricultural product and (ii) provincial systems for meat and vegetable products. ▶ Korea: (i) systems for banning sales of non-compliant products and (ii) systems for agricultural products. 	<p>There is a need to implement national traceability system. However, the following notes should be taken into consideration by the Vietnam Government:</p> <ul style="list-style-type: none"> ▶ The implementation of national traceability system regarding the scale and technology deployment depends on the current capacity of Vietnam. <i>E.g.: the system implemented in China offers users mobile application and web dashboard to input data to the system which can be easy to be obtained by most stakeholders of the supply chain.</i> ▶ The national system may require Vietnam Government to build competent and trained team with clear institutional arrangement. ▶ Raising awareness of related government agencies and supply chain stakeholders regarding the national traceability system. ▶ In short term, implementing pilot traceability systems implemented at provincial level targeting signature products, including those are provincial specialty (including products under OCOP program), or those awarded with geographic indications by Vietnam Government or by other countries, or high-risk, high value products.

IV.1. Potential intervention areas (4/5)

Existing capacities of supply chain stakeholders & Public awareness

Challenges	International practices review	Proposed intervention areas for Vietnam
<ul style="list-style-type: none"> ▶ Lack of financial and technical capacities from supply chains stakeholders to implement digital traceability system ▶ Lack of ability to access international standards and export markets' requirements 	<p>Regarding financial capacities</p> <ul style="list-style-type: none"> ▶ Users with lack of financial capacities may join the national traceability systems invested and implemented by the government that meet minimum requirements to perform traceability. In China, the fees are offered at low rate <p>Regarding technical capacities</p> <ul style="list-style-type: none"> ▶ These markets establish guidance on the application of traceability system and digital traceability systems for user to learn from. ▶ In China, QR-code are widely promoted and used by both major retailers and street markets due to its low implementation costs and ease of application. 	<p>Capacity building for less formal stakeholders are essential.</p> <ul style="list-style-type: none"> ▶ Capacity building activities may include holding national/regional events and training courses for F&V supply chain stakeholders to enhance the general technical knowledge, to promote the application of digital technologies in traceability and to promote the application of national standards/ guidance on applying some possible digital technologies. ▶ In addition, competent authorities may coordinate with specialized associations such as Vietnam Digital Agriculture Association (VIDA) in holding and promoting capacity building events to improve technical knowledge of food operators, especially those in less formal markets as well as to disseminate knowledge regarding international standards and export markets' requirement <p>For stakeholders with less financial and technical capacities.</p> <ul style="list-style-type: none"> ▶ Promote the use of national traceability system. ▶ Promote the adoption of more manual traceability systems (involvement of some common technologies with low implementation cost such as barcode, QR code, mobile application).

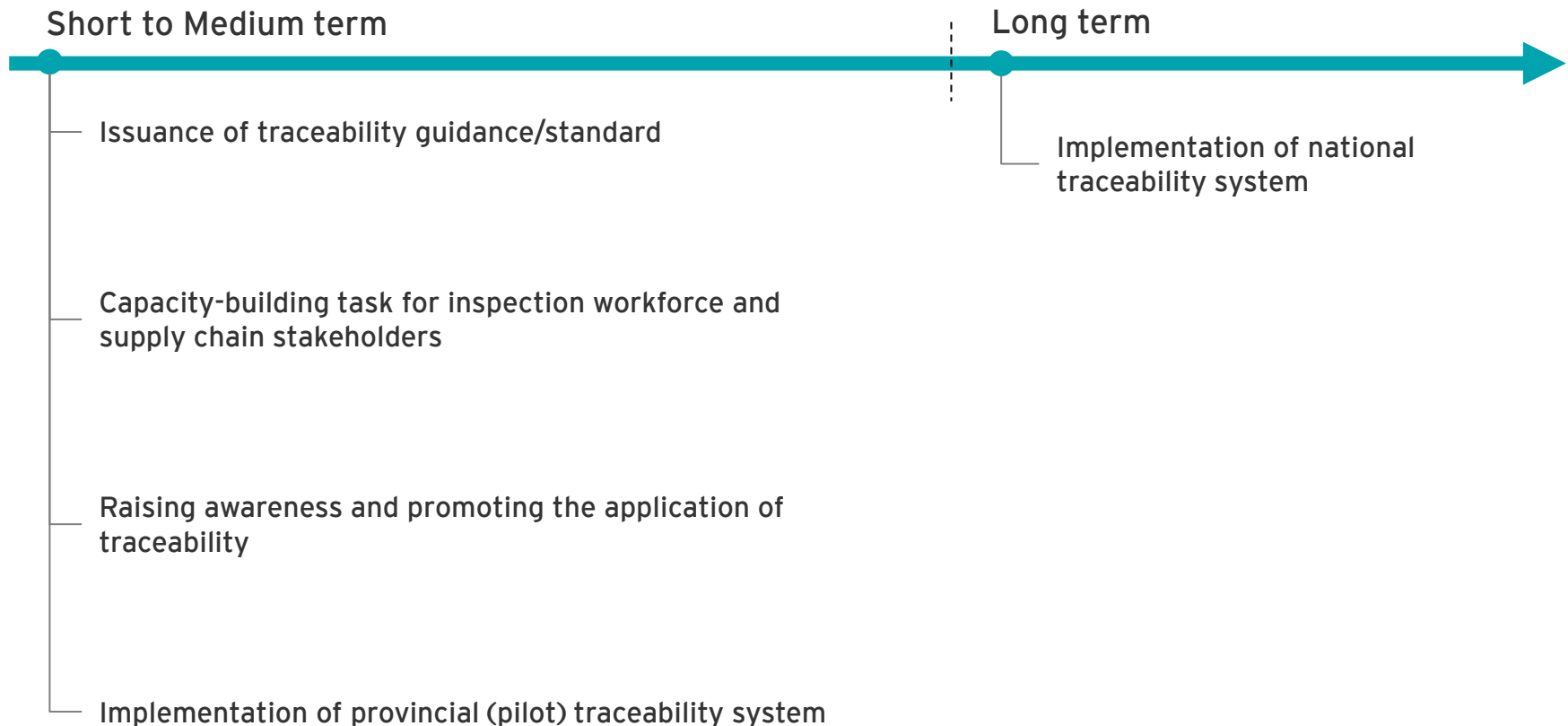
IV.1. Potential intervention areas (5/5)

Public awareness

Challenges	International practices review	Proposed intervention areas for Vietnam
Low public awareness	In Korea, for 20 years, annual Food Safety Day has been held by MFDS to raise public interest in food safety and promote safety awareness of food-related workers.	<ul style="list-style-type: none">▶ Disseminate knowledge and enhance consumers' awareness of food traceability via national/regional food safety events.▶ Promote the benefits of food traceability to the public.

IV.2. Proposed plan for key intervention areas

**Note: Some key intervention areas could be exercised in short-to-medium term, but some do require longer period of time to be implemented. Taking that into consideration, the table below presents our proposed plan for the Vietnam Government for the enhancement of digital traceability application situation of Vietnam.*



Q&A session

Thank you for listening!