National Training on Electronic Traceability for Trade Facilitation and Smallholder Integration

Settha Palace Hotel, Vientiane, Lao PDR
13–15 August 2014

This report describes training and workshop activities during the “National Training on Electronic Traceability for Trade Facilitation and Smallholder Integration”, held at Settha Palace Hotel, Vientiane, Lao PDR, from 13–15 August 2014. The report summarises the outcomes and discusses good practice and future training needs.

The report comprises the following sections:

1. Objectives and participation
2. The training programme and participant activities
3. Key findings from the discussions during the training
4. Evaluation of the participants’ knowledge on the topic
5. Looking ahead
6. Concluding remarks

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Programme

**Day 1 – What is E-Traceability**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
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<tr>
<td>09:00-09:20</td>
<td>Welcome address:</td>
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<tr>
<td></td>
<td>Mr. Yann Duval, Chief, Trade Facilitation, UN Economic and Social Commission for Asia and the Pacific (ESCAP)</td>
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<td>Mr. Xaypladeth Choulamany, Director General, Department of Planning and Cooperation, Ministry of Agriculture and Forestry</td>
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<td>09:20-09:50</td>
<td>Introduction of participants and scope of the training</td>
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<td>09:50-10:10</td>
<td>Agricultural trade facilitation and findings from a business process analysis study in Lao PDR, Yann Duval, ESCAP</td>
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<td>10:10-10:30</td>
<td>The importance of e-traceability for inclusive, safe, accessible food production for the world market, Gwynneth Foster</td>
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<td>10:30-10:50</td>
<td>Tea/coffee break</td>
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<td>10:50-12:00</td>
<td><strong>Session 1: Electronic traceability: the theory, Gwynneth Foster</strong></td>
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<td>• Traceability concepts</td>
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<td>• Stakeholder views</td>
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<td>• Why traceability is important</td>
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<td>Discussion of the presented material with attendees</td>
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<td>12:00-13:00</td>
<td>Lunch and networking opportunity</td>
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<td>13:00-14:30</td>
<td><strong>Session 2: Electronic traceability: the theory (continued), Gwynneth Foster</strong></td>
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<td>• Traceability principles</td>
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<td>• Implementing traceability</td>
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<td>• Stakeholder benefits of electronic traceability</td>
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<td>14:30-15:00</td>
<td>Tea/coffee break</td>
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<td>15:00-16:00</td>
<td><strong>Session 3: Electronic Traceability in Lao</strong></td>
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<td></td>
<td>• Electronic traceability initiatives and smallholder integration in Lao: Challenges and opportunities, Mr. Thonevichith Naphayvunh, Head of Lao Farmer Network, ACBPE</td>
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<td></td>
<td>• Relevant experiences and lessons learned of traceability implementation and future direction/way forward (related to animal tracking, food and feed traceability, eSPS, food trade with large importing blocks etc.), Mr. Somphe Buaphanthavong, Marketing and customer relationship, Vanida Rice Mill/ Khamnuanphathana Rice miller group Khammuoane</td>
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<tr>
<td>16:00-16:30</td>
<td>Recap of the day and feedback from the participants</td>
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**Day 2 – Design and Implementation of E-Traceability Systems**

09:00-09:15 Recap of Day 1

09:15-10:30 **Session 4: Food information systems and their design, Gwynneth Foster**
- Functional management of chain food information systems
- Levels of traceability data
- The role of regulations in the establishment of paperless systems
- Food Business Operators (definition)
- Systematic view of a Food Information and Traceability Framework

10:30-11:00 Tea/coffee break

11:00-12:00 **Session 5: Examples of traceability systems, Gwynneth Foster**
- Livestock (South Africa)
- Chicken (China)
- Export grapes (India)

12:00-13:00 Lunch and networking opportunity

13:00-16:00 **Session 6: Practical exercise in groups, Gwynneth Foster**
- Group 1: Draw a supply chain for farmed fish
- Group 2: Draw a supply chain for rice
- Group 3: Draw a supply chain for cabbage
- Group 4: Draw a supply chain for pigs
- Group 5: Draw a supply chain for cows
- Each group present the supply chain to the other participants

**Day 3 – Implementation of Traceability**

09:00-09:15 Recap of Day 2

09:15-10:30 **Session 6: Chain Food Information Systems Management, Gwynneth Foster**
- Complex relationships and a standardized trading ecosphere
- Standards: Codex Alimentarius; HACCP; ISO; GLOBALG.A.P.; GS1; data carriers; TraceFood

10:30-11:00 Tea/coffee break

11:00-12:15 **Session 7: Supporting smallholder farmers, Gwynneth Foster**
- Case studies:
  - Etrace (Egypt)
  - Agriculture Operations Centre (Phare Province, Thailand)

12:15-13:15 Lunch and networking opportunity

13:15-15:00 **Session 8: Practical exercise: Looking ahead, Gwynneth Foster**
- In the same groups, consider the relevance of e-traceability, the benefits to stakeholders, expected obstacles to implementation and possible solutions.
- Present the outcomes to the other participants.

15:00-15:30 Tea/coffee break

15:30-16:00 Recap of the day and feedback from the participants

16:00-16:30 Closing
The training in Vientiane, Lao PDR, was the fifth in a series of training sessions on “Electronic Traceability for Trade Facilitation and Smallholder Integration”, conducted by the Trade Facilitation Unit, Trade and Investment Division, of the UN Economic and Social Commission for Asia and the Pacific (ESCAP). Previous sessions in the series were conducted by Dr Heiner Lehr, in Bangladesh, Bhutan, Myanmar and Nepal. The training in Lao PDR was conducted by Ms. Gwynne Foster.

This report describes the training in Vientiane, Lao PDR, under the following headings:

1. Objectives and participation
2. The training programme and participant activities
3. Key findings from the discussions during the training
4. Evaluation of the participants’ knowledge on the topic
5. Looking ahead
   – Identification of good practice in traceability (or e-traceability)
   – Further training needs on electronic traceability or related topics
   – Recommendations for integrating smallholders into e-traceability systems
6. Concluding remarks

1. Objectives and participation

The motivation for the training was to improve trade facilitation through moving from paper-based to electronic documentation, including through implementation of electronic traceability. The topic of electronic traceability is highly technical and specialized, and it was known before the training that some participants might not be familiar with the subject. Key objectives for the training were thus to introduce participants to electronic traceability and to enable them to consider its application to their respective areas of interest.

Thirty four people took part in the training, including senior personnel from the Ministry of Agriculture and Forestry and from ESCAP who presented and attended selected sessions. Participants represented planning, technical, compliance and trade functions from Vientiane and several provinces in the following organisations:

   – Ministry of Foreign Affairs;
   – Ministry of Industry and Commerce (MOIC);
   – Ministry of Agriculture and Forestry (MAF);
   – The National Agricultural and Forestry Research Institute.

Representatives of Vanida Rice Mill and Lao Agro Processing Association participated from the private sector. Other participants were members of ESCAP Secretariat, and a translator.

2. The training programme and participant activities

The programme prepared for the training follows the pattern of that in previous countries.
The original programme and some materials were adjusted to reduce the level of technical detail, to introduce new examples and different case studies, and to accommodate the extra time needed for translations. The nature of the practical exercises was also changed.

The revised programme and brief descriptions of each session follow. Some of the topics on the original list were not discussed, and materials for both the original and revised programmes will be provided so that interested participants have access to a full set of information, and to support further activities.

<table>
<thead>
<tr>
<th>Day 1 – What is E-Traceability</th>
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<tr>
<td><strong>Introductory session:</strong></td>
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<td>The opening address was delivered by Mr. Soudchay Nhoyvanisvong, Ministry of Agriculture and Forestry Director: Department of Planning and Cooperation, Division of International Cooperation. He discussed the importance of sustainable agriculture and simplifying trade, that traceability from farm to fork supports food safety, and the need for information to be in electronic form in order to move easily across borders. He wished that – by the end of the workshop – participants and Lao PDR would be a step closer to understanding and implementing electronic traceability.</td>
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<tr>
<td>The welcome address was delivered by Ms. Maame Agyeben, Associate Economic Affairs Officer from the Trade Facilitation Unit, Trade and Investment Division, ESCAP. The training would raise awareness amongst participants of electronic traceability and what it entailed. ESCAP would be available to support Lao going forward, with planning, finding gaps and setting priorities.</td>
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<tr>
<td>Participants introduced themselves.</td>
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| Keynote speech: |
| Mr Yann Duval, Chief of Trade Facilitation Unit, Trade and Investment Division, ESCAP, delivered a presentation titled “Agricultural trade facilitation and findings from a business process analysis study in Lao PDR”. Trade Facilitation makes it easier and cheaper for all to participate in international trade. He discussed findings from a Business Process Analysis (BPA) conducted in Lao PDR that examined importing animal feed and exporting maize. Agri-food products are subject to extensive documentation and information requirements, due to health and safety concerns. The ability to trace the origin of agri-food products is necessary to gain access to international markets. Moving from paper-based to paperless (electronic) trade is important for facilitating trade, and to meet increased product and transaction information requirements. This contributed to the motivation for this first e-Traceability training workshop in Laos. |

| Trace session 01: The smarter food vision |
| The first session in the training programme reinforced the importance of food safety in the global food trade system, using the European Union as an example. With electronic systems, information is more easily accessible than with paper-based systems, and one can build an information chain. Electronic systems enable a vision of “smarter food”, which is inclusive, safe and traceable. |
Day 1 – What is E-Traceability

**Trace session 02: Electronic traceability: the theory**

The remaining sessions in Day 1 considered the theory of electronic traceability. Topics included: Traceability concepts; Stakeholder views; Why traceability is important; Traceability principles; Implementing traceability; and Stakeholder benefits of electronic traceability. Videos, photographs and case studies reinforced key points from the discussion.

Additional information on the implementation steps and the types of traceability systems was provided in the presentation materials.

The participants were asked to name products of interest. The products identified were: bananas; cabbages; cassava; corn/maize; cows; farmed fish; pigs; pineapples; rice; rubber; sesame; soybean; sugar cane; tobacco; and vegetables.

**Participant presentation 01**: A participant from the private sector presented a rice mill as a Lao case study. Key points from the feedback reports are considered in the “findings” section that follows.

Day 2 – Design and Implementation of E-Traceability Systems

**Participant presentation 02**: A participant introduced the Lao Farmer Network.

**Trace session 03: Food information systems and their design**

Session 3 considered food information systems. Topics included: functional management of chain food information systems; levels of traceability data; the role of regulations in the establishment of paperless systems; and a systematic view of a Food Information and Traceability Framework.

The following case studies were used to illustrate different traceability systems: a) Livestock in South Africa (the GMPBasic system); b) Internal controls at a chicken processor in China; and c) Export grapes from India (APEDA’s system to control residue levels on exported grapes).

Additional examples were provided in the presentation materials.

**Group exercise 01: Supply chain diagrammes for selected products**

The participants formed 5 groups. The groups each selected a product, prepared supply chain diagrammes and presented the results. Products were farmed fish, rice, cabbage, pigs and cows.

Key points from the feedback reports are considered in the “findings” section that follows.

We closed Day 2 of the training after the feedback presentations.

Day 3 – Implementing Traceability

**Trace session 04: Chain food information systems management**

Training on Day 3 introduced the fact that electronic messages cross country boundaries (originating countries and receiving countries) and different levels (government, business and individual citizen, customer or consumer). This creates complex relationships, which encourages a standardized trading environment and communications disciplines.

Relevant international standards discussed were: Codex Alimentarius; HACCP; ISO; GLOBALG.A.P.; GS1; and TraceFood. (Additional standards are provided in the presentation materials.)

**Trace session 05: Supporting smallholder farmers**

Two case studies were used to illustrate approaches that other countries had taken to enable smallholder farmers and agricultural industries to meet market requirements: the Etrace
Day 3 – Implementing Traceability

programme in Egypt, and an Agriculture Operations Centre project in Phare Province, Thailand.

Group exercise 02: The way forward

Participant groups were asked to rate the importance of electronic traceability to Lao PDR and their areas of interest; consider what would be needed to implement traceability for the selected products and present the findings to the group.

The results are considered in the “findings” section that follows.

Closing session:

The training concluded with a brief recap of the topics and activities during the 3 days.

Ms. Maame Agyeben from ESCAP gave final remarks and thanks. She reiterated that ESCAP would be available to support Lao PDR with planning the way forward.

The closing presentation was delivered by Mr. Soudchay Nhoyvanisvong, MAF: Director: Department of Planning and Cooperation, Division of International Cooperation. Certificates were issued to participants.

That concluded the workshop activities.

3. Key findings from the discussions during the training

The presentations on the rice mill and Lao Farmer Network, and the practical exercises, gave participants the opportunity to consider how e-traceability might apply to their own situations and areas, and to express their thoughts to the group. The groups demonstrated a good understanding of the production and trading environments for the products selected. There was active participation and discussion was lively.

Summaries follow of key points made during the respective discussions.

Presentations on Lao organisations

– Rice mill:

The rice from Lao has good qualities, e.g. the fragrance of Jasmine rice and the benefits of largely organic production compared with neighbouring countries that use chemicals.

The milling company works with local farmers. They participate in projects and have been granted foreign aid. Assistance from SNV helped them to meet market requirements. Provincial government provides technical and policy support. Products are exported directly to some countries, under the company’s own labels. Exports to Europe are via a company in Thailand, under that company’s label.

Issues raised included that other countries in the region dump products in Lao, which reduces the price for the farmers, and that middlemen traders buy harvested crop from producers who have been given seed, which reduces the product expected by the mill.

– Lao Farmer Network:

The Lao Farmer Network was formed early in 2014. The Network now operates in 10 provinces and its members include households, families and trade (not big companies). The aim of the Network is to share experiences between members, and enable farmers
to access markets and funding. The farmers are not organised by the Network. MAF
endorses the organisation. The Network is working with ASEAN.

There are many different products, including handicraft, bamboo, rice, organic coffee
and vegetables. The production of farmers is very small scale. They have set a target to
expand food production and export to international markets by 2015.

Challenges include establishment of the organisation, e.g. a legal framework for the
association and office premises. Meetings are held in homes. Some committee
members do not speak English and literacy levels vary. The cost of meetings is high e.g.
for translators. Some members are not experienced in formal meetings. Not all farmer
networks and provinces are represented, so there is work to be done on membership.

Electronic traceability is new, and they would need to get the reaction of farmers. They
would need support and funding.

Supply chain discussions and presentations from participant groups

The first practical exercise asked participants to select a product and, in groups, draw the
associated supply chain. This allowed people from different areas, interests, age groups and
experience to share a common discussion. A member of each group presented the outcome
and key points from the group discussion.

Participant groups selected farmed fish, rice, cabbage, pigs and cows for the supply chain
exercise. These were snapshot case studies of the industries as seen by the members of the
respective groups. Questions and comments from other participants highlighted that there
are alternate scenarios to those presented, for example in different provinces.

Extracts from the supply chain presentations follow.

- Farmed fish case study: Coordination of farmers and other stakeholders could be
difficult. There is no overall organisation or association. Local NPOs and NGOs work
with farmers. Some feed is imported. Farmers may sell directly to customers. There are
middlemen and agents from other countries e.g. Thailand. Provincial Technical Offices
could support implementations. Include Border Control Officers in discussions. The
group asked how to approach traceability of farmed fish under these circumstances.

- Rice case study: There are 14 types of rice in Lao – different provinces grow different
varieties. Rice is produced on community land and privately owned land. There are
some contract farmers. Farms are not easily accessible. No chemicals are used in the
plantations. Agents buy from people at the paddy field. MAF and the MOIC support rice
projects. Government negotiates the price with buyers. There is a public-private
partnership to produce [a variety of] rice for beer. Traders buy at the price set by
government, although sometimes they break the rules. The Bill of Clearance depends on
who owns the land. Questions to be answered include how e-traceability will be
implemented, how it will be funded and how the farmers will benefit.
- **Cabbage case study:** A customer contracts farmers to grow cabbages. Farmers have worked on this basis since year 2000. The customer requires producers to conform to Good Agricultural Practice (GAP) standard. Seed is imported from Japan, via Thailand. Nurseries are under shade or on open land. A greenhouse is in process, which will be covered with shade net. Chemicals are used in production. Farmers stop using chemicals 2 months before the harvest. The records from clearing to harvesting are according to GAP. The daily growth is recorded, and the condition of the plants. Information is sent to the customer before the harvest. Cabbages are graded according to weight and packed into bags. The bags are all the same weight. The customer brings a team to inspect the harvest and packing. The product is handed to the customer once packed. Certificates of origin and risk assessments are needed as the cabbages are exported to other countries. Each country (e.g. China and Vietnam) has different forms and requirements. There is a new “Form D” for products exported to ASEAN countries. The different Lao provinces also have different types of documents. There is no tax on cabbages, which is an advantage over e.g. coffee. A new request is for nutritional value. Human resources capacity is always an issue e.g. a nutritionist.

- **Pig case study:** The group gave technical details of pig production. Government develops the legal framework and master plan for LAO agricultural land use. There are private sector organisations and a technical association. Quality control is important. Feed includes concentrates in pellet form. There needs to be access to veterinary service. Getting credit and capital investment are challenges. Market access and customs can also be a challenge.

- **Cow case study:** There are 3 main stakeholders in the cows sector: the producer, government and the buyer. MAF provides technical support and MOIC facilitates documents. The production procedure considers the breed, the area, available labour, the technique, and information requirements. The farmers grow grass for feed. Government supports farmers: Large cows, that reach a good size for meat, are sold by the kilogram. Some provinces have a quota. To export a live cow they need a certificate of origin, movement specification, export permit and delivery documents. They take the cows to the border and clear the products there. The customer has a look at the date of birth and which farm reared the cow, and evaluates the health of the animal. The animal is handed over if the customer is happy.

The examples of businesses and production that were presented by participants and groups would all be candidate case studies for a detailed Traceability Business Process Analysis.
Practical exercise: Looking ahead – the way forward

In the second practical exercise, participants assessed the importance of electronic traceability and considered how it might be implemented in Lao. The participants worked in the groups formed the previous day. The following questions guided the discussion:

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<tbody>
<tr>
<td>1. How relevant is e-traceability to Lao?</td>
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<td>2. How relevant is e-traceability to your area of activity?</td>
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**Considering the product exercises yesterday . . .**

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<td>3. What benefits would stakeholders get if they implement traceability?</td>
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<td>4. What obstacles and problems would you expect in trying to implement traceability?</td>
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<td>5. How could the obstacles and problems be addressed?</td>
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Each group presented its assessment and reasoning, as well as concerns and suggestions.

**Points raised by the groups during feedback presentations**

**i. Relevance of e-traceability:**

E-traceability was assessed by all groups to be important to Lao PDR, as well as to respective sectors and areas of interest. It would help to expand the agribusiness sector by supporting marketing planning and trade promotion and facilitation. It would be beneficial to the relationship with ASEAN. The quality of products would improve, as would reliability of services such as transport. The value of the Lao brand would increase. It would provide a tool to collect information about food products. Government agencies would be able to interact more effectively with other agencies, agribusinesses and stakeholders. E-traceability would enforce accountability and make it easier to monitor the trading process.

**ii. Benefits to stakeholders of implementing e-traceability:**

A broad range of benefits relating to e-traceability were identified. There would be improved coordination between government departments and between government and the private sector. Less labour, cost and time would be spent gathering information. The private sector would be able to access information in a timely manner. Implementing e-traceability would help to expand existing markets and to access new markets. Customers and consumers would be better informed and trust the products. The sustainability of the business sector would be increased and business relationships would be improved, especially when trying to find new markets for products. Producers could plan production better if they know the requirements of specific markets. E-traceability would help to protect Lao products from counterfeit goods.
iii. **Obstacles to implementing e-traceability:**

This is a new area of work - implementing e-traceability would take time and there would be delays. There is a lack of relevant experience and human capacity. IT skills and infrastructure are not available in farming areas. Getting all stakeholders involved would be a challenge, for example this would include middlemen and traders. Farmers in many areas are not well organised. The impact of natural disasters must be taken into account. Gathering the information required from farm level could be difficult. There is no legal framework for e-traceability and new laws would need to be developed. Funding the implementation of e-traceability and the associated skills development and capacity building would need to come from government as farmers are unable to do so.

iv. **Suggestions on how to approach the implementation of e-traceability**

- In addition to the agricultural sector, there is also a need to include the industrial sector.
- We need contextualisation - experts need to show us how this will work in the Lao context.
- Similar trainings should be held, in order to create awareness about e-traceability amongst all stakeholders. The decision-makers should participate in the trainings. Training should be held in provinces.
- Multiple stakeholders should be involved in activities. The mandate of stakeholders should be increased to include e-traceability.
- The skills to manage the information transfers would need to be developed. Implementations would need to be funded.
- The Ministry of Transport must be involved as it oversees the IT system in Lao.
- The Ministry of Education should also be involved as it this will involve universities, learning and training.
- Trained staff must coordinate the implementation.
- We should start a project or case study.

The comments reflect the mood and thoughts after the training, and give a starting point for moving forward.

7. **Evaluation of the participants’ knowledge on the topic**

The training aimed to introduce participants to electronic traceability and to enable them to consider its application to their respective areas of interest.

Although language was a barrier to open interaction with most participants, the translator was competent and the comments during the practical exercises suggest that there is a
good grasp of the concept of e-traceability. The leaders in the group show appreciation of what it might take to implement e-traceability and how it might progress. There was active contribution by participants during the practical exercises.

8. Looking ahead

The sections below suggest the way forward:

**Identification of good practice in traceability (or e-traceability)**

Expectations of and good practice in traceability are well-defined. E-traceability is an approach to achieve traceability more effectively and efficiently than is possible using paper-based systems. A measure of performance relates to the amount of time allowed for products to be withdrawn or recalled should there be a serious threat to consumers.

The principles and standards of traceability and e-traceability systems were discussed in the training sessions and referenced in the materials and case studies. There are many more documents and examples available, including for specific sectors.

The main challenges facing traceability policy makers and practitioners are that each situation is different! The practices must take account of both production conditions and customer requirements. There are often multiple sources of products and multiple destinations. The challenge is thus to clearly define the requirements and objectives of traceability in order to determine an appropriate approach.

**Further training needs on electronic traceability or related topics**

This training was an introductory overview of the subject, to make participants aware of what e-traceability is and what it entails, and to enable them to get an idea of what would be involved with an implementation. Each aspect of the training would need to be considered in detail, and warrant further training.

Traceability involves business, technical and administrative disciplines, and further training should be structured accordingly. National policy, sector norms and standards and legal requirements are influencing factors. E-traceability requires specialist information systems, and operators need to understand how to accurately record, manage and share information. Requirements and solutions would differ by commodity and stage in the process e.g. a live animal compared with a slaughtered carcass or pack of meat in a shop. Decisions include how to identify products and locations, and how to manage a product recall. Influencing factors would be the scope of traceability that is required and who is driving the process – government or the private sector.
This comes back to the importance of understanding the specific objectives of a traceability initiative. Determining this would require business analysis skills and facilitation skills. Only at that stage can the training programme be finalised. This applies equally to a national programme for Lao PDR, and an individual farming business.

**Recommendation for integrating smallholders into e-traceability systems**

The Indian system to control export grapes, the Egyptian Etrace programme and the Agriculture Operations Centre project in Phare Province, Thailand, which were presented to the participants, are examples of how other countries and communities have approached traceability and farmer and agribusiness support. The ASEAN influence might also be used to good effect.

This is a big subject, and it is recommended that the discussions need to progress to a firm concept in order to give sound advice. However, the trainer proposed the following considerations:

- Decide why e-traceability is important, the key drivers are and measures of success.
- Plan for a 10-year implementation process at a national level. The steps during the first 5 years would generally include formulating policy and the legal framework, determining the objectives, agreeing responsibilities and accountabilities, allocating resources, and constructing and conducting a series of proof of concept projects. The remaining 5 years would be go-live programmes and expanding the scope of the implementations.
- Develop sub-objectives and plans in selected industry sectors and locations.
- Establish the starting points. This is vital for all activities – the destination will be defined by the legal framework and market demands and objectives, however each farmer’s circumstances will be unique, different provinces have different procedures, local support capacity is specific to an area, there will be new disciplines, and so on.
- Develop multi-discipline traceability implementation teams at national-, provincial- and local level. Develop national sector advisory and monitoring teams.
- Develop e-traceability champions and give them authority. The implementations cut across multiple disciplines and parties, and it is difficult to keep momentum if allocated to a line function.
- Involve all stakeholders up front. This does not mean that all will be supportive! In particular, expect that the farmers might not be enthusiastic.
- Provide the necessary resources, including information infrastructure, skills and capacity, and funding.
- Adopt a fit-for-purpose approach and make sure that benefits are realised.
- Learn from others who have gone before. Maintain contact with organisations that have a regional view such as ASEAN.
- Build on the Business Process Analysis exercise already completed.
- Seek assistance in planning, analysing gaps and setting priorities from organization such as ESCAP.
9. Concluding remarks
Having good products is no longer all that is required to gain access to lucrative markets – the information and disciplines are becoming equally important. Traceability of food products “from farm to fork” is well established and has become a must-have for trading nations. E-traceability is becoming the norm in developed countries.

Lao PDR is well able to take this initiative forward. The level of commitment shown in relation to the training is impressive, as is the knowledge of the leaders. The respective groups showed a good appreciation of the industries and conditions in their provinces and areas of interest and operation.
Annex

Electronic Traceability for Agricultural Trade Facilitation and Smallholder Integration

References and further information

Vientiane, 13 – 15 August 2014
Training presentations

• The smarter food vision
  – Global Imports of Food, WTO http://www.wto.org
  – EU Food Imports, Eurostat http://epp.eurostat.ec.europa.eu

• Electronic traceability: the theory
  – Codex Alimentarius www.codexalimentarius.org
  – EU General Food Law http://ec.europa.eu/food/food/foodlaw/index_en.htm
  – ISO22005:2007 Traceability through the food and feed chain www.iso.org
  – Videos showing stakeholder views http://www.foodtraceability.eu
  – GS1 http://www.gs1.org/traceability
  – TraceFood http://tracefood.sintef.no
Training presentations

• Food information systems and their design
  – Food information systems  [www.tracefood.org](http://www.tracefood.org)
  – Livestock (South Africa) [www.gmpbasic.co.za](http://www.gmpbasic.co.za)
  – Export grapes (India) [www.apeda.gov.in](http://www.apeda.gov.in)
  – Palm Oil (RSPO) [www.rspo.org](http://www.rspo.org)

• Chain food information systems management
  – HACCP [www.fda.gov/Food/GuidanceRegulation/HACCP](http://www.fda.gov/Food/GuidanceRegulation/HACCP)
  – GLOBALG.A.P. [www.globalgap.org](http://www.globalgap.org)
Additional materials referenced by Dr Heiner Lehr

- Global Approaches to Traceability, report for ECR Russia (2013)

Communicating Food Safety, Authenticity and Consumer Choice. Field Experiences

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- Codex Alimentarius, CCFICS 2003, "Discussion paper on traceability/product tracing in the context of food import and export inspection and certification systems."
- ISO, ISO/DIS 22005, "Traceability in feed and food chain — General principles and basic requirements for system design and implementation"
- EU Common Food Law, 178/2002
- EU Feed Hygiene Regulation, 183/2005
- EU Feed Additive Regulation, 1831/2003
- Can-Trace, Can-Trace reference document
- CIES, "Implementing Traceability in the Food Supply Chain"
- ECR, ECR Blue Book, "Using Traceability in the Supply Chain to meet Consumer Safety Expectations"
- BRC, "Technical Standard for Companies Supplying Retailer Branded Food Products" (incorporating the old EFSIS standard)
- IFS, "International Food Standard"
- GS1, "The GS1 Traceability Standard"
- ... and many others
Thank you for your attention!

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