Emerging Issues in International Trade for Fish and Fishery Products

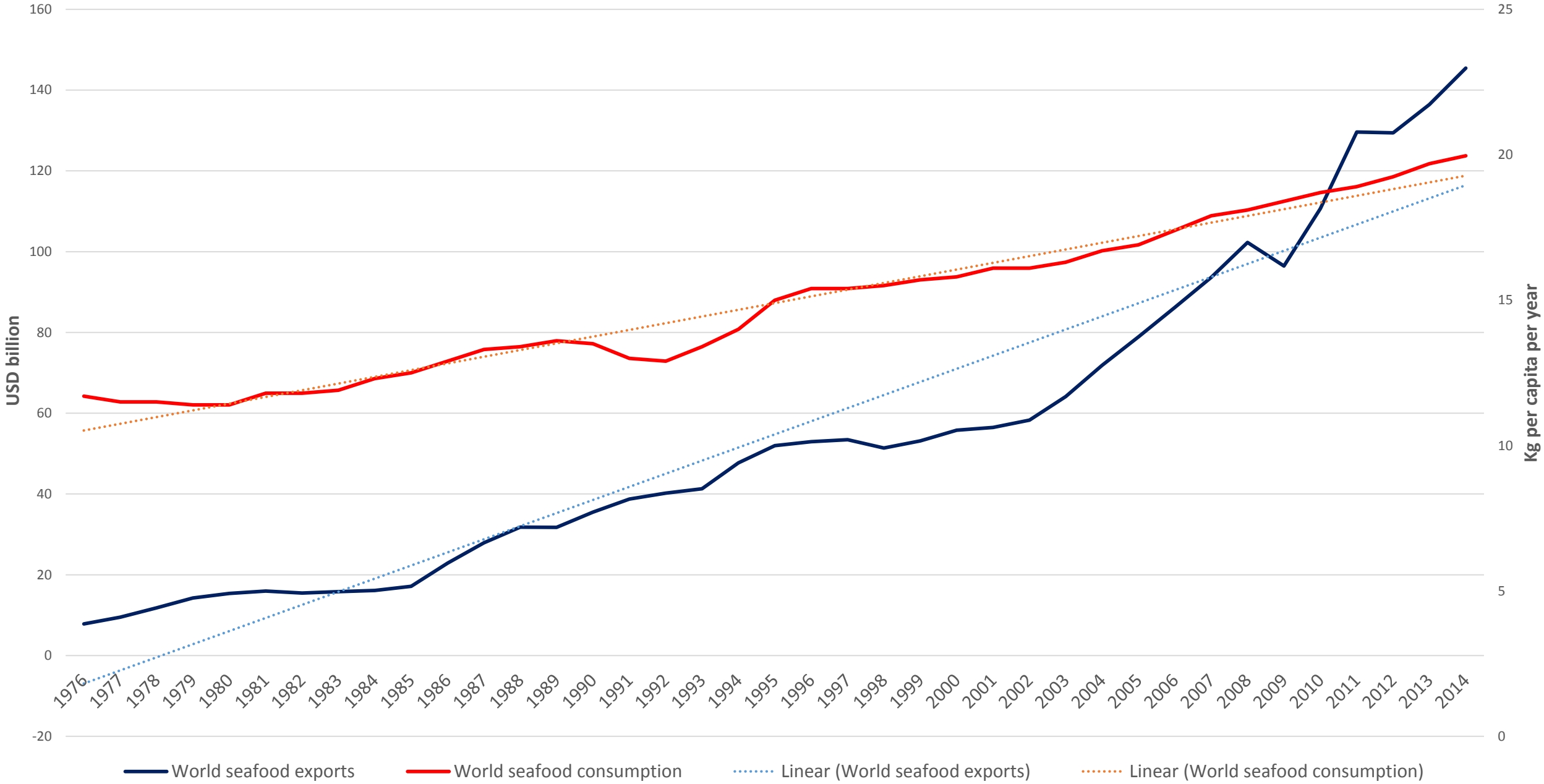
Felix Dent
Fishery Industry Officer
Fish Products, Trade and Marketing Service
FAO of the UN

Emerging Issues in International Seafood Trade

- The Globalization of Seafood
- Traceability
- Ecolabelling
- CITES
- Fish & Nutrition
- The Growth of Aquaculture

Globalization in a graph: world seafood exports vs world average seafood consumption

1976 to 2014



The Globalization of Seafood

What's behind it?

Demand for seafood growing rapidly in emerging markets

Global interconnectedness homogenizing market preferences

Steady trend towards more **liberal trade policies** in many parts of the world

Improved logistics and transportation technologies → geographical proximity between producer and consumer is less and less important, even for fresh seafood

Outsourcing of processing stages to countries with lower production costs

→ Today, fish is one the most traded food commodities, often crossing multiple national boundaries on its journey from production to consumption

The Globalization of Seafood

What does it mean for the industry?

Fewer and fewer domestic seafood markets not exposed to **international competition**

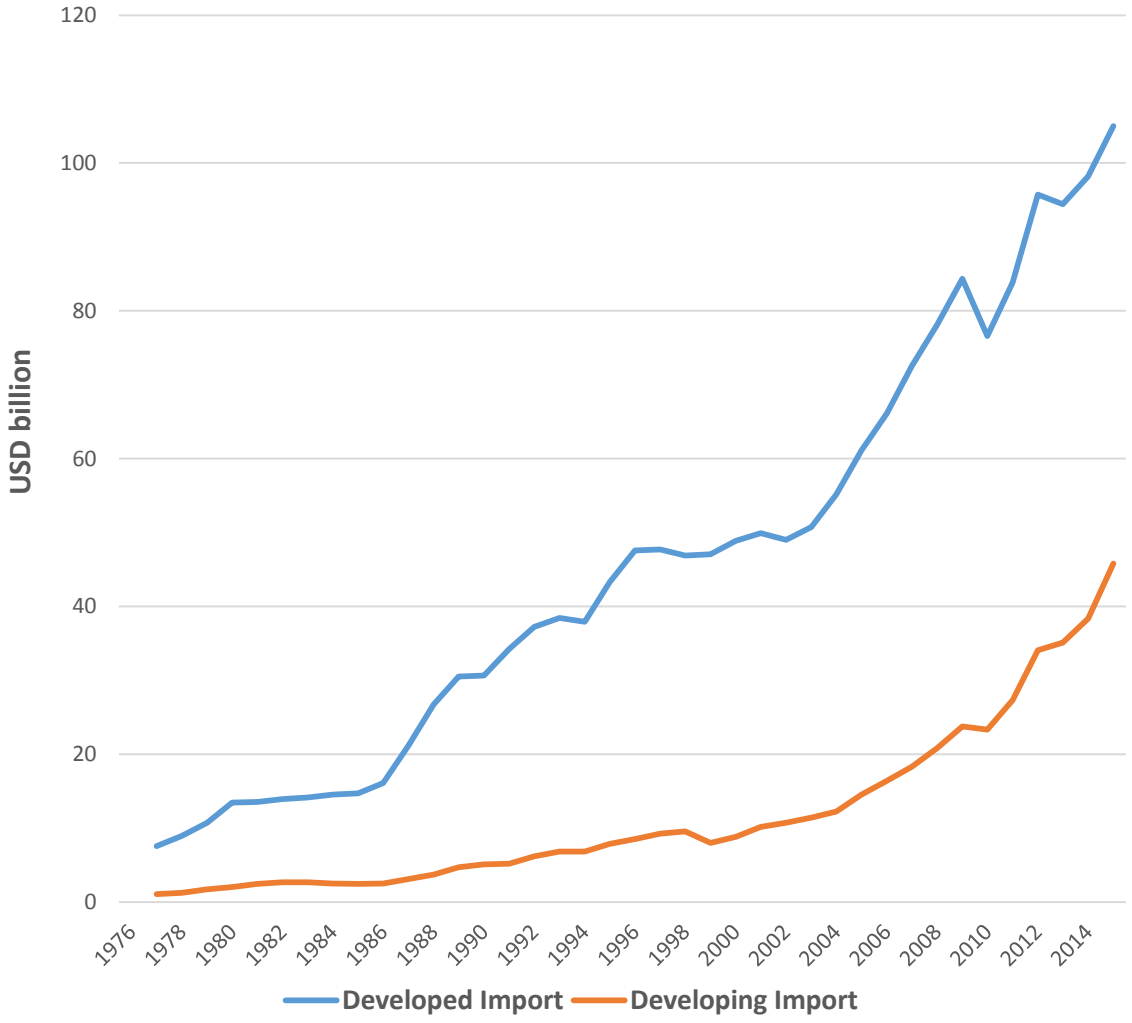
Diversity of suppliers mean effects of supply shocks are often less and shorter-lived (e.g. shrimp, salmon)

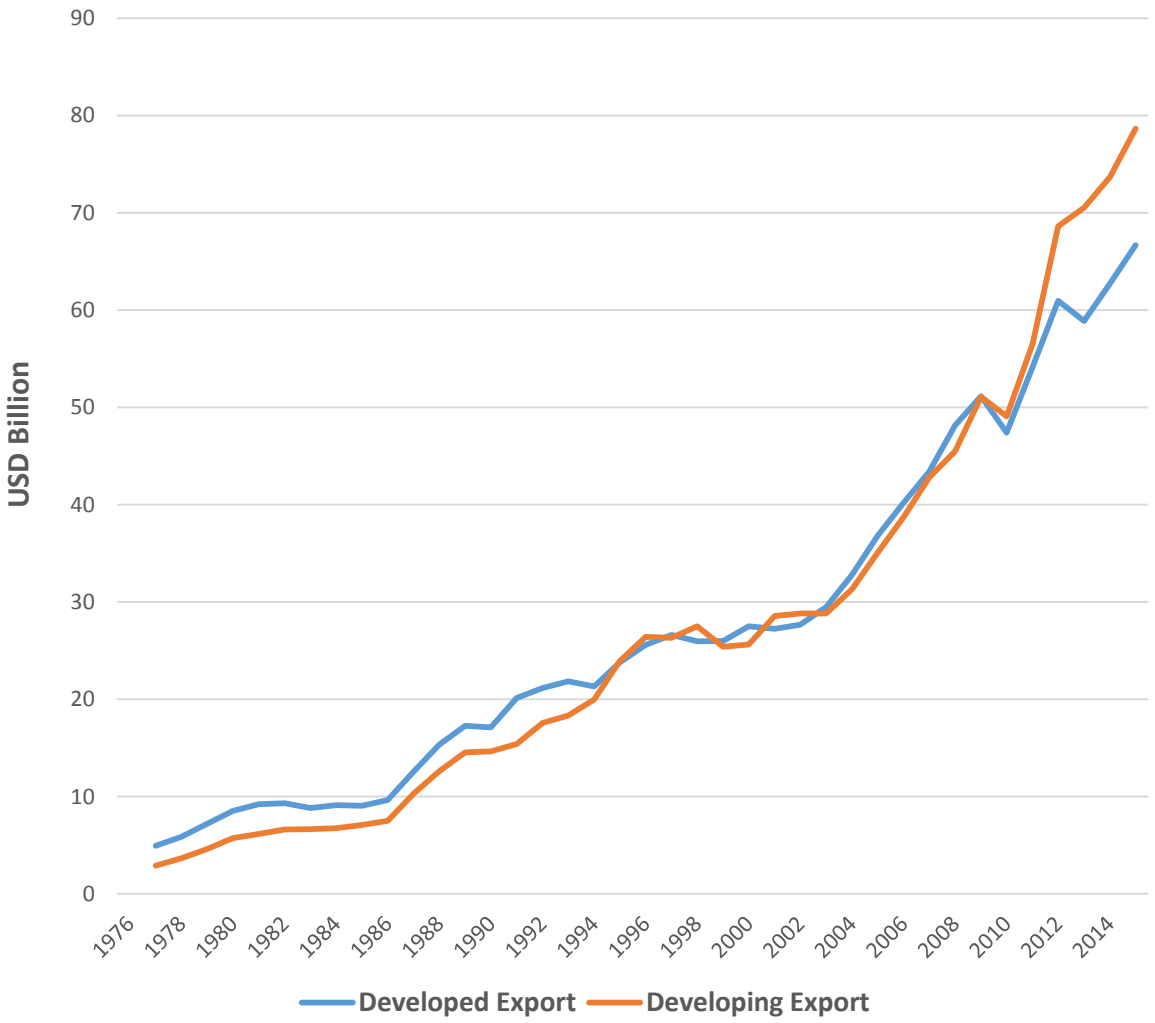
Increasing number of retail sales now made by **large, consolidated supermarket chains** linked to international supply chains

Processing is more intensive, geographically concentrated and vertically integrated

Traceability along the supply chains is increasingly important to meet food safety and sustainability requirements and standards

World seafood trade: developed vs developing





Traceability in the Supply Chain

Globalization of supply chains (separation of producer and consumer)

+

Concerns about food safety and quality assurance

+

Consumer awareness of fisheries sustainability issues (IUU fishing)

= Growing need for traceability mechanisms and guidelines

Are costs and benefits equally distributed along the supply chain?

Balance between need for traceability and minimizing unnecessary barriers to trade?

Can we develop single traceability mechanisms to serve multiple purposes?

Traceability & IUU Fishing

- Traceability is now included as a market access requirement in the regulations of major seafood markets such as the EU, the USA and Japan
- Necessary to show that the fish has been caught legally from a sustainably managed fishery wherever in the world that may be
- Also important component in many private ecolabelling schemes
  - FAO guidelines: any claims on the labels (species, sustainable etc) should be accurate and verifiable through a **traceable chain of custody**

- **Traceability should complement and enhance other regional and FAO-lead initiatives against IUU fishing**
  - 2009 FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing
  - 2013 FAO Voluntary Guidelines for Flag State Performance
  - Comprehensive Global Record of Fishing Vessels, Refrigerated Transport Vessels and Supply Vessels (Global Record)

Traceability & Food Safety

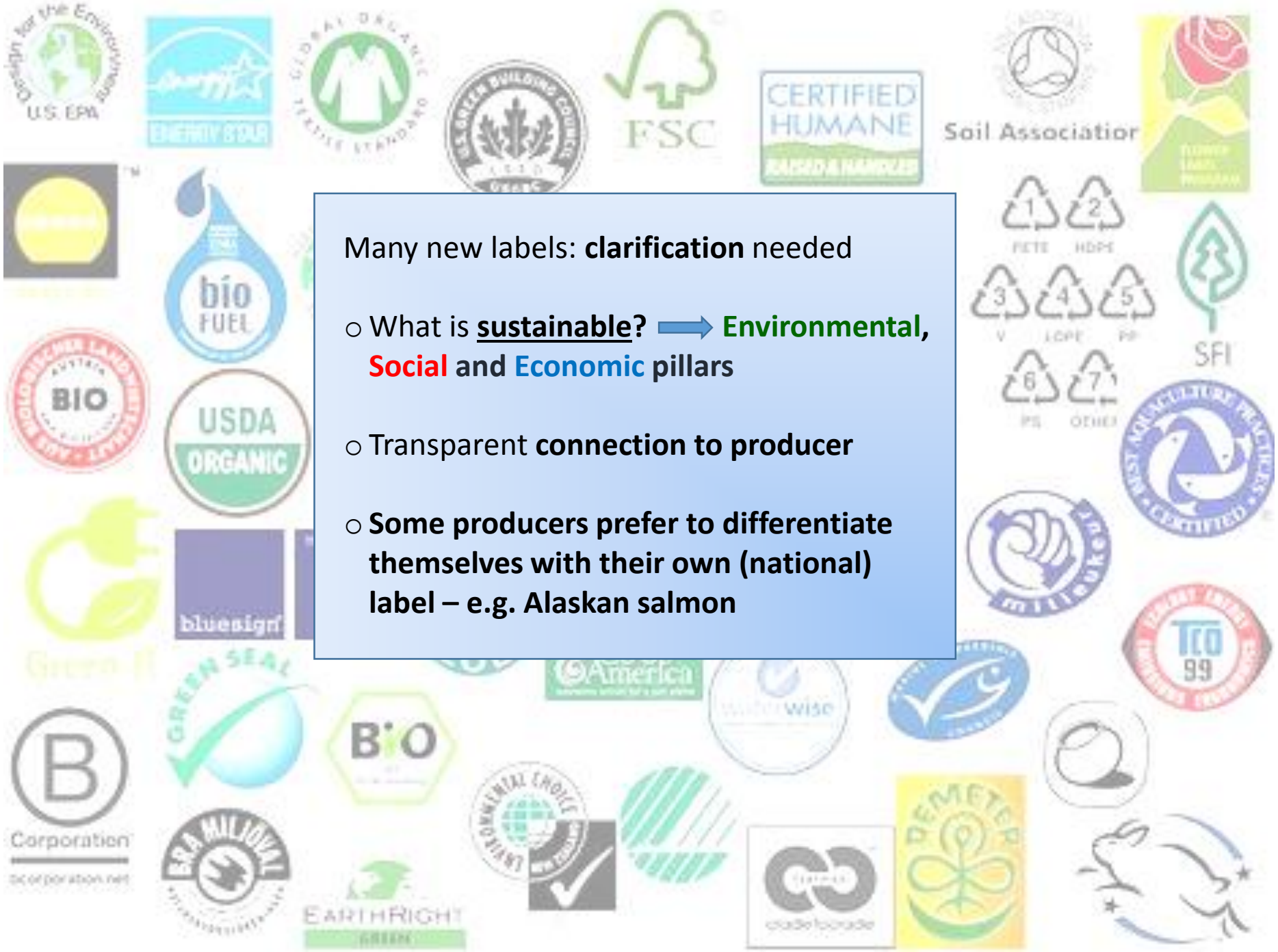
- Food safety and quality requirements increasingly strict
- Codex Alimentarius guidelines recognize traceability as a tool within their food inspection and certification systems
- “Code of practice for fish and fishery products” recommends the implementation of **traceability lot numbers** for lot identification and recall purposes
- Effective procedures should be in place to deal with any food safety hazard and to enable the **complete, rapid recall** of any implicated lot of the finished product from the market

Ecolabeling and Certification

Some of the costs & benefits…

- Studies suggest that in many cases, **fishers & farmers** bear most of the **cost** ←→ **retailers** reap most of the **rewards**
- **Is it only farms and fisheries that would be sustainable with or without the label that are being certified? → Is it just an additional cost or is it a motivation to improve practices?**
- Ecoblabel certification can allow access to **new markets**
- Ecolabels can encourage the development of **stable** and **integrated supply chains**


Design for the Environment
U.S. EPA
ENERGY STAR
GLOBAL ORGANIC TEXTILE STANDARD
U.S. GREEN BUILDING COUNCIL
LEED
USGBC
FSC
CERTIFIED HUMANE
RAISED & HANDLED
SOIL ASSOCIATION
ORGANIC STANDARD
Soil Association
EPEAT
GOLD
bio FUEL
BIRD FRIENDLY
FAIRTRADE
GREEN TICK
SUSTAINABLE
CERTIFIED
CERTIFIED
bio gro
ORGANIC
1 PETE
2 HDPE
3 V
4 LDPE
5 PP
6 PS
7 OTHER
SFI
AUS BIOLOGISCHER LANDWIRTSCHAFT
AUSTRIA
BIO
USDA
ORGANIC
AUSTRALIAN
CERTIFIED
ORGANIC
UMWELTZEICHEN
ENVIRONMENTAL CHOICE
BEST AQUACULTURE PRACTICES
CERTIFIED
Green IT
bluesign
The independent industry textile standard
GREEN GLOBE
80
PLUS
milieukeur
Co-op America
waterwise
TCO
99
GREEN SEAL
BIO
B
Corporation
bcorporation.net
BRA MILJÖVAL
EARTHRIGHT
GREEN
ENVIRONMENTAL CHOICE
NEW ZEALAND
cradletocradle
DEMETER



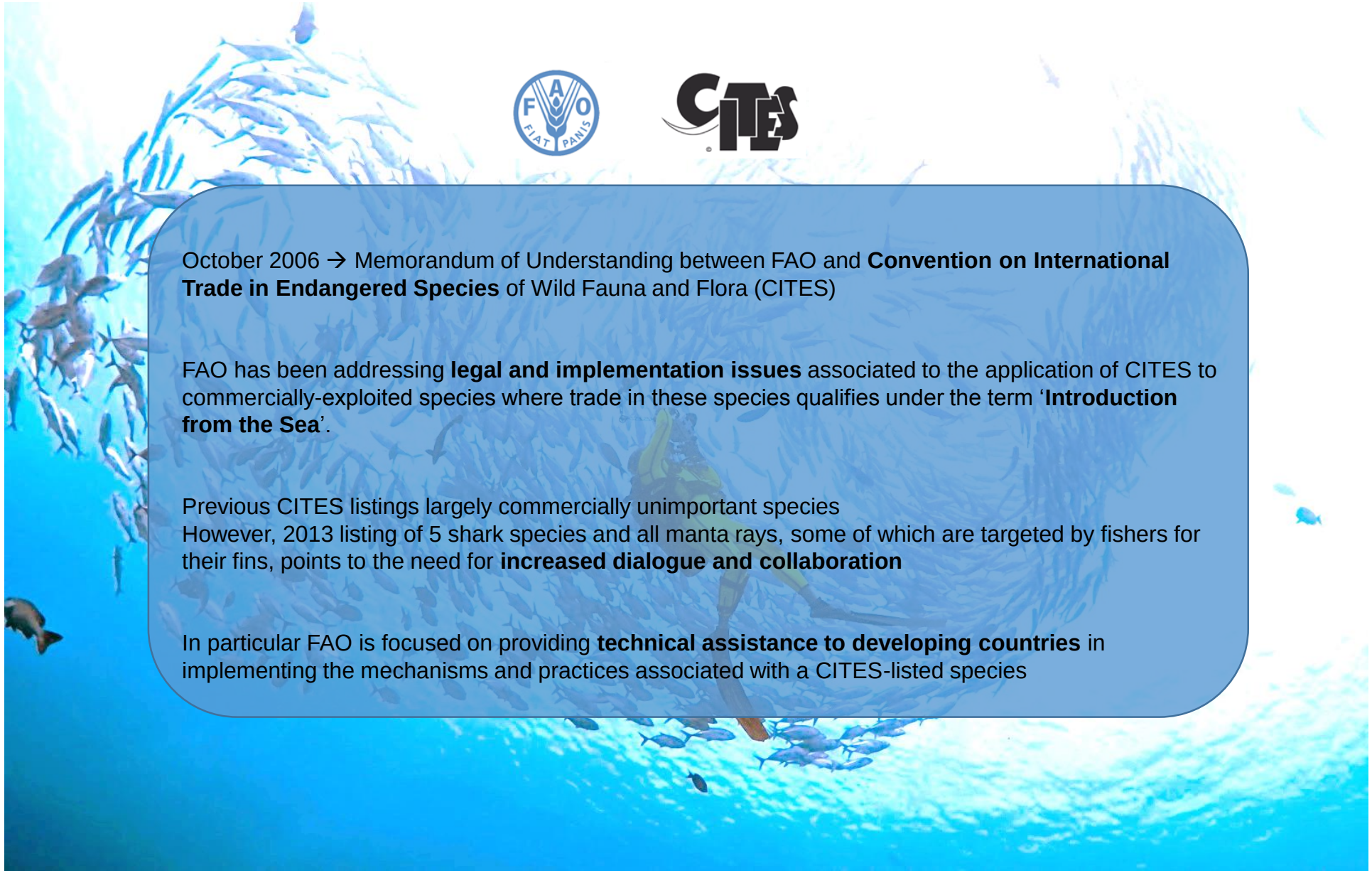
Many new labels: **clarification** needed

- What is **sustainable?** ⟹ **Environmental, Social and Economic pillars**
- Transparent **connection to producer**
- **Some producers prefer to differentiate themselves with their own (national) label – e.g. Alaskan salmon**

FAO response

- **Guidelines**
  - for Eco-Labeling of Fish and Fishery Products from Marine Capture Fisheries (2005)
  - for the Eco-Labeling of Fish and Fishery Products from Inland Capture Fisheries (2010)
  - for Aquaculture Certification (2011)


FAO
FIAT PANIS
CITES



October 2006 → Memorandum of Understanding between FAO and **Convention on International Trade in Endangered Species** of Wild Fauna and Flora (CITES)

FAO has been addressing **legal and implementation issues** associated to the application of CITES to commercially-exploited species where trade in these species qualifies under the term '**Introduction from the Sea**'.

Previous CITES listings largely commercially unimportant species
However, 2013 listing of 5 shark species and all manta rays, some of which are targeted by fishers for their fins, points to the need for **increased dialogue and collaboration**

In particular FAO is focused on providing **technical assistance to developing countries** in implementing the mechanisms and practices associated with a CITES-listed species

Local to Global: consumption versus trade

Fish can contribute to food security and provide income through...

- ❑ Domestic consumption
- ❑ Generation of employment
- ❑ Trade

FAO-NORAD Value-chain study: fish trade has in most cases a positive impact on local welfare but...

- ❑ Trade can increase pressure on resources
- ❑ Full range of benefits of fish consumption are difficult to quantify

Fish & Nutrition

What's so great about seafood?

Fish provides many valuable nutrients

- ❑ protein
- ❑ long-chain omega-3 fatty acids
- ❑ fat-soluble vitamins
- ❑ minerals like iron, calcium, iodine, zinc & selenium

With numerous health benefits

- ❑ (*known*) reduced risk of cardiac death, aids neurodevelopment in unborn infants
- ❑ (*probable*) reduced risk of stroke, (*possible*) reduced risk of depression

Which are important in developing countries

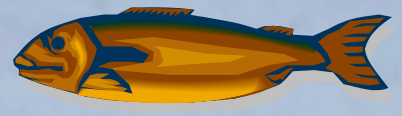
- ❑ fish provides nutrients where they are most needed
- ❑ cheap small pelagics growing component of developing country diets

Fish & Nutrition: the developing world

Iron deficiency anaemia is a major problem in many developing countries, affecting more people than any other health condition

- Negative health effects can cause substantial decline in national productivity levels

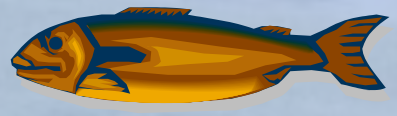
FISH (including bones, head etc) is a great source of iron



Vitamin A deficiency is a public health problem in more than half of all countries

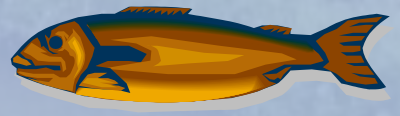
- Negative health effects can include blindness and increased risk of infection

FISH (including bones, head etc) is a great source of Vitamin A



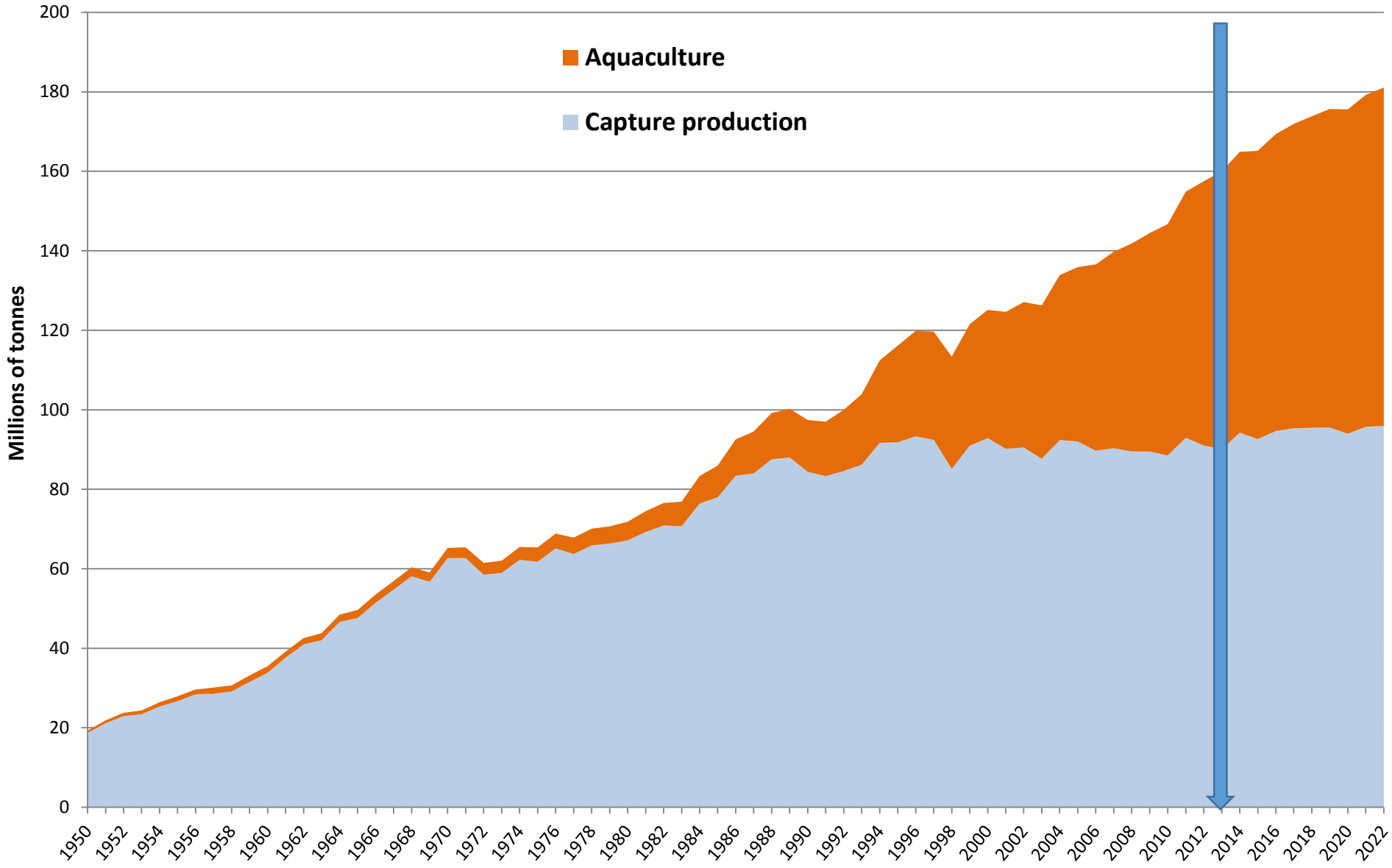
Coronary Heart Disease (CHD) is a global health problem, and CHD-related mortality is increasing in developing countries

FISH consumption can reduce the risk of CHD-related death by up to 36%



Aquaculture vs capture in global production

1950 - 2022 (FAO-OECD projections)

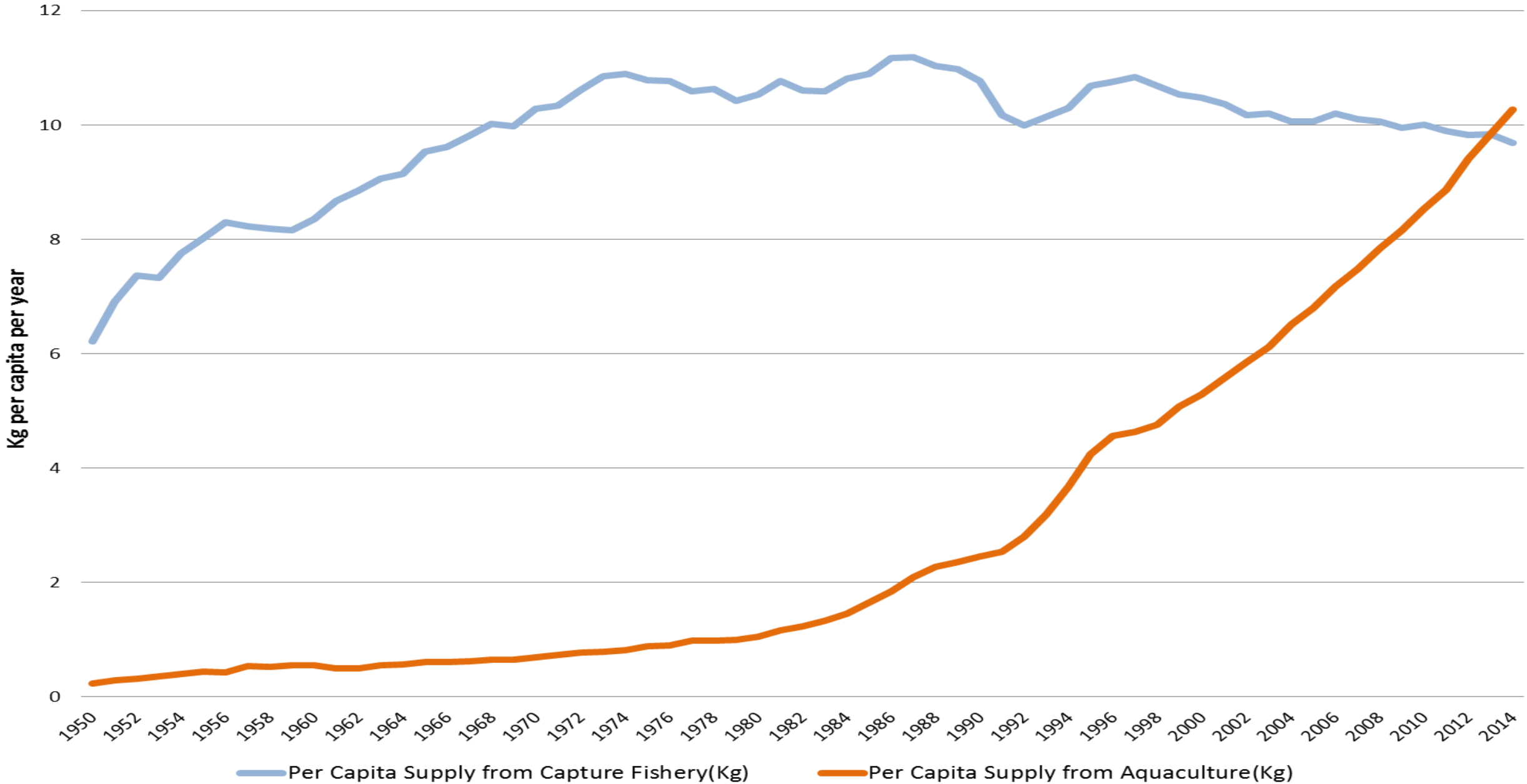


Source: FishstatJ & Globefish Highlights (2014)

Note: 2012 & 2013 estimated figures

Per capita fish supply for human consumption

1950 to 2014



The Growth of Aquaculture

What does it mean for…

❖ **Markets, Products & Prices?**

- Aquaculture producers better able to control production levels in the long-term and to adapt their product to meet market requirements
- Greater potential for vertical and horizontal integration
- However, non-diversified producers are highly exposed to price volatility and disease

❖ **Traceability and certification?**

- New traceability tools and standards for aquaculture producers
- Certification schemes need to address public concerns relating to environmental and social impacts in particular

❖ **Fish & Nutrition?**

- Majority of aquaculture sector expansion taking place in developing countries
- Aquaculture producers are better able to control size, nutritional content and exposure to health hazards
- Aquaculture has the potential to make a significant contribution to food security

Aquaculture sustainability: challenges and prospects

IF

- Global commitment to the evaluation and reduction of environmental/social impact
- Reduction of wild fish proportion in feed (alternative protein sources)
- Disease prevention

THEN

- Sustainable supply of healthy seafood for a growing population
- Potential increase in export revenues for developing countries
- Reduced pressure on wild populations
- Economic benefits e.g. employment in the farming sector

Conclusions: you tell me…

- What does the continuing globalization of seafood mean for the industry and for the consumer?
- What action can we take to reduce any negative impacts?
- What are the most important challenges and opportunities presented by the emergence of traceability standards and tools?
- What is the net benefit (cost?) of ecolabels for the industry as a whole?
- What influence should organizations like CITES have on the regulations and standards governing seafood trade?
- Is it more important to encourage domestic consumption of fish in developing, nutrient-deficient regions or to develop export markets?
- What does the continuing growth of aquaculture mean for the seafood industry and for seafood consumers?
- How can we reduce possible negative impacts?

THANK YOU FOR LISTENING

www.globefish.org