



# 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

# 7.1: Origin of aquatic ingredients (cont'd)

- 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