





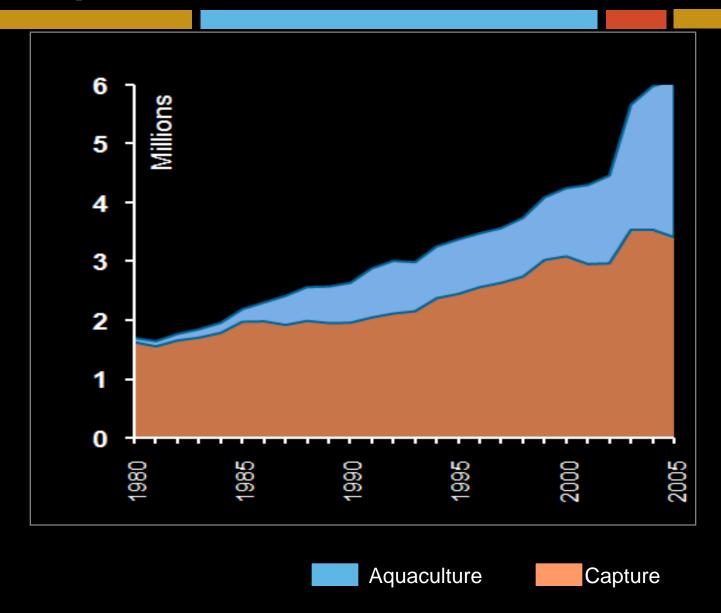


Shrimp Aquaculture Dialogue:

Creating standards.
Transforming aquaculture.



The challenge: production of farmed shrimp on the rise





A solution through dialogue

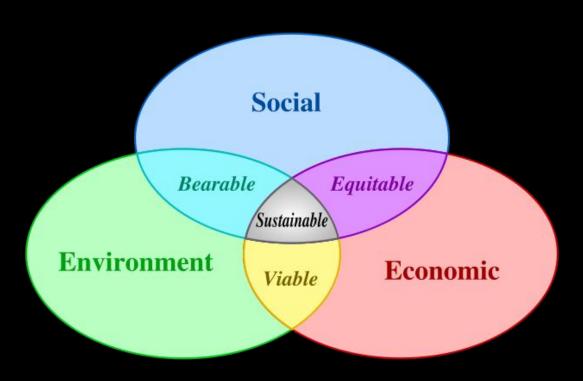
Standards for minimizing shrimp farming's key impacts on:

- environment
- society





Economic viability also a key component



- Investment/cost to reach the level of certification
- Certification cost (length)
- A balance between the environmental and social pillars

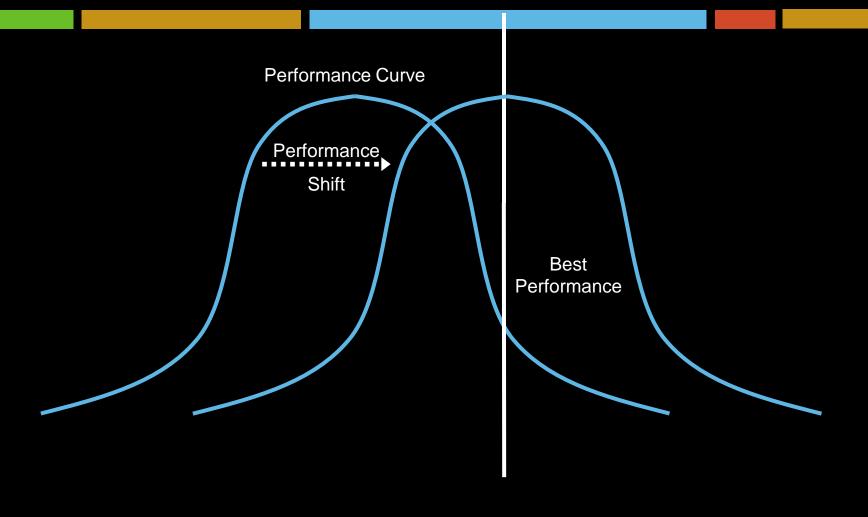


Use standards to transform aquaculture

- Certify products
- Benchmark other standards
- Incorporate into government programs
- Create foundation for buyer and investment screens



Standards can encourage innovation





Need 'shared language' to reach agreement

agreement			
	Definition	Non-aquaculture example	Aquaculture example
Impact	The problem we want to minimize	Overweight	Waste in effluents
Principle	The guiding principle for addressing the impact	Maintain a healthy weight	Conserve water resources
Criteria	The area to focus on to address the impact	Food consumption	Nutrient use and release
Indicator	What to measure in order to determine the extent of the impact	Calories	The amount of phosphorus added and released per metric ton of fish produced
Standard	The number and/or performance level to reach to determine if the impact is being minimized	< 4.5 calories/kilogram of body weight/day	Phosphorus input or utilization in tilapia aquaculture operations will not exceed 30 kg P / mt fish produced and loads of phosphorus released into natural receiving waters will not exceed

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22 kg P/mt fish produced



Process is tried and true

- Multi-stakeholder
- Consensus oriented
- Transparent
- Based on sound science
- Performance-based
- Measurable standards
- ISEAL compliant





Shrimp Dialogue is open to everybody

- Approximately 6 meetings/year
- Meetings held in key shrimp farming regions

30-100 people/meeting



Bringing diverse groups together

200 stakeholders

150 entities (NGOs, producers, academics, etc.)

20 countries

And more each day...

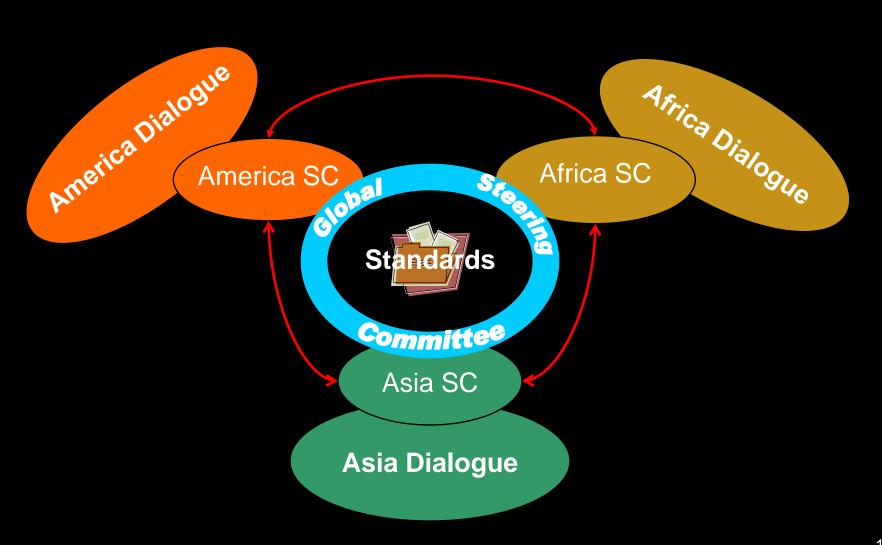


How can you be part of the Dialogue process?

- Attend Dialogue meetings
- Do not attend but provide input
- Join a technical working group
- Join an advisory group
- Serve as a steering committee member



Steering committees at multiple levels





Steering committees manage the Dialogue

- Make final decision about global standards
- Consider input from all Dialogue participants, technical working groups and advisory groups
- Use a consensus-oriented decision making process

WWF coordinates but does not manage the process



Consortium provides the foundation

- 1999-2006: Shrimp Farming and Environment Consortium (WWF FAO, World Bank, NACA and UNEP)
- 40 case studies by 120 researchers
- 140 meetings with a total of 8,000 people



The consortium identified key impacts

- Conversion of natural ecosystems, particularly mangroves
- Salt water seeping into groundwater and onto farmland
- Depletion of pelagic fish for shrimp feed
- Pollution of coastal waters due to pond effluents
- Biodiversity issues arising from collection of wild brood and seed
- Outbreak of diseases
- Social conflicts



The consortium identified principles

- Principle 1: Farm sitting
- Principle 2: Design and construction
- Principle 3: Water use
- Principle 4: Broodstock and post larvae
- Principle 5: Feed management
- Principle 6: Health management
- Principle 7: Food safety
- Principle 8: Social responsibility



Next steps

- Create criteria, indicators and standards
- Post standards for two 60-day public comment periods
- Give standards to an independent standardsholding body



Dialogue is transparent so you can stay involved

All meeting documents posted on the web

Invitations sent to key stakeholders

Meeting notices in trade publications



Stay involved

worldwildlife.org/shrimpdialogue ebernard@wwf.fr