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# Checklist for Governments: LASTING AND SCALABLE SEAFOOD TRACEABILITY



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# CHECKLIST FOR GOVERNMENTS

TO ACHIEVE LASTING AND SCALABLE SEAFOOD TRACEABILITY

## BEFORE YOU BEGIN: NON-STARTERS AND POLITICAL CONSIDERATIONS

Although the science and practice of food traceability have increased globally over the last two decades, progress has not always been smooth or linear. In fact, in reviews of dozens of reports and interviews with numerous experts around the world, there were more examples of ‘glorious failures’ than ‘boring wins.’ In hindsight, interviewees often realized there were non-starters or political factors that were evident early in their efforts that caused the projects to fail. **Choosing solutions incompatible with existing infrastructure, using traceability exclusively or relying on regulation alone to motivate adoption were common non-starters across countries and commodities.** Be aware of political factors from the start that can derail projects into ‘glorious failures’ at later stages of implementation, even after pilot projects achieved or demonstrated technical or tactical feasibility (e.g., trade disputes, shifting markets, unexpected regulatory or enforcement changes, or country turmoil such as coups, regime changes). All these issues can be avoided through a strong emphasis on consulting all users of traceability solutions and data—data generators, first receivers, processors, exporters, importers, and end market regulators—early and often (see [SALT Principle: Be inclusive and collaborative with stakeholders](#)).

*Choosing solutions incompatible with existing infrastructure, using traceability exclusively as the motivation for adoption, or relying on regulation alone to motivate adoption were **common non-starters** across countries and commodities.*

This checklist was developed to support governments in designing and implementing lasting and scalable traceability systems in their seafood sectors. It compiles insights and advice gleaned from traceability experts from five continents and 32 published resources and case studies. After reviewing findings for common themes and factors that influenced or interfered with traceability, this checklist was created

for governments to consider, use, and revisit to avoid others’ “glorious failures” and work towards effective solutions. Scalable and lasting seafood traceability can be achieved by adhering to an iterative, 4-stage process outlined in this checklist and in conjunction with the [Comprehensive Traceability Principles and Pathway](#).

Governments should use this checklist to support traceability regardless of their starting point: whether no traceability currently exists; traceability only exists in pilots but has failed to expand; or traceability system expansion has stalled or declined, and noncompliance is on the rise. Once the traceability system has expanded governments need to return to this list every 3-5 years to re-evaluate performance and identify areas where re-calibration is needed to enhance or sustain compliance in the sector as the landscape of technology, market actors, and regulations changes.

## STAGE 1: REVIEW FOUNDATIONAL FACTORS FOR TRACEABILITY THAT SCALES UP THE PROGRAM TO LAST

Resources to reference when developing a foundation for a scalable system
<a href="#">Nine Steps for Developing a Scaling Up Strategy</a>
<a href="#">Mexican Papaya Industry – a model for sector-wide change</a>
<a href="#">Traceability Learning Journeys (Australia)</a>
<a href="#">A review of Canadian and international food safety systems</a>

### 1. DEFINE THE “WHY” AND “WHAT” OF TRACEABILITY REGULATION & POLICY

- Define what traceability means for your country’s seafood sector. Establish goals for traceability and the minimum data elements necessary to achieve them.
- Analyze where existing regulations/standards may conflict with new regulation. Make any new traceability regulations and/or standards consistent with existing ones.
  - For seafood, align regulatory key data element (KDE) requirements with best practice data standards [for example, the [GDST Standard](#)].
- Ask government representatives, industry representatives, and other stakeholders, including fishers, traders, and other near-shore actors, “Why is the regulation/policy important?”
  - Consider typical traceability drivers such as export markets, access to premiums, food safety, trade, etc. Depending on which drivers are present in the system, different data and other needs will have to be considered.
  - Remember, relying exclusively on access to a single export market as a “why” is ineffective; be aware of markets that may undermine your traceability goals.
  - Dedicate resources to communicate the “why” to all impacted parties.

***“EU yellow cards were really the sole impetus for regulations in the Philippines, but many fishers were not inspired by that, seeing many other markets growing and closer to home that did not care about traceability.”***  
 – Site Manager, Sustainable Tuna Partnership, Phase 2

## STAGE 2: DEVELOP REGULATION AND POLICY THAT CAN SCALE UP AND EVOLVE

Resources providing insights for developing effective regulations and policies that support scaling up
<a href="#">Pathway to the Principles: Design</a>
<a href="#">Applying eCDT systems to small-scale fisheries (Philippines)</a>
<a href="#">The GDST Standard</a>
<a href="#">Cost Benefit Analysis Calculator</a>

## 1. IDENTIFY THE “WHO” OF TRACEABILITY REGULATION & POLICY.

- Identify what group (i.e., agency) is ultimately responsible or in charge of traceability.
  - Define roles for all stakeholders at local, regional, and national level and engage them appropriately in the consultation and development process:
    - Responsible:* person or group responsible for completing the task
    - Accountable:* person or group with authority over the successful completion of the task
    - Consulted:* person or group who should be consulted before/during completion of the task
    - Informed:* person or group who does not directly contribute, but who should be kept informed of what the task is, who is completing it, and what its status is
  - Clearly communicate requirements
    - Policymakers are responsible for this step of the checklist, and should inform the business community and fishers.*
  - Respond to stakeholder *queries*
    - The enforcement agency should be accountable for this step of the checklist, though they may choose to delegate responsibility to a clearly designated non-regulatory agency or government contractor.*

## 2. DETERMINE THE “WHEN” AND “HOW” OF TRACEABILITY REGULATION & POLICY.

- Determine how the national government will give implementing agencies authority.
- Establish a date for enforcement and clear consequences for non-compliance.
  - Ensure stakeholders are aware of the enforcement timelines and consequences.

***“National government has the money and makes the rules, but the local government is responsible for the work necessary to make rules reality. That needs to change. LGUs [local government units] need training, staff, enforcement authority.”***  
– NGO Project Manager, Philippines

## 3. DETERMINE WHAT IS REALISTICALLY FEASIBLE, NOT WHAT IS THEORETICALLY POSSIBLE.

- Document stakeholder realities by asking investigative questions to assess readiness:
  - What quantifiable operational and financial impacts will traceability regulation have on each set of stakeholders?
  - What are stakeholders’ qualitative perceptions of traceability and/or traceability regulation?
- Determine technological infrastructure needs (e.g., power, internet, refrigeration).
  - Will the traceability system be designed based on current technology infrastructure?

- Will the traceability system be designed based on future infrastructure improvements?
- How many impacted businesses will need new automation to reasonably comply? What will it cost?
- Who can/will pay for any improvements needed?

***“Solutions failed because they did not have the necessary corporate infrastructure – no call lines, no multi-lingual support, were not customizable, had an awful interface, and they were not updated regularly.”***  
*– Directors of USAID-funded traceability pilots with mangos in Haiti and coffee, chocolate, and horticultural products in Latin America*

Evaluate current traceability solutions by asking the following questions:

- Are there traceability solutions available to meet the local seafood supply chain’s needs (i.e., language, user interface, hardware, etc.)?
- Will supply chain actors need to customize available traceability software solutions to meet their needs?
- Does the traceability solution support customization?

Evaluate institutional capacity for education, training, outreach, financial support, and enforcement. Needs can be identified by asking the following questions, interviewing stakeholders, and/or conducting pilots:

- What is the gap between baseline traceability practices, particularly for small and medium scale enterprises (SMEs), and what will be required for compliance with any new policy or regulation?
- How many impacted businesses will need new technical staff to comply?
- Will the government need additional staff or funding programs (e.g., grants or low interest loans) to support technical or automation infrastructure needs of SMEs?
- Who will communicate with SMEs about the new requirements and how to comply with them?

*This is a role for the government, not the private sector.*

*SMEs should not learn of requirements from their overseas buyers.*

- Has the government provided stakeholders, especially SMEs, with examples of compliant traceability system outputs?
- Are there user-friendly, accessible campaign materials (posters, videos, infographics, village meetings) that clearly convey WHEN compliance is required and WHAT consequences for noncompliance are?

- Consider surveying impacted stakeholders like the government of Western Australia did with a lighter touch when seeking to enhance traceability systems in their province [see: [Traceability Learning Journeys: Lessons in Implementation and Impact from Food Manufacturers in Western Australia](#)].
- For more in-depth information on SME capacity and gap analysis, consider conducting pilots like the U.S. did in conjunction with the traceability section of their Food Safety Modernization Act (FSMA) [see: [Pilot Projects for Improving Product Tracing along the Food Supply System](#)].

### STAGE 3: MAKE SURE THE SYSTEM CAN SCALE ACROSS THE ENTIRE SECTOR

Consult these resources before implementing your system to ensure it can scale up
<a href="#">Funding Traceability Technology</a>
<a href="#">The Enabling Environment for Food Traceability System Success</a>
<a href="#">Reducing Transaction Costs</a>
<a href="#">Public-Private Partnerships and Collective Action</a>

#### 1. SUPPORT DEDICATED FIRST MILE DATA COLLECTION.

- Select a data collection model.
  - Consider a model that requires data collection staff supplied by the government, fishers associations, or other third parties take on the burden of data collection. In certain environments, this model has proven more effective than the traditional approach of placing the burden of data collection on fishers, especially small-scale fishers.
- Determine how data collection will be funded.
  - Assess who will supply funding (e.g., exporters or local government, or farmers/fishers' associations).
  - Use a tool, like a Return on investment (ROI) calculator, for determining costs and benefits at the entity level. Then summarize results across a range of actors in the sector to determine which entities can pay and how much, and the costs of compliance with any regulations [for example, see this ROI calculator from the Australian Table Grape Association].
  - Consult stakeholders to ensure funds are used effectively.

***“In the Philippines, there was a physical challenge in collecting the data from municipal fishers who often land their boats at informal landing sites. So, a few years ago the government invested a whole bunch of money and physical resources – stainless steel tables, refrigeration – into developing community landing centers. But hardly any of them are being used. They built them in the wrong places. They’re too far from the shore. They didn’t do the consultations, so it was such a waste of resources/money. The intention was good, but the implementation was terrible.”***

***– NGO Project Manager, Philippines***

## 2. PRIORITIZE INTEROPERABILITY.

- To enable interoperability, align any new requirements with the existing data standards and communication protocols.
  - Support standardized data formatting and communication protocols via accessible existing standards [for example, see the [GDST Standards](#)].
- Codify complementary requirements in regulations. This means regulating what data must be shared, AND how it should be recorded and structured to reduce the need for manipulation when data is shared between entities.
  - Invest in technologies that connect different software products, enable reporting for multiple standards, and help companies capture and combine data more effectively.
  - Do not invest in developing new solutions; instead, support selection among solutions that already exist.

## STAGE 4: MAKE IT LAST – PLAN FOR TRACEABILITY SYSTEM SUPPORT AND MAINTENANCE

Regularly revisit these resources to ensure sufficient maintenance so the traceability system lasts
<a href="#">Reducing Transaction Costs</a>
<a href="#">Business Modeling for a Digital Compliance Platform</a>
<a href="#">Cost Benefit Analysis Calculator</a>

## 1. GENERATE REVENUE TO FUND LONG-TERM PROGRAM COSTS.

- Ensure fees and fines exceed cost of implementation, enforcement, and maintenance.
  - Calculate costs of reaching, educating, and training supply chain actors to adhere to and maintain traceability and build a revenue generation plan (e.g., licensing and registration fees) consistent with costs.
  - Be cautious about inequity related to technology solutions.
  - To scale fines for non-compliance appropriately, understand the full costs of operating the traceability system (e.g., upfront **costs** of software and infrastructure, licensing, automation, and any **benefits** like insurance costs, market access, premiums) for actors in your region and

***Fees can serve as a major motivator for buy-in from the local actors on the ground, so be sure to communicate the fees’ potential value to the local government units and then, in turn, how those fees can come back to the fishers to support needed infrastructure improvements, like making landing stations functional for their needs.***  
 – Site Manager, Sustainable Tuna Partnership, Phase 2

supply chain [for example, this [calculator](#) from the Australian Table Grape Association can help determine return on investment (ROI) for various actors].

- Regularly review ongoing maintenance costs and adjust fees/fines accordingly.
  - Consider the infrastructure lifecycle and whether SMEs will need ongoing assistance to maintain necessary automation capacity.
  - Consider the rate of inflation in the cost of technical and enforcement staff to maintain appropriate staffing levels.
  - Assess the size and structure of the industry. Has there been consolidation? Are fines scaled appropriately for the biggest businesses?

## BEFORE YOU GO: FUTURE CONSIDERATIONS

The practice of food traceability will continue to evolve as it has over the last two decades. Traceability programs will need to be updated to reflect changes in export market requirements, domestic needs, global standards, and technological developments. The cost of traceability programs will change over time as well. Fees/fines must be adjusted to ensure they continue to motivate compliance in the supply chain and support maintenance/enforcement costs for regulatory agencies. **Establish a regular cadence (every 3-5 years) to review and revise traceability programs** to ensure long-term program success.