

Importance of traceability in today's customer preferences

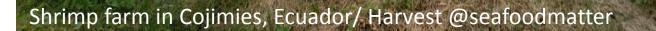
Prepared for:22nd India International Seafood Show 2020 Presented by: Marcelo Hidalgo; Founder & Advisor of Seafoodmatter Email: contact@seafoodmatter.com

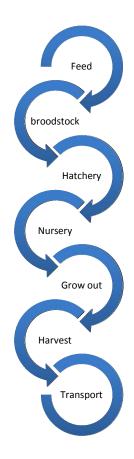
Vellavilla, India / Tuna fishing @seafoodmatter

This presentation will cover



Main concerns in the seafood market and retailers Traceability systems in the seafood value chain Seafood Traceability - complexity Market consumer preferences Take away





Current situation

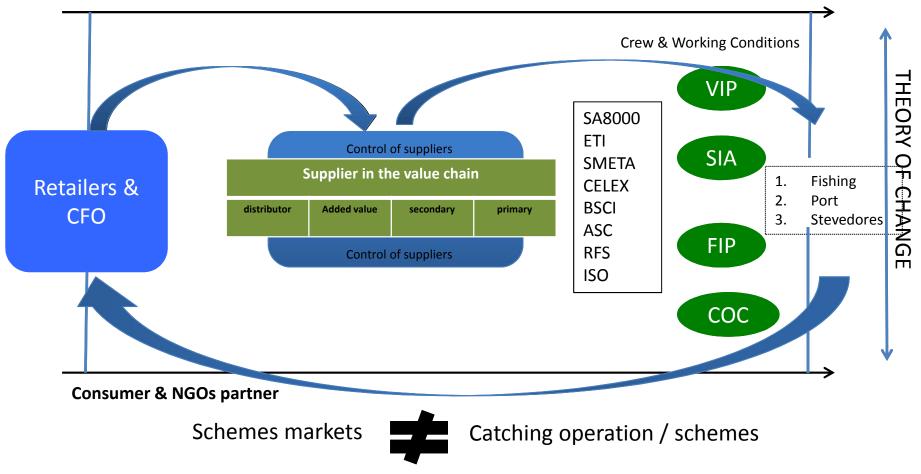


- Marine catch was 79.3 m. MT (FAO 2016)
- Aquaculture production was 80 m. MT (FAO 2016)
- Global tuna catch 4.2 m. MT (FAO 2016)
- Shrimp produced 4.0 m. MT in 2018 (Globefish 2019)
- Increase in media coverage about social, legal, food safety and environmental aspects.
- World Economic Forum: WWF + private and public sector; new global traceability system.
- NGO's and governments pressure (retailer rating / scoring)
- Retailers ask for full traceability and accountability
- Every food should be fully traceable, say FDA
- Research Institute in South Africa; 21% of products in the market are mislabeled.

Market and external pressure Theory of Chain – Value chain



NGOs pressure



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Market concerns





Main concerns of Retailers – Market (risks)



Integrity of the product:

- Where seafood was caught/harvest? (IUU, FAO, Sustainable sources)
- Is the seafood properly processed and canned/packed?(Thermal process, carbon dioxide, double seamming)
- Labor onboard, worker and working conditions (BSCI, ETI, SA8000)
- Is the information on the label sufficient? (avoid fraud, mislabelling)
- Reliable supplier and information.
- Certifications (Quality, Food Safety, Legal sourcing, Sustainability, Labor, ISO)

Traceability systems in the global markets





Traceability system in the seafood sector

United Kingdom

- John west; "can tracker"
- Track the tuna can to the Ocean and the boat
- Provide transparency, awareness of the story behind the story

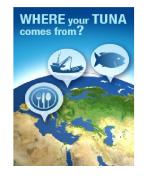
<u>Italy</u>

- Rio Mare; implement a sophisticated software
- Track the tuna can to boat, fishing date, fishing method, date of canning and quality.
- Weapon against illegal fishing

<u>Canada</u>

- Sobeys "thisfish" (fresh seafood and frozen products). From the ocean to dinner plates coded and tracked
- Its origin, boat, crew, the Captain logbook.
- Fishermen are proud to be part of this traceability system, sustainability and Quality









Traceability system in the seafood sector

Ecuador

• A traceability platform to document the complete lifecycle of the shrimp from farm to fork.

<u>Thailand</u>

 A backbone seafood sustainable system. To trace from the pond that produced it – monitor the operations, actions and labor conditions of our suppliers to the plate.

<u>Global</u>

• 63+ members, create a platform open seafood companies. To improve the traceability from end to end which it is a challenge due to for instance shrimp is a globalized commodity









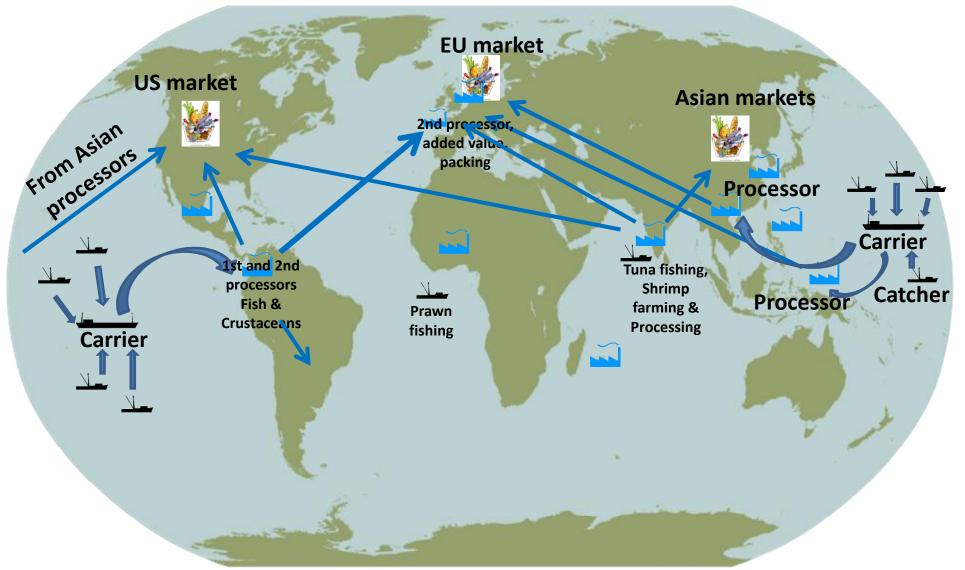
Why do we need a traceability system ?



- Consumers can trust the seafood supply chain
- Producers; can manage quality and sanitary information and find out consumption pattern and consumer's needs
- Logistics; documentation support.
- Governments; can track the origin of the tuna, food safety compliance / Transparent
- Others; can provide information about
- sustainability,
- quality,
- food safety,
- workers and working conditions.

Seafood supply chain: a specialized business





Seafood supply chain Traceability typical model

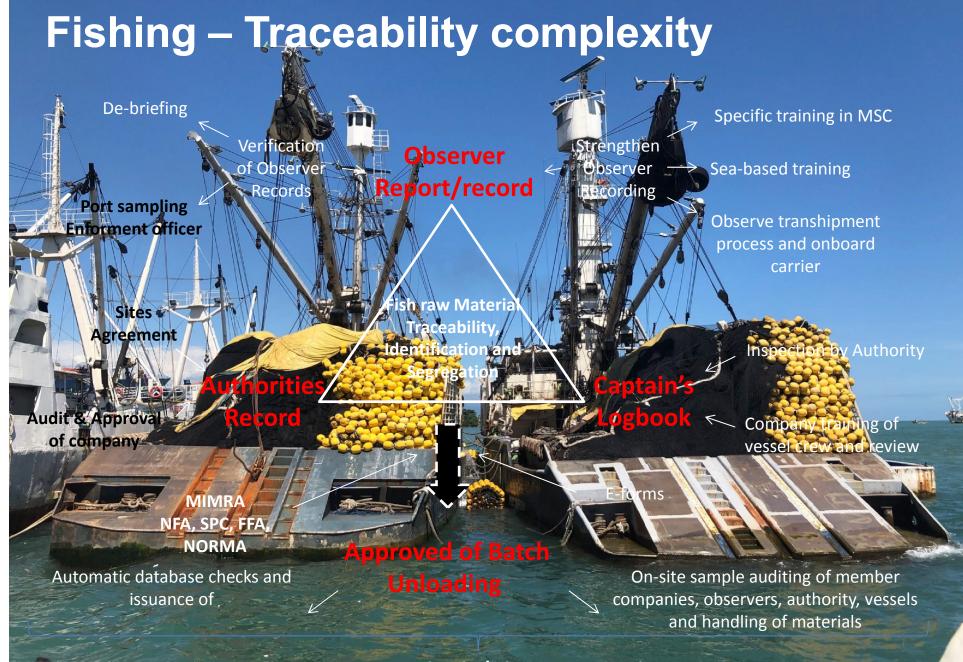


*Hatchery – Feed – Farm – Transport – Reception (sorting, classification) – Processing (first) – FCL shipment - market

*Fishing ground – fishing boat – unloading – Reception (sorting by species, size, market) – processing (first) – shipment - processing (second) – transport - market



- By who? (vessel ID, IUU, Hatchery/farm name,)
- Where? (IUU, Fishing area, harvest, complaince)
- When? (Closure period, catch quantity, harvest, transfer, date, and time)
- How? (Fishing method, Farm, Complaince)
- In what quantity? (Catch quantity, harvest, sorted at reception, complaince, CoC)



Papua New Guinea@seafoodmatter

Log books/ Electronic recording

Global Fishing Watch source



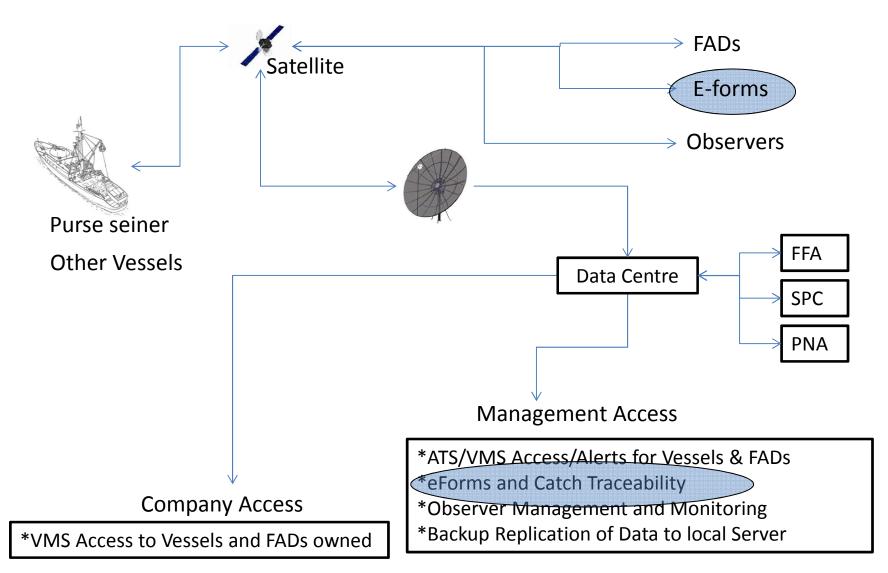
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Positional data from VMS + Google Earth Geographical location / 2013 MSC manager PNA

Verification and quality of data

FIMS provides technical support to Pacific Islands





Fishing - Complexity & elements

Fleet: tuna, small pelagic Gear: Trawler, Purse seiner, Longline, Pole & line Government regulations Markets request: client and buyers Food safety Environmental issues Quality Crew onboard welfare: workers Segregation and Identification Electronic date VMS Certifications (fishing license, SOLAS, UNCLOS)

Tuna fish local market in Male, Maldives@seafoodmatter





Farms – Traceability complexity



External Audits, client audits

Ingredients Verification of Vessels Documents Raw material control

Suppliers' control (fish, packaging, etc)

IUU control Sea

Suppliers certificates.

Audit & Approval documentation

Quarantine, laboratory evaluation, Broodstcok, hatchery

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System

Automatic database checks and issuance of approval number

Black tiger shrimp / Thailand @Thai shrimp aquaculture **Environment/** Sustainability Responsible.

Raw material Traceability, Processing and Segregation, Packaging / can code

rvested

Farm Supervisor Specific training in Good practices in Aquaculture, veterinarian Quality of the water, plancton, ground Constant farm Monitoring,

> Farm monitoring, environment & metrics record keeping Nursery management, Stocking densities

Management system certification & records

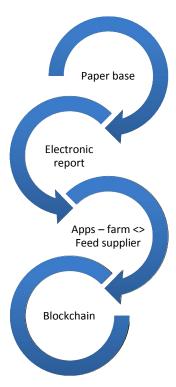
External evaluation, validation (2nd and 3th party)

Internal Audits /farm management system

Farm - Complexity & elements

Size of the farm: single, multi or group Government regulations Markets request: client and buyers Food safety Environmental issues Quality Labor aspects: workers Feed: feed ingredients Broodstock sourcing Hatchery information Key Elements/ farm performance





Trout farm in Italy @seafoodmatter

ASC Online farm mapping tool

Welcome to the ASC GIS Online farm Mapping Tool

Tips and Navigation:



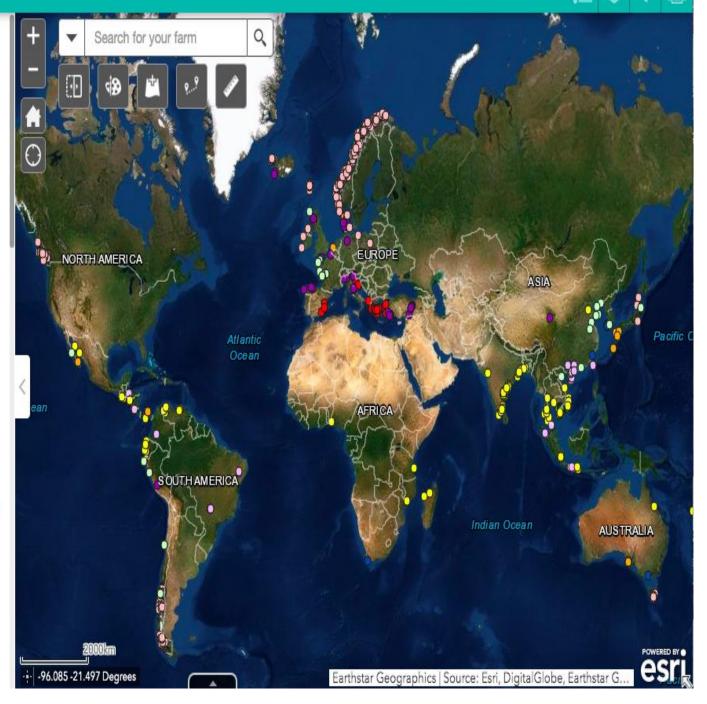
To add or remove visible layers from the map toggle the "Layers" widget in the top right of the map. By clicking on the features on the map you can 'quickview' information in a pop-up screen. Please note: some layers contain large amounts of data and do not render instantly as some do. The World Database on Protected Areas will only appear after you zoom in on an Area of Interest. When you select a layer to display, it will show up automatically in the Legend.

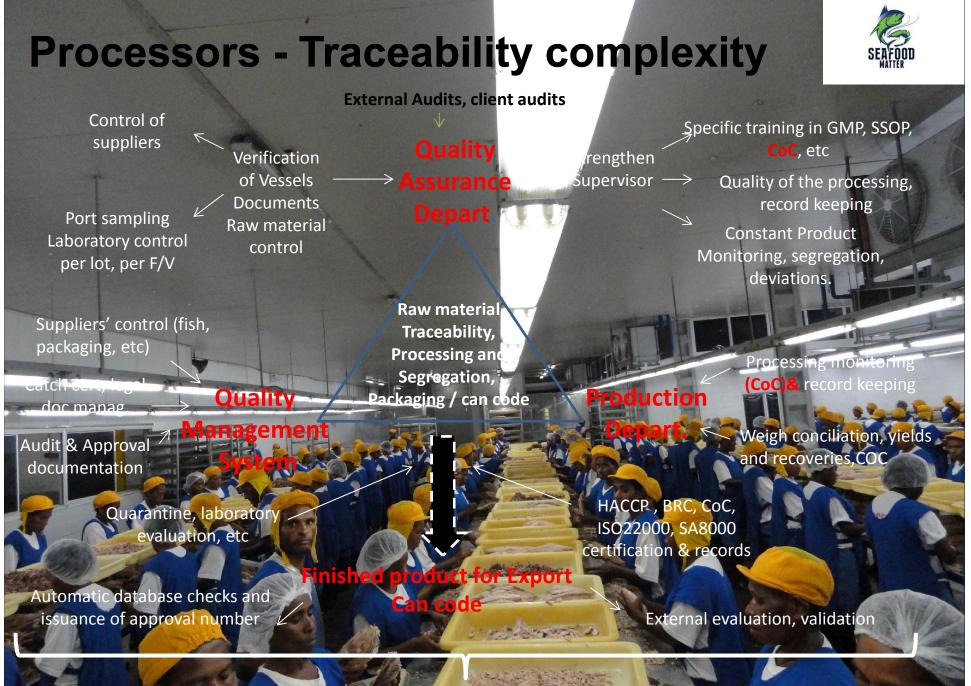


The "Filter" widget allows you to filter out certain farms from the whole dataset. The default filters are set to the species, but if you click in the bottom right corner, you can create your own filter for the "ASC certified farms" layer.



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Internal Audits / Management system

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Processing - Complexity & elements

Type of processing: first, secondary, added value Government regulations

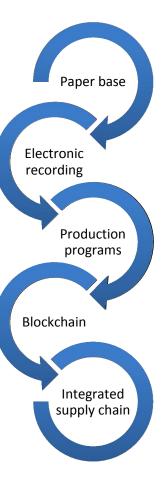
Markets request: product's specifications Food safety (chemical, microbiological, water, etc) Environmental issues

Quality specifications

Labor aspects: workers Feed: feed ingredients Control of suppliers / qualifications Recovery / Yields

Processing Qingdao, China@seafoodmatter





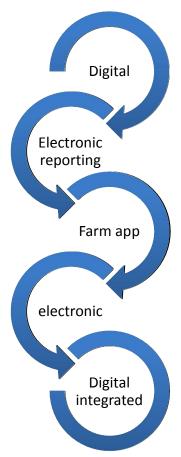
Market preferences on traceability

Shrimp farm in Nicaragua / Sampling @seafoodmatter

Full-chain traceability



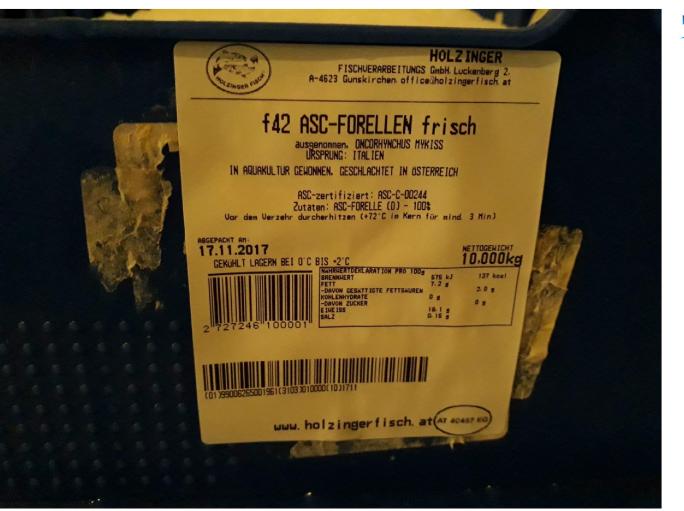
- Protection of public health
- Improvement of products traded
- Reduce recall scope (batches, segregation)
- Reduce the risk of illegal, unregulated and unreported (IUU) fishing, human trafficking
- Increase consumer trust
- Quality assurance
- Reduction of brand risk associated with no good labor practices (farms)/ onboard crew welfare
- Demonstrate / Improve sustainability practices



Take away



- Seafood trading is a globalized business that needs high transparency and accountability when it comes to Seafood sourcing
- Traceability shall be built on existing industry practices and company records, build on existing international norms and government processes, and build on farm or fishing company systems, documents and records a robust and **reliable** traceability system.
- To drive change go to the next level, make your traceability go digital/on-line and you will get a robust, highly reliable system, with a tremendous increase on the transparency level brand leading trustful!





THANK YOU !