Sustainable **Certified** Seafood: Background

Resources for the Future, May 4, 2016

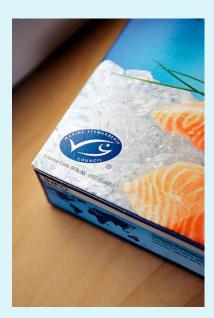
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Certification schemes



Monterey Bay Aquarium Seafood Watch

The Monterey Bay Aquarium Seafood Watch program creates science-based recommendations that help consumers and businesses make ocean-friendly seafood choices. Carry this guide with you and share it with others to help spread the word.

BEST CHOICES

Arctic Char (farmed) Bass: Striped (US hook & line, farmed)
Catfish (US) Clams, Mussels & Oysters Cod: Pacific (US hook & line) Halibut: California (US hook & line) Lobster: Spiny (Mexico) Prawns: Snot (AK) Rockfish (US) Sablefish/Black Cod (AK & Canada wild) Salmon (AK) Sanddab (CA, OR & WA) Sardines: Pacific (Canada & US) Scallops (farmed) Seaweed (farmed) Shrimp (AK wild, US farmed) Sole (CA, OR & WA)

Tilapia (Ecuador & US)

Trout: Rainbow (US farmed)

(Canada & US troll, pole)

(FAD free, US troll, pole)

Tuna: Albacore/White canned

Tuna: Skipjack/Light canned

Tuna: Yellowfin (US troll, pole)

GOOD ALTERNATIVES

Basa/Pangasius/Swai Cort Pacific (US trawl) Crab: Blue & King (US) Crab: Dungeness Crab: Pacific Rock (CA & OR) Halibut (US Pacific gillnet & trawl) Lobster (Bahamas & US) Mahi Mahi (Ecuador & US) Octopus (Spain & US) Salmon (CA, OR & WA wild) Scallops (wild) Shrimp (Canada & US wild, Ecuador farmed) Snapper (US) Sole: Petrale (CA, OR & WA) Squid (US) Swordfish (US) Tilapia (China & Taiwan) Tuna: Albacore/White canned (US longline) Tuna: Skipjack/Light canned (imported troll, pole and US longline) Tuna: Yellowfin (imported troll, pole and US longline)

AVOID Cod: Pacific (Japan & Russia)

Crab: Red King (Russia) Lobster: Spiny (Belize, Brazil, Honduras & Nicaragua) Mahi Mahi (imported) Orange Roughy Rockfish (Canada trawl) Salmon: Atlantic (farmed) Sardines: Atlantic (Medit, Sea) Sharks Shrimp (imported) Squid (imported) Swordfish (imported) Tuna: Albacore/White canned (except Canada & US troll, pole and US longline) Tuna: Bluefin Tuna: Skipjack/Light canned (imported longline and purse seine) Tuna: Yellowfin (except troll, pole and US longline)

Start with "Best Choices" then check the other columns—your favorite seafood could be in more than one.

Best Choices
Buy first, they're well managed
and caught or farmed in ways
that cause little harm to habitats
or other wildlife.

Good Alternatives

Buy, but be aware there are concerns with how they're caught or farmed.

Avoid

Take a pass on these for now, they're overfished or caught or farmed in ways that harm other marine life or the environment.

Visit us online or download our app for a **full list** of our recommendations.





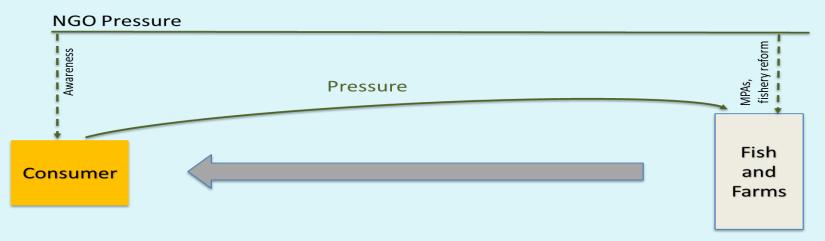




Sustainable seafood certification

- Retailers: Establish and protect brand, satisfy demand, create niche markets
- **Fishers**: Differentiate product forms, access to broader markets, price premiums
- **Consumers**: Credibility in claims, product safety/health, "warm glow"
- Environmental NGOs: Leverage supply chain to change production practices and improve governance
- Suppliers: Responding to fishermen, retailers, consumers, and NGOs

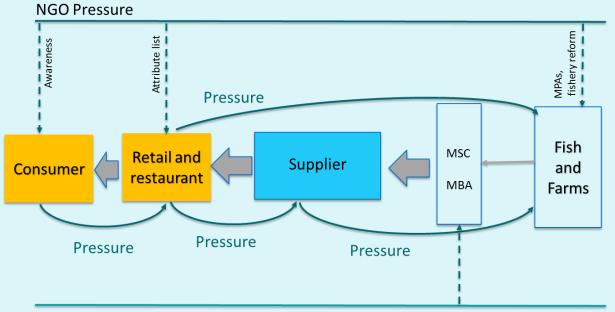
Original theory of change 1.0



- Consumer-driven focus
- Prominent boycotts of products (dolphin safe tuna, give swordfish a break, Chilean sea bass)
- Development of consumer guides
 - Audubon Magazine in 1998
 - Seafood Watch, Monterey Bay Aquarium

Seafood Certification 2.0

- NGOs pressure retailers to change practices, led to brand risk around seafood
- Unilever & WWF team up to create MSC in 1996
 - Goal was to change way to fish are caught, marketed, and bought
- MSC becomes independent, 1st fishery certified is Alaska Salmon in 2000





BEST CHOICES	GOOD ALTERNATIVES	AVOID	Start with "Rest Choices" then
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2.0: Rapid development

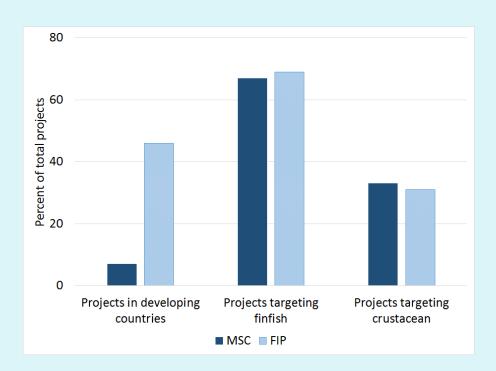
- Many supermarkets, restaurants, and food service companies have and are making seafood sustainability commitments
 - E.g., Whole Foods, Walmart, Raley's, and McDonald's in the US and Sainsbury's in the UK have promised to source 100% sustainably
- Growth in the number of certification groups and NGOs providing recommendations
 - ~30 different schemes across fisheries and aquaculture (3rd party certifiers, guides, coalitions)
 - Criteria for certification differ and ratings vary for same fish stocks

Seafood Supply

- Most certified product comes from developed country fisheries
 - E.g., 93% of MSC certified fisheries are in developed country waters
- About ½ globally traded seafood (wild caught and farmed) comes from developing countries
 - Development of fishery improvement programs (FIPS) to address this gap

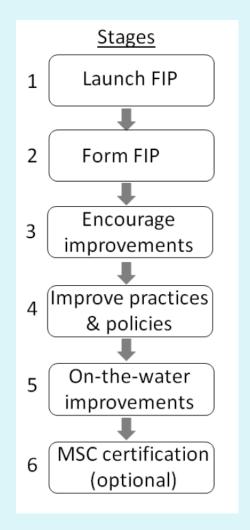
Supply bottlenecks: Role of developing country fisheries

- Supply bottlenecks:
 Ability to find product that meets multiple attributes, including price, quantity, quality, and sustainability
- Sustainability commitments of many retailers include seafood from fishery improvement projects or FIPs



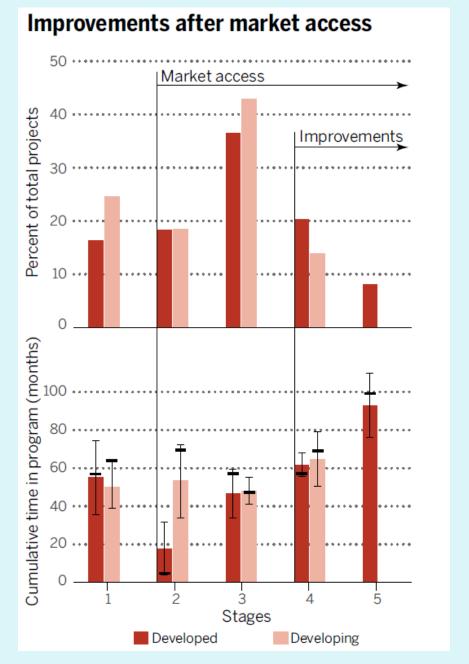
Supply bottlenecks: FIPs

- FIPs are partnerships up and down supply chain
 - NGOs (WWF, SFP) and private (Blueyou)
- Reward conditional management and on-thewater improvements (stage 4&5) with open markets (stage 2)

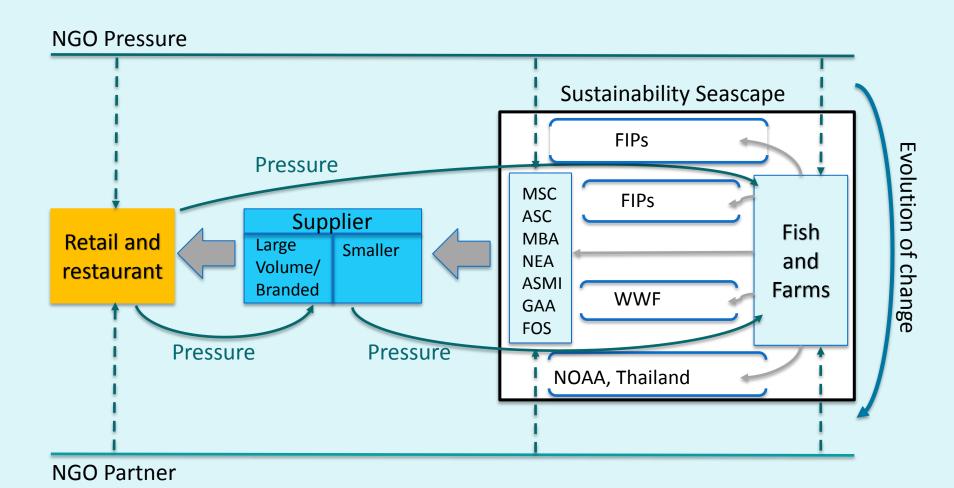


FIPs and Market Access

 Relative to fisheries in developed countries, fisheries in developing countries are not moving as fast through the stages



Seafood certification 3.0



Challenges and opportunities moving forward

- FIPs and other schemes creating de facto sustainability claims, competing with MSC and other third-party certification
- Incorporation of social attributes (e.g., labor, community well-being) into wild-caught fishery certification systems
- Development and incorporation of economically viable traceability systems in seafood supply chains

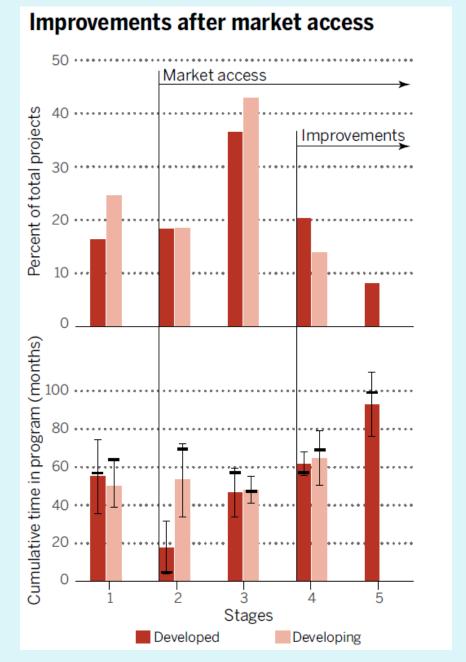


Background slides



FIPs and Market Access

- DCFs are stagnating in stage 2, where access to certified markets is provided
- Fishery
 management
 reform occurs in
 stage 4



Challenges with FIPs

- FIPs creating de facto sustainability claims, competing with MSC and other third-party certification
- Majority FIPs are single species
 - Species managed with input restrictions (e.g., gear)
 with weak to low monitoring and enforcement
- Fishing community not necessarily in position to affect fishery governance
- Retail and NGO partners need staying power in order to resource commitments

Recommendations

- Basic exclusionary rights needed for improvements, but difficult to enact in poor fishing communities
- Retailers must maintain strict adherence to conditional market access
 - Withhold access until some improvements in place
 - Withdraw access if no improvements made in reasonable amount of time

Future research

- How effective are market incentives for motivating and maintaining engagement of DCF fishing communities?
- How are costs and benefits of FIPS distributed in short and long-run?
- How do fishery and community characteristics affect the durability of value-chain driven improvements?
- How can greater oversight of FIPs in DCFs be balanced with the greater costs it will entail?