



VOLUNTARY LABELLING, CERTIFICATION & STRATEGIC POSITIONING





UNIVERSITY of STIRLING

Institute of Aquaculture

PrimeFish Team & Contributors Francis Murray, Dimitar Taskov & John Bostock







Aquaculture of BE THE DIFFERENCE BE THE DIFFERENCE

Contents

- 1. Seafood certified sustainability standards; drivers
- 2. Adoption trends
- 3. 'Taking back control'? The Global Salmon Initiative (GSI) as an example of pre-competitive sectoral certification strategy
- 4. Summary & recommendations

1. Seafood certified sustainability standards

What are certified sustainability standards?

- Market-based approach to govern negative externalities of business practices
- Here mainly relating to environmental, social (& food safety) standards
- Borne of a legislative vacuum & loss of confidence in nation states internalise non-economic considerations valued by society
- Many types of ownership and certification forms
- But all are (i) voluntary & (ii) adhere to third-party auditing systems
- Framed as consumers directing change through purchasing power? or

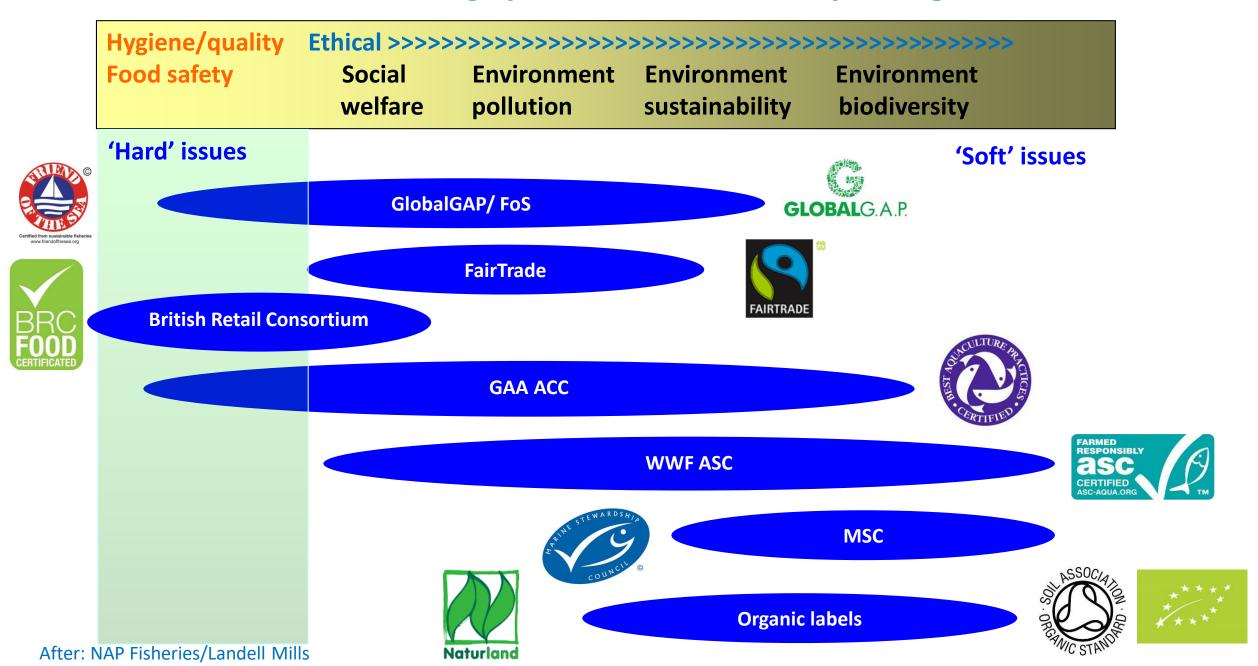
Why certify?

- Supports ethical consumption & production by integrating social & environmental issues
- Price premium? limited evidence
- 'Eco-efficiency' improved resource utilisation (growth, feed, escapes etc.)
- Other strategic objectives
 - outsourcing of brand/ reputation risk-management
 - v civil society challenges/ campaigns
 - fragmented value-chains v internal assurance
 - pre-competitive: social licence to operate (GSI example)?
- Limited to companies capable of funding costs? (industry dynamics)

Who drives demand for 3rd party certification?

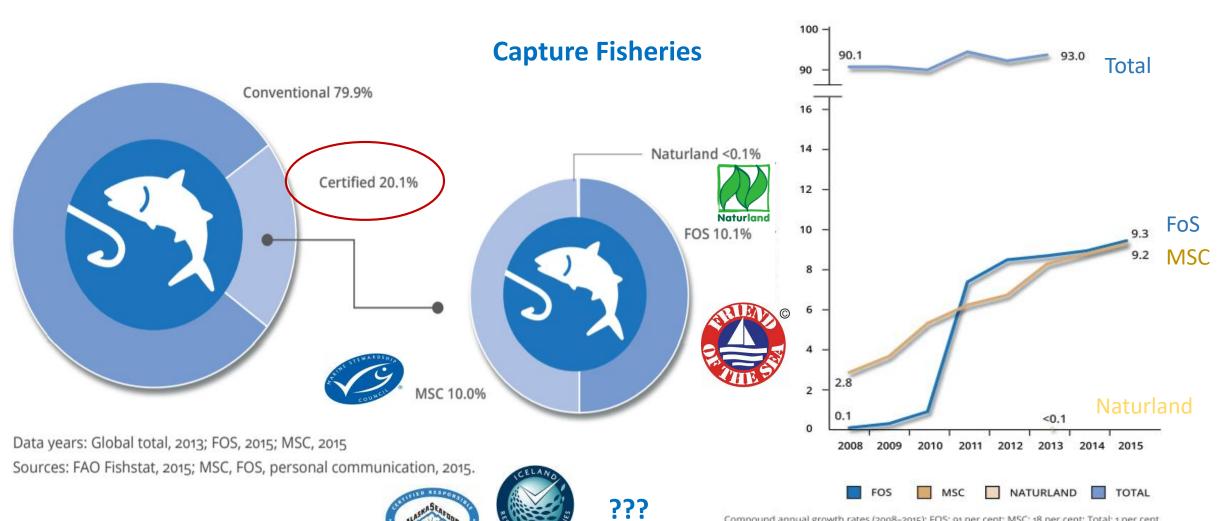


The seafood ethical labeling spectrum – food safety to organics



2. Adoption Trends

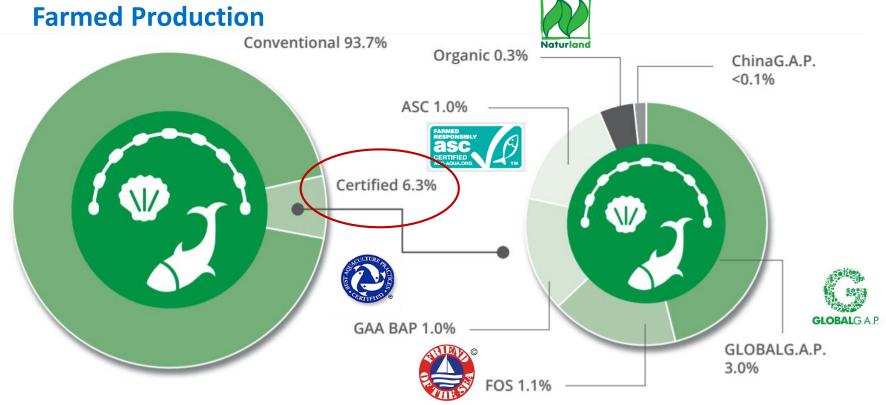
Certified sustainable <u>fisheries</u> production %volume 2013-15



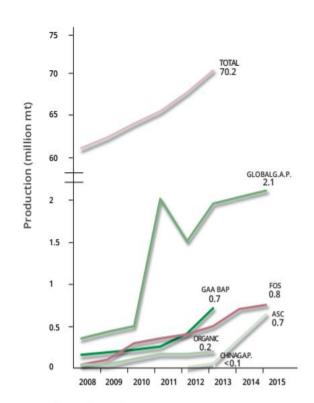
Compound annual growth rates (2008–2015): FOS: 91 per cent; MSC: 18 per cent; Total: 1 per cent. Source: FAO Fishstat, 2015; FOS, MSC, personal communication, 2015.

After: Potts et al., 2016

Certified sustainable <u>aquaculture</u> production %volume 2013-15



Data years: ASC, 2015; BAP, 2013; ChinaG.A.P., 2013; Conventional, 2013; FOS, 2014; GLOBALG.A.P., 2015; Organic, 2013. Sources: FAO Fishstat, 2015; ASC, BAP, ChinaG.A.P., FOS, GLOBALG.A.P., Organic, personal communication, 2015.

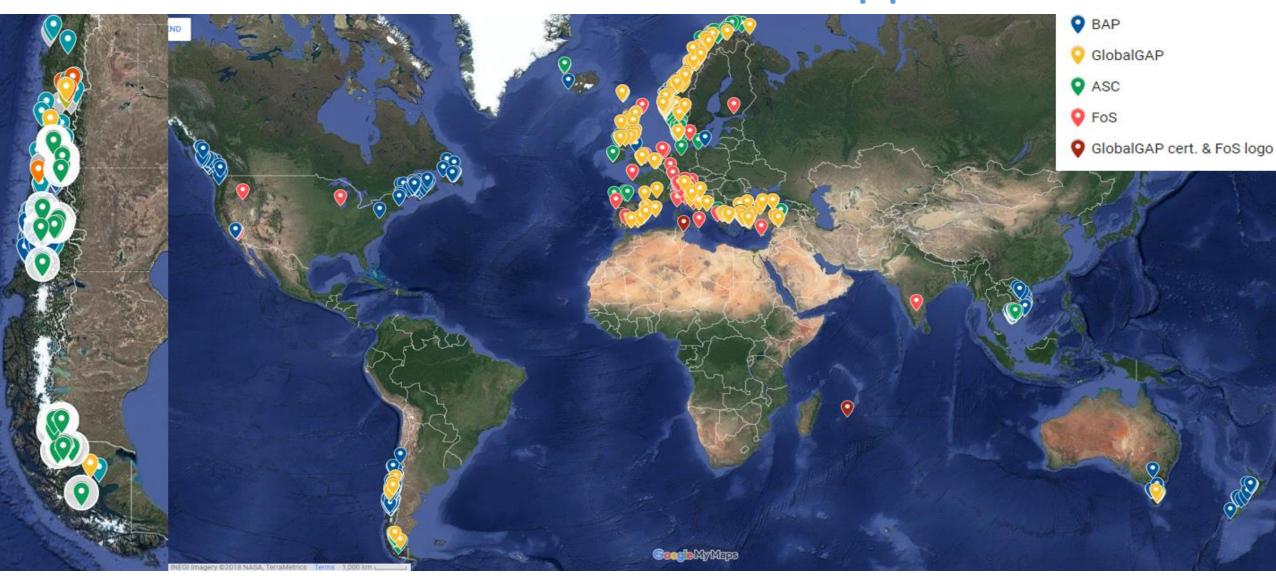


Compound annual growth rates (2008–2015): ASC: 98 per cent; BAP: 35 GLOBALG.A.P.: 29 per cent; Organic: 35 per cent; Total: 6 per cent. Sour ASC, BAP, ChinaG.A.P., FiBL, FOS, GLOBALG.A.P., MSC, Naturland, personal control of the co

GlobalGAP, GAA & ASC = 80% of export <u>aquaculture</u> certification globally

After: Potts et al., 2016

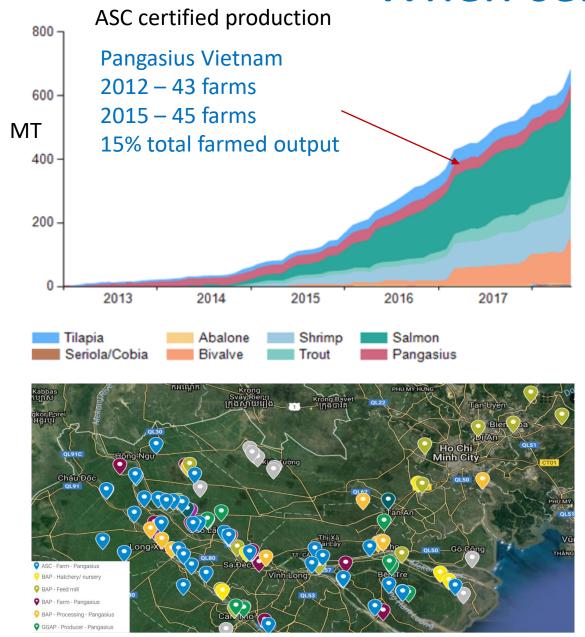
Certified aquaculture entities by standard body Oct 2017 - Primefish Spp.



3. 'Taking back control'?

The Global Salmon Initiative (GSI) as an example of pre-competitive sectoral certification strategy

When certification fails?





Jan 2017: French retail chain Carrefour stop selling pangasius in Spain, Belgium, Italy & France citing environmental & food safety concerns!

The Global Salmon Initiative (GSI)

- 'Pre-competitive' 'corporate citizenship' voluntary commitment of global salmon producers in (most) highly consolidated seafood sector:
 - Commitment to 100% ASC certification all farms by 2020
 - Transparency on 18 environmental & social performance indicators
- Key drivers?
 - **social license** for growth ambitions & assoc. site licensing requirements?
 - WWF global eNGO founding role & background support for ASC standards?





GSI Members (12-24 companies from 2013-2016)













AquaChile

Bakkafrost

Blumar S

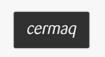
Blumar Seafoods

Huon Aquaculture

Los Fiordos

Marine Harvest





Cermaq









Camanchaca

Grieg Seafood

Multiexport Foods SA

New Zealand King Salmon

Ventisqueros S.A

					Salmon		
SN	Company	Operational Countries					
1	Marine Harvest	Chile	Norway	Canada	Scotland	Faeroes	Ireland
2	Cermaq	Chile	Norway	Canada			
3	Grieg Seafood		Norway	Canada	Scotland		
4	Aquachile	Chile					
5	Blumar	Chile					
6	Camanchacha	Chile					
7	Los Fiordos	Chile					
8	Multiexport Foods	Chile					
9	Ventisqueros	Chile					
10	Bakkafrost					Faeroes	
11	Huon						Australia
12	NZ King Salmon						N. Zealand

17 farmed salmon companies participating producing >65% of

global

volume.

2018:

Associates:





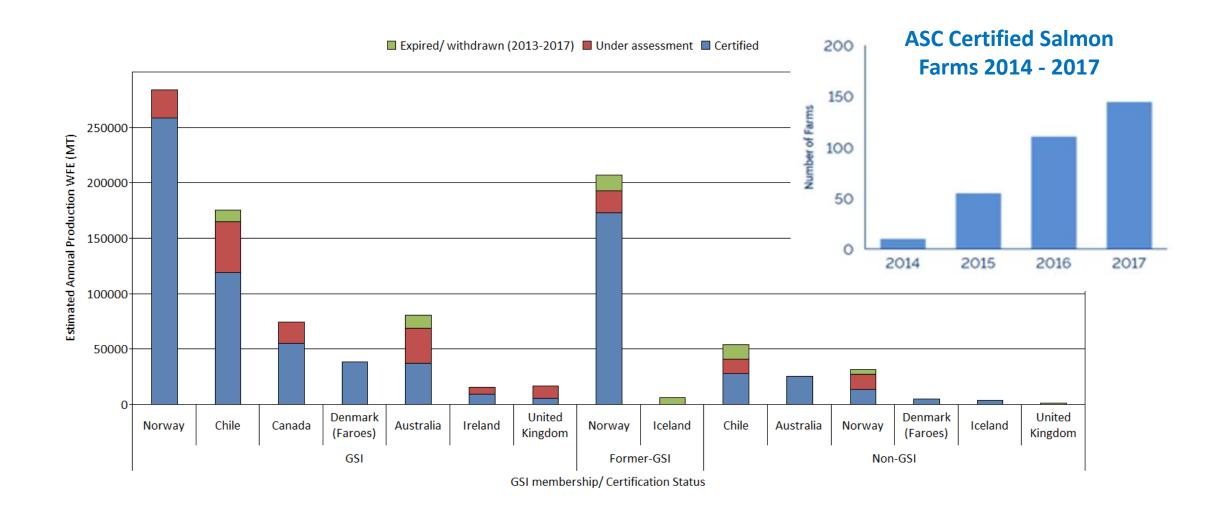




18 Environmental & Social Indicators – accessible from GSI website

		To Elivirolli Cittal & Social illaicators accessible il olli osi website									
Grp	SN	Indicator Description	Environmental								
1	1.1	Fish escapes	Fish Escapes	GLOBAL							
2	2.1	Fish mortality	Fish Mortality Antibiotic Use	SALMON INITIATIVE							
3	3.1	Antibiotic use Index (AUI)	Sea Lice Counts								
4	4.1	Sea lice counts	Sea Lice Treatments	ort							
	5.1	Sea lice treatments – in bath	Non-Medicinal Methods	BILITY INDICATORS ASC CERTIFICATION							
5	5.2	Sea lice treatments – in feed	Wildlife Interactions	+ Chile + Camanchaca GO							
6	6.1	Non-medicinal sea lice treatment methods	Use of Marine Ingredients in Feed Certifications & Environmental Licenses	haca in Chile							
	7.1	Wildlife interactions – Birds		e the use of antibiotics, and we hope to show our progress here via the GSI ve a responsibility to ensure a sanitary environment, and protect the health and							
7	7.2	Wildlife interactions - Mammals	Social	ent. At times, this means we have to use antibiotics to ensure the health of our fish, piotics to fight off illness. We only ever use antibiotics following the direction of a							
	8.1	Use of Marine Ingredients in Feed – Fish Meal	Compliance Occupational Health and Safety	ly used under close instruction from certified fish health professionals. umber of treatments over entire production cycle.							
8	8.2	Use of Marine Ingredients in Feed – Fish Oil	Interaction with the Community	Number of treatments over entire							
9	9.1	Certifications & Environmental Licenses	Direct Labor	production cycle							
10	10.1	Legal compliance – Fines (USD)	R&D Investment	2.91							
	11.1	Occupational Health & Safety – Fatalities									
11	11.2	Occupational Health & Safety – Injury Lost Time	20	2.49							
	11.3	Occupational Health & Safety – Absence Rate									
12	12	Interactions with the Community	20	2.41							
13	13	Direct Labour (FTE Per Year)	This figure has been calculated as a company ave	prage for the species farmed in this region.							
14	14	R&D Investment (Website Link)	Due to differences in regional treatment regulations and practices, inter-regional comparisons of antibiotic use should be avoided. The Sustainability Report can however be used to track company progress over time.								

Est. output (WFE mt/yr) of ASC certified marine salmonid cage sites by GSI membership, country & certification status



4. Summary & recommendations

- Most certification schemes do not guarantee a price-premium; but as minimum guarantee continued access to certification-centric market segments
- GSI: example of salmon industry re-asserting control of certification to achieve strategic sectoral precompetitive objectives.
 - Primary driver: social license for marine-site licensing & future growth
- Sustainable Shrimp Partnership (SSP): Ecuadorian shrimp producers adopting similar approach
 - leveraging benefits of national antibiotic-free farming status
- Strategic lessons for
 - (i) companies in 'concentrating' sectors e.g. seabass & bream
 - (ii) emergent (national) schemes e.g. VietGAP, Icelandic & Alaskan Responsible Fisheries
- Collaborating producers need to take leading role & ownership