



#### **Shrimp Aquaculture Dialogue**

Development of Standards for Responsible Shrimp Aquaculture Antananarivo, June 3, 2008

> Eric Bernard Aquaculture Specialist World Wildlife Fund





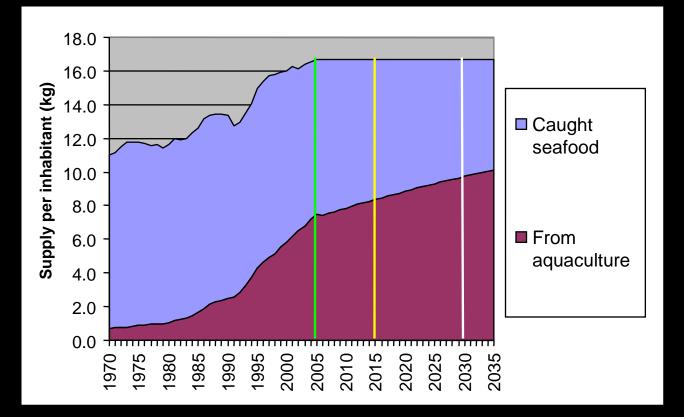
Thank you for attending this 2<sup>nd</sup> Shrimp Aquaculture Dialogue Meeting in Madagascar

## A few numbers on seafood production International Principles for Responsible Shrimp Aquaculture The "Shrimp Aquaculture Dialogue"



# WWF

## Aquaculture is on the rise

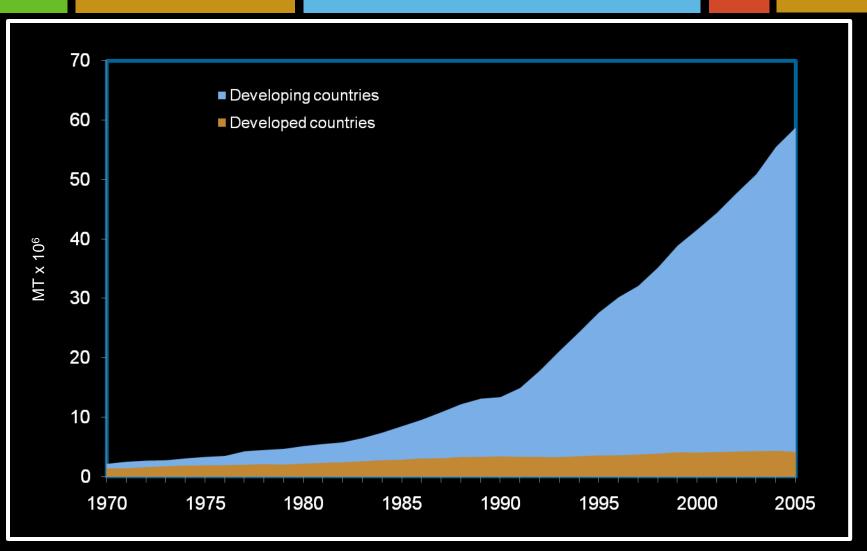


#### Source: FAO, 2007



# WWF

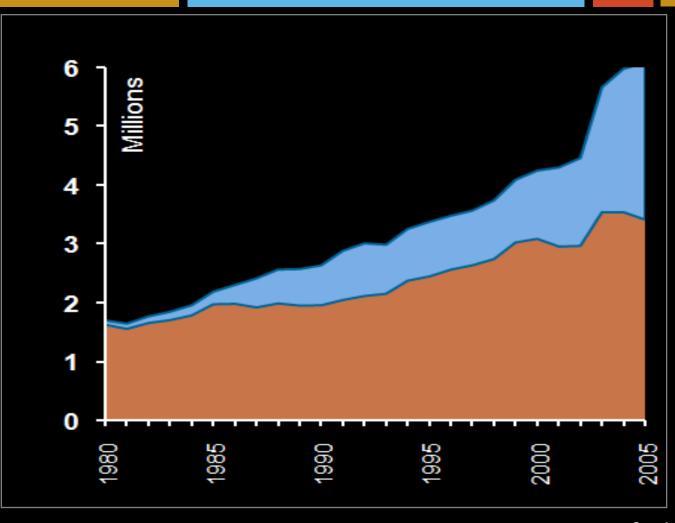
## Aquaculture: primarily a North-South relationship



Source: FAO, 2007



## Farmed shrimp production is on the rise



Aquaculture

Caught



- The world has limited natural resources
- Fisheries have impacts —76% of fisheries have reached or exceeded their capacity
- Aquaculture is the fastest growing agrifood production system
- Today, 46% of fish consumed in the world are produced using aquaculture

#### BUT

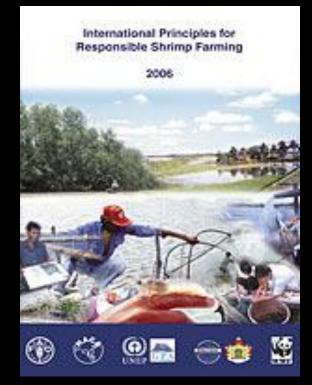
Aquaculture can have negative environmental and social impacts





## "Aquaculture Dialogues"

- 1999: WWF joined FAO, NACA & WB (and later UNEP) in starting the Consortium on Shrimp Farming and the Environment
  - 120 researchers, 40 case studies, 140 meetings, 8,000 individuals
  - Developed the "International Principles for Responsible Shrimp Farming"
  - Adopted by FAO in 2006
  - Approved by COFI !













## The Consortium identified the Main Impacts

- Ecological consequences of the conversion of natural ecosystems, especially mangroves, into farms
- Effects such as the salinization of groundwater and agricultural land
- Use of fish meal in shrimp feed
- Coastal water pollution by pond effluents
- Biodiversity problems connected with gathering broodstock and postlarvae
- Introduction of pathogens that lead to severe epidemics in farms
- Social conflicts in some regions





## The Consortium identified the Main Principles

- Principle 1: Site selection
- 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: Health and Safety
- Principle 8: Social Responsibility





## What is the "Shrimp Aquaculture Dialogue"?

- An opportunity for the players of the shrimp aquaculture industry to discuss how their industry is evolving
- An opportunity to share information
- An opportunity for open discussions





- Information made available on the WWF US website and its partners' websites
- Progress presented in the Aquaculture Dialogues e-newsletter (monthly)



- Contact me at ebernard@wwf.fr
- Press releases in specialized journals and magazines



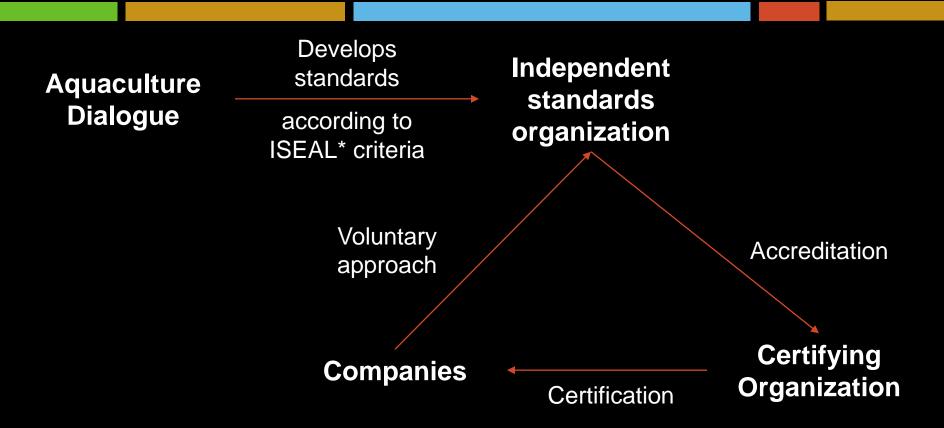


- To identify relevant indicators based on the International Principles
- To develop standards based on performance
- To pass on the standards developed by an independent standards organization
- To have a transparent multi-stakeholder approach that respects ISEAL\* criteria





## The Fate of Developed Standards

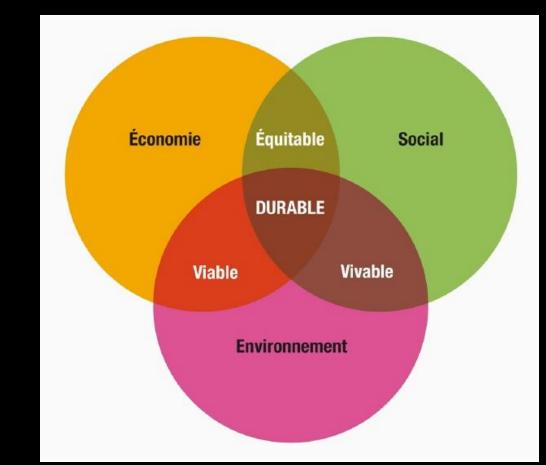


\*International Social and Environmental Accreditation and Labelling: Code of good Practices for setting Social and Environmental Standards





### **Aquaculture and Sustainable Development**



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





## The International Principles of Standards

- Impact
  - The problem that we want to eliminate or reduce
- Principle
  - The scope of action to be studied in order to solve the problem
- Criteria
  - The subject to target in order to solve the problem
- Indicator
  - The element that must be measured to achieve the goal
- Standards
  - Number/level that must be reached in order to say that the goal has been attained





## The International Principles of Standards

- Impact
  - Being overweight
- Principle
  - Maintain a healthy weight
- Criteria
  - Diet
- Indicator
  - Weight
- Standards
  - < X kg depending on height

- Impact
  - Sunburn
- Principle
  - Manage one's exposure to the sun
- Criteria
  - Use of a protective system
- Indicator
  - Sunburn
- Standards
  - Absence of a sunburn





## The International Principles of Standards

- Impact
  - Coastal water pollution by pond effluents
- Principle
  - Water use
- Criteria
  - Efficiency in terms of nutriments
- Indicator
  - "Quantity of Nitrogenous Waste"
- Standards
  - < X %



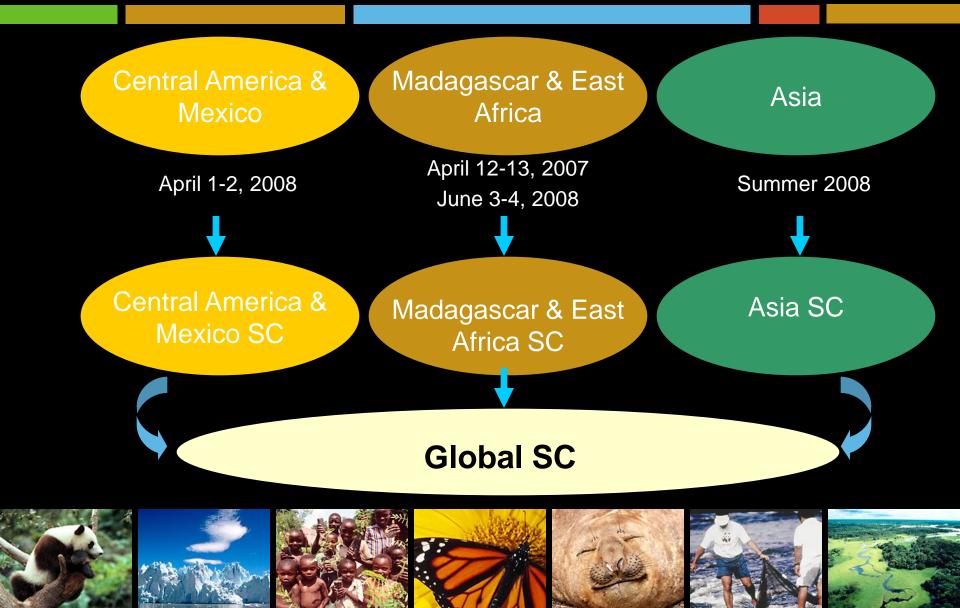
## WWF

#### The different levels of participation in the "Aquaculture Dialogue"





### Possible organization between the different regions





## Goals of the 2008 Workshop

- To identify relevant indicators based on
  - proposals from the Working Group
  - the results of the 2007 Madagascar Workshop
  - the results of the Belize Workshop (for informational purposes)
- To set up the Steering Committee for the region





## Thank You

## Schedule Change





- 9:20 a.m.: Shrimp Aquaculture Dialogue: workshop presentation and goals
- 10:00 a.m.: Coffee break
- 10:15 a.m.: Presentation of Working Group's proposals regarding possible relevant indicators
- 11:15 a.m.: Aquaculture certification
- 11:45 a.m.: Results of the Belize workshop and goals of the Madagascar workshop





## This Afternoon's Schedule

- 2:00 p.m. : Review of the Working Group's proposals regarding possible relevant indicators
  - Leaders
    - Jean Louis Martin
    - Liet Chim
    - Michel Autrand
    - Eric Bernard

(Coffee break at 3:00 p.m.)

5:00 p.m.: End of the day





## **Tomorrow Morning's Schedule**

- 9:00 a.m.: Review of the first day's strong points
- 9:10 a.m.: Review of the 8 principles and proposal of additional indicators
  - Leaders
    - Jean Louis Martin
    - Liet Chim
    - Michel Autrand
    - Eric Bernard

(Coffee break at 10:15 a.m.)

12:15 p.m.: Lunch at the Carlton





- 2:00 p.m.: The Steering Committee's Role and Mission
- 2:30 p.m.: Setting Up the Steering Committee
- 3:00 p.m.: Closing
- 4:00 p.m.: Cocktails at the Carlton
- Around 5:30 p.m. : Steering Committee Meeting

