



# The role of certification systems

IFFO Workshop: Protein Sustainability in Aquafeeds

Dan Lee, Sorrento 2022



# Certification



Why? What does it all mean?

## Job advert, 1982

"Leading Ecuadorian shrimp farming company seeks suitable candidates to train as farm managers. Adaptable hard working young people, preferably with a degree in life science, farm management or aquaculture, willing to live and work in isolated locations. Entry level from US\$ 12.000 p.a. plus housing, benefits."

## A booming industry

The Ecuadorian shrimp farming industry is expanding faster than any other in the world. Exports of farmed shrimp reached 20 million tons of tails in 1981, three times the trawl fishery catch, and are growing at some 40% p.a. Approximately 30.000 ha of ponds were in production last year, and that figure will soon be doubled.



# Negative environmental impacts

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Rapid expansion in shrimp farming during the 1980's

e.g. in the Philippines

- abandoned shrimp pond
- stumps of former mangrove trees still visible



# Environmental externalities

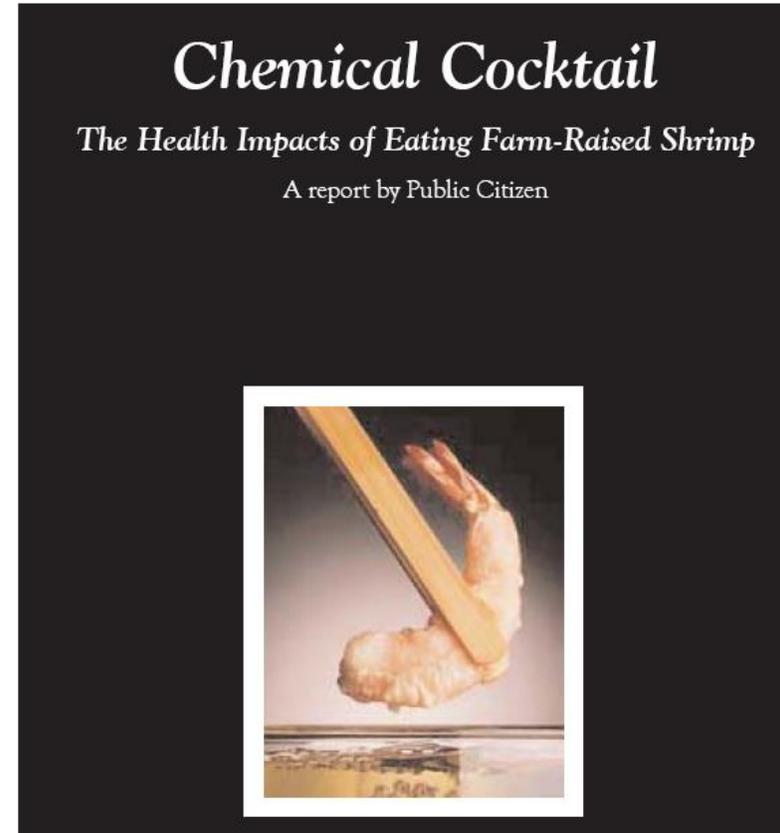
- Habitat damage
- Pollution
- Salinization of land and freshwater
- Spread of diseases
- 'Pressure' on industrial fisheries

# Food safety issues

- Antibiotic residues

# Antibiotic & chemical residues

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# Drivers

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# Consumer driven?

- The big idea
  - Consumers promote responsible aquaculture practices through informed choices
- The big problems
  - General confusion
  - Lack of awareness
  - Serious shortage of good, independent information about the environmental friendliness of aquaculture products



# SMASH & GRAB

Conflict, corruption & human rights abuses in the shrimp farming industry

## Trade war escalates; US catfish farmers file antidumping petition

by Stephen Rappaport

WASHINGTON, DC - The US catfish industry has found another salvo in its trade war with Vietnam. On June 28, the Catfish Farmers of America (CFA) filed an antidumping petition with the US International Trade Commission (ITC) and with the Department of Commerce (DOC). The petition claims that frozen basa and tra filets imported from Vietnam are being sold in US markets at less than fair value and that those sales cause serious injury to domestic catfish farmers and processors.

## GREENPEACE

### TO CURB DESTRUCTIVE SHRIMP AQUACULTURE

Andhra Pradesh state, central of India, many villages living near the sea have become shrimp farming villages. More and more villages are being destroyed by shrimp farming.

## SQUANDERING the SEAS



How shrimp farming is squandering ecological integrity and security around the world.

## Mangrove Forests: One of the World's Threatened Major Tropical Environments

## Murky Waters:

Environmental Effects of Aquaculture in the United States

Foundation

is partnership with

# NGO driven?

Market driven?

NEWS

# Wal-Mart insists on sustainable shrimp

WAL-MART Stores, Inc. the world's biggest supermarket group, is specifying that all imported farmed shrimp sold in its stores has been certified as meeting set environmental standards. The US retail giant has partnered with Global Aquaculture Alliance (GAA) and Aquaculture Certification Council, Inc (ACC) to ensure that all shrimp suppliers adhere to Best standards.



are increasing.

Orlando Business Journal - January 5, 2006  
<http://orlando.bizjournals.com/orlando/stories/2006/01/02/daily21.html>

ORLANDO  
**BUSINESS JOURNAL**

## Darden adds new certification program for shrimp suppliers

Orlando Business Journal - January 5, 2006

Darden Restaurants Inc. is requiring its farmed shrimp suppliers to become Best Aquaculture Practices-certified. The certifications will come from the Global Aquaculture Alliance's newly revised standards, the Orlando-based company says. The Best Aquaculture Practices certification standards provide quantitative international guidelines and auditing procedures that limit environmental impacts and protect the wholesomeness of shrimp throughout the production process. Developed by the Global Aquaculture Alliance with input from technical experts and non-governmental organizations, the BAP program includes participating shrimp hatcheries, farms and processing plants worldwide.

# The need to promote and verify:

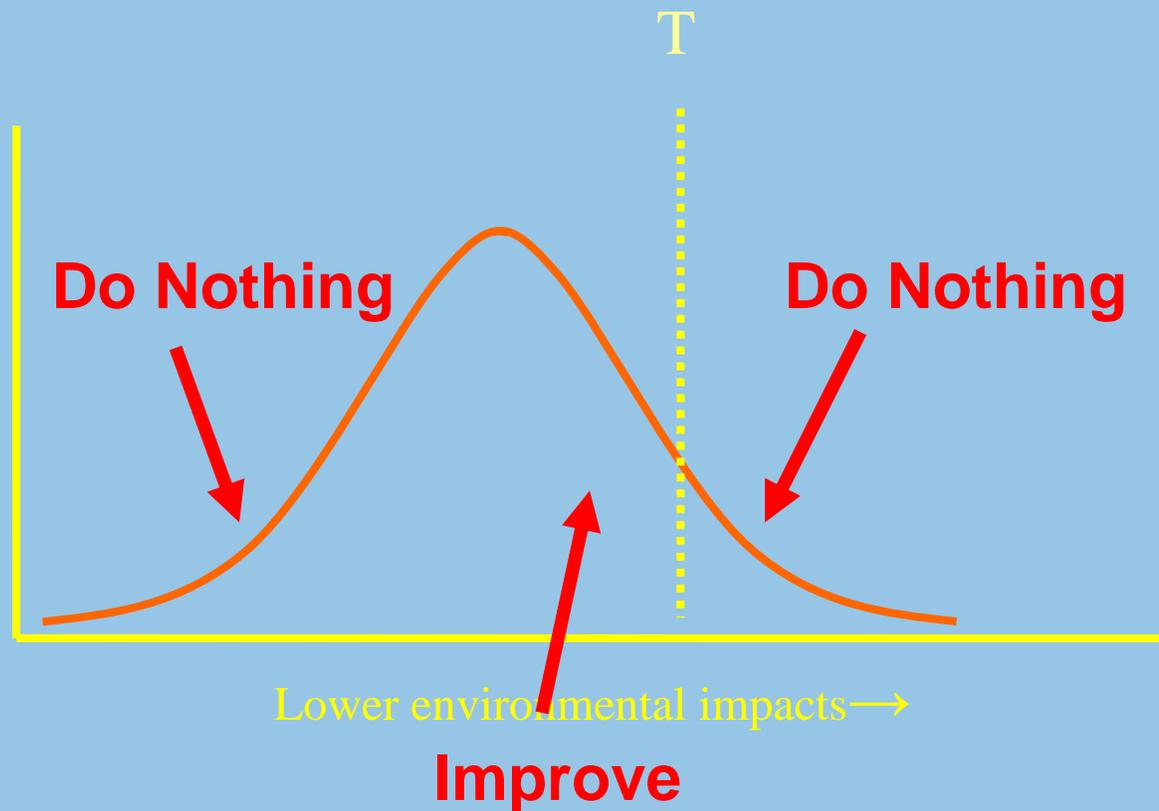
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- good environmental performance
- food safety
- social standards
- positive community impacts
- animal welfare
- traceability

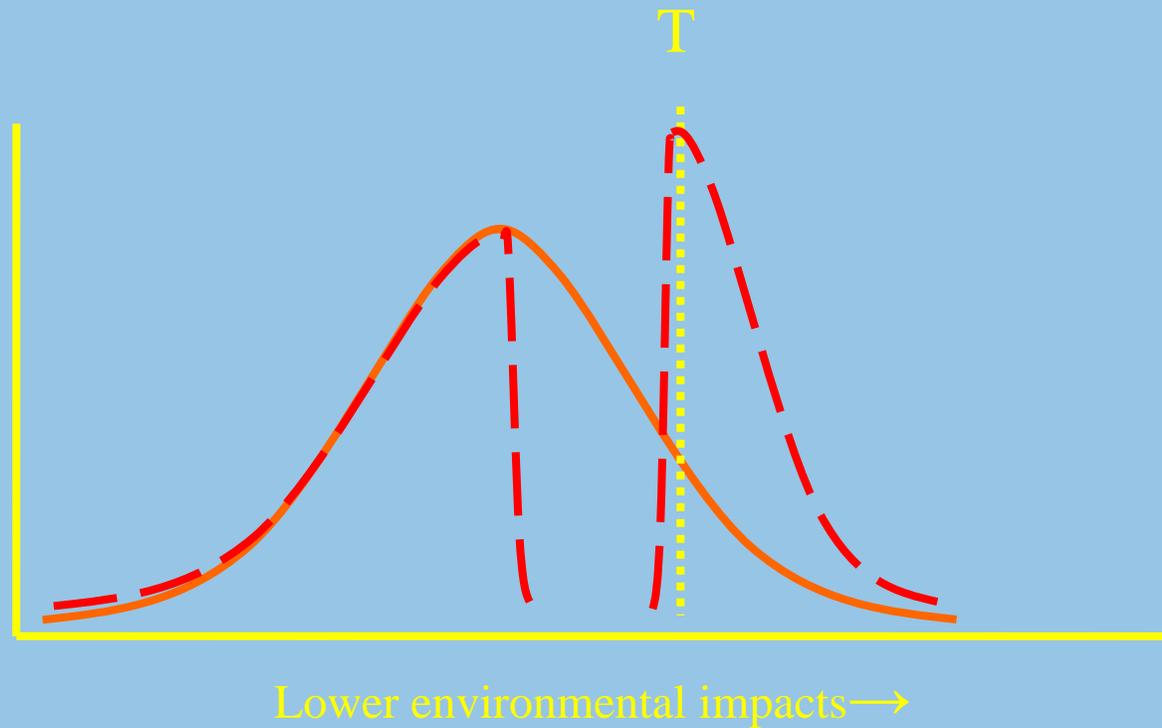




# Theory - how certification works



# Theory - how certification works





## Asymmetrical information

Buyers are often ignorant about a product's safety, origins or environmental and social impacts

Producers have a lot of information about how their fish or shrimp were produced

# Akerlof



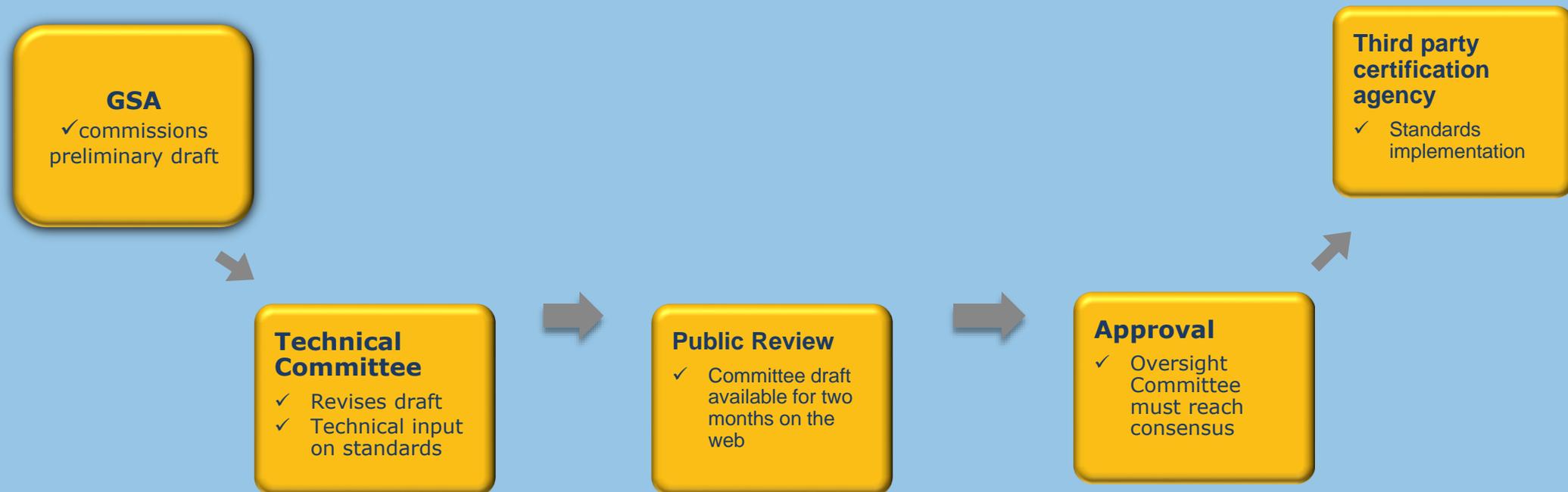
The prospect of the used car actually turning out to be a lemon has a chilling effect on all used-car transactions, which ultimately can lead to a "breakdown" of that market altogether, as wary buyers decide that there is no way to ultimately tell whether the car is good or bad and sellers are unable to persuade them otherwise

*The Market for Lemons (1970)*

# Adding value by signalling



# Typical Standards Development Process



1. Retailers & food service
  2. Benchmarkers & accreditation bodies
  3. Standard setters
  4. Certification bodies
  5. Producers
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**Certification systems are 'top down'**

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**Problems**

# The costs of certification

- “primary producers often feel disproportionately burdened by this additional cost, particularly as the benefits to them are less tangibly measured.
- A part of the reason for this is that the impact on price or market access is difficult to observe.....Especially when certification *preserves* market share or price rather than increasing it”



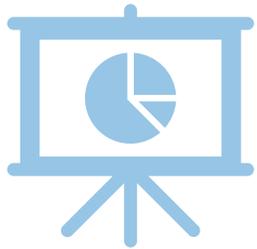
# Competition, innovation and cost-effective solutions

Thórarinnson:

*I understand that the proliferation of eco-labels can lead to confusion in the marketplace, but competition is important.*



# Demonstrating improvements



## General approach:

establish a baseline for each indicator, against which future performance can be compared



## The challenge:

“it is extremely difficult to prove impact, but it is possible to show the contribution of a standards system towards impact, by establishing a plausible relationship between the short-term results of implementation of the standards system and the long-term (positive or negative) effects” (ISEAL)

## **The difficulty of demonstrating improvements**

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**Self selecting samples**

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**Absence of reliable control and baseline data**

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**Some improvements can take place anyway, without aquaculture certification**

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**Aquaculture certification can stimulate a rising tide of improvements that lifts all 'boats', whether certified or not**

**Improvements  
compared to  
what?**

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Zero impact?

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Uncertified aquaculture?

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Fisheries?

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Livestock and poultry?



## Other models



Trends in certification – a GSA perspective

What We Do



BEST AQUACULTURE PRACTICES

***Vanguard***

BAP Vanguard is an initiative created by Best Aquaculture Practices to highlight producers that are leaders in the aquaculture industry. Producers that are part of this initiative go above and beyond what is expected of them and incorporate leading-edge innovations or best practices into their businesses. Producers must be BAP-certified in order to participate in BAP Vanguard.

# BAP Vanguard Standards

Climate Action

Sustainable Feed Ingredients

Recirculating Aquaculture Systems

Raised without Antibiotics

Enhanced Social Accountability

Biosecurity Area Management



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## BEST SEAFOOD PRACTICES

# It's time the word 'sustainable' referred to more than the environment

The BSP program provides a more comprehensive approach to assurance of responsible seafood throughout the entire supply chain by creating partnerships and new tools.



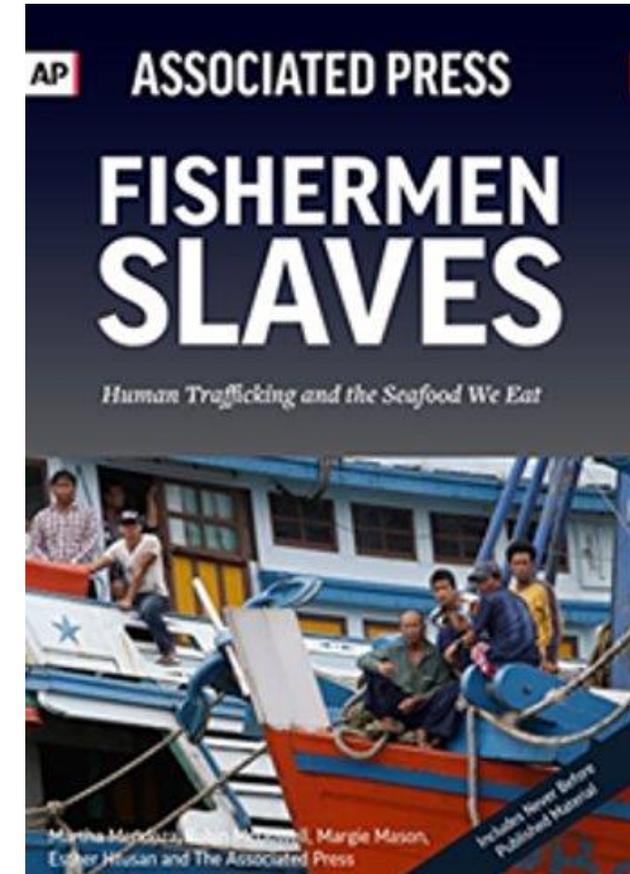
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## Social issues

**Why is seafood more susceptible to human rights abuse?**

**What can we do to improve human rights in seafood?**

- Ensure sustainable seafood looks beyond environmental impacts, protecting crew rights and welfare through the entire supply chain



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## Responsible Fishing Vessel Standard

### CREW RIGHTS, SAFETY, & WELLBEING

#### Section 1: Crew Rights and Integrity

- Recruitment process
- Contracts, agreements and T&Cs
- Remuneration & working hours
- Grievance & disciplinary measures
- Personal documentation
- Freedom of movement & no forced labour
- Freedom of association
- Child labour

#### Section 2: Crew Health & Safety

- Safety at sea
- Crew living conditions



# Global Support: International Press Coverage



Marine Stewardship Council (MSC)  
27,601 followers  
3d • Edited •

A world first...

This month an Australian fishing vessel has been certified to the [Global Seafood Assurances Responsible Fishing Vessel Standard](#); an initiative which aims to improve labour conditions and crew welfare.

"This is a huge credit to their skippers and crews and testament to the fact that many of our partners set the benchmark for best practice across the global fishing industry," says [Marine Stewardship Council](#) CEO Rupert Howes.

The vessel, Antarctic Discovery, belongs to Australian Longline Fishing, which operates in an MSC certified Patagonian and Antarctic Toothfish fishery: <https://lnkd.in/dd89jJs>

#ResponsibleBusiness #Fisheries #Seafood #ILOc188



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## Seafish UK, GSA launch new safety standard for commercial fishing vessels

By Undercurrent News June 12, 2020 09:24

UK public body Seafish and Global Seafood Assurances (GSA) have launched a new safety standard for commercial fishing vessels.



NEWS SEAFOODSOURCE RESPONSIBILITIES PRODUCT SHOWCASE SUPPLIER DIRECTORY SEAFOOD

Thai Union Group PCL  
Listed on the  
DJSI for the 7<sup>th</sup> consecutive year in 2020

### First vessel attains GSA's Responsible Fishing Vessel Standard

By Chris Chase  
January 14, 2021



Helena Delgado Nord  
Responsible Sourcing Manager

First vessel to achieve RFVS. Hop...

The RFVS is a fishing vessel-based...



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## BAP FEED MILL STANDARD 3.0



### Key changes/updates include:

New provisions for antimicrobial use

Strengthened social accountability and employee safety requirements

Enhanced sustainability of key inputs: Fishmeal, Fish Oil, Soy, and Palm Oil

New requirements for energy and water consumption



# Shrimp farms and mangroves

Honduras



# What certification does:

- Raises environmental and other standards
- Facilitates international trade
- Fills an information vacuum, signalling
- Provides information for anyone who's interested:
  - consumer
  - retailer
  - food service sector
  - importer

# Issues still to resolve

Non-tariff barriers to trade

Workability/affordability for small producers

The difficulty of demonstrating improvements

Need for competition, innovation and cost effectiveness

**Certification  
can  
stimulate  
trade by  
reducing:**

## Food safety scares

- PCBs
- Melamine
- Chloramphenicol

## Product detentions

## Country bans

## Risk

# Trends:

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More labels

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Product environmental footprints, GHGs

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More benchmarking

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Shift towards social issues, animal welfare

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Wild and farmed seafood = seafood

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Financiers taking greater interest

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Innovations

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## Conclusions



1. Ecolabels should not be viewed simply as awareness raising tools for consumers, but as a tools that communicate expectations and requirements to whoever is interested
  2. The requirements of retailers and supply chains are becoming more important than direct consumer preferences.
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**Thanks!**

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