Shrimp Aquaculture Dialogue
Presentation of the proposed standards
Understanding the Draft Standards Document

- Introduction, history, and scope
- Draft standards text
  (criteria; indicators; performance metric)
- Rationale = reasoning behind standards
- Guidance = how to implement
- Footnotes & definitions
How we will work together

1. Draft standards overview by:
   - Principle / impact area
   - Core elements of standards
   - Outstanding issues

2. Full group clarifications (per above)

3. Small group discussion – what works? What needs improvement?

4. Report out and synthesis of key points and feedback
Presentation Structure

- Principle / impact area
- Core elements of standards
- Key outstanding issues
Principle 1: Comply with all applicable national laws and local regulations

Impact area

– Farm shall be approved by national and regional authority

Core elements of draft standards

– Documentation proving compliance with local and regional authority.
  (e.g. land title, permit, tax requirement, discharge regulation, legal use of therapeutants, and chemical)
Principle 2: Site farms in environmentally suitable locations while conserving biodiversity and important natural habitats

**Impact area**
- siting in ecologically sensitive habitats during construction and expansion
Criteria 2.1: Ecological and biotic siting considerations

Core elements of standards

• Critical habitats protected
• Protection of endangered species
• Buffer, riparian buffer and corridor protection
• Biodiversity inclusive Environmental Impact Assessment
• Data gathering to enable continuous improvement
Criteria 2.1: Ecological and biotic siting considerations

Outstanding Concerns

- How to address coastal and riparian buffer zones and wildlife movement corridors?
- Appropriate scale for EIAs?
- Incentives for landscape level and integrated coastal planning processes?
- Scale and time scale for BEIA?
- Acceptable practice for building canals and pumping stations in mangrove areas?
- Maintaining ‘no net loss’?
Criteria 2.1: Ecological and biotic siting considerations

(continued)

• Identification and assessment of previous habitats?
• Guidance criteria for silvofishery?
• Water issues sufficiently addressed in relation to siting and ecosystem function?
Criteria 2.2: Prevention of salinization of adjacent freshwater and soil resources

- Core elements of draft standards
  - Soil permeability
  - Water loss in pond
  - Use of freshwater
  - Impact on adjacent freshwater bodies and land
  - Sediment containment and use
Criteria 2.3: Prevention of soil erosion

Core elements of standards

– rules for design and construction of ponds and canals
– conservation of natural hydrological condition

Outstanding Issue

– Importance of soil erosion as an impact?
Principle 3: Develop and operate farms with consideration for surrounding communities

**Impact area**
- negative impact on local communities (e.g. reducing public access to land and water resources; jeopardizing livelihoods)

**Core elements of standards**
- participatory Social Impact Assessment
- conflict resolution policy
- Providing employment within local communities
- Contract farming arrangements are on paper, include basic provision and are recorded
Principle 3: Develop and operate farms with consideration for surrounding communities

Outstanding issues

- Farm closure and reclamation arrangements?
- Relevance to private standard system?
- Associated negative impacts of migrant labor addressed? Alternatives?
Principle 4: Operate farms with responsible labor practices

**Impact area**
- Poor working and living conditions on site

**Core elements of standards**
- No Child labour
- No forced, bonded or compulsory labor
- No discrimination
- Work environment health and safety with adequate training
- Living wages
- Access to freedom of association and the right to collective bargaining
Principle 4: Operate farms with responsible labor practices

Core elements of draft standards (cont’d)

– No disciplinary practices in the working environment causing temporary or permanent physical and/or mental harm
– working hours, and overtime laws/expectations are compensated
– Employee and worker contracts fair and transparent
– Fair and transparent mechanism to resolve conflicts
Principle 5: Manage shrimp health in a responsible manner

**Impact area**

– Transfer and amplification of disease
– Therapeutic chemical pollution and antibiotic resistance
Criteria 5.1: Disease prevention

Core elements

– Preventive BMP
– Presence of net mesh, grills, screens, or barriers
– Dissolve oxygen in pond water
– pH level in pond water
– Survival rate

Outstanding Issue

Sufficiency of disease prevention standards?
Criteria 5.2: Predator control

Core elements of standards

– No intentional lethal predator control of any protected, threatened or endangered species
– No use of lead shot
– Establishment of a predator monitoring program

Outstanding Issue

Appropriate maximum number of lethal control events annually?
Criteria 5.3: Disease management and treatment

Core elements of standards

– No use of antibiotic
– Records of all product stocked and used on site
– All chemical product instructions are available on site and worker are trained
– Use of pesticide
– Discharge of chemical with neutralization
– Residues in pond not detectable
– Use of probiotic allowed under limited conditions
Criteria 5.3: Disease management and treatment

Outstanding Issues

– "white-list" of approved products,
– "black-list" of banned products
– "grey-list"?
– Use of Rotenone and Teaseed cake?
– Reference to existing conventions regarding hazardous pesticides
Principle 6: Manage broodstock origin, stock selection and effects of stock management

**Impact area**

- the collection of wild post-larvae and broodstock
- the introduction of non-native species
- the escape of genetically-distinct native shrimp
Principle 6: Manage broodstock origin, stock selection and effects of stock management

Core elements of standards

– No use of non-indigenous shrimp species unless those species are already widely used in commercial production locally
– post-larvae must be sourced in order to prevent genetic contamination of their population
– compliance with regional, national and international importation guidelines (e.g. OIE and ICES) for prevention of disease introduction and introduction of invasive species
– Use of Specific Pathogen Free Post Larvae (PL)
– Use of closed loop hatchery raised PL
Principle 6: Manage broodstock origin, stock selection and effects of stock management

**Core Elements of Standards**

– Use of wild caught broodstock in some condition
– No use of wild-caught PL
– BMP to prevent escapees
– Records of escapees
– No use of transgenic shrimp
Principle 7: Use resources in an environmentally efficient and responsible manner

**Impact area**

- Use of wild-caught (e.g. pelagic fish) and terrestrial farmed ingredients in shrimp feeds
- Energy use
- Farm efficient
- Effluent impact
- Waste management
Criteria 7.1: Origin of aquatic ingredients

Core elements of standards

– Fishmeal or fish oil originating from fisheries certified by an ISEAL member’s certification scheme
– Use of by product feed ingredient allowed in some condition
– Transparency of feed ingredient sources
Interim standards for certified fisheries
- No allowance for fisheries that are classified as depleted or overfished by regional, national or local fisheries management authorities
- Use of fishmeal and fish oil in shrimp feed containing products from fisheries that are listed on CITES Appendix I, on the IUCN’s Red List
- Stock status or assessment of fisheries used
- Demonstrate consideration for species interaction issues

Outstanding Issues
- How should an acceptable stock assessment result be defined? What is a credible assessor?
  • How should an acceptable demonstration for species interaction issues be defined?
7.1: Origin of aquatic ingredients (cont’d)

**Outstanding Issues**

– How should an acceptable stock assessment result be defined? What is a credible assessor?

– How should an acceptable demonstration for species interaction issues be defined?
Criteria 7.2: Origin and content of terrestrial feed ingredients

Core elements

– Non-marine ingredients from sources certified by an ISEAL member’s certification scheme
– Feed formulation available

• Interim for certified source
  – Presence and evidence of a responsible sourcing policy which comply with internationally recognized moratoriums and local laws. The ingredients must not come from the Amazon Biome.
  – Chemical and Pesticide Use in agriculture
    • Include issue of chemical and pesticide use?
    • If so, how audit?
Criteria 7.3 and 7.4: Use of GMO ingredients and land animal by products

Core elements of standards

– Use of GMO ingredient in feed
  • Option for GMO use?
– Use of land animal by product
  • Options for land animal by-products use?
Criteria 7.5: Use of wild fish for fishmeal and oil

Core elements of standards

– FFER
– FCR

Outstanding issues

Appropriate rationale for FCR inclusion?
Criteria 7.6: Effluent contaminant load & energy efficiency

Core elements of standards

– Nitrogen balance
– Phosphorus balance
– Concentration of settleable solids in effluent water from aerated ponds
– Average, daily, minimum dissolved oxygen concentration in receiving water body
– Presence of records summarizing the facilities’ energy consumption by sources
– Presence of records verifying the Annual Cumulative Energy Demand
Criteria 7.7: Handling and disposal of hazardous materials and wastes

Core elements of standards

- Combustibles contained in bunds
- Chemicals stored in impermeable containers or buildings
- Used lubricants recycled or turned over to an accredited waste management company
- Chemical containers reused turned over to an accredited waste management company
- Non-hazardous, non-recyclable wastes turned over to an accredited waste management company or landfill
- Non-hazardous recyclable wastes reused or turned over to a recycling company