



SCIENCE & SUSTAINABILITY FORUM

Advancing Science and Management for Sustainable Ocean Resources



SUSTAINABILITY: CRITICAL REVIEW OF ISSUES & OPPORTUNITIES

Rationale: Seafood purchases by major institutional buyers are being driven by public perceptions on the status and management of fisheries. However, the tools (i.e., benchmarks, reference points) used to measure global stock/fishery sustainability vary among species and management authorities, and are poorly understood in key sectors of the seafood industry. The issue is further complicated by sustainability indexes from NGOs. One key conclusion from Ocean Trust's 2010 Science and Sustainability Workshop was to support competent science authorities. Yet, even among science authorities benchmarks vary and available data bases are not readily available or integrated for public access; and tools to evaluate the sustainability of fisheries online or in the marketplace are limited with a predominance a private eco-labeling and/or web-based initiatives leading to an absence of public acceptance of national management systems in assuring sustainable resources and buying decisions based on perceptions rather than management coverage or science assessments on the status of fisheries.

Forum Objectives:

1. Provide science-based guidance on stock status and fisheries management/sustainability
2. Enhance public recognition/acceptance of management by management authorities
3. Establish public tools access competent science authorities: web portal/national labels

Discussion Topics:

I. How do we measure the health of stocks? What does overfishing mean relative to fishery sustainability and how it is defined and used by different groups.

This issue has been raised in several recent publications: "The overfishing metaphor" by Brian Rothschild in AIFRB Briefs; "Has overfishing ended? Top US scientist says yes" in same AIFRB issue referencing Steve Murawski; "The end of overfishing: what does it mean?" by Ray Hilborn in SeafoodNews.com; and from Ocean Trust's 2010 Science & Sustainability Workshop a statement from New Zealand Ministry of Fisheries scientist Kevin Sullivan suggesting that "we should not be fixed on stock status, where it is on plot, but the fish management system because over time stock status will fluctuate...overfishing may occur in one year status, but if the fishery is under a framework and plan that makes it sustainable." This view is consistent with NOAA administrator's statements who have stated that "if it's managed under MSFCMA, it's sustainable." This raises the question in measuring the health of stocks: what is important abundance, fishing effort or management?

II. How are we doing? What are global, regional, national trends in fisheries management and status? What are the successes or challenges we face?

PROPOSED PARTICIPANTS & SESSIONS (11/14/11)

Globally, the FAO SOFIA report is used to track trends in fisheries, but it has limitations and challenges especially in integrating stock status and fishing effort data into a global perspective especially when definitions might differ among reporting RFMOs and nations. The complexity of the issue is discussed in the Trevor Branch et al. 2011 paper in *Conservation Biology* on “Contrasting global trends in marine fishery status obtained from catches and from stock assessments.” NOAA’s Fish Stock Sustainability Index shows positive trends and FAO most recent SOFIA report illustrates the paradox between public perceptions and global trends. “*Since the mid 1990’s and through the 2000’s several studies have predicted the rapid decline of marine fisheries worldwide...paradoxically, a glance at the total global capture statistics prompts a word that has very rarely been used to describe catch trends: stability*” (FAO 2010). What can be said about the status of fisheries from global, regional and national perspectives as the US sources its seafood from all corners of the world?

III. Science and Sustainability: Has the connection been lost in public debates?

Certain fisheries continue to be singled out by NGOs as unsustainable. Species like such orange roughy, farmed salmon, and Atlantic cod have been dropped by major buyers. Is there a management issue or just a misunderstanding of how fisheries are managed? Is Atlantic cod at risk from poor management or does it illustrate public confusion on stock fluctuations under changing ocean conditions? Are “red” listed fish endangered or just misunderstood? Is aquaculture managed to sustain production, environmental quality and market acceptance?

IV. Conclusions: Public Education, Communication & Outreach

Ocean Trust’s first Science & Sustainability workshop highlighted the need for platforms for competent science authorities to speak more publically on these issues and a gateway for public access to science and management authorities’ data on the status of fisheries. Does FAO/FIRMS database offer a tool with its expansion to national partners (e.g., NOAA, Norway, New Zealand) to link public interest to competent science authorities? Are there other data bases that should be considered such as the work on meta-analysis of fish stock assessments by Jensen et al? What options are available to integrate different measures of sustainability into a publically accessible database? Do FAO’s newly released benchmarking guidelines provide an opportunity to test their application to national management programs to support nation-wide ecolabeling or recognition for fisheries to substantiate the sustainability of national management programs? Do RFMO performance reviews provide a model for third-party assessments of management systems to address public interest in sustainably managed fisheries?

Forum Program:

Welcome: Forum Objectives - Thor Lassen Ocean Trust/Steve Cadrin, AIFRB (8:00 – 8:20)

I. Defining Sustainability: Measures & Misconceptions (8:20 – 9:00)

Sustainability: A Science Perspective – Brian Rothschild, UMASSD/AIFRB

Sustainability: A Market Perspective – Food Marketing Institute Representative

II. Global Sustainability Definitions, Discrepancies & Stock Status (9:00 – 10:30)

PROPOSED PARTICIPANTS & SESSIONS (11/14/11)

FAO's Global Assessment: Balancing Global Overfishing Standards – Yimin Ye, FAO
Global Trends Stock Status: Catch vs. Stock Assessments – Trevor Branch, UWA
Standards for sustainability: Overfishing vs. Management – Forum Discussion

Break (10:40 – 10:45)

III. Trends: Global, Regional, National Perspectives (10:45 – 12:00)

The End of Overfishing: What does it mean – Ray Hilborn, UWA
MetaAnalysis of Fishery Stock Assessments: A Global Analysis – Olaf Jensen, Rutgers
How are we doing: Is the system broke or are we making progress – Forum Discussion

Lunch (12:00 – 1:00)

IV. Sustainability Case Studies of Red Listed Fish (1:00 – 3:00)

Orange Roughy: Does IUCN Endangered Criteria Apply? – Pamela Mace, New Zealand MoF
Farmed Salmon: Using Science to Sustain Production & Market Reputation - FKD/IMR Norway
Atlantic Cod: Sustainability of Recovering Stocks in Dynamic Ecosystems – US/DFO Scientist
Chilean Sea Bass: Antarctic Fisheries Status and Management Standards, CCAMLR
How do we overcome public perceptions on fisheries management – Forum Discussion

Break (3:00 – 3:15)

V. Ensuring Sustainability of Management: Tools At Hand (3:15 – 5:00)

Performance Reviews: RFMO Approach – North East Atlantic Fisheries Commission
FAO Benchmarking: Application to National Management Systems – William Emerson, FAO
Integrating Ecolabel Benchmarking Tool into Management Plan Process – Forum Discussion

Dinner/Day Two

VI. Public Outreach Tools to Recognize Management/Science Organizations (8:00 – 9:30)

Expanding FAO/FIRMS Database as a Global Portal – Marc Taconet, FAO/FIRMS
Framing Sustainability for US Fisheries – Steve Otwell, UFL Gainesville
National Labels: Iceland Responsible Fisheries – Grimur Valdimarsson, Iceland MoF
Web Portals/National Label: Conveying Sustainability to Public Audience – Forum Discussion

VII. Conclusions, Recommendations & Planning – Open Forum Discussion (9:30 – 12:30)

Next Steps: Initiatives, Research, Projects, Future Forums – Dick Beamish, DFO

Forum Invitees: FAO, NOAA, Canada DFO, Icelandic Ministry Fisheries, Norwegian Ministry of Fisheries, INAPESCA (Mexico), New Zealand Fisheries, CCAMLR, UMass Dartmouth, University of Washington School of Fisheries, Sea Grant, FMI, Bonefish Grill, H-E-B Grocery, Publix, AIFRB, Ocean Trust, and other major retail and restaurant seafood buyers.

Location/Dates: The workshop session will be held in February 2012 in Washington, DC.

Sponsorship: Ocean Trust is seeking sponsorship from fish producing nations and the private sector to continue an ongoing forum between scientists and seafood users.