FRESHWATER TROUT AQUACULTURE DIALOGUE

TORSHAVN, FAROE ISLANDS
MAY 27-28, 2009

Meeting Summary

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The following document is the summary from the second meeting of the Freshwater Trout Aquaculture Dialogue (FTAD). Attached to the summary are the meeting agenda, participants list and the draft criteria developed by the participants.

MEETING BACKGROUND

The FTAD met May 27-28, 2009 in Torshavn, Faroe Islands to discuss the development of standards for responsible freshwater trout farming. This was the second meeting of the FTAD since it was created in 2008.

David Plumb of the Consensus Building Institute (CBI) facilitated the meeting and Christoph Mathiesen of World Wildlife Fund (WWF) convened the meeting. The expected outcomes of the meeting included:

1) Creating a shared understanding of the FTAD process and how meeting attendees can participate in the process
2) Soliciting input and feedback on draft FTAD impacts and principles.
3) Developing draft FTAD criteria and indicators
4) Creating a shared understanding of the FTAD Steering Committee's role and composition and to solicit nominations
5) Receiving input on the FTAD outreach strategy

PRE-MEETING OUTREACH

To help prepare for the meeting, WWF staff had phone conversations with several meeting participants to discuss their expectations for the meeting, meeting format, and suggestions for how to best incorporate input from community groups and nongovernmental organizations. To encourage participation in the meeting, WWF disseminated a meeting invitation to a broad list of stakeholders and a press release about the meeting to the seafood trade publications and several local media outlets in Denmark. The Dialogue meeting was promoted, too, in the Aquaculture Dialogues e-newsletter and on the Dialogue website. Last, WWF reached out to a variety of producers to encourage them to attend the meeting. This outreach included meeting stakeholders in person at seafood exhibitions and during field visits in trout producing regions.

MEETING PARTICIPATION

Twenty-five people participated in the meeting. Of these participants, WWF estimates that 40% represented producers, 15% represented buyers and/or processors, 20% represented non-governmental organizations and community groups, 10% represented government agencies, and 15% represented academia. Participants came from eight countries, including Spain, Poland, Denmark, U.K., South Africa, France and Italy. A list of participants is included in Annex 3.

MEETING RESULTS

Following is a summary of the discussions and results from the meeting. Please note that all documents and presentations referred to in the meeting summary are available at:

http://www.worldwildlife.org/what/globalmarkets/aquaculture/trout-additionalresources.html

Aquaculture Dialogues Purpose and Process

Participants discussed the purpose and process of the Aquaculture Dialogues and the FTAD. They expressed general agreement with the goals and strategy. Participants mentioned several specific reasons why the FTAD is important and compelling. Those included:

- Moving a significant percentage of the freshwater trout aquaculture industry to better practices
- Improving the accuracy of information on best practices
- Helping to improve the general public and government perception of freshwater trout aquaculture
- Addressing a real market for sustainable aquaculture products
- Creating a sustainable aquaculture enterprise
- Helping governments create standards

Participants also raised some concerns about the FTAD process and made suggestions around how to improve it. These included:

- The importance of bringing additional stakeholders into the process, particularly more farmers, other geographic regions and small-scale producers
- The need to coordinate with other Dialogues around related impacts, particularly working with the salmon Dialogue around freshwater smolt and feed issues
- Making the standards relevant to different technologies, techniques and geographic regions
- Need to develop standards that can be implemented.
- Need to always maintain transparency of the process, explain it in simple terms and make it easy to understand
- Danish legislation may be a resource/model
- Not entirely clear what the Dialogue's role will be in implementing these standards

FTAD Impacts, Principles and Criteria

Dialogue participants reviewed the impacts and principles that were developed at the previous FTAD meeting (November, 2008). In small working groups and plenary discussions, participants then began drafting criteria (defined as the "area of focus to address environmental and social impacts") for each of the principles. A summary of the draft criteria is attached as Annex 2.

Steering Committee
The group discussed the role, composition and functioning of the FTAD Steering Committee (SC) and introduced current SC members: David Bassett with the British Trout Association and Federation of European Aquaculture Producers; Niels Alsted with BioMar, a feed manufacturer; Dawn Purchase with Marine Conservation Society; and Jose Villalon of WWF. Participants were asked to suggest nominees within the following two weeks to expand the SC to approximately ten members from four. Participants agreed that the committee's composition should include a broad representation across stakeholder groups and geographies. Comments around the SC included:

- May be useful to have government officials and technical people involved on the SC
- May be better to have a technical/academic person rather than the World Aquaculture Society
- Important to have a retailer on the SC
- Would be best to have an actual farmer on the SC.
- May be good to have a consumer group represented.
- Need clarity around the procedure for removing someone from the SC

Outreach Action points for outreach were solicited. Suggestions included: mentioning the FTAD at various stakeholder meetings and in stakeholder newsletters, invite the FTAD coordinator to stakeholder functions, refer to FTAD on stakeholder websites, have FTAD represented at trade shows, introduce Aquaculture Dialogue's seafood industry liaison to retailers and involve local WWF offices in outreach.

NEXT STEPS
- SC meeting to be held in June to approve the process document and road map for the FTAD and discuss and/or decide on additional SC members
- Christoph will meet with stakeholders in Spain in June to introduce them to the FTAD process
- Full Dialogue meeting to be held in October or November
- Christoph will draft an outreach strategy for the SC to review by the end of August
- **Next Full Dialogue meeting will be 5-6th November, 2009 in Barcelona, Spain.**

ANNEX 1: MEETING AGENDA

Day 1

8:30 Registration

9:00 Welcome and introduction to the FTAD - *Christoph Mathiesen*

9:10 Overview of the agenda and meeting guidelines - *David Plumb*

9:20 Overview of the Aquaculture Dialogue process and Aquaculture Stewardship Council – *Jose Villalon*

9:50 Overview of the FTAD process to date and going forward - *Christoph Mathiesen*

10:30 Break

10.45	A scientific perspective on key impacts in different production systems – *Alfred Jokumsen*
11:05	Review draft impacts and principles - *Christoph Mathiesen*
12:00	Lunch
13:00	Introduction to criteria - *Christoph Mathiesen*
13:30	Breakout group discussions to develop draft criteria
14:45	Break
15:00	Report out from breakout groups, followed by facilitated group discussion about criteria
16:45	Wrap-up discussion
17:00	Adjourn

Day 2

8:30	Perspectives from Day 1 – *Christoph Mathiesen and David Plumb*
9:10	Role, responsibilities and composition of the Steering Committee; committee nominations – *Christoph Mathiesen and Jose Villalon*
9:50	From criteria to indicators – *Christoph Mathiesen*
10:10	Break
10:30	Breakout group discussions to develop indicators
11:15	Report out from breakout group discussions, followed by group discussion about indicators
11:45	Wrap-up and the way forward
12:00	Adjourn

ANNEX 2: DRAFT CRITERIA

INTRODUCTION
These draft impacts, principles and criteria represent the work of the 2nd FTAD meeting, held May 27- 28, 2009 in Thorshavn, Faroe Islands. The criteria are presented as a work in progress that builds off the impacts and principles identified in the 1st FTAD meeting in November 2008. The next step for the Dialogue process is to identify indicators for these criteria, followed by standards for each indicator. All the work remains in draft form and open to revision.

Principle 1: Comply with all applicable international, national and local laws and regulations

Criteria:

- Operate within the legal framework of applicable international, national and local laws and regulations

Notes: Question whether it's necessary to write "international, national and local" as they are implied in "applicable." Does international include, for example, European Union (EU) regulations implemented within EU? What should be the approach when EU law conflicts with national law – what law trumps? Additionally, what is the appropriate resolution when two regulations conflict each other – agricultural standards versus water standards? Finally, what is the best stance to adopt when permits are delayed by appeals – should there be a time limit, or no time limit?

Principle 2: Conserve local habitat and biodiversity

This principle encompasses the impacts of habitat conversion, escapees and predator control

Criteria:

- Indigenous flora and fauna
- High-value ecosystems (determining parameters for farm site locations)
- Predators
- Escapees (competing for habitat, genetic impact, disease transmission)

Notes: The scope of the definition of "high-value ecosystems" is not yet clear. Indicators for high-value habitat may need to be different for established farms vs. new farms (grandfather clause?). Indicators for escapees could include presence of grids, nets, bars, grills or closed systems. Genetically modified trout may be an issue that needs to be addressed with regard to escapees. Questions emerged regarding approved methods for predator control indicators (non-lethal vs. lethal). Also, is it important to distinguish between predators and pests? One indicator for indigenous (flora and) fauna could be systems to prevent fish and fauna from entering the production area. Are we missing something in these criteria that looks at keeping farms away from flood-prone areas to minimize disease transmission risks (this may only be relevant in certain regions)?

Principle 3: Minimize negative effects on water resources

This principle encompasses the impacts of discharges and water use

Criteria:

- Use of water (altering natural water flow, water table/groundwater depletion/saltwater intrusion)
- Effluent quality and load
- Impact on receiving body of water (receiving water carrying capacity/change)

Notes: Effluent indicators could be nitrogen, phosphorus, turbidity, antibiotics, solids, oxygen saturation, chemicals, disease agents (pathogens), BODs, CODs or a nitrogen budget (probably need to prioritize this list). Questions were raised about when quality vs. load is most appropriate measure. Load was defined as mass per time and quality was defined as the concentration of contents in water. How should this process deal with farms that are helping to restore degraded habitats? Suggestion, that we need specific criteria/indicators around bio-solids and indicators to deal with critical moments, such as draining of pools. Nitrogen budget could be an indicator for that. Third bullet is about measuring the impact on the recipient environment, such as a lake downstream. There was some debate around whether bullet three is really different from bullet two (effluent).

Principle 4: Proactively maintain the health and welfare of cultured fish and minimize risk of disease transmission

This principle encompasses the impact of fish health/welfare and disease transfer

Criteria:

- Survival and health of farmed fish
- Bio-security (disease-free eggs, hygiene (SSOP), staff capacity, traceability)
- Medical/chemical treatment
- Water quality on site
- Care and handling (slaughtering/careful moving of fish etc)

Notes: Possible indicators for the water quality are temperature, oxygen, pH, eutrophication, benthic impacts). Questions about whether welfare should be mentioned explicitly in the principle?

Principle 5: Use resources responsibly

This Principle encompasses the impacts of energy efficiency, carbon footprint and feed ingredients

Criteria:

- Energy usage and carbon footprint on production site
- Feeding regime
- Source of marine raw material in feed
- Source of non-marine raw material in feed
- Use of wild fish for feed (dependency on marine protein and lipid source)

Notes: For energy, possible indicator is best available technology. How to do deal with the fact that recirculation technology will always be more energy intensive than flow-through. No mention of human and equipment resources: should we? Feeding regime refers to the efficient use of feed – indicators could include Feed

Conversion Ratio (FCR) and documentation/reporting of fish farm practice (effluent indicators may also address this). Source of feed ingredients concerns sustainability of harvesting raw materials. There was a debate about the value of indicators that measured the dependency on fishmeal in feed (such as "fish-in, fish-out"). Some thought it was important to set a cap and push to reduce dependency on fishmeal through a "fish-in, fish-out" indicator (FFER). Others suggested the focus should be ensuring certificates of sustainable fish harvest and sustainable vegetable protein harvest, and the standards shouldn't take a stand on the percentage composition of ingredients in the feed. There were some concerns about the availability of feed that would meet the future standard.

Principle 6: Be socially responsible

This principle encompasses social/community impacts

Criteria:

1) Freedom of association and collective bargaining
2) Child labor
3) Forced, bonded or compulsory labor
4) Discrimination
5) Health and safety
6) Wages
7) Labor contracts
8) Conflict resolution
9) Working hours
10) Living conditions
11) Co-existence with other community activities

Notes: Women's equality may need to be its own criteria, apart from discrimination. Some social criteria may be combined under a single heading such as "Labor Practices," which could, for example, encompass wages, labor contracts, working hours and living conditions. The co-existence criteria should include "community access" as an indicator. Other possible indicators for community co-existence may be having an upfront impact assessment and being in compliance with results of any civil litigation from community.

ANNEX 3: PARTICIPANTS

Name	Organization/Enterprise
Thomas Bjerre Larsen	Danish Environmental Protection Agency
Dawn Purchase	Marine Conservation Society
Steve Sommerfeldt	Freshwater Institute
Christoph Mathiesen	WWF Denmark
Jose Villalon	WWF US
Carson Roper	WWF US
David Plumb	Consensus Building Institute
Susanne Thomsen	Danish Technological Institute
Erik Olofson	Jämteland Council (Sweden)
Alfred Jokumsen	DTU Aqua National Institute for Aquatic Resources
Brian Thomsen	The Organisation Danish Aquaculture
Francesca Margiotta	Federation of European Aquaculture Producers (FEAP)
David Basset	British Trout Association and FEAP
Susana Portela	ATRUGAL
Anna Pyć	Polish Trout Breeders Association
Jean-Yves Colleter	Federation of French Aquaculture (CIPA)
Durita Nielsen	P/F Luna (Faroe Islands)
Jesper Heldbo	The Organisation Danish Aquaculture
Claes Mathiesen	Wing Consult
Niels Alsted	BioMar
Viggo Hørlyck	Aller Aqua
Krijn Resoort	Molapong Aquaculture South Africa
Michael Larsen	Bureau Veritas (Denmark)
Dánjal , Petur Højgaard	Research in Faroese aquaculture
Nick Reid	British Trout Association and FEAP