




CHAINS OF CUSTODY- TRACEABILITY TRAINING- Fiji 2019


FFA

Joepe Tamani
FFA, 2019



Disclaimer


- ❑ The contents of these presentations does not in any way represent FFA position nor does it represent any formal opinion or position of any MSC body.
- ❑ This presentation may be conflicting as it will try to address some of the knowledge between Market Access and Private Certification.



MSC Standard and Eco labelling Program


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- ❑ Sustainable Seafood and Traceability Standards



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    graph LR
      A[Fish/Farm] --> B[Fishery Certification]
      B --> C[Chain of Custody]
      C --> D[Ecolabelling Licensing]
      D --> E[Customer]
  
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Chains of Custody Program

Purpose: Traceability of certified seafood through the supply chain

- ❑ Fish are not always exported/sold immediately after catching
- ❑ Fish/Seafood from Catching to Export/sale will and may involve multiple state players. **Example- Caught by a PNG flag vessel, Transshipped in Tarawa, unloaded in China and Exported to EU.**
- ❑ Companies handle certified and non-certified seafood, and different species can be indistinguishable in final product.



The Chain of Custody program-

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- ❑ What does MSC Chain of Custody do?
 - Provides assurance that throughout the supply chain, certified products are segregated from non-certified products and are traceable back to a certified source.
- ❑ How does it do this?
 - Supply chain companies have to meet the MSC Chain of Custody Standard. These companies:
 - Implement relevant systems and procedures
 - Are independently audited to verify their compliance



The Five Principles of Chain of Custody

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1. Certified products are purchased from certified suppliers
2. Certified products are identifiable
3. Certified products are segregated
4. Certified products are traceable and volumes are recorded
5. The company has a management system

These principles apply to all supply chain companies that participate in the MSC Chain of Custody program

Principles of the Chain of Custody Standard
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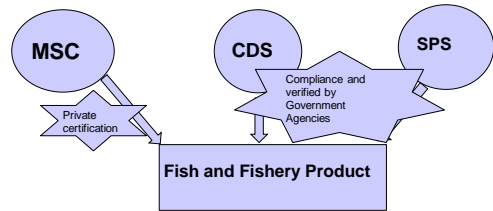
Principles of Chain of Custody
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1. Origin- Certified-> Vessels, exporter etc.
 - How do you ensure that happens in your company
2. Separation/Segregations-> along the complete supply chain
 - Discuss how your company practices segregation along the supply chain?
 - Vessels
 - Factories
 - Cold storage

Principles of Chain of Custody
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3. Proper labelling- Discuss how your company ensure that the products is adequately label and correctly label
4. Only sell certified fish as MSC- How do or can you confirm this?

MSC versus Legislative Fisheries Requirements
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Understanding Market Access Requirements
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Elegibility

- The key importance of both this elements is that define the eligibility of the raw materials
- While the factory may have a "EU number", that alone doesn't make that fish eligible for the EU.

The diagram shows a sequence of steps: a fisherman on a boat, a truck, a factory labeled 'EU Approved Factory', and finally the European Union flag, representing the path to market access.

Market Access Obligation
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- **Obligations of resources:** Instruments of production and Conditions of handling/processing
 - Processing conditions
 - HACCP and Pre requisite programs
 - Traceability
- **Obligations of results:** Safety levels of the products.
- **Obligations of control:** Regulatory verification
 - Effectively implemented by a the CA
 - "Competency" is determined upon audit sanction by the EU
 - Strict control of certification of products

FFA Passport-Visa Analogy

- Passport- issues by your government but still does not allow you to travel to most of the worlds destination.
- Visa- issued by the country you want to visit. This is a sovereign decision by each country.
- There are some countries you can travel to without a visa but many you cannot travel without one.
- Passport= compliance with your National standard
- Visa= compliance with Market requirements.



FFA EU market Access – for MSC Fish

- 1. **Health Certificate:** “fish as food- safe to eat”
 - Priority is to protect the “health of the consumers”
 - Non negotiable
 - If you do not comply, you can not export fish to any of EU member states
 - Important that here the subject is not fish BUT FOOD
- 2. **Catch Certificate (IUU):** “fish as a legally caught resource”



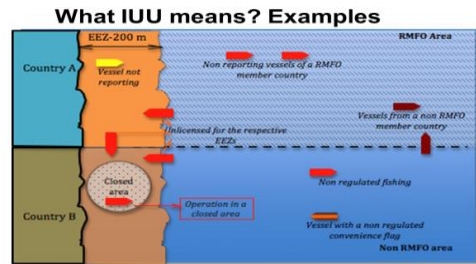
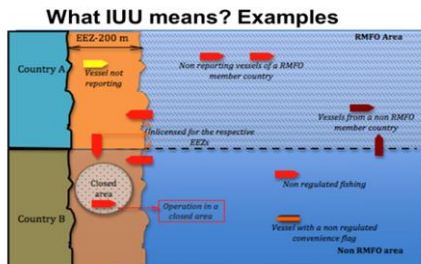
FFA Catch Certificate

- The Catch Certification Scheme deals with fish as a legally caught resource.
- Provides official guarantees from the vessel’s flag state to the EU:
- that the fish was harvested in accordance with their own applicable laws and international conservation and management measures.

FFA What it means?

The fish was caught...

	By who?	Where?	In what quantity?	When?	How?
Regulation/regulated:	Primarily concerned with vessel ID & fishing ground				Primarily concerned with catch quantity, perhaps closure period and gear type
Unreported:	All data types are relevant				
Compliance:			Primarily concerned with amt, quantity, season		
Science:					

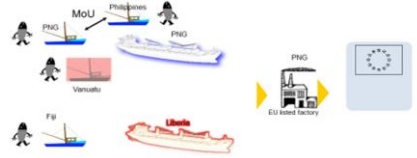


What Comes First?

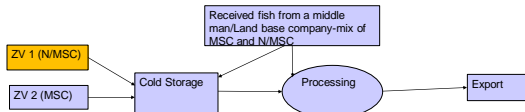
- ❑ To access the EU a country must be sanitary approved, then all its vessels intending to provide the EU need to be too.
- ❑ Around 100 countries are presently approved. (Fj, Si, PNG, KIR)
- ❑ If not approved you still could be involved as a transshipments and non processing country. (FSM/Tuvalu/RMI)
- ❑ While both regimes are as different as the work scope of a Seafood Safety Inspector and a Fisheries Officer, there should be synergies in between both certifications.
- ❑ Both certificates cannot contain discordant information

Eligibility

The origin of the raw materials and the way it arrives define the eligibility in terms of "fish as food"

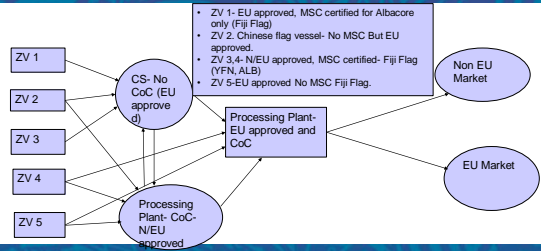


Some Real Case Scenarios for Discussions

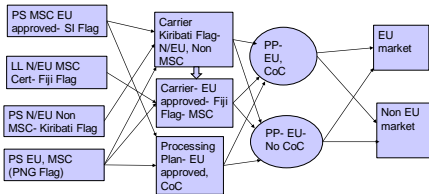


- ❑ Discuss the eligibility principles to be complied with and how and what I can export to the Market as MSC certified product
- ❑ Note- All ZV (Freezer Vessels) are Long Liners.

Some Real Case Scenarios for Discussions



Some Real Case Scenarios for Discussions



CoC and Traceability?



What does MSC Chain of Custody do?
Provides assurance that throughout the supply chain, certified products are segregated from non-certified products and are **traceable back to a certified source.**

Why trace ability?



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What is traceability?

- ISO define traceability as:
 - *“the ability to trace the history, application or location of that which is under consideration....when considering products this can relate to origin of materials and parts, and processing history.”*



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Traceability EU perspective

- The ability to trace and **follow a food**, feed, food-producing animal or substance intended to be, or expected to be incorporated into a food or feed, ***through all stages*** of production, processing and distribution.



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What is Seafood Traceability?

- The ability to **systematically identify** a unit of production, track its location, and describe any treatments or transformations at all stages of production, processing, and distribution (Magera and Beaton 2009)



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Traceability

- A record keeping system designed to track the flow of product or product attributes through the production process or supply chain.
- Tracking- Forward and
- Tracing- Backward



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Key Words

- Ability to trace
- Systematic
- Location
- How many? Where? What?



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What is seafood traceability?

- It is achieved through proper documentation and record keeping
- Proper handling of protocol through processing, shipping and receiving to ensure that products can be traced accurately



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Traceability and Chain of Custody

- Chain of custody refers to all steps in a supply chain that take possession of the product,
- It provides record of the sequence of entities that have custody of fish as they move through a supply chain that allows the ability to trace a fish back to its origin.



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5 Principles of CoC

1. **Principle 1-** Certified products are purchased from certified suppliers
 - i. The organisation shall have a process in place to ensure that all certified products are purchased from certified suppliers.
 - ii. Organisations handling physical products shall have a process in place to confirm the certified status of products upon receipt.
 - iii. Organisations with certified products in stock at the time of the initial certification audit shall be able to demonstrate that these products were purchased from a certified supplier and comply with all relevant sections of this standard before they can be sold as certified.



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5 Principles of CoC

2. **Principle 2-** Certified products are identifiable
 - i. Certified products shall be identified as certified at all stages of purchasing, receiving, storage, processing, packing, labelling, selling and delivery.



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5 Principles of CoC

3. **Principle 3-** Certified products are segregated
 - i. Certified and non-certified products shall not be mixed if the organisation wishes to make a claim about these certified products



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5 Principles of CoC

4. **Principle 4-** Certified products are traceable and volumes are recorded:
 - i. traceability system that allows:
 - i. Any product or batch sold as certified to be traced back from the sales invoice to a certified supplier.
 - ii. Any products identified as certified upon receipt to be traced forward from point of purchase to point of sale.



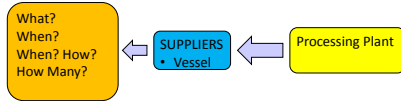
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5 Principles of CoC

5. **Principle 5-** The organisation has a management system
 - i. The management system includes the systems, policies and procedures used to ensure that the organisation complies with the CoC Standard.

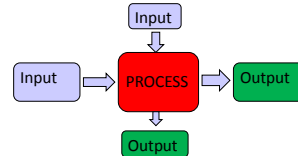
FFA **What is traceability?**

- Notermans S. & Beumer H. (Safety & Traceability of Animal feed in Food Authenticity & Traceability (2003):
 - Supplier traceability- ensures that the source of all raw materials/ingredients can be identified from the records and documentation.

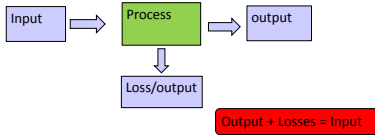


FFA **What is traceability?**

- Process traceability- ensures the ability to identify all ingredients and process records for each individual products produced by the factory.



FFA **Mass Balance**



FFA **Mass Balance**

- In the Mass-Balance model products and as they move through the supply chain an exact account is kept about the volume ratios.
- Thus it is guaranteed that the amount of products produced equals the amount (or volume ratios) of **sustainable** products sold to consumers.

FFA **Mass Balance**

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FFA **What is seafood traceability?**

- Traceability is a farm to fork approach or from Sea to plate
- Useful to inform protocols and expectations to verify food safety, legality, and sustainability.

Two categories of traceability:

- 1. **Internal traceability**- relating to the traceability of product and the information relating to it, **within** the company or factory, and;
- 2. **External traceability**- which relates to product information that a company either **receives** or **provides** to other members of the supply chain.

The need for traceability

- Globalization of the industry
- Increase length of supply chain
- Demonstrating Due Diligence

Traceability

- There are multiple functions and needs of traceability
- Where you sits in the supply chain?
- Type of product handled and process?

Due Diligence

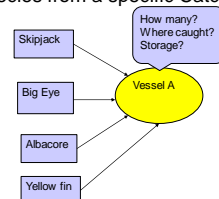
- "It shall be a defence for the person charged to prove that he took all reasonable precautions and exercised all due diligence to avoid the commission of the offence".

Importance-why do we care?

- If Seafood is not fully traceable:
 - Difficult to recall
 - Impossible to prove it from legal sources
 - Legality
 - Accountancy
 - Certification
- Companies that lack proper traceability documentation and protocols throughout their supply chain are at legal and reputational risk.

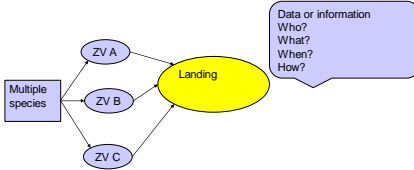
Status Quo-Reality

- Multiple species from a specific Catch Area.



FFA Status Quo- Reality

- ❑ Landing- multiple species and multiple vessels



FFA Status Quo

- ❑ What documents comes from the vessels?
- ❑ What does the documents says?
- ❑ Who is responsible?
- ❑ Does any one verify?
- ❑ During landing- what documents?

FFA Status quo

- ❑ Data often not recorded or poorly recorded
- ❑ Data do not follow the product
- ❑ Data mostly paper based
- ❑ Paper provides "flexibility" to juggle supply and demand
- ❑ Makes fraud easier to commit.

FFA Status Quo

- ❑ Not willing to change the way we do things- old habits die hard
- ❑ Lack if commitment
- ❑ Lack of enforcement
- ❑ Do not see the Return of investment on Traceability

FFA Traceability Arguments-status quo

- ❑ food safety product recalls every week? – sometimes it's several in a week!
- ❑ Business and Countries would be unlikely to survive the cost of a recall of several days' production, especially when you are finally going internationally. (worse case- loosing the market)
- ❑ You have to ensure that if the worst did happen, you can isolate the affected stock as precisely as possible, and minimise the impact of the recall.
- ❑ **You MUST have an effective traceability system in place.**

FFA Why do we care about traceability?

- ❑ Market Access Requirements
 - SPS
 - Catch Certification
 - Chains of custody
 - Objective evidence that confirms eligibility

FFA Traceability Systems

- ❑ Traceability systems are record keeping (monitoring) procedures that track and demonstrate the movement of a particular raw material(s) from supplier(s) through processing, to customers.
- ❑ The amount of information recorded varies depending on the product and its pathway through the processing and transportation.

FFA Traceability system- Internal

1. Transfer (WR, Filleting)



FFA Traceability system- Internal

2. Addition- additional ingredients are added during processing(Canning)



FFA Traceability system- Internal

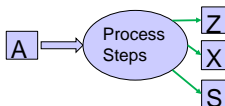
3. Joining- insufficient raw materials from one source to fill an order.

- Materials with two different ID codes needs to be combined.

FFA Traceability system- Internal

4. Splitting- one traceable unit is split for use in different processes or products.

- New ID codes is given



FFA Current landscape and challenges

- ❑ One step forward one step backward approach
- ❑ If every steps in the supply chain had accurate documentation and all products mixing recorded, product should be traceable to its sources(s).
- ❑ Point of mixing pose the most difficult.
- ❑ With greater focus on IUU, seafood fraud, and seafood safety, the seafood industry must become more proactive in upgrading traceability practices to be able to meet their business needs and market requirements.

FFA **Current landscape and challenges**

- ❑ Some reasons that seafood industry does not have a 100% end-to-end traceability:
 - Seafood is a global commodity and faces a lot of language and technological barriers
 - Multi facets supply chain
 - Ongoing cost of investment
 - Lack of transparency
 - Lack of investment will

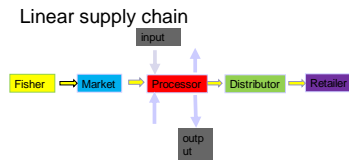
FFA **Traceability in the Supply Chain**

- ❑ Have a look at some of the information that could be captured at different points of the process:
 - Traceability is possible only when the material input and output records are maintained at each step
 - Traceability enables corrective actions to be implemented quickly and effectively when something goes wrong
 - When a potential food safety problem is identified, whether by food business or a government agency, an effective traceability system can help isolate and prevent contaminated products from reaching consumers.

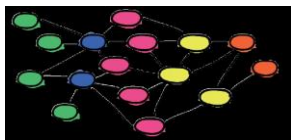
FFA **Traceability in the supply chain**

<p>When the product is first supplied</p> <ul style="list-style-type: none"> • Who is the product received from? • What exactly was received? • When was the product received? • What was the condition(s) of the product(s) when received? 	<p>As the product continues through the manufacturing process:</p> <ul style="list-style-type: none"> • Which materials was used to make each • Storage • Balance/Lost 	<p>Once the manufacturing process has been completed on site</p> <ul style="list-style-type: none"> • Whom the product has been supplied? • What exactly was supplied? • When was it supplied? • What quantity was supplied?
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FFA **Linear supply chain vs Reality-challenge**



FFA **Multi level - Challenge**



FFA **Factors driving traceability**

- ❑ Legislation
- ❑ Market access requirements
- ❑ Food Safety Certification
- ❑ Customer Requirements
- ❑ Product Recalls
- ❑ System Efficiency
- ❑ Business Information Systems
- ❑ Branding



Benefits of Traceability

- ❑ Traceability enable Corrective Actions to be implemented quickly and effectively when something goes wrong
- ❑ Traceability provides assurances and OBJECTIVE evidence of compliance to eligibility principles
- ❑ Information sharing
- ❑ Compliance
- ❑ Transparency and competitive advantage
- ❑ Market accessibility and benchmarking



Standards for traceability

- ❑ The regulatory standards for traceability
- ❑ Third party certification standards for traceability
- ❑ Retail requirements and standards for traceability



Reality

- ❑ Consider the followings
 - We do not keep records to that level of detail. (Why?)
 - You are not a large business?
 - There is a legal requirement here, and the various global retail standards have set the bench mark for traceability systems based on their experiences.
 - What do the standard ask for?



Standards for traceability systems

- ❑ Traceability starts with material input (received) records, or tracking the lots that supplies come in
- ❑ BATCH OR LOT IDENTIFICATION
 - A lot is a quantity of food which is prepared or packages under essentially the same conditions usually:
 - From a particular preparation or packaging unit; and
 - During a particular time ordinarily not exceeding 24 hours



Standards for traceability systems

- ❑ Labelling
 - Name of food
 - List of ingredients
 - Lot identification
 - Name and address of manufacture and or supplier
 - Country of origin



Quality of Traceability

- ❑ HACCP addresses the quality of traceability expected for regulatory compliance. 3 aspects:
 - 1. Food Receipt:**
 - this means that food business must not receive a food unless it is able to identify the name of the food and the name of the supplier.

FFA Quality of Traceability

- ❑ A food business must provide, to the reasonable satisfaction of an authorized officer upon request, the following information relating to food on the food premises:
 - The name and business address of the vendor including vendor guarantee
 - The prescribe name or, if there is no prescribed name, a name or description of the food sufficient to indicate the true nature of the food.

FFA Quality of Traceability

- ❑ Traceability system requirements:
 - Traceability information be readily accessible in order to what, how much of and from where products need to be recalled.

FFA Quality of Traceability

- The traceability system should include records covering:
 - Production records
 - What products are manufactured or supplied
 - Volume or quantity of products manufactured or supplied
 - Batch or lot identification (or other markings)
 - Where products are distributed
 - Any other relevant production records

FFA Requirements for traceability

- ❑ Level of information contained in a traceability system
- ❑ Recording information to maintain an effective system

FFA Requirements for traceability 1 step Backward and 1 step forward

- ❑ Traceability means that at any point in the supply chain, movements can be traced one step backward and one step forward.
- ❑ When you consider a supply chain in all its complexity, this can be crucial factor in ensuring the quality of products.

FFA Requirements for traceability 1 step Backward and 1 step forward

- ❑ For example, the FBO should be able to trace their raw materials/ingredients back to where it came from.



Requirements for traceability
1 step Backward and 1 step forward

- ❑ What do you receive?
- ❑ Whom do you received it from?
- ❑ How much or many do you received?(types and or species)
- ❑ Conditions?
- ❑ Where it is?

Traceability within your operations

- ❑ Up to now we have established where the raw material have come from and where the product is going.
- ❑ It is important that traceability is maintained within your own operations, whether they be storage, packaging and dispatch or during complex manufacturing operations.
- ❑ Internal traceability begins when:
 - Received of raw materials and
 - Finishes at dispatch of finish products or customer orders.

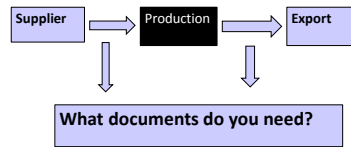
Traceability Requirements- Understanding what is needed?

- ❑ Vessel
 - verifiable, accurate, and traceable data/information starts with the capture of catch information at the point of harvest or with the first receiver (e.g., at the dock).

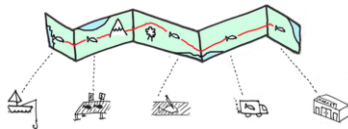


Traceability Requirements- Understanding what is needed?

- ❑ Internal Traceability – Black box mystery



Traceability Requirements- Understanding what is needed?



- ❑ The essence of supply chain transparency consists of information about the companies supplying products.
- ❑ Its key value is proof of compliance is with particular requirements such as IUU and sustainability certification, and with risk management.

Traceability Requirements- Understanding what is needed?

- ❑ Fish Accountancy- Mass Balance
 - Both Health Certificates and Catch Certificates are about certain quantities of export....numbers.
 - These numbers could be:
 - A portion of a particular landing
 - Portion of a particular production
 - From multiple landing and multiple production



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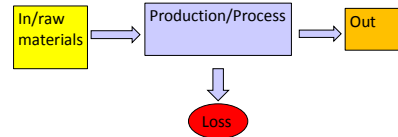
Using Mass Balance

- Mass Balance: is the ability to trace a specific raw material or packaging item and reconcile the quantities received of that batch against the quantities used, destroyed or damaged, and remaining in inventory.
- Mass balance can help you prove the identity and source of certain raw materials, especially those that have claim of origin or other status that might be of value to the consumer.



Traceability Requirements- Understanding what is needed?

- Accountancy- Mass Balance



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Traceability Requirements- Understanding what is needed?

- Fish Accountancy/ Mass Balance

- Product = Total amount processed- total losses
- E.g. 1: Total amount landed= 300MT
 - Total amount processed = 200MT
 - Total amount exported = 76MT
 - Amount of fish left from that landing= 100MT



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To be continued.....

Next time