CONSUMERS' GUIDE TO SHRIMP CERTIFICATION

with an analysis of the ASC Shrimp Standard

3rd EDITION

(Advanced draft, for review)

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Edited by A.K Thavaraj

FOREWORD

A Consumer's Guide to Shrimp Certification is a much needed document for anybody who is a 'stakeholder' in the business of Shrimps, Prawns, or in fact any kind of Aquaculture product. Now how do we define who a stakeholder is? Obviously, the consumer, the person eating Shrimps, either bought at the Supermarket, the neighbourhood store, local market, restaurants etc. Stakeholders are also fishers, the workers on shrimp farms, the people evicted from their lands, forcibly or willingly, the shrimp farmers themselves, the agents buying the shrimp. the processing industry, the retailers, the importers, the exporters and those that are 'selling' the idea of 'safe' and 'responsibly produced' shrimps. It is a big big business as we found out along with the people who one day suddenly found out that they were left out in the cold, due to this enormously profitable business. They lost their homes, their livelihoods and often their lives. While working with these communities, the fishers, the farmers, the agriculture workers, we found the issue to be beyond borders. Shrimp Aquaculture can be used as an example whenever you want to describe a skewered and negative form of production in the name of 'food security', development or creating 'innovative' alternative production systems and livelihoods at the cost of local communities, fishers, a system that increases greatly wide income and wealth disparities, unequal growth, unsustainable models, environmental degradation leading to ecological stress and most of all a very high level of human rights violation. This is true in all the tropical shrimp producing countries .

This very Comprehensive Guide is exactly what it states: a consumer's guide to shrimp certification. While all of us delving to find out more about the industry, the more we found that people were being taken for a ride with inaccurate and misleading information often based on half truths. We have tried our best to sit to discuss the issue and understand it, while we never ever got answers to all the questions asked at every meeting and discussion we have had with those promoting and developing so called standards, we felt it important to seek our own responses. By we, we mean all those organisations who were supported and fed information from the people affected themselves and those who were willing to stick their necks out, because they believe in accessing full information of any . Many people, once they have heard people's voices, have asked many questions, needed to know where they could get the information. This publication is in response to all the deliberately unanswered questions that have been asked and are needed to be asked

Amit Thavaraj has done a brilliant job of this. Painstakingly going through all the reports and documents, this Guide is extremely valuable to everyone who either eats shrimp or is a part of the cycle of promoting shrimp, by cooking, serving or being a part of the industry. We are very proud of the excellent result of Amit's hard work over the years. The only comment I would like to make at this point is that Amit Thavaraj has now enrolled himself or maybe others could take over from him of giving us regular updates, as the Industry tries to colour itself differently each time it is exposed.

Congratulations for a great job done. Painstaking but hopefully will be found useful by those that matter.

Khushi Kabir
Nijera Kori

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Third Edition, August 2015

A.K. Thavaraj is an Indian documentary film-maker. He has served as the unofficial records-keeper of the CO Alliance since 2007.

Acknowledgments

G. Hubendick and the **Anti-shrimp Group** of the **Stockholm Society for Nature Conservation** and the **Coastal Network of the Swedish Society for Nature Conservation** supported this work with a grant in December 2013.

R. Damanik, **K. Kabir** and their colleagues in **IGJ** and **Nijera Kori** for field-data

A. Quarto of **Mangrove Action Project, M.F. Ferrari** of **Forest Peoples Programme** and **N. Ahmad** of **ASIA** for editorial support.

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EDITOR'S NOTE

The arguments in this document were presented, by CO Alliance members, at various meetings around the world—at conferences, dialogues, seminars, summits and, most importantly, at village-square discussions held with community members—and it has been my privilege to collect and present them to you in the form of this guide.

The first edition was called A*n Analysis of the ASC Shrimp Standard* and was written as a reference document for the CO Alliance. It was first used in a meeting with Oxfam Novib to discuss the reasons behind the Alliance's opposition to the ASC Shrimp Standard that Oxfam Novib had helped to draft.

While this edition remains focused on the ASC shrimp standard, the content has been re-formatted to serve as a guide to other shrimp certification standards as well. To this end, the content is presented in two sections—the first deals with issue of tropical shrimp farming and certification in broad strokes and is a quick introduction to the core issues at hand; the second section is a detailed analysis of the most recent draft of the ASC shrimp standard and the ASC Shrimp Audit Manual.

A lot of relevant information is available online and the reader is encouraged to follow the many links in the document. Citations in this edition have been updated to include recent research and news reports. A deliberate choice was made to cite free-access, online sources whenever possible, instead of those that require subscriptions or were not available online.

Any errors are mine and I would be grateful if these are brought to my notice.

A.K.T

Pune, May, 2014

Introduction

Grassroots NGOs in the global south know that shrimp certification does very little or nothing to improve local conditions. Over the course of the last twenty years, CO Alliance members have worked among thousands of people in Bangladesh, Indonesia, Latin America and Thailand. We know that local rights, opportunities and livelihoods in the community have worsened because of the shrimp farming. However, some international NGOs, including Oxfam Novib, IUCN-NL and WWF, continue to believe that certification might be used to reduce the devastating environmental, social and economic impacts of tropical shrimp aquaculture. Consumers in the global north are bombarded with labels that claim to sell "Ethical," "Organic," "Sustainable," "Fair," and "Responsibly farmed" tropical shrimp.

What do these terms mean? What is a "good choice"? What does "responsibly farmed" mean? And to whom are the label-makers and shrimp retailers responsible?

For one, they are responsible to you. To consumers. To people in the US, the EU and Japan—countries that import many thousand tonnes of tropical shrimp every year. You decide, everyday, whether tropical shrimp aquaculture will continue to destroy coastal ecosystems. Unfortunately, your purchasing decisions are influenced by the lies, half-truths and propaganda of the shrimp industry.

To that end, the *Consumers' Guide to Shrimp Certification* was re-edited to address you.

"Ethical shrimp" does not exist, neither does "Responsible shrimp" or "Fair shrimp" or "Sustainable shrimp" or "Eco-friendly shrimp." But responsible consumers do exist, as do ethical consumers and conscientious consumers. This document hopes to persuade you to become one.

- Tropical shrimp cannot be farmed sustainably in sufficient quantities to satisfy current market demands. Consumers need to stop eating farmed tropical shrimp.
- Open-throughput farming methods are destructive; almost all the shrimp produced in the world today are grown on open-throughput farms and they cannot be called "sustainable." Certifiers of farmed shrimp (not wild-caught shrimp) avoid using the word "sustainable" and, instead, employ vague euphemisms like "ethical" and "responsibly farmed" and so forth.
- Shrimp are carnivores: as many as two pounds (often more) of fish such as anchovies and sardine are boiled and pureed to make the "fish-feed" used to grow one pound of shrimp. Farming tiger shrimp for food is as silly as farming tigers for food; farming a carnivorous species worsens food security.
- The feed industry alone is as destructive as the rest of the shrimp production chain.
- The world does not need to eat shrimp to satisfy its protein requirements. Also, the people who grow these shrimp cannot afford to eat it... The fish that they *can* afford to eat is being used by the shrimp industry—to feed shrimp.
- The ASC's claim that its shrimp standard promotes social responsibility must be doubted. Independent verifications of certified farms can (and will) be conducted to test this claim.
- While the ASC and its supporters all acknowledge that consumption levels of shrimp are a major cause for concern, they refuse to ask you to stop eating or reduce consumption of farmed tropical shrimp. It doesn't matter who is certifying farmed tropical shrimp—they are all trying to elbow their way into a $10-billion (and growing) industry.

ABBREVIATIONS and DEFINITIONS

Abbreviations

ASC—Aquaculture Stewardship Council.
ASC-TAG—Aquaculture Stewardship Council Technical Advisory Group.
B-EIA—Biodiversity-inclusive Environmental Impact Assessment.
GSC/ShAD—General Steering Committee of the Shrimp Aquaculture Dialogue. This committee was responsible for drafting the ASC shrimp standard.
IUCN—International Union for Conservation of Nature.
MSC—Marine Stewardship Council.
Oxfam—Oxfam International. http://www.oxfam.org
Oxfam Novib—The Dutch affiliate of Oxfam.
PAD—Pangasius Aquaculture Dialogue. Created the ASC Pangasius standard
p-SIA—Participatory Social Impact Assessment
ShAD—Shrimp Aquaculture Dialogue.
TEEB—The Economics of Environment and Biodiversity.
WWF—World Wildlife Fund.

In this document, the terms “ASC standard” and “Standard” refer to the ASC Shrimp Standard , Version 1.0 March 2014 .

The GSC released three drafts of its shrimp standard. Version 1 was released in March 2010; Version 2, in December 2010; Version 3, in December 2011.

The ASC formally released the shrimp standard and an audit manual in March 2014.

In this guide, versions of the standard (including the drafts released by the GSC) are referred to using the following convention:

> **Version Key for the GSC Standard Drafts: GSC-V$:##**
> ($=1,2,3) refers to the version of the **GSC** draft standard
> ## is the page number.
>
> Thus, **GSC-V2**:34 is page number 34 in version 2 of the GSC Standard.
>
> **Version Key for the ASC Standard: ASC-V$:##**
> ($=1,2,3) refers to the version of the **ASC** draft standard
> ## is the page number.
>
> **Version Key for the ASC Audit Manual: AM-V$:##**
> ($=1,2,3) refers to the version of the **ASC** Audit Manual
> ## is the page number.

ASC Standard: http://www.asc-aqua.org/upload/ASC%20Shrimp%20Standard_v1.0.pdf
ASC Audit Manual: http://www.asc-aqua.org/upload/ASC%20Shrimp%20Audit%20Manual_v1.0.pdf
ASC Website: http://www.asc-aqua.org
Other background documentation on the ASC Standard: http://worldwildlife.org/pages/creating-standards-for-responsibly-farmed-shrimp

Definitions

FAO Glossary of Aquaculture: http://www.fao.org/fi/glossary/aquaculture/
Aquatext Aquaculture dictionary: http://www.aquatext.com/dicframe.htm

EIA, and B-EIA

Environmental Impact Assessment (EIA) is a process of evaluating the likely environmental impacts of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health impacts, both beneficial and adverse.

A B-EIA includes an assessment of biodiversity in the project area—a biodiversity-inclusive EIA.

EIA, defined by the UNEP: http://www.cbd.int/impact/whatis.shtml

FPIC

Free, prior and informed consent (FPIC) is a principle that a community has the right to give or withhold consent to proposed projects that may affect the lands they customarily own, occupy or otherwise use.

A guide to FPIC: http://pubs.iied.org/pdfs/16530IIED.pdf
Making FPIC Work: http://www.forestpeoples.org/sites/fpp/files/publication/2010/08/fpicsynthesisjun07eng.pdf

Intertidal Zone

The area that is above water at low tide and under water at high tide (in other words, the area between tide marks). This area can include many different types of habitats, with many types of animals, such as starfish, sea urchins, and numerous species of coral. Wetlands, salt flats and mud flats can be found in the intertidal zone.

Wikipedia, Intertidal Zone: http://en.wikipedia.org/wiki/Intertidal_zone
Wikipedia, Intertidal Ecology: http://en.wikipedia.org/wiki/Intertidal_ecology

Open-throughput shrimp farm

A shrimp farm whose inlets for fresh/sea water and outlets for waste-water are connected via sluices to a natural source—usually the sea—and uses natural tidal flows (or pumping stations) to exchange water with it. Nets are used to prevent shrimp from escaping however, all effluents and non-sedimented sludge flows out, untreated. Shrimp farm effluents contain residues of pesticides, herbicides, antibiotics and decomposing organic matter.

These systems depend upon external natural resources such as clean air and water and a healthy wild ocean; production in an open throughput system gradually degrades the natural support base that sustains it.

Shrimp farms: http://en.wikipedia.org/wiki/Marine_shrimp_farming

p-SIA

Social impact assessment (SIA) is a methodology to review the social effects of infrastructure projects and other development interventions. P-SIA, or participatory SIA includes local community stakeholders in the process of identifying and assessing social impacts.
http://www.nmfs.noaa.gov/sfa/social_impact_guide.htm

Closed-loop farm or Recirculating Aquaculture Systems (RAS)

A shrimp farm whose inlets and outlets are strictly isolated from its surroundings. Water exchange is tightly regulated with waste-treatment stages in the outlets. Some farms of this type are sustainable. Unfortunately, even closed-loop farms can use unsustainable shrimp feed.
Some RAS systems use algae as shrimp feed. Most farms of this kind are sustainable or can be made sustainable with very few changes to its production systems.

USFDA on RAS: http://www.ars.usda.gov/is/AR/archive/feb09/seafood0209.htm

Farmed Tropical shrimp

Pacific white shrimp: http://en.wikipedia.org/wiki/Whiteleg_shrimp
Giant tiger shrimp: http://en.wikipedia.org/wiki/Penaeus_monodon
Giant river prawn: http://en.wikipedia.org/wiki/Macrobrachium_rosenbergii

The pacific white and the giant tiger shrimp (also called the black tiger prawn) account for more than 80% of worldwide production and will be certified under the ASC standard. The third—a freshwater species—is not covered.

FAO statistics on aquaculture: http://www.fao.org/fishery/statistics/global-aquaculture-production/en

Shrimp or prawn

Traditionally, the terms "shrimp" and "prawn" are interchangeably used of different species in different parts of the world. The FAO convention is to call marine and brackish-water forms "shrimp" and freshwater forms "prawns".
http://www.fao.org/fi/glossary/aquaculture/spec-term-n.asp?id_glo=17673&id_lang=TERMS_E&lang=en

Shrimp feed

Shrimp are carnivores. To fulfill their protein requirements, edible, fatty fish (anchovies and sardines, for example) are caught and processed to create the two principle components of feed—fishmeal and fish oil. It can take as much as 2 lbs of fish to raise 1 lb of shrimp.

Grinding Nemo—A film on shrimp feed production: http://www.youtube.com/watch?v=MqW8V4QjI1I
Fishmeal: http://en.wikipedia.org/wiki/Fish_meal

Wetlands

Wetlands are “areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters [...]” and “[...]may incorporate riparian and coastal zones adjacent to the wetlands, and islands or bodies of marine water deeper than six meters at low tide lying within the wetlands”.
Ramsar definition: http://www.ramsar.org/cda/en/ramsar-about-faqs-what-are-wetlands/main/ramsar/1-36-37%5E7713_4000_0__

LINKS

CO Alliance Members

Asia Solidarity against Industrial Aquaculture: http://www.asiasolidarity.org
Forest Peoples Programme: http://www.forestpeoples.org
KIARA (People's Coalition for Justice in Fisheries): http://www.kiara.or.id
Indonesian Traditional Fisherfolks Union (Kesatuan Nelayan Tradisional Indonesia): www.dppknti.org
Mangrove Action Project: http://www.mangroveactionproject.org
Nijera Kori: http://www.nijerakori.org
Redmanglar Internacional: http://www.redmanglar.org
Stockholm Society for Nature Conservation: http://stockholm.naturskyddsforeningen.se
Yadfon Association: http://www.ecotippingpoints.org/our-stories/indepth/thailand-mangrove-restoration-community-management.html

Contacts

Bangladesh: Khushi Kabir, Nijera Kori, k.kabir@nijerakori.net
Europe: Gudrun Hubendick, gudrun.hubendick@hotmail.com
Indonesia: Riza Damanik, Indonesia for Global Justice, riza.damanik@gmail.com
India: Natasha Ahmad, ASIA localchingri@gmail.com
Thailand: Pisit Charnsnoh, Yadfon yadfon@loxinfo.co.th
US: Alfredo Quarto, MAP alfredo@mangroveactionproject.org

Editor: Amit Thavaraj amit@theoutsider.in

SECTION I

FAQ

What is the CO Alliance and what do you do?

The CO Alliance—the Critical Outsider Alliance—is a group of organizations and networks working on a broad range of social, economic, environmental and cultural issues—human rights, consumer rights, indigenous peoples rights, land and water use, agriculture, environmental law and conservation, labour rights, marine and coastal ecology, soil science, social science and traditional fisheries.

More than 50 large and small organizations (there are two networks of organizations in the list below) are members of the CO Alliance. The CO Alliance is informal: we have no secretariat, no staff, no board members and no funding.

MEMBER	COUNTRY	WORK
Asia Solidarity Against Industrial Aquaculture	Bangladesh, India, Indonesia, Malaysia, Sri Lanka, Thailand	Human Rights, Labour rights **(Network of organizations)**
Forest Peoples Programme	UK	Indigenous people's rights
KIARA (Koalisi Rakyat untuk Keadilan Perikanan)	Indonesia	Indigenous people's rights, Environment, Food-security
Mangrove Action Project	USA, Thailand, Indonesia	Environment, Community-rights
Nijera Kori	Bangladesh	Human Rights, Labour rights, Food-security
Stockholm Society for Nature Conservation (Anti-shrimp Group)	Sweden	Environment
Redmanglar Internacional	Brazil, Colombia, Cuba, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Peru, Venezuela	Environment, Community-rights **(Network of organizations)**
Yadfon Association	Thailand	Environment, Community-rights

Websites

ASIA: http://www.asiasolidarity.org
Forest Peoples Programme: http://www.forestpeoples.org
KIARA: http://www.kiara.or.id
Mangrove Action Project: http://www.mangroveactionproject.org
Nijera Kori: http://www.nijerakori.org
Redmanglar Internacional: http://redmanglar.org
Stockholm Society for Nature Conservation: http://stockholm.naturskyddsforeningen.se
Yadfon Association: http://www.ecotippingpoints.org/our-stories/indepth/thailand-mangrove-restoration-community-management.html

People

Pisit Charnsnoh, Yadfon: http://www.goldmanprize.org/2002/asia, http://www.rolexawards.com/profiles/associate_laureates/pisit_charnsnoh

Riza Damanik, Indonesia for Global Justice: http://rizadamanik.com/

Khushi Kabir, Nijera Kori: http://www.theecologist.org/campaigning/campaigning_the_basics/1074925/campaign_hero_khushi_kabir_empowering_bangladeshs_most_vulnerable.html

Alfredo Quarto, MAP: http://www.justmeans.com/blogs/exclusive-interview-with-alfredo-quarto-co-founder-and-executive-director-of-mangrove-action

Why are you called “Critical Outsiders”?

We have been consistently critical of *all* shrimp certification schemes; we have refused to engage in a “formal” dialogue with any certifier—we have remained “outside” the dialogue process but have continuously provided them with detailed feedback on what we thought was wrong with their standard. This document is a compilation of our inputs to them since 2008.

Being outsiders has allowed us to offer honest and frank feedback to those involved in the dialogue process as well as the general public.

Conversely, NGOs that styled themselves as “critical insiders” within the ShAD process have never been critical of the ASC in public. Perhaps they were forced to censor their opinions simply because the terms of the dialogue did not allow freedom of expression in public. We will never know...

However, this has not always been the case. One “insider”—the Pew Environment Group (PEG) refused to be cowed down. They were part of the Marine Stewardship Council (MSC); when they realized that the MSC Standard was not stringent enough, they quit and released a damning statement against the MSC:

> "*While we support several individual requirements of the standard, its deficiencies in addressing major environmental impacts and risks such as the transfer of pathogens and the discharge of harmful chemicals are too significant to overlook. The fact that some performers in the industry are able to achieve stronger performance within these categories furthers our concern that the [Salmon Aquaculture Dialogue] SAD standard is placing greater emphasis on strong industry adoption rather than strong environmental performance. PEG cannot support the standard until it is revised to more adequately address the negative impacts of smolt production in freshwater lakes in Chile; the use and discharge of antibiotics considered highly important to human health; the amplification of pathogens and transfer to wild fish; and the use and discharge of toxic parasiticides.*"
>
> **Source:** http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Other_Resource/PEG%20comments%20on%20SAD%20draft%20std%20June%202011.pdf
> [PEG went on to fund the creation of a quantitative environmental performance tool—GAPI.]

The term “critical outsiders” was coined by the GSC/ShAD!

We used to call ourselves the “Polder 22 Group” in honour of an island-community in Bangladesh whose inhabitants, 20 years ago, didn't allow shrimp farming on their land. Today, the surrounding regions are barren—nothing grows on the toxic land, the water is saline, animals don't have fodder to eat—while Polder 22 thrives. Hundreds of people come everyday to collect drinking water, to gather firewood and fodder and to work on the fields of Polder 22. The prosperity that they enjoy today was earned at a harsh price—a woman protesting against shrimp farming was murdered by

thugs employed by the local shrimp mafia—and is commemorated every year by people who come to pay their respects at her memorial.

The Korunamoyee Memorial: http://www.forestpeoples.org/topics/shrimp-farming-coastal-forests/image/shrine-polder-22-marks-site-where-leading-community-acti
Polder 22: http://www.yale.edu/agrarianstudies/foodsovereignty/pprs/49_Paprocki_2013.pdf

Why are coastal ecosystems important?

Coastal ecosystems provide a variety of critical "services" both to the environment and local communities.

ECOSYSTEM SERVICE	PROVISION BY MANGROVE ECOSYSTEMS
Gas regulation	CO_2 storage. Growing mangroves create O_2 and absorb CO_2 and SO_2
Climate regulation	Global climate: Can sequester up to 1.5 tons of carbon/ha/year (Ong, 1993); Regional climate: evapo-transpiration and cloud formation affect both rainfall and transport of stored heat energy to other regions by wind; Micro-climate: shade and insulation affect local humidity and temperature extremes
Disturbance regulation	Buffer adjacent terrestrial communities and ecosystems against storms and tsunamis. Slow the rate of water flow and allow silt to settle out, reducing the impact of flooding on adjacent marine ecosystems such as sea grass beds and coral reefs
Supply of raw materials	Building materials (durable, water resistant timber and thatch); energy (charcoal and firewood); food resources (crabs, mangrove worms, fish, honey, sugar, fruits, alcohol, vinegar, animal fodder); traditional medicines; fur; aquarium industry products; tannins; dyes from bark; lime; etc.
Water supply	Evapo-transpiration can increase local rainfall, also involved in water catchment and groundwater recharge
Waste absorption capacity	Capture and absorb large amounts of waste flowing from land, including nutrients and industrial waste, protecting marine habitats
Erosion control and sediment retention	Stabilize land against the erosive forces of the sea, slow water flow allowing sediments and pollutants flowing from land to settle
Nutrient cycling	Capture and reuse nutrients that might otherwise pollute marine ecosystems; re-mineralize organic and inorganic matter; export organic matter to other ecosystems
Pollination	Provide habitat and food for insects and bats, thus helping support the wild populations of these highly valuable pollinators
Biological control	Provide habitat and food for insect bat and bird species that prey on pest species
Refugia or habitat	Provide vital habitat and create conditions essential to reproduction for a wide range of terrestrial and aquatic species. Support a vast variety of marine life in complicated food webs supported by the detritus they generate. Provide habitat for indigenous people
Genetic resources	Contain unique biological materials, many of which have medicinal uses
Recreation	Boating, birdwatching, fishing, etc

Cultural	Aesthetic, artistic, educational, spiritual and scientific values

Source: Farley, J., Batker, D., de la Torre, I., and Hudspeth, T., (2010), Conserving Mangrove Ecosystems in the Philippines: Transcending Disciplinary and Institutional Borders, Environmental Management Volume 45, Number 1, pp 42

What are the impacts of farming tropical shrimp in open-throughput systems?

Evaluating the losses

The TEEB (The Economics of Ecosystems and Biodiversity) study was launched by Germany and the European Commission to develop a global study on the economics of biodiversity loss. The objective of the project is to highlight the growing cost of biodiversity loss and ecosystem degradation; to provide the conceptual foundation to link economics and ecology, to highlight the relationship between biodiversity and ecosystem services and to show their importance for human well-being.

TEEB's findings allow us to estimate a dollar-value for ecosystem services.

A study on the conversion of mangroves to commercial shrimp farms in southern Thailand estimated the net economic returns at $1,122 per hectare a year. But once the wider costs of the conversion - what economists call externalities - are taken into account, a very different conclusion is reached. The economic benefits from the mangroves of collecting wood, providing nurseries for offshore fisheries and protection against storms total $10,821 a hectare, far outweighing the benefits of converting them into a shrimp farm. [**Source**: http://www.bbc.co.uk/news/business-11606228]

The shrimp farmer does make a profit but the community, as whole, loses 10 times that amount.

Teeb's headline-grabbing announcement was that the degradation of the natural world is costing the global economy **US$2-5 trillion** per year.

> **The economics of ecosystems and biodiversity, TEEB**: http://www.teebweb.org/our-publications/teeb-study-reports/ecological-and-economic-foundations/
> **Global study of shrimp fisheries—FAO:** ftp://ftp.fao.org/docrep/fao/011/i0300e/i0300e.pdf
> **Nature's gift: The economic benefits of preserving the natural world:** http://www.bbc.co.uk/news/business-11606228
> **FAO Report on the impacts of aquaculture**: http://www.fao.org/docrep/t0697e/t0697e04.htm
> **Challenging the aquaculture industry on sustainability**:http://www.greenpeace.to/publications/Aquaculture_Report_Technical.pdf
> **Nature's subsidies to shrimp and salmon farming**: http://www.sciencemag.org/content/282/5390/883.short
> **Trade in Ecosystem Services. When payment for environmental services delivers a permit to destroy**: http://wrm.org.uy/books-and-briefings/trade-in-ecosystem-services-when-payment-for-environmental-services-delivers-a-permit-to-destroy/

Environmental impacts

Keep the TEEB figure of losses vs. profits per hectare in mind while reading the following:

Habitat loss and biodiversity loss

> About 35% of mangrove forests were lost from 1980 to 2000[1] which has had an impact on the coastal communities that use mangrove forests as a protective barrier from natural disasters such as hurricanes and tsunamis.

1 *Millennium Ecosystem Assessment (2005) Millennium ecosystems and human well-being: synthesis. Island Press, Washington, DC.*

Shrimp culture is, by a considerable margin, the greatest cause of mangrove loss[2]. Mangroves in developing countries are likely to decline another 25 percent by 2025[3] [4]. A specific example: 80% of the mangroves in the Mahakam Delta in Indonesia are now shrimp ponds.

Global Mangrove Database and Information System: http://www.glomis.com

In Indonesia, which has the world's largest area of intact mangroves, the *estimated rate of loss* is even higher with 90 percent loss projected in some provinces like Java and Sumatra[5].

Aquaculture of many species relies on juvenile fish being caught from the wild to supply stock rather than using hatcheries to rear them.

> *In Bangladesh, for each single tiger shrimp (P. monodon) juvenile collected, there were 12–551 shrimp larvae of other species caught and wasted, together with 5–152 finfish larvae and 26–1636 macrozooplanktonic animals.*
>
> *In Honduras, the reported annual collection of 3.3 billion shrimp juveniles resulted in the destruction of 15–20 billion fry of other species*
>
> *In the Indian Sundarbans, each tiger shrimp juvenile only accounted for 0.25– 0.27% of the total catch. The rest of the catch consisted of huge numbers of juvenile finfish and shellfish which were left aside on the beach flats to die.*
> **Source***:* http://www.greenpeace.to/publications/Aquaculture_Report_Technical.pdf

The juveniles of other species, called "bycatch", are killed in the process with disastrous consequences on the food chain. **Definition and further links**: http://en.wikipedia.org/wiki/Bycatch

Biodiversity losses are also caused by effluents discharged by shrimp farms—an intrinsic flaw of all open-throughput shrimp farms.

Mexico: http://www.ncbi.nlm.nih.gov/pubmed/23861653
Vietnam: http://www.ncbi.nlm.nih.gov/pubmed/23616080
China: http://jlakes.org/web/aquaculture-pollution-china-ESPR2007.pdf

Introduction of exotic, invasive species

The threats of invasive exotic species is very real and has been happening for a long time always "with the right intentions, but with disastrous consequences." See this report for a scientific discussion:

Aquatic Invasive Species Vector Risk Assessments: http://calost.org/pdf/science-initiatives/ais/AIS%20Aquaculture%20FINAL%20Report%20.pdf
Aquaculture and invasive species: http://andrewstaroscik.com/views/2012/01/aquaculture-and-invasive-species/

The problem with exotic species are that they either fail miserably (usually, this is what happens) to adapt to their new surroundings unless they are protected by a farm; or they are extremely good at destroying the competition. As long as they are inside the farm it doesn't matter, but if they escape (and many do) there is a small chance that they will thrive in their new surroundings...

2 McLeod, E. and Salm, R.V, (2006) IUCN, Managing Mangroves for Resilience to Climate Change, pp 11
3 Ibid.
4 Ong, J.E. and Khoon, G.W. (2003). Carbon fixation in mangrove ecosystem and carbon credits. Theme B from the East Asian Sea Congress: Essential Cross-Sectoral Processes and Approaches to Achieving Sustainable Development
5 Bengen, D.G. and Dutton.I.M. (2003). Interactions between mangroves and fisheries in Indonesia. Fishes and Forestry – Worldwide Watershed Interactions and Management. Oxford: Blackwell Scientific. Pp 632-653 (quoted Mcleod et.al., 2)

The Tiger Shrimp has gone wild in the Gulf of Mexico: http://www.mnn.com/earth-matters/animals/blogs/giant-tiger-prawn-invades-gulf-of-mexico
The Cajun crayfish is the set to become the new top cat in parts of Africa: http://news.nationalgeographic.com/news/2012/01/120109-louisiana-crayfish-invasive-species-environment-africa-science/
A weed(.) is threatening to spark the biggest animal migration in Africa: http://news.nationalgeographic.com/news/2010/12/101210-alien-weed-science-environment-great-migrations-kenya/
Other invasive species: http://www.mnn.com/your-home/organic-farming-gardening/stories/foreign-insects-diseases-got-into-us-after-sept-11

How did crayfish get to Kenya from Louisiana? They were imported in the 1970 by aquaculture farmers.

Assessing the global threat of invasive species to marine biodiversity: http://ballast-outreach-ucsgep.ucdavis.edu/files/136965.pdf
Google Scholar: http://scholar.google.co.in/scholar?q=aquaculture+invasive+species

65% of exotic species introductions have been intentional, and that 69% of these (39% of the total) have been for aquaculture.

The truth is that scientists cannot predict exactly what will happen ten, or twenty, or thirty years from now if an exotic species escapes. With regard to aquaculture, the invasion has already occurred: *P. vannamei* is now considered, according to the ASC, as native to Asia.

Carbon Footprint

"The carbon footprint of the shrimp from this land use is about 10-fold greater than the land use carbon footprint of an equivalent amount of beef produced from a pasture formed from a tropical rainforest" **Source**: http://phys.org/news/2012-02-tiny-shrimp-giant-carbon-footprint.html#jCp

More information:
http://news.sciencemag.org/earth/2012/02/carbon-footprint-shrimp-cocktail
http://www.nrdc.org/living/shoppingwise/meals-mass-destruction-shrimp.asp
http://www.onearth.org/article/the-gathering-storm?page=3
http://www.treehugger.com/green-food/shrimp-may-be-small-their-environmental-impact-devastating.html

Fish feed production is devastating to the environment

Technical reports

Fishmeal and fish oil usage in aquaculture feeds—Global Trends
In 2000: http://www.nature.com/nature/journal/v405/n6790/full/4051017a0.html
In 2008: http://www.webpages.uidaho.edu/fish510/PDF/fishmeal.pdf

Flow chart of capture and farmed fisheries products
http://www.nature.com/nature/journal/v405/n6790/fig_tab/4051017a0_F1.html
Ecological links between intensive aquaculture and capture fisheries
http://www.nature.com/nature/journal/v405/n6790/fig_tab/4051017a0_F2.html
The effects of aquaculture on fish supplies:
http://www.nature.com/nature/journal/v405/n6790/abs/4051017a0.html

FCR and total consumption

A comparison of feed conversion ratios in 1995 and 2007 show that while the percentage of fishmeal used in shrimp-feed has reduced from 28% to 18% (resulting in an FCR reduction

from 2.0 to 1.7) the absolute quantities of shrimp-feed usage have soared from 1.4 million tons to 5.6 million tons. Fishmeal has been substituted with GM soy.
Source: http://www.pnas.org/content/106/36/15103/T1.expansion.html#fn-4

Common sense indicates that grinding up edible fish to grow other fish is silly. Isn't it?
Google Search: https://www.google.co.in/search?q=can+carnivores+be+farmed

Soy plantations in South America

Use of soybean is being promoted as a sustainable replacement for fishmeal, not just for the shrimp industry, but also the meat and poultry industry. Raising GM soy has created a new set of problems, far away from the coast, in the rain-forests of South America.
Sources:
http://www.theecologist.org/trial_investigations/336873/killing_fields_the_true_cost_of_europes_cheap_meat.html
http://www.theecologist.org/trial_investigations/1220194/how_our_growing_appetite_for_salmon_is_devastating_coastal_communities_in_peru.html

Economic impacts

Shrimp farming causes a net economic loss

The myth of shrimp-farming "helping to develop poor coastal communities" has been conclusively debunked by the TEEB report. Coastal communities that start farming shrimp and fish feed for export are gradually bankrupted by the business. If you thought that a poor kid in Bangladesh was going to school because you bought tropical shrimp, you've been suckered by propaganda.

However, even in terms of other indicators like employment and ancillary services, shrimp farming does not help local communities.

Employment statistics are always presented in isolation—figures don't compare shrimp-farming employment to sustainable, annual employment opportunities in local communities. Typical shrimp-farms employ 1-5 persons/ha/yr as employees whereas traditional economic activity employs 10-40 people[6] . Shrimp cultivation has reduced rice production significantly—by 60% in some regions of Bangladesh. This has cascaded on other activities as well. Fodder-shortage has reduced livestock; shortage of paddy and other cereal has curbed poultry farming; yields in homestead gardens have fallen due to the high salinity; fish-stock in canals have been depleted due to the high by-catch ratio of shrimp fry collection; the local marsh-grasses have died as has the local weaving industry that would weave mats[7] [8].

A study in the Satkhira district of Bangladesh has shown that shrimp farming results in a net economic loss of 22%[9].

In all producer-nations, the distribution of wealth created in the country is grossly disproportionate. The model of business in Bangladesh, for instance, favours traders, middlemen, processors and transporters over farm-workers and hatchling-collectors[10]. This is largely true in other producer-nations as well.

6 EJF, 2004 and Mulekom, L.v., Axelsson, A., Batungbacal, E.P., Baxter,D., Siregar,R., de la Torre, I., SEAFish for Justice, (2006), Trade and export orientation of fisheries in Southeast Asia: Under-priced export at the expense of domestic food security and local economies, Ocean & Coastal Management, Volume 49, Issues 9-10, 2006, pp 553
7 Wistrand, A., (2003), Tiger prawns vs. the Bengal Tiger, in (de la Torre, I., Barnhizer, D., eds.) The blues of a revolution, ISA Net, USA
8 BCAS., (2001), The costs and benefits of bagda shrimp farming in Bangladesh – an economic, financial and livelihoods assessment. Prepared as part of the Fourth Fisheries Project by Bangladesh Centre for Advanced Studies
9 Alam, S.M., Shrimp-based farming systems in the south-western coastal zone of Bangladesh, Integrated Tropical Coastal Zone Management: Application and practices in Asia, pp 75-90
10 BCAS., (2001), The costs and benefits of bagda shrimp farming in Bangladesh – an economic, financial and livelihoods assessment. Prepared as part of the Fourth Fisheries Project by Bangladesh Centre for Advanced Studies

Global market mechanisms prevalent in the shrimp trade lead to growing inequities in the distribution of resources, profits, and costs between the northern and southern hemispheres. The profits from shrimp-aquaculture are not re-invested in the development of the producer-communities because the bulk of the profits do not remain within the community.
Global Trade In Tiger Shrimp Threatens Environment:
http://www.sciencedaily.com/releases/2008/02/080214114510.htm]

Case Study—Economic losses due to shrimp-farming in Bangladesh

The following table[11] lists the changes before and after shrimp farming was introduced to a region in southern Bangladesh.

Activity	Previous economic activities	Present economic activities
Agriculture	Agricultural work in own land as well as on the lands of others. Opportunity to work in ploughing, planting, harvesting, threshing and other related work.	Job opportunities have been vastly reduced due to the conversion of agricultural lands into shrimp ponds.
Cattle	Previously cattle were kept in almost all households. The families had additional income from the sale of milk, calves, and cow dung.	Due to two-thirds reduction in rice production, sufficient straw is not produced, resulting in fodder shortage. There is also shortage of grazing land and fresh water for the cattle.
Poultry	There used to be poultry farming in the region. Women used to earn supplementary income from the sale of eggs and chickens.	The shrimp cultivators have imposed a ban on poultry keeping, especially of ducks, because they eat the shrimps.
Vegetable gardens	Most of the households used to cultivate vegetables on their homestead lands, and sell the surplus after meeting household needs .	Due to salinity of the soil, vegetables cannot be cultivated. There is lack of nutrition as well as closure of a former source of income.
Fishing	The fishermen and poor women used to catch fish in the canals and flood plains, and sell the surplus after meeting household requirements.	All the water bodies are now saline. Due to destruction of scores of varieties of fish fry during collection of shrimp fry, fish populations have been drastically reduced. Many fishermen have lost their occupation.
Handicrafts	A marsh grass known locally as "meley" (*Cyperus cf.*) used to grow in the marshy areas. Women used to weave mats with flower stems of this grass.	At present meley is not locally available, resulting in loss of part time occupation for women.

Land grabs

In Honduras, 8% of the farms controlled 72% of the operating area while 84% of the operators worked on 13% of the area in the regions The 17 largest firms operate over 65% of the area and provide 73% of the total sales. GMSB operated 7,000 ha of shrimp farms in Honduras[12]

> *In Ecuador, reports indicate that there have been thousands of forced land seizures, only 2% of which have been resolved on a legal basis. Tens of thousands of hectares of ancestral land have allegedly been seized. This has often involved use of physical force and the deployment of military personnel. (Environmental Justice Foundation 2003).*

11 EJF, 2004 and Mulekom, L.v., Axelsson, A., Batungbacal, E.P., Baxter,D., Siregar,R., de la Torre, I., SEAFish for Justice, (2006), Trade and export orientation of fisheries in Southeast Asia: Under-priced export at the expense of domestic food security and local economies, Ocean & Coastal Management, Volume 49, Issues 9-10, 2006, pp 553

12 Stanley , D., Alduvin , C., (2002), Science and society in the Gulf of Fonseca: The changing history of mariculture in Honduras, Report prepared under the World Bank, NACA, WWF and FAO Consortium Program on Shrimp Farming and the Environment. pp 23

In Burma, the military has seized land without compensation in order to construct shrimp farms (Environmental Justice Foundation 2003)
Source: http://www.greenpeace.to/publications/Aquaculture_Report_Technical.pdf

Contract farming creates debt-traps

"The workers are bonded in contract or 'plasma' farming arrangements whereby almost everything in their life is owned by the parent company, in this case a Thai multinational."
Source:
http://www.theecologist.org/investigations/politics_and_economics/368669/selling_indonesias_coast_for_cheap_prawns_and_profit.html

The Realities of the 'Slave Contract' and the Risks that Farmers Must Bear
http://www.amrc.org.hk/node/1000

Unsustainable land use—Abandoned ponds

Many shrimp farms of coastal zones in Southeast Asia including Taiwan, Thailand and Indonesia have been abandoned due to acid sulfide soils and associated problems[13]. In addition to sulfide-related acidification, eutrophication, broad accumulation of toxins, and crop diseases limit use of a pond to a 5–10-year span, after which growers move on to a new area of mangroves.

Without aggressive (and expensive) restoration work, which most producer-communities cannot afford, shrimp-farms remain completely barren for decades after the land was abandoned. Baseline studies on shrimp aquaculture in the 1980s and 1990s have recorded many sites in Thailand during the "boom" era. Satellite data from this period is typically low-resolution (500-1000m) in comparison to that available today. However, comparative studies of Landsat data used in those studies is possible now given that these are available online. Worldwide there are over 400,000 ha of abandoned shrimp farms today, based on an informed estimate by mangrove scientist Robin Lewis, who has been working for over 35 years on mangrove restoration.

ESDI: http://glcfapp.glcf.umd.edu:8080/esdi/index.jsp
Landsat Science:http://landsat.gsfc.nasa.gov/
Google Maps:http://maps.google.com

Restoration is expensive and takes decades. Unfortunately, the shrimp industry doesn't have to pay for it; neither do certifiers.
Restoration of abandoned ponds: http://mangroveactionproject.org/recuperation-of-abandoned-shrimp-farms/
Ecological, community-led restoration: http://mangroveactionproject.org/emr-method/
Between 1.8 to 5.4 ha of mangroves are required to deal with the effluents from 1ha of semi-intensive aquaculture—twice (to six times higher) than the ASC's recommendation of a 1:1 ratio.
Mangroves and shrimp pond culture effluents in the Philippines:
http://www.ingentaconnect.com/content/umrsmas/bullmar/2007/00000080/00000003/art00021

Production risks are borne by the shrimp-farmer

EMS (http://en.wikipedia.org/wiki/Necrotising_hepatopancreatitis) is the latest scourge of farmed shrimp. It is a bacterial disease with a mortality rate of up to 90%. When the crop fails, it is the farmer who bears the loss. Importers and retailer might book what might be called a "notional loss"—sales volumes fall, but they haven't actually "lost" any money at all. In terms

13 World Bank, NACA, WWF, FAO (2002), Shrimp Farming and the Environment. A World Bank, NACA, WWF and FAO Consortium Program "To analyze and share experiences on the better management of shrimp aquaculture in coastal areas", Synthesis report, pp 16–27

of revenue, when a shrimp crop fails, retailers simply hike their prices while they find new sources.

Disease Kills Shrimp Output, Pushes U.S. Prices Higher:
http://online.wsj.com/news/articles/SB10001424127887323998604578565201120674008

The effects of crop failure cascade—debts, distress sale of land, migration, land-grabs... Certification schemes don't protect farmers from crop failure and arguably, certification is not the right tool to offer this protection. When the prices of tropical shrimp rise due to crop failure, it should serve as a reminder to consumers that hundreds of shrimp farmers are teetering on the verge of debt-traps. And that certification can do nothing to help these farms.

Social and Human Rights Impacts

Abuse and Injustice in Bangladesh's Shrimp Industry

http://www.ejfoundation.org/shrimp/impossiblycheapfilm
http://ejfoundation.org/shrimp/impossiblycheapreport

Child Labour

http://www.google.com/images?q=shrimp+fry+collector
http://www.flickr.com/photos/oxfam/5213259350/

Inhuman labour conditions in the Thai shrimp industry

http://www.youtube.com/watch?v=NBw8xViSdKE
http://www.washingtonpost.com/world/asia_pacific/in-a-world-hungry-for-cheap-shrimp-migrants-labor-overtime-in-thai-sheds/2012/09/19/3435a90e-01a4-11e2-b257-e1c2b3548a4a_story.html

Slavery-like conditions aboard shrimp-feed trawlers

http://www.theecologist.org/News/news_analysis/1596323/the_slavery_behind_our_seafood.html

Human health impacts

Indiscriminate use of antibiotics and pesticides

Antibiotics for human-usage are diverted for use in shrimp farms. Organizations like the WHO, several national governments and charities subsidize essential antibiotics for the use of people who cannot afford to buy them. These are produced for people, not for the shrimp. Data from Chile shows that its antibiotics imports by salmon industry were 10 times higher (in 2006) than what it imported for use by people.

Traces of antibiotics remain in the shrimp you consume.
Antibiotics and the meat we eat: http://www.nytimes.com/2013/03/28/opinion/antibiotics-and-the-meat-we-eat.html?
Does the use of antibiotics pose a threat to human health?:
http://jac.oxfordjournals.org/content/53/1/28.full
CDC—Antibiotic resistance and food safety FAQ: http://www.cdc.gov/narms/faq.html
Antibiotic use in shrimp farming and implications: http://www.aseanfood.info/Articles/13006662.pdf

Drug-resistant bacteria discharged into local water bodies. Even after antibiotic use is stopped, antibiotic-resistance remains encoded in the genes of bacteria, which can transfer the resistance to pathogenic terrestrial bacteria. There is evidence to show that the Latin American epidemic of cholera, *V. cholerae* (the bacterium that causes cholera) appeared to have acquired antibiotic resistance as a result of coming into contact with antibiotic-resistant bacteria selected through the heavy use of antibiotics in the Ecuadorian shrimp industry.

Heavy use of prophylactic antibiotics in aquaculture: a growing problem for human and animal health and for the environment: http://onlinelibrary.wiley.com/doi/10.1111/j.1462-2920.2006.01054.x/full

Recent research and advances in gene mapping have confirmed what scientists suspected in the 1980s and 1990s: that aquatic bacteria can pass resistant genes to their terrestrial cousins.

Antimicrobial use in aquaculture re-examined: its relevance to antimicrobial resistance and to animal and human health: http://onlinelibrary.wiley.com/doi/10.1111/1462-2920.12134/full

Also see:
Antibiotic resistant Thai shrimp: http://www.sciencedirect.com/science/article/pii/S0956713513004659
Antibiotics in Bangladesh shrimp: http://www.sciencedirect.com/science/article/pii/S168742851300068X
Antibiotic resistant shrimp in Vietnam:
http://www.sciencedirect.com/science/article/pii/S0048969705000264

Nitrofurans: http://en.wikipedia.org/wiki/Nitrofuran
Chloramphenicol: http://en.wikipedia.org/wiki/Chloramphenicol
Sulfamethoxazole: http://en.wikipedia.org/wiki/Sulfamethoxazole
Oxolinic acid: http://en.wikipedia.org/wiki/Oxolinic_acid
Norfloxacin: http://en.wikipedia.org/wiki/Norfloxacin

In addition to antibiotics, a number of pesticides are used in shrimp farms to kill (among other things), molluscs, fish, fungi, plants and insects. Pesticides accumulate over a lifetime and may cause problems long after the first exposure. A few commonly used pesticides are:

Organophosphate-based pesticides

These are a group of pesticides widely used in shrimp farms. These chemicals are toxic to the neurological system at relatively low levels. A 2010 study has found that organophosphate exposure is associated with an increased risk of Alzheimer's disease. Another study from the same year found that each 10-fold increase in urinary concentration of organophosphate metabolites was associated with a 55% to 72% increase in the odds of ADHD in children.

Organophosphates: http://en.wikipedia.org/wiki/Organophosphates

Parathion, an organophosphate pesticide, is a known carcinogen and is banned in several countries. Exposure to small amounts of the chemical over a long period of time can cause headaches, memory loss, muscle weakness, cramps and loss of appetite.

Malachite Green

Malachite green is often used to kill fungus on shrimp eggs. This chemical is popular among shrimp producers because it is cheap, effective and widely available. However, it is also a potential carcinogen that has been found to cause tumors in laboratory mice and rats.

Source: http://www.foodandwaterwatch.org/reports/suspicious-shrimp/#pesticides

Even if pesticide levels in the shrimp itself are safe, a significant amount of these chemicals are flushed into the surrounding water and into the food-chain where they do cause a lot of damage.

Cancer causing pesticides found in shrimp:
http://www.internationalreporting.org/shrimp/2010/10/27/health/
Pesticide Action Network, North America: http://www.panna.org/
Pesticide residues in shrimp effluents: http://www.ncbi.nlm.nih.gov/pubmed/12472156

Because of the huge volume of imports, the US FDA can only check around 1-2% of all imported shrimp. The rest enters the US market untested.

More information

Google Scholar: http://scholar.google.com/scholar?q=impacts+of+shrimp+aquaculture
http://scholar.google.com/scholar?q=human+health+shrimp+aquaculture

The ASC itself readily admits that all these impacts exist. Then they suggest that certification of shrimp-farms will improve the situation.

How does certification work?

The premise

This is how certification of farmed shrimp is supposed to work:

> *A conscientious consumer will choose sustainable shrimp; this consumer is willing to pay a premium price for sustainable shrimp; the premium price, combined with consumer demands for sustainable production will serve as an incentive to producers and distributors and gradually transform the market towards sustainable production.*

The premise is based on a number of assumptions which are listed in the table, below.

Table: Necessary ingredients for certification-led improvement

ASSUMPTIONS	ASC's Position	CO Alliance's Position
A conscientious consumer exists	Exists. Is offering this consumer their brand of certified shrimp.	Exists. But is unaware about sustainable shrimp. You have to educate consumers about the problems caused by farmed shrimp; then show them how your certified shrimp solves those problems and then ask the consumer to buy the shrimp that you have certified. The attitude of certifiers is “Leave the thinking to us, all you have to do is buy the shrimp with our label.”
Shrimp can be grown in a sustainable manner to satisfy global demands.	Possible.	Not possible, by far, to meet global demands sustainably using open-throughput production systems. Increasing yield-per-hectare or expanding production areas to cope with growing demand worsens the situation. Sustainable production systems exist, but their small output and diverse produce is of no interest to the export market. Demand should be reduced by educating consumers while concurrently promoting sustainable production systems.
The farmer can pay for actual field-level improvements.	Will adjust criteria and audit guidelines to make sure that the farmer can afford improvements. GSC/ShAD refused to comment on the losses incurred by the community.	Open throughput farming inside the intertidal zone results in a net-economic loss for the local community. This was published in the UN Millennium Development Report and is accepted as a fact. ASC shrimp standards continue to allow shrimp farming inside the intertidal zone simply because the coastal ecosystem and local community pays the costs instead of the farmer.

ASSUMPTIONS	ASC's Position	CO Alliance's Position
The farmer can pay audit fees and label fees.	ASC will adjust criteria to make auditing cheaper (less time, less thoroughness) Label fees are the ASC's primary source of income.	As above. Label and audit fees are not our concern.
Consumer can pay the price premium.	Consumers can pay and are willing to pay.	National-level campaigns in Sweden and the QYS-campaign in Seattle (see page 42) have shown that *when conscientious consumers are told about open-throughput farming, they stop eating tropical shrimp, whether certified or not*—this is a solution that certifiers don't like because they lose business. Obviously, the shrimp-business doesn't like it either. "Uncaring" consumers will continue to purchase the cheaper unsustainable variety—there is little qualitative difference between the two kinds. The ASC claims that certified shrimp (across all certifiers) will comprise 20% of the market in 2020. *Even if one assumes that the ASC shrimp is sustainable (which it is not) then 80% (or more) of the market in 2020 will remain unsustainable.*
Commitment to change on the part of producers, exporters and importers	They will change.	They openly admit that they won't change. Exporters are making tons of money off regular uncertified shrimp and have refused to stop selling uncertified shrimp.
Transparency and trust	Consumers can check audit reports on the ASC website	The ASC website does not link a farm's audit report to *brands* or *companies*. Without this information, the report itself is useless. The reports themselves are hidden away under multiple layers of links. If you've bought a packet of ASC certified tilapia or pangasius see if you can find the audit report of the farm that grew it: http://www.asc-aqua.org

The situation may be represented graphically on page 28. The bottom-half is a simplified representation of the value chain. Dotted arrows indicate exchange of information; green arrows indicate transfer of commodities or wealth. Needless to say, it is a gross simplification. The real value-chain is far more complex.

The argument offered by certifiers is shown in the top half. Readers can decide which one fits reality better.

The process

Assuming that one believes that the prerequisites for certification have been satisfied, how does a certifier proceed?

This process is outlined in the table below.

Certifying farmed sustainable shrimp—a to-do list

PROCESS	What the ASC did
1 Define sustainable shrimp; create a standard that will certify the production of such shrimp.	The GSC/ShAD was deeply concerned with market-adoption and that a standard focused on environmental performance would lose market share. So, over the course of four years and three drafts, the standards were *diluted more than once [See Section II for examples —Ed.]* to fit the needs of their "top 20% performers" *[Also see the next question on how a standard is created]* As a result, the farms that the ASC will certify are not sustainable. Even the current "top 20%" are not sustainable—they are all open-throughput farms.
2 Public Dialogue with *all* stakeholders.	GSC/ShAD spent the first two-years of the 4-year "dialogue" talking *exclusively* to industry partners. By the time the standard was thrown open to public dialogue, most of the damage was already done. NGOs and scientists who joined the process did so strictly on invitation from existing GSC/ShAD members: the original committee selected itself; then they decided whom to invite. During the drafting process, one GSC/ShAD member was offered an industry position. The offer was accepted and the member quit the GSC; then re-joined it as an industry representative. The "public dialogues" were held in posh venues, not among local community stakeholders. In Ecuador, the entire local community representation walked out of the meeting; 90% of the attendees at Jakarta were industry reps and government officials; and the fishermen who were invited to the meeting didn't understand a word of what was going on; local community representatives protested outside the venue.
3 Start educating consumers about sustainability and the new standard.	Nothing. No consumer campaign was launched. What is the point of creating a certification-led intervention if you don't educate consumers about making sustainable choices? The ASC has assumed that a market-adoption campaign is equal and equivalent to a consumer-awareness campaign. The CO alliance is not surprised—big shrimp-businesses *are* the ASC's market; they're the people who actually pay the ASC.
4 Give consumers tools to verify that the certifiers and auditors are doing their job—earn their trust.	The audit-reports for tilapia and pangasius do not have standardized data-fields: – GPS coordinates of farms are missing from many audit reports; – p-SIA (participatory-Social Impact Assessment) details are missing from all reports – Auditors have the freedom to note "Not Applicable" in mandatory fields. If consumers cannot check the certifier's claim, why should they trust them?

	PROCESS	What the ASC did
		The initial assessment of the ASC's published reports on tilapia and pangasius (both species are relatively easier to audit) shows that they are not doing enough to earn our trust.
5	Start certifying farms.	Not been done yet.
6	Advocate for adoption of the standard to the shrimp export-import industry.	They are doing this very energetically indeed. The GSC/ShAD went out of its way to please their industry stakeholders. Industry representatives were part of the drafting process from the outset. The ASC continues to pursue a vigorously pro-business agenda. Its income in 2010 was €692,000; in 2011 it rose to €953,000—they made a million dollars in one year by certifying tilapia and pangasius.
7	Create mechanisms that make the certification business *accountable to consumers*	Nothing has been done. The worst that can happen to a certified shrimp business that under-performs or cheats or bends the rules is the loss of the label. Meanwhile, the certifier got license fees and the shrimp-business sold shrimp. Everyone wins—except the consumer and the local community. *"It was fun while it lasted... Now sell the company to your brother and re-apply for certification under a new brand next year." [See the case study on page 54. — Ed.]* At the time this guide was published, the ASC had not announced any plans for, say, an online "blacklist" of errant farms (with GPS coordinates) or the creation of, say, a "Non-Compliance Fund" created by setting aside a portion of their license fees.

Steps 1 and 2 in the table, above, contribute towards creating a standard. Only if the certifier has a good standard can it proceed to the remaining steps, which leads us to the next question.

How does one know if a standard is any good and whether it will work?

The first step in the process listed above is extremely important; the sustainable product, a sustainable production chain and all its processes must be defined—what is sustainable shrimp and how is it produced? Once these are defined, how does one assess if a producer is creating a sustainable product?

These questions are posed and answered in a **Standard**—a document that contains definitions for the producer, and procedures for the auditor .

> *According to ISO (2004), a standard is: "A document established by consensus and approved by a recognized body, that provides for common and repeated use, rules, guidelines, or characteristics for activities or their results, aimed at the achievements of the optimum degree of order in a given context." It also notes that: "Standards should be based on the consolidated results of science, technology and experience, and aimed at the promotion of optimum community benefits."*

The problems to be addressed are defined under various categories, or **principles**—such as environment, human welfare, and product quality. For example, Principle 4 of the ASC Standard states: "Operate farms with responsible labour practices."

Each principle within the standard is defined by a set of **criteria**; the shrimp farm's degree of

compliance to these criteria is validated by "**indicators**"; the presence of these indicators is **audited** with a *pre-defined* accuracy and thoroughness.

What remains at the end of this chain is said to be compliant to the standard and is certified.

To evaluate the quality, or environmental performance, or sustainability of a standards-compliant product, one must first analyse if the definitions and procedures outlined in the standard are good enough: *if the standard is weak, the certified product is weak*.

CASE STUDY – The hypothetical ORGANOFITburger Standard.

The Label: ***ORGANOFITBurgers—certified healthy.***

A Principle: *1. Burgers must contain healthier ingredients than regular burgers.*

Criteria: *1.1 It should contain all 5 elements of a healthy diet.*
1.2 All ingredients must be organic.
[... and so on]

Indicators: *1.1 Presence of **x** g of carbohydrates, **y** g of protein...*
1.2 Max. amount of pesticide levels—0g [... and so on]

Auditor: *1.1 Auditor will check lab reports present at the factory, attach a copy to his audit-report; he shall pick a sample at random from the production-line get an independent lab to test it and and attach a copy of the test to his audit-report.*

1.2 Auditor will [... and so on]

[The example illustrates a "prescriptive standard"; ISEAL and FAO guidelines promote "management-based standards" in which criteria and indicators are drafted with reference to processes rather than the outcomes of those processes. Most standards, including the ASC standard, use a mix of both methods. The ASC standard is set to ISEAL guidelines—Ed. **ISEAL Guidelines***:* http://www.isealalliance.org/our-work/defining-credibility/codes-of-good-practice/standard-setting-code *]*

The quality of the standard itself is assessed at 6 levels:

- Level 0: What is the consumer being told? (**Label**)
- Level 1: What does each principle claim to benchmark? (**Claim**)
- Level 2: What does it actually benchmark? (**Criteria** must be sufficient to benchmark the claim)
- Level 3: What will be audited? (**Indicator**(s) chosen must be appropriate to determine that each criterion is fulfilled)
- Level 4: Can it be **audited**? (The presence of indicators can be verified by an auditor in the time at hand; any number of independent third-party audits will return identical results.)
- Level 5: The Result (Is the certified product living up to the claim?)

Each step down the levels described above widens the gap between what is claimed (at Level 1) to what is achieved (at Level 5). The gap, at each level may be widened further for one or more reasons: outdated data and inadequate research, ambiguous or imprecise drafting, dilution of criteria, indicators or auditing guidelines to induce adoption of the standard, and finally, deception by the shrimp farmer being audited or a corrupt auditor.

In the case-study, notice how the text on the label is different from the principle (highlighted red).

“Healthy” does not mean “healthier ingredients than regular burgers.” The word “ingredients” is confusing the sentence—What if one took a regular burger and deep-fried it? The “ingredients” remain the same, but, health-wise, the deep-fried burger is arguably worse,. Removing the word “ingredients” does not help—a 2,000-calorie artery-choking burger is “healthier” than a 3,000 calorie artery-choking burger; but can it be called “healthy”?

The OrganoFITburger Standard exhibits a Level 0—1 gap: the product being sold is not what the label says it is.

The standards document must be precise and unambiguous. Imprecision is likely to be amplified during the audit; it will increase the duration of auditors' training; it will confuse producers. The extra time spent drafting precise standards is saved many times over during the usage of the standard. As we shall see in Section II, the text of the ASC Shrimp Standard is woefully imprecise.

Finally, even if Levels 1, 2 and 3 are rigorous, the financial considerations at Level 4 (audit duration vs. costs, audit frequency vs. costs and so forth) will always dilute the quality of the certified product allowing unsuitable produce to slip through. A Level 4 gap is an intrinsic flaw of all types of certification. The implications of the flaw depend upon the product being certified.

Effective certification-led sustainability of large-volume products must ensure the following, in order:

A) The standard itself is rigorous—Level 1 is *appropriately* high, Level 2 is tangible and Level 3 is verifiable and measurable—and precise.
B) The audit requirements are practical (time and personnel costs are low) and allow an audit whose proficiency and fairness can be verified after the fact.
C) There should be enough of the certifiable product available to make an impact on the market: If there's too little of the certified product, it won't make any difference.

Matrix of certification results

	A	B	C	RESULT
1	Pass	Pass	Pass	[**GOOD**] The certified product is sustainable, audit-friendly and a label-based intervention coupled with consumer information will have a positive impact.
2	Pass	Pass	Fail	[**BAD/NEUTRAL**] The product can be produced sustainably, but is far outnumbered by the unsustainable variety. As a result, producers have no reason to switch to sustainable production (which has higher production costs than the unsustainable variety and requires additional capital investment) since there is a huge existing, growing market for the unsustainable variety.* But large importers sourcing from both kinds of producers *gain* a lot of positive publicity by virtue of their association with even a tiny amount of sustainable produce: Importers and supermarkets can and do leverage the “sustainable” tag. As a result, they sell a lot *more* of all kinds of shrimp, creating a greater demand for the unsustainable product. ***Is ecolabeling a desirable environmental policy measure?** http://link.springer.com/article/10.1023/A:1011101604084 **Impure public goods and the comparative statics of environmentally friendly consumption** http://web.williams.edu/Economics/wp/kotchencompstat.pdf
3	Pass	Fail	---	[**BAD**]The standard itself is rigorous, but can't be audited effectively for a variety of reasons (time, expense, prone to corruption, lack of verifiability—the Level 4 gap in effect.) As a result: (a) a lot of unsustainable produce is labeled sustainable and dumped on the market and/or (b) sustainable producers don't volunteer to apply for the standard.
4	Fail	Pass	---	[**WORSE**]The standard does not certify a sustainable product and is essentially worthless. But, the product is certified “sustainable” and enters the market. Most certification schemes

				fall under this category.
5	Fail	Fail	---	[**WORST**] Greenwash.

Unless A.B and C are all simultaneously fulfilled, certification fails to be useful for the product at hand. In the case of farmed tropical shrimp, and specifically ASC's certification, members of the CO Alliance believe that one the results (4) or (5) are applicable. One CO Alliance member (the Anti-shrimp Group of the Stockholm Society, which funded this Guide) asserts that for farmed tropical shrimp, result (2) *might* apply—it is possible to certify tropical shrimp, but not enough of it is being produced to affect the market; SSNC's research has validated the Case 2 risk—certification of tropical shrimp creates the false perception among consumers that tropical shrimp can be farmed sustainably.

The principles, criteria and indicators in the ASC shrimp standard are analyzed in Section II.

Does certification of farmed tropical shrimp work?

Using the ASC Standard would result in outcomes (4) and (5) listed in the matrix.

But there are other shrimp standards to analyze; and other aquaculture products that use similar inputs (feed, antibiotics, pesticides) and have the same flaws (effluent treatment, location, labour standards) as open-throughput shrimp aquaculture.

GAPI

A rigorous, quantitative tool for assessing the *environmental* performance of farmed finfish standards has been developed. It is called the Global Aquaculture Performance Index (GAPI).

GAPI is highly adaptable:

- It can be used to assess any aquaculture production, not just those that are certified
- It can be used as a tool for improving (or diluting.) an existing standard
- The quantitative benchmarks are set by the user—you can say “If I change my standard so that it has zero inputs from unsustainable feed sources, what happens then?”
- It allows the user to compare say “Norwegian farmed salmon” to “Australian barramundi”

GAPI: http://web.uvic.ca/~gapi/
Key Results: http://web.uvic.ca/~gapi/explore-gapi/keyfindings.html
How Green is your EcoLabel (2011): http://web.uvic.ca/~serg/papers/GAPI_Benchmarking_Report_2011.pdf

GAPI gives you numbers, it is up to you to decide whether those numbers are good enough to call the product “green” or “sustainable” or “rat-free.” The performance of many standards that certified Atlantic Salmon was rated by the Monterey Bay Aquarium (MBA) and the Blue Ocean Institute (BOI). MBA set its “green” bar at 85; BOI set it at 80. A 100 score means that the product had zero environmental impact.

The USNOA standard scored 84 (yellow); MSC scored 77(yellow); Global GAP scored 69 (red). According to BOI these same scores were rated 84(green); 77(yellow) and 69(red)
Source: http://web.uvic.ca/~serg/papers/GAPI_Benchmarking_Report_2011.pdf

Most importantly, tools like GAPI allow standard-setters the option to “set the bar”. Zero-impact scores on all principles are not possible, but if they set the bar too low, they're fooling nobody: Atlantic salmon that Marks & Spencers calls “green” scores 62 on GAPI.

The MSC—the elder brother of the ASC—has been around for more than a decade. MSC is one of the very few labels that dares to use the word “sustainable.” Though it has deficiencies (they still haven't solved the problem of feeding carnivorous species like salmon) and many critics, the MSC scheme has some good features—their documentation and traceability feedback to consumers is better

organized than the ASC.
But even after a decade in business, and they're still not sustainable. Accusing the ASC of optimism would be an understatement.

Reports about GAPI from varied sources, scientific and layperson:

Environmental Claims For Farmed Fish Don't Hold Up To Scrutiny:
http://www.npr.org/blogs/thesalt/2011/12/08/143304753/environmental-claims-for-farmed-fish-dont-hold-up-to-scrutiny#more

Fishy Labels: Your Seafood May Be Less 'Green' Than You Think:
http://www.mainstreet.com/article/lifestyle/food-drink/fishy-labels-your-seafood-may-be-less-green-you-think

Even the Best Farmed Fish Can Cause Problems: http://news.sciencemag.org/2010/10/even-best-farmed-fish-can-cause-problems

If you're spending a little extra money on farm-raised fish with a sustainability sticker, you may be getting short-changed: http://www.takepart.com/article/2011/12/09/truth-about-eco-labels-for-farmed-fish

Farmed and Dangerous: http://www.farmedanddangerous.org/markets-certifications/certifications-eco-claims/

The aquaculture industry responded. But the responses were muted.

Sustaining Ethical Aquaculture Trade: http://seatglobal.eu/wp-content/uploads/2010/11/GAPI-a-fair-assessment-of-global-aquaculture-sustainability.pdf

GAPI tools are now being adapted for farm-level analysis. This too is limited to environmental indicators.
FLAPI: http://web.uvic.ca/~serg/initiatives/flapi.html

When applied to farmed fish, it would be fair to conclude that mature certification schemes (10+ years in the wild.) have not delivered on their promise and that even certified farms have below-par environmental performance and to underline a key message:

Most certified farms are not sustainable; certified produce is not necessarily sustainable.

We want sustainable production; not "Certified Sustainable™" production.

Can certifiers claim that their shrimp is "responsible" or "sustainable"?

Most certifiers don't use the word "sustainable" in their printed literature and, instead, use words that sound suitably synonymous. Scientists (who are very finicky about precision) were quick to point out the difference:

Is Responsible Aquaculture Sustainable Aquaculture? WWF and the Eco-Certification of Tilapia:
http://www.tandfonline.com/doi/abs/10.1080/08941920802506257

Indeed, none of the principles in the ASC standard includes the word "sustainable".

The problems of open-throughput shrimp-farming have been listed in the previous pages. Clearly shrimp-farming creates social, environmental and economic problems of a complexity and magnitude that a single tool like certification cannot solve. Also, as was shown earlier, (page 32) in the case of farmed tropical shrimp, the best-case scenario is a Type (2) result, which would have no impact on the market.

Here, one must also factor in an important aspect of certification that has not been addressed earlier —certification is a business. The moment an organization decides to get into certification, their business priorities begin influencing their decisions. They have to compete in a market flooded with

competition. By no means should this be a cause for sympathy for the certifier—though it has been offered as a excuse for some leeway: *“We're trying really hard to accommodate everyone's opinion... It's far from perfect, but we're doing the best we can.”* [GSC/ShAD, 2010]

Like any business entity, a certifier too must be careful about public claims. In the USA, environmental labels must adhere to USEPA environmental guidelines and FTC regulations on environmental claims in advertising—businesses are not allowed to make claims that they cannot substantiate.

USEPA: http://epa.gov/greenerproducts/standards/
FTC: http://www.ftc.gov/enforcement/rules/rulemaking-regulatory-reform-proceedings/guides-use-environmental-marketing-claims
FTC green-guide text: http://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf

For example:

> *A product is advertised as "environmentally preferable." This claim likely conveys that the product is environmentally superior to other products. Because it is highly unlikely that the marketer can substantiate the messages conveyed by this statement, this claim is deceptive. The claim would not be deceptive if the marketer accompanied it with clear and prominent language limiting the environmental superiority representation to the particular attributes for which the marketer has substantiation, provided the advertisement’s context does not imply other deceptive claims. For example, the claim “Environmentally preferable: contains 50% recycled content compared to 20% for the leading brand” would not be deceptive.*

Government-led regulation keeps certifiers on their toes; and conscientious consumers have a duty to be vigilant of tall claims made by all businesses, including certifiers.

Now, to the question at hand: How can a certifier make the claims that it does?

We answer this question using the ASC shrimp standard as a case-study.

Firstly, certifiers don't actually have to solve the problems of tropical shrimp farming, or even try to solve them.

From a business perspective all they have to do is:

- They must appear to be solving the problem—if conscientious consumer believes that they are trying, sincerely, to make a difference, then he or she will buy the product.
- Cherry-pick the “positives” in their advertising and leave out the “negatives”—again inducing consumers to buy the product that they certify.

From a legal and PR perspective:

- They cannot lie vis-a-vis the claims defined in the standard—they cannot say that their standard solves a problem, when the certified product can be easily shown to be non-compliant with the standard. In other words, if someone can prove, in multiple cases, that the certified product is not compliant with the standard, the negative publicity would kill the business.

So, how can they claim that their product is something that it isn't?

Tricks of the trade no. 1: Reduce the “scope” of certification

The ASC shrimp standard prohibits child-labour. But women and children in developing countries collect *P. monodon*—tiger shrimp—juveniles in the wild and sell them to shrimp farmers. They earn a dollar for an entire day's work if they're lucky. (http://www.worldfishing.net/news101/industry-news/abuse-and-injustice-in-bangladeshs-shrimp-industry)This is one of the reasons tiger shrimp from Bangladesh is as cheap as it is. Children and illegal migrant labour are recruited by shrimp processing factories in Thailand. (http://www.washingtonpost.com/world/asia_pacific/in-a-world-hungry-for-cheap-shrimp-migrants-labor-overtime-in-thai-sheds/2012/09/19/3435a90e-01a4-11e2-b257-e1c2b3548a4a_story.html)

How do certifiers respond to queries about child-labour? Simple: The scope of the certified farm is limited to the farm boundaries. The children are not working *on* the farm—and anything outside the farm boundaries is not addressed by the standard. It is your duty as a consumer to check the standard and then purchase the product…

The analogy is: A restaurant is certified “Rat-Free™” but the Rat-Free™ Standard only requires the health-inspector to check the kitchen. He doesn't check the larder, or the toilet, or the wine-cellar or the delivery room or the dining room or the…

The ASC could easily have refused to certify shrimp that is sourced from child-labour. It was as simple as including a clause that if at any time the farm was found to have sourced hatchlings caught by children, its certification would be revoked. Local NGOs would have willingly offered to keep tabs on shrimp farmers who flouted this clause… The ASC did nothing.

They have allowed the practice to continue for six years from the time of publication of the standards. After six years have passed, farmers will still be allowed to source wild-caught broodstock for purposes of “genetic enhancement.”

The same trick was used to avoid the problems of unsustainable feed sourcing and GM ingredients in feed and inhuman working condition and waste-management in shrimp-processing plants. People did point out these loopholes during the two comments-periods. The following input was offered in 2010:

> *Comment: […] The standards apply only to farms where shrimp are raised. The standards do not apply to fishing operations, shrimp preparation and processing or transport. If certification is stamped on the packages of shrimp from these farms indicating they comply with the ILO Core Labor Standards (CLS), but the shrimp were processed or transported by employers that deny Freedom of Association, use child labor or forced labor, or discriminate against workers, then the stamp on the package gives a false guarantee that the product came through a supply chain respecting CLS, when in fact the opposite would be the case. In other words, establishing standards for one small part of the supply chain while ignoring all other parts is misleading to consumers of the product.*
>
> *[GSC/ShAD replied: We agree. However, this is initially outside the scope of the ShAD, but we would like to ensure that the ASC finds ways to address this immediately. We recognize it as a very important issue.*
>
> **Source:**
> http://assets.worldwildlife.org/publications/27/files/original/Shrimp_Aquaculture_Dialogue_Responses_to_1st_Public_Comment_ShrimpC.pdf?1344364858 The excerpt is taken from page 4 of the document.

[The example mentioned above is one of many more instances that are scattered across all the 7 principles of the ASC standard. See Section II for more examples.]

In other words “If it's not covered by the scope of certification, it's not our problem right now. We are aware of the problem and really concerned, but… our shrimp is sustainable.”

Case-study – Certified Rat-Free™ Restaurants

An irate consumer calls up the agency that certifies Rat-Free™ restaurants. The PR Man answers:

"Yes sir, we know that you found rat-droppings in the larder and under the tables and we're awfully sorry that a rat nipped you in the toilet, but we're focusing on the kitchen at the moment. And, the kitchen is clean. It is compliant with FAO guidelines, "

"But there are huge piles of rat-poop all over the place... I saw it. "

"Not in the kitchen. We know about those other droppings. We're setting up a different company to put GPS collars on all rats which will tell us immediately if they enter the kitchen. We're also developing the Rat-Poop Testomatic™."

"GPS collars on rats? Are you insane?"

"We have to track their movements, sir. We can't exterminate rats unless we can prove they were actually in the kitchen. That would be inhuman."

"I don't care. I'm not coming back. And I want a refund."

"That's your choice sir. But if you don't visit again, what incentive does the restaurant have to clean up the rest of the place? Don't let those rat-hugging non-profits influence you... Did you know that other certifiers don't check the fridge. We check the fridge, you know... if it's in the kitchen. No refunds."

"But I want to eat in a rat-free restaurant."

"And we have so many Rat-Free™ restaurants from which to chose. Your choices are contributing towards making all restaurants Rat-Free™. You sir, are a discerning patron of fine dining. You keep eating, sir. And leave the rats to us."

If, for even a moment, you thought that including this fictional conversation was flippant or out-of-place, see these responses from companies to a film that documents the gross human rights abuse and environmental destruction caused by the feed industry in Peru.

Company responses:
http://www.theecologist.org/investigations/food_and_farming/269542/ecologist_film_unit_feed_for_greed.html

The film:
http://www.theecologist.org/trial_investigations/1220194/how_our_growing_appetite_for_salmon_is_devastating_coastal_communities_in_peru.html

Another company-response:
http://www.naturland.de/fileadmin/MDB/documents/Aqua/Naturland_Reply_to_the_Swedish_Society_for_Nature_2011.pdf

Murky Waters: http://www.naturskyddsforeningen.se/sites/default/files/dokument-media/murky_waters.pdf

Both reports mentioned above are good examples of how a certifier dodges environmental impacts by reducing the scope of certification; the responses received are not surprising considering that in both instances they were attempting to defend the indefensible.

Trick no. 2: Hide the prickly bits in guidelines

The issue of FPIC (Free Prior and Informed Consent) in the ASC Standards is a good example of this trick in use:

FPIC forms the foundations of sustainable, inclusive development and is an integral part of international law and jurisprudence. **FPIC***:* http://www.forestpeoples.org/guiding-principles/free-prior-and-informed-consent-fpic

In a nutshell: You have the right to say “yes” or “no” if someone wants to build a highway through your neighbourhood. FPIC is easy to implement in a developed nation where people are aware of their rights and, indeed, implementing a development project without FPIC would result in a nation-wide uproar.

Answer the following questions and then (regardless of whether you want the highway or not) ask yourself if your rights to FPIC are violated in any of these situations:

- If you're not in town when the surveyor comes knocking on your door and you can't register your vote to say no when you do return?
- The surveyor doesn't speak your language; you don't understand a word he says but he seems pleasant enough and insists that you sign?
- If the surveyor doesn't give you the option to say “No, I don't want a highway” because it is not printed on his questionnaire?
- If the surveyor says, “You're free to go to court, but we're going to build the highway regardless, and if the court agrees with you you can dig up all the concrete yourself?”
- You've been a tenant (living in a rented flat) all your life and the surveyor refuses to speak with you because you're “not the owner”?
- A highway-contractor with an assault rifle stands behind the surveyor as you answer his questions?

Did you answer “yes” to any of these questions? These are *real* analogies of what actually happens when the shrimp-mafia sets its sights on land that they don't own.

You should have a say in the development of your neighbourhood; it doesn't matter if you're rich or poor or don't have a Ph.D or you're disabled… FPIC is a universal right.

Shrimp farms are often located in community-owned areas—in regions where the entire community has, for centuries, had free access to coastal resources. Very often shrimp-farming regions are rife with conflict; communities are divided, unequally, between those who want the farm and those who don't. In most cases, the people who are against the shrimp farm far outnumber those in favour—but it doesn't matter in this context. What matters is that if a certifier claims that their standard is “socially responsible” they have to put in place fair FPIC protocols and an equitable system for resolving conflict.

Certifiers know this. They can't dodge FPIC, which is why many of them don't include social standards at all.

The ASC, on the other hand, wishes to differentiate itself from other shrimp standards on this crucial aspect. They want to tell you that the farms they certify have been built after fair consultations with local communities and FPIC. But they can't have explicit FPIC: if they did, many of their “top 20% performers” would be rendered non-compliant.

And now the trick itself.

They claim that the Standard is “socially responsible,” but explicit FPIC protocols are absent in the standard itself: no explicit FPIC criteria, no explicit right to say no…Nothing within the criteria

or indicators... Everything is in the guidelines, not in the text of the standard. The guidelines don't offer the right to say no either—which means that a community can object, but cannot **explicitly** say “No.” And the consumer cannot check exactly what was said either.

What this means is that you—the consumer—have to take their word on faith.

- You can't check if a particular farm did indeed implement FPIC (it won't be mentioned in the audit-reports)
- You can't check if conflicts are being resolved
- You will never know if a p-SIA was fair (the auditor is not required to report on the thoroughness of the p-SIA)

The ASC Standard does nothing **verifiable** to indicate an increase social performance in an industry where conflict is the norm rather than an exception.

The ASC is not alone among certifiers (including those who certify other products) who have tried to dodge FPIC protocols by shoving them in the guidelines where they may or may not be mandatory, but can be pointed out to those who ask why FPIC is absent. [See page 63 for a comparison of FPIC across various standards]

CO Alliance's members in Bangladesh, Indonesia and all of Latin America have documented horror stories of women being gang-raped by the local shrimp mafia because they dared to protest against the shrimp farms; of people being forced to migrate because the local shrimp farm has salinated their wells and poisoned their farmland.

ASC certification does not calm the social turbulence caused by shrimp-farming—it, instead, widens power-based inequalities and, shorn of its layers, strengthens that despicable maxim that might is right.

In Section II, you will find a number of other examples of critical issues that have been moved into guidelines and appendices: **they're in the document, but not in the standard**.

Trick no. 3: If it isn't defined, it can't be audited

Misdirection is an old favourite with magicians. The magician knows exactly where the rabbit is, but he will spend forever searching his pockets, your pockets, his assistant's pockets... Everywhere, except the one place where the rabbit actually is hidden. You know it's hidden somewhere but where exactly?

Principle 4 of the ASC standard uses this trick to great effect—with as much finesse as can be expected from an inept stage-magician.

They say workers will have this facility and that benefit and these wages and... But they haven't defined who a “worker” is. They take great pains to define “hired (permanent) workers” and “child-workers” and “hired labour” and (in a different document) “young workers” but not “workers.”

And then they proceed to give these “workers” wages and facilities, and special benefits to “permanent workers”.

The following is copied from Section II. There really is no better way to explain it. *[Or to confuse—Ed]* According to the ASC Standards:

- A permanent worker is one who has a contract of "unlimited duration." Only "permanent workers" are guaranteed a "fair" wage, the rest are not.

- A five hectare shrimp farm is considered “small scale”; such a farm is assumed to employ a **maximum** of **one** permanent worker.

- Only those workers with year-long contracts are "hired workers"; a hired worker is not necessarily a permanent worker.
- "Hired labour" are not hired workers (and, by the law of association, they are not permanent workers either)
- Benefits are available exclusively to "hired workers" under most criteria in Principle 4.
- The standards **explicitly** exclude "Hired labour"—the majority of the workforce—from benefits.

To add to the general confusion, these definitions are scattered around in footnotes and guidelines. Meanwhile, the criteria in the standard and its guidelines give “workers” a list of facilities and benefits. The key question is:

Consumer: Who are “workers”?
Auditor: Which workers?
The Standard does not define them at all. And it is isn't defined, it does not exist as far as the standard is concerned.

Trick No. 4: Create your own definitions

This is a valid (though its use in a court of law is frowned upon) legal trick. Readers in the US might remember a famous statement: “It depends on what the meaning of the word 'is' is.” [**Source**: http://www.youtube.com/watch?v=j4XT-l-_3y0]

Examples of words and phrases whose meanings in the ASC Standard are not what is conventionally assumed :

“Responsible”
“Conflict resolution”
“Negotiated outcome”
“Social sustainability”
“Traceability”

Are the ASC's shrimp standards better than the rest?

Certification is a tool whose utility can be assessed by measuring, simultaneously, its effectiveness and efficiency—by the positive measurable changes it makes to the lives of people, the state of the ecosystem and by the duration taken to bring about these changes.

If the tool fails to fulfill these metrics, it is not necessarily a bad tool—it might just be the wrong tool for the job: you cannot dig a pit with a spoon; you cannot eat with a shovel. We maintain that certification is an effective tool for many products; it is just not the appropriate tool for mitigating the effects of tropical shrimp farming. (See page 32 for a matrix of results to be expected from certification.)

Whether ASC certification is “better” or not will be known within the first few years of its adoption by the shrimp industry.

The ASC insists that their standard will improve shrimp production. We have been asked, literally, “to take a leap of faith.” We refuse to do that. And neither should you.
To answer the question: Do we think that the ASC shrimp standard is better than other shrimp standards?
The short answer: It isn't.
The long answer: See Section II

What is your solution to the problem?

Reduce demand in consumer nations

Consumers in the USA eat 2 billion lbs of shrimp every year: almost 4.5 lbs per person per year. In 1990 they consumed ¼th that amount and nobody was starving. As a start, we need to reduce shrimp consumption to pre-1990 levels... If people eat less shrimp, expansion of the industry will halt immediately.

A consumer campaign informing consumers about farmed tropical shrimp is the first step; if such a campaign were to be launched by WWF today, it will start solving the problem tomorrow. The ASC will not make any money, but WWF will regain a lot of credibility among its supporters and (dwindling circle of) friends.

Promote sustainable production systems around the world

Some varieties of local wild-caught shrimp can be sustainable.
Some RAS systems can be made fully sustainable (near-zero impact if they can scale up production of algae-based feed systems.)

We urge those who can influence public opinion like Monterey Bay Aquarium, SSNC and Greenpeace to promote these technologies.

Support local shrimp fishers

Your local sustainable fishers deserve your support. If you live in the US, consider the following local varieties of shrimp:

Pacific Northwest
Oregon pink shrimp (April - October)
Spot prawns (March - September)

Pacific Southwest
Spot prawns (Year round, peak February - October)
Ridgeback shrimp (October - May)
Coonstripe shrimp (May - October)
Pink shrimp (April - October)

Gulf of Mexico
Pink shrimp (Year round, peak in the winter)
Brown shrimp (Year round, peak in the summer)
Brown rock shrimp (Year round, peak July - October)
White shrimp (Year round, peak in the fall)
Royal red shrimp (February - May)

Atlantic Southeast
Pink shrimp (Year round, peak in the winter)
Brown shrimp (Year round, peak in the summer)
White shrimp (Year round, peak in the fall)
Brown rock shrimp (Year round, peak July - October)
Royal red shrimp (February - April)

Atlantic Northeast
Northern shrimp (Winter/spring)

There are other seafood choices available to discerning consumers:

MCS: http://www.fishonline.org/
Mangrove Action Project: http://www.questionyourshrimp.com
Greenpeace: http://www.greenpeace.org/international/en/campaigns/oceans/seafood/red-list-of-species/#a1

Keep consumers informed

The CO Alliance has resolved to check certified shrimp-farms and publish our findings online. Preliminary work has already begun and CO Alliance members in Bangladesh and Indonesia are getting ready to conduct audits of certified farms.

Conscientious consumers must have access to information—we intend to give you this information.

Case Study – "Question Your Shrimp" Consumer Awareness and Markets Campaign

by Vanessa Lopez, QYS Campaign Coordinator

In 2009, Mangrove Action Project (MAP) created its Question Your Shrimp Consumer Awareness and Markets Campaign based in Seattle with a Seattle Area focus. The campaign aims to address the global forces that drive the continual and destructive conversion of mangrove ecosystems to coastal shrimp farms. About 90% of U.S. shrimp is imported and marketed to a US consumers that are unaware or have been green-washed concerning the environmental consequences of farmed shrimp.

In the last 3 years, the QYS campaign has conducted outreach in Western Washington with consumers, retailers and restaurants. Outreach activities are designed based on the change adoption framework to encourage long-term behavior change. While it is impossible to track the behavior change on an individual level, we designed a "consumer pledge" and "restaurant/retailer pledge" that represent an honest effort to source and consume shrimp that is not imported, thus lessening rate of shrimp farm expansion. Thus far, over 1,000 consumers, 28 restaurants, and 2 retailers have signed the "Question Your Shrimp" pledge. By raising awareness & changing consumer demand in the U.S. (currently, the #1 consumer of imported shrimp), the campaign strives to reduce mangrove deforestation & oppression of coastal communities overseas.

The campaign is not without its set of grassroots challenges. I have personally found it hard working within a shoestring budget and against a giant level of unawareness about basic environmental principles. However, I am challenged by the opportunity to broaden the perspective of chefs, retailers, and consumers on the origin and supply chain of imported shrimp. This in itself is rewarding. I have often finding our audience, whether they be chefs or private citizens, quite receptive and willing to support the pledge to not consume imported, warm water shrimp.

The campaign helps Seattle Area residents feel empowered to make an informed and sustainable choice. As the campaign grows and lessons are learned, MAP plans to take the QYS campaign to other cities along the West Coast, and later to other parts of the US and Canada.

SECTION II

The ASC Shrimp Standard—Principles

The ASC shrimp standard is divided into 7 principles:

- Principle 1: Comply with all applicable national and local laws and regulations
- Principle 2: Site farms in environmentally suitable locations while conserving biodiversity and important natural ecosystems
- Principle 3: Develop and operate farms with consideration for surrounding communities
- Principle 4: Operate farms with responsible labour practices
- Principle 5: Manage shrimp health and welfare in a responsible manner
- Principle 6: Manage broodstock origin, stock selection and effects of stock management
- Principle 7: Use resources in an environmentally efficient and responsible manner

The titles of each of principle within the standards are widely advertised by the ASC.

> *From the ASC Website: " [...] providing customers fish from farms that can clearly demonstrate that they have been produced in an environmental and socially responsible manner."*
> *"'Our customers should feel confident that they always buy responsible seafood, whether it is farmed or wild caught. We are pleased that farmed fish that meets the ASC standard will be available shortly,' said Marc Jansen, Director of Consumer Affairs and Quality of CBL."*

[Fig.1: A graphic on the ASC website that is also used in their press releases]

A comparison with other certification schemes illustrates that the Principles of the ASC Shrimp Standard are not as exhaustive as they could be.

The following is the Forest Stewardship Council's list of principles.

> *Principle 1: Compliance with all applicable laws and international treaties.*
> *Principle 2: Demonstrated and uncontested, clearly defined, long–term land tenure and use rights.*
> *Principle 3: Recognition and respect of indigenous people's rights.*
> *Principle 4: Maintenance or enhancement of long-term social and economic well-being of forest workers and local communities and respect of worker's rights in compliance with International Labour Organisation (ILO) conventions.*
> *Principle 5: Equitable use and sharing of benefits derived from the forest.*
> *Principle 6: Reduction of environmental impact of logging activities and maintenance of the ecological functions and integrity of the forest.*
> *Principle 7: Appropriate and continuously updated management plan.*
> *Principle 8: Appropriate monitoring and assessment activities to assess the condition of the forest, management activities and their social and environmental impacts.*
> *Principle 9: Maintenance of High Conservation Value Forests (HCVFs) defined as forests containing environmental and social values that are considered to be of outstanding significance or critical importance.*

Principle 10: In addition to compliance with all of the above, plantations must contribute to reduce the pressures on and promote the restoration and conservation of natural forests.

The keywords in red are missing from the ASC principles.

The purpose of listing the FSC principles was to underline that the ASC failed to set its goals high enough.

We analyse the ASC Standard's performance at each of the following levels:

- Level 0: What is the consumer being told? (**Label**)
- Level 1: What does each principle claim to benchmark? (**Claim**)
- Level 2: What does it actually benchmark? (**Criteria** must be sufficient to benchmark the claim)
- Level 3: What will be audited? (**Indicator**(s) chosen must be accurate enough to determine that each criterion is fulfilled)
- Level 4: Can it be **audited**? (The presence of the indicators can verified by an auditor in the time at hand.)
- Level 5: The **Result** (Is the certified product living up to the claim?)

P1: Comply with all applicable national and local laws and regulations

Performance Gap

Principle 1 illustrates the wide gap between what is claimed at Level 1, what is required at Level 3 and what is finally checked at Level 4.

Criterion 1.1.1 (**ASC-V1**:22) states: "Compliance with local and national laws or regulations" and not "***all*** applicable national and [...]" as claimed by the Principle.

This is the difference between a witness swearing to speak “the truth, the whole truth and nothing but the truth” and just “the truth.”

The standard does not specify which laws are applicable.

The GSC/ShAD was aware of this gap as early as 2010 since the text in **GSC-V1** did attempt to specify the areas of national law that the standards might address. Criteria 1.1.1 to 1.1.5 in **GSC-V1**:11 listed the relevant areas of national law and required the presence of documents that showed the farm's compliance with these laws. It was expected that subsequent drafts of the the standard would refine these criteria on a per-nation basis.

Instead, the GSC/ShAD and the ASC-TAG dodged the problem.

> **GSC-V2**:12 stated *"Because keeping abreast of regulatory reform on a per country basis is not feasible, the ShAD will not specify a definitive set of laws that must be in place for this certification. The core of this principle is simply that 'the existing law must be followed' as the baseline entry point for certification under the ShAD standards."*
>
> A year later, **GSC-V3**:13 said *"...the major challenge for the ShAD Standards regarding Principle 1 is how auditors can effectively determine a farm’s compliance with the law without the ShAD Standards specifying which laws are important."*

ASC-V1:22 dropped the line about the challenge. Naturally, they didn't mention that in the 3 years between the GSC-V3 and ASC-V1, (and after six meetings) the ASC-TAG hadn't solved the problem of how auditors would actually verify compliance with the law.

Instead, the GSC/ShAD and the ASC-TAG saved themselves the research effort: The second version of the standard (**GSC-V2**:12) required that the shrimp farmer tell the auditor which laws were relevant. In GSC-V3, the ludicrous clause was buried, but the ASC-TAG exhumed it in **AM-V1**:01.

> **AM-V1:**01 *“Auditors will need to contact farms pre-audit and request list of legal compliant permits necessary to ensure they are cognizant of national legal requirement. P1 also looks at government inspection reports (if/when governments do this regularly) as verification that permits are not 'merely' documents with stamps but also reflect an ongoing relationship re compliance to the permit conditions. ”*

What reports? What documents? What permits? Does the auditor verify if the farm was ever inspected by the government or does he take the farmer's word that no inspections have been conducted?

> **AM-V1:**01 refers to a *“pre-audit checklist of documents that outlines the minimum information that a client must have prior to the first audit.”*

Whenever the GSC was criticized about the lack of country-specific information and imprecise guidelines for auditors in the draft Standard, they would mention that an “Audit Manual” would

address those flaws. Now that an audit manual has been written, they've inserted yet another "pre-audit" checklist which, when written, will address...

> **GSC-V3**:13 and **ASC-V1**:22 both try to gloss over the reluctance to provide a checklist with the following nugget of sophistry: *"Cross-country comparisons of "adherence to the law" will not take place under this certification, as the other major issues of concern are addressed in subsequent ASC Shrimp Standard Principles, thus rendering the need for legislative evaluations unnecessary."*

No. We didn't ask for a "cross-country comparison" of legislation; we didn't want the GSC/ShAD to conduct "legislative evaluation" of national law either; what was needed was a list of applicable laws, documents and permits. We wanted a checklist.

Why did we want country-specific checklists of all applicable laws?
ASC-V1:22 gives the answer: *"[...] the farm must be legal where it operates. "*

It is the certifier's responsibility to keep abreast of national laws and permits. The GSC/ShAD supervised the work of regional committees each of which could have drafted a checklist of laws for countries in their region; the ASC-TAG would be responsible for updating the basic check-list of laws as and when required.

The FAO has published a list of relevant laws in the top 40 aquaculture producing nations. It is available online, free to use. **FAO National Aquaculture Legislation Overview**:
http://www.fao.org/fishery/collection/nalo/en

The GSC/ShAD could have used this list as a baseline and refined it to their needs...

CASE STUDY – Principle 1 of the Pangasius Standard

> The current version of the ASC Pangasius Standard (version 1.0) includes criteria 1.1.1 to 1.1.5 that were omitted from the ASC shrimp standard; indeed, the criteria listed under Principle 1 of the ASC Pangasius Standard (version 1.0) are almost identical to the corresponding text in **GSC-V1**:11.
>
> The ASC Pangasius Standard (version 1.0) reads:
>
> > *1.1.1 Presence of all pertinent permits and registrations required by local and national authorities*
> > *1.1.2 Presence of documents proving compliance with pertinent tax laws*
> > *1.1.3 Presence of documents proving compliance with pertinent water discharge (including water effluents) regulations*
> > *1.1.4 Presence of documents proving compliance with local and national legal regulations on land and water use.*
>
> The criteria are vague; the audit reports of ASC-certified pangasius farms too are vague—the auditor mentions "documents present" without specifying which documents were present.
>
> However, the ASC Pangasius standard fails at Level 4 (Audit complexity—why not give the auditor a baseline checklist instead of making him or her waste time by determining all "pertinent documents" for each farm.
>
> The ASC Shrimp Standard doesn't make it as far as Level 4. It fails at level 2.

Principle 1 should have been drafted on a per-country basis with the current applicable laws as a

baseline. It should have listed a basic country-wise checklist of {n1, n2, n3, n4...} documents to be presented to the auditor.

As it stands, compliance under P1 is left to the discretion (and experience) of the auditor and the honesty of the shrimp-farmer. The text complicates the audit and makes verification of the process impossible—how can one accuse the auditor of incompetence if one doesn't know what he was supposed to have checked?

The GSC/ShAD (not the shrimp farmer nor the auditor) was supposed to define the standard. Why the GSC and ASC-TAG shirked their responsibility is unknown; minutes of meeting available online do not offer any clues.

Criterion 1.1.2 requires public availability of permits and licences. Therefore, local community groups can challenge a shrimp farm's certification... Correct?

Wrong. Local community disputes don't matter to the ASC. As far as they are concerned, if the auditor is satisfied, the farm gets certified.

The local community *can* request documentation from the shrimp farm; if there is a dispute, or if pertinent documentation is lacking, they *can* challenge the legality of the farm in court... But, as far as the ASC is concerned, legal disputes are considered a resolution of conflict between the farm and the community and do not affect the farm's certification. Surprised? See page 64 for how the ASC defines “conflict resolution.”

As such, revelations about (il)legal status, post-audit, do not affect a farm's certification.
The ASC has never declared that if a discrepancy (under any principle) is brought to its attention it would withdraw certification to the farm.

We might never find out exactly what will force the ASC to revoke certification because doing so is possibly an indirect admission of negligence and could lead to a lot of messy legal wrangles. For example, would the ASC be responsible for refunds to customers for telling them that a farm was “responsible” when, in fact, it was never in compliance with the ASC Standard? The automobile industry is held accountable for faulty cars; could the ASC be held responsible for recalling all the farm's shrimp from supermarkets, restaurants and even your refrigerator?

But a conscientious consumer can stop buying ASC-certified shrimp. If you were to find out that an ASC-certified farm doesn't have all the necessary paperwork would you continue to purchase their produce?

The standard does not require compliance with international treaties.

This glaring omission has to do with the variations between international law, national law and, most importantly, the enforcement of international law. The implication of this omission is discussed on page 53 in the analysis of Principle 2.

Conclusions

- An ASC certified shrimp farm does not require compliance with international treaties.
- The standard does not require compliance with *all* applicable national and local laws relevant to aquaculture.
- The auditor does not have a checklist; he does not know what to check.
- The audit-reports from pangasius and tilapia farms (that have been certified by the ASC) do not provide information about what documents were shown to the auditor. In other words: The consumer cannot know what was checked; and, indeed, the ASC does not know exactly what was checked either so there is no way the consumer can find out if anything was checked at all.
- Criterion 1.1.2 is irrelevant to a farm's certification status, post-audit.

P2: Site farms in environmentally suitable locations while conserving biodiversity and important natural ecosystems

Groupe UNIMA and OSO were both members of the GSC/ShAD. Groupe UNIMA's operations in Madagascar are located entirely in the salt flats along the island's coastline [**Rajaosafara, S and du Payrat, T, 2009, Sustainable development in Madagascar, a case study: The UNIMA Group (an independent assessment made within the WWF and UNIMA Group partnership) pp 30**].

OSO's farms are located on the edge of a national park. The links, below, contain photographs of their farms.

Groupe UNIMA: http://www.unima.com/?lg=en
OSO: http://www.madagascar-gambas.com/en/index_en.htm

The standard makes it clear that clearing of forests is allowed for building pumping stations and "inlet canals" without defining these or limiting the damage that might be caused. The "inlet canal" on the OSO farm is a triangular region for the creation of which more than 1.3ha of mangroves were destroyed. This "inlet canal" serves one set of ponds. The company operates more than one set.

Further, the borders of the ponds clearly indicate that mangroves were cleared to create large parts of the farm and not just the "inlet canal."

UNIMA's operations in Madagascar: http://www.unima.com/page_aquaculture.php?lg=en

Principle 2 was diluted to suit the industry

Let us begin by looking at the critical issue of whether or not shrimp farms inside mangrove ecosystems would be certified.

GSC-V1:12 said:

Criterion	Indicator	Standards (Existing Farms)	Standards (New/Expanding Farms)
2.1.1	Allowance for siting in National Protected Areas (PAs)	None, except for those with IUCN PA category V or VI	None, except for those with IUCN PA category V or VI
2.1.2	*Allowance for siting in mangrove ecosystems*	*None*, except in areas needed for pumping stations and canals with appropriate offsetting via restoration of 100% of equivalent area.	*None*, except in areas needed for pumping stations and canals with appropriate offsetting via restoration of 100% of equivalent area.
2.1.3	Allowance for siting in natural wetlands.	*None*, except in areas needed for pumping stations and canals with appropriate offsetting via restoration of 100% of equivalent area.	*None*, except in areas needed for pumping stations and canals with appropriate offsetting via restoration of 100% of equivalent area.

Criteria 2.1.1-3 meant that no shrimp farms would be certified if they were located inside either “mangrove ecosystems” or “natural wetlands” irrespective of when these farms were established.

Bravo.

Another important aspect of these criteria in **GSC-V1** was that the standard differentiated between new, expanding and existing farms.

"Existing" was defined as: *"Encompasses any of pond, farm site or related facilities established prior to publication of this document,"* while "New" meant: *"Encompasses all forms of expansion, new ponds, new farm sites or related facilities done after publication of this document."*

On the same issue—siting in mangrove ecosystems and natural wetlands—**GSC-V2** said this:

Criterion	Indicator	Standard
2.2.2	*Allowance* for siting in mangrove ecosystems, and other natural wetlands of ecological importance *as determined by the BEIA (Biodiversity-inclusive Environmental Impact Assessment)*	None for ponds built/ permitted after May 1999, except for pumping stations and inlet/outlet canals provided an equivalent area is rehabilitated as compensation. For ponds built/ permitted before May 1999, farmers are required to compensate/offset impacts as determined by the BEIA.

The first dilution is immediately apparent—new and old farms would be treated the same. The standard would not distinguish between old farms, old farms that were expanding, and new farms. Also, the cut-off limit was farms was set at 1999. The reason offered by the GSC/ShAD was the adoption of the Ramsar Convention in 1999.

But what about farms that were *established* before 1999 but *expanded* after 1999? The auditor now had no reason to deny compliance to an *expanding* shrimp farm under this criterion.

Secondly, farms in mangrove ecosystems and natural wetlands were allowed, subject to recommendations made by a BEIA.

From "*No farms in natural wetlands*" the standard was diluted to "*Farms in natural wetlands if a B-EIA allows it.*"

Reforestation, restoration or rehabilitation?

The second, more insidious change was the inclusion of the BEIA clause into 2.2.2, which allowed farms established after 1999 to "compensate for impacts" without defining how this would be done or assessed by the auditor. The guidelines for the BEIA are squirreled away in an Appendix.

In **GSC-V1**, the restoration (for canals built) was 100% equivalent area; in **GSC-V2**, it was knocked down to 50% and included a curious recommendation that "*[...] any mangrove removal must be compensated by allowing the natural regrowth or reforestation in an equivalent area.*"

"Natural re-growth" was not defined; "reforestation" is not the same as "restoration".

Thus, 2.2.2 allowed the shrimp farmer, conveniently, to abandon his or her farm, thereby allowing "natural re-growth"—in the absence of a definition, "natural regrowth" could mean "allowing a land to regrow naturally, without interference."

Principle 1 uses the terms "reforested," "restored" and "rehabilitated" indiscriminately.

The most relevant of these terms—"rehabilitated"—has been deliberately left undefined in **ASC-V1**:27, footnote 18. which says "*Rehabilitation Appendix will be developed as part of the testing phase in 2011 .*" **ASC-V1** was published in 2014, a full three years after the Rehabilitation Appendix was to have been developed.

Appendix I (**ASC-V1**:117, footnote 145) also leaves the term undefined. The ASC-TAG (ASC Technical Advisory Group) has been aware (6th ASC-TAG meeting, September 2012, Item 7) that the phrasing and definitions in the text were arbitrary and that harmonization across all the standards was necessary but in the three years since that meeting, they haven't done anything.

AM-V1:04 contains the same footnote 18 which says "*Rehabilitation Appendix was developed as part of the testing phase in 2011 .*" The reference is probably to Appendix A **AM-V1**:45-47, "Mangrove Restoration," which contains the following "*checklist for farmers and guideline [for] auditors*":

Item	Validated	To be improved
Understand the ecology of the mangrove species at the site, in particular the patterns of reproduction, propagule distribution, and successful seedling establishment .		
Understand the hydrologic patterns (in particular the depth, duration and frequency of tidal inundation) that control the distribution and successful establishment and growth of (targeted) mangrove species.		
Assess modifications of the original mangrove environment that currently prevent natural regeneration (recovery after damage).		
Restore hydrology and other environmental conditions that encourage natural recruitment of mangrove propagules and successful plant establishment.		
Only consider actual planting of propagules, collected seedlings, or cultivated seedlings after determining (through steps 1-4) that natural recruitment will not provide the quantity of successfully established seedlings, rate of stabilization, or rate of growth of saplings established as objectives for the restoration project.		

The reader can decide whether this (non-mandatory.) checklist is appropriate for a *standards document*. For example: how is the auditor is expected to check whether the farmer "understand[s] the ecology, patterns of reproduction [...] hydrologic patters [and] propagule distribution."

Multiple loopholes and more dilution

In **ASC-V1**:27, hidden away in the fine print (footnote no. 19) is a ridiculously transparent loophole:

> *"Mangrove areas preserved within the farm can be considered as part of the compensation (e.g. if a farm has 2ha, but they kept 1ha with mangroves inside the farm, they can be considered in compliance)."*

This is what the final draft (**ASC-V1**:27) has to say about siting in mangrove ecosystems:

Criterion	Indicator	Standard
2.2.2	Allowance for siting in mangrove ecosystems, and other natural wetlands of ecological importance as determined by the BEIA **or** national/state/local authority plans/list	None for farms built after May 1999, except for pumping stations and inlet/outlet canals provided they have been permitted by authorities and an equivalent area is rehabilitated as compensation. For farms built **or permitted** before May

Criterion	Indicator	Standard
		1999, farmers are required to compensate/offset impacts via rehabilitation as determined by the B-EIA, **or** the national/state/local authority plans/list, **or** 50% of the affected ecosystem (whichever is greater).

The sentences defining the indicator and compliance standard are unforgivably crude and offer a number of loopholes. (Compare the text in **ASC-V1**:27 with the relatively straightforward and elegant **GSC-V1**:12)

Firstly, the addition of "or" to the indicator makes the BEIA optional. So, if the local authority says that the farm is legally within its rights to exist and expand within a natural wetland, the BEIA does not matter? *This is exactly why Principle 1 did not require compliance with international law.* If local laws do not explicitly prohibit destruction of natural wetlands, a shrimp farm can violate the Ramsar Convention.

Secondly, the profusion of slashes (/) indicate multiple, mutually exclusive conditions, but do not specify which takes precedence. The GSC/ShAD demonstrated its unwillingness to tackle national law while dealing with Principle 1; here they dive headfirst into legal issues with no compunctions. Which takes precedence: National law? State law? Local law? What about customary law? Who decides?

On to the compliance standard (column 3):

- Why are farms built before 1999 allowed to compensate for impacts with 50% of affected land and post-1999 farms required to compensate with "equivalent area?"
- The addition of the word "permitted" is an obvious loophole. What if a farm-owner got a permit to build or expand its operations before 1999 but didn't actually build or expand, would he be allowed to build or expand a farm in 2014 based on permission received before 1999?
- "Compensate/offset" is not defined. And why the obsession with the slash? Either one wants "compensation" or one wants "to offset." The GSC/ShAD were unsure and the draft reeks of it.
- Without a list of applicable laws on "impacts", how is the auditor to decide "which is greater?"

They expect the auditor to decide, on location:

- Whether the BEIA should have been conducted
- When the BEIA should have been conducted, if it was required (Does a 2001 BEIA count?)
- Whether the date on which "permission" was granted supersedes the BEIA
- What laws and lists apply to the case?
- If some aspects of the BEIA are accurate.

AM-V1:02,03 contains audit guidelines that do not help at all and it is obvious that the auditor will not have the necessary time to properly evaluate the BEIA report. He or she is not being asked to evaluate the report. Again, if a farm is found non-compliant with 2.2.2 after the audit, the ASC can conveniently blame the auditor; the auditor can blame the lack of training, time and a faulty BEIA; the ecologist who wrote the BEIA will shrug and blame the ASC for an over-ambitious, but vague ToR.

Case Study—A Certified Sustainable™ farm in the middle of mangroves

The flaws in criterion 2.2.2 may be explained with the following hypothetical case-study:

1. A private company intending to begin shrimp farming operations obtained a permit in 1998 to build a commercial enterprise on 100ha of unspoiled mangrove land; it built 30ha of ponds and left the rest for future expansion.

- Under Criterion 2.2.2, this farm is certifiable because it was built before 1999 and more than 50% of the land remains unused and, by ASC's definition (footnote 19, **ASC-V1**:27), this qualifies for compliance.

2. The farm then knocked down a further 30ha of mangroves in 2005. It still remains certifiable:

- The standard does not address expansion and the auditor is shown the 1998 permit.
- The new ponds are arguably certifiable under both options in 2.2.2 because the company, established before 1998, and it conserved 50% of its mangroves, and "expansion" is not addressed by the standard (it is mentioned in **AM-V1**:03, but its applicability is not defined.)

3. After 7 years the existing ponds were abandoned. The global economic slowdown in 2008 forced the company to shut down. A few years later, in 2014, the entire property was sold to a new company. This company owned 60ha of abandoned ponds upon which it could not farm shrimp and a further 40ha of standing mangroves. So, it knocked down the rest of the mangroves leaving the original 60ha for "natural regrowth."

- The new farm too is certifiable—siting in a mangrove wetland is allowable as long as an equivalent area (the 60ha, which the company owns but cannot use) is "rehabilitated".

4. When the new ponds too were exhausted, the entire 100ha area was sold to a subsidiary company that sets up a cash-crop plantation.

5. Throughout the entire fiasco, all the ponds in operation remained certifiable under Principle 2 of the ASC Standard. 100ha of mangroves were lost.

The provision to allow the construction, after 1999, of inlet canals is thought-provoking.

> **Question**: What is the difference between a patch of mangrove forest denuded by illegal logging and a shrimp farm?
> **Answer**: An inlet canal and a pumping station

Criterion 2.2.2 is an auditor's nightmare and the GSC/ShAD should have been aware of these problems. Instead of simplifying the criterion and (justifiably, on environmental grounds) denying certification to ANY farm located within the intertidal zone or in natural wetlands, the GSC/ShAD rushed into drafting a criterion that would appease the shrimp industry.

Consequently, the standard is simply not rigorous enough in defining, with adequate clarity, the many different aspects of a shrimp farm that applies for certification, for example:

- as a business entity that may or may not be involved only in the production of shrimp—does felling of mangroves qualify if it is done for the ancillary or associated business?

- a fraudulent shrimp business that clears mangroves as one business entity, then sells the land to a separate business entity that legitimately claims that it did not clear any mangroves.

- as a shrimp farm that has not cleared mangroves itself but has bought land, "as is," from a neighbouring business entity that is not a shrimp farm.

The CO Alliance strongly proposes that the next draft of the ASC Shrimp Standard should pro-actively protect the coastal environment of the global south by refusing to certify farms sited inside the intertidal zone or natural wetlands.

The CO Alliance holds IUCN-NL responsible for allowing criterion 2.2.2 to exist, in the form that it does, within the ASC Standard.

Show us the BEIA

Appendix I contains information and guidelines for the proposed BEIA (Biodiversity-inclusive Environmental Impact Assessment.)

ASC-V1:113 states:

> *The BEIA shall be carried out by a nationally accredited body. Where no accredited body exists, farms must ensure that the B-EIA team consists of competent and qualified environmental scientists, biologists and ecologists with a minimum of a Master of Science degree from a university*.

Good.

> *The role of ecologists and practitioners in the B-EIA team will be to:*
> - *provide an objective and transparent assessment of the biodiversity and potential (in the case of new projects) or known (in the case of existing operations) ecological effects of the farm to all interested parties, including the general public;*
> - *facilitate an objective and transparent determination of the farm in terms of its compliance with national, regional and local conservation and biodiversity policies;*
> - *and set out what steps must be taken to adhere to the requirements relating to designated sites and legally protected areas as encompassed in the ShAD Standards.*

Better.

The Standard recommends a preliminary screening and scoping exercise to determine what needs to be checked by the BEIA surveyor; then lays out what will be reported:

- *The type of farming used, possible alternative methods and a summary of activities likely to affect biodiversity.*
- *An analysis of opportunities and constraints for biodiversity, including "no net biodiversity loss" or "biodiversity restoration" alternatives.*
- *Expected or already experienced biophysical changes (in soil, water, air, flora, fauna) resulting from activities or proposed activities or induced by any socioeconomic changes.*
- *Spatial and temporal scale of influence, identifying effects on connectivity between ecosystems and potential cumulative effects.*
- *Available information on baseline conditions prior to an existing farm and any baseline conditions for proposed farms along anticipated trends in biodiversity in the absence of the farm.*
- *Likely biodiversity impacts associated with the farm operation in terms of composition, structure and function.*
- *Biodiversity services and values identified in consultation with stakeholders and anticipated changes in these, highlighting any irreversible impacts.*

- *Biodiversity services and values identified in consultation with local experts (without a vested interest in the area in question) and anticipated changes in these, highlighting any irreversible impacts.*
- *Biodiversity services and values identified in consultation with stakeholders and anticipated changes in these, highlighting any irreversible impacts.*
- *Possible measures to avoid, minimize or compensate for significant biodiversity damage or loss, making reference to any legal requirements.*
- *Information required to support decision making and a summary of important gaps.*
- *Proposed IA methodology and timescale.*

Impractical, but excellent. One cannot question the motives of the standard-setters. We're now at Level 3 and it looks alright.

At Level 4, all the good work is undone:

> ***ASC-V1**:120: To determine compliance with this particular criterion, auditors **need not verify** the accuracy, robustness or quality of the data gathering in a B-EIA report.*

Why not?

If the GSC/ShAD thought that training auditors to verify the accuracy, robustness or quality of data would be time-consuming and expensive, they should have required the auditor to attach a copy of the BEIA report to the audit report. Independent verification would have been possible; consumers could have seen the report and decided whether the relevant criteria are fulfilled.

ASC-V1 does not require the auditor to attach a copy of the BEIA report to the farm's audit-report. This should be made mandatory.

In other words: **Show us the BEIA report.**

A pinch of salt

The ASC sets the following the salinity limits and prohibits certain practices (**ASC-V1**:41) :

> 2.5.1 Discharge into natural freshwater bodies: None
> 2.5.2 Allowance for use of fresh groundwater in ponds: None
>
> 2.5.3. Water-specific conductance or chloride concentration in freshwater wells used by the farm or located on adjacent properties : *For all freshwater wells (identified prior to full assessment), specific conductance may not exceed 1,500 mhos [sic.] per centimeter and/or chloride concentration may not exceed 300 milligrams per liter.*
> [The figure 1500 mhos/cm is probably a typing or font-rendering error since the correct value of 1500µmhos/cm is mentioned on a same page in footnote 44. For reference, 300mg/L of Cl^- is 30mg/dL or 8.45 me/L; 1500µmhos/cm is 1.5 dS/m —Ed.]
>
> 2.5.4 Soil-specific conductance or chloride concentration in adjacent land ecosystems and agricultural fields : *"No net increase when compared to the first year of monitoring. "*

Water sources can be classified into two kinds—surface water (lakes, rives, ponds, irrigation canals and so forth) and groundwater (aquifers accessed through wells, underground rivers, springs).

Consider the case of a shrimp farm that has been in operation for, say, five years and has applied for ASC certification. The farm has been discharging saline water into the neighbouring river from where it flows into the sea. It also operates a groundwater pump to dilute the salinity of its ponds as and when required. As a result, the local groundwater aquifer is already unfit for drinking (Cl^- concentrations are above 30mg/dL) and, for practical purposes, cannot be called a source of fresh water. The water, though, is still far less saline that sea water. The river, into which the farm

discharges saline water and other effluents is already polluted.

2.5.3 is a good criterion. Deep aquifers that have escaped pollution from seepage must be protected and the ASC standard does well to protect them even though it should have set a stricter limit of 25mg/dL of , which is the recommended limit for drinking water. **FAO guidelines on water quality evaluation**: http://www.fao.org/docrep/003/t0234e/T0234E01.htm#ch1.2.1

However, the rest of criteria contain the following flaws:

According to the ASC Standard, in 2.5.1 the determination of illegal discharge is made *after* identifying “natural freshwater bodies”. Therefore, if a natural water body does *not* qualify as a freshwater body, it's fine to discharge saline water into it.

Secondly, 2.5.2 mentions “use of fresh groundwater” and not “use of a fresh groundwater *source*” Therefore, if the shrimp farm has already polluted the local groundwater, it isn't fresh water any more. And, consequently, a shrimp farm can continue to use a groundwater *source* because it is not fresh. That the GSC/ShAD were aware of the difference is evident in the first draft (**GSC-V1**:27).

Thirdly, 2.5.4 does not specify a baseline salinity for soil. This is an obvious loophole for old shrimp farms to get certified—they've salinized the soil for years and rendered it useless. So the ASC cut them some slack. Again, **GSC-V1**:28, shows that they knew about this dilution. Then, they went ahead and diluted 2.5.3 as well—the only strong criterion. The act of generosity is spelled out in footnotes 45 and 47 A**SC-V1**:41.

> The ASC allowed the presence of salinated wells in the vicinity of the farm *“if it can be demonstrated that seawater intrusion or other phenomenon outside the control of the farmer is responsible for the increase.”*

That's convenient. If a source of drinking water is saline during the first audit, the BEIA should explain how the well was polluted and contain proof that the circumstances were outside the control of the farmer. The consequences are devastating:

Case-Study: *It was his fault, not mine.*

Let us assume that the ecologist conducting the BEIA does find a saline well. How does the farmer show that he was NOT responsible—one cannot prove a negative. However, it is easy for the farmer to point at the neighbouring shrimp farm.. “He did it. Not I.”

The case study is not hypothetical at all. Shrimp farms exist as clusters. The ecologist conducting the BEIA cannot verify whether a specific farm in a cluster of five is responsible for negligence under 2.5.3 and 2.5.4. So, he or she, must either accept the farmers word or investigate the neighbouring farmer, who in turn points to his neighbour... All he or she can do is note down that the water in the well contained *x* g/L of chloride. And during the audit, the shrimp farmer blames the neighbour.

Members of the CO Alliance have encountered this tactic in the past: local disputes, salinization, deforestation and all kinds of evil are always the fault of the neighbouring farm. If post-audit checks conducted by the local community prove that drinking water wells in the neighbourhood have been salinated, there's no link to negligence on the part of the ASC. They blame the auditor, who blames the ecologist...

The underlying issue of salinization caused by shrimp farming remains. Thousands of wells in Bangladesh have been rendered saline. These wells still exist, but no one has had a sip of water from them for decades; local women (traditionally, water-providers in the household) have accepted their fate to walk 5 miles inland to fetch a potful of drinking water. Everyone “knows” that the local shrimp farms have salinized the groundwater, but no one can prove

negligence on the part of a single farmer or farm.

CO Alliance members deal with such cases everyday. We told the GSC/ShAD that this issue could not be addressed by certification.

The case-study on page 54 also illustrates the point being made in this one... The auditor cannot decide about the applicability of 2.5.3 and 2.5.4 in the case of a farm that has changed ownership.

Other flaws in Principle 2 include:

- Guidance notes in **GSC-V2**:19 did attempt to define “reforestation” in appropriate terms; these notes were removed in **ASC-V1**.
- The inclusion of “or” in **GSC-V2**, and retained in **ASC-V1** in criteria 2.4.1, 2.4.2 and 2.4.3 dilute the criteria.
- How does the auditor actually check that a groundwater well that is used to access drinking water is not also being used to pump water into the farm's ponds?
- 2.5.3, footnote 45 does not define the nature of evidence to be shown to the auditor or the ecologist
- 2.5.5 does not define what constitutes “written permission from the community.”

Conclusions

- Allowing farms to operate inside the intertidal zone, in mudflats and salt flats, or in natural wetlands is as destructive as allowing the outright clearance of mangroves. **ASC-V1** makes no attempt to regulate these farms.
- **ASC-V1** does not define an "inlet canal" or limit the destruction caused for building such infrastructure. Allowing the destruction of mangroves for the purpose of building "inlet canals" encourages shrimp farms to expand into areas whose mangroves have been cleared by other business entities.
- The time, expertise and manpower required to audit a shrimp farm or conduct a BEIA have been grossly underestimated by the standard-setters.
- The entire section on the siting of shrimp farms—Criterion 2.2.2—could be rendered irrelevant by the allowance made in **ASC-V1**:27,F19.
- Principle 2 fails at bridging the gap between Level 2 and Level 1—allowing the certification of farms inside the intertidal zone or in natural wetlands nullifies the claim that the farms are sited in environmentally suitable locations.
- The BEIA provision fails at Level 4. If the auditor is not required (or cannot) to verify the accuracy of the BEIA, the document should have been made available for the consumer to evaluate.

P3: Develop and operate farms with consideration for surrounding communities

The subject of Principle 3 is crucial and is given high-priority by members of the CO Alliance. The ASC's claim that the ASC shrimp standard, unlike other certification schemes, addresses social impacts depends entirely upon the robustness of Principle 3.

Local communities were not consulted

The GSC/ShAD did not make adequate efforts to meet local communities while the standards were being drafted—a fact pointed out and agreed upon during two meetings between members of the GSC/ShAD and the CO Alliance in 2010. The CO Alliance was assured that Principle 3 of the standards would include measures that would ensure that the concerns of the local communities were taken into consideration. The following were among the list of 47 questions directed to the GSC/ShAD at the first of the two meetings:

> *1) In the meeting one GSC/ShAD participant said that he didn't think that the standards could possibly deal with the issue of displaced people. In this case how can any farm where conflicts have existed in the past, possibly qualify for even potential certification, if the voices of the displaced people are not represented in the certification process? In other words: How would existing farms address the concerns of people who had been dispossessed of their livelihoods and displaced from their native lands by the establishment of the farm?*
>
> *2) How will the certification press account for human rights abuses that may have taken place ten, twenty or thirty years ago? Will these abuses be viewed with the same critical opinion as abuses that might have taken place more recently? If not why not?*

Given the extraordinary scale of the human rights violations perpetrated by the shrimp industry, the CO Alliance expected the GSC/ShAD to draft suitably robust criteria and adequate levels of vigilance during the audit. This was in 2010, a year before **GSC-V3** was published and four years prior to **ASC-V1**.

The CO Alliance was assured that the GSC/ShAD would "attempt" to address these concerns in a forthcoming draft of the standards. This was not done.

Show us the p-SIA (Participatory Social Impact Assessment) documents

Criterion 3.1 is an excellent example of the “put it in the guidelines” trick. The standard is fine till it reaches Level 3. Level 4 onwards, critical information disappears into appendices where it is not mandatory.

ASC-V1:44 states:

> *Although shrimp farms are often the economic backbone of local communities*[50]*, they can also have a negative impact on local communities, such as reducing public access to land and water resources and jeopardizing livelihoods.*[51]

Criterion 3.1—All impacts on surrounding communities, ecosystem users and land owners are accounted for and are, or will be, negotiated in an open and accountable manner

Criterion	Indicator	Standard
3.1.1	Farm owners shall commission or undertake a participatory Social Impact Assessment (p-SIA)[52] and disseminate results	The p-SIA report adheres to the steps outlined in Appendix II; is available in the local government, the community

Criterion	Indicator	Standard
	and outcome openly in locally appropriate chosen community civil language. Local government and at least one civil society organization chosen by the community shall have a copy of this document. The p-SIA process and document includes a participatory (shared) impact and risk analysis with surrounding communities and stakeholders.[53] The participatory element (community input and response) is visibly included in the report. Outcomes as agreed between farm and surrounding community on how to manage risks and impacts are included in the report.	and through the community civil organization; and the report lists dates of meetings and names of participants.

The footnotes read:

[50]: ***Community****: A group of people with possibly diverse characteristics who are linked by social ties, share common perspectives, and are joined by collective engagements within a geographically confined area. Four indicators:*

- a state of organized society in small form (town, village, hamlet) that recognizes a single representative (leader, formal or informal)
- the people inside a confined geographical area; small enough to allow face-to-face interaction as the main form of contact between the individuals within the group
- having a common good or a common interest and recognizing that, and been recognized as having that.
- A sense of common identity and characteristics ('we' versus 'them' feeling) on either/or social, cultural, economic, ethnic grounds.

[51]: *This principle seeks to minimize injustice or unrest in affected communities that may result for Shrimp farming activities. The standards recognize that it is only possible to be socially equitable to the point that legal frameworks and negotiated outcomes allow. Nonetheless, the GSC believes this standard represents a significant improvement from past and current social realities, and will seek to continuously strengthen them. The GSC has benchmarked ShAD social sustainability standards against widely accepted international public covenants and agreements, such as UN declarations on Human Rights, the Right to Development, the UN Declaration on the Rights of Indigenous Peoples (IPRA), the Millennium Development Goals, and the ILO core conventions. Examples of covenants with the private sector include: OECD Guidelines for multinational corporations, the UN Global Compact on Corporate Social Responsibility and ISO 26000. A more detailed benchmark is set by existing and developing protocols in Multi-Stakeholder Initiatives such as the Roundtable on Sustainable Palm oil, Ethical Tea Partnership, Forest Stewardship Council and in standards such as SA8000 and ETI. See also appendix 2 for further reading.*

[52]Participatory Social Impact Assessment (p-SIA)*: An assessment of positive and negative consequences and risks of a planned or ongoing project (here: a farm or farm development) undertaken in such a manner that all stakeholder groups have input in process, results, and outcome of such an assessment, and that steps taken and information gathered is*

openly accessible to all. See Appendix II

[53] ***Stakeholder definition****: A person, group, or organization that has direct or indirect stake in an organization because it can affect or be affected by the organization's actions, objectives, and policies.*

We shall analyze the contents of Appendix II later. For now, let us concentrate on the text of the criteria and the indicators.

- There's no mention of FPIC here.
- A p-SIA will be conducted. By whom? When? Who will host it?
- Stakeholder has been defined, but how does the auditor check that stakeholders with grievances attended the meeting?
- How does the auditor determine, in the report, that "*the participatory element is visibly included?*" How does the auditor verify the accuracy of this report?
- How does the auditor check if the outcomes mentioned in the report were agreed upon?
- Does the consumer get to see this report? Does the auditor attach a copy to his own report?

None of these questions are answered. The indicators are neither measurable nor verifiable and, instead resemble a process document (understandable, given the nature of the criterion); footnote 51 reads like a political speech. A lot of words, but very little information.

Appendix II (**ASC-V1**:124) must contain answers...

It doesn't. There's a lot of information about p-SIA in Appendix II, but very little *relevant* information. There are descriptions of PRA, stakeholder analysis, stakeholder meetings, village meetings, focus group meeting, Beneficiary Assessment—but nothing specific on what the farmer must do.

It mentions an option which allows 25 "member-farms" to apply together for "group-certification." What is that? The standard fails to address the complexities of one farm, yet the GSC/ShAD was planning to certify 25 farms all at once.

Remember that this is supposed to be standards document, not a primer for social-workers... What little relevant information is present in Appendix II, is shocking.

Here's what we can conclude from Appendix II:

- Explicit FPIC is absent.
- The p-SIA will be commissioned and supervised by the shrimp-farmer.
- The farmer will submit "a minimum of one-page summary" to the auditor.
- The auditor is not obliged to check anything:

  > ***ASC-V1****:131: "For compliance to this particular criterion, auditors need not verify the accuracy, robustness, or quality of the data-gathering in a p-SIA report. Nor will auditors need to assess whether impacts are present or absent, as the p-SIA report will already have done that."*

  If the accuracy of the data in the p-SIA is not being verified, what is being audited?

- Consumers can't check anything either. This is a major flaw. The ASC could have justified its speeching and appendices simply by requiring the auditor to attach a copy of p-SIA documents with the audit-report as is required by the standard. Interested parties could verify if conflicts, that were unresolved during the p-SIA were being resolved.

After the auditor checks than the presence of a "minimum one-page summary" for "apparent completeness" the farm is deemed compliant under 3.1.1 and subsequent audits of the farm under

P3 “will be less.”

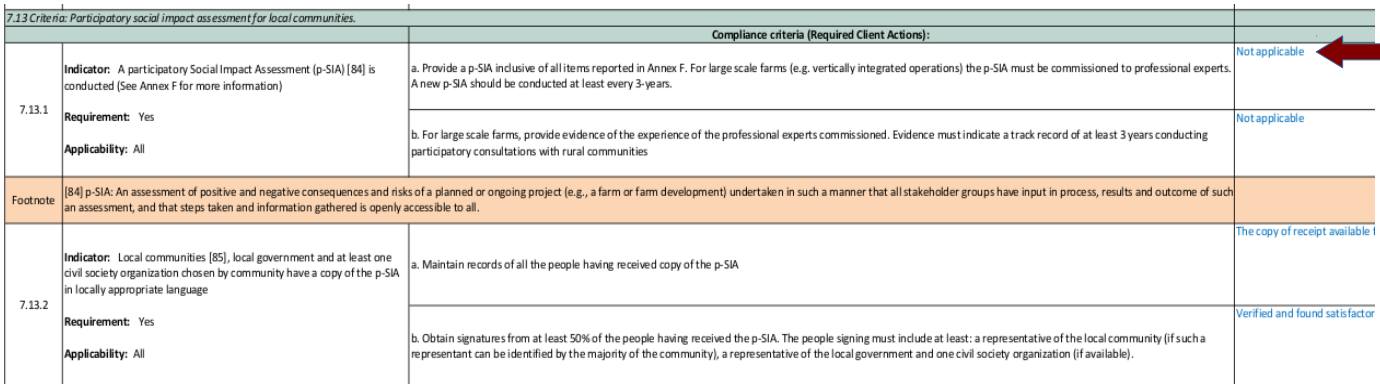
A “checklist for farmers and guideline for auditors on a complete p-SIA process and report” was appended in **GSC-V2**:90. It was retained, unchanged, in **ASC-V1**:131 and included “done” and “still to do” columns with no indicators as to how the data entered under these columns would influence certifiability under Principle 3. Further, the checklist does not specify whether all items listed within it apply to both the farmer and the auditor or whether some items were intended for the farmer (or auditor) alone.

One nugget of information in Appendix II (**ASC-V1**:130)is useful:

> ***A small-scale farm*** *is defined as the local decision-making authority, has a* ***maximum of one full-time permanent hired worker****, and a maximum of five ponds but a total production area of no larger than five hectares.*

This sentence lets slip an important detail. A “small farm” is defined as having a maximum of one permanent hired worker and could be as large as five hectares. We shall return to this point while discussing P4.

As such, Principle 3 depends heavily upon the quality of Level 3 and Level 4 outcomes. If the auditor is not told what to do, chances are that he or she will do nothing. The auditor's report for the Tan Hoa pangasius farm (the first to be certified by the ASC) is used as an illustrative example. The auditor has marked criterion 7.13.1 (the relevant criterion under the ASC Pangasius Standard) as "not applicable"



7.13 Criteria: Participatory social impact assessment for local communities.			
		Compliance criteria (Required Client Actions):	
7.13.1	**Indicator:** A participatory Social Impact Assessment (p-SIA) [84] is conducted (See Annex F for more information) **Requirement:** Yes **Applicability:** All	a. Provide a p-SIA inclusive of all items reported in Annex F. For large scale farms (e.g. vertically integrated operations) the p-SIA must be commissioned to professional experts. A new p-SIA should be conducted at least every 3-years.	Not applicable
		b. For large scale farms, provide evidence of the experience of the professional experts commissioned. Evidence must indicate a track record of at least 3 years conducting participatory consultations with rural communities	Not applicable
Footnote	[84] p-SIA: An assessment of positive and negative consequences and risks of a planned or ongoing project (e.g., a farm or farm development) undertaken in such a manner that all stakeholder groups have input in process, results and outcome of such an assessment, and that steps taken and information gathered is openly accessible to all.		
7.13.2	**Indicator:** Local communities [85], local government and at least one civil society organization chosen by community have a copy of the p-SIA in locally appropriate language **Requirement:** Yes **Applicability:** All	a. Maintain records of all the people having received copy of the p-SIA	The copy of receipt available
		b. Obtain signatures from at least 50% of the people having received the p-SIA. The people signing must include at least: a representative of the local community (if such a representant can be identified by the majority of the community), a representative of the local government and one civil society organization (if available).	Verified and found satisfactor

[The Tan Hoa audit report, 7.13.1 marked “not applicable”]

The audit guidelines (ASC Pangasius Audit Manual version 1.0, p35) do not specify the conditions under which a p-SIA is "not applicable."

Yet, the auditor has marked 7.13.1 "not applicable." Strangely, under 7.13.2a,b (availability of p-SIA, signatures of recipients) have both been ticked. It is unclear whether an existing p-SIA was used and if so, whether the criteria and guidelines for that p-SIA were the same as those specified under Annex F, 2a-c of the Pangasius Audit Manual.

All said and done, the most crucial element of Principle 3—the p-SIA—is condensed to a single entry on the audit report. “Not Applicable” is all we know about community stakeholders near the Tan Hoa farm.

This is unacceptable. If everything under Principle 3 is being determined by a p-SIA, then the consumer has a right to see the p-SIA report to determine if the shrimp farm carried out its due diligence.

Show us the p-SIA documentation.

Poor FPIC (Free, Prior and Informed Consent) protocols

A response to the tall claims made in footnote 51 is deserved. Forest Peoples Programme published a report that compared FPIC (across different standards.

Securing rights through commodity roundtables? A comparative review:
http://www.forestpeoples.org/sites/fpp/files/publication/2012/11/securing-rights-through-commodity-roundtables-comparative-review.pdf

A summary of their conclusions on FPIC:

	Bonsucro	FSC	RSB	RSPO	RTRS	ShAD
'FPIC' explicit	Guidance Appendix	Yes	Yes	Yes	FPI and Doc Cnst	Guidance
Right to say 'no'	Not clear	Yes Guidance	Yes Guidance	Yes Guidance	No	'View considered'
Informed	Not clear	Yes	Yes	Yes	Yes	Via p-SIA
Clear definition of prior	No	Guidance.	Guidance, bfr. permits	Guide	No	Via p-SIA
No coercion No army	Not explicit	New Guidance	Only in Guidance	Not explicit	Not explicit	Not explicit
Self-representation	No	Yes	Yes	Yes	No	No
No eminent domain	Not explicit	Not explicit	Yes	Not explicit	Not explicit	Not explicit
Who can participate?	Interested Party (IP)	IPs and Local Community (LC)	Owners/users /stakeholders	IPs and LCs	Traditional owners	IPs: DRIP LCs: IFC
Traditional Knowledge	No	Yes	No	No	No	No

And conclusions on the rights of land users:

	Bon-sucro	FSC	RSB	RSPO	RTRS	SHaD
Legality	Yes	Yes	Yes	Yes	Yes	Yes
Customary	Yes	Yes	Yes	Yes	Traditional	Appendix
No legitimate dispute	Yes	Yes	Yes	Yes	Yes	Appendix
Demonstrable rights	Yes	Not as such	Guidance	Yes	Yes 'Documented'	Appendix
Users' Rights	No	No	Yes	2.3, 7.5 users	No (except traditional users)	'Ecosystem users'
Food security	No	No	Yes	via HCV5	No	Appendix
Water Rights	(WQ)	HCV 4	Yes	4.4 and HCV 4	?	Appendix

FPP is a member of the CO Alliance and has contributed to the RSPO. While the RSPO has its own share of flaws, it is left to the reader to decide:

a: Whether any of the standards are acceptable on the issues of FPIC and land rights.
b: Whether the ASC Standard is any better that the others.

FPP involvement with RSPO: http://www.forestpeoples.org/topics/responsible-finance/private-sector/palm-oil-rspo?language=All&date_filter[value][year]=2010
RSPO: http://www.rspo.org

Conflict Resolution redefined

At the outset, it is important to realize that social conflict in the shrimp-producing regions of the global South is a severe problem. If we were talking about factories that make Intel® processors or Ikea® tables we could, perhaps, be satisfied with less stringent conflict-resolution criteria. But we're not.

There are shrimp businesses in Indonesia that have defrauded thousands of contract-farmers who continue to work because they are caught in debt-traps; there are charges of murder, rape, pillaging, armed assault, robbery and abduction against shrimp farmers in Bangladesh.

If the ASC claims strong social-performance, we expect just that—strong criteria that will reward those shrimp farmers who are working in harmony with the community...

Criteria 3.2.1 and 3.2.2 in **ASC-V1**:47 deal with conflict resolution.

> Criterion 3.2.2 (**ASC-V1**:47) says: *"Areas of conflict or dispute are recorded and shared among farm, local government and surrounding community representatives. At least 50% of the conflicts shall be resolved within one year from the date of being filed, and a total of 75% in the period between two successive audits."*
>
> Areas of conflict is defined as*: "Conflicts, for the purpose of this standard, are situations wherein one party perceives hindrance in legitimate interest as caused by the other party's actions or absence of actions. One party is the farm owner or manager. The other party is either a surrounding community or group of stakeholders in the community. Conflicts, for the purpose of this standard, do exclude complaints made by single individuals unless verified/supported by a community leader or community organization. The process of resolution is documented and meeting minutes are kept. Minutes include an agenda, the list of concerns raised, resolutions or agreements reached, a list of who shall take what action by when, and a list of participants. Local government and, if available, at least one civil society or customary organization chosen by the community shall have access to the conflict resolution process and the documentation. "*

The baseline conflict-status of a farm is derived (by the auditor) from the p-SIA report. So, if the p-SIA was not fair, 3.2.1 and 3.2.2 are rendered irrelevant.

Let us assume that the p-SIA was conducted properly. The indicator for 3.2.1 is the presence of a "conflict resolution policy" that the farm-owner has developed. The guidelines (**ASC-V1**:47) state that:

> *The contents of this policy must be known publicly (in surrounding communities) and the farm must allow verification of the progress it makes in resolving outstanding concerns.*

This raises the following questions:

- Who checks that progress is being made to resolve outstanding concerns and how often are these checks conducted?
- Who determines that the conflict resolution policy is fair? Who has the final say in the matter?

The standard proposes the use of "complaint boxes and "registers" as a means of tracking conflict. The auditor is required to check that these boxes exist and that a register is maintained. Either the GSC/ShAD was being childishly naïve while drafting the indicator to this criterion or it was unaware of ground realities in producer nations.

The GSC/ShAD could have drafted a fair conflict resolution policy and required that farms applying

for certification must accept the policy. Shrimp farms could be given the option to add clauses to the policy or state reasons why they refused to sign... This is a standard business practice around the world.

Complaint boxes and registers that are under the control of the shrimp farm operator *cannot* be used to guarantee that the local community's concerns will reach the auditor. The GSC/ShAD could have proposed that the auditor consult local people's organizations or other third-parties in an effort to verify that the farm was in compliance with 3.2.1. This was not done.

Criterion 3.2.2 is not defined rigorously.

The phrase “Areas of conflict [...] are recorded” does not specify the source. Are only those conflicts raised in the p-SIA and in “complaint boxes and registers” considered as being “recorded”?

- If so, then how does the auditor check if conflicts are recorded fairly if the process is wholly under the control of the shrimp farm operator?
- The standard does not require the shrimp farmer or company to declare if it is involved in litigation against the local community (see item 3 below for more on this.) If, say, a people's organization has filed a complaint in the local courts (and the matter is sub judice,) does it count as a complaint against the shrimp farm ?

If a consumer visits a shrimp farm and wants to register a complaint, she can't. Because every complaint has to be supported by a local community “leader” or organization. Having placed this restriction, the ASC did not bother defining who qualifies as a local leader or a what is a local organization.

CO Alliance members will visit certified shrimp farms and test the complaints procedure.

The GSC/ShAD twisted the meaning of "conflict resolution" to suit its own purposes in **ASC-V1**:47, also separately, in footnote 55:

> *"A conflict is deemed resolved if both parties in the negotiation process have agreed to take it off the agenda (in terms of this standard: if both parties accept external mediation and/or a legal verdict then the conflict is deemed resolved regardless of whether the mediator or legal decision has been made)"*

In simpler terms: **if the community took the shrimp farm-owner to court, the conflict is deemed resolved.**

The auditor too only verifies that a conflict resolution policy exists and not if the shrimp farm is actually resolving conflicts. Further, **not all conflicts need be resolved, ever.** Incidentally, the first (**GSC-V1**:34) and second (**GSC-V2**:28) drafts of the standard required 50% resolution of conflict within six months, and 75% within a year of filing.

In the final draft (**GSC-V3**:28, **ASC-V1**: 47) they diluted the criterion to “75% *between two successive audits*.” How long, exactly, is that?

> **ASC-V1**:131 clearly states that *“the frequency of audits under P3 is expected to be less in more technical-operational requirements in this Standard, after initial compliance has been checked and found to be in order. ”*

This implies that when the auditor does return for the “successive audit,” he or she might not check P3 at all. Imprecisions of this nature are littered across the text of the standard—if the document does not set precise standards, the auditor cannot check compliance; if the standard does not explicitly tell the auditor to check for something, he or she will not check it.

The severity of the charge is not being considered by the ASC Stndard. Consider the following charges:

- Defacing public property
- Vagrancy
- Menace to public health
- Drunken and disorderly conduct
- Resisting arrest
- Assaulting a police officer
- Grand theft auto
- Murder

If you're acquitted of the first six, over the course of "successive audits", you're good to go. The last two don't count at all (unless you commit another crime) and the Grand Poobah of Conflict Resolution tells everyone that you're resolving your conflicts well.

The ASC's version of "conflict-resolution" is farcical. There isn't a polite way of saying this: it's a sick farce. The CO Alliance had raised the issue of prior conflicts with the GSC/ShAD—hundreds of cases where local people were forced to migrate to other parts of the country because shrimp farming had destroyed the local economy. The GSC/ShAD admitted that the standard would not address these cases.

Implying to consumers that a shrimp farm or company has resolved its conflicts with the local community when in fact, it might be facing *sub judice* criminal proceedings, falsifies the Level 1 claim made by Principle 3.

Auditing Contract Farms, "Fairness is optional"

Criterion 3.4 (**ASC-V1**:49) deals with contract farming agreements and was drafted ostensibly to protect farmers (the contractor, or vendor) from the shrimp-company (the contractee, or principal).

> The claim is: *"Contract farming arrangements (if practiced) are fair and transparent to the contract farmer."*
>
> Contract farming is defined (**ASC-V1**:49): *Contract farming can be defined as an agreement between farmers and processing and/or marketing firms for the production and supply of agricultural products under forward agreements, frequently at predetermined prices. The arrangement also invariably involves the purchaser in providing a degree of production support through, for example, the supply of inputs and the provision of technical advice. The basis of such arrangements is a commitment on the part of the farmer to provide a specific commodity in quantities and at quality standards determined by the purchaser and a commitment on the part of the company to support the farmer's production and to purchase the commodity" (FAO).*
>
> 3.4.1 states: *The contracts are written in an appropriate language, and co-signed copies are kept by both parties.*
>
> 3.4.2 states: *The contracts comply with Appendix III part A (***ASC-V1**:135*) on content of basic provisions to ensure that conditions of the agreement are mutually understood.*
>
> 3.4.3 states: *Meetings between the purchaser and the contract farmers to discuss and negotiate agreements are held at least twice a year and documented. Meetings are attended by at least three representatives of the farm group or cooperative. All members contributing to the supply contract must sign their agreement to the negotiated terms.*

First, a quick check if the key claim "*contracts are fair and transparent*" is dealt with in the criteria or indicators:

- 3.4.3 does require transparency but there's no mention of “fairness” anywhere else.
- 3.4.2 directs the auditor to *Appendix III, Part A*. The text of Part A is adapted from an FAO document and deals *only* with the content and structure of the contract. It does *not* deal with “fairness” at all.
- Fairness is the subject of *Part B*, but 3.4.2 requires compliance only with Part A. Part B is not binding, it is merely an advisory segment that would be useful for those creating contracts. Why specify “Part A” at all? If Appendix III contained applicable guidelines, then the text “Appendix III” would have sufficed. Part B was deliberately excluded from audit requirements.

  GSC-V1 and GSC-V2 did not contain the distinction between Part A and B. Indeed, both versions did not contain Appendix III at all. The text was added in **GSC-V3**:97 and retained in **ASC-V1**:135. Therefore, one can say that the claim is not being verified by the auditor: Fairness is optional.
- Muddying matters in **AM-V1**:11 is text that requires the auditor to check compliance with “Appendix III, Part A” in one column, but just “Appendix III” in the next.

So, can one expect the auditor to judge the “fairness” of the contract? **AM-V1** makes it unclear and will remain so until the ASC clarifies whether or not the auditor will check for fairness.

Let us assume that the auditor is empowered and required to evaluate the “fairness” of a contract. With that in mind, consider the following case-study of a farmer in Lampung who is contracted by a shrimp-exporter based in Jakarta.

- Who is applying for certification in this case: the farmer or the shrimp company? This must be clarified. For this purpose, we assume that it is the shrimp company that has applied for certification to the ASC.
- Will the auditor check that the copy of the agreement held by the shrimp company is identical to the one held by the farmer? **AM-V1**:01 requires the auditor and the client (the principal) to determine whether a visit to headquarters is required. Therefore, in this case, the auditor must visit Jakarta. It's not optional.
- What happens if there are discrepancies in the two documents, or if parts of the document are missing—say, “Appendix II” is missing from the farmer's copy but is present in the companies' files—whose copy will be used to evaluate compliance to 3.4.2?
- If the shrimp company has applied for certification and its contract with the farmer is deemed “unfair” by the farmer whose poverty and debt leave him no choice but to continue farming (he does not wish to exercise his right to terminate the contract) will the farm be certified?
- If the shrimp company has entered into a contract with multiple shrimp farmers under identical terms (the contract agreement is the same) and if the auditor determines that the contract is unfair under 3.4.2, does this automatically disqualify certification to other farms operated by other contractors under the same contract?
- And finally, what happens in the case where the local agent of the shrimp company has a “verbal contract” with the farmer in addition to the legally binding contract between the farmer and the shrimp company? Which contract will the auditor evaluate? Which takes precedence—the legally binding written contract, or the verbal contract?

The last question in the list is a “real-life” case that shows the complex power-dynamics of contract-

farming relationships. These relationships are heavily skewed in favour of the company.

This criterion is doomed to a Level 4 failure. To put matters into perspective: one CO Alliance member has spent more than a decade working with contract farmers in Indonesia and documenting the legal implications of their work. This is what they found:

- Relevant documents date back to the 1990s
- Documents were lost during the tsunami
- Documents are incomplete
- Contractor's names don't match those who are actually working on the farm
- Contracts are sub-let to other vendors
- Controlling interest in the original contractee have changed hands twice
- Local racketeers and middle-man enter into “non verbal” contracts

Contract Farmers in Indonesia: http://www.forestpeoples.org/sites/fpp/files/news/2011/07/Joint%20Petition%20-%20Fight%20CP%20Prima%20Crime,%20Free%20Shrimp%20Farmers.pdf
Contract farming and other issues in coastal Indonesia: http://www.theecologist.org/investigations/politics_and_economics/368669/selling_indonesias_coast_for_cheap_prawns_and_profit.htm
The Cooperative Politics of the Plasma-Nucleus A Study Case of the Shrimp Industry In Lampung, Indonesia (Draft): http://asiasolidarity.org/wp-content/uploads/2014/04/Political-Cooperation-of-Contract-Farming-Riza-Damanik.pdf

Criterion 3.4 does not contain nearly enough detail to “certify” the claim and as such, it fails at Levels 3 and 4—the indicators are not sufficient to validate the claim; the auditor does not know what to check. The ASC simply did not do enough research to create appropriate standards for contract farming. Contract-farming is exploitative; prices of imported tropical shrimp from Indonesia are low precisely because contract-farmers are exploited by large multinationals.

The addition of “Part A” to the text of criterion 3.4.2 isn't fooling anyone.

The CO Alliance will approach this problem from the perspective of the community. If a company that runs contract-farms is certified, we will investigate the case and report our findings to the consumer.

Other Flaws

> Criterion 3.3.1 (**ASC-V1**:48) is poorly worded: *"Farms shall document evidence of advertising positions to people living within daily traveling distance from the farm before hiring people who cannot travel to and from home on a daily basis."*
>
> The guidelines for the auditor (**ASC-V1**:48) state: *"The standard does not pre-determine local hiring but seeks to exclude the possibility that farms avoid hiring people locally if and where suitable workers are available."*

A footnote to this criterion makes an exception: "Not applicable if farm is found to hire >50% of their staff locally." Another footnote, 56, excludes small-scale farms.

Thus, if the farm hires more than half its staff locally, it need not advertise positions? And if it is a “small scale” farm, it need not advertise at all?

But how does the auditor determine that more than 50% of the farm's “staff” is “hired” given that the words “staff” and “hired” are not defined? [This loophole is addressed in detail in the analysis of Principle 4]

> The next criterion—3.3.2—tries to resolve the problem: *“Justifications for employment of each worker are available, and based on profile and merits (skills, experience or CV in the case of hired migrant worker).”*

However, (as shall be shown n the analysis of Principle 4,) the standards lack an unambiguous definition of the term “worker.” Indeed, the criteria under Principle 4 ensure that most people who work on the farm—temporary-wage workers—are not considered “hired workers” by the standards.

Conclusions

- The standard makes no attempt to address the case of those who have been displaced by the shrimp farm and have migrated—the most common consequence of shrimp farming in poor regions.
- The underlying purpose of Principle 3 is being measured by and depends upon a fair p-SIA. The audit does not check if the p-SIA was fair or that the farm being audited has acted upon p-SIA recommendations outlined in Appendix II.
- The definition of “conflict resolution” applicable to 3.2.2 is unacceptable; 3.3.x is rendered effectively irrelevant when read in the light of the definition of key terms such as “worker” and “hired” that are provided under various criteria under Principle 4.
- The Principle should have required that p-SIA documentation be made available with the audit report. Lacking this crucial information, compliance with the Principle cannot be verified by a consumer.
- The indicators that validate criterion 3.4 (contract farming) are grossly insufficient and do not take into account ground realities; its audit requirements are impractical.
- Criterion 3.4.2 does not require that the contract is “fair.”

P4: Operate farms with responsible labour practices

From a living wage to a minimum wage

On the issue of fair wages, in criterion 4.5.1, **GSC-V1**:41 states that "*the percentage of employees who are paid basic needs/living wages or legal minimum wage, whichever is highest, [should be] 100%.*"

> *"A basic or living wage should be capable of sustaining 50% of an average-sized family with food, clean water, clothing, housing, transportation, schooling, obligatory tax payments, health care and an additional 10% discretionary income (SA8000). An employer shall minimally pay a full-time worker the basic needs wage (without financial deductions) or national legal minimum wage; whichever is higher. (**GSC-V1**:45)"*

Living wage is a term that Oxfam—a GSC/ShAD member—has defined in many documents and the phrasing used in **GSC-V1:45** is almost identical to Oxfam's definition of the term.

In **GSC-V2**:37, the term "living wage" was removed from criterion 4.5.1 and was replaced by "fair wages," defined, in a footnote, as:

> *"a fair and decent wage is a wage level that enables workers to support the average sized family above the poverty line."*
>
> Another option offered to employees by the standard was "*50% of median income in the country adjusted for average household size."*

In **ASC-V1**:60, the term "fair wage" was replaced in the indicator by "minimum wage, as applicable to their specific job/task description." without clarifying who would determine the minimum wage "as applicable." In the absence of this definition, the shrimp-farm owner is free to decide what is the "minimum wage, as applicable."

The term "fair and decent" was promoted to the title, where it is conveniently prominent but irrelevant to the standard.

Conclusions

- The ASC standard does *not* guarantee any worker a living wage.
- It does *not* guarantee *all* workers fair wages or decent wages.
- It guarantees only "minimum wage, as applicable."
- The standard does not specify who determines the "minimum wage as applicable to [the] job."

Who is a "worker," as defined by the GSC/ShAD?

The definition of the term "worker" was mangled over the course of the three versions and results in a loophole that appears to be a consequence of intent rather than shoddy drafting. What follows should be evidence enough to show that the GSC/ShAD was obsessed with ensuring that their standard *did not*, through omission or overlap, require shrimp farmers to pay their employees a decent wage.

In **GSC-V1**:39, the term "**employee"** was defined as:

> *"a person who enters an agreement, which may be formal or informal, with an enterprise to work for the enterprise in return for remuneration in cash or in kind."*

This simple (and elegantly suitable) definition would apply to all categories of workers (permanent workers on the payroll, temporary workers hired for a specified duration, or workers contracted for a specific task) who received remuneration from the employer.

GSC-V2 used the term "**employees"** as well. Though large portions of the text were re-written they remained, essentially, the same as the corresponding sections in **GSC-V1**.

The term was removed from most criteria and indicators in **ASC-V1**. The new definition in **ASC-V1**:55 added that the word "employees" would mean "**hired workers**":

> Employee*(Hired worker)*: *An employee is a person who enters an agreement, which may be formal or informal, with an enterprise to work for the enterprise in return for remuneration in cash or in kind. In this standard referred to as 'hired worker'.*

The text in red, above, was added. Does it muddy things enough? Not for the GSC/ShAD.

The guidelines for the p-SIA (**ASC-V1**:130) mention that workers partially paid according to time/days **and** partially paid through share in product sales are considered "**hired workers**."

In **ASC-V1**:60, "**hired workers**" were "**permanent workers**" only if their contract **exceeded 12 months**.

ASC-V1:52 explicitly defined the difference between "**hired labour**" and "**permanent hired labour**" as follows:

> *"Hired labor, for specific short activities with the maximum duration of two weeks, such as harvesting, is not considered permanent hired labor."*

If this wasn't confusing enough, the standard also defines a second category of short-duration employment: the temporary worker.

> **ASC-V1**:36 defined a "**temporary worker"** as one
>
> *"whose main job is* [in the capacity of] *an occasional, casual or seasonal worker; daily workers, works seasonal [sic.] or temporary under contract with duration of less than 12 months. In case of re-hiring the same worker: if the total of the two hiring periods, irrespective of the time between hiring periods, goes beyond 12 months total (including, if any, probation periods), then the worker is a permanent one."*

The second clause within the definition is laudable but is rendered irrelevant at Level 4 since the documentation made available to the auditor is not suitable to correctly identify a temporary worker and then determine if he or she has been contracted cumulatively, at most 2-weeks at a time or less (which would make him "hired labour"), and at least 26 times or more for a period longer than one year (which would make him a "permanent worker")

In simpler terms: the auditor does not have the time and documentation to check if a temporary worker satisfies the conditions to be called a "permanent worker."
Confused yet? The ASC Vocabulary defined in the document ASC Farm Certification and Accreditation Requirements (http://www.asc-aqua.org/index.cfm?act=tekst.item&iid=6&iids=290&lng=1) does *not* define the terms "worker," "hired worker," "temporary worker," "hired labour," or "permanent worker" though it does define the term "young worker."

The ASC worker

To sum up, the ASC defines 5 categories of workers:

- **A permanent worker** is one who has a contract of "unlimited duration." Only "permanent workers" are guaranteed a "fair" wage. A small-scale farm can have a maximum of *one* permanent worker.
- Those with a year-long contracts *and* a stake in the sales of the product are **hired workers** or **employees**
- **Hired labour** is a distinct category with a maximum contract duration of two weeks.
- **Temporary workers** are those hired on short-duration contracts, but have not worked for more than a year, cumulatively, on the farm,
- **Young workers** are any worker over the age of a child (14 or 15) and under the age of 18
- The word **WORKER** is not defined.

Matrix of benefits—Who gets what on a shrimp farm

What could explain this obsession with defining who is a “worker?” The following matrix should help to clarify:

CRITERION	Perm. Worker	Hired Worker	Temp. worker	Hired labour	Not specified	WORKER (Undefined)
4.1.1 Minimum age, 18		*				
4.2.1 Right to full payment		*				
4.2.2 Right to keep identity documents		*				
4.2.3 Freedom of movement		*				
4.3.1 Anti discrimination policy						*
4.3.3 Equal Pay		*				
4.3.4 Maternity benefit and marital rights					*	
4.4.1 Health and safety training						*
4.4.3 Medical expenses						*
4.5.1 Minimum wage “as applicable”		*	*			
4.5.2 “Fair” wage with increments	*					
4.5.3 No withholding of salary						*
4.5.4 Mechanism of wage-settings known						*
4.5.5 Prohibition of revolving labour					*	
4.6.1 Freedom of association						*
4.6.2 Non discrimination						*
4.7.1 Fairness of disciplinary measures					*	

CRITERION	Perm. Worker	Hired Worker	Temp. worker	Hired labour	Not specified	WORKER (Undefined)
4.7.2 Documented disciplinary policy						*
4.7.3 Prohibition of harassment					*	
4.8.1 Defined work hours						*
4.8.2 Right to leave the farm after hours		*				
4.8.3 Minimum time-off					*	
4.8.4 Lift to nearest public transport						*
4.8.5 Overtime Compensation					*	
4.8.6 Voluntary overtime					*	
4.8.7 Maternity Leave					*	
4.9.1 Allowance for labour-only contracts					*	
4.9.2 Appropriate work permits						*
4.9.3 Written contract agreements						*
4.9.4 Probation period					*	
4.9.5 Sub contracting					*	
4.10.1 Access to managers						*
4.10.2 Complaints redressal						*
4.10.3 Complaints redressal plan					*	
4.10.4 Complaints redressal efficiency					*	
4.11.1 Safe and decent living conditions						*
4.11.2 Facilities for women					*	

What does one infer from this matrix?

- Only permanent workers are explicitly eligible to receive a “fair wage.” The ASC has not defined what is “fair.”
- One *explicitly defined* category of employment—the temporary worker—is *not* eligible for any benefits except those in 4.5.1.
- Another *explicitly defined* category—“hired labour”—is not eligible for any benefit at all.
- The GSC/ShAD created an over-arching exception in 4.5.2 that specifically gives “minimum wage, as applicable” to temporary workers, an act that suggests that instead of trying to decipher their own standard to determine who got what, they decided to toss a minimum-wage bone to everyone on their certified farms. Obviously the shrimp industry representatives on the GSC were unhappy about paying minimum wage, so they added “as applicable.” The actual turn of events described in the last two sentences is semi-conjecture and is based upon the minutes of meeting of the GSC/ShAD.
- The phrase “minimum wage as applicable” changes nothing on an ASC-certified farm. The shrimp farmer decides “minimum wage as applicable” and pays what he wants. The only difference is that he can brag to the world (and to his workers) that they are certifiably being paid a decent wage according to international standards.
- Criterion 4.5.5 prohibits revolving labour schemes and it applies to "*long time workers*,"

which is an undefined term. If one assumes “long time” to mean “one year contract” then 4.5.5 addresses “hired workers” and “permanent workers,” who, by definition are not vulnerable to these unfair schemes in the first place (See **GSC-V1**:45). Revolving labour contracts are designed to exploit short-term workers. There is a perverse interpretations—that the ASC Standard wished to address those short-term workers who have been exploited for a "long time." How does the auditor determine if this is the case?

And finally, a bit of information gleaned from the infamous Appendix II (mentioned earlier in the analysis of P3) allows us to determine how many people on a certified shrimp farm would benefit from these standard.

> **ASC-V1**:130: *A small-scale farm is defined as the local decision-making authority, has a maximum of one full-time permanent hired worker, and a maximum of five ponds but a total production area of no larger than five hectares.*

This should serve as a sobering thought for anyone who assumed that the ASC Standard was created to help small-scale farmers: *on a small-scale farm*, the ASC Standard might result in *one worker* getting a **“***fair wage.***”**

The ASC Standard is littered with references to SA8000 and ILO Labour codes. However, the matrix makes the GSC/ShaD's priorities quite clear. At best, the ASC can claim that Principle 4 was drafted in haste and that the shoddy mess requires a complete re-write.

Conclusions (B)

- The text of Principle 4 allows farm owners to continue with the existing system of unfair, unequal and discriminatory employment practices for a majority of their work-force.
- By its own definitions, on a small-scale farm the ASC Standard guarantees a **“fair wage”** to a **maximum** of **ONE** worker.
- Principle 4 does not address the welfare of thousands of women and children engaged as shrimp hatchling (PL) collectors. Indeed, it does not address the vast majority of people working downstream and upstream in the shrimp value chain—hatchling collectors, transporters, processors, packers and so forth.
- The specific insertion of the phrase "shall include temporary workers" into 4.5.1 indicates that the ShAD/GSC was aware of what the standard entailed and allowed a concession in the interest of a "negotiated outcome" with the industry representatives on the committee. The CO Alliance considers this a craven surrender.
- The extreme imprecision in the use and definition of important terms makes this key principle incoherent and, ultimately, leaves too many loopholes.
- The guarantee of "minimum wage as applicable" is no different from existing practice.
- The 6th meeting of the ASC TAG (September 2012) included a note (item 7, line 265) on harmonizing definitions across the standards. It remains to be seen how this issue will be addressed.

P5: Manage shrimp health and welfare in a responsible manner

Principle 5 involves a number of technical criteria that are beyond the scope of this document. A separate document focused on Principle 5 is being prepared. Interested readers are welcome to contact us for more information.

Is antibiotic use allowed? It's allowed in hatcheries on and off site.

One criterion in **ASC-V1**:79 deserves mention in this guide.

> Criterion 5.3.1 states: *"Allowance for use of antibiotic and medicated feed on ASC-labeled products (farm can be certified but specific product receiving medicated feed will not be authorized to carry ASC label)."*

What does it mean to say that "[...]farm can be certified but not authorized to carry the ASC label?" The statement is analogous to saying, "The student has graduated but will not be given a diploma."

The guidelines to 5.3.1 mention:

> *"The use of antibiotics are permitted on farms certified to ASC however, shrimp in specific ponds that have received medicated feed are not authorized to carry the ASC label."*

This is impossible since the basic unit of ASC Shrimp certification *(should be, but)* is *not* a pond, but the entire farming operation (**ASC-V1**:9) and, in some special cases, a cluster of farms. Audits under the ASC-standards are not strictly pond-level either—they should have been mandatory, but the standard does not require it. Therefore, if 5.3.1 prohibits the use of antibiotics or medicated feed, a consumer will *correctly* assume that all ponds in the farm must be compliant if the farm was certified.

> Secondly, **AM-V1**:27 clearly states: *"Instructions to Client on Indicator 5.3.1 : This requirement applies to all antibiotics, all application methods and to both direct use and medicated feed. This indicator does not apply to hatcheries, on or off site. "*

Shrimp farmers can use all the antibiotics they want in their hatcheries. The antibiotic-fed shrimp is transferred to grow-out ponds where they cannot be fed antibiotics; if they are, the farm can still be certified...

Shrimp is transferred to growout ponds in tanker lorries—which are filled at the hatchery—and the entire load, including the water, is pumped out into the growout pond or a temporary transfer pond. This would mean that, over time, antibiotic-laced water (around 80% of the tetracycline class of antibiotics remains uneaten) from the hatcheries will contaminate the growout ponds.

Further, the GSC/ShAD insists that the standard cannot control "off-site" conditions and has used the excuse to great effect in defending criteria listed under Principle 7. But surely "onsite" conditions are under the farmer's control. Why then, did the ASC allow the use of antibiotics on onsite hatcheries?

The exception in **AM-V1**:27 is not mentioned in the text of the standards—it was added solely to the Audit Manual.

> **AM-V1**:27 **instruction D** to 5.3.2 states: *During on-site visits, verify there is no evidence of use of antibiotics critical for human medicine through direct observation and inspection.*

Ignoring the illogic (absence of evidence does not imply evidence of absence; a null result can be used as evidence only in very specific cases) how is an auditor supposed to prove the absence of CI

antibiotics through “direct observation and inspection?” The auditor is not being asked to take a random water-sample and send it for testing…

If this criticism sounds unduly harsh, consider the converse: What evidence would the ASC demand from you if you alleged that a certified shrimp farm had used antibiotics on the Critically Important List?

They would they demand a laboratory test.
They would demand independent, third-party sample collection.
They would scream defamation till they turned blue.

However, for their own audit requirements, the ASC is happy to accept the solemn declaration from the shrimp farmer (who is being audited.) that he or she did not use any CI antibiotics.

Additionally, WWF has been reported to have claimed in 2012 (well after the publication of **GSC-V3**) that the ASC standards for shrimp do not allow the use of antibiotics at all:

> *"ASC standards do not allow any antibiotics to be used in shrimp production, but for farmed salmon, certain drugs are allowed but for very limited, targeted uses, and must be administered under veterinary supervision, according to Villalon."*
> **Source:** http://www.foodsafetynews.com/2012/05/abc-finds-illegal-antibiotics-in-imported-shrimp/

Criterion 5.3.2 explicitly prohibits the use of antibiotics in WHO's list of Critically Important Antimicrobials. However, it allows shrimp farms to use antibiotics in the Highly Important category.

Antibiotics on the “Highly Important” list are also widely used in human medicine. A number of critics have pointed out this omission to the ASC.

The GSC was probably under severe pressure from the shrimp industry representation because the FDA-approved list of anti-microbials that are allowed for use in aquaculture (florfenicol, sulfamerazine, chorionic gonadotropin, oxytetracycline dihydrate, oxytetracycline hydrochloride, as well as a drug combination of sulfadimethoxine and ormetoprim, subject to maximum residual levels) includes the tetracycline family, which is on the Highly Important list. **Source:** http://www.gao.gov/new.items/d11286.pdf **pp 8**

If antibiotics as a class are banned, what was the need to specifically ban antibiotics on the CI List?

How to test for pesticides?

Criterion 5.3.5 disallows the use of banned pesticides.

GSC/ShAD was determined that the auditor would never actually test a water-sample for pesticide and antibiotic residues. Very messy work.

Criterion 5.3.6 in **GSC-V1**:51 required that there be no detectable pesticide and chlorine residues in pond water. It was deleted in **GSC-V2**.

In **ASC-V1**, all claims of “No antibiotics” and “No banned pesticides” are certified without a single sample being tested.

> **AM-V1**:28, instruction B states: “*Review records to confirm farm usage of products. During on-site inspection, verify no evidence for unrecorded use of any veterinary medicines, chemicals or biological products (i.e. no empty containers or non-inventoried warehouse supplies).* ”

The auditor is told to look for empty containers marked “Banned Pesticide.” We also see, yet again,

GSC/ShAD's obsession with illogic: If there is “no evidence” there is “nothing.” One cannot prove the existence of “no evidence.” Absence of evidence does not imply evidence of absence. If there are no empty containers, there are no empty containers; it doesn't prove anything else. For example, it doesn't prove that there were never any empty containers or big silos of Agent Orange in the shrimp farm.

GSC/ShAD also clarifies that ASC shrimp is not specifically certified safe to eat:

> (**ASC-V1**:75): “*ASC Shrimp Standard does not specifically address food safety issues, which are supposed to be covered through either international or national legislation (refer to P1) and, if necessary, through other certifications that focus on this aspect (such as the International Food Standard (IFS), the British Retail Consortium (BRC), ISO 22000 or GlobalGAP).*”

The statement also appears in the introductory portion of the Standard (**ASC-V1**:16). Honest declarations of this kind must be applauded. However, honesty does not absolve the ASC of minimal due diligence. Ensuring that certified shrimp ponds are pesticide-free is a fair expectation of any standard that claims to promote “responsible” production.

The following process is recommended:

- Define “pesticide-free”, define the sampling procedure, define the tests to be used
- Take a random sample(s)
- Test the samples for pesticide residues.
- If residues are under pre-defined limits, certify the water-body pesticide-free.
- Attach the test-report to the certificate or provide a link to a scanned copy, online.

In this particular case, for criterion 5.3.5 we're not willing to accept the excuse that the ASC Standards are management-based—some criteria require a prescriptive approach.

If you're saying that banned pesticides are not being used, certified shrimp-farms must conduct periodic laboratory tests to prove that they are not being used; the standard-setters should either define a protocol for auditors to verify that these laboratory reports are authentic or they should require auditors to collect and submit a random sample for testing at an accredited laboratory.

Conclusions

- The Principle deals with shrimp health, and not food safety. The ASC recommends other certification schemes to certify that their shrimp is safe to eat.

- The ASC Standard allows the use of antibiotics in shrimp hatcheries, both on and off site.

- The ASC Standard does not require shrimp farms to test for pesticide residues; it does not require that auditors test for pesticides.

P6: Manage broodstock origin, stock selection and effects of stock management

Indigenous exotic shrimp.

Criterion 6.1 (**ASC-V1**:83) : Presence of exotic or introduced shrimp species

Criterion	Indicator	Standard
6.1.1	Use of non-indigenous shrimp species.	Allowed, *provided it is in commercial production locally*, AND there is no evidence**[106]** of establishment or impact on adjacent ecosystems by that species AND there is documentation (hatchery permits, import licenses, etc.) that demonstrates compliance with introduction procedures as identified by regional, national and international importation guidelines (e.g., OIE and ICES).

None of the indicators within 6.1.1 are within the control of the shrimp farm. The "no evidence" clause is illogical (in footnote **[106]**, the GSC/ShAD declares that it was aware of the illogic, but that they left the text unchanged, regardless.) and in the case of such evidence becoming available in the future the responsibility for the disaster could conveniently be transferred to the hatchery from where the Post Larvae (PL) were sourced.

Consequently, the presence of such evidence too has no effect whatsoever on the certified farm. The phrase “Regional, national *and* international guidelines” requires the auditor to know and check compliance with all such guidelines.

It must be mentioned here that GSC/ShAD, to allow non-indigenous species, brought in “international importation guidelines” while they refused to do so in Principle 1.

The point is moot. As far as *P. vannamei* and *P. monodon* are concerned, ICES and OIE guidelines have already been violated by the shrimp industry many times over.

ICES: http://www.fao.org/fishery/rfb/ices/en
ICES Guidelines Home: http://www.fao.org/docrep/003/w3592e/w3592e00.htm#Contents
ICES Species Introduction guidelines: http://www.fao.org/docrep/003/w3592e/w3592e0a.htm#bm10
OIE Guidelines overview:
http://www.oie.int/fileadmin/Home/eng/Health_standards/aahc/2010/en_chapitre_1.5.6.htm
OIE and private certifiers:
http://www.oie.int/international-standard-setting/implications-of-private-standards/
http://www.oie.int/fileadmin/Home/eng/Internationa_Standard_Setting/docs/pdf/Final_private_standards_report.pdf

Requiring a shrimp farm to demonstrate compliance with ICES guidelines is laughable. We look forward to visiting ASC certified shrimp farms to verify their compliance with ICES or OIE guidelines.

The GSC/ShAD's solution to the problem is (not surprisingly) to devise separate standards for hatcheries.

> The guidelines (**ASC-V1**:85) say: *"Although exotic species have been deemed a critical conservation concern globally, as they have the ability to significantly disrupt ecosystem function and species interactions, in the case of L. vannamei there is currently no evidence to suggest that the use of this species poses a significant risk to adjacent ecosystems in areas where it is exotic. Therefore, the current version of the ShAD Standards allows for the culture of L. vannamei in areas outside its native range, but does not allow it to be introduced into a new area."*

Firstly, the text has been carefully worded to include the logical paradox that "no evidence exists" for *L. vannamei* escapes have resulted in their breeding uncontrollably outside a shrimp farm, which is irrelevant considering that the species has already been introduced to Asia by the shrimp industry.

As such, *L. vannamei* farming in Asia (outside the native range of the species) is allowed (**ASC-V1**:66).

Regarding other species of shrimp, the guidelines in the standard are circumspect.

> ***ASC-V1**:85: P monodon, L. vannamei, P. stylirostris and P. japonicus are all known to have escaped from U.S. culture operations (Briggs et al. 2005). Farmed P. japonicus and P. merguiensis have escaped facilities in the Pacific Islands, with the latter now known to be established off Fiji.*

> ***ASC-V1**:86: In areas of West Africa, particularly in Cameroon and Nigeria, populations of escaped P. monodon have become sufficiently established to support a commercial fishery. Penaeid shrimp make up about 2% of Cameroon capture fisheries, and black tiger shrimp is a notable portion of this catch. In Nigeria, tiger shrimp comprises as much as 10% of trawler catches since its arrival approximately 4 years ago. Interestingly, while Cameroon holds aquaculture in Nigeria responsible for the release, Nigeria has indicated that Gambia, Senegal or Cameroon may be responsible.*

However, there are enough loopholes within the indicator and the Audit Manual that allow the certification of *P. Monodon* farms and other non-native species of shrimp:

> **AM-V1**:30, instruction **C**: *Confirm that documentation shows the farmed species is commercially farmed locally if the species is not indigenous .*

The instruction is absurd. The standard defines "locally" (**ASC-V1**:83) as "within the country of production." Of course the species is being commercially farmed, locally. It's a commercial shrimp farm, not a tourist attraction. Why else would they invite an accredited shrimp-farm auditor?

> **AM-V1**:30, instruction **D**: *Review, as a minimum, evidence of no negative impact and assess its accuracy and appropriateness by means such as an internet review, including, as a minimum, a Google search.*

In simple terms: "Do a Google Search and find evidence of no evidence." Instead if the auditor was asked to find "evidence of negative impacts" he or she would have found boatloads of evidence.

Here's one example:
Ecological risk assessment and management of exotic organisms associated with aquaculture activities :
ftp://ftp.fao.org/docrep/fao/011/i0490e/i0490e01e.pdf

Insufficient escape-management protocols

The standard specifies “escape management” protocols in the vaguely defined criterion 6.1.2 that requires *no changes* (physical or procedural) to existing shrimp farms. This is to be expected from a management-based standard…

> Criterion 6.1.2A: *“**Effective** screens or barriers of appropriate mesh size for the smallest animals present; double screened when non-indigenous species.”*

But all shrimp farms have sets of screens in place because they do not want their produce to escape. Shrimp escape nevertheless. Adding the “word” effective does not make existing screens effective.

6.1.2A required a quantitative indicator in the form of a matrix of screen sizes.

> Criterion 6.1.2B: *“Perimeter pond banks or dykes are of **adequate** height and construction to prevent breaching in exceptional flood events.”*

These too are common practice. Using the term "adequate" without specific measurements is pointless. In an attempt to draft a "one statement fits all farms" criterion, the text has been generalized far too much. The GSC/ShAD could have mobilized its considerable resources to create a set of measurable, quantitative criteria for requirements.

Criteria 6.1.2C,D,E require record-keeping of existing practices and nothing more.

> Criterion 6.1.2F: *"Escape recovery protocols in place"*.

The guidelines to this criterion admit:

> *“It is not currently feasible to accurately count the number of shrimp that enter a pond, which makes it impossible to estimate how many disappear due to escapes versus other causes (e.g., mortality and predators). This may be reconsidered for future versions of the Standards, when escape data are more available and counting technologies are more advanced.”*
>
> They go on to state: *“The ShAD Standards recognize the challenges of recording all escapes but expects farmers to do due diligence on this standard and record any observed escapees.”*

How will the auditor determine the effectiveness of whatever is offered as an “escape recovery protocol” for compliance to 6.1.2F?

- Is it prudent to offer certification to a farm from where shrimp have escaped?
- Are there any "escape recovery protocols" in current use that the ASC considers appropriate?

As a result of 6.1.2A-F, the risk and probability of escapes from certified farms remain exactly the same as non-certified farms.

Wild-caught Post Larvae

Criterion 6.2 offered the GSC/ShAD the opportunity to take a principled stand against the inhuman conditions faced by *P.monodon* (Black Tiger shrimp) PL collectors as well as the horrific by-catch inherent to the process—to assert that the ASC would not certify shrimp collected by women and children wading through waist-deep water all day.

They did nothing even though *P. monodon* hatcheries exist. One of them is run by a GSC/ShAD member. Another GSC/ShAD member buys produce from it. But instead of taking a pro-poor stand, GSC/ShAD decided to appease the industry and allowed the procurement of wild-caught *P.monodon* PL.

Let us analyse the history of the GSC/ShAD addressed the problem:

GSC:V1:56 said:

Criterion	Indicator	Standard
6.2.3	% of total post-larvae from closed loop hatchery (i.e. farm- raised broodstock)	*P. Vannamei* 100% *P. Monodon* must be improved over time (100% within 6 years after the publication of the standards)
6.2.4	Wild-caught broodstock must be sourced from fisheries with an established fishery management plan or certified fisheries	Yes
6.2.5	Allowance for wild-caught PL	None

> *The guidelines to criterion 6.2 GSC-V1:57 said: The wild collection of PL added to the disease problems that the shrimp aquaculture industry experienced in addition to causing high by-catch of untargeted marine species and impacts to the health of wild shrimp populations. The ShAD does not allow the collection of wild PL, employs strict indicators and standards for what species and stocks can be collected for broodstock, and limits the amount of shrimp broodstock that can be collected overall. Wild stock monitoring systems must be enforced via government methods, stock assessments or quota systems.*

6.2.5 was a mistake. They never meant to disallow wild-caught *P.monodon*—the text of 6.2.3 makes that quite clear.

The second version (**GSC-V2**:56) flagged 6.2 with the following note:

> *6.2.2: The GSC has included standards for P. indicus and P. stylirostris and is interested in hearing from producers on the feasibility of standards that require 10% of postlarvae to be produced in closed loop hatcheries.*
>
> *6.2.3: There is disagreement among the GSC as to whether or not this standard is necessary and auditable. Some are not sure that broodstock fisheries have significant impacts on wild populations.*
>
> *The GSC would appreciate feedback on both of these issues.*

They got feedback. Sourcing of wild-caught PL from “established fisheries with and established fishery management plan” was, apparently, anathema to the shrimp industry. Poor, illiterate women and hungry children are desperate, easily bullied and conveniently “beyond the scope of certification.” Most importantly, they work cheap: a six-hour day for a dollar or less.

Consequently, **GSC-V3**:58 amended the criteria as follows:

Criterion	Indicator	Standard
6.2.3	Origin of wild-caught broodstock	Sourced from locally fished broodstock only.
6.2.4	Allowance for wild-caught PL *other than natural tidal flow into ponds*	None

Click on the links, below, to see what “sourced from locally fished broodstock only” means.

Shrimp collection: http://ejfoundation.org/sites/default/files/public/styles/large/public/shrimp/RS18240_A%20child%20harvesting%20shrimp%20fry.%20-%C2%AC%20Philip%20Gain-SEHD-scr.jpg
Shrimp farming labour issues: http://ejfoundation.org/shrimp/theissues/labourissues

ASC-V1:88 makes it clear that wild PL harvests of *P.monodon* would be permissible for a further six years.

> The amendment to criterion 6.2.4 is cryptic: *“Allowance for wild-caught PL other than natural tidal flow into ponds.”*

It is not clear how any PL can flow naturally into a pond—passing through the nets and screens and over the dykes and walls required by 6.1.2A.

It they could flow in, they could also flow out of the ponds. How can this be permitted under criterion 6.2.4 when 6.1.2A is supposed to prevent such occurrences?

How can “wild *caught*” PL flow in? If they were caught, how could they be flowing around… or in?

Conclusions

- Principle 6 offered the GSC/ShAD the opportunity (missed in Principle 4) to address the miserable working conditions of women and children who collect wild PL. The GSC/ShAD did nothing.
- The rest of the criteria in Principle 6 (barring the prohibition of transgenic shrimp in 6.3.1) require existing hatcheries and shrimp farms to make no changes at all to their systems.
- The GSC/ShAD had the option to use criteria under Principle 6 to encourage a shift to closed-loop production systems (not just hatcheries, but entire farms). This was not addressed at all.

P7: Use resources in an environmentally efficient and responsible manner

How does the ASC Standard improve environmental performance of the fish feed industry? It doesn't. Principle 7 is, without a doubt, the weakest in the ASC Standard. It achieves nothing and its sole purpose seems to be to increase credibility among consumers—a manufactured alibi.

The GSC/ShAD refused to ban wild-caught *P. monodon* PL (and the crippling human rights abuses inherent in the process) by wailing about the scope of the standard being restricted to the farm gate; in the case of Principle 7 they casually certify offsite processes and materials. In both cases, the environmental or human rights performance of the ASC Standard was weakened to appease the shrimp industry.

> **GSC-V2**:59 offered this excuse: *"The GSC acknowledges that many aspects of Principle 7 are out of the typical audit scope at the farm level. However, some of the issues that are contained within Principle 7 were identified as important impacts to be addressed for a credible eco-label by the ShAD and therefore need to be included in the standard despite the auditing challenges."*

In other words: "Consumers won't buy our stuff unless we appear to do something about feed."

Did the GSC/ShAD feel that the credibility of their label would suffer if they banned off-site child labour?

Where was the fishmeal and fish oil made? Was it produced sustainably?

> **ASC-V1**:92 states that: *The use of wild-caught (e.g., pelagic fish) and terrestrially farmed ingredients (e.g., soy) in shrimp feeds has a potentially negative impact on marine and terrestrial ecosystems. Energy use also requires specific attention. This principle not only addresses the origin of those resources but also seeks to improve the overall efficiency of the production system and ensure that wastes are treated properly so that effluent has a limited impact.*

Criterion 7.1: Traceability of raw materials in feed **ASC-V1**:92:

Criterion	Indicator	Standard
7.1.1	Evidence of basic traceability of feed ingredients, including source, species, country of origin and harvest method demonstrated by the feed producer.	List of all ingredients making up more than 2% of the feed available provided on company letterhead.

Criterion 7.1.1 requires that: "*Evidence* of basic *traceability* of feed ingredients, including source, species, country of origin and harvest method [is] demonstrated by the feed producer." (**ASC-V1**:92)

> A footnote explains: *"Traceability must be at a level of detail that permits the feed producer to demonstrate compliance with the standards in this document. Compliance would be in the form of third-party documentation of quality assurance schemes and traceability of ingredients. This standard also assumes that the feed producer will make available to the farm a full list of feed ingredients and is aware that the relevant portion of the auditor report may be disclosed to purchasing retailers although the ingredient sources may be not revealed."*
>
> The guidance notes add: *"To satisfy the standard, feed producers are obliged to declare (but only to auditors) all sources of fishmeal, fish oil and other major ingredients above a 2%*

inclusion rate. Proprietary arguments against the full traceability and transparency of ingredients are not an acceptable argument for non-compliance, as the standards require innovations on behalf of producers and full traceability of feed ingredients to ensure the long-term sustainability of feed sources. Furthermore, the disclosure of only significant ingredients, and not the micronutrients, allows a higher probability of compliance with this standard."

Firstly, how does a *list of ingredients* constitute evidence of traceability to the consumer?

Consumer: Where did you source that ketchup?
Shopkeeper: The ketchup contains tomatoes, water, sugar and cornflour.
Consumer: Of course, but where did you buy it?
Shopkeeper: Sorry. I can't tell you.
Consumer: Why? I want to know if child labour was used to produce it.
Shopkeeper: Er… Umm… See it has a lovely green label that says "Responsible Ketchup."

Unfortunately, 7.1 was redrafted to its current form of a pitiful non-sequitur.

The percentage factor in the list of ingredients varied as well. It was 5% in V1, 1% in V2 and 2% in V3 without the text offering any clue as to why these changes were made. Fish-oil percentages varied, perhaps?

The attempt to hide the source of fishfeed from the consumer (while declaring it to the auditor) is ludicrous and gives the impression that proprietary trade-secrets are at stake. The ASC should stop playing corporate spy-vs-spy and include this information in the audit report. Brand names need not be mentioned: just the ingredients and their country of origin will suffice.

The criterion requires that the raw materials used in the feed should be traceable. Make it so. In its current form the standard fails at Level 3… and this, with the very first criterion.

In Summary:

- Criterion 7.1.2 lacks suitable audit guidelines and relevant information was not available either in the audit manual or on the ASC website when **ASC-V1** was released.

- Criterion 7.1.x doesn't tell the consumer the source of feed. The sustainability of the feed production process is not being certified.

The text that serves to explain the shambles that is criterion 7.1 includes the following literary gem, dripping with irony:

"Marine ingredient sourcing for feed is a key off-farm issue requiring special consideration, as traceability and fisheries certification are still in their infancy, making the process of creating auditable standards very challenging."

In other words: "One doesn't know enough about fisheries certification to create an auditable standard."

No improvements on sustainability: More Standards needed.

Criterion 7.2 specifies standards for the sustainability of feed ingredients.

Both Criteria 7.2.1a, 7.2.1b do nothing but defer important decisions. In other words: shrimp fed on environmentally devastating fishmeal will remain candidates for ASC certification and shrimp farms need do nothing for five years. In the interim, the ASC sends some business in the direction of its brother, the MSC.

ASC-V1:94: Criterion 7.2.: Origin of aquatic and terrestrial feed ingredients :

Criterion	Indicator	Standard
7.2.1a	Timeframe for 100% (mass balance) fishmeal and fish oil used in feed to come from fisheries certified by a full ISEAL member that has guidelines specifically promoting ecological sustainability of forage fisheries. *OR FOR THE INTERIM 7.2.1b. or 7.2.1c*	Within five years following the date of standards publication.
7.2.1b	b. FishSource score, for the fishery(ies) from which a minimum of 80% of the fishmeal and fish oil by volume is derived (See Appendix IV, subsection 3 for explanation of FishSource scoring) a. for Fishsource Criteria 4 (spawning biomass assessment) b. for Fishsource Criteria 1, 2, 3 and 5	a. 8 b. 6 or compliance with alternative interim proposal 7.2.1c
7.2.1c	c. Lacking a FishSource assessment a fishery could be engaged in an Improvers Program. (transparent and public Fisheries Improvement Project (FIP) with periodic public reporting.	See Appendix VII for details on compliance.

Criterion 7.2.1b in its current form does not ensure sustainability. Even the sustainability implications of attaining a FishSource score of 8 across all criteria within 5 years, as proposed by the standard, are questionable.

AM-V1:34-35 (two pages of audit guidelines for a single criterion.) does not specify how the compliance will be recorded in the audit report. The criterion and its guidelines are a maze of smoke and mirrors. Important questions are left unanswered:

- Will the audit-report mentioned the subsection of criterion 7.2.1 under which the farm attained compliance? That is, will the consumer see “Compliant under 7.2.1c” or will the report just say “Compliant.”
- If compliance is granted under 7.2.1b, will the audit report mention the FishSource score of the source fishery and the species used to produce the feed? Will the consumer be told the country of origin of the fishery?
- Who determines whether the *Fisheries Improvement Programme* is any good and whether “joining” such a programme implies improvements at all? Will the consumer be allowed to determine if the FIP is good enough?

A little more detail on the Fisheries Improvement Programme is merited:

Criterion 7.2.1c did not exist in GSC-V3; the Fisheries Improvement Project does not exist either—work on such a project was outlined in GSC-V3:64.

Essentially, ASC wants fishmeal factories and fisheries to devise their own strategy for improvement, then get the MSC's stamp of approval on the strategy, then form a committee to sit on it to hatch an Action Plan, then implement it, then get the MSC to certify the fishery or factory.

The GSC/ShAD estimated that the formulation and implementation of an *Action Plan* (**GSC-V1**:65) would take a 3-6 years and up to a maximum of ten years. In ASC-V1, the relevant text was cut out and plugged into Appendix VII with minor changes (creation of the Action Plan was capped at 5

years, references to IFFO-led certification of factories were removed).

While 7.2.1c might look impressive, the ASC hasn't actually done anything and doesn't intend to. In the three years since **GSC-V3** was published, there's been no work done on FIP apart from the cut-and-paste operation to create yet another Appendix.

What could they have done?

Criteria under Principle 6 required the auditor to verify the authenticity of third-party documentation and information; the audit manual contains an instruction to carry out a search on Google. While this is not the ideal approach (obtaining information and structuring it is the job of the standard-setters, not the auditor), it does show right intent. The same principle could have been used in this case too... The GSC/ShAD did try...

> **GSC-V1**:60 and (7.21b **GSC-V2**:61) said:

Criterion	Indicator	Standard
7.1.1a	Allowance for fisheries that are classified as depleted or over-fished by regional, national or local fisheries management authorities	None
7.1.1b	Allowance for the use of fishmeal and fish oil in shrimp feed (including those made from fisheries by-products) containing products from fisheries that are listed on CITES Appendix I, on the IUCN's Red List (in categories: Near Threatened, Vulnerable, Endangered, and Critically Endangered)	None

> **GSC-V2**:63 said: *"Forage fisheries are also particularly important in developing countries as they offer a primary source of EPA/DHA, which is necessary for human development. Inefficient conversion of wild fish, used for subsistence, into farmed fish, used for discretionary consumption, represents a meaningful issue of equity and food security.*
>
> Simply put, 7.1.1b required the auditor to take an extra step with the information received from the feed manufacturer—go online and check:
>
> > Is the source over-fished?
> > Is it on the CITES List?
>
> **ASC-V1**:96 pushed all references to CITES to the guidelines; the audit manual does not require any checks on the CITES database.
>
> **CITES**: http://www.cites.org/eng/app/index.php
> **State of US Fisheries**: http://www.nmfs.noaa.gov/sfa/fisheries_eco/status_of_fisheries/
> **State of World Fisheries (SOFIA), FAO**: http://www.fao.org/fishery/sofia/en
> **SOFIA, 2012, Part III (Demand and supply of aquafeed and feed ingredients for farmed fish and crustaceans: trends and future prospects)**: http://www.fao.org/docrep/016/i2727e/i2727e03.pdf
> **FAO, The ecosystem approach to fisheries**: http://www.fao.org/docrep/006/Y4773E/Y4773E00.HTM
> **FAO Code of Conduct for responsible fisheries**: http://www.fao.org/docrep/005/v9878e/v9878e00.htm
>
> Standardization of stock assessment criteria were discussed by GSC/ShAD (**GSC-V1**:60). The shrimp-company representatives probably vetoed the idea.
>
> Verification of feed sources could have been listed as a required "client action" under the criterion. The standard requires such actions under other criteria, why not this one?

Criterion 7.1.1 in **GSC-V1** and **V2** show the correct approach; it wasn't perfect, but it made sense and is what we expect from standard-setters who want to promote environmental performance. By

removing these criteria, the GSC/ShAD failed in their task.

While running the maze of 7.2.1, one must remember that the auditor isn't checking the feed producer. All he or she does is check whether the shrimp farm has a letter from the feed producer that attests compliance with the standard.

> **AM-V1**:34, instruction **A** requires: *"Verify that farm possesses information about feed ingredients. "*

Straightforward statement. The auditor isn't certifying that the feed ingredients are sustainable. He is merely verifying that the shrimp farm has a list of ingredients and a letter from the feed producer.

Instruction **B** refers to the FishSource scores of >6 for four criteria and >8 for one: which, in the combination listed, does not imply sustainability.

> Instruction **C** (applicable to 7.2.1c) requires: *"Review evidence and confirm accuracy (compliance with Appendix VII) "*

Confirming the accuracy of the evidence (the letter.) requires the auditor to visit the *feed producer*; how can the auditor comply with instruction C during the audit of the *shrimp farm?* This implies, again, that the auditor will merely confirm the presence of a letter and nothing more.

We are not amused.

Soy from the rainforest.

Standards for terrestrial ingredients are covered by a single criterion 7.2.2 (**ASC-V1**:95):

Criterion	Indicator	Standard
7.2.2	Percentage of non-marine ingredients from sources certified by an ISEAL member's certification scheme that addresses environmental and social sustainability.	80% for soy and palm oil within five years from the date of the ASC Shrimp Standard publication.

More postponement. And again, the earlier drafts of the standard included attempts at stronger environmental performance. For example:

GSC-V1:62 said:

Criterion	Indicator	Standard
7.2.1a	Presence and evidence of a responsible sourcing policy from the feed manufacturer for feed ingredients which comply with internationally recognized moratoriums and local laws, including vegetable ingredients or products derived from vegetable ingredients. The ingredients must *not come from the Amazon Biome*, as geographically defined by the Brazilian Soya Moratorium.	Yes

GSC-V2:64 said:

Criterion	Indicator	Standard
7.3.2	Evidence that all other vegetable feed ingredients are *not sourced from internationally recognized moratoriums such as the Amazon biome*.	Yes

These criteria were knocked out in GSC-V3. ASC-V1 doesn't contain them, either. Pity.

GM ingredients allowed in feed

Criterion 7.3: Use of genetically modified (GM) ingredients in feed

Criterion	Indicator	Standard
7.3.1	Allowance for feed containing ingredients that are genetically modified ONLY when information regarding the use of GM ingredients in shrimp feed is made easily available to retailers and end consumers, including: a. Disclosure on the audit reports if GMO ingredients were used in the feed fed to shrimp b. Disclosure if GMO ingredients were used in the feed fed to ASC-certified shrimp all along the supply chain up to the retailer. Total disclosure on the revised auditor reports are published on an easy-access database on the ASC web page. This database should be made available on demand to retailer and consumers. c. Use of the most adequate, fast and user-friendly communication tools to inform retailers and consumers on all certified products.	Yes.

> GSC/ShAD said (**GSC-V3**:68, **ASC-V1**:99): *"In a science-based and culturally sensitive context, how do we satisfy the needs of opposing market forces and expectations of consumers regarding the allowance of GM ingredients for shrimp feeds, while preserving our mandate to develop socially and environmentally responsible performance indicators for the top 20% of global shrimp producers?"*
>
> **ASC:V1**:*97* contains an aptly named value statement*: "The standard setting process recognized the complexity of the GM issue and there was significant debate about this issue given concerns about availability and cost of non-GM feed ingredients, the social and environmental impacts of GM crops and the potential for this issue to affect consumer trust and the brand of the ASC. "*

In other words: GM soy is cheap and it is easily available. Our commitments to the top 20% are more important…
The GSC must have voted on this issue since the text does not suggests consensus among the committee. The result of that vote is what we have: GM ingredients in feed are allowed.

> **ASC-V1**:100 offers a strange explanation: *"…increasing demand for GM-free plant protein has the potential to cause further deforestation in important biodiversity areas (e.g., the Amazon rainforest). "*

The GSC/ShAD were trying to protect the rainforest by allowing GM soy. These are the same group of people that deleted the criterion banning feed made from soy grown in the Amazonian biome. Interesting.

85% of US-grown soy and 98% of Argentina-grown soy is already GM. **Source**: http://www.gmo-compass.org/eng/grocery_shopping/crops/19.genetically_modified_soybean.html]
Global GM Soybean Acreage: http://www.gmo-compass.org/eng/agri_biotechnology/gmo_planting/342.genetically_modified_soybean_global_area_under_cultivation.html

This implies that a lot of audit-reports should indicate that GM ingredients were used in the shrimp feed; the ASC website itself should contain this information too.

The CO Alliance will keep the consumer informed about GM-fed shrimps that are certified by the ASC.

Further dilution

Criteria 7.4.1 that defines acceptable FFER (Fish Feed Equivalence Ratio) 7.4.2a, 7.4.2b were diluted over the course of the three drafts:

- from 1.5:1 to 1.9:1 for *P. monodon*
- 1:1 to 1.35:1 for *L. vannamei*

GSC-V1 required shrimp farms to raise their shrimp more efficiently—tiger prawns would only be allowed to eat 1.5 times their own body-weight of fish; **ASC-V1**:103 allows these prawns to eat as much as twice their body-weight of fish. Apart from the aforementioned terror over "market adoption," the GSC/ShAD offered no justification for the increase.

They refused to set a baseline eFCR standard in the final version (**ASC-V1**:103) of the standard, even though earlier versions (**GSC-V2**:68 and **GSC-V1**:66) contained a baseline. The reason offered was that *"eFCR varies with the size of shrimp harvested and climate conditions under different latitudes ."*

The text suggests that not enough is known about eFCR to set an appropriate standard. This is misleading. Guidelines to same criterion in previous versions of the standard tell another story.

> **GSC-V1**:66 referred to an EU document in the matter of eFCR: *"While eFCR varies with the size of shrimp harvested, the GSC has decided to set a threshold eFCR of 2.5 as published in the Reference France Official Organic Shrimp AB Regulation CC-REPAB-F published 13.2.2007 under EU Organic Regulation no. 834-2007"*
>
> **GSC-V2**:70 removed the reference, but retained the rest of the guidelines which said: *"While eFCR varies with the size of shrimp harvested, the GSC has decided to set a threshold eFCR, as opposed to scaling eFCR with shrimp size. The GSC recognizes that this approach will challenge the producers of large size-class shrimp more than producers of smaller size-class shrimp. However, this is in keeping with the spirit of the Aquaculture Dialogues, whose objective is to minimize the key environmental and social impacts of aquaculture, where minimizing the use of wild forage fish needs to be a priority."*

Criteria 7.5.1 and 7.5.2 that define permissible effluents were also diluted—higher FCR would result in more effluents. The monstrous limit allowed in GSC-V2 cannot be attributed to the equally monstrous FCR 2.1 allowed for *P.monodon*. Nevertheless, it was corrected in the next version, though the allowed limits were higher than those set in GSC-V1. The reason is simple: more wastage leads to more effluents.

Effluent contaminant load (in kg/ton):

	GSC-V1:68	GSC-V2:71	ASC-V1:105
P. *monodon*	28.5 Nitrogen 5.5 Phosphorus	97 29	32.4 5.4
L.*vannamei*	17.6 2.7	53 14	25.2 3.9

The GSC/ShAD could not solve the problem of sustainable feed after deliberating over the problem for at least five years; prior to that Oxfam Novib (a member of the GSC/ShAD) had engaged with GlobalGAP for four years; as such, there is no reason to believe that any other certification body will solve the problems caused by the fish feed industry in another five.

Conclusions

- The fact that the ASC standard allows the usage of forage-fish as shrimp feed is, in of itself, sufficient to nullify any claims of sustainability.
- 7.1.1 is not being audited – Level 3 is not consistent with Level 2
- 7.2.1 is a non-criterion – Level 2 is not consistent with the Level 1 claim.

Be a responsible consumer

Buy local

Support your local fisherfolk. Buy shrimp grown or caught in your own country.

Support shrimp farmers in your country who use closed-loop aquaculture production systems.

Check MAP's website http://www.mangroveactionproject.org for a list of local US and Canadian fishers who need your help and support.

You have rights, use them

The ASC claims a “farm to fork” traceability:

> *All companies involved in the supply of ASC certified products also have to be ASC certified (so called ‘chain of custody’). These companies are required to ensure that ASC certified fish can never been mixed with non-ASC certified fish and can always be traced back to the certified farm.*

If you do buy a packet of ASC-labeled shrimp you have the right to know which *farm* grew it. Call the ASC and ask for this information; then check our website. We might have photographs, video or audio interviews of people who live near the farm. If we don't, let us know. We'll go there and find out if the farm is, indeed, sustainable.

You might have the right to demand a refund if you find that the certified farm is not, in fact, compliant to the standard to which the label claims it is. Seek legal advice.

Make your opinion heard

The following web pages contain contact information of organizations who support ASC certification:

Oxfam Novib belives that ASC certfication can “potentially protect communities and ecosystems.” Not a resounding vote of confidence in the standard that they helped create.
http://www.oxfamnovib.nl/?id=GUID-1D335328A50344DE9432198674FE919E

IUCN-NL calls it a win-win situation:
http://www.iucn.nl/resultaten/resultaten_per_thema/?12637/1/Sustainable-shrimp-farming-a-win-win-situation

Call your local WWF and voice your concern:
http://worldwildlife.org/about/contact

Don't be fooled; don't let others be fooled

The FTC has strict guidelines about what can and cannot be claimed by environmental advertising.

This is what the FTC offers as a example of what is and is not misleading:

> *A product is advertised as "environmentally preferable." This claim likely conveys that the product is environmentally superior to other products. Because it is highly unlikely that the marketer can substantiate the messages conveyed by this statement, this claim is deceptive. The claim would not be deceptive if the marketer accompanied it with clear and prominent language limiting the environmental superiority representation to the particular attributes for which the marketer has substantiation, provided the advertisement’s context does not imply*

other deceptive claims. For example, the claim "Environmentally preferable: contains 50% recycled content compared to 20% for the leading brand" would not be deceptive.

If you think your rights as a consumer have been violated, seek legal advise.