





Aquaculture Certification

WWF's Experiences Regarding Impacts, Standards and Certification

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World Wildlife Fund (WWF)

- Founded—1961
- Mission—Conserve nature
- Members—5M globally
- Budget—US\$400M globally
- Employees—3,000

- Largest privately financed conservation NGO in the world
- >13,000 projects in 157 countries
- 2nd most trusted brand in EU; 8th in US
- Helped develop 6 certification programs; 2 more in progress





WWF's Experiences with Certification Programs

- Rainforest Marketing—1980s
- Forest Stewardship Council—1990s
- Marine Stewardship Council—1990s
- Marine Aquarium Council—1990s
- Protected Harvest—2000
- Climate Savers—2000s
- New program for IT industry—2007
- Aquaculture Dialogues, Standards Setting—2000s



- Compared shrimp aquaculture and shrimp trawling—built consensus about comparative impacts
- Co-created the Shrimp Aquaculture and the Environment Consortium (World Bank, NACA, UN Food and Agriculture Organization, WWF)
- Co-convened multi-stakeholder meeting to identify areas of agreement, disagreement and areas with little or no data
- Developed 3-year, \$1 MM program that included >40 studies to fill the gaps and build consensus
- Vetted TORs and researchers electronically



Shrimp—What was accomplished?

- >40 case studies (from global to local) with 120 researchers in 20 countries
- Convened more than 140 meetings with >8,000 people
- Posted all findings on a website; invited comments
- Developed the most up-to-date information available on global trends and impacts of shrimp aquaculture
- Built a dialogue and created consensus between different stakeholders about shrimp aquaculture
- Drafted principles and criteria for sustainable shrimp aquaculture in 2003
- COFI/FAO formally adopted International Principles for Sustainable Shrimp Farming in 2006



Key Global Issues Identified by Multi-stakeholders

		Species/ Species Groups									
Issues	Tuna	Shrimp	Salmon	Trout	Catfish	Tilapia	Abalone	Scallops	Oysters	Clams	Mussels
Antibiotic use	Μ	н	н	н	Μ	Μ	Μ	NA	NA	NA	NA
Benthic biodiversity	н	Μ	Μ	Μ	L	Μ	L	Μ	Μ	Μ	Μ
Chemical use	L	н	Μ	н	н	L	Μ	L	Μ	Μ	L
Disease transfer	н	н	н	L	L	L	Μ	L	н	L	L
Escapees/Invasive	н	Μ	н	L	L	н	Μ	L	н	L	L
Genetic alteration	L.	L.	н	н	н	н	L.	Μ	н	L.	Μ
Land and water use	L	н	L	н	н	н	Μ	Μ	Μ	Μ	Μ
Mortality removal	L	L	Μ	Μ	н	н	L.	L	L	L	L.
Fish meal/oil use	н	н	н	н	Μ	Μ	Μ	NA	NA	NA	NA
Water pollution	н	н	Μ	н	Μ	н	L.	L	L	L	L.
Predator control	L	Μ	Μ	н	н	н	н	н	н	н	н
User conflicts	М	Н	М	L	L	М	L	Μ	М	М	Μ

Relative importance levels (L = low; M = medium; H = high; NA = not applicable)

Adapted from: Boyd, McNevin, Clay and Johnson, 2005 "Certification Issues for Some Common Aquaculture Species, Reviews in Fisheries Science, 13:231-279.



Accelerating Better Practice Adoption





Why Voluntary Standards and Certification?

- Governments aren't the best entity to encourage better practices sustainability is rarely about compliance
- Need a level playing field globally
- Need market recognition for progress—markets & market pull are part of the solution
- Performance standards and voluntary programs are key to innovation and future BMPs
- Certification can provide traceability and reduce risks





What Makes Credible Certification Systems?

- Addresses multiple species
- Developed/Governed through transparent, multi-stakeholder processes
- Targets key impacts & reduces them—delivers on the promise
- Is global and does not discriminate against classes of producers
- Doable based on what is currently possible, but pushes the curve
- Guaranteed by third-party certifiers
- Has fire walls between standards setting group, holding organization and certification entities



- Do not explicitly target the 6-8 key environmental and social impacts of producing the product in question
- Do not measurably reduce key impacts against a baseline
- Rely on practices (BMPs, GAPs, etc.) as proxies for measurable results
- Created by and reflects the interests of specific groups, rather than broad multi-stakeholder interests
- Governance structures are not broadly multi-stakeholder
- Firewalls do not exist between standards setting, holding, and/or certification



- Most information on impacts is out of date & inadequate for standards
- Significant gaps in knowledge exist about key impacts
- Lack of consensus about the key impacts or how to rank them
 - Especially true for social impacts
- Little interest in species that are not "problems"
- The time it takes to build consensus and credibility across different stakeholder groups and regions of production
- Inability to be strategic and focused rather than exhaustive
- The role of producer provided data and whether it is verified or not



- Being proscriptive rather than results based—emphasis on compliance rather than innovation
- Identifying cost effective, meaningful indicators, that apply to all producers
- Tendency to mix food quality and health and safety issues with other impacts
- Exclusion of some producers (especially smallholders)—by neglect or design
- Finding the right unit of certification
- Finally, focus is on internationally traded products



The Goals of the Aquaculture Dialogues

- Identify and agree on the 6-8 key impacts per species
- Develop baseline data for key impacts to use as benchmarks
- Develop performance-based standards
- Focus on the results desired and let producers find their own way to achieve them—this spurs innovation
- Identify BMPs to eliminate or reduce key impacts to acceptable levels
- Use transparent, multi-stakeholder processes (to agree on key impacts, develop standards, and undertake consultation and implementation)



Progress in the Aquaculture Dialogues & Standards

Dialogue	Countries	Dialogue Participants, Key Partners, Companies Seeking Better Suppliers	Inception	To date
Shrimp	Belize, Indonesia, Madagascar, Mexico	Ahold, Carrefour, Costco, IKEA, Sysco, ABN-Amro, Marks & Spencers, Wal-Mart , FAO, WB, NACA,, Aquastar, Belize, Madagascar, and Aceh Shrimp Producers, GAPCM, Fundacion Natura, ISANet	1999	137 meetings with stakeholders. 40 research projects completed. Principles and criteria drafted. Conducting on farm surveys and identifying better practices, field testing draft standards
Salmon	Chile, Norway, Canada, Scotland and United States	Marine Harvest, Salmon of the Americas (SOTA), Skretting, CARR, NET, Fundacion Terram, SalmonChile, FHL Norway, Whole Foods, Ahold, Wal-Mart, Costco, Carrefour, IKEA, Environmental Defense, Monterey Bay Aquarium, New England Aquarium, AquaNet, DFO Canada, NOAA	2004	9 Full Meetings held. Agreed on Goals and Objectives. Commissioned report on Salmon Feed and the Environment. Formed 5 TWGs (2 more in progress) to complete state of information reports; 3 will present at WAS
Molluscs (Scallops, oysters, mussels, clams, and abalone)	United States, New Zealand, Thailand, Canada	Pacific Coast Shellfish Growers Association (US), Maine Aquaculture Association, East Coast Shellfish Growers Association (US), FAO, NACA, Coastal Fisheries Research and Development Center- Thailand, Phuket Abalone Farm, Association of Scottish Shellfish Growers, FAO, Monterey Bay Aquarium, David Suzuki Foundation	2004	One global meeting. Separate meetings with regional producer groups. Organizing a meeting for Asia. Have begun identification of key impacts.
Tilapia	Ecuador, Honduras, Indonesia, US, Costa Rica, Brazil	Costco, Cargill Animal Nutrition, Whole Foods, AQUAMAR, Regal Springs, Aquamar SA, Rainforest Aquaculture, ENACA, Mountain Stream, Tiltech, Southern Tilapia Farm, CI, New England Aquarium, Monterey Bay Aquarium, ED, SEAWISE	2005	Hosted 2 Full Meetings, Goals and Objectives undergoing comment period. Steering committee being finalized. Key impacts identified.
Catfish	US	Alabama Catfish Producers, Catfish Farmers of America, Whole Foods, MBA, SEAWISE, Blue Ocean Institute, America Seafood	2005	Co-hosted first meeting with Auburn University. Have met several times with other US producers as well.
Basa	Vietnam	Wal-Mart, Beaver Street Fisheries, QVD, NACA, Vietnam— VASEP	2006	Preliminary meetings with producers, processors, buyers. Undertook assessment of key impacts.
Trout	US	US Trout Producers Association	2007	Initial discussions held with the association in Idaho and at the World Aquaculture Society.



WWF and Aquaculture Standards

- Over the next 2 years to draft and vet science-based standards for 10-12 species
- Link buyers to producers that are in the dialogues suggest targets
 - 50% of purchases from dialogue producers in 2 years
 - 100% of purchases from certified sources within 5 years
- Work with existing organizations—when possible
 - SQF/FMI
 - Side-by-side comparisons of standards
 - Develop "Meta-Standards"
- Find a home for the Dialogue standards the exit strategy
 - Make or buy?





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