

Shrimp Aquaculture Dialogue

Public Comments Recieved Dec 1, 2010 – Feb. 1, 2011 (2nd Period)

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Timeline for Response

The public comments have been separated into Principle, Criteria, and Indicators/ Standards and are now under review by the GSC. A formal response will be posted with the comments received when Version 3 of the ShAD standards is posted sometime in May. Version 3 will be used to develop the guidance and will be used for field testing the standards. The Global Steering Committee for the Shrimp Aquaculture Dialogue is appreciative of all the comments received and will consider and respond to all comments.

COMMENT # 1 – Gert van der Bijl

Van: Gert van der Bijl

Verzonden: vrijdag 28 januari 2011 14:22

Aan: 'coreypeet@gmail.comno'

Onderwerp: Shrimp Aquaculture Dialogue Public Comments Due February 1, 2011

Please find below some the text parts of the draft Shrimp Aquaculture standard in box with below each box some of my comments

First of all: there is a considerable number of highly relevant issues (e.g. social issues), also from the point of view of our organization, that I don't comment on. I focus my comments on the chapters covering terrestrial feed as my perception is that in this chapter there is much room for improvement.

- **Feed management:** Wild stocks of fish can be depleted for use in formulated feeds for shrimp production

Comment

This is definitely true. But as in feed for aquaculture fish is increasingly being replaced, and likely to be replaced by terrestrial feed, concern about the possible negative social and environmental impact of production of crops should be added here as an important concern.

1) Some GSC members think that these standards can be audited through documentation provided by suppliers that may or may not be audited by an independent third party. Others are concerned that this will not be strong enough for a credible eco-label given that it will rely heavily on documentation for compliance.

2) Some GSC members are suggesting to take Principle 7 out of the standards in order to not bring confusion and to creating false expectations for consumers what issues have been adequately covered. As a consequence, they suggest waiting until a specific standard is designed for shrimp feed plants, and independent ASC auditors are able to validate the practices at this level of the chain of custody before communicating on these issues towards the consumers.

The GSC welcomes opinions or suggestions on how to handle this issue

Comment

I am afraid that taking out this Principle 7 will create more confusion among consumers and buyers and will create more false expectations. Consumers and buyers are likely simply to expect that a standard addressing sustainability of shrimp production will be integral and holistic and therefore as much as possible also cover sustainability of feed production. Not addressing this issue will be very difficult if not impossible to explain.

7.1.3 Responsible sourcing of feed ingredients the feed manufacturer must provide evidence of policies to source only 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.

Guidance 7.1.3: The farmer or feed company must demonstrate that ingredients are not coming from the Amazon biome or other regions of globally significant biodiversity.

Comment

I see several problems here:

1. The indicator and the text for Guidance seem to be not fully in line. In the indicator only the Amazon Biome as defined by the Brazilian Soya Moratorium has been mentioned, whereas in the guidance 'or other regions of globally significant biodiversity' is added.

Adding other areas is important for two reasons:

- a. The Soya Moratorium is only working in one country (Brazil) in one area with just a very small part of the Brazilian soy production
- b. Deforestation is a problem in other areas in Brazil and in other countries as well.

But in that case a list of areas should be added, which would further complicate issues.

2. The Soya Moratorium is an important element to assist companies in defining a responsible sourcing policy for soy, which is an important vegetable ingredient for shrimps. However, Compliance to the Soy Moratorium does not mean that the soy does not come from the Amazon Biome. The Soy Moratorium inhibits trade of soy from areas deforested after July 24th 2006 in the Amazon Biome.

3. A considerable number of companies has expressed support to the Soy Moratorium. But at batch level it is not possible to verify compliance to the Soy Moratorium, so for an individual shrimp producer it is impossible to proof compliance to this criterion.

4. It seems that sustainability issues here are reduced to just one (important,) issue. But there is a large number of other social and environmental issues that should be part of a responsible sourcing policy, including pesticide use and other elements of Good Agricultural Practices and good labour conditions to mentioned but a few.

Recapping:

Although supporting the Soy Moratorium can be seen as relevant and important, it will be very complicated if not impossible to link it to certified shrimp production. As far as I see the only alternative will be to demand certified feed production as soon as reasonably possible.

7.3.1 Percentage of non-marine ingredients from sources certified by an ISEAL member's certification scheme that addresses environmental and social sustainability
100% within 5 years of the date of ShAD standards publication for soy and 3 years for palm oil

Guidance 7.3.1: Soy must originate from sources certified under an ISEAL membership scheme. It is expected that this can include the Sustainable Agriculture Network (SAN) protocol for soy and/or the Roundtable for Responsible Soy Production (RTRS) within 5 years of the publication of the ShAD standards. Palm oil must originate from sourcing certified by the standards created by the Roundtable on Sustainable Palm oil within 3 years. Other ingredients must originate from certified sources within 5 years of the standards.

Comment

Suggested requirement:

Presence and evidence of a responsible sourcing policy for the feed manufacturer for feed ingredients which comply with recognized crop moratoriums, local laws and compliance to relevant independent, third-party sustainability schemes for the key vegetable ingredients. For soy compliance with RTRS or any standard that is considered to be equivalent by ASC is required in those countries where RTRS soy is available.

It is difficult to think of a good reason to add that this is 'expected to be included within 5 years'.

RTRS soy will be available from 2011 onwards. RSPO certified produce has been available for a number of years. Availability of segregated material still is limited. But other chains of custody could be included.

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COMMENT # 2 – Thomas Wilson

I have some comments on the proposed standards:

"Some GSC members are suggesting to take Principle 7 out of the standards in order to not bring confusion and to creating false expectations for consumers what issues have been adequately covered. As a consequence, they suggest waiting until a specific standard is designed for shrimp feed plants, and independent ASC auditors are able to validate the practices at this level of the chain of custody before communicating on these issues towards the consumers. "

I feel that it would be better to have a specific set of standards for feed mills, and that the farmer should be required to buy feed from feed companies that have received certification regarding those standards, if that is possible.

In the interest of social and economic sustainability, there should be an option for supplying shrimp even if certified feed is not available in the country where the shrimp are being produced. Requiring the farmer to import feed from elsewhere has environmental and economic costs that may outweigh the benefit of forcing feed compliance.

"list of feed ingredients present in a proportion of >1%, including all marine, terrestrial plant, and terrestrial animal ingredients "

The shrimp feed business is highly competitive and we have to have a bit of leeway for differentiation without making all of our information available to competitors. I would rather see reporting of ingredients from other than marine sources >2%.

"Transparency of major feed ingredients is also important to ensuring the credibility of feed sourcing. The current plan for implementation calls for the producer to declare all sources of fishmeal, fish oil and other major ingredients above a 1% inclusion rate. "

Since the purpose of these standards is to benefit ocean fisheries, then >1% could be maintained here. One of the problems that might arise is that we buy ingredients such as squid liver powder, which contains marine ingredients (squid-byproducts), which are presumed to be from squid prepared for human food. The exact quantity of squid and the nature of the actual by-products that were added would not necessarily be known by us. There are several ingredients used in shrimp feed that might have similar problems.

"A document from the feed supplier (on company letterhead) must be provided to the auditor that lists the ingredients above 1%, states personal accountability for the veracity of the claim by the top QA/management staff, and gives permission for the content of auditor reports to be disclosed to purchasing retailers. "

Without further clarification, I do not agree at all that the auditor's report can be disclosed --. At whose discretion? It should be required that in every instance where a disclosure is going to be made, that the feed company has to give permission, and that confidentiality of the disclosure has to be assured. If we don't give permission, it means that our products will not be considered by that

retailer. Fair enough. There are all levels of retailers in the seafood distribution channel, and they are also subject to competition. If we have an agreement to supply the retail channel of retailer A, and retailer B is able to ask for our documents even though they have no interest in buying from us, but intend to use the information gleaned to attack retailer A which is a competitor - this is unacceptable. If we know that retailer B is a competitor of our customer retailer A, we should be able to refuse the disclosure of our information to company B. We are likely to know that this competitive environment exists, whereas an auditor or an agency working on behalf of the ShAD standards might not. Who will accept responsibility for the damages? The agency responsible for the disclosure might be susceptible to legal action if consequential damages were proven to be the result of disclosure.

"Allowance of feed ingredients from Penaeid shrimp --None "

Please explain the basis, scientific or otherwise, for this.

I don't believe that there is a defensible solid scientific basis for this.

In nature shrimp are cannibalistic, and studies involving attractants have shown that shrimp have a high preference for the taste of shrimp meal. Shrimp eat shrimp all the time in ponds where they are being grown. It is a way for shrimp to obtain nutrients for easy assimilation with a nutrient profile very close to the nutritional requirement of the animal. There is also benefit in providing a source of chitin in the feed which assists in improving growth. All of these factors lead to improved growth, and improved feed performance. In instances where feeds contain large amounts of soy and other plant proteins, anything that can improve attractability should be considered seriously.

If the concern is that shrimp meal is a disease vector, the processing of shrimp meal by drying at high temperature precludes the survival of pathogens, either viral or bacterial. And then the material is cooked one more time during feed production.

Laboratory Studies have shown that even though the presence of viral DNA can be detected, feeding this material to shrimp by including it in feed has never resulted in the transmittance of disease.

I am already complying with this in some instances, but rather than not using shrimp meal at all, (in order to gain the benefits mentioned above) I am using shrimp meal from *Ascaetes* species, which are used in Asia for shrimp pastes, or in another instance, added to Pad Thai for example in Thailand. These are small scale fisheries, in some cases artisanal, and the quantity is quite limited.

If there is indeed to be no allowance for Penaeid shrimp meals, then compliance should be confirmed by discretionary sampling of feeds from farms followed by DNA testing. I am aware of companies that state publicly that they do not use shrimp head meal, but our frequent analysis of competitor's feeds shows this to be untrue. A raw materials supplier that is part of a major agricultural conglomerate indicates that some of these companies are indeed using Penaeid shrimp-based raw material, which is bought and sold using a name which does not identify it as sourced from shrimp.

That is about all the comment I can make in the limited amount of time I have available. If you want any further clarification of any points I have raised, feel free to contact me.

Thomas Wilson

COMMENT # 3 – Dallas Weaver

Went through your documentation and you have many problem areas. Most of it is just feed good stuff that I won't bother commenting on.

However, several of your technical restrictions are counterproductive to achieving your goals of sustainability or irrelevant to those goals. You have to decide what you want: sustainability with minimal environmental impact or PC fund raising success.

Shrimp Dialog comments:

Disease control;

Probiotics – Limiting probiotics to “Only strains deemed not harmful by the appropriate competent authorities¹⁰² are allowed.”

- 1- “competent authorities” in probiotics don’t exist
- 2- Effective probiotics are often consortia of species and strains
not just a species
- 3- Probiotics in the water is different than going into the feed
- 4- These silly limits will close the future to your farmers.
- 5- I have a feeling that your “concerns” are pure B.S.,
you have no science or data.

Transgenic Shrimp

The ban on transgenic shrimp is going to make sustainability an inconsistent goal. The ideal shrimp would have the ability to digest phytate phosphorous to keep phosphorous from building up in the environment – that is GM—been done in pigs. An ideal shrimp would produce RNAi against several shrimp virus and that ability would require genetic modification. An ideal shrimp would also produce cellulase and lignase to digest plant carbohydrates into sugars for growth – more genetic modification. An ideal shrimp would also be able to elongate short chain fatty acids into EPA and DHA – just a few more genes.

I could go on, but this all requires genetic modification and the results of that modification will improve the environmental impact of shrimp production.

It is time your organization got off the anti-GMO campaign and just drop the whole subject of GMO.

Feeds

Land animal meals

There is no evidence indicating that any prion type disease will move from mammals to fish, let alone shrimp. This issue is just concerns the whole sustainability of the human food chain and any restrictions have no scientific basis and will just decrease the efficiency of the human food chain and increase stress on the environment.

FCR

The use of fish meal is irrelevant – Fish meal production is orthogonal to aquaculture – fish meal production has been a constant and the only change has been the market has shifted from chickens and pigs to aquaculture diets. All people who have any knowledge on the subject of aquatic nutrition know that this whole fish meal business is pure propaganda pushed by activists with other agendas. Hitching yourselves to something that is being exposed as pure PR BS will not serve your objectives in the long run as this plays out.

The FCR discussion depends upon whether you include the carbohydrate added to the ponds on ODAS (organic algal detrital soup) or C/N ratio systems, where you are adding sugar, starch, cellulose, etc. to grow bacteria to remove the waste nutrients (NPK) from the shrimp and producing single cell protein in the pond for the shrimp to eat. If you don’t understand this microbiological ecology game, you have no business discussing shrimp sustainability.

Since you can’t do anything intelligent about FCR, just drop the subject and let economics rule on

what is the least cost method (low quality feed + single cell protein production vs. high quality diets vs. high quality diets and molasses, etc). This again would just close future options to the detriment of your stated goals of sustainability. Changes in fish meal and oil prices are already taking care of this problem – neither fish meal or oil are absolutely required for shrimp diets or carnivorous fish diets (I was indirectly involved in a study where we got 30% faster growth and better FCR (20%) with a pure vegetarian diet on a very carnivorous fish species – it wasn't cheaper).

Effluents

All the discussions about minimizing N and P discharges are related and counter your concerns about GMO's. You are boxing yourself in a corner again. There will be a future and it will come whether you are part of it or not. Shrimp will become the chicken of the tropics and be cheaper to produce than chicken – unless the nut cases block this evolution.

Also: putting in statements like using a high effluent hold time to allow “ammonia volatilization” just shows ignorance of basic gas/liquid mass transfer operations. Your whole discussion of DO, reaeration is lame and misinformed.

Please address these issues:

Dallas

Dallas E. Weaver, Ph.D.

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http://web.mac.com/deweaver/bottom_trawling/Welcome.html

COMMENT #4 – Blake Lee Harwood

I have a thought on the way the text around FishSource scores is constructed. I understand the intention but for the sake of clarity it should say:

- Acceptable fisheries should score a minimum of 6 for Criteria 2 (do managers follow scientific advice) and Criteria 4 (spawning biomass assessment)
- Acceptable fisheries must score a minimum of 6 for the three remaining FishSource criteria (Criteria 1, 3 and 5) except that one criteria may be marked N/A (not capable of assessment at this time).

I think the bigger issue about how to deal with data deficient Asian reduction fisheries supplying the aquaculture sector is still very live. Clearly we want to avoid the AD standards causing a stampede towards Peruvian Anchovy and build some kind of ladder of improvement for Asian fishmeal producers (and fisheries) that are currently likely to be excluded but how to do this is problematic. As you know, SFP is talking a lot with IFFO about the idea of an 'improver programme' which would be some kind of system for publicly recognising companies that are trying to improve even if they haven't reached the standard yet. SFP is keen to talk to lots more folk about these issues though since it seems to be buzzing around everywhere and Sian Morgan and I were considering maybe getting an informal group together at the SCA in Vancouver to bash some ideas around. But maybe that's happening anyway and I'm just not in the loop!

Blake Lee-Harwood

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COMMENT # 5 – Alfredo Quarto

I wish to strongly protest against a very fault-ridden process that WWF and its so-called "Aquaculture Dialogue" set in motion over the last few years. Your claims for holding an open, assessable process where "all stakeholders" have a chance to express their views is not an honest projection of what really occurred, whereby the majority of "stakeholders" are not even involved in the process and so their voices have not been heard, or included.

As well, the standards you are planning to release for the Aquaculture Stewardship Council to use are full of inaccuracies and illogical conclusions that do not fit the reality on the ground in the projected shrimp producing countries. You strangely assume that shrimp farmers will become wildlife monitors and stop their operations if an endangered species is spotted on their grounds. You naively assume local community members who oppose the shrimp ponds on their neighboring lands will write nice notes stating their opposition and stick these neatly into comment boxes set up at the shrimp farm office, and that these notes will be read and taken into account when the shrimp farm owner remedies the problem. You wrongly assume mangroves destroyed by shrimp farming operations that you certify will be replaced by simply replanting elsewhere to compensate. You assume on blind faith that your certified shrimp will decrease the production of uncertified shrimp, but fail to grasp the possibility that those eating the certified brand will be new consumers wrongly convinced that all is now OK with these shrimp, and so you actually may be increasing shrimp consumption, rather than decreasing it.

You assume too much with too little to back up your assumptions, and finally you assume that your standards will work to reduce environmental and social effects ignoring the sad history of this unsustainable open, throughput system of aquaculture which you unwittingly still support, and this is perhaps the gravest assumption of them all, for with this assumption you will attempt to sell your certified shrimp to a gullible consumer public who will see your seal of approval as indicative that all is well on the production front, ignoring the fact that more environmental damage and human suffering will result from their increase in appetite for cheap, imported shrimp.

For these reasons and more, I sincerely urge you to not release your certification standards, as these are not a solution but a deepening of the problems associated with the shrimp farm industry. You should be working with those of us asking the consumer public to greatly reduce their consumption of imported shrimp, and not increase it via unproven substitutes, for this only leads us further astray.

For A Sustainable Future,

Alfredo Quarto,
Mangrove Action Project
PO Box 1854
Port Angeles, WA 98362

COMMENT # 6 – Brad Price (Seajoy)

5.1.6-2) Where nursery ponds are used and transferred to pond systems then the SR is 15-25% too high. An option would be to treat the nursery/growout systems independent with each having it's own SR. As well, in culture systems that direct stock the PL's the SR is 10-20% too high.

6.2.2-Closed loop hatchery is highly feasible.

7.0-Principle 7 should be taken out of the standards until the shrimp feed plants have their own specific standards.

bprice@seajoy.com

COMMENT # 7 – Tatiana (WWF MTI Soy Team)

Here is the contribution from the WWF MTI Soy team, which is lead by Cassio Franco Moreira, from WWF Brazil.

Criterion 7.1 and 7.3

The Soya Moratorium is the commitment of soya traders (members of Abiove and Anec) not to trade soy produced in areas deforested after July 24th 2006 in the Amazon Biome. It does not mean that the soy does not come from the Amazon Biome.

This is an important agreement, but only refers to Brazil. So in addition to it, we recommend that the **Aquaculture Dialogue Standards** demands RTRS (Round Table on Responsible Soy) soy for the composition of its feed in the countries where the national interpretation was formally accepted. The RTRS has developed global standards for the responsible soy production through a multi stakeholder approach. The standards include, amongst others, the no conversion of forests and the protection of high conservation areas. www.responsiblesoy.org/

The RTRS Soy is expected to be in the market from April 2011 on. The traceability, supply chain and certification system are ready.

COMMENT # 8 – Aldin Hilbrands (Royal Ahold)

General comments

- There is no mention of processing facilities in the standard. Although I realize that this is a farm standard, has any thought been given to ensuring that processing facilities also respect labor legislation and workers' rights? What is the latest on that that discussion?
- There are still some substantial differences between the Aquaculture Dialogue Standards; for example in the definition of wages (basic needs wage vs. fair wage, etc.), what the definition is of well-managed fisheries, etc.
- Try to separate the Principles, Indicators and Standards from the background information and guidance for assessment material but the document is getting more and more difficult to read.

Specific comments

- For the comments on Chapter 4, see attached document which includes "Sticky Notes".
- Under Indicator 7.3.1, it should be clear for the farmer what GMO raw materials are included in the feed used. This should be supplied by the feed producer. The consumer should also be informed about this through the shrimp product ingredient declaration but not through the ASC certification logo/claim (which is still unknown at this time).
- Under 7.4.1, science should confirm that the use of land animal byproducts do not have demonstrated negative effects on the health and welfare of the shrimp. In that case, c) is the preferable option to select.
- Even the interim plan for 7.2.1 will take time to implement and when you are realistic this will take some years at least. In the meantime, you can gain practical experience as to how to audit this and at what point in the supply chain e.g. not a farm level but ideally at the feed factory level because here it all happens.
- Another alternative is to require gap assessments + action plans from fisheries against FAO/ISEAL compliant ecolabel standards and monitor continuous improvement over time.

Principle 4 - Flagged issue regarding worker age: Is it necessary to mention a specific age? As long as national legislation and ILO definitions are respected, it would be automatically mean workers are at

least 15 (Or 16 in more and more countries) and that no 'young' workers' be mentioned, 18 may be the safest option to avoid young workers doing dangerous work.

Guidance for 4.2.1: The two indicators for forced labor do not really correspond to the guidance for implementation. In addition, there are other indicators for forced labor mentioned in the guidance for implementation, but not in the indicators (for example: common housing that is locked up at night).

4.4.1: Further description is required of what evidence a farm should be able to provide.

4.5.1: Has there been any research on what this means in those countries where the 50% is not met for those employers (does it make them non-competitive)?

The formulation in the SAD is a good one: "evidence that that employer is working towards the payment of basic needs wage."

It is confusing that each AD uses different definitions and calculation methods.
I hope this feedback will assist in the revision of the standard and should you need additional information, let me know.

Best regards,

Aldin Hilbrands
Senior Manager
Product Integrity

COMMENT # 9 – Frédéric Millet (National Prawn Company)

Please find attached my comments only on issues marked by a "flag icon" as to be the ones that you need some feedback.

Flag Icon P8 on ASC certification:

Certification should be applicable at the level of a "farm" or "operation" (i.e. small producer could be one pond only) not at pond level otherwise will lose a lot of credibility as per traceability concern it would be very difficult to verify anything...

A/ compliant and non-compliant ponds simultaneously only during transition phase

B/ No. Should inform immediately the competent authority (or certifying body) and declassify and isolate the product (no ASC logo) with proper management/handling procedure.

C/ If A & B implemented then no need for exception. Exception will reduce the "credibility" of the certification scheme.

D/ N/A

Flag Icon P18 on mangrove compensation requirements:

Flexibility should be given to assess best "option" of compensation to reflect site specificity. The option c should be in use "the BEIA or another tool should be used to assess the ecosystem services lost and allow the farm to mitigate these in flexible ways" as this might bring some concerns in terms of biosecurity and sustainability.

Flag Icon P33 on age limit for workers:

Local labor laws and regulations should apply as a general principal. For family operated farms (small producer) this is a more complicated issue and some specific “guidelines” should be created (i.e. minimum school attendance).

Flag Icon P43 on living conditions for employees:

Local laws and regulations should apply as a general principal. I will keep it as drafted in 4.11.1 and 4.11.2 and add “have to comply will local laws and regulations (if any)”

Flag Icon P45 Survival rate:

This is a very subjective “standard” and has great variability from site to site, species used, Pl’s source... Would be better to set standards for a specific “producer community” or geographical area/region and provide some specificity for the species in use. For existing farms/operation collect historical data or give two year moratorium to build data base and then set target for improvement on yearly basis...

Flag Icon P49 on disease management and use of antibiotics:

As a general principal no use of antibiotics should be allowed. So Option 1 “No allowance for use in any pond of certified farm” should be the rule.

Flag Icon P52 and p56 on broodstock origin and Pl’s origin:

The basic rules should be:

a/ use only endemic species to the region (except if it is a closed system) in order to avoid introduction of non-native species and potential threat to biodiversity of adjacent eco-systems as a “*principe de précaution*”.

b/ use only “domesticated” broodstock (no wild catch) this should be the principle from a sustainability point of view.

c/ use of screened broodstock from biosecurity/sustainability point of view.

These can be monitored through documentation.

Flag Icon P65 use of GM ingredients in feed:

For business continuity and due to market constrains, the cost of raw materials will make necessary to use GM ingredients. I think that the criteria of price difference between GM and non-GM ingredient should be considered as drafted in 7.4.2.

Flag Icon P69 FCR:

It is also very difficult to establish one “single” standard for this parameter. There is so much variability due to site specificity, species, origin of feed ingredients in general, environmental conditions, grow-out strategy, targeted shrimp size, etc....

For instance at NPC (desert costal aquaculture project in Saudi Arabia) we raised *P. indicus* in high saline environment so the energy requirements from the animals for osmoregulation are much higher than same animals in brackish waters (our R&D department done tank trials to compare performances). The FCR will be definitively higher with same “level” of pond management. We adapt feed formulas to use FM made from fisheries byproducts (one of the main criteria for sustainable and responsible sourcing) but at the end as the content in ash are higher the results from our tanks test trials shown that the FCR will increase in comparison to other source of FM...

Same as survival rate, the principle should be “improvement from current situation”: collect historical data or give two year moratorium to build data base and then set target for improvement on yearly basis...

Some general comments:

At NPC, we have a limited impact on surrounding fauna or flora as we are located in the middle on the desert were “nothing” grows/lives and don’t interfere/compete with human activities as we are far away from any human settlement. We take a very proactive approach in term of environmental

monitoring and impact assessment. We develop production strategy focused on maintaining optimum conditions (“don’t push the envelope”) for our grow-out operation and we created over 2700 permanent jobs. We prioritize the development of a sustainable project rather than short term profitability and the management of the company have been maintaining this “attitude” for many years now.

We have to be realistic and put things in perspective. One of the main criteria to adhere to one of the numerous “organic” or “eco-friendly” schemes currently available is also from a business point of view the benefit for the company that you retrieve from it in term of market position and/or added value to your product. In other words, from the management point of view, the cost of certification and constrains on production cost has to be balanced with the benefit(s) that you receive from it to justify the investment

Thanks for your attention and if you need some clarification, please, do not hesitate to contact me.

Best regards

Frédéric Millet
General Manager
Quality and Sustainability
National Prawn Company

COMMENT # 10 – David R.W. Griffith

Please find the following comments regarding the proposed shrimp standards, listed in no particular order.

- 1) I believe that the minimum level of certification is the individual farm. The decision taken by the producer to undertake certification is as much a philosophical one as a physical one and as certification is an overarching process in that it covers general processes it is not practical to operate on a pond by pond basis. Thus any product from the farm can carry the logo as long as the farm remains compliant. If a pond ceases to be compliant then the farm ceases to be compliant; its hard to see at this point what could be done to an individual pond that shouldn’t rule out certification status for the whole farm. Having said that there needs to be some consideration given to pond reared brood-stock. As these animals are not destined for human consumption and may receive antibiotics its important to allow for this specific instance of non-compliance. As a corollary to this there must be a chain of custody provision for processing plants to ensure no mixing of two farms products.
- 2) I applaud the decision to incorporate EIA’s in the standard; in many countries (if not all) the EIA is a legal requirement for operation and this should not represent a major problem. It is a concern however as to how to unify this across the range of environments, countries and companies supplying EIA services. This goes to the question of mangrove replanting for example should this be left in the hands of the company undertaking the EIA. Further, in some countries the amount of reforestation is established by law and it would thus be outside the scope of the certification to apply a different criteria.
- 3) As with the EIA, the p-SIA is an excellent idea and one that needs to be included in the standard but its going to be important to standardize across countries. Social and cultural differences may make huge differences to application of this. Again as with the EIA there may be considerable variation between implementation without a specific standard for these criteria.
- 4) Labour practices: it is inappropriate to set limits within the industry that differ from local laws. Obviously all operations must comply with the local laws as an absolute minimum –and should strive to perform above local laws- but establishing levels above those may skew

competition away from practices that favour increasing labour opportunities in what usually are rural, poorly developed areas. Is it a conscious decision to establish working conditions and salary levels that are in excess of local conditions as a means on differentiating between certified and non-certified operations?

- 5) Point 4.8.2 “right to leave the farm after work”. In many farms workers sleep on site due to distance from town, difficulties over transport and/or security; these conditions are usually included in contracts that workers sign with the farm. This clause would seem to be at odds with the contractual agreement and could lead to a confusion and legal conflict.
- 6) Point 5.1.6: the levels used are high for aerated semi-intensive ponds in Latin America and may also be on the high side for non-aerated fed systems, particularly when using SPF and SPR animals. The large ponds typically used in Latin America do not favour high survivals as a general rule, being subject to the vagaries of water quality and climate. When stocked with the more delicate SPF and SPR animals –recognised as a target for the program- it may be difficult for operations to consistently achieve these levels. Of course as a means of differentiating between producers this may be a reasonable target, as long as it doesn’t favour particular farming practices (eg intensive high density) over others that may reflect regional differences (eg East vs West). The other aspect of concern is that maintaining high survival rates may favour antibiotic use as farmers strive to maintain certification. Perhaps this measure should be left as a second phase consideration?
- 7) Point 5.3.1: there should be no allowance for antibiotics in animals for human consumption. The only justifiable use of antibiotics is for broodstock populations which are not to be used for commercial purposes and are highly valuable to the farming operation. It is my personal belief that no broodstock should be reared on a production farm in the first place, but given that mass selection programs are used in many countries and will continue to the basis of many stocks we need to allow that process and we should respect the welfare of those animals.
- 8) Principle 6 should be included in the standard and I agree with the proposals laid out. I don’t agree that certified farms use wild stocks or use exotic species unless authorized by local government and then undertaken according to ICES regulations. The industry has reached the point where there is no need to continue to move animals, particularly exotics around the world. There is an absolute need to clean up existing stocks and reduce the threat of periodic disease events. The only need to use wild sourced animals would be to add to a genetic pool and this should be done via appropriate protocols and is clearly not appropriate for a farm.
- 9) Transgenic shrimp: this should not be included in the standard. The animals doesn’t exist as yet and there is too poor an understanding of the environment for rearing shrimp to consider authorizing a production of GMO shrimp. However that day come and we should not rule out the possibility that we may need to go down that route, unlikely as that may sound at this juncture.
- 10) Principal 7: there should be a feed component to the standard, at least in a basic format that ensures complete traceability of ingredients. It is inappropriate to shift responsibility for this area to the feed mills as the farmers are absolutely obliged to ensure that their principal ingredient for production meets criteria. It may well be that down the road there be a feed mill standard that would allow for logo use and bring but as an initial phase – and down the road- there needs to be a clear onus on compliance from farmers regarding feed. Having said that I don’t think that we are at a point to implement the finer details laid out in 7.2.1 (c). Some more detailed research needs to be done to determine how much fish meal is really available to comply with this point.
- 11) GM feed ingredients should be allowed. This should not be a price mandated issue- it’s black and white and laid out clearly in the document. In order to meet the needs of the projected population we will need to minimize footprints and GM will play an important part in this, once we figure out how to produce GM with no negative impact. Given this issue is a touchy

one labelling is a fair option and should be mandated by the standard. This leaves the option of producers marketing a non-GMO fed product at a premium, if the market exists.

- 12) The use of an eFCR value surely is fraught with difficulties caused by extraneous issues such as exchange rates and local government policies that make this number dubious.
- 13) What happened to the production based calculations of N and P loading for effluents? I thought that was a neat idea for managing the question that favoured retention, treatment and reduced loading.

David R. W. Griffith

Technical Director

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COMMENT # 11 – Serge Orru – WWF France

Global Steering Committees of Aquaculture Dialogues for Salmon, Trout and Shrimp
Aquaculture Stewardship Council (ASC)

10 février 2011

Letter of Concern: GMO-Feed for farmed Fish and Seafood under the new Eco-Label ASC

Dear Members of Global Steering Committees,

Dear ASC Board and Director,

As you may know, R&O Seafood Gastronomy has been strongly involved in the Aquaculture Dialogue process with its division OSO in the ShAD.

R&O Seafood Gastronomy represent 40,000 MT of seafood per year mainly for the French market and 5% (growing every year) of its volume is certified organic if farmed or MSC if wild.

With great concern we have taken notice about the actual status and current proceedings within the ongoing Aquaculture Dialogues for Shrimp, Salmon and Trout with regards to allowance for GMO as feed ingredients for farmed fish and shrimp under the future consumer label Aquaculture Stewardship Council ASC.

As leading industry members with regards to fish and seafood sustainability we do critically question the broad acceptance of an eco-label which is allowing GMO-feedstuffs for farmed animals. The use of GMO in the food and feed industry is regarded very critically by both European consumers and the public. Consequently, the use and power of a consumer label such as the ASC in order to promote more sustainable, environmental sound and socially responsible aquaculture practices will be very much limited, - in the worst case, the label will be not accepted at all.

Another worrying fact from a marketing point of view is the complete absence of coordination between the different Aquaculture Dialogues for different species, addressing exactly the same issues of concern in aquaculture. When launching ASC-products, communication of the contents and benefits of this consumer label must be eased by consistent and clear messaging for all labelled products / species, based on a consistent standards. So far with the current ASC-standards, this is

clearly not the case¹ and we do wonder how to successfully launch such products on demanding consumer markets of Europe.

We do once more express the need for a credible, reliable and effective eco-labelling scheme for farmed fish and seafood, which is able to serve not only niche markets, but broader segments in the retail and food service sector. If the future ASC, - as it is being developed under the above outlined circumstances -, is going to be able to serve these essential needs, is currently uncertain and remains to be seen.

We do strongly recommend to reconsider the issue of GMO in feed and we do emphasize once more the need for more consistent ASC-standards for all species and products subject to labelling before first certified products are being launched in 2011.

In full appreciation of your attention and understanding

Serge Orru
General Manager, WWF France

¹ Important crosscutting issues for different species which need more consistency from a marketing point of view do encompass standards for feed (including GMO!), pollution of water, conservation of habitats, exotic species, use of therapeutics / chemicals and social responsibility.

COMMENT # 12 – Anders Hviid Jensen (Nordic Seafood A/S)

With a background as an Engineer in biotechnology and aquaculture I have worked on a Danish development project in Thailand at the turn of the century, trying to test and implement solutions to reduce water intake and increase pond water quality in shrimp ponds. The aim was to avoid further deterioration of the Thai Black tiger production. Unfortunately it was too little too late. Based on my experience, both as a shrimp farmer, but also as Quality manager of a larger importer of aquaculture products, I have listed some areas of concern for an environmental standard that I consider pitfalls.

Initiatives towards a cleaner process in aquaculture have two opposing mechanisms: The stricter the program the more environmentally friendly. However, the stricter the program the fewer has resources and ability to follow such a standard. It is my concern that the standard ends up at a level where the majority of small farmers won't be able to participate. Many small farmers are at a level of education that requires an easily accessible standard. In my opinion this includes reducing testing and test equipment to a minimum, making sure that the technical details, traceability programs and choice of feed is made simple and that the investment requirements are kept as low as possible. Producers of feed holds a key role in developing sustainable aquaculture. The standard should include feed producers and they need to make available feed of a quality and specification as required by the standard. This feed should be labeled for easy access for the farmers.

Keep the door open for poorly placed farms. I.e. farms in mangroves or other sensitive areas, as long as they are not newly established. It is doubly important that they do not adversely affect their recipient environment.

Effluent criteria need to consider survival rates as well. Some ponds will have high survival rates some will have lower. If you lose 25% of your shrimp due to a drop in oxygen levels and needs to emergency harvest, you risk exceeding an effluent value that you otherwise would have been able to uphold, only from the fact that your yield goes down.

Lastly, let me reiterate: Keep it simple, keep it accessible and affordable. Consider the educational level of the average small scale farmer.

Should you have any questions please don't hesitate to contact me.

Sincerely,

Anders Hviid Jensen | with kind regards

Quality Manager

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COMMENT # 13 – New England Aquarium

For Comment Period Ending February 1st, 2011

Matthew Thompson, Jason Clermont, Michelle Cho

mthompson@neaq.org, jclermont@neaq.org, mcho@neaq.org

Preamble:

These comments are provided to the Shrimp Aquaculture Dialogue (ShAD) on the Second Draft Standards for Responsible Shrimp Aquaculture by the New England Aquarium. Founded in 1969, the New England Aquarium is a global leader in ocean exploration and marine conservation and is committed to building awareness and finding innovative solutions through our marine conservation and research initiatives. The Aquarium's Sustainable Seafood Advisory Services (SSAS) aim to protect the world's ocean resources by raising public awareness and working with the seafood industry to advance sustainable practices within wild-capture fisheries and aquaculture operations. We appreciate the opportunity to review and comment on these draft standards. These comments should not be considered an endorsement of the ShAD or its standards; neither should the suggestions made be considered conditions to obtain that endorsement. We recognize the challenges and potential benefits of certification schemes and often offer comments and suggestions to strengthen these standards. These comments are presented from a general perspective and are not prescriptive, as the ShAD Steering Committee will generate the specific technical values.

General Comments:

In our opinion the standard gives too much weight to a Biodiversity and Environmental Impact Assessment (BEIA) that would likely be carried out post-farm construction. Standard 5 and Standard 7 are key areas that require greater attention.

Comments on Principle 2: Site farms in environmentally suitable locations while conserving biodiversity and important natural habitats:

- Standard 2.1.1 Adapted BEIA system with certain levels based on farm size and system is more practical than the previous draft; however these levels may still be impractical to small farms. An alternative approach would be based on income/production level, where certain income levels trigger the degree and scope of BEIA required, and this may be more feasible to extensive/small producers as well as cluster farms. As is stated in the EIA definition quoted, these systems are most effective prior to construction; as such the cost/benefit of a post construction EIA might be limited. The standards 2.2.2, 2.4.1, 2.4.2 use information from the BEIA to demonstrate compliance; however the need for assessing those impacts/recommendations is not clearly mandated in Appendix 1. We are concerned that the standard places too much weight on the BEIA process, which may not be consistent; an

observation that might not be clear to the auditor. An alternative consideration would be to set an indicator for each issue, mandate consideration in the BEIA process and then state the stringency will be at the highest level prescribed by the standard or that defined in the BEIA process. BEIA should be open to more than just “academic ecologists and NGOs”, add “or other professionals with relevant experience”. What is the range of the BEIA (i.e., 2km radius of the farm)?

- Standard 2.2.2 See above comment on BEIA. Guidance for implementation states 50% of mangrove areas will need to be reforested but the standard says dependent on the BEIA. Does the re-forestation necessarily have to occur on the farm site or could preferential restoration of other critical areas, such as a “green belt”, be included?
- Standard 2.3.1. Replace “new” with “farms built after the publication date of this standard”
- Standard 2.4.1 Change the wording to “as defined in national legislation at the time of construction or as determined as necessary by the BEIA”.
- Standards 2.4.1-2.4.3 Text in the Guidance for implementation differs from that of the standards. Several particulars are not mentioned in Appendix 1.
- Standard 2.5.1 While setting a maximum limit for seepage is beneficial, is a daily rate an auditable criterion? We suggest that limits are set on water replacement and water exchange over the course of the production cycle (see comments on standard 5); this may be audited by reviewing water pump fuel consumption. An additional benefit of limiting water replacement is biosecurity.

Comments on Principle 3: Develop and operate farms with consideration for surrounding communities:

- Standard 3.2.1 In continuation from the first draft, setting percentages of conflict resolution is not prudent since the outcome is not always directly under the control of the farm. It also assumes that complaints will be reasonable or addressable. In this regard auditor judgment would be acceptable based on the conflict resolution implementation guidelines. The standard should require that each complaint is reviewed within a specific time frame and that where resolutions are required these are met or progressing toward being met.
- Standard 3.4 In response to our comment on the first draft, the GSC stated that this point was for farms to subcontract other farms. Outsourcing farms or ponds must require another farm to be certified and separate traceability requirements in place. The GSC should not allow outsourcing by a certified operation on credibility grounds. Contractual agreements made by farms with processing plants should, however, be audited for compliance.

Comments on Principle 4: Operate farms with responsible labor practices:

- Standard 4.8.3 Is the two nights off inclusive or in addition to the 24 hours?
- Standard 4.10.3 Similar to 3.2.1, setting these types of goals is not practical, 4.10.2 should be sufficient.
- Standard 4.11.1 Needs more clarification and set expectations, perhaps as a checklist for auditors (e.g., access to fresh drinking water, clothes washing facilities, protection from the elements, sleeping areas raised off of the floor, personal storage and space (lockers, etc.), sufficient cooking areas and equipment, etc.).

Comments on Principle 5: Manage shrimp health in a responsible manner:

In our opinion, this standard requires greater attention. Certified operations should be required to operate in the most biosecure manner available. Limiting introduction of diseases through checks on PLs is positive, however, surrounding farms may not be as thorough. More specific detail is required to ensure biosecurity on certified farms.

- Standard 5.1.2 This standard is too loosely worded around critical biosecurity issues. The standard should mandate measures such as foot and automobile baths, reduced/capped water exchange (i.e., no more than 10% of the pond volume may be intentionally (not including rain) added over the production cycle), crab nets, bird nets, pond drying, and

following. By limiting the disease pathways on to the farm, the risks of release amplification and subsequent release to the surrounding environment can also be reduced. These actions are common to many farms across Asia and Latin America and should easily be met by the top 20% of production.

- Standard 5.1.4 Should state “pond bottom”.
- Standard 5.3.1 Option 1 is the stronger and likely would be easier to audit (purchase records, visual inspection on the farm and shrimp testing).

Comments on Principle 6: Manage broodstock origin, stock selection and effects of stock management:

- 6.1.1 “There is no evidence of establishment or impact on adjacent ecosystems” is still a confusing statement and would require a baseline study of adjacent ecosystems. The guidance given on implementation is inadequate for this standard. In footnote 114, “evidence” is defined as a peer-reviewed scientific report that demonstrates species or ecosystem impacts due to the escape of cultured species, however, footnote 111 claims that there is no proven evidence of the impact of *L. vannamei*. This standard needs more clarity. Will white shrimp in Asia be grandfathered in if an impact is presented in the literature?
- 6.1.2 Reword the Indicator to “Reduce the risk of introduction of invasive/exotic species.”
- 6.1.3 Can point B be rolled into 2.4.1? In points C and D “timely” should be replaced with “at a minimum of daily/weekly, etc.”
- 6.1.4 As written, a catastrophic failure would not necessarily result in a loss or suspension of certification. We recommend the addition of a suspension of certification until cause has been determined and compliance with criteria has been confirmed.
- 6.2.1 This is the same standard as 6.1.2, and should be rolled into one standard. “Prevention” in the Indicator language should be change to “Reducing risk of” by using these standards.
- 6.2.2 This is a positive standard but could be improved with “with evidence of a broodstock selection program targeting improved production efficiencies, such as growth rate”.
- Rationale: Remove the exclusion for extensive culture of shrimp introduced in the culture area by natural water flows. This could be a sink for diseases and also would not likely be in compliance with Standard 2.2.2.

Principle 7: Use of resources in an environmentally efficient and responsible manner:

In our opinion, Criterion 7.2 requires more attention. We feel that currently these standards may not effectively define and control what is required for a number of reasons:

1. Scoring systems and “bars” used to measure compliance are outside the control of the dialogue process and the ASC. These “outside systems” could change in their environmental rigor, be used for raw materials that are inconsistent with the goals of the dialogue and thus could remotely affect the overall rigor the ASC certification. This could also create supply issues for certified producers.
2. Confidence/Peer review in the data/scoring process might be insufficient to verify compliance and are outside the control of the dialogue process and the ASC.
3. Reliance of effort outside the control of the dialogue process and the ASC. To meet some of these goals at least one third party would need to undertake additional effort even if the “bar” is met, this could create supply issues for feed mills.
4. Potential for conflict of interest. Using systems outside the control of the standard to prove compliance could create conflicts of interest within those systems, especially where there is direct involvement with the raw material evaluated.
5. Added cost and logistical requirement.

There are a number of possible solutions to these issues, including; 1. Requiring the use of a specific revision of the system used for evaluation as part of the standard, 2 (and to a degree) 4. Including the requirement a degree of peer-review of an evaluation as part of the standard. Standards 3, 4 and 5 still present a potential issue.

We feel that the most effective resolution would be for the dialogue (and thus the ASC) to set specific requirements for marine ingredients as the standard. Several of the systems used as standards now could be used by feed companies to demonstrate compliance with the standard.

Alternative Recommendation for Criterion 7.2:

Future Requirements (<5 years from publication of the standard):

All feed used must have independent, third-party verification (e.g., certification or other audited report) that all marine ingredients are fully traceable, and that they show species sourced, country of origin, gear type used, and bycatch species associated with the fishery and that these meet the marine ingredient requirements stated below.

Interim Requirement:

Feed must come from feed mills that have signed a declaration that all marine ingredients meet the following requirements and disclose species sourced, country of origin, gear type used, and bycatch species associated with the fishery. Information on marine ingredients must be available to farmers and auditors on request.

The following marine products, including byproducts and trimmings, are excluded from feeds:

- All krill and krill products (Reviewed at next standard review)
- Unregulated fisheries bycatch
- All organisms originating from fisheries for which the following terms are applied by government organizations, fishery managers or organizations such as FAO and ICES:
 - o Overexploited
 - o Harvested unsustainably or at risk of being harvested unsustainably
 - o Fishery closed (except as part of area closures as part of adaptive management)
 - o Recommendation of no fishing
 - o Stock status critical
 - o Bycatch of IUCN endangered or critically endangered species
 - o IUU fishing probable
 - o Damages critical habitats (e.g., dynamite, poison fishing)
- All organisms originating from fisheries without formal management plans except where fishery health is effectively maintained through restrictions and output controls (e.g., no take of 'berried' females and precautionary size limits)
- All organisms originating from fisheries listed as endangered or critically endangered by the IUCN
- Any products of the same genus to the species for which the feed is intended.

Preferential Sourcing of Aquatic Resources:

Preferentially or increasing current sourcing of farmed fish byproducts and trimmings from ASC certified farms and from marine fisheries from sources that are independently certified to meet the above requirements should be included.

Additional advantages of this approach:

- Offers flexibility of ways to meet the specified requirements, which includes common certifications but also allows companies to independently have fisheries assessed or work with elements of a fishery to meet the requirement. This potentially could increase the volume of acceptable sources, reducing competition and cost for resources currently accepted in the draft standard.
- Potential to reduce costs and lag time required for fisheries to be evaluated

Other recommendations:

- ASC develop a feed standard, ensuring auditing of raw material usage

- Develop an interim multi-stakeholder marine ingredient peer-review panel for raw material assessments

Additional Standard specific comments:

- 7.1.1 and 7.1.2 Products should be traceable to the source, country of origin, species, etc. This information should be available now.
- Standard 7.2.1 Why not 100%? Also, is this 90% of fishmeal / fish oil in a particular formulation (e.g., each batch used), or over a certain time period (e.g., annually)?
- 7.2.2 Should include a restriction on certain ecologically important Euphausiids as well (e.g., Antarctic krill)
- Standard 7.2.1c This standard should include protected, endangered, or threatened (PET) species listed by individual countries (e.g., MMPA, ESA, SARA), as these lists might be more readily updated. A possible proxy would be the Potential Biological Removal (PBR) approach put forth by Wade, 1998 and in use in US and NZ fisheries management. See: Wade, P. R. (1998), Calculating Limits to the Allowable Human-Caused Mortality of Cetaceans and Pinnipeds. Marine Mammal Science, 14: 1–37.
- Standard 7.5.2 This standard should set a maximum protein cap to feeds being applied. An FCR of 1.7 for vannamei is too high for a top 20% standard.
- Standard 7.8.1 Auditors should inspect storage and separation on the farm site as well as reviewing procedures.

COMMENT # 14 – Richard Luney (Marks & Spencer Plc UK)

1st February 2011 Richard Luney, Wild Fish & Aquaculture

Criterion 2.1: Biodiversity Environmental Impact Assessment (BEIA)

	Comments
2.1.1	Costs involved for smaller farmers could be prohibitive. OK for large integrated operations but good siting and environmental management there is little benefit. Recommend there are two 2) for existing smaller farms

Criterion 2.2: Siting in protected areas or critical habitats

	Comments
2.2.2	There should be flexibility considered for existing farms based on the status of local legislation at the time of farm/pond construction – modifications of farms are likely to be cost prohibitive and/or impossible to full fill. This is particularly relevant in small operations where cap ex can be an issue. Compensation measures should be considered for farms that fail to comply on a particular or small area of their farm.

Criterion 2.3: Consideration of habitats critical for endangered species

	Comments
2.3.2	This makes complete sense for large farm operations however will be particularly difficult to fulfill with small operations when boundaries are shared. Compensation measures should be considered for these farms where clear boundary / perimeter space may not be as defined or controllable as in large operations.

Criterion 2.4: Ecological buffers, barriers and corridors

	Comments

2.4	There should be flexibility considered for existing farms based on the status of local legislation at the time of farm/pond construction – modifications of farms are likely to be cost prohibitive and/or impossible to full fill. This is particularly relevant in small operations where cap ex can be an issue. Compensation measures should be considered for farms that fail to comply on a particular or small area of their farm.
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Criterion 2.5: Prevention of salinization of adjacent freshwater and soil resources

	Comments
2.5.1	Complicated measurements for small farmers. Too many records for small farmers who may be illiterate with kit availability / management / training a real concern.
2.5.3	Complicated measurements for small farmers. Too many records for small farmers who may be illiterate. Equipment and test kits expensive for small farmers.
2.5.4	Complicated measurements for small farmers. Too many records for small farmers who may be illiterate
2.5.5	Complicated measurements for small farmers. Too many records for small farmers who may be illiterate

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

	Comments
3.1.1	Agree with this in principle however it must be doable, in particular for small farmers / holdings. Adequate expertise is required when not available at farm level. Bias towards large farm operations.

Criterion 3.2: Complaints by affected stakeholders are being resolved

	Comments
3.2.1	Agree in principle that the mechanism needs to be in place, but again paperwork issues / literacy issues for some farmers, in particular small operations. Will need independent bodies to ensure this is in place = COSTS

Criterion 3.3: Transparency in providing employment opportunities within local communities

	Comments
3.3.1	This is not very practical for small farmers when total number of employees at a small holding could be 1 or 2. A farmer in this group is not realistically going to advertise an available position in a local newspaper. Some areas are extremely rural. Compensation to be given for small farms – perhaps the standard should be applied when numbers are over a certain amount of employees?
3.3.2	Same concerns as detailed above

Criterion 3.4: Contract farming arrangements (if practiced) are fair and transparent to the contract farmer

	Comments
3.4.1	There is a huge assumption of literacy levels within this section. Small farms with 1 or 2 employees do not exactly have a HR department.

Criterion 4.1: Child labor and young workers

	Comments
4.1.1	Agree. Should not raise to 18 as if do you could force 15-18 year olds into worse scenarios as no work them e.g. child prostitution

Criterion 4.4: Work environment health and safety

	Comments
4.4.2	Should this be 15? If not can anyone under 18 realistically work on a farm? If minimum age is set at 18 (4.1.1) this needs to be defined

Criterion 4.7: Harassment and disciplinary practices in the working environment causing temporary or permanent physical and/or mental harm

	Comments
4.7.1	Agree but practicality needs to be considered for small farms. Paperwork adherence and literacy could be some of the issues here.
4.7.2	As above
4.7.3	As above

Criterion 4.8: Overtime compensation and working hours

	Comments
4.8.1	Agree in principle however how achievable is this on a small farm where most workers live in situ on the farm, often pond side. Need to define start / stop time officially.

Criterion 4.10: Fair and transparent worker management systems

	Comments
4.10.1	Agree in principle however how can this be effectively managed in small farms?
4.10.2	As above
4.10.3	As above
4.10.4	As above

Criterion 4.11: Living conditions for employees accommodated on the farm

	Comments
4.11.1	This Indicator / Standard requires further definition. This will also differ dependent on the country standards are being applied
4.11.2	Agree

Criterion 5.1: Disease prevention

	Comments
5.1.4	Difficult to ensure due to the influence of external factors which are not in complete control of farmers. Some systems such as semi-intensive to extensive would have real difficulty in full compliance and would therefore be excluded from certification. This is unbalanced as there are other criteria where they can be regarded as most appropriate and responsible when considering the characteristics of the area. There are natural financial incentives from being efficient as possible on these indicators. Suggest to impose evidences of control measures instead of numerical standard. If a non aerated pond dips below 3ppm what is the outcome? Does the pond or farm fail the standard? Need further breakdown of acceptable tolerances.
5.1.6	Difficult to ensure due to the influence of external factors which are not in complete control of farmers. Some systems such as semi-intensive to extensive would have real difficulty in full compliance and would therefore be excluded from certification. This is unbalanced as

	Comments
	<p>there are other criteria where they can be regarded as most appropriate and responsible when considering the characteristics of the area. There are natural financial incentives from being efficient as possible on these indicators. Suggest to impose evidences of control measures instead of numerical standard.</p> <p>1) <i>Unfed and non-aerated pond systems</i>: Should this not be different for monodon and vanammei?</p>

Criterion 6.2: Origin of post larvae or broodstock

	Comments
6.2.2	How practical is this for small farms, question on how achievable this will be for smaller farmers versus large integrated operations that have benefits of available resource.

Criterion 7.2 - Origin of aquatic ingredients

	Comments
7.2.1	<p>Most fishmeal fisheries that are likely to be compliant are located in the western hemisphere. We do not think that pushing Asian shrimp producers to source fishmeal from a different continent is a good practice, especially given the ecological concerns of increased pressure on these fisheries and additional carbon footprint. There are also commercial concerns regarding increased production cost and some trade barriers. Suggestion that the standards should open the possibility of poorly documented fishmeal sources to enter a period of improvement. This would not only make the certification more attainable in the short term but also drive improvements and improve sustainability in Asia in the long term.</p> <p>Recommendation - A separate standard for feed companies should be developed</p>

Criterion 7.3– Origin and content of terrestrial feed ingredients

	Comments
7.3.1	We would expect feed companies to be feeding back on this proposal

Criterion 7.4: Use of Genetically Modified (GM) ingredients in feed

	Comments
7.4.1	Not currently suitable for UK market
7.4.2	Agree
7.4.2	Not currently suitable for UK market

Use of land animal by products in feed (formerly 7.4)

Criterion 7.5: Use of wild fish for fishmeal and oil

	Comments
7.5.1	The use of processing by products should be promoted as a way of reducing FFER to provide time for reducing fishmeal content in feed formulation

Criterion 7.6: Effluent contaminant load

	Comments
7.6.1	This is a complex requirement for small farms
7.6.2	This is a complex requirement for small farms
7.6.3	There will always be a small amount of sludge / sediment going into waterways when ponds are emptied. Cannot see how this (even a very small amount) can be prevented?
7.6.5	This is questionable in the case of estuaries submitted to numerous discharges along the watershed. There is a concern that some shrimp farms (contributing a small fraction of nutrient release) would be penalized as a result of other activities.

Criterion 7.7: Energy efficiency

	Comments
7.7.1	We would question how practical this will be for small farm holdings
7.7.2	We would question how practical this will be for small farm holdings

COMMENT # 15 – Bambang Widgdo (PT.Central Proteinaprima)

PT.Central Proteinaprima (PT. CPP)

Wisma GKBI, 19th floor

Jl. Jend. Sudirman No.28

Jakarta 10210 - INDONESIA

Tel: (6221) 57851788 Ext 401

Fax: (6221) 57900679

	COMMENTS/SUGESTION
4.9.1	THE DEFINITION OF WORK PERMIT: CONTRACT AGREEMENT OR WORKING PERMIT FOR FOREIGN EMPLOYEE?,
4.9.3	INDONESIAN LABOUR LAW: PROBATION FOR 3 MONTHS
5.1.5	pH 7.5 - 8.5, considering that the possible increase of H2S toxicity if water pH is < 7.5, and greater NH3 toxicity if pH > 8.5.
	(1) SR: 25 - < 35 %
	(2) SR: 35- < 50%
	(3) SR: > 50 % (when viral diseases present in the intensive culture, yearly averatges of SRcan still reach 50%, by normal condition the SR can reach 80-90%)
5.3.1	Option 2 is more applicable compare to Option 1
5.3.4	No allowance of organochlorine pesticides application.

Commets/sugestion related to Broodstock and Feed

1. Pg 54. Vannamei should not be restricted to only countries currently culturing vannamei. Currently, vannamei is the “commercial” species of choice. We do not want to restrict new countries from developing a shrimp culture industry.

2. Pg 57. I do not know if monodon domestication can be completed in 6 years. I believe that vannamei took about 20 years with USA government funding. Commercial broodstock companies will only develop when there is a sizable market.

3. Pg 58. I believe that transgenic shrimp maybe the future for the industry. I do not think that we should restrict development or prohibit transgenic shrimp at the present time.

4. Pg 59. I would agree that feed raw materials should be discussed with feed mill standards and not pond production standards. Most farmers will not be able to control there feed raw material source.

It would be unrealistic to have full traceability for all shrimp feed raw materials as raw materials are sources and “traded” globally.

I do not know if we can comply with Internationally recognized moratoriums for raw materials. I would think that all feed mill should comply with their own countries recognized and supported moratoriums.

5. Pg 65. At the present time, we cannot restrict the use of GMO raw materials. This includes soybean meal and products, corn and wheat flour and products which are all major raw materials for shrimp feed.

6. Pg 68. FFER and eFCR are not realistic at the present time. These standards are greatly affected by SR which is difficult to predict and control.

7. Pg 71. Effluent Contaminant load, not sure if we can set and maintain standards. The nitrogen and phosphorous wastes will come primarily from feed. Protein (nitrogen) in feed will normally fluctuate between 30-35% protein (17% variation) due to raw material supply and cost. The same is true for phosphorous ranging from 1.1%-1.5% (36% variation). There is a lot of normal formulation variation.

COMMENT # 16 – Food & Water Watch

RE: Draft standards for Shrimp Aquaculture Dialogues
February 1, 2011

Dear Mr. Corey Peet,

Please accept this letter as comments from Food & Water Watch (FWW) with regard to the draft standards for the Shrimp Aquaculture Dialogues (ShAD). FWW is a non-profit consumer advocacy organization group working with grassroots organizations across the country to create an economically and environmentally viable future. Our Fish Program promotes safer and more sustainable seafood for consumers, while helping to protect the environment and support the long-term well being of coastal and fishing communities. Among other issues, we prioritize sustaining our wild fisheries and providing consumers credible information on seafood.

We are concerned that there are ongoing discussions about standards for open water shrimp farming, a highly unsustainable practice. Furthermore, we are concerned that certifying a fundamentally unsustainable industry will lead to increased consumption, thereby multiplying the negative environmental and social consequences. We believe that certification will not help to address the serious environmental and social impacts caused by the shrimp industry.

In particular, we are concerned about the proposed standards for Criteria 5.1.1. Criterion 5.1.1 (“Use of therapeutants and chemicals”) suggests that the ShAD standards should allow for the use of therapeutants and chemicals when authorized by national authorities, and this is clearly inadequate given that many countries in which shrimp farming is common have insufficient regulation and enforcement to ensure that such use of chemicals is properly authorized. Indeed, in Criterion 5.3.6 it is observed that the exact definition of “appropriate competent authorities” is still being developed. Criterion 5.1.1 should therefore incorporate such a definition, and defer to food

safety standards developed by leading food safety authorities such as the European Union, rather than standards from countries in which an absence of regulation may not correspond to an absence of risk to consumers, workers or the environment.

Rather than creating standards at all, we should be moving away from the certification of industrial aquaculture, and toward more sustainable forms of aquaculture – like landbased recirculating aquaculture systems (RAS).

RAS are enclosed, controlled farms that use recirculating water to grow shrimp, finfish, and even fruits, herbs and vegetables. These farms do not drain into a natural water source, can re-use waste and operate without chemicals or antibiotics. Being “closed- loop” means they can grow a wide range of plants and fish without threatening the environment, or competing with fishermen who make their living selling local seafood.

We appreciate the opportunity to comment on the ShAD and ask that you please contact us at the number listed below with any questions.

Sincerely,
Marie Logan
Research and Policy Analyst, Fish Program
mlogan@fwwatch.org
415-293-9919

COMMENT # 17 – Conscientious Objectors

6 January, 2011

Dear members of the ShAD GSC,

In reviewing the current draft standards of 01 December 2010, we “Conscientious Objectors” or “COs” brought to your notice at Trang, Thailand, the many flaws in the process and data used as the basis for developing them. These faults in the GSC/ShAD standards run deep and permeate much of the document in key parts, thereby rendering the document as a whole unwieldy and unreliable. A main concern of this process is the lack of participation of those most directly affected by shrimp farming in the development of the standards. The Cos recommend that the ShAD/GSC include the voice of affected communities for the standard to have any credibility.

Some of our concerns are listed below.

I. Many instances of inaccurate and misleading assumptions, claims and logic found within these draft standards, which undermine the intent and purpose of the document, including (but not limited to):

- a. Only 10% of mangrove loss attributed to shrimp farming, which cites the industry’s own low and contentious estimate. More recent, less biased and conservative estimates suggest a 38%-50% mangrove area loss due to shrimp farming.
- b. The employment figures (including potential employment and other economic benefits) created by shrimp aquaculture are wrong. There are also enough (peer-reviewed) studies that demonstrate the net economic loss of shrimp aquaculture (e.g. the UN Millennium Ecosystem Assessment).
- c. Apart from economic losses, the social, cultural and biodiversity-linked losses to communities have not been evaluated and cannot be boiled down to a “money figure”. Not all that is

useful commands a high value (water); not everything that has a high value (diamond) is useful -- this is an accepted truth that the GSC chose to ignore in the pSIA methodology outlined in the annex to the Standards.

- d. The proposition that “Comment Boxes” installed “conveniently” at the shrimp farm site will provide meaningful feedback indicates a chronic lack of ground-based research on the part of GSC
- e. The unreasonable belief in “industry self-regulation” given that industry representatives on the GSC admit that they would continue to buy uncertified shrimp (80-90% of the total produce) even after the Standards are on the market.
- f. Lack of local community (local stakeholders or resource users) involvement in the whole so-called “dialogue” process:
 - Absence of credible southern community organizations or leaders’ involvement in the GSC itself and their “dialogue” process.
 - Obvious dominance of the GSC by the industry and their Big International NGO counterparts has made the Standards non-representative of and threatening to local community interests
 - The present process of creating these standards leaves no credible room for meaningful future involvement of local communities.
- g. Lack of any ground-based studies that support the claim of community-led involvement in the formulation of the Standards. The “study” done in Bangladesh cannot be considered as such.
- h. Finally, given the (relatively dilute) requirements of the current draft of standards, the GSC admits to not having seen even one (representative) shrimp farm that might be certified nor could GSC describe a certifiable shrimp farm. Whom then do these standards address? How does this 3-year exercise justify its output?

II. The standards are neither Eco-friendly nor environmentally acceptable:

- a. The standards propose unproven mitigation and “restoration” practices and even mitigation practices that have been shown to fail.
- b. The standards ignore the IUCN Red-list and widespread recommendations by biologists and conservationists to expand the global protected area network – recommendations that would encompass almost all intertidal ecosystems in the world, and all shrimp farms in Ecuador and Madagascar.
- c. The proposition that participating shrimp farmers will be able or even inclined to properly monitor and list species that inhabit or utilize the regions in and around their shrimp farm plots is unrealistic.
- d. Consideration of GM soy or palm oil for feed is unacceptable and contrary to the Precautionary Principle and to the concerns of experts, social and environmental groups across the world. The cultivation of GM soy in Latin America has been widely associated with biodiversity loss, land grabbing, poisoning and loss of livelihoods. The voices associated with feed production need to be heard in this discussion and are notably absent.
- e. Fish-meal and fish-oil sourcing from wild-caught fisheries undermines and contradicts the notion that farming carnivorous fish is sustainable and / or responsible. There is growing evidence to show that relying on trash fish species has undermined biodiversity and is threatening seabird populations and marine mammals, as well as the livelihoods of coastal fishing communities.
- f. Traceability of fishmeal and other feed ingredients derived from terrestrial sources cannot currently be guaranteed by the GSC/ShAD, and hence it is not possible to assess the social and environmental impacts from the feed production chain as a whole.

III. Legal issues

- a. Compliance with international conventions (Ramsar, CBD and so on) is not included in the

Standards.

- b. The GSC is aware that in many producer nations enforcement of local and national law is the primary problem – that shrimp farming is illegal or, at most, quasi-legal in many regions. Yet, the auditing process ends with “documentary compliance”, which encourages corruption.
- c. Appropriate financial tools (fines and so on) to deter marketing of produce from farms that are certified (but not adhering to standards) are easily included in the standards, but noticeably absent.

The process of creating the standards and the standards itself are flawed to the point where we COs would not consider spending further time trying to “patch” the cracks. We have not done so in the past. However, what does concern us is that the standards are being developed (and possibly promoted) by WWF and IUCN among others, and that the sale of WWF's and IUCN's credibility to northern consumers will cause irreversible damage to the environment and livelihoods in producer nations. The damage caused to the reputations of these organizations is not our concern.

The GSC's claim that these standards address the concerns of local resource users is untenable as of now. The GSC has the resources to truly involve the communities but has not done so. Further, if these standards are given via the ASC to the shrimp market, then the claim is legally fraudulent.

If the GSC wishes to make this claim (and differentiate itself from competing standards) then communities that are affected at all levels of the production chains from feed to farms, must be involved in a meaningful manner. Let the standards emerge subsequently, if at all.

The GSC should be willing to accept that community-led inputs might well indicate the abandonment of standards for shrimp aquaculture. If so, there is scope for further positive engagement with the COs.

Therefore, we COs strongly urge that:

1. The ShAD/GSC should postpone the release of the standards until adequate local community input into the standard setting process has been sought and given.
2. The GSC should consult qualified experts who will design a process of gathering community inputs and possibly also help in implementing it. Again, the process should follow the fundamental principles of all social research, and indeed, studies of any kind – repeatability, peer-review, and transparency.
3. The methodology and locations of these reviews should be made public before the act to allow external agencies (including the COs) to monitor and provide feedback on the process itself. The results should also be made public.
4. The postponement should be of a duration that the process demands – the COs estimate that 12-18 months would be required for meaningful community participation in the process. We must point out that the delay could have been averted if the GSC had prioritized community involvement from the time it was created, 3 years ago.

Until then and unless the current aim of the ShAD/GSC to release these standards is changed, we COs must take an active and vocal public stance against the standards. We would appreciate an answer to this letter before January 24, 2011.

Sincerely,

COs present at the meeting in Trang, Thailand

Khushi Kabir, Nijera Kori, Bangladesh

Gudrun Hubendick, Stockholm Society for Nature Conservation, Sweden

Alfredo Quarto, Mangrove Action Project, USA

Natasha Ahmad, Asia Solidarity against Industrial Aquaculture, India

Maurizio Farhan Ferrari, Forest Peoples Programme, UK
Riza Damanik, KIARA, Indonesia
Mida Saragih, KIARA, Indonesia
Amit Kumar Thavaraj, Asia Solidarity against Industrial Aquaculture, India
Khun Pisit, Yadfon, Thailand

COMMENT # 18 – Belize Shrimp Grower’s Association

Belize Shrimp Grower’s meeting with pertaining to the Shrimp Aquaculture Dialogues

January 31, 2011

A meeting of the Belize Shrimp Grower’s Association was held on January 28nd at Cardi’s Restaurant in Independence Village. Attending representatives from Belizean shrimp farms included Belize Aquaculture (David Aquilar, Nick Carpenter), AquaMar and Cardelli Farms (Linda Thornton), TexMar (Harold Bowers and Hilberto Muschamp) and Paradise Shrimp Farm (Hank Bauman). WWF consultant Tim Smith and Belize/Mexico Agricultural Projects coordinator Maurico Mejia were also in attendance.

The meeting sought to update the farmers on Shrimp Aquaculture Dialogues (ShAD), , and inform the farmers about the details of the upcoming Monterrey Bay Aquarium ecoevaluation and receive feedback from the farmers about the ecocertification process, their perceptions and needs. Farmers were positively disposed toward the ShAD standards overall and expressed support in principle for adopting the ShAD standards as national better management practices pending approval of the final draft.

The ShAD Steering Committee has finished the 2nd draft of the standards and has submitted them for a second round of public comment. The consultant had previously proposed that the BSGA association use the ShAD standards as a framework for the BMP guidelines for Belize. Comments were offered on the list of ShAD standard items that had been discussed on previous versions of the ShAD.

FCRs and Survival

The BSGA has expressed throughout their participation in the ShAD process that these particular standards are counter-productive. Farmers already have strong economic motivation to keep FCR low and survival high. Stochastic events outside the control of farmers can strongly affect FCR and survival rates. FCR is also subject to parameters such as feed quality which may be attained using less environmentally desirable strategies such as increased use of high protein fish meal or aeration which increases survival but increases carbon footprint. It was noted that FCR and survival standards should be adjusted for shrimp age and size. Long term averaging and disaggregation of FCR and survival into individual ponds were also discussed as ways to overcome the problems with FCR and survival, but weaknesses were noted in both approaches. Rather than focusing on surrogate measures of effective environmental performance, actual measures of environmental effects are much more relevant measures in an environmental certification. The BSGA strongly recommends that FCR and survival be dropped from the ShAD standards.

Farm vs Pond Level Certification

Farmers also expressed a mild preference for pond by pond certification over whole farm certification.

Water levels

For the standard pertaining to water percolation from ponds, farmers felt evaporative loss allowances should also include variability according to specific temperatures and the presence of aerators.

Pond DO

The farmer expressed that they don't experience shrimp mortality in their ponds until DO levels dipped below 2. They felt DO standard for ponds should therefore be 2 ppm rather than 3.

COMMENT #19 – Mathias Ismail – OSO Gastronomy

January 30th 2011

Recipients:

- Global Steering Committees of Aquaculture Dialogues for Salmon, Trout and Shrimp
- Aquaculture Stewardship Council (ASC)

Letter of Concern: GMO-Feed for farmed Fish and Seafood under the new Eco-Label ASC

Dear Members of Global Steering Committees,
Dear ASC Board and Directors,

R&O Seafood Gastronomy (R&O) is France leading seafood distribution company. R&O has been strongly involved in the Aquaculture Dialogue process with the strong implication of its sustainable seafood division **OSO** in the ShAD from day one.

R&O Seafood Gastronomy is trading more than 40,000 MT of seafood per year, serving France and west Europe at a growth rate of 9% per annum, acting as French pioneer in AB/EU-organic certified seafood production and promotion. With more than 2.000 Tons of organic shrimp, seabass, salmon and seabass traded last year, R&O is a real market maker in the certified seafood business for both foodservice and traditional/fishmonger retail sectors.

We have taken notice with great concern about the actual status and current proceedings within the ongoing Aquaculture Dialogues for Shrimp, Salmon and Trout with regards to allowance for GMO, as feed ingredients for farmed fish and shrimp under the future consumer label *Aquaculture Stewardship Council ASC*.

As a leading actor of the industry with regards to fish and seafood sustainability, we do critically question the broad acceptance of an "eco-label" which is allowing GMO-ingredients for farmed animals. The use of GMO in the food and feed industry is regarded very critically by both European consumers and the general public. Consequently, the use and power of a consumer label such as the future ASC in order to promote more sustainable, environmental and socially responsible aquaculture practices will be very much limited, - in the worst case, the label will be not accepted at all. **More, this approach could be mis-leading the consumers and possibly abusing him on the actual integrity of the product he purchases in good faith.**

Another worrying fact from a marketing point of view is the complete absence of coordination between the different Aquaculture Dialogues for different species, addressing exactly the same issues of concern in aquaculture. When launching ASC-products, communication of the contents and benefits of this consumer label must be eased by consistent and clear messaging for all labelled products / species, based on consistent standards. So far with the current ASC-standards, this is clearly not the case¹ and we do wonder how to successfully launch such products on demanding consumer markets of Europe.

1 Important crosscutting issues for different species which need more consistency from a marketing point of view do encompass standards for feed (including GMO!), pollution of water, conservation of habitats, exotic species, use of therapeutics / chemicals and social responsibility.

We do once more express the need for a credible, reliable and effective eco-labelling scheme for farmed fish and seafood, which is able to serve not only niche markets, but broader segments in the retail and food service sector. If the future ASC, - as it is being developed under the above outlined circumstances -, is going to be able to serve these essential needs, is currently uncertain and remains to be seen.

We do strongly recommend to reconsider the issue of GMO in feed and we do emphasize once more the need for more consistent ASC-standards for all species and products subject to labelling before first certified products are being launched in 2011.

In full appreciation of your attention and understanding,

Sincerely,

Mathias ISMAIL

Group Managing Director

COMMENT # 20 – Marc Le Groumellec (UNIMA)

Comment on flagged issue: The answer to question A should definitely be: YES. The question is not to allow them (because it is not intentional to have non-compliant ponds, and is pretty rare), but better said detecting what is non-compliant and having a predefined procedure to manage them independently.

Answers to questions C & D: NO (as a consequence of answering YES to A)

It can happen to have a non compliant pond, or batch. There should be a transparent mechanism to process them separately and market them under the standard box with no logo, in order to protect the credibility of the certification towards the consumers. It is how it works with already existing B to C certifications.

General comments for all principles: although the continuous improvement is generally accepted by GSC members and most stakeholders as one of the basic principles of this certification, very little has been made so far in the standards to fix ambitious targets to be achieved by farmers in the future. As some criteria have been downgraded in order to achieve the target of 20 % producers to be certifiable, we do not clearly pave the way on where these standards want to go, what would be an ideal shrimp aquaculture according to us. It would be good to set these goals right from the beginning, to make sure this certification does not get lost or take the wrong direction in the future. Some indicators able to measure this continuous improvement should also be defined, and followed on a yearly basis.

Principle 2: Site farms in environmentally suitable locations while conserving biodiversity and important natural habitats.

General comment on P2: we consider that this principle is not yet fully matured, and remains in some parts very difficult to apply on the field for shrimp farmers.

Criterion 2.1: Biodiversity Environmental Impact Assessment (BEIA)

This indicator refers to the BEIA, which is not clearly defined yet, although the annex gives precisions about its content. But some important questions remain. Who will certify that the BEIA made (and/or paid) by farmers do actually follow the ShAD recommendations? Will auditors be requested to be trained to evaluate such a document, and eventually check major claims included? Or will auditors

work only on documentation? There is also a distortion of competition between small farmers and bigger ones, as the scientific value of their BEIA is potentially very different. Therefore, the meaning of being certified will not always have the same signification on the field.

Criterion 2.2: Siting in protected areas or critical habitats

2.2.1 How do you intend to audit this criterion? Who will check that the farm is actually in compliance with the management objectives and plan of the PA? Why not including this in the BEIA annex, instead of relying on an auditor who may not be trained to evaluate this?

2.2.2 Salt flats should be specifically excluded from the natural wetlands mentioned here. Or refine the definition of what is “of ecological importance” prior to the BEIA (i.e. directly included in the guidance document).

We should pay attention to the subjectivity of the expert in charge of the BEIA, and differences of interpretation between countries and auditors.

Comment to flagged issue: it should be at least 100 % of the affected area, with a clear policy of preserving fauna and flora in the untouched mangroves, and attempts to promote flora and fauna biodiversity recovery in the replanted zone (with local species, the target being to recover a biotope similar to the affected one). BEIA should include recommendations on what species should be replanted, densities, area estimation of the affected zone, and identify adequate zones for replantation/compensation.

Criterion 2.3: Consideration of habitats critical for endangered species

2.3.1 The definition of a critical habitat should be refined. Is it a nesting area, a feeding area, etc.? What is the actual size of this area? It should be mentioned in the BEIA, for the identified IUCN red list endangered species present in that area.

2.3.2 In order to follow that indicator and reach the required standard, the areas should be clearly defined. The notions brought on page 21 are too general. This should be quantitatively defined through the BEIA, as it is zone and species specific.

Criterion 2.4: Ecological buffers, barriers and corridors

2.4.2 The rationale on which the BEIA will base its assessment of the minimum width required is not clear enough. It should be refined, in order to avoid subjectivity in the BEIA and differences of interpretation between farms and countries.

2.4.3 Same remark as the previous point, for both BEIA and p-SIA. Strong rationale is required to avoid subjectivity and differences of interpretation between farms and countries. Who will decide what the adequate width for human movement is? However, p-SIA should show active dialogue and consensus about this issue, but it will probably be difficult to determine a minimum width adapted to all farms and countries.

Criterion 2.5: Prevention of salinization of adjacent freshwater and soil resources

2.5.1 It seems a pretty subjective indicator. The real impact highly depends on the difference between salinity in the ponds and in the surrounding “freshwater” aquifers. Brackishwater is frequent in shrimp farm zones, both for pumped and imported water and in aquifers. So what has to be calculated is the additional salt quantity brought in the zone by the farm activity, which diffused in its close environment. The initial salinity of the aquifers near the farms and the follow up of this value in time is required to interpret this indicator. It is the relative increase in salinity of the aquifers which is important, not the amount of seepage.

Proposed as 2.5.6.: We recommend having a simple biological indicator, like “no biological evidence of salinization of surrounding freshwater aquifers and ecosystems “. Vegetation which has burnt with salt is easy to detect. A perimeter around the farm should then be mentioned.

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

3.1.1 A list of accredited p-SIA auditors should be available from now on for the farmers who are big enough to need a classical p-SIA. It should be part of the guidance document.

Criterion 3.4: Contract farming arrangements (if practiced) are fair and transparent to the contract farmer

3.4.1 Preventing tying commerce. The contract farmer should not be tied in its choice for major inputs (post-larvae, feed), and for processing plant. He should be given free choice, and evidence of absence of tied sales should be given (to be included in the standards or alternatively proposed as a new indicator, 3.4.4).

Criterion 4.1: Child labor and young workers

We recommend setting the minimum age as close as possible to 18. It should not be considered as responsible to have a contracted worker of 15 years old on a shrimp farm.

As an extreme measure, in order to allow family farms to be certified, exception could be made for close family workers (sons and daughters, grandsons or granddaughters), but with evidence of the parental link (as it could be assumed they have less risk to be exploited), but with the same standards for 4.1.2 (opportunity to attend school, etc.).

Criterion 4.8: Overtime compensation and working hours

General comment: these five indicators are very detailed and might not always be adapted to the local conditions, like for example the remoteness of the working site, and constraints due to bad logistics (damaged roads in rainy season, etc.). The overall idea of the chosen indicators should be kept, but allowing more flexibility on how it is applied. Evidence should be given that workers do accept the working conditions in a transparent way.

Criterion 4.9: Employee and worker contracts are fair and transparent

4.9.3 What is the rationale on which this indicator is based? This can be challenging in some type of work.

4.9.4 That can be a challenge to obtain from all kinds of sub-contractors, especially the ones providing finished products to the farm, and not located close to the facilities. We recommend limiting that standard to major sub-contractors or intermediaries, and also to all the ones working on the farm itself.

Criterion 4.10: Fair and transparent worker management systems

4.10.1 This is very difficult to organize on a big farm, with 700 employees or more. There must be staff representatives who are elected by their peers in a transparent manner and can facilitate the communication between the workforce and the managers. Same, some workers representatives are elected to have a sit in the managing board (sorry if translation looks bad).

4.10.3 This can be an ambitious figure (either for the percentage or for the delay), depending on the kinds of complaints received. An evaluation should be made by the auditors on whether this was an easy and quick to solve complaint or not. Proposed alternative: there should be evidence that the complaints have been analyzed, and solutions implemented as soon as possible, for 90 % minimum.

Criterion 4.11: Living conditions for employees accommodated on the farm

The ShAD should look for universal quantitative parameters to follow up that criterion adequately. Number of square meters/employee, medical records with the level of infectious diseases, foodborne diseases, etc.

Criterion 5.1: Disease prevention

5.1.2 Can be included in a separate manual, or as separate SOPs. Some can use ISO 9001 or ISO 22000 structures, for example, and not a massive manual. The demonstration of efficiency is what is important here, not the fact that documentation does exist.

5.1.6 The real stocking density is frequently underestimated, as a regular commercial practice by post-larvae sellers. Sometimes it represents 5, 10 or even 20 % surplus. In order for this figure to be accurate, a demonstration of post-larvae real counts should be made, by a standardized method, which should be included in the guidance document, and audited.

5.1.7 A real SPF animal should come from a domestication program, based in a nucleus center. The list of specific diseases for which it is claimed to be free should also be provided. Otherwise, you should use the “High Health” terminology. We recommend the use of SPF as the target when commercially available, with a tolerance to use “High Health”.

Criterion 5.2: Predator control

5.2.1 What are the documents required as evidence for this indicator, when the audit happens once a year? Would independent evaluation by local NGOs or communities be a reasonable alternative?

5.2.2 What about pest control (wild dogs or cats, rats)? How to differentiate from some predator control? Recommendation: a list a species to be protected (including predators) should be available in each farm, and established through BEIA. Evidence of protection of these species during predator or pest control should be provided to the auditor.

Criterion 5.3: Disease management and treatment

5.3.1 Option 2 should be preferred. Although the occurrence of bacterial diseases in shrimp is clearly less than viral, antibiotic use could still be a useful tool if adequately prescribed, and by far the best solution available for some farmers to prevent the spread of these bacterial diseases in their farms and surroundings. Allowing the antibiotic use under strict regulation also allows having more control on its actual use than simply banning it. In many countries where it has been theoretically banned, it is actually still frequently used, but through black market and without any supervision of trained professionals. The fact that treated ponds cannot be marketed under the ASC logo will automatically protect the consumers, the credibility of the ASC logo and will discard from certification the farms where treatments are frequent. In that sense, it would be in agreement with organic standards. Not allowing the use of antibiotics while there is an active bacterial infection going on in one farm can be perceived as an unnecessary threat for the wild fauna susceptible to that infection in the close environment. It is also an animal welfare issue.

There is a clear cross cutting issue in not allowing antibiotic treatment in shrimp while it is allowed in TAP and PAD too. We do not see the rationale explaining why the benefits and risks in using such compounds are different between those two fish and shrimp.

Principle 6: Manage broodstock origin, stock selection and effects of stock management

General comment on principle 6: making an audit on documentation for those indicators that can only be checked in hatcheries downgrades ASC standards compared to other existing standards like Label Rouge, Organic and Aquaculture Certification Council, which all have a specific standard for hatcheries and specific independent third party auditing in the hatchery itself. We strongly advocate to not relying on documentation provided by post-larvae producers to guaranty that these indicators are following the standards. It damages the credibility of the ASC and its place on the market.

If the majority of GSC members finally decide to allow hatchery certification on documentation only, farmers who will use post-larvae coming from actually on field certified hatcheries - which will be submitted to a real third party independent audit under these standards - should definitely be differentiated in a clear predefined way from others whose larvae origin was only audited on documentation.

Criterion 6.1: Presence of exotic or introduced shrimp species

6.1.3: as discussed previously, the level of prevention measures if exotic species are reared instead of local indigenous species should be clearly increased. This is not obvious here. A better filtration system (sand or cartridge?; reverse well point?) should be implement, and more controls.

Criterion 6.2: Origin of post larvae or broodstock

6.2.3: the criterion is absolutely required. Most of the monodon wild broodstock used in major producing countries like Vietnam is not coming from this country. It is imported from remote areas, which has two major consequences: the importation of major exotic diseases, as they are emerging or unknown diseases for the zone; and the depletion of the wild stocks in the zone where they are captured. One example is Andaman Islands, the source of any monodon broodstock in Asia. Another one is Indian Ocean countries, like Mozambique or Madagascar, where the species only represents 1% to 2% of the wild catches, and where farmers have difficulty to buy wild broodstock themselves, because of this international traffic, which has a consequence on the development of their own aquaculture. However, I do not see any big issue if the wild monodon broodstock is coming from the same country where it is used in hatcheries, and if it follows national regulations (reference to principle 1 should be mandatory in that case).

Principle 7: Use resources in an environmentally efficient and responsible manner

General comment on principle 7: for many reasons, one being that there aren't any shrimp feed producers within the GSC (apart from UNIMA-Nutrima), the shrimp dialogue is not well finalized on feed principles, especially the information required at the feed plant level. Many of the major indicators included here cannot be applied yet, and are expecting other standards to be established first (i.e. no ISEAL member's accredited certification is available for most of ingredients currently used for shrimp feed, especially for fishmeal and the major vegetal ingredients).

Last but not least, claiming that it has been audited on documentation only clearly downgrades ASC standards compared to other existing standards like Label Rouge, Organic and GAA, which all have a specific standard for feed plants and specific independent third party auditing in the plant itself. We strongly advocate to not relying on documentation provided by shrimp manufacturers to guaranty that these indicators are following the standards. It damages the credibility of the ASC.

Farmers who will use feeds coming from actually certified feed plants which will be submitted to a real third party independent audit under these standards should definitely be differentiated from others who were only audited on documentation in a clear and predefined way.

Criterion 7.1 - Traceability of raw materials in feed

7.1.1 How do you intend to audit that criterion on documentation, when only ingredients which represent more than 5 % of the total weight have to be mentioned on the composition, by law?

7.1.2 How do you intend to force shrimp feed producers to provide such information when laws are asking much less information? What would be the power of the farmer on the feed plant to ask them to provide such information? How will you check that is information is valid when auditing it on documentation, and not in the plant? What is the value of such a statement made by the manufacturer?

7.1.3 How do you intend to audit this criterion on the farm? Will it only be a letter from the shrimp feed manufacturer, or will he have to ask his providers to write a specific statement. Who will be liable for such information? What is the credibility of an audit based on documentation for such a criterion?

Criterion 7.2 - Origin of aquatic ingredients

7.2.1 Availability and applicability issue: it is pretty uncertain that the required quantity of certified fishmeal will be available for shrimp feed producers within five years to provide enough food for 20 % of shrimp farmers worldwide. When only a few fishmeal producers are certified, it will put more pressure on this resource and increase its price for manufacturers and farmers. The carbon footprint of such a strategy is also bad, until there are enough certified fishmeal producers. It is good reason to

wait before implementing principle 7.

7.2.2 What is the rationale for that indicator? Is this coherent with the land animal byproduct tolerance to use?

Interim Plan for 7.2.1

7.2.1a: How would it be assessed by auditors? In order to demonstrate full compliance and full traceability, one has to show how it works in the plant, on the field. Not applicable if audited on the farm, through documentation only.

7.2.1b: The proposed standard difficult to interpret, and work with on a day to day basis in a feed plant.

7.2.1c: How do you intend to audit that indicator on documentation while this information should be provided by the fishmeal provider of the shrimp feed producer (which is most of the time a broker)?

Criterion 7.3– Origin and content of terrestrial feed ingredients

7.3.1 Are the soy roundtable issued standards authorizing GM soy to be responsible without mentioning its status when sold? Why not considering that all non-marine ingredients currently used should also be certified for environmental and social sustainability by an ISEAL affiliated CB, if it does exist? Why only soy and palm oil (this last one not being a major ingredient in shrimp feed)? There is a potential applicability issue for feed producers. It is a challenge to audit it on documentation.

7.3.2 Contradictory statement with 7.3.1: what does “all other vegetable feed ingredients” mean? I guess if they are ISEAL certified, they will not come from the Amazon biome. Why only consider this forest, and not others that are under threat of deforestation for agriculture use too? Why only soy and not other vegetal ingredients? What document will be provided by the feed producer and given to the farmer to be used as evidence? This is not (yet) an existing document required in the chain of custody.

Criterion 7.4: Use of Genetically Modified (GM) ingredients in feed

	<i>Standards</i>
7.4.1	Comment: only transparent and respectful option towards the consumers. Allows the farmers who make the choice of not using GMs to be differentiated, and rewarded for their additional effort regarding sustainability.
7.4.2	Comment: This standard would not have any value for the end consumers, as long as the buyers decide what to do with this information. It would not prevent from having some products mentioning they do not use GMs in their feeds.

GM vegetal ingredients used in shrimp feed – especially monoculture soy - cannot be considered as sustainable. This has clearly been stated by many stakeholders in the Soy responsible round table (make a Google search with “Responsible Soy GM”, and you will find many websites mentioning this (see websites in annex below), and can check especially this scientific report:

http://www.gmwatch.eu/images/pdf/gm_full_eng_v15.pdf). We support the Basel criteria on this particular aspect (http://assets.panda.org/downloads/05_02_16_basel_criteria_engl.pdf ; <http://wwf.panda.org/?16872/The-Basel-Criteria-for-Responsible-Soy-Production>) instead.

Therefore, GM vegetal ingredients should not be associated with standards aiming at environmental and social responsibility. The ShAD should not promote its hidden use, while some Soy roundtable stakeholders requires a clear differentiation of non-GMs vs GMs (see WWF statement: .

We acknowledge that there is currently an issue about the availability of non-GM soy, especially for America, and in some parts of Asia. But we think that certified products are the right target for non-

GM soy producers, and some will switch back to non-GM seeds if they see this opportunity. A lot is also already available, but not differentiated because mixed with some GM soy later in the chain of custody. It requires traceability and separate storage. This investment can be done if the market demands it.

Mentioning its use only to buyers will not help, as long as it is not mandatory to inform the end consumers about it. It would be a lie by omission. The risks of credibility for the ASC is high, and such lax choice spoils the rest of the standards, as already pointed out during the first public comment by major NGOs (WWF France; WWF Germany, Austria & Switzerland; WWF Sweden; Fairtrade) and major retailers (Carrefour, Anchor Seafood/Findus/Marks & Spencer).

Running a certification requires a full transparency on what has been followed as principles to produce that product. The consumer must be fully aware of what he's paying for. It should therefore be a mandatory claim.

Use of land animal by products in feed (formerly 7.4)

Land animal byproducts (LABPs) should be taken with the same precautionary approach as GMs. During the first PCP, there have been big concerns expressed by major stakeholders about allowing its use as shrimp feed ingredients. Beef or sheep are definitely not a natural food source for marine crustaceans, and their byproducts should not be included into shrimp pellets.

If LABP are used by certified shrimp farmers, as for GM vegetal ingredients, it should be mandatory to mention it to the end consumers, as many end consumers care about these core issues.

Moreover, LABP is one of the worst ingredients in terms of carbon footprint, and while it has not been addressed in the current standards, it would probably be in the future. We should promote alternative strategies instead of relying on these non sustainable ingredients.

Criterion 7.5: Use of wild fish for fishmeal and oil

FCR should be considered with a lot of precaution:

First of all, it highly depends on how it is calculated. The rationale behind that indicator should be better explained.

- If the purpose is to evaluate the efficiency of an animal of converting feed sources that can be used for other industries, it should include all kinds of inputs, including molasses, organic fertilizers, probiotics. This is usually not the case. It is also frequently calculated without considering the feed used in the ponds that failed because of disease outbreaks, ending up with non marketable shrimp.
- An FCR which is too strict will push the farmers towards the use of a more efficient feed, which means with higher protein content, especially marine proteins. It is contradictory with some other indicators. It will put more pressure on limited resources, like sustainable fishmeal (currently only Peruvian), leading to an increase in fishmeal prices for these sources. Therefore, it increases the speculation which already exists on these inputs. This high quality fishmeal also has a very bad carbon footprint, which is already an issue, and might be addressed in the standards in the future.
- Looking at long term views, the ShAD standards should aim at alternative sources of ingredients that could be used in shrimp feed. Among them, one can find vegetal ingredients – not only soy, but many others –, lower quality fishmeal (issued from trimmings of sustainable fisheries for human consumption, with more bones and less flesh, therefore more ashes in its composition), insect meals, and alternative marine productions. All of these, when included into shrimp feed formulation, might show less efficiency, and as a consequence a higher FCR.

As for the African shrimp production system, FCR can be considered high compared to other continents for several reasons, linked to its specificities:

- Usually, the farmers are aiming at big sizes for their shrimp. Due to bad logistics, high energy prices and high feed cost, no subsidies from their governments, the African shrimp farmers can only be competitive by producing shrimp of big size (minimum 20-30 pieces/kg as an average). As males continue to eat even if they do not grow, it affects negatively the overall FCR. But it is not economical to produce small sizes shrimp, because Africa cannot compete with Asia in terms of costs.
- The temperature is not always optimal, and there is a marked cold season; therefore the assimilation of food is less efficient when temperatures reach less than 25°C in the morning. But it is not economical to stop operations during that time, due to the high initial investment.
- It is less easy to estimate correctly the shrimp biomass in a 10 Ha pond with low density than in small intensive ponds.
- The FCR is already a high economical constraint for producers anyway. If it is not economically viable because FCR is too high, the farmers will stop its operations.
- A maximum FCR which is too low will induce that no African shrimp farmers will be eligible to the ShAD.
- The proposal is:
 - o Either precise the way FCR should be calculated, and fix a maximum FCR according to shrimp size, with values flexible enough to allow all rearing systems to be eligible.
 - o Or focus on FFER only instead of FCR, which has more meaning for the protection of marine limited resources, with a clearer purpose.

Criterion 7.6: Effluent contaminant load

7.6.1 & 7.6.2 Applicability issue: very few field data are available to define the right limits. Farmers do not follow those parameters usually. Recording data and having them available for audit should be recommended as a first step. Limits should be put in a later version of the standards.

7.6.4 "Aerated ponds" only the ones continuously aerated should be considered here.

7.6.5 Applicability issue: necessitates determining the point where the measure will be taken. Easy if there is only one point of discharge, but quite impossible if there are several on one farm, or if it is diffuse in mangroves.

http://www.panda.org/about_our_earth/agriculture_impacts/news/?156602/Involvement-in-the-RTRS-GM-Soy-Industry ; in which you can find the following statement: "WWF has also worked with RTRS stakeholders to establish a dedicated voluntary GM-free supply chain for RTRS soy and will continue to work to ensure that this GM-free supply chain is credibly implemented."

Comment: This initiative should be applauded and promoted through the use of such a GM-Free supply chain of RTRS in the aquaculture dialogues, and specifically in the ShAD.

COMMENT # 21 – Lena Klevenäs (FoodFirst Information and Action Network Sweden)

Sweden 3 Feb 2011

To Corey Peet, Shrimp Aquaculture Dialogues Coordinator
coreypeet@gmail.com

Comment on draft shrimp aquaculture standards.

By coincidence FIAN just learned that WWF US has been behind developing standards that has now been open for comments. FIAN has not been informed less invited to any dialogue. Considering the important work that e.g. WWF Sweden has done with its Fishguide advising never to consume tropical shrimp, we had never imagined that WWF could be behind the idea of certifying shrimp

aquaculture for the export market. This explains why we are late with our comment hoping that you will consider it .

FIAN is an organizations present in 60 countries with the aim to contribute throughout the world to the implementation of the provisions of the International Bill of Human Rights by working for the protection of the human right to food and, above all, the right to feed oneself of persons or groups threatened by or suffering from hunger and malnutrition, especially peasants, agricultural workers, landless labourers, squatters, sharecroppers and others whose land rights have been or are being violated.

Shrimp farming leads to massive destruction of the mangrove eco-system, agricultural lands, water resources and coastal fishery. This has severe socio-economic consequences with loss of food security and livelihood for especially poor coastal populations. Land used collectively for food, and also other basic needs, is privatized for the comparatively short gain of a few to produce a luxury product for the rich. It often leads to displacement and human rights violations. According to the UN Millenium Assessment shrimpfarming in the intertidal aerea is always an economic loss. As we understand from rapidly looking at your web, you are ready to certify farms in the intertidal area. (<http://www.worldwildlife.org/what/globalmarkets/aquaculture/dialogues-shrimp.html>)

We wish to express our deep concern that WWF is behind setting up standards for shrimp aquaculture thus legitimizing an industry with severe social and environmental consequences wether certified or not.

Shrimp consumption needs to be reduced, by giving it a green stamp it will rather lead to increased consumption and thus it will lead to increased negative environmental and social consequences.

We are also appalled that you claim on your web (<http://www.worldwildlife.org/what/globalmarkets/aquaculture/dialogues-shrimp.html>) that the standards will be effective *in promoting a responsible aquaculture that is in harmony with both the environment and the people living in the communities located near the farms*. Especially as it seems no consultation or real dialogue has taken place on which to base such an assumption, we could only find on meagre report with a couple of people interviewed.

Moreover reading your web, your "expert guide" claim "*Farmed fish is an excellent source of protein and, when produced well, helps protect the environment. I am totally convinced that aquaculture is the most sustainable way to feed the world.*" If this also goes for shrimp it is a suprising statment considering the amount of protein that goes into shrimp farming is more then the harvested shrimp.

We are sorry we are late in sending our comments due to the reasons explained above.

For the sake of respecting the human right to food as stated in the International Covennant of Economic, Social and Cultural Rights of coastal populations we plea to you not to release these standards.

Lena Klevenås
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COMMENT # 22 – Monica Erwér (The Swallows India Bangladesh desk, Sweden)

Re Comment on draft shrimp aquaculture standards.

Dear Corey Peet,

I represent the Swallows which is a Swedish NGO working with local NGOs and marginalized groups in India & Bangladesh. We have for some 15 years sent volunteers to Bangladesh and, many of them have been working with the shrimp issue for years. Back to Sweden they have in various ways informed about the growing conflict between sustainable livelihood for the poorest and the interests of the shrimp industry.

Today we happened to hear about that WWF was behind developing standards to certify shrimp aquaculture. Through Google we reached the web writing about the dialogue. We learned that comments should be with you by 1 February. Though we are a few days late, we still hope you will accept our comments.

We read on your web that: *“It is very important that the entire shrimp aquaculture industry, including retailers, farmers and scientists continue to be involved with the development of the standards.... I strongly encourage all industry players to submit their comments”*. We hope it does not mean that you do not welcome comments from NGOs like ours with extensive experience from shrimp aquaculture?

Looking rapidly through your web, we also get the impression that you have not involved local communities affected by shrimp farming in your dialogue? We see only one report that is connected to the situation on the ground: “Lessons from the Ground” but hardly anybody affected by shrimp farming has had a voice as we can see (in-depth interviews with one woman and one man and a couple of group interviews with males not involved in shrimp farming it seemed). We are also wondering why you choose Coastal Development Partnership considering all the knowledgeable people and organizations in Bangladesh? The conclusion from the above our comment are; there seem to be a serious lack of background information and dialogue with affected populations when you have developed this standards. This is to us extremely serious as the effects on peoples livelihood are very grave; loss of food security, water depletion, coastal protection, violence, corruption etc.

Our second comment is that we are against certification of tropical shrimp as we believe there is no sustainable industrial shrimp aquaculture and certification will lead to more shrimp farming and more consumption especially with WWF making a green stamp. If WWF will not get such a bad reputation for doing this that people anyway will refrain from consuming.

As we are late in commenting, we will not comment more at this time.

We will appreciate any feedback to our letter and will be pleased to answer any question you might have to our standpoint.

Sincerely yours,

Monica Erwér, director, *The Swallows India Bangladesh desk, Sweden.*

COMMENT # 23 – Joseph Suresh**Criterion 2.2: Siting in protected areas or critical habitats**

	Remarks
2.2.1	No Change recommended except in the case of traditional land-use. In all others, the farming operation shall cease after a grace period of 5 to 10 years.

Criterion 4.4: Work environment health and safety

	Remarks
4.4.1	100 % without numerical discrimination. (Based on my own personal experience.)

Criterion 5.1: Disease prevention

	Remarks
5.1.5	<8.5

COMMENT # 24 – Dr. Niti Chuchird (Kasetsart University)

Experts' opinions from Fisheries and Environmental Science, Kasetsart University, Bangkok, Thailand

General opinion:

- (1) Most of the main producing countries are not involved in the development of ShaD
- (2) Type of certification should all parallel production with a proper segregation system

About the proposed criteria:

- (1) Principle 2
 - It is not clear how EIA should be studied (esp. biodiversity aspects) and the stakeholder participation should be conducted
- (2) Principle 4
 - Working time recording system is not practical as workers work for a few hours during the day during cultivation period
- (3) Principle 5
 - The survival rate is set too high. It is suggested to change from 70% to 60% due to the practicality in low-salinity shrimp farming system
 - The requirement to control the DO level at 3 ppm is not practical as it will require a huge amount of energy inputted
 - Probiotics should be allowed if they are registered with the relevant authority
- (4) Principle 6
 - The document evidence from hatchery should be sufficient, as this is the farm standard
- (5) Principle 7
 - This clause should be dropped out, as it is very much concerned the confidentiality of feed manufacture which is not practical for them to trace back “all” suppliers as the suppliers change from time to time.
 - This ISEAL-certified fishmeal and fish oil will not be feasible as the supply is not sufficient. There will be the implication on the increased cost of feed and that will have an impact at the farm level. Any standard should not add more production cost to make the business not being able to stay competitive in markets. The same will be the case for using of certified soybean meal.

- It is suggested to consider another indicator such as “Feed Conversion Ratio” or “Feeding management system is in place to monitor the remaining feed and try to minimize that” or “Water/Energy use per ton shrimp produced” instead
- FCR is more appropriate than FFER as this is the farm-level standard
- The nutrient budget cannot be used as the calculation method, as the environmental conditions in each country vary a lot
- Instead of energy use recording, it is suggested to consider the indicator like “Commitment to reduce the energy use for annual production”

COMMENT # 26 – Jake Piscano

Re flagged issue: In my experience, individual ponds give different results, meaning, one pond may give good harvests, while the pond right next to it may give poor or fair harvests. This, of course, is due to properties peculiar to the specific pond. But it might not be advisable for large farms to go into a per pond certification – even for small farms with say 3 – 5 compartments, this might not be necessary. Results from harvests of ponds usually indicate only survival and growth. These parameters will not be reflected to the consumer as processing plants sort stock according to size. If a farm uses antibiotics or chemicals, this will most likely reflect on all its harvests.

Re flagged issue Mangrove Restoration: A standard should be made on the value of ecosystem services lost and this applied to party in question. Often it is only the lumber value of the mangrove that is assessed. The lumber value should also be added to the ecosystem service value to come up with total value.

Re flagged issue Child Labor: Might be hard to implement for family operated farms. But for corporate farms and commercial standard farms, worker age should be at least 17 with an apprenticeship period. Farm work is physically demanding and goes with the tides – particularly for traditional systems.

Guidance for implementation 4.11

In general, sanitation and hygiene in farms is simple. Waste disposal (animal and human) is done in designated areas where the waste is allowed to decompose. Dead animals are buried – particularly if there is a threat of a viral disease.

Most waste is utilized as fertilizer – which might not be welcome to other cultures – but is common in others. What is important here, is that the waste has been allowed to decompose before use as fertilizer.

Re flagged issue 5.1: Survival rates differ in tropical systems even under ideal conditions. Factors include genetics, pond condition and water and the attention of the caretaker to respond immediately to observed changes in the environment or needs of the stock. I agree with your standards here.

Re flagged issues 5.3: Agree on all of these

Re flagged issue Auditability: Going thru the suppliers is more simple – they are less in number, are already controlled by government regulatory and industry bodies – and easily place additional information in their packaging. Stay with this is my comment.

Re Interim Plan for 7.2.1 (7.2.1a and 7.2.1b): Yes. This is necessary as well as orientation for small holding farmers in many countries.

Re GMOs: GMs are still controversial in my country. The greater concern, however, is that GMs are used more as pricing tools rather than increased efficiency of feed.

Re flagged issue Land Animal Byproducts: Most if not all feed manufacturers use animal meal of many kinds. This impacts only on protein available for nutrition of the farmed species and should no longer be placed in labels – as these are already indicated in feed labels. What would be helpful is to make sure that feedmillers accurately label their products. It is a known fact that feed millers use materials “in season”. Meaning they buy during periods of availability and look for alternatives when the needed materials are not available – hence, meat and bone meal maybe replaced by poultry-by product meal or by fishmeal (favoured stock).

Re flagged issue FCR: FCR concerns may be good for those with feeding all throughout the cycle, but many traditional and semi-traditional systems do not do this as they use a variety of fresh (wet) and plant food to reduce their costs.

COMMENT # 27 – Mr. Vu Vi An (Research Institute for Aquaculture 2)

Comments to ShAD:

1. General comment: The standards are comprehensive and detailed. However, it is time-consuming and costly for farmers to apply these standards. It is difficult for the aquaculture farmers (small-scale) to join the certification program without the support from foreign-aided projects or local authorities (technical & funding). Before application, pilot certification program should be implemented in a number of provinces to assess the feasibility of these standards. In addition, the product (shrimp) should have the necessary guarantees (price, stability etc.) so that people can trust and follow accepted standards. The standards are comparatively long, with some unnecessary parts in the "Guidance for Implementation". It should be explicit, precise and understandable.

2. Principle 1: relevant national/local regulations/laws should clearly state (prohibited mechanical, water effluent, labor....) for farmers/auditors to follow/comply/evaluate.

3. Principle 2:

C2.3.2: It is necessary to supplement list of endangered species and key criteria to identify them. In general, this criteria is too general, which causes difficulties for farmers to identify and assess. Therefore, It could be combined with part 2.1 (BEIA).

C2.4.1-3: The requirements in terms of distance to the pond should be clearer and any provisions by the government should be specified. In page 23: River/ canal must have bank of at least 25 m wide of natural land. In my opinion, this is optional: it is only applicable to natural forest land but meaningless to traditional agriculture areas such as the land of Hoa Loi cooperative.

4. Principle 6: Those exotic species which have been recognized to be harmful to the environment should be prohibited. It is, in deed, extremely likely that they will spread out to nature, once they are grown in large scale.

Vietnamese

Ghi Lai

An có 1 số nhận xét và góp ý về tiêu chuẩn Shad như sau:

1. Nhận xét chung: Tiêu chuẩn này đầy đủ và chi tiết. Tuy nhiên để có thể áp dụng được, người dân phải mất nhiều các chi phí phát sinh khác. Mà người dân (quy mô nhỏ) khó có thể áp dụng được nếu không có sự hỗ trợ của các Dự án & chính quyền địa phương (kết thu & kinh phí). Trước khi áp dụng và đưa ra thực tế, cần thí điểm triển khai ở 1 số địa phương để đánh giá tính khả thi của bộ tiêu chuẩn này, sau đó mới khuyến cáo áp dụng. Ngoài ra, số phần (tôm) cần có những báo động cần thiết (giá cả, tính ổn định..) để người dân có thể an tâm và chấp nhận tuân theo tiêu chuẩn này. Bộ tiêu chuẩn tương đối dài, phần "Guidance for Implementation" có chi tiết chi tiết. Cần ngắn gọn & dễ hiểu.

2. Principle 1: các quy định/lưu ý liên quan của nhà nước/địa phương cần nêu chi tiết ở đây (hóa chất cấm sử dụng, nước thải, lao động...) để farmers/auditors có thể dễ dàng nhận thấy và tuân theo/đánh giá.

3. Principle 2:

C2.3.2: Cần bổ sung danh sách các loài động vật đang bị đe dọa cùng các chỉ tiêu cần tuân thủ. Nhìn chung tiêu chuẩn này thực chung chung, có thể gặp chung với phần 2.1 (BEIA), người dân rất khó có thể nhận biết và đánh giá.

C2.4.1-3: Cần rõ ràng và chi tiết hơn về yêu cầu các khoáng cách tối thiểu ao nuôi, nếu có quy định của nhà nước thì cũng cần nêu chi tiết. Trang 23 có quy định: sông/kinh phải có bề rộng ít nhất 25m để tự nhiên. An thực quy định này tùy vào vùng: chi có ý nghĩa đối với đất ruộng tự nhiên, chi đối với vùng nông nghiệp tưới tiêu như HTX Hòa Lợi thì không có ý nghĩa.

4. Principle 6: Đối với những sinh vật ngoại lai nào mà đã được đánh giá là có hại cho môi trường thì cấm luôn. Thực tế cho thấy mất khi đã nuôi tràn lan thì khả năng thoát ra ngoài tự nhiên là hiện nhiên.

An chi có 1 số nhận xét trên.... chi chi rõ ràng, những hy vọng không quá trễ!!!!

Vi An

Mr. VU VI AN

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COMMENT # 28 – Greg Small (Rubicon Resources)

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To: World Wildlife Dialogue Coordinator / Corey Peet

From: Gregg Small, Director of Quality Assurance

Date: January 15, 2011

Subject: Comments on WWF Shrimp Aquaculture Dialogue Draft Standards Version 2.0

Dear Sirs,

The Introduction of the Standard states that: *"The core philosophy, in practice, is that farmers as the*

production experts should be given the freedom to innovate around a collectively-defined environmental or social benchmark.” The final standards focus on “*impacts from the industry include water pollution, disease outbreaks, clearing of mangrove forests and disruptions of community livelihoods*” (WWF request for public comment, Dec 1 2010). This benchmark and focus cannot be achieved in the standard if it favors the largest farmers and farm groups and discriminates against small farmers. The standard states that “*as the production experts (Farmers), should be given the freedom to innovate*” (page 4) but in the following pages the standard takes that freedom away from them through a bureaucracy. It is these small farm groups that represent the majority (number of farmers and number of farms) of shrimp farmers worldwide. It is also these small farmers who are most affected by negative environment damage and social ramifications caused by the industrial sized farms. The small farms and associated communities have the most to gain from a carefully written standard. Both the BAP, Global Gap and Thai Gap programs for shrimp farm better represent the small farms/farmers than this WWF document.

A. Small Farms. The standard, as written is a barrier to these small-scale producers. Page 5 states that the ShAD is only relevant for the top 20% of farms. What happens to the remaining 80% ? The stated goal in a search for Continual Improvement (page 5) but, that is not possible in the remainder of the standard. In fact, as written, it would make it almost impossible and unaffordable for the small farms to participate. Based on the Thailand shrimp industry, only 2% of those small farms could meet the WWF requirements in this standard and these farms would only represent the low intensity Black Tiger farms that don't have any issues associated with energy, feed efficiency ratios, animal welfare issues and effluent discharges. Even family members on small farms are excluded from working their own business (page33, box). Local law should prevail (page 38).

Instead, the Best Aquaculture Practices (BAP) farm standard sets forth a reasonable way to:

- 1) Cluster small farms to reduce auditing costs by grouping farms using a similar water source and using feed from a common supplier. Audited farms would be sub sampled from the entire group annually.
- 2) Feed Efficiency Ratios (Feed Conversion ratio) – should be judged based on continual improvement NOT using a fixed ratio.

B. Social Responsibility section is a process of micro-management and is highly bureaucratic and unnecessary. International standards for Social Responsibility have been well covered under the guidelines presented in SA 8000. A better approach might be to accept the guidelines in the SA 8000 standard.

Examples of over management by this standard:

It is not necessary to provide “Special consideration” (section 4.4.4) to migrant or foreign workers. Such workers are already covered by local labor laws.

Wages in this Standard are to receive pay “greater than or equal to (whichever is highest) to legal minimum wage (section 4.5.2). This clause will make shrimp farms unprofitable with a wildly escalating labor cost.

Employees shall know mechanism for setting wages (section 4.5.3). How will this clause be upheld? Will there be a need for a bureaucracy to uphold all clauses listed here?

C. Ban on Non-indigenous species (section 6.1.1) will eliminate small farm development on the entire continent of Africa. The few shrimp farms that now exist in Africa are large, commercial operations. To impose this requirement now is unfair to Africa because it is an area of the world which has the water resources to support immense small farm development and the economic benefits of responsible shrimp farming in the future.

Instead of the Non-indigenous species requirement, the use of International importations guidelines (section 6.1.2) and the use of effective screens or barriers (section 6.1.3) will be effective to control the risk posed by Non-indigenous species. In addition, the Guidelines BAP Standards Section 8 – Post

larvae Sources (Page 17) refer to governmental regulations and prohibit wild post larvae.

D. Appendix I – Suggested Guidance for a Biodiversity is too expensive for small farms. This will make it impossible for a small farm or a cluster of small farms to operate. The science for assessing biodiversity at the pond issue can be dealt with by a series of questions on Mangrove conservation and Biodiversity Protection and Effluent Management (see BAP Aquaculture Facility Certification / Application/Audit).

E. Appendix II – Guidance for participatory Social Impact Assessment is not needed. Instead, farms can be audited through a series of Pass/Fail questions on Property Rights, Community Relations, Worker Safety and Employee Relations (see BAP Aquaculture Facility Certification / Application/Audit).

F. Steering Committee Representation. The standard, version 2 states the “goal of the ShAD is to follow the ISEAL policies (page 6) but it violates that policy by the high representation of NGO representation on that committee. Out of 14 representatives listed, 10 (71%) are NGO representatives. Only a few are representatives of the processing sector. Does this make up meet the ISEAL requirement for balanced stakeholder participation as represented in the WWF Shrimp Aquaculture Dialogue Process Document? <http://www.isealliance.org/content/standard-setting-code>

ISEAL - Credible Standard-Setting Processes

The Code focuses on the standards development process and on the structure and content of the standard. Key steps in standards development include:

Identifying affected stakeholders and providing them with information about the Code development process and how they can participate

Having public consultations and ensuring that there is a **balance of interests** participating

Ensuring a variety of opinions are given equal weight and providing for balanced decision-making

G. Time line for implementation. Can you provide a timeline for benchmarking, training qualified auditors and possible price breakdowns for the training, updating the future standard needs and fees for farm audits? I recommend the ShAD stakeholders or GSC discuss such costs and procedures with organizations which have undergone this process. I would hope that the BAP would share such details to help your group move forward to the ISO standardization which you desire.

H. Expense of the ShAD audits. Page 7 recognizes that the cost of the audit is significant. Add to the basic audit the number of good intentions written between the lines with Conflict Resolution (page28), p-SIA (page 27) and BEIA (page17), small farms will be crushed by the cost. To avoid an overall exclusionary Standard, these items must be removed.

I. GSC recommendations:

a. 6.2.2. (page 56) Defer to local regulations

b. Principal 7 (page 59) Defer to local experience. Thailand has been regulating their industry with professional staff for over 20 years.

c. Interim Plan 7.2.1 (page 61) Write continual improvement check points into annual inspections. These CI plans will improve the industry gradually.

d. Ban on GM feed (page 65) Require GM feed to be identified in the feed audit. Let the economics and ultimately the marketplace decide.

e. Land Animal Byproducts (page 68) Farming in not “nature” and requiring the shrimp to abide by natural standards while demanding a farm culture is counter intuitive. Why not eliminate farmed product and only accept wild caught shrimp? This Byproduct requirement does not make sense.

f. FCR 7.5.2. Write continual improvement check points into annual inspections. These CI plans will improve the industry gradually.

Gregg Small is the Director of Quality Assurance for Rubicon Resources. He has a Masters degree from the University of Washington in Seafood Policy (School of Marine Affairs). He has audited food processing facilities worldwide for the US FDA Office of Seafood, USDC Seafood Inspection group and as a private consultant. He has also served as an NMFS Fishery Biologist and been employed in seafood production facilities for over 20 years. Rubicon Resources supplies shrimp and other seafood to a variety of customers.

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COMPARISON OF SHRIMP STANDARDS

The Best Aquaculture Practices shrimp standards for farms have been used worldwide for a number of years. The program has evolved at the demands of the retail market and with international NGO input. That program is now an ISO standard under the Global Food Safety Initiative (GFSI). The World Wildlife Shrimp Farm Standard is in the early stages of development. The shrimp dialogues to develop the WWF Standard are ongoing and the Standard is about 75% complete. Draft 2 of the Standard was released late 2010 and the WWF hopes the Standard will be finalized and benchmarked by early 2011. It should be ready to implement in 2012 or 2013 via independent 3rd party auditor. **“BECAUSE WWF REQUIREMENTS ARE NOT FINALIZED OR MAY CHANGE IN THE NEXT FEW MONTHS, THIS A BEST EFFORT TO PREDICT THE FINAL WWF STANDARDS”**

WWF	BAP
STAKEHOLDERS	
<ul style="list-style-type: none"> Primarily NGO groups 	<ul style="list-style-type: none"> Primarily Retailers and Importers
SMALL FARM SUPPORT	
<ul style="list-style-type: none"> Discourages small farms 	<ul style="list-style-type: none"> Encourages up to 50 cluster farms Sharing water supply, feed, broodstock
GOVERNMENT PARTNERSHIP	
<ul style="list-style-type: none"> Not working with governments 	<ul style="list-style-type: none"> Working with Thai Department of Fisheries for standardization
TRACEABILITY	
<ul style="list-style-type: none"> Not required in a specific manner 	<ul style="list-style-type: none"> Mandated to use Trace Register
FARM WATER USE / EXCHANGE	
<ul style="list-style-type: none"> Input water not monitored 	<ul style="list-style-type: none"> Input water is monitored
SOCIAL RESPONSIBILITY AND LABOR	
<ul style="list-style-type: none"> Requires Worker Associations (Unions) Participatory Social Impact Assessment (p-SIA) required 	<ul style="list-style-type: none"> No Union or Association Requirement SA 8000 requirement
FEED MANAGEMENT	
<ul style="list-style-type: none"> Higher demand for meal from vegetable source and less wild feed 	<ul style="list-style-type: none"> Different feed-in / feed-out ratio
SOIL AND WATER CONSERVATION	
<ul style="list-style-type: none"> No salination monitoring and no standards at harvest 	<ul style="list-style-type: none"> Salination is monitored
BROODSTOCK AND GENETICS	
<ul style="list-style-type: none"> No wild stocks in pond 	<ul style="list-style-type: none"> No wild stocks in pond
PATHOGEN CONTROL	
<ul style="list-style-type: none"> Minimal test – only recommended 	<ul style="list-style-type: none"> Mandatory testing
FARM DESIGN AND PLACEMENT	
<ul style="list-style-type: none"> Farms can not block access local population 	<ul style="list-style-type: none"> Access is guaranteed to land and nearby water supplies and fishing
GENERAL ENVIRONMENT ISSUES	
<ul style="list-style-type: none"> Mangroves can not be removed Strict Biodiversity Environmental Impact Assessment requirements 	<ul style="list-style-type: none"> Mangroves can not be removed on new farms & Recommends replanting mangroves on existing farm sites
WORKER SAFETY	
<ul style="list-style-type: none"> Fewer Standards 	<ul style="list-style-type: none"> Safety Standards at each step/location
FARM DESIGN AND MANGROVES	
<ul style="list-style-type: none"> International Standards 	<ul style="list-style-type: none"> Same as WWF
FARM AUDIT EXPENSES	
<ul style="list-style-type: none"> 4-5 Days of audit by 2 auditors BEIA cost prohibitive for small farms P_SIA cost prohibitive for small farms 	<ul style="list-style-type: none"> 1 Day audit by 1 auditor Included in standard audit SA 8000 required in audit

COMMENT # 29 – WWF Malaysia

Upon reviewing the Draft Standards for Responsible Shrimp Aquaculture (Version 2.0), WWF-Malaysia would like to put forward the following comments and recommendations.

Principle/Criterion/ Indicator / Page	Comments / Recommendations
General Comment	<p><u>Comments / Recommendations</u></p> <p>It would be useful for the readers if a glossary to explain certain terms used in the standards is provided.</p>
Definition Page 5	<p><u>Comments / Recommendation</u></p> <p>The term “small holders” needs to be defined.</p>
General comment Incomplete sentence Page 7	<p>The last sentence in this page appears to be incomplete.</p>
General Level of certification – by pond or by farm Page 8	<p><u>Recommendation</u></p> <p>WWF-Malaysia recommends that Criterion 6.2-6.3 of Principle 6 and Criterion 7.1-7.5 of Principle 7 is by pond. All other Principles should be applied for the whole farm.</p> <p><u>Justification</u></p> <p>Whilst WWF-Malaysia understands that such a system might be tedious to implement, we believe that it would allow farmers to offset cost of certification by being able to certify some of their ponds as opposed to the whole farm during the implementation phase of the farm. However, only Criterion 6.2-6.3 of Principle 6 and Criterion 7.1-7.5 of Principle 7 should be allowed to be certified at pond level. Other Principles and Criteria in the standards should be certified on a farm basis as it involves legal, landuse, release of non-indigenous species, environmental, community and workers issues which should not be compromised. With such a certification system, only if the whole farm conforms to Principles 1, 2, 3, 4, 5, Criterion 6.1 of Principle 6 and Criterion 7.6 – 7.8 of Principle 7 should it be allowed to qualify for certification and if some of the ponds conform to Criterion 6.2-6.3 of Principle 6 and Criterion 7.1-7.5 of Principle 7, certification can be given to the respective ponds. If the farm does not conform to Principles 1, 2, 3, 4, 5, Criterion 6.2-6.3 of Principle 6 and Criterion 7.6 – 7.8 of the standards, the farm nor any of the ponds should be allowed to qualify for certification.</p>
Principle 1	

Principle/Criterion/ Indicator / Page	Comments / Recommendations
Criterion 1.1.2 Page 12 Transparency on legal standards	WWF-Malaysia would like to seek clarification if this applies to farm approval conditions set by relevant government agencies (e.g approval conditions in an Environmental Impact Assessment).
Criterion 1.1.2 Page 12 Transparency on legal standards	<p><u>Recommendation</u></p> <p>Re-word the “Standards” to “Government...easily accessible to the public” or include “...easily accessible...” in the definition for “Publicly available” in “Guidance for Implementation” (Page 13)</p> <p><u>Justification</u></p> <p>In some cases, while these documents may be made available to the public, they may not be easily accessible. Therefore it would be good to specify in the standards that the documents should be made easily accessible to the public.</p>
	<p><u>Recommendation</u></p> <p>A maximum time period for the farm operator to respond and provide the documents to members of the public who requests through email or post should be specified in the standards or in the audit checklist and guidance documents that will be developed (Page 5, Para 4).</p> <p><u>Justification</u></p> <p>This will ensure that the documents/information requested by members of the public is provided in a timely manner.</p>
Principle 2	
Criterion 2.1 2.1.1 Page 14	<p>It is stated in the indicator that “Farm owners shall commission or undertake a participatory Biodiversity-inclusive Environmental Impact Assessment (BEIA)...”</p> <p>It is unclear why the indicator is worded as “...commission or undertake...”.</p> <p>It is unclear if the question of the independence of the BEIA study will be addressed.</p>
Criterion 2.1 2.1.1	<p><u>Comment</u></p> <p>In the “Guidance for Implementation” (Page 16), it is stated that local government and at least one civil society organization chosen by the community shall receive a copy of the BEIA. Under the rationale (Page 15)</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
	<p>it is stated that the BEIAs under the ShAD must involve some element of transparency. However, this statement is a little vague. The standard does not specify that the BEIA should be made available to all stakeholders or interested parties.</p> <p><u>Recommendation</u> The standards should state clearly that the BEIA should be made available to all stakeholders and any interested party for review and comments prior to decision making. The comments and recommendations received should also be made available to the public and taken into consideration during decision making.</p> <p><u>Justification</u> This is in the interest of promoting a transparent process which is one of the core principles of the standards. Any interested party should be able to access the BEIA report for review and should be able to provide comments.</p>
<p>Criterion 2.2 Page 16</p>	<p><u>Recommendation</u> “Critical habitat” has been defined as based on the criteria used in the 1984 US Fish and Wildlife Services (Page 21) criteria. WWF-Malaysia recommends that this definition is used as a minimum standard. If there are well defined national interpretations of critical habitats in a country, this can be applied in the standards, provided that the national interpretation is based on a more stringent definition compared with the 1984 US Fish and Wildlife Services criteria.</p> <p><u>Justification</u> In some countries, national interpretations of critical habitats are available. In such cases, it would be more relevant to conform to the national interpretations as long as the national interpretations are more defined within the national/local context and/or utilize more stringent criteria than the 1984 US Fish and Wildlife Services. As such, the standards can prescribe the definition of “Critical Habitats’ as defined in the 1984 US Fish and Wildlife Services is used as a minimum requirement.</p>
<p>Criterion 2.2 Indicator 2.2.2</p>	<p>The indicator and the standards state, “Allowance for siting in mangrove ecosystems, and other natural wetlands of ecological importance as</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
Page 17	<p>determined by the BEIA” and “For ponds built/ permitted before May 1999, farmers are required to compensate/offset impacts as determined by the BEIA” .</p> <p><u>Recommendation</u></p> <p>The sentence is changed to “Allowance for siting in mangrove ecosystems, and other natural wetlands of ecological importance as determined by either the BEIA <u>or national/state/local authority plans/list</u>” and “For ponds built/ permitted before May 1999, farmers are required to compensate/offset impacts as determined by either the BEIA <u>or national/state/local authority plans/list</u>”</p> <p><u>Justification</u></p> <p>In some countries, important mangrove or natural wetland areas are identified in national, state or local landuse plans or lists. These plans are important in the national and/or local context and have to be recognized by the standards. The BEIA should be conducted in a more localized context and even if national, state or local landuse plans have not identified a certain area as an important mangrove or natural wetland area, it is hoped that the BEIA will do so. However, in some cases, national policies of some countries recognize a certain wetland as a sensitive habitat but this might not be reflected in the BEIA. The recommendation above is to overcome this.</p>
Definition of Natural Wetlands Footnote 21 Page 17	<p><u>Comment</u></p> <p>The definition of natural wetlands does not include freshwater swamps.</p> <p><u>Recommendation</u></p> <p>Freshwater swamps are included in the definition of wetlands for the purposes of this standard.</p> <p><u>Justification</u></p> <p>Freshwater ecosystems provide important ecosystem services such as mitigate flood and salinization of soil and groundwater. It is also an important source of livelihood for local communities. As a lot of emphasis is given to mangrove conservation, there is an emerging trend, especially for larger farms, to move further inland where freshwater swamps are located. Thus, in developing countries, there is pressure to convert freshwater swamps to other landuses, including aquaculture leading to</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
	permanent loss of freshwater swamps. In Malaysia for example, freshwater swamps are considered threatened habitats.
Question on compensation requirements Page 18	<p>The GSC is interested in ideas to formulate the compensation requirements for lost mangroves in an appropriate and justifiable way.</p> <p><u>Recommendation</u></p> <ul style="list-style-type: none"> a) The BEIA or another tool can be used to assess the ecosystem services lost and allow the farm to mitigate these. However, the term “flexible ways” needs to be defined. b) It is unclear why the compensation requirement is only applicable only for mangroves and not all natural wetlands. Compensation requirements should be applicable for all types of wetlands. <p><u>Justification</u></p> <ul style="list-style-type: none"> a) It might be difficult for the standards to specify the requirements for compensation as compensation could be area specific. b) Not only mangroves but other types of natural wetlands are rich in biodiversity and provide ecosystem services and the loss of these natural wetlands also needs to be compensated.
2.2.1 Guidance for Implementation Page 19	According to the text (last para, second last line), ponds can also be built in floodplains provided the hydrology of the area is maintained and a percentage of the natural land is not developed. If ponds are allowed in floodplains, it has to be ensured that the ponds are not raised to mitigate flooding in the farm as this would worsen flooding in adjacent areas.
2.3.1 Guidance for Implementation Page 21	<p>According to the text, big farms shall seek an expert opinion while small farms may consider including local stakeholders</p> <p><u>Comment</u></p> <p>It would be good if big, medium and small farms is defined in the standards itself instead of in the Suggested Guidance for a BEIA (Page 80, Appendix 1)</p>
Criterion 2.4 2.4.1 Coastal Barriers Indicator Page 21	<p>The indicator states “Minimum barrier (manmade or natural) between farm and aquatic or marine environments.”</p> <p><u>Recommendation</u></p> <p>The word “manmade” should be omitted from the standards. New farms should ensure that they have natural barriers and should not be allowed</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
	<p>to construct barriers.</p> <p><u>Justification</u></p> <p>Manmade barriers such as seawalls will cause coastal processes to change and it could cause coastal erosion even a few kilometers away from where it is constructed. Construction of seawalls in or near turtle nesting beaches, for example, could result in loss of nesting beaches in the long term. Therefore, creating manmade structure as coastal barriers for aquaculture farms should not be allowed for new farms.</p>
<p>Criterion 2.4 2.4.1 Coastal Barriers Standards Page 21</p>	<p>The standards state “As defined in national legislation or as determined is necessary by the BEIA at the time of construction, whichever is greater. The BEIA must assess risks associated with 25-year storm or flood risk”</p> <p><u>Recommendation</u></p> <p>The BEIA must assess risks associated with 100-year storm or flood risk.</p> <p><u>Justification</u></p> <p>The impact of climate change and increase in frequency of storm surges and extreme flood events should be taken into consideration when preparing the BEIA Thus assessing a 25-year storm or flood risk is no longer sufficient. A 100-year flood or storm risk should be taken into consideration.</p>
<p>Coastal and Riparian Buffers Pages 21-23</p>	<p><u>Comment</u></p> <p>In the previous draft standards, a minimum buffer of 100m of buffer was specified in the “Standards” itself. In this revised document, it is specified in the “Guidance for Implementation”.</p> <p>WWF-Malaysia seeks clarification on how the “Standards” differs from “Guidance for Implementation”. Page 11 of the draft standards implies that the guidance section provides further explanations of how each standard will be interpreted by auditors or implemented at the farm level. However, it is unclear if it is compulsory for operators to implement measures specified in the “Guidance for Implementation” or if it only serves as a guide. For example, 2.4.1 or 2.4.2 can be interpreted as the minimum width of coastal barriers / riparian buffers is as defined by national legislation or as determined by the BEIA (as specified in the “Standards”). However, in the “Guidance for Implementation” (Page23), a minimum of 100m buffer for coastlines and a minimum of 25m for</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
	<p>riparian buffers is specified. If the national legislation states that a minimum buffer of only 25m is required for coastal areas, it could create confusion as to which specification the farm operator should follow; the national legislation as specified in the “Standards” or the minimum of 100m as specified in the Guidance for Implementation.</p> <p><u>Recommendation</u></p> <p>The standards should specify very clearly that measures in the “Guidance for Implementation” should be implemented by farms intending to be certified. On the issue of coastal / riparian buffers, the minimum width specified in the “Guidance for implementation” of these standards should be followed (i.e minimum of 100m for coastal and minimum of 25m on both sides for riparian buffers).</p>
<p>Coastal and Riparian Buffers Pages 21</p>	<p>In the “Standards”, it is stated that the minimum width of coastal / riparian buffers is “As defined in the national legislation or as determined is necessary by BEIA at the time of construction, whichever is greater”.</p> <p><u>Recommendation</u></p> <p>The “Standards” is reworded to,</p> <ul style="list-style-type: none"> a) “As defined in national legislation at the time of construction, as determined is necessary by the BEIA, or 100m whichever is greater” for 2.4.1 and b) “As defined in national legislation at the time of construction, as determined is necessary by the BEIA, or 25m wide on both sides, whichever is greater” <p><u>Justification</u></p> <p>Some countries do not have national legislation on buffers and it could be difficult to control the independence of a BEIA. To overcome this, the standards should specify a minimum buffer zone. If a minimum 100m buffer (for coastal) or 25m (for riparian) cannot be adhered to due to constraints (such as land constraints), the BEIA should identify this clearly in the report and provide appropriate recommendations.</p>
<p>Coastal and Riparian Buffers 2.4.1 & 2.4.2 Guidance for</p>	<p>It is stated “For riparian buffers, vegetation must be undisturbed and permanent...” and “For open coastlines and adjacent natural water bodies, the zone of undisturbed vegetation...”.</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
Implementation Page 23	<p><u>Recommendation</u></p> <p>Replace “undisturbed” with “native and natural”.</p> <p><u>Justification</u></p> <p>Natural disturbances to riparian and coastal vegetation occur due to various reasons, for example erosion. As such, it might be more relevant to use the term “native and natural” instead of “undisturbed”.</p>
Criterion 2.5 2.5.3 Page 23	<p><u>Comment</u></p> <p>The “Standards” specify “Specific conductance <1,500 µmhos/cm or chloride concentration <300 mg/L”. These standards are for release of saline water into freshwater ecosystem from one farm. It is unclear how cumulative impacts will be addressed. This is especially important in freshwater bodies that are habitats to endangered species or freshwater resources that are utilized by local communities.</p> <p><u>Recommendation</u></p> <p>One possible way to overcome this problem is to identify cumulative impacts in the BEIA. If the freshwater body has reached a threshold and more saline water cannot be diluted by the freshwater body, a farm should not be allowed to operate in the area. If a farm does start operations and releases saline water into the freshwater body (even it conforms to specific conductance <1,500 µmhos/cm or chloride concentration <300 mg/L), the farm should not be certified.</p>
2.5.1 Guidance for implementation Page 25	<p><u>Recommendation</u></p> <p>For large farms, the standards should make it compulsory for ponds and canals to be lined with waterproof material.</p>
2.5.5 Page 24 Criterion 7.6 7.6.3 Page 71 (Disposal of sediment/sludge)	<p>The sediment disposal area should be identified in the BEIA or the farm management plan and approved by relevant authorities.</p>
Principle 3	
Criterion 3.1	<p><u>Comment</u></p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
<p>Rationale Page 27-28</p>	<p>In the text, the United Nations Declaration on Rights of Indigenous People is referred to as IRPA. This is not accurate as the IPRA is not the same as the UNDRIP. The IPRA is an Act that is relevant to the Philippines.</p> <p><u>Recommendation</u> Include the United Nations Declaration on the Rights of Indigenous People (UNDRIP) as the international agreement to ensure social standards.</p> <hr/> <p><u>Comment</u> According to the text in the “Rationale”, “Where the UN agreement on ethnic minorities and indigenous peoples (IPRA) applies, the concept of ‘free and prior informed consent’ shall form the basis of the dialogue and negotiations”. This can be interpreted as “free and prior informed consent” only applies to ethnic minorities and indigenous peoples and not necessarily all local communities.</p> <p><u>Recommendation</u> The “free and prior informed consent should apply not only ethnic minorities and indigenous peoples but all local communities that could be potentially impacted by the farm.</p> <p><u>Justification</u> In many cases, the local communities who could be potentially affected may not necessarily be ethnic minorities or indigenous peoples.</p>
<p>Criterion 3.2 3.2.1 Page 28</p>	<p><u>Recommendation</u> Specific Conflict Resolution guidelines be developed with stakeholders involved (i.e. detailed in a flow chart the recourse and the process of resolution). The guidelines need to be socialized to the community as it important for the community to be educated on the process so they are aware of the recourse they have in the event of a conflict.</p> <p><u>Justification</u> Policies would normally be rather general and doesn’t necessarily provide a detailed process of how conflicts should be managed and resolved. It might be better to specify the details in the form of a “Conflict Resolution” guideline.</p>
<p>Principle 5</p>	

Principle/Criterion/ Indicator / Page	Comments / Recommendations
Criterion 5.1 5.1.2 Page 44	<p><u>Recommendation</u></p> <p>The “Standards” specifies that a written plan which includes a monitoring protocol is in place to mitigate the spread of diseases.</p> <p><u>Justification</u></p> <p>It is unclear how the farm operator will “demonstrate consideration”. It would also be difficult for the assessor to evaluate whether the farm operator has “demonstrated consideration” if a written plan and monitoring protocol is not in place.</p>
Criterion 5.2 5.2.2 Page 48	<p><u>Recommendation</u></p> <p>Suggest changing “Allowance for use of lead shot and select chemicals for predator control” to “Allowance for use of lead shot, select chemicals or alien/introduced species for predator control”.</p> <p><u>Justification</u></p> <p>Introduced/alien species that are used for predator control could cause negative impacts to the ecosystem.</p>
Criterion 5.3 5.3.1 Page 49	<p><u>Recommendation</u></p> <p>WWF-Malaysia recommends that only Option 1 is retained.</p> <p><u>Justification</u></p> <p>Option 2 creates loopholes in the certification.</p>
Criterion 6.1 6.1.1 Page 52	<p><u>Comment</u></p> <p>The term “locally” needs to be defined. Does it refer to the whole country, geographical context or a particular local area / ecosystem?</p> <p><u>Recommendation</u></p> <p>It could be defined as a particular river basin in an area or river ecosystem.</p> <p><u>Justification</u></p> <p>Certain non-indigenous species may have already been introduced in a country or geographical area but not necessarily into a particular river ecosystem/river basin. As such it is important to ensure that these non-indigenous species are not introduced in new river ecosystems / areas.</p>
6.1.3 (B) Page 52	<p><u>Comment</u></p> <p>Exceptional flood events needs to be defined.</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
	<p><u>Recommendation</u> Define exceptional flood events as “100-year flood events”.</p>
<p>Criterion 6.3 6.3.1 Rationale Page 58</p>	<p><u>Recommendation</u> Remove the phrase “genetically enhanced”.</p> <p><u>Justification</u> The indicator is only for transgenic shrimp and genetic enhancement is a natural process.</p>
Principle 7	
<p>Criterion 7.6 7.6.3 Guidance for Implementation Page 74</p>	<p><u>Comment</u> According to the text (para 2, second last sentence), “Alternatively, grassed strips or vegetated ditches and mangrove areas or other wetlands have been used for treating freshwater effluents”. Does this mean that the standards accept this as a method for treating farm effluents?</p> <p><u>Recommendation</u> The use of grassed strips, vegetated ditches or mangrove areas should not be encouraged as an effluent treatment method.</p> <p><u>Justification</u> The capacity of the grassed strips, vegetated ditches or mangrove areas to treat the effluent efficiently will need to be assessed. The impact of the effluent on the vegetation should also be assessed prior to utilizing these areas for effluent treatment. As such the standards should not encourage the use of these areas for effluent treatment purposes.</p>
<p>Criterion 7.6 7.6.3 Guidance for Implementation Page 75</p>	<p>It is stated in the text that some farms will discharge effluents directly to the sea.</p> <p><u>Recommendation</u> For farms that intend to release effluents directly to the sea, the effluent discharge point in the sea must be determined taking into consideration the coastal hydraulics of the area.</p> <p><u>Justification</u> Whilst the sea will have large mixing/dilution factor, coastal hydraulics needs to be taken into consideration to ensure that the effluents</p>

Principle/Criterion/ Indicator / Page	Comments / Recommendations
	discharged directly into the sea undergoes optimal mixing/ dilution and is not washed back into the coastal area and pollute the area. This is especially important in areas where there are recreational beaches, threatened / endangered species or if there are many farms that are discharging effluents directly into the sea.

COMMENT # 30 – Dr. Stanley Chia

Comments on Second Draft of Standards for Responsible Shrimp Aquaculture 01 December 2010

1. How does WWF certify the auditor?

- Qualification of auditor (educational background, prerequisite requirements, etc.)

- Training of auditor (conducted by what organization, training program, etc.)

- Re-certification program

2. What are the criteria to determine the unit of certification for a group or cluster of independently – owned facilities or operation?

3. What is the cost of an audit? Since it may require 4-5 days auditing with two auditors. Small farmers with their financial inability to pay for higher audit costs should be considered.

4. Page 8 – Farm Level vs. Pond Level Certification

A. Should compliant and non-complaint ponds be allowed on the same farm?

It should be “All or None” because it would be difficult to ensure products of non-certified ponds are not mixed with product from certified ponds. In other words, how can full traceability be ensured if complaint and non-complaint ponds are in the same farm?

5. Criterion 1.1.2

“Publicly Available” should also imply available when asked by an auditor. Or the local authority should take a lead to assist the farmers by posting on the government website.

6. Criterion 2.1 Biodiversity Environmental Impact Assessment (BEIA)

This requirement will increase costs for farmers, particularly for small farmers. How does WWF recognize an NGO or ecologist is qualified to conduct BEIA? Should NGOs or ecologists be accredited? Besides, the farmers have to be trained on how to conduct BEIA (identify and address the impact on biodiversity and ecosystem in their farming areas.

7. Criterion 2.2.2 Allowance for siting in mangrove ecosystems, and other natural wetlands of ecological

importance as determined by the BEIA.

For farms built before 1999, farmers should obey what the government laws required. Government laws (e.g.Vietnam) allow cutting of mangrove as additional income for small farmers but the laws also require replanting/restoring of mangrove. However, new farms are not allowed to be built in mangrove ecosystems or other natural wetlands of ecological importance. The replanting/restoring of mangroves should comply with the regulations for that particular country.

8. Criterion 2.3.2 Maintaining habitats critical for endangered species within farm boundaries

Farmers should work with ecologist and local government officials to identify and protect critical

habitats for species at risk in areas where shrimp farms are located.

9. Criterion 2.4 Ecological buffers, barriers and corridors

The guidance for implementation of this standard is difficult to understand. WWF should provide more details.

10. Criterion 4.1 Child Labor and Young Workers

It should follow the national labor laws in that particular country. 18 years of age is too strict. How about children and young workers that are the family members? Should there be an exception in this standard?

11. Criterion 4.11 Living conditions for employees accommodated on the farm

This standard should be flexible, depending on cultural factors of that particular country.

12. Criterion 5.3 Disease Management and Treatment

All certified farms should not use antibiotics.

13. Criterion 5.3.6 Use of Probiotic Bacteria Strains

Understood the definition is being developed. This will be difficult to determine who the appropriate authority should be.

14. Principle 6: Management Broodstock Origin, Stock Selection and Effects of Stock Management

Agree with removing this standard since it will be very challenging for auditors to verify. This standard will be included when the auditors are able to validate in the future.

15. Criterion 6.2. Origin of Post Larvae or Broodstock

6.2.2 – How was it determined that “6 years” would be the allotted time to require 100% P. monodon to be from closed loop hatchery? It should say, “100% P. monodon when it is available on a commercial scale.”

6.2.3 – If a standard is not auditable, then it needs to be removed. Not necessary to include this standard.

16. Principle 7 Use Resources in an Environmentally Efficiently and Responsible Manner

This standard needs to be addressed elsewhere. It should not be included in the audit criteria since it is mostly related to the feed industry. Farmers can decide what feed to buy but they cannot control how it is made. Therefore, a separate standard should be established for feed suppliers

COMMENT # 31 – Mark Nijhof (Heiploeg Group of Companies)

Mark Nijhof, Heiploeg Group of Companies, P.O. Box 2, 9974 ZG Zoutkamp, The Netherlands.
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Introduction.

Please find below my personal comments on the Draft ShAD V.2.0. I am delighted to comment on this valuable document, thereby contributing to the continuous improvement of farmed shrimp. I have made this document primarily from my personal viewpoint. Although written without consultation of colleagues and relations, it may be regarded as the input from Heiploeg Group of Companies and the GLOBALGAP Sector Committee Aquaculture. This document may be made available to any reader without prior notification to me.

Page. 7. Species covered by the ShAD.

I would like to plead for inclusion of species from the genus *Metapenaeus* in the scope of certification

as well. The *Metapenaeus monoceros* is a species currently being farmed at significant scale in Asia applying best aquaculture principles and surely does not deserve exclusion at this point.

In addition, *Macrobrachium rosenbergii* is also farmed using farming methods very comparable (if not identical) to that of Penaeid species. In view of the quantitative and commercial importance of this species, I would suggest inclusion in the scope as well.

Page 8; Unit of Certification (UFC)

Please find my suggestions on the following questions (taken from the draft ShAD) to the public:

A) Should compliant and non-compliant ponds be allowed on the same farm?

B) Should the farm lose its certification if one pond becomes non-compliant, or should those ponds be discarded from the products that will have the right to carry the ASC logo?

C) Should there be exceptions? If so, what should they be?

D) Who will decide and what is the process for evaluating those exceptions?

In my view this is unacceptable to allow 'partial certification' (only parts of a farm certified). Any standard stipulates management criteria for the whole farm; not for individual production units (ponds, tanks, etc). It can never therefore be the case that the content of one production unit causes noncompliance, as the standard is about farm management. If however the results observed in one production unit reflects overall insufficient farm management, there is indeed a certification issue. I think we come to the subject of 'level of compliance' (should a farm have 100,0% score?).

Page 12; legal compliance

The standard reads: "Proofs of permits relevant to developing, establishing, and operating a shrimp farm are available".

I would like to suggest following formulation on basis of the rationale 1.1.1:

"A written assessment of all operational activities and applicable relevant legislation, combined with proofs of permits relevant to developing, establishing, and operating a shrimp farm are available."

Page 16; question to public on 'mangrove compensation'

It seems to the opinion of the author rather uncertain whether some observed mangrove replanting activities observed actually anticipate on the ecological impacts of mangrove deforestation due to shrimp culture. Mangrove areas are ecologically valuable areas for effective coastal protection and for supporting a wide and specialized biodiversity functioning as breeding ground for many species in the adjacent seas. In many projects, it has been observed by me that mangrove trees were planted in other often more land-locked areas. The ecological value of mangrove trees on any other place then the direct shore line (e.g on the shrimp farms themselves) seems entirely absent to me. There is apparently a misunderstanding that 'any mangrove tree, wherever' is a valuable compensation.

'Reforestation in an equivalent area' (p.19) therefore seems insufficient. Effective mangrove restoration seems only effectively implemented by lengthy coastal areas having a buffer zone of an ecologically relevant width and left in undisturbed condition.

Mangrove trees planted on the farms; absent ecological value. Kalimantan, Indonesia, October 2010 (Picture and audit by the author)

Page 18-19; geographical area.

The text reads:

The location of a farm relative to protected areas will be determined via the farms geographical coordinates. These coordinates will be provided to the auditor (degrees and minutes latitude and longitude) with an accuracy of two decimals in the geographical minutes (e.g. 15° 22,65' N ; 22°43,78' E).

It should be added in the text between brackets:...(degrees and minutes latitude and longitude using WGS84 coordinates)...

There are (or have been) many GPS systems in use world wide, which may cause deviations of about 300 m accuracy if compared to eg. ED-50 system coordinates. WGS84 is today's standard.

Page.23 Riparian buffer.

This paragraph 2.4.1 mandates buffer zones of considerable proportions, rarely found in practise. I would suggest to delete the 100 m and 25 m limits and to have the dimensions of these borders motivated by the BEIA.

P.33, discrimination.

Point 4.3.1 prescribes no discrimination for any job with respect to gender and age as well. This is not in line with generally accepted criteria for job selection. Employers may for sure give preference for certain jobs to certain employees on basis of gender and age. Shrimp farms for instance mostly employ guards. Selecting physically fit adult men as watchman, potentially exposed to harshness, is a good practise in view of worker safety and well-being.

Page 44

On page 4, it is clearly stated that the ShAD shall address 'social and environmental impacts of shrimp farming' . From that perspective, health care of shrimp in order to minimize the emission of drug residues and pathogens into the environment is very sensible. 5.1.1 however only relates to human food safety (and is in fact covered by legal compliance) and can in my view better be omitted.

5.1.2 is to my opinion inadequate. I would like to refer to the GLOBALGAP standard ('veterinary health plan' as a better alternative. I am happy to make it available upon request.

At last, the pond survival is a parameter only addressing animal health and well-being without any sensible link to environmental or ecological impacts. I would suggest omitting the 'survival' criterion, as it cannot really be audited as well (see also FCR).

Page 49.

The discussion on antibiotics in feed can in my view be finished straightforward. Antibiotics in feed is allowed as long as it is within the legal framework as stipulated in 5.1.1. The standard is not about human nutritional issues. As ASC is a process-certification (not a product-certification), there should be no option for 'allowance without label', especially as this latter cannot be audited on site!!!

Page 49; neutralisation of hazardous chemicals.

The degree in which a chemical compound is 'hazardous' depends on its concentration and therefore often on its application. Example: pure sodiummetabisulphite powder is as such a hazardous (irritating) chemical, thus upon application, it is hazardous to the workers. Once in the product (50 mg/kg) it is not 'hazardous' for those handling the shrimp. My suggestion: don't distinguish between 'hazardous' and 'non hazardous' chemicals; take all chemicals into account. It is stated that 'neutralisation' of compounds must be interpreted as 'broken down'. This is very often not the case. Chemicals will in many cases be diluted to harmless concentrations and be broken down in the environment by biodegradation. This is not a 'bad practise'!

My suggestion: Use and discharge of each individual chemical should be subject to the BEIA where the minimal ecological en environmental consequences should be motivated.

Page 56 origin Brood stock

Indeed, the term 'established fishery management plan' doesn't say anything about that fisheries!! I also suggest omitting this control point on basis of auditability.

Page 56 wild-caught PL.

In some most extensive forms of aquaculture, PL's come in by the inlet water and are thus not actively 'caught'. Similarly, in bi-valve culture, mussel seeds may attach on substrates (e.g ropes) hung in the water column. This passive collection from the planktonic phase is not regarded as a 'bad ecological practise' and should in my view be allowed.

Page 59 and following; Feed.

As recognized by the ShAD, most of these criteria cannot be audited on farm and even documented evidence should be preceded by audits at feed mills etcetera.

Therefore I advice to follow the same methodology as GLOBALGAP in which only feeds from audited and certified feed companies may be used. Chapter 7 is best effectuated in a separate 'feed dialogue standard'.

Page 60 use of Penaeid shrimp derived feed ingredients.

This criteria seems to me rather misplaced at this point. I relates to ethical aspects in the realm of perceived animal well-being ('forced cannibalism') as well as to veterinary principles. This is not at all what the ShAD was supposed to be about (page 4). I would suggest omitting this criterion; re-use of the shrimp wastes in shrimp feed is encountered very often and not in disagreement of the general spirit of ShAD.

Page 68-69 Feed conversion.

> On farms, it can be audited if management systems are in place allowing the accurate determination of Feed Conversion Ratios. However, asking for the actual FCR value itself is not regarded as 'auditing'. Certification bodies will certainly bring this forward.

> Another aspect regarding FCR is the estimation of standing stock. At any moment of farming, there are records available of feed purchased and shrimp harvested. There is also a very substantial biomass (shrimp) in the ponds that has ingested a known amount of feed, but the true quantity of this shrimp biomass can only be estimated. This leads to an inevitable inaccuracy in FCR assumptions.

Only if the 'completely finished' productions from the past are taken into account, FCR can be calculated.

> FCR's are expressed in 'kilo per kilo'. A kilo of feed containing more lipids (40 kJ/g) provides often better (lower) results as opposed to more carbohydrate (17 kJ/g) containing feeds, although the energetic efficiency of the fatty feed may be even poorer! The same holds for the shrimp; if the farmed shrimp contains more energy (lipids), the farming is energetically more efficient. Therefore, 7.5.2 has very little meaning to me. Similar to Phosphorus and Nitrogen, 'energy retention efficiency' is better in place then FCR.

P.68. FFER

I would like to present the following line of thought to the ShAD committee:

> Given the fact that fish meal and fish oil of responsible sources is available, it is best used in aquaculture compared to other goals (e.g poultry, pork) as its unique nutritional values (unsaturated fatty acids) can only be passed on to man through aquatic animals.

Provided there is some common sense in this statement, it makes minimizing the FFER ratios very questionable!

Page 71 and following; sludge / DO

Similar to the maximum amount of Nitrogen and Phosphorus (through both feed and fertilizer!), a

maximum of 'total organic matter' (expressed as COD) can be implemented, to overcome the above mentioned problem associated with FCR and feed composition (differences in energy density of feed).

It also compensates for fertilizer COD input. I have communicated this before to Eric Bernard, partly by a scientific paper from myself on this topic and I am pleased to give further advice on this matter. The discharge of 'organic matter' should in my view be dealt with in the BEIA, where quantity, receiving water body etc. is addressed.

These criteria (COD input and BEIA) should in my view replace the rather cumbersome criteria with regard to settling ponds (they only collect sludge; the disposal problem remains) and oxygen fluctuations in receiving water body.

Page 75. Handling of chemicals & personal safety

This paragraph relates to 'environmental care' as uncontrolled emission of chemicals is addressed. To some extent, handling of chemicals also relates to 'workers safety' and is often seen as a basic principle prior to Chapter 4 ('social compliance'). Is the refraining from workers' safety criteria (first aid, emergency procedures, training & personal protection handling chemicals, etc) a deliberate choice of ShAD?



(Example worker safety: as these little boats are worn down, employees use polystyrene blocks as 'boat' for farm operations, without life jackets or swimming skills...)

COMMENT #32 – Rujinop Tanjaturon (Seafresh)

Comments from Seafresh Industry, Thailand, Contact: Mr. Rujinop Tanjaturon, Email:

rujinop@seafresh.com

General comments

As a processor and worldwide exporter of shrimp products, we are concerned by the number of different specific requirements coming from various markets that are difficult for farmers to handle, especially when there are implications on production cost. As a result, although we appreciate the intention of the ShAD to provide strict criteria for defining responsible farming, we ask the ShAD to carefully consider the limited level of influence of farmers on hatcheries and feed companies, and the cost implications of the requirements. In particular, we are very concerned by the cost implications of BEIA requirements and feed requirements. It is even unclear for us how feasible some requirements on feed ingredients sustainability would be in Thailand. We think that it is unfair to put the burden of some requirements dealing with broodstock origin (Principle 6) and feed

ingredients (Principle 7) on farmers that have no influence or even information on these aspects, and that separate hatchery and feed standards should be developed to address these aspects.

Comments on farm level vs pond level certification:

A. As a processor, we would prefer that all ponds are compliant for certification. Although we ensure traceability of our products back to individual ponds, separating products from different ponds result in complications for making sure products are kept separate along the chain of custody. Also, if these standards provide a reasonable and practical definition of responsible farming, what would justify having non-compliant ponds? It would mean that the standards are too strict to apply in all ponds and therefore the standards should be modified.

B. To be consistent with point A, there should be some flexibility in the standards so that a farm does not lose its certification because of one non-compliant pond. Otherwise, the certification is going to be difficult to handle commercially.

C. In relation with point A, if some indicators might result in some non-compliant ponds within a certified farm, then considering exceptions is an option. For example for feed ingredients: what if the availability of such ingredients is not sufficient for covering the whole production of a large farm? We think that the standards should be flexible and practical enough so there is no need for considering exceptions.

Criterion 1.1: Documented Compliance with Local and National Legal Requirements

	Comments
1.1.1	In Thailand, permit of operation is based on: <ul style="list-style-type: none"> - Property title - Farm registration by Department of Fisheries (DoF). - Good Aquaculture Practices (GAP) certification by DoF, which implies verification of the above.
1.1.2	The GAP certificate can be displayed in farms and the general public can also check on DoF website.

Criterion 2.1: Biodiversity Environmental Impact Assessment (BEIA)

	Comments
2.1.1	Performing an EIA is not a legal requirement for shrimp farms in Thailand, and all the farms we know have not done any. Consequently, we are concerned by the cost of BEIA, which is likely to result in the Thai industry opposing the ASC certification. The cost is a special concern to small farmers. In the case of small farmers scattered over a large area, it is not clear how the scale of study would be defined. Also, it is unclear what expertise in that area could be available to shrimp farmers. It is particularly concerning in the case of small farmers that do not have connections with NGOs or Universities in most cases.

Criterion 2.2: Siting in protected areas or critical habitats

	Comments
2.2.1	The Thai government is progressively increasing PAs and in many cases that resulted in human activities, including aquaculture, being present within the new boundaries of a PA. The Thai government has issued a decision allowing these people to continue their activity, and that applies to any PA independently of its category. Therefore, although we agree that new shrimp farms should not be built in PAs, the case of ponds built prior to the designation or extension of the PA should be considered according to local legal dispositions.

2.2.2	- New GAP requirements include that farms must be located outside mangrove and wetland areas. Therefore we feel that this aspect could be checked by the auditor and there is no need to commission an expensive BEIA to verify this point.
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Comments on compensation measures:

In Thailand, reforestation programs are coordinated by the Ministry of Natural Resources and local Forestry Services with the participation of local communities, including shrimp farmers. Numerous mangrove planting programs are developed in Thailand, and the requirement should be to participate to these government reforestation programs. The Forestry Department should determine species and areas to be replanted. Certified farms could get credit based on the number of trees planted or area reforested.

Criterion 2.3: Consideration of habitats critical for endangered species

	Comments
2.3.2	This does not seem to be applicable to most farms we know because properties are all developed for shrimp ponds and sometimes plantations.

Criterion 2.4: Ecological buffers, barriers and corridors

	Comments
2.4.1	We find the word “coastal” confusing. Most farms are remote from the sea and pump water from estuaries and canals. Additionally, this is not covered in national legislation and no BEIA is required before construction. Therefore, we do not understand how this could be applied.
2.4.2	Similar comment as for previous indicator: this is not covered in national legislation and no BEIA was done before construction.
2.4.3	We do not understand how this could apply to existing farms because ponds and canals constitute physical barriers through the farms. Beside most farms have been built on land previously modified for agriculture or other uses and natural vegetation have already been disturbed.

Criterion 2.5: Prevention of salinization of adjacent freshwater and soil resources

	Comments
2.5.1	Farmers do not do this sort of measurement and feasibility would have to be verified.
2.5.3	Farmers do not have tool to measure specific conductance
2.5.4	Farmers do not have tool to measure specific conductance
2.5.5	Sediment is commonly used as fertilizer, especially in palm tree plantations. This practice has not shown negative impacts. Farmers let sediment dry on farm for a few years before using as a fertilizer, but they do not measure conductance or chloride.

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

	Comments
3.1.1	We do not know any farm that would have done a pSIA and it is unclear what expertise might be available for doing this. Small and medium-scale farmers deal with issues locally within their community but this is not documented. We suggest that a simpler requirement is that some local stakeholder records minutes of meetings and decisions.

Criterion 3.2: Complaints by affected stakeholders are being resolved

	Comments
3.2.1	Again, small and medium-scale farmers deal with issues locally within their community and the elected community leader has the charge of resolving any dispute. We do not think that asking farmers to write policies would help in any way this process. A simple verification that conflicts are resolved is to interview the community leader.

Criterion 3.3: Transparency in providing employment opportunities within local communities

	Comments
3.3.1	In Thailand, most shrimp farm workers come from poor areas of the North and from Myanmar. Locals are not interested in the job because 24-h duty imposes to live on the farm. Besides, many other jobs are available to locals.
3.3.2	We do not think that this should apply to small farmers.

Criterion 3.4: Contract farming arrangements (if practiced) are fair and transparent to the contract farmer

We agree with these requirements.

Criterion 4.1: Child labor and young workers**Comments on minimum age:**

All medium and large-scale farms we know only employ people over 18, but we think that in the case of small farmers, their children might want to work on the farm with their parents before 18, and therefore we support the current proposal of 15.

Criterion 4.3: Discrimination in the work environment

	Comments
4.3.1	We do not think that this should apply to small farmers.
4.3.2	We do not think that this should apply to small farmers.

Criterion 4.4: Work environment health and safety

	Comments
4.4.4	In Thailand, all people, including foreigners holding a work permit, have access to government medical facilities at no charge. This should be acceptable under these standards.

Criterion 4.5: Fair wages

	Comments
4.5.1	Thailand has a good system in place for setting minimum wages in the different provinces based on local cost of living. This should be the basis used for Thailand. Shrimp farm workers usually get additional bonuses based on harvest, which would have to be considered as part of their wage.

Criterion 4.6: Access to freedom of association and the right to collective bargaining

	Comments
4.6.1	We do not think that this should apply to small farmers. It is unclear how this would apply to other farms. Trace unions are not represented among the shrimp industry and we do not know any farm that would have a worker organization. In this case, how can they demonstrate compliance?

4.6.2	We do not think that this should apply to small farmers.
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Criterion 4.8: Overtime compensation and working hours

	Comments
4.8.1	In Thailand, farm workers usually live on the farm and are on 24-h duty in case of emergency but they do less than 8h of effective work per day. The requirements need to accommodate that reality and not consider all time on site as “stand-by” hours.
4.8.4	It is unclear how this would be applied to workers on 24-h duty.

Criterion 4.9: Employee and worker contracts are fair and transparent

	Comments
4.9.1	Nationals do not need work permit, so that should only apply to foreign workers.

Criterion 4.10: Fair and transparent worker management systems

	Comments
4.10.1	We do not think that this should apply to small farmers.

Criterion 4.11: Living conditions for employees accommodated on the farm

Suggestions for defining good living conditions:

Waterproof roof and walls. Walls should be made of concrete or wood or other similar material sealing well and isolating from excessive heat. The rooms must be well ventilated and lit. The floor must isolate from humidity and animals. A locking door should be present. Clean toilets. Some furniture should be provided for keeping belongings, but beds should not be an obligation. Most Thai people prefer to sleep on hard surfaces.

Criterion 5.1: Disease prevention

	Comments
5.1.1	In Thailand, the DoF publishes lists of products authorized in aquaculture.
5.1.2	Small farmers will have limited technical and financial capacity to implement a sophisticated health plan.
5.1.4	All ponds we know are equipped with mechanical aeration and the usual target is 4ppm to not drop below 3ppm, therefore we agree with the standard. However, small farmers cannot afford an oxygen meter and adapt aeration power based on their experience. A simple way of demonstrating compliance should be considered, such as periodic verifications so that they do not have to invest in DO meter.
5.1.5	This is done by all farmers.
5.1.6	All our farmers run fed and permanently aerated ponds and have experienced a drop in survival in 2010 from >80% to 70+%, using postlarvae from the same hatcheries and the same pond management. We think that PL quality and environmental factors can affect survival in great measure, beyond the control of farmers. Moreover, obtaining an accurate value is impossible. We regularly observe records of survival >100% even with farmers that verify the PL number before stocking. It would be very difficult for small farmers to comply because they have very few harvests every year and RSD is easily >15%, whilst it is relatively easy for big farms to have a low RSD. Additionally, a standard procedure for biosecurity is to destroy stock with chlorine in case of severe mortality due to WSSV at a young age, and these failures do not appear in records that are based on harvested ponds. For all these reasons, we think that a SR numerical standard is not applicable. We think that the requirement should be that SR

	Comments
	must be recorded but no minimum value set
5.1.7	Hatcheries provide results of PCR tests but not for all batches because of limited analytical capacity. Periodic verification based on a sampling plan must be accepted. Some hatcheries run what they call Specific Environment Resistant strategy according to which resistance is not identified for specific pathogens, but any known or unknown pathogen present in the local environment. That should be considered as equivalent to SPR.

Criterion 5.2: Predator control

	Comments
5.2.1	All farms we work with have small ponds and the usual way of excluding birds is covering ponds with “bird nets”.

Criterion 5.3: Disease management and treatment

	Comments
5.3.1	We support the option 1. All Thai farmers we know do not use any antibiotic. Besides the Thai government has prohibited the make of medicated feeds, therefore antibiotics would have to be applied on farm, which would present many risks of misuse in our opinion. However, it is not clear what type of evidence would be required. Testing animals for many antibiotic residues would be very expensive and not even possible because of limited analytical capacity of certain compounds.
5.3.4	In Thailand, the DoF has authorized the use of trichlorfon (organophosphate) to eradicate possible vectors of shrimp virus in supply water. Treated water is not released to the environment before harvest (about 100 days). However, this pesticide seems to be restricted under some EC regulations for different uses. We are concerned by such possible inconsistencies and suggest that reference should be made to national legislation.
5.3.6	We suggest replacing the word “harmful” by “pathogenic” for better clarity. However, it is unclear how to judge which bacteria could be pathogenic. We suggest the ShAD to make a list of such unacceptable bacteria, or refer to national legislation. It is also unclear to us how one of the most commonly used probiotic, EM, would be considered, because although its composition is unclear, it is authorized by the Department of Fisheries.

Principle 6: Manage broodstock origin, stock selection and effects of stock management

General comments:

Only indicators that can be verified on farm should be considered. We suggest developing separate standards for hatcheries because some of the aspects considered cannot be demonstrated by farmers.

Criterion 6.1: Presence of exotic or introduced shrimp species

	Comments
6.1.1	We do not understand how farmers could provide evidence of no establishment on adjacent ecosystems.
6.1.2	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?
6.1.4	Escapees are usually not observed and are counted as mortality, and we do not understand how farmers can report escapes if they do not see it.

Criterion 6.2: Origin of post larvae or broodstock

	Comments
6.2.1	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?
6.2.3	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?

Comments:

P. stylirostris has been introduced in Thailand and is from breeding program.

The shrimp industry is moving away from wild broodstock very fast and it seems irrelevant to try to address the sustainability of broodstock fisheries at this stage. Additionally, it would be very difficult to document, and certainly not by farmers. We suggest this is removed from the standards.

Principle 7: Use resources in an environmentally efficient and responsible manner**General comments:**

We suggest developing separate standards for feed mills. In the meantime, certification would have to be based on declarations from feed mills.

Criterion 7.1 - Traceability of raw materials in feed

	Comments
7.1.1	This should be considered under feed mill standards to be developed within the next 5 years, not in farm standards.

Criterion 7.2 - Origin of aquatic ingredients**General comments:**

All these aspects cannot be addressed by farmers and cannot be verified at the farm, therefore they should not be included in farm standards. Moreover, we have no indication of real possibilities of sourcing such feed ingredients. The best solution would be for the ShAD to certify feeds, so farmers only need to order certified feed.

	Comments
7.2.1	This should be considered under feed mill standards to be developed within the next 5 years, not in farm standards.

Interim Plan for 7.2.1

	Comments
7.2.1a	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?
7.2.1b	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?
7.2.1c	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?

Criterion 7.3– Origin and content of terrestrial feed ingredients

	Comments
7.3.1	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?
7.3.2	We do not think that this should be included in farm standards. How can farmers demonstrate compliance?

Criterion 7.4: Use of Genetically Modified (GM) ingredients in feed

General comments:

We think that decisions on GMOs should be left to national regulations as different countries adopt different positions. We think these decisions need to be respected and therefore we support the requirement of documenting the use of GM-free ingredients in case it is a requirement from the market. But an obligation of declaring inclusion does not make sense to us, both from the production and the commercial sides.

	Comments
7.4.1	We disagree with this proposal. In Thailand shrimp feeds include soybean of different origins. Some are GMOs, some are not, But inclusion in feed varies depending on availability on the market and we do not know when standard feeds include GMOs. A declaration of inclusion does not make sense to us. We only ensure the non-inclusion of GMOs for customers that have a special request in that sense. Only a declaration of non-inclusion would make sense.
	We do not understand how this can be applied. Only farmers that order a GM-free feed would be able to provide documentation on GMOs. Others would simply do not know: feed may or may not contain GMOs.
7.4.2	This should be included in feed standards. In the meantime, declarations from feed mills can be verified by the auditor at the farm.
7.4.2	Our experience is that it is not really a problem of cost in Thailand, but more of availability. There is not enough GM-free soybean available for supplying the industry. Most feed companies do not differentiate soybeans of different origins and only farmers with bargaining power that deal directly with feed companies can obtain a GM-free feed as special formulation.
	The potential issues related to GMOs are not directly related to the seafood industry but agriculture and food at large. Therefore, we do not understand why the ShAD should take a position in this. We think that decisions on acceptance of GMOs should be left to national regulations as different countries adopt different positions.

Use of land animal by products in feed (formerly 7.4)

General comments:

Some buyers do not accept land animal byproducts because they are concerned that it does not sound natural or good. But they are commonly used in feeds in Thailand, and once again, accessing a special formulation requires a direct connection between farmers and feed companies. Any requirement of that sort would tend to exclude small and medium-scale farmers. Reasons for excluding land animal byproducts are unclear and we think this should not be considered in ShAD standards.

Criterion 7.5: Use of wild fish for fishmeal and oil

	Comments
7.5.1	Fishmeal processing by-products should be discounted from the total fishmeal content because it is a very important source of fishmeal in Thailand and it is important to promote the best use of it.
7.5.2	We think that 1.7 is a good target for a large farm that would produce a wide range of different sizes. But the FCR is directly related to harvest size, which is decided by buyers, not farmers. This is an issue in the case of small farmers that produce just a few crops in a year. If they have to produce big sizes, they would not be able to comply even with a good control of feed use. There is a logical financial incentive for farmers to keep a good control of FCR, therefore we suggest that the requirement is only to keep records for proving good control, but no maximum value should be decided.

Criterion 7.6: Effluent contaminant load

	Comments
7.6.2	Small farmers will have difficulties demonstrating compliance because of complexity and lack of access to feed composition information.
7.6.5	This is difficult to understand. It is unclear how small farmers could comply with this requirement, as most of them cannot afford a DO meter. It is also unclear how this should be done in the case of a group of small farmers scattered over complex water bodies including very small canals that hold no water at low tide. We think that small farmers should be exempted from this indicator on the basis that their impact is very limited anyway.

COMMENT # 33 – M.N. Kutty

Introduction, page 5:

“The ShAD seeks to set performance standards at the farm-level³ that are ambitious, yet practical for approximately the top 20 percent of farms to achieve – whether those farms are large or small. At the same time, the standards are intended to help protect and maintain large-scale ecosystem function and ecosystem services in shrimp producing areas, with the recognition that aquaculture operations are not solely responsible for total ecosystem health.”

Comments:

This paragraph seems to be self contradictory. The recommendation that only the top 20% of the farms to achieve irrespective of size is discriminatory because most of the farms in developing countries will not have the capacity to reach the ‘ambitious’ standards set. Farm size would not be factor here, since almost all small farms will not be able to meet the SHAD standards, unless they group together in clusters or otherwise in the same ecosystem and gear up their capacity, but this process has not begun yet. The amount of documentation required and actions which SHAD requires the farmers to do, which are not under the control of small farmers, makes it highly discriminatory and weighs in favor of large farms and would ensure that the 20% will be only large farmers. As I had indicated in my first draft (SHAD Version 1) comments*, and well recognized, much of the shrimp farming capacity is with small farms in less developed countries (as India) and so the maximal extent of shrimp farming systems and the concerned ecosystems at global level will stay out of the SHAD process, unless appropriate corrections and positive recommendations are incorporated in the proposed SHAD standards. Otherwise, this would make the SHAD exercise one sided, when it is claimed that “the standards are intended to help protect and maintain large-scale ecosystem function and ecosystem services in shrimp producing areas (globally!)”.

The Version 2 is again stressing Trade (see my earlier comments*), but is it possible to develop/ protect trade without development of acceptable production? When the standards are set at a level reachable by only the top 20% of the farms, capable/affluent enough to qualify, the rest of the farms, even if they can produce acceptable products through adoption of the presently recognized good management practices, are ignored – most of which are situated in developing countries, where the bulk of healthy shrimp aquaculture is now in progress, but they lack the capacity to achieve the proposed rigorous standards, as indicated.

When the SHAD Review is seeking for constructive comments, this approach to the SHAD exercise seems to discourage effective responses from institutions/individuals in developing countries involved in development of sustainable shrimp farming with programmes for small farms, linked to overall rural development activities, find it hard to consider the SHAD recommendations further as

they have a responsibility to protect the interests of the weaker sections of the society to which the bulk of the small farmers belong and indeed also the vast expanse of the ecosystems covered. Surely WWF is already aware of this fact, for SHAD to go beyond protecting the interests of the larger farms often of the affluent. As I had indicated in my SHAD 1 comments, this gives an impression that SHAD is more interested in protecting the interests of the trade for the affluent, neither protecting the small farmers' interests nor the health of the vast expanses of ecosystems where these small farms predominate. It would be difficult to protect the environment covering the large ecosystems where the capable 20% could be interspersed among the 80% 'ineligible' farms.

Unless the present approach to ensure healthy trade from the anticipated top 20% elite farms is broadened and a fair attempt to include more farms with suitable provisions for enlisting more farms, especially small farms prevalent in developing countries as those in South Asia (India/Bangladesh) are covered, indeed ensuring clean shrimp production, by developing appropriate measures through further discussion as needed, the Version 2 will not be acceptable to many potential respondents from developing countries such as India. Further suggestions on improving the Version through review of the whole document will be of no avail and hence may not be attempted. I have the same sentiments in responding to Version 2 and I am afraid that you may not succeed in eliciting any public (government) institutional response from India in this context. For my personal views on Standards my earlier comments (Version 1) are still pertinent.

M. N. Kutty
Prasadam, Puthur
Palakkad, Kerala 678 001
India
26 January 2011

*re: **Page 7:** Geographic scope to which the standards apply (re Version 1)

“The shrimp standards do not seek to impede or restrict the general development of shrimp operations, but rather to address the production of shrimp that is traded internationally.”

Comments: This appears to be a narrow view of the Dialogue – while it is appreciated that the standards are not intended to restrict general development of shrimp farming (SF) operations, the Dialogue being global in nature and in view international bodies such as WWF and FAO give stress to rural development mainly in less developed countries, the Global nature of the SHAD exercise should address sustainable shrimp aquaculture, centered now more in developing countries - addressing “the production of shrimp that is traded internationally” connotes protecting more the interests of the importing countries – this approach needs to be revised and development of socially and environmentally sound aquaculture has to be encouraged globally, bringing the reformed benefits to all universally and not just ‘international trade’.

COMMENT # 34 – Grupo Granjas Marinas, Honduras

Comentarios del Grupo Granjas Marinas, Honduras.
Coments from Grupo Granjas Marinas, Honduras.

Principio 2: Ubicar las granjas en sitios ambientalmente adecuados, mientras que se conserva la biodiversidad e importantes hábitats naturales.

Principle 2: Site farms in environmentally suitable locations while conserving biodiversity and important natural habitats.

2.1.1. Los propietarios de granjas encargarán o llevarán a cabo un proceso participativo de evaluación del Impacto sobre la Biodiversidad Ambiental (Beia) 14 y difundirán abiertamente los resultados y los efectos en un lenguaje local apropiado

2.1.1. Farm owners shall commission or undertake a participatory Biodiversity-inclusive Environmental Impact Assessment (BEIA) and disseminate results and outcomes openly in locally appropriate language.

Comentario: El proceso de ejecutar una BEIA es caro (US \$ 20,000 o mas dependiendo de los terminus de referencia) y en el caso de fincas establecidas años atrás en áreas de playones salinos (como es el caso en Honduras, fácilmente comprobable mediante imágenes satelitales) con muy bajo impacto sobre ecosistemas de manglares que hospedan la gran mayoría de la biodiversidad de la zona y los cuales son manejados bajo Areas Protegidas, reguladas por las autoridades ambientales del país con base en Estudios de Impacto Ambiental, y con sistemas de gestión ambiental implementados, no identificamos beneficios adicionales al ejecutar un nuevo BEIA para aplicar a la certificación. Al contrario, nos parece que puede constituir una barrera financiera a la certificación.

Proponemos que para fincas establecidas que han realizado EIAs en el pasado y tienen un plan de manejo ambiental que incluye aspectos de biodiversidad, dicha información sea considerada válida para aplicar a la certificación. El auditor tendría que evaluar la calidad y validez de dicha documentación con base a una inspección de los aspectos relacionados con la biodiversidad en el sitio.

Comment: The process of doing a BEIA is expensive (USD 20,000 or more depending on the terms of reference) and in the case of farms established years ago in areas of salt flats (as it is the case in Honduras, easily verifiable with satellite images) with very little impact on mangrove ecosystems that host the main part of the biodiversity of the area and are managed under Protected Areas , regulated by environmental authorities based on Environmental Impact Assessments, and with environmental management systems in place, we do not identify additional benefits of doing a new BEIA for applying to certification.

We propose that for established farms that have already done an EIA in the past and have an environmental management plan in place that includes aspects of biodiversity, this information is considered as valid for applying to certification. The auditor would have to evaluate the quality and validity of this documentation based on an inspection of aspects related with biodiversity on site.

Criterio 2.2: Ubicación de las áreas protegidas y hábitats críticos

Criterion 2.2: Sitting in protected areas or critical habitats

2.2.1. Permiso para la colocación en Áreas Protegidas (APs)

2.2.1. Allowance for sitting in Protected Areas (Pas)

Comentario: El criterio debería considerar situaciones particulares. En el caso de Honduras la industria camaricultora está concentrada en la región sur, específicamente en la zona del Golfo de Fonseca, donde se ha ubicado en áreas de playones salinos concesionadas por el Estado de Honduras. Esta industria comenzó a desarrollarse a partir de los años 1970, y a nivel comercial cobró mayor impulso en 1984. Aspectos importantes a considerar en relación Industria camaricultora y áreas protegidas en Honduras:

- a. Las áreas protegidas de la zona sur de Honduras fueron declaradas en 1999 mediante el decreto 5-99 E para proteger bosques de manglar principalmente. La industria ya estaban legalmente ubicadas bajo concesiones en áreas de playones salinos detrás de los bosques de manglar, desde años atrás.
- b. Estas áreas protegidas fueron categorizadas bajo Hábitat Especie, y aunque el termino es similar al utilizado por la IUCN (hábitat especie para categoría IV), la definición usada en el decreto permite la realización de actividades económicas para beneficio local y nacional siempre y cuando sean compatibles con los objetivos de manejo del AP (ver anexo del decreto en su cuarto considerando).
- c. En los planes de manejo de dichas áreas protegidas, dentro de la zonificación de las mismas, se consideró la acuicultura como parte de la zonificación como Zona de Uso Múltiple / Sub Zona de Uso Intensivo. En la mayoría de los casos, solo partes perimetrales (estaciones de bombas, canales, partes de lagunas) de las fincas quedaron dentro de los límites de AP. Bajo estas consideraciones el estándar debería permitir la presencia de fincas en zonas protegidas categoría IV cuando:
 - a. Las fincas ya estaban legalmente establecidas antes de la declaración de las áreas protegidas.
 - b. Cuando la declaración de áreas protegidas y el plan de manejo de las mismas consideran permitidas las actividades acuícolas.

Comment: The criteria should consider particular situations; In the case of Honduras the shrimp industry is concentrated in the Southern region, specifically in the Gulf of Fonseca, where it has been located in areas of salt flats under concessions from the State of Honduras. This industry started to develop in the years 1970s and took off commercially in 1984. Important aspects to be considered in relation to the shrimp industry and protected areas in Honduras:

- a. Protected areas of the Southern region of Honduras were declared in 1999 under Decree 5-99 E to protect mangrove forests mainly. The industry was already legally established for years on concessions in areas of salt flats located behind mangrove forests.
- b. These protected areas were categorized as Habitat Species, and despite the fact that this term is used by the IUCN for category IV, the definition used in the Decree allows for conducting economical activities for local and national benefit if and when they are compatible with the objectives of the AP management.
- c. In management plans of these protected areas, the zoning considers aquaculture under the zone of multiple use / Sub-zone of intensive use. In the majority of case, only periphery areas of shrimp farms, including pumping stations, canals and portions of ponds lie inside the boundaries of protected areas. Under these considerations, the standards should allow the presence of shrimp farms in protected areas of category IV when:
 - a. Farms were already legally established before the declaration of protected areas,
 - b. When the declaration of protected area and the corresponding management plan allows for aquaculture activities.

Criterio 3.2: Las quejas de los afectados se están resolviendo

Criterion 3.2: Complaints by affected stakeholders are being resolved

3.2.1. Los propietarios de granjas deberán elaborar y aplicar una verificable política de solución de conflictos para las comunidades locales. La política deberá indicar cómo se realizará un seguimiento transparente de los conflictos y reclamaciones, cómo la mediación por terceros puede ser parte del proceso, y explicar cómo responder a todas las quejas recibidas. Se utilizaran cajas de quejas, registros de quejas, y recibos de reconocimiento de quejas o (en idioma(s) local (s))

3.2.1. Farm owners shall draft and apply a verifiable conflict resolution policy for local communities.

The policy shall state how conflicts and complaints will be tracked transparently, how third party mediation can be part of the process, and explain how to respond to all received complaints. Complaint boxes, complaint registers, and complaint acknowledgement receipts (in local language(s)) are used.

Comentario: En cualquier conflicto hay al menos dos partes involucradas las cuales tratan de hacer prevalecer sus posiciones. El estándar debe especificar que la resolución de conflictos debe hacerse en base a lo que establecen las leyes del país.

Ejemplo real de solicitud que puede ser inaceptable por parte de fincas y considerado como conflicto sin resolver por parte de comunidades: Una comunidad que solicita el uso de los canales de la finca para realizar actividades de pesca. La empresa está en libertad de aceptar o no dicha solicitud considerando aspectos de seguridad y sanidad, sin embargo la no autorización de ingreso a la comunidad puede crear resentimientos por parte de la comunidad, y ser considerado por ellos como conflicto sin resolver. En este tipo de caso, el auditor tendría que basarse en las leyes de protección de la propiedad privada para reconocer el derecho de la finca a negarse.

Comment: In any conflict there are at least two parties involved, all of them trying to make their position prevail. The standards must specify that the resolution of conflicts must be based on what the laws of the country establish.

Example of request that could be unacceptable for farms and considered as conflict to be resolved by communities: a community that request the use of farm canals for fishing activities. The company has the right to accept or not that request considering aspects of security and health. However, refraining community members from accessing the farm could create resentment from the community and be considered by them as a conflict to be resolved. In this type of case, the auditor would have to base his judgement on national laws about protection of private property to recognize the right of the farm to respond negatively to the request.

Principio 5: Gestión de la salud y el bienestar del camarón de una manera forma responsable
Principle 5: Manage shrimp health and welfare in a responsible manner

5.1.4 Concentración mínima de oxígeno disuelto
5.1.4 Minimum dissolved oxygen concentration

Comentario: En sistemas de cultivo extensivo o semi-intensivo (sin aireación mecánica), nuestra experiencia es que no es posible garantizar “no más de 3 días: concentraciones de oxígeno disuelto inferiores a 3 ppm en el 90% de los estanques” aunque estemos de acuerdo con dicha meta de mantener 3ppm mínimo. La razón es que esas lagunas están sometidas a variaciones climáticas (lluvia, nubosidad, cambios en temperatura) que afectan directamente el bloom de fitoplancton. Existen incentivos puramente económicos en mantener un buen nivel de oxígeno para evitar mortalidades a través de medidas preventivas con base a fertilizaciones y recambios de agua, pero no son siempre suficientes para cumplir con el requisito propuesto. Por esas razones, nos oponemos a este estándar que tendría como consecuencia excluir de la certificación sistemas de cultivo de baja densidad que son los más adaptados en ciertos sitios. Proponemos que el requisito se limite al monitoreo de concentración de oxígeno para demostrar que los niveles son superiores a 3ppm la mayoría del tiempo como indicador de un buen manejo de lagunas.

Comment: in extensive and semi-intensive culture systems (without mechanical aeration), our experience is that it is not possible to guarantee “no more than 3 days in a row of dissolved oxygen lower than 3ppm in 90% of the ponds” even if we agree with the target of maintaining 3ppm

minimum. The reason is that these ponds are subject to climatic variations (rain, cloudiness, changes in temperature) that directly affect the phytoplankton bloom. There are purely economical incentives to maintain a good level of oxygen to avoid mortalities through preventive measures based on fertilization and water exchange, but they are not always enough to comply with the proposed requirement. For these reasons, we are opposed to this standard that would have the consequence of excluding from certification culture systems of low density that are the most appropriate in some sites. We propose that the requirement is limited to monitoring oxygen concentration for demonstrating that levels are higher than 3 ppm most of the time as an indicator of good pond management.

5.1.6. La tasa de supervivencia anual media de las granjas (SR) y la desviación estándar relativa (RSD) para: Sistemas de estanques alimentados pero no aireados

5.1.6. Annual average farm survival rate (SR) and relative standard deviation (RSD) for Fed but nonaerated pond systems

Comentario: Este parámetro se vuelve sensible en fincas grandes semi-intensivas sujetas a un sin número de factores externos no controlables: lluvia, nubosidad, cambios en temperatura, todos ellos inciden en la sobrevivencia de manera crítica, e influyen muchísimo más allá de las actividades de manejo. Adicionalmente, no es posible evitar la introducción de agentes patógenos en lagunas grandes como las que se usan en América Latina en sistemas de cultivo extensivos y semi-intensivos. En efecto, no es económicamente justificado o técnicamente factible, tratar químicamente el agua por el volumen de tan grande requerido, o proteger las lagunas de animales terrestres y voladores por las superficies involucradas.

Por lo tanto, en el caso de sobrevivencia debe considerarse las fluctuaciones por situaciones fuera del control humano. Poner un límite mínimo tendría como consecuencia hacer que fincas semi-intensivas y extensivas no puedan cumplir de forma continua. Por lo anterior, proponemos que el requisito sea nada más de monitorear y reportar la sobrevivencia en lagunas ya que es siempre una herramienta requerida para evaluar el desempeño de una finca.

Comment: this parameter turns out to be very sensitive in large semi-intensive farms that are subject to countless uncontrolled external factors such as rain, cloudiness or temperature changes, all having a critical incidence on survival with an influence much more important than management activities. In addition, it is not possible to avoid the introduction of pathogens in large ponds as used in Latin America in systems of extensive and semi-intensive culture. Actually, it is not economically justifiable or technically feasible to treat incoming water with chemicals because of the huge volume involved, or to protect ponds against terrestrial and aerial animals because of the huge areas involved.

Consequently, in the case of survival one must consider fluctuations due to situations beyond human control. Putting a minimum limit would result in the fact that extensive and semi-intensive farms will be unable to comply continuously. Therefore, we propose that the requirement is only to monitor and report pond survival given that it is always a necessary tool for evaluating the performance of a farm.

5.1.7 % de post larvas surtida (PL) que son SPF o SPR

5.1.7 % of stocked post larvae (PL) that are SPF or SPR

Comentario: Animales SPF no han dado buenos resultados en fincas hondureñas, al contrario, mortalidad ha sido superior. Estos animales al ser expuestos a sistemas abiertos donde las enfermedades son parte ya del ambiente, eran presa fácil de las mismas. El caso de SPR requiere de

un programa de selección genética que tomaría varios años y que permita demostrar resistencia a enfermedades específicas. A corto plazo es difícil de cumplir.

Sugerencia: solamente requerir análisis de PCR en reproductores en diferentes etapas para comprobar que estos están libres de enfermedades.

Comment: SPF animals have not given good results in Honduran farms; to the contrary mortality has been higher. When exposed to open systems where diseases are present in the environment, these animals are easy victims of diseases. As for SPR, it requires a program of genetic selection over several years that would demonstrate resistance to specific diseases. Short term, it is difficult to comply.

Suggestion: only require PCR analysis in broodstock at different stages to demonstrate that they are free of diseases.

5.2.2. Permisibilidad para el uso de perdigones de plomo y productos químicos para control de predadores

5.2.2. Allowance for use of lead shot and select chemicals for predator control

Comentario: ¿Cuales alternativas existen para el control de aves como Cormorán en áreas extensivas y abiertas? ¿si no se utiliza armas de fuego cuales pueden ser las alternativas viables? Ciertos métodos como maquinas de emisión de sonido pierden su efectividad debido a la capacidad de adaptación de las aves. La técnica de destrucción de nidos puede ser más complicada e incluso dañina ya que afectaría poblaciones que quizás no estén causando daño sobre las fincas. Posiblemente el uso de armas en este momento sea la alternativa más viable en situaciones de ataques severos.

Propuesta: contemplar el uso de armas de fuego para el control de plagas en cumplimiento con aspectos legales relevantes.

Comment: what are the alternatives for the control of birds like cormorants in large, open areas? If we do not use lead shots, what could be viable alternatives? Some methods such as noise effect machines lose their effectiveness because of the adaptation capacity of birds. The technique of nest destruction can be more complicated and even more harmful because it can affect species that are not causing harm to farms. Lead shot is possibly the most viable alternative in situations of severe attacks.

Proposal: Consider the use of lead shot for the control of pests in compliance with relevant legal aspects.

Criterio 7.6: la carga contaminante del efluente

Criterion 7.6: Effluent contaminant load

7.6.5 Variación porcentual de oxígeno diurno disuelto (OD) en relación con DO a saturación en el cuerpo de agua receptor de la salinidad específica del agua y la temperatura

7.6.5 Percentage change in diurnal dissolved oxygen (DO) relative to DO at saturation in receiving water body [6] for the water's specific salinity and temperature

Comentario: En esteros ribereños con fuerte influencia de actividades humanas (diferentes a las acuícolas) en el caso hondureño no se podría cumplir con esto. Consideramos necesario definir un indicador para esteros ribereños y otro para aguas marinas. En caso de los esteros ribereños, existe un factor estacional importante con calidad de agua muy distinta en época seca y época lluviosa. Para tomar esto en cuenta, nos parece que una medición quincenal no es suficiente, y proponemos que sea aceptado calcular el promedio anual con más de 24 datos y hasta 365 en caso de que una

finca tenga la posibilidad de hacer una medición diaria.

Comment: in riverine estuaries under strong influence of human activities (others than aquaculture) like it is the case in Honduras, it is not possible to comply with this. We consider it is necessary to define different indicators for riverine estuaries and marine waters. In the case of riverine estuaries, there is an important seasonal factor with very different water quality in dry and rainy seasons. For taking this into account, it seems to us that a biweekly measurement is not sufficient, and we propose that it is accepted to calculate the average annual value with more than 24 data and up to 365 data in case a farm has the possibility of doing daily measurements.

[6] measured at a station at least 200 m down current from the farm outfall

COMMENT # 35 – Stephanie Mathey (Carrefour)

Direction Commerciale France et Marchandises Groupe

Direction Qualité Groupe

Nouvelle adresse : 17/19 rue Victor Basch TSA 61872 - 91887 MASSY 2 CEDEX

Recipients:

- Global Steering Committees of Aquaculture Dialogues for Salmon, Trout and Shrimp
- Aquaculture Stewardship Council (ASC)

February 16th 2011

Letter of Concern: GMO-Feed for farmed Fish and Seafood under the new Eco-Label ASC

Dear Members of Global Steering Committees,

Dear ASC Board and Director,

The Carrefour group has one simple ambition: making Carrefour the preferred retailer wherever it operates.

It means having the trust of millions of customers and consumers in our stores and shops: trust in product quality, price and service. It means being able to satisfy and anticipate customer needs; It means respecting producers and the environment. It means earning customer preference through ethical commitment and action. It means making customers happy by making their lives easier.

With great concern we have taken notice about the actual status and current proceedings within the ongoing Aquaculture Dialogues for Shrimp, Salmon and Trout with regards to allowance for GMO as feed ingredients for farmed fish and shrimp under the future consumer label Aquaculture Stewardship Council ASC.

I would like to explain to you our global position on GMO.

Carrefour have a pioneer approach on GMO. For 10 years, Carrefour offers own brand products which are not GMO labelled in Europe. For some of the Carrefour Quality Lines (pork, fish, poultry...) Carrefour goes even further by excluding the use of GMOs in the feed of these animals. Since 25 October 2010, in France, these products are indicated to the customers Carrefour by a sticker « Fed without GMO » on the product packaging's. (cf French communication just after).

As leading industry members with regards to fish and seafood sustainability we do critically question the broad acceptance of an eco-label which is allowing GMO-feedstuffs for farmed animals. The use of GMO in the food and feed industry is regarded very critically by both European consumers and the public. Consequently, the use and power of a consumer label such as the ASC in order to promote more sustainable, environmental sound and socially responsible aquaculture practices will be very much limited, - in the worst case, the label will be not accepted at all.

Another worrying fact from a marketing point of view is the complete absence of coordination between the different Aquaculture Dialogues for different species, addressing exactly the same issues of concern in aquaculture. When launching ASC-products, communication of the contents and benefits of this consumer label must be eased by consistent and clear messaging for all labelled products / species, based on a consistent standards. So far with the current ASC-standards, this is clearly not the case¹ and we do wonder how to successfully launch such products on demanding consumer markets of Europe.

We do once more express the need for a credible, reliable and effective eco-labelling scheme for farmed fish and seafood, which is able to serve not only niche markets, but broader segments in the retail and food service sector. If the future ASC, - as it is being developed under the above outlined circumstances -, is going to be able to serve these essential needs, is currently uncertain and remains to be seen.

We do strongly recommend to reconsider the issue of GMO in feed and we do emphasize once more the need for more consistent ASC-standards for all species and products subject to labelling before first certified products are being launched in 2011.

In full appreciation of your attention and understanding

Stephanie MATHEY
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1 Important crosscutting issues for different species which need more consistency from a marketing point of view do encompass standards for feed (including GMO!), pollution of water, conservation of habitats, exotic species, use of therapeutics / chemicals and social responsibility.

COMMENT # 36 – Dirk Lamberts

Dear Corey,

I see that the deadline for comments relating to the English version of the ShAD draft standards has passed, so if that would be an issue, then please consider my comment one on the Indonesian version. I hope you can still take it on board. I am making this comment on my own behalf as an aquatic ecologist, former lecturer of aquaculture and environmental safeguarding practitioner.

I would like to make a comment on the use of dissolved oxygen (DO) saturation change as an indicator for eutrophication. The use of DO saturation as a proxy for nutrient concentrations is problematic, and is also problematic when used as an indicator for the effects of eutrophication as e.g. caused by phytoplankton blooms die-offs and the subsequent surge in BOD.

Nutrient status is only one of many variables determining DO concentrations at any given moment. Other factors that can have an effect that may be at least as important as that of nutrient concentrations - and primary producers populations sustained by these nutrients - include mixing (wind, wave, convection), flows, tides, surface to volume ratio, stratification, presence of other oxygen consumers, presence of aquatic macrophytes, weather conditions, suspended solids (erosion), euphotic depth, impact of overhanging terrestrial vegetation (shading, leaf litter – all seasonal), floodplain effects, presence of pollutants, and the impact of rainfall and storms on salinity, temperature and mixing. In other words, one specific level of primary producer populations can result in a widely varying range of DO concentrations and saturation levels, and of their diurnal fluctuations. There is ample literature to support all this.

Setting a daily saturation variation level of 65% between two moments in a day only determined by the photoperiod, at one depth of 30 cm, irrespective of the actual DO concentrations or the sensitivity of the environment in which the discharge occurs does not provide comfort regarding the contribution of a farm to eutrophication. The saturation value is useful for comparisons but is further of little ecological relevance to aquatic organisms: if the lower DO level tolerance of a fish is 2 mg/l and the fish finds itself in water of 1 mg/l, it will likely die, irrespective of the fact whether that 1 mg/l represents 10 or 100% saturation.

Eutrophication as an ecological phenomenon must be assessed in function of the specific environment in which it occurs. In terms of impact on the environment, there is no guidance that is universally applicable to all situations where water from a shrimp pond is discharged. What has no impact in one situation could be disastrous in another.

A classification of the receiving water in terms of its natural nutrient status, its present level of (nutrient) pollution and its sensitivity to increases in nutrient inputs would provide a much more solid ground to 'minimize the potential negative environmental and social impacts associated with shrimp aquaculture' as your website so eloquently states than that diurnal fluctuations in DO saturation can. The latter is basically a lottery and that is not what standards should be about.

Best wishes,

Dirk Lamberts








COMMENT # 37 – WWF Vietnam

REPORT OF WORKSHOPS ON

PUBLIC COMMENTS ON 2nd DRAFT OF ShAD/ASC IN SOCTRANG AND CAMAU PROVINCES, VIETNAM

Project Name:	Promoting certification and Better Management Practices among small-scale shrimp farmers in Vietnam
Project Number:	VN 093901
Project Start Date (FY):	2009
Date Report Completed (MM/YR):	01/2011
Report Completed By:	Huynh Quoc Tinh, Aquaculture Field Coordinator

1. Name of activity:
Workshops of public comments on 2nd ShAD draft for relevant stakeholders in Soctrang and Camau provinces, Vietnam (Activity 2.6.1)
The activity was implemented with the support of local staffs in My Xuyen Agriculture and Rural development Division and Ca Mau Agriculture and Aquaculture Extension Services Center.
2. Purposes of the activity:
 - Introducing the 2nd draft of ShAD/ASC standards to extension workers, group leaders, district and provincial authorities of Agriculture and Rural Development, Fishery Association in Soctrang and Camau provinces.
 - Getting comments on ShAD/ASC standards from relevant stakeholders of all participants as their working area.
3. Time of the activity
The comment meetings had been implemented from 19 to 31 Jan 2011.
4. Outputs of the activity:
The workshops were implemented with the comment results as below:
 - ✚ In general, All participants shown the commitment to apply ShAD/ASC standards if the certificated product have the price that higher than the cost of their investment. Besides that, these standards look like to be more applicable with semi-intensive and intensive farming rather than improved- extensive farming, which take into account many pro-poor people in terms of cost investment.
 - ✚ **Criterion 2.1:**
 - **2.1.1**, participants have no idea on that due to they cannot image how is BEIA and how much for cost investment.
 - In the **guidance for implementation of criterion 2.4**, section 2.4.1 needs to make clear definition about “confined watercourses” that should be “natural rivers or streams” and/or man-made canals in the forested habitats. Besides that, it is considerable to become the barrier for owner’ certificated farm if land areas in “the zone must be at least 25 meters wide on both sides” do not belong to the certificated farms. Participants suggested that “the zone” must be based on the conclusion of BEIA instead of “at least 25 meters wide on both sides”
 - ✚ **Criterion 2.5:** Generally, it is meaningful to apply for the areas that are not original/natural brackish-water. The phrase “soil resources” must be replaced by “planned agricultural soil

- recourses”.
- **2.5.1:** phrase “surface freshwater areas” must be replaced by “publicly surface freshwater areas” due to it confuse to define the scale of “surface freshwater areas”.
 - **2.5.3:** phrase “surface freshwater bodies” must be replaced by “publicly surface freshwater bodies” due to it confuse to define the scale of “surface freshwater bodies”.
-  **Criterion 4.11:**
- **4.11.2:** the phrase “Separate sanitary and toilet facilities are available for men and women” must be replaced by “**comfortable/suitable** sanitary and toilet facilities are available for men and women”
-  **Criterion 5.1:**
- **5.1.5:** the standard should be a range such as 7 – 9.5
 - **5.1.6:**
 - + (1) Unfed and non-aerated pond systems: SR > 30% and RSD <15%
 - + (2) Fed but non-aerated pond systems: SR >55% and RSD <15%
 - + (3) Fed and permanently aerated pond systems: SR >75% and RSD <15%.
-  **Criterion 5.3:**
- **5.3.1:** 100% participants said that if “No allowance for use in any pond of certified farm” will be very difficult (even impossible) and farmers will not commit on that due to be very high risks. So they suggested that “Allowance for use antibiotics in ponds that have diseases and these ponds will be not sold under the ASC label, provided product can be traced back to individual ponds” OR “Allowance for use antibiotics, which are permitted by ASC, in 2 first month of cultivating period and after that if ponds use antibiotics will be not under the ASC label, provided product can be traced back to individual ponds”.
-  **Criterion 6.2:**
- **6.2.3:** At the present, almost 100% *P. monodon* broodstock in Vietnam is wild-caught which “an established fishery management plan” is unavailable and uncontrolled. It is necessary to give time for preparation of authority. This standard is necessary to create the market-driven but it seems to be over control/management of producers.
-  **Criteria 7.1, 7.2, 7.3 and 7.4:** Because of the workshops did not have any participant which is feed-processor, so that, the workshop could not discuss technical detail in these criteria. Based on current and near future, some suggested that these criteria are necessary to create the market-driven to develop a sustainability industry of shrimp culture but these seem to be over control/management of producers. And this is strongly depended on the product prices and the available market demand.
-  **Criterion 7.5**
- **7.5.2:** suggested that eFCR of *P. monodon* are 1.5 – 2.0 (instead of 2.1)
-  **Criterion 7.6:** the workshops recognized that this criterion is very important and directly related with their business but at the moment, all participants did not have available data/records related with standards, hence, they could not comment for these standards.

Appendix 1. Lists of participants in the workshops in Soctrang and Camau provinces

No	Participant	Soctrang	Camau
1	Representative of DARD		1
2	Representative of Provincial Brand office of Aquaculture		1
3	Representative of Provincial Extension Service Center	1	2
4	Representative of Provincial Farmer Association		1
5	Representative of Provincial Fishery Association	1	
6	My Xuyen DPC	1	
7	District section of Agriculture and Rural development	2	3
8	District station of Extention Service Center	2	6
9	Farmer group leaders	10	12
10	WWF – Vietnam staff	2	2

COMMENT # 38 – WWF US, Costco, and Thai Farmers

Comments on the Shrimp Aquaculture Dialogue (ShAD) Standards Version 2.0

Submitted by Aaron McNevin (WWFUS) and Ken Kimble (Costco) on behalf of 15 shrimp farmers in Chantaburi Province and 20 shrimp farmers in Surat Thani Province.

In February 2011, WWF-US and Costco conducted a field survey to determine the ability of a subset of shrimp farmers in Thailand to meet the ShAD Version 2.0 standards. Comments from farmers and other industry-related stakeholders revealed that although there have been several ShAD meetings and ShAD outreach efforts in Asia, it appeared that the outreach and stakeholder meetings formulated standards that did not reflect the performance of those producers in the region where the ShAD conducted these activities. In an effort to generate feedback on the standards from farmers, WWF and Costco provide the following comments on the ShAD Version 2.0 standards on behalf of the stakeholders we engaged with during our time in Thailand.

Both WWF-US and Costco understand that the comment period for English speaking persons ended on 1 March 2011, but we expect the following comments be treated as “Thai” comments and be fully considered because of the delays in obtaining the Thai version of the ShAD Version 2.0 standards.

Both WWF-US and Costco respect and appreciate the Dialogue process, and we have not interjected any comments from our own organizations. These comments and suggested revisions are sourced directly from Thai farmers and/or researchers/consultants that participated in the meetings.

General Comments and Questions

- Dr. McNevin informed us that the last meeting of the ShAD Global Steering Committee (GSC) is to be held in Amsterdam as this survey is being carried out.
 - o Will these comments be given the same consideration as comments received prior to this GSC meeting?
 - o How is it possible for Thai shrimp farmers to know that these comments will be considered appropriately?
 - In the ShAD Ver 2.0 document there are a series of “flagged” or “TBD” pieces of information and standards, and comments cannot be submitted about those issues until the ShAD proposes the language or information, thus it is apparent that another draft should be posted for public comment once those “unknowns” have been proposed. Not allowing for comments on those aspects of the standards that have not been shared undermines the credibility of the public comment process.
 - There is a large proportion of environmental activists on the GSC and if this body is the decision making body for the standards, the representation is skewed away from the production sector. It is the current knowledge that one of the producers has also resigned from the GSC making the skewing even more weighted towards the environmental community and there should be a clear justification how the decision making body allows for weighted opinions considering the make-up of the steering committee.
 - The GSC should update the GSC list so stakeholders can see the final representation of the stakeholders prior to final standards being developed.
 - The explanation on the “top tier” of the industry that is able to meet the standards needs clarification as the understanding is that only 20% of producers will EVER be able to comply with the standards.
- 1 NOTE: this is a shared GSC seat that only has 1 vote

Specific Comments and Suggestions for Revision

1. Principle 1, Criterion 1. – In Thailand there are 7 kinds/levels of land rights. Some of these land rights are only inheritable.

Suggestion for revisions: Include in the standards provisions that call for the adherence to customary or inheritable land rights.

2. Principle 2, Criterion 1. – There is no farmer in Thailand currently that has heard of or has undergone a BEIA. There are no accredited agencies either public or private that can carry out this assessment. The BEIA is expected to be quite costly. The ShAD considers the BEIA as a focal component of the standards, yet the provisions that an academic ecologist or NGO can conduct this assessment reveals that there will be a wide variety of results.

“Ecologist academic/NGO consultant: Ecologist, biologist with university degree and knowledge of relevant environmental regulations, and employed by an education or research institution, or an environmental NGO. The specialist must demonstrate knowledge of the area to be assessed and related literature.”

It would seem prudent that the person conducting the BEIA would at least have experience

conduct one or more assessments. Further, with no background on shrimp culture, how do these persons understand the potential impacts if they do not know how shrimp are cultured?

It appears the most important task for this standards is to pay someone to develop a report. Thai farmers are prepared to change practices to attempt to be more environmentally friendly, but there is a threshold beyond which farmers cannot adopt such standards that require several thousands of dollars just to have an assessment performed much less adjust farming to the outcomes of the assessment.

The ShAD has been tasked with “identifying the key impacts of production and setting measurable performance standards to minimize or eliminate these impacts”. The BEIA is not measurable and this assessment in itself is to identify impacts that the ShAD should be identifying. It is possible for Thai farmers to address the impacts of production and attempt to mitigate these issues, but it is unreasonable to not be allowed to comment on what standards will be imposed until after the BEIA is conducted. There is no means to have a stakeholder voice to agree on standards if they are not clear and available for public comment.

Many of the standards that are pushed on Thai farmers are paid for by processors already, and it may not be economically viable for processors to provide this assistance if the costs for implementation are beyond economic viability.

References are not useful in determining how to conduct a BEIA. Analysis. Further, the FAO publication seems to contradict the use of EIAs for aquaculture.

The references the ShAD provides for guidance on the BEIA include:

1. GUIDELINES FOR ECOLOGICAL IMPACT ASSESSMENT (Institute of Ecology and Environmental Management, IEEM, 2006)

<http://www.ieem.net/ecia/download.html>

This reference is not accurate as the title of the paper is “Guidelines for Ecological Impact Assessment in the United Kingdom”. There are no shrimp farms in the United Kingdom, thus how is this reference applicable?

2. BIODIVERSITY IN IMPACT ASSESSMENT (IAIA, 2005)

<http://www.iaia.org/publicdocuments/special-publications/SP3.pdf>

This reference provides high level principles and broad and non replicable means to carry out a BEIA.

For example:

“Questions to ask:

At the gene level, to what extent will the proposal have significant effects on:

- Genetic diversity of species, particularly rare and declining species and those with identified as priorities in NBSAPs and/or subnational biodiversity plans?
- Opportunities for species populations to interact, e.g., by increasing habitat fragmentation and isolation?
- Risk of extinction?
- Persistence of locally-adapted populations?

At the species level, to what extent will the proposal:

- Alter the species-richness or species-composition of habitats in the study area?
- Alter the species-composition of communities?
- Cause some species to be lost from the area?
- Affect species identified as priorities in NBSAPs and/or subnational biodiversity plans?
- Increase the risk of invasion by alien species?"

Each of the above bullets would require a separate scientific study. It does not appear feasible to do this at the expense of a shrimp farmer.

3. References within BIODIVERSITY IN IMPACT ASSESSMENT (IAIA, 2005) follow:

a. Convention on Biological Diversity. *Convention Text*.

(<http://www.biodiv.org/convention/articles.asp>)

o This reference details the agreements and justification for the Convention on Biological Diversity

b. Convention on Biological Diversity: *Decision V/6 Ecosystem Approach*

(<http://www.biodiv.org/decisions/default.aspx?m=COP-05&id=7148&lg=0>) and Decision VII/11 Ecosystem Approach

(<http://www.biodiv.org/decisions/default.aspx?m=COP-07&id=7748&lg=0>)

c. CBD (2002). *CoPDecision VI/7A: Further development of guidelines for incorporating biodiversityrelated issues into environmental impact assessment legislation or processes and in strategic impact assessment*.

(<http://www.biodiv.org/decisions/default.aspx?m=COP-06&id=7181&lg=0>)

o These two references describe "what" the ecosystems approach is.

d. IAIA (2004) *Biodiversity & Impact Assessment Key Citations*.

(http://www.iaia.org/Non_Members/Activity_Resources/key_resources.htm)

o This is an association website that appears to be more concentrated on building membership

e. IUCN (2004) *Red List of Threatened Species*. (<http://www.redlist.org/>)

o Database on protected species.

f. Millennium Ecosystem Assessment (2003). *Ecosystems and Human Wellbeing:*

A

Framework for Assessment. Island Press.

(<http://www.millenniumassessment.org/en/products.ehwb.aspx>)

o URL not valid

g. Ramsar Wetlands Convention (2002) Resolution VIII.9 *Guidelines for incorporating biodiversity related issues into EIA legislation and/or processes and in SEA' adopted by the CBD, and their relevance to the Ramsar Convention*.

(http://ramsar.org/res/key_res_viii_09_e.htm)

h. Ramsar Convention Secretariat (2004) *Ramsar handbooks for the wise use of wetlands, Volume 11 Impact Assessment*.

(http://indaba.iucn.org/ramsarfilms/lib_handbooks_e11.pdf)

o URL not valid for above 2 references

i. Precautionary Principle. (<http://www.pprinciple.net/index.html>)

o Website recites the precautionary principle and provides guidelines that are broad, non-implementable or simple common sense.

Example:

Guideline 12: BE ADAPTIVE Use

an adaptive management approach, including the following core elements:

- monitoring of impacts of management or decisions based on agreed indicators;
- promoting research, to reduce key uncertainties;
- ensuring periodic evaluation of the outcomes of implementation, drawing of lessons and review and adjustment, as necessary, of the measures or decisions adopted;
- establishing an efficient and effective compliance system.

4. FAO Fisheries and Aquaculture Technical Paper 527 Environmental impact assessment and monitoring in aquaculture - Requirements, practices, effectiveness and improvements (Aquaculture Management and Conservation Service, Fisheries and Aquaculture Management Division, FAO Fisheries and Aquaculture Department)

<http://www.fao.org/docrep/012/i0970e/i0970e00.htm>

The following are extracts from this citation:

- “The global and regional reviews in this study and the associated technical workshop draw on experience from throughout the world in the application of EIA and monitoring to aquaculture development. In practice most aquaculture is small-scale and is not subject to EIA or rigorous monitoring. More emphasis needs to be placed on environmental management frameworks which can address the environmental issues associated with large numbers of small-scale developments – including strategic environmental assessment, risk analysis, management plans for water bodies and/or groups of farms, monitoring and response procedures.

Where EIA is applied there is mixed experience. Several weaknesses were identified in the regional reviews and at the workshop, including lack of consistency in assessment; lack of appropriate standards; lack of integration between levels and divisions of government; inadequate or ineffective public consultation; lack of assessment skill and capacity; limited follow-up in terms of implementation and monitoring; and excessive bureaucracy and delays. There is very little hard evidence on cost effectiveness.

Monitoring is of fundamental importance to effective environmental management of aquaculture, and without which EIA itself is largely pointless. The main weakness identified was limited implementation of monitoring requirements as developed in EIA environmental management plans, and limited analysis, reporting and feedback of farm level and wider environmental monitoring programmes into management of individual farms and the sector as a whole.

The key to more effective use of both EIA and monitoring procedures will be to nest them within a higher level strategic planning and management framework, including clear environmental objectives and quality standards. More rigorous risk analysis should be used to inform the focus of both EIA and monitoring.

- “a well developed and implemented regulatory regime addressing all the key impacts of aquaculture may be more effective than “one-off” EIA.”

Analysis of the materials provided by the ShAD reveal that there is little substantive information on examples of or specific methodologies of a BEIA. Imposing such a massive effort on producers that are typically small scale or rural without a conscious effort to understand what is being imposed is considered reckless and would be counterproductive

to meaningful change. For example, Thai farmers are using more and more 100% enclosed systems, Thai farmers are not allowed to construct in wetlands. These efforts seem to be more concrete and tangible than an assessment.

Suggestion for revision Option 1: Simply provide the performance level or outcome that is desired and Thai farmers will try to meet it and remove the requirements for an outside evaluation.

Suggestion for revision Option 2: Provide the BEIA criteria clearly (stepbystep without vagueness or room for question) and allow professional or government bodies within a country and with experience conducting EIA's to conduct an analysis. Government bodies should be entrusted to conduct these analyses as there is no proof that an environmental NGO or academic ecologist would provide any less bias.

3. Principle 2, Criterion 2. – It is not clear how a red-listed species is to be determined at the farm site.

Suggestion for revision: Provide a list of species or a sample of how a list should be generated from start to finish so that Thai farmers can identify what is necessary.

4. Principle 2, Criterion 3. – Is the only way to determine critical habitats at a farm to pay for a BEIA? Why doesn't the ShAD specify what habitats are critical, Thai farmers can protect those areas, but paying for an outside organization to tell Thai people what is critical habitat for Thai species seems unfair.

Suggestion for revision: Provide the critical habitats to be protected and remove BEIA provision. Be clear.

5. Principle 2, Criterion 4. – Buffer zones are understandable barriers to help protect certain types of habitat. Wetlands are highly sensitive habitats and Thai farmers do not want to produce shrimp in the wetlands.

Suggestion for revision: Standard should have a maximum distance from coastal or other wetlands. Other habitats like nonwetland should be allowed to be used for farming, except the specific areas that the ShAD determines as too sensitive for use. List habitats that are considered critical. BEIA should not be required.

6. Principle 2, Criterion 4. – Corridors between farms are not always realistic because of the small plots of land used by some farmers. If critical habitats are identified by the ShAD, or at least criteria on what "critical habitat" would be, farmers can develop larger corridors (buffers) between farms where applicable. Vegetation or re-vegetation is a feasible effort to be included as a standard. It should be noted that some determining the migration routes of wildlife is an extremely costly endeavor, and the outcome may be inconclusive, whereas the requirement for vegetation to be used as a boundary between farms would be straightforward and achieve a desirable outcome.

Suggestion for revision: All farm boundaries should be vegetated with natural vegetation to prevent erosion and sedimentation and provide maximum habitat for the in proportion to farm size.

7. Principle 2, Criterion 4. – Access points or blockage of these points is not desirable by Thai shrimp farmers. It would seem that the most concrete and effective means to address this standard in a quantitative manner is select the number of access points per kilometer.

Suggestion for revision: Make standard – a minimum of 1 public access point to public grounds every 1 kilometer of farms that border public land. Access points to other private lands should not be considered.

8. Principle 2, Criterion 5. – Salinization of groundwater is an issue where brine waters are taken into the interior portions of the country. For farms operating in areas that are brackish, this should not be considered as an impact. Further, of the monitoring and standards required, most attention should be focused on the use of chloride concentrations considering the costs of conductivity meters.

Suggestion for revision option 1: Make standards reliant on chloride analysis not specific conductance. The results will be similar and it is more feasible for farmers.

Suggestion for revision option 2: Incorporate salinization of surrounding environment a component of the social conflict with surrounding users.

9. Principle 3, Criterion 1. – While there is agreement with the intent of the p-SIA, Thai farmers believe there is a flaw in the steps used to carry out this appraisal. When all issues are focused on a particular project, the scope of the p-SIA is skewed and further can set the stage for extortion.

Suggestion for revision: Allow for the assessor to conduct the initial assessment in a locale based on the impacts identified by stakeholders, but not based on the impacts of a specific farm on the community. This is a more holistic approach and it does not set the stage for extortion. When the assessor determines what impacts exist that the community feels are not being addressed by the shrimp farm, then the farm should engage at the stakeholder level with communities and assessors to mitigate these issues through. This suggestion is not to remove the pSIA or stakeholder engagement. It is an attempt to get honest and truthful information.

10. Principle 4, Criterion 8. – In Thailand, farmers allow workers to bring families on to farms and they provide housing. Thus, the farmer and family live at the farm. Working hours should be considered as duties required on a daily basis and determined on this basis as if the “time at the workplace” is considered “time of work”, it is impossible for any farmers to comply unless they kick the families off of the farm.

Suggestion for revision: Base the standard on working hours and overtime on tasks that are given a time allotment, or at least allow for this option. Example: feeding (2 h), aerator repair (1 h), etc...

11. Principle 5, Criterion 1. – Survival rates should not be as low as those in the standards. Farmers can do much better than these survival rates.

Suggestion for revision: Minimum survival for all farms should be 60%

Survival in shrimp farming can be greatly affected by salinity of waters and some standards like the pushing of farms further back in to the interior of the country can have dramatic effects on salinity and survival. Thus, salinity should be a factor in the survival percentages and where farms are located where full strength seawater is used and readily available,

survival percentages should be even higher than in comment 11. These survivals should be >70%.

12. Principle 7, Criterion 1. – It is recognized that farmers need to use and source resources responsibly. There also need to be options to choose from as far as feed manufacturers. This criterion appears to consider farmers as feed plant owners as well. This is not true and farmers cannot guarantee any feed ingredient can be traced, this is the feed mills responsibility. Thai farmers can request this information, but can only guarantee that they received the information from the feed manufacturer. Thus these standards should be explicit that the information required to show farmers meet the standards is that which is provided by the feed manufacturer. Thai farmers are willing to help in making feed companies more sustainable by shifting practices, but there needs to be time available to do so.

Suggestion for revision: 7.1.2 and 7.1.3 should have a timetable for adoption and potentially a phased approach. Form letters and forms as templates should be provided in the guidance.

13. Principle 7, Criterion 4. – How is a farmer to able to be held in compliance with a standard that is set for the Aquaculture Stewardship Council (ASC)? This appears to be very much outside the realm of influence for a farm and it is not a farm-level standard. This is a standard for the certification scheme. How do farmers attempt to change what ASC will do?

Suggestion for revision: Develop standards for ASC with the ASC, not via farmers. Strike standards that make farmers responsible for ASC actions.

14. Principle 7, Criterion 6. The amount of phosphorus and nitrogen to be released from monodon farms is massive and should be reduced dramatically. These values represent a very inefficient facility for use of nutrients.

Suggestion for revision: The amount of phosphorus released from a monodon farm should be 10 kg/mt shrimp and 30 kg/mt shrimp for nitrogen.

Suggestion for revision: For closed systems, the monitoring requirements for released nutrients should be noted and removed for these systems.

15. Principle 7, Criterion 6. For farms that discharge water, farmers should be allowed to develop a program that is not laboratory intensive. Feeds can be modeled based on discharge for a given feed type. This would make calculations consistent as long as feeds are of the same nutrient content. The following is an example of how farms could achieve the discharge standards.

**Feed
type
FCR N content P content Effluent Water
P
concentration
Effluent Water
N
concentration
Water
Discharged/mt**

shrimp

The information above would allow farms to simply monitor the volume of water used and feeding amounts to develop a model for how much nitrogen and phosphorus is discharged. The model would require measuring effluents initially to form a baseline of information, but frequent lab analyses should not be required if the model is tested and proven.

Suggestion for revision: Clearly state that a model can be developed to quantify discharges as long as this model is tested and validated.

COMMENT # 39 – Peter Vandergeest

Draft Standards for Responsible Shrimp Aquaculture Version 2.0 Overall comments:

My expertise is more on the social side so my comments are focused on those dimensions. In addition, my comments are primarily based on what I know about shrimp farming in Southern Thailand through my research, combined with my work with researchers in a few other sites—e.g., Bangladesh, Vietnam.

1. *One overall approach that the committee might consider is to follow the approach of LEED green building certification and create different levels of achievement: a basic level that should give access to the main markets, and gold/silver for more niche- - oriented markets. The criterion like number 7 could be included for the reasons given, but at least initially considered optional and not necessary for basic level. This is a major change in approach, but one that also potentially allows for improvement once a basic level is achieved, and one that might allow some local jurisdictions to require/reward higher levels of achievement (much like what happens in LEED). This would also address the next flag on time lag.*
2. The pSIA requirement seems doable to me if appropriate authorities who have experience and the mandate to organize collective processes are involved.
3. There are a number of standards that I identify below where the committee relies exclusively on technical measurements, where there is scope for community input based on their local ecological knowledge and impact on local livelihoods. This local knowledge is wasted if its not taken advantage of. Community input need not be confined to a social impact assessment.

Detailed Comments:

Principle 3: Communities:

I understand the major question here is feasibility. I should state that I do not have any personal experience in doing p---SIAs, so that my comments are more my general sense of what might work and what might not. One whole, reading Appendix II on guidelines for pSIA, my opinion is that these provisions can be made quite doable, as most of the provisions are understandable, and do not require excessive technical knowledge, access to national regulations, or access to people defined as experts. The main overall change I would suggest is to allow more scope for involvement of local leaders or authorities in the process. For example, the proposed farmer might ask the local village head or

assistant head to call the required meetings, rather than organize these her/himself. Also, documents with checklists on what should be done and how to do them in local language would be helpful.

3.2.1:

A conflict resolution policy sounds reasonable and doable to me. Does not need to be elaborate. Third party mediation option is important. Where I work the village head or assistant head has this role normally.

Principle 1:

Regarding the requirement that producers should present auditors with outline of regulatory system: In many cases regulatory systems are complex and contradictory; the people who know this system will be the government units involved plus perhaps some researchers. Many producers are likely to not have sufficient information to comply with this.

Suggestion: That auditors or ASC also work with relevant agencies in each country to develop a list of applicable laws and regulation, and visit local governments to obtain their information on the most relevant regulations. Relevant government units would range from national natural resource agencies—especially Fisheries Departments-----to local government with authority over land and resource use and the like. Other agencies with relevant regulations may include Environment, Land, Labour, and Civil Administration. Qualify the provision regarding requirement of farmers to outline the regulatory system—seems to me that the auditors should have some responsibility to know this system and what is applicable.

Principle 2:

I am guessing that the biodiversity standards will likely be considered the most onerous by small farmers, not the social impact assessments. Many of these standard assume capacity and knowledge that many farmers will not have, and set out standards that do not account well for local contexts.

The costs associated with BEIA is not the only barrier. Other include (1) lack of ability to understand the terminology and concepts, and (2) lack of access to relevant information and expertise. Regarding terminology: These ideas are clear to a panel of experts and the people who provide comments, and shrimp farmers with higher level education, but they may not be so easy to figure out for farmers who may not have access to higher education. I can see many farmers I know reading these standards and wondering what they could possibly mean! If the concepts make sense, then people will understand if they are translated into local terminology; most rural people have a pretty good idea, for example, what carrying capacity means if its presented in accessible language. So what is needed are translators. Solution is both to have a process for making the ideas accessible, and provisions for involving local people who do have the training to understand to help with translation. This is mentioned in the sentence on potential involvement of NGO or ecologist. But does not need to be a university trained ecologist. Sometimes a local teacher, government official may also be very knowledgeable and can also help out. Regarding access to information, involving local authorities may help, as not all governments are eager to provide information easily to ordinary people, and often a local authority figure is necessary.

On page 15, under continuous improvement: cumulative impact is a significant issue. Involving local government or other appropriate local authorities (e.g., community forest committees. . .) is one way of addressing cumulative impact.

2.1.1:

First sentence, “this document” is not clear—refers to BEIA? Also, not clear what why the local government should receive the document. What are they expected to do with it? Finally, civil society organization is ambiguous. In some places, private businesses, or business associations, are considered civil society. Be more specific, and also allow for a substitute where ‘civil society’ organizations as I think this was intended may be difficult to find (e.g., Vietnam?).

Specialist with appropriate expertise: I am trying to think who the villagers I know in Southern Thailand might go to. Many of them simply do not have contacts with ‘ecologists’ in universities or environmental groups. There are people around, for example, graduates from local universities, but I would add that the auditor could help put farmers in touch with experts, perhaps lists might be drawn up? On the whole I don’t find this provision very helpful because it assumes that villagers have no understanding of biodiversity.

Page 19: 100% of farmers (why not write, ‘all farms’) sited after 1999 are required to prove that they did not cause mangrove destruction/wetland alteration. The list of methods for proving this is rather long and this no specification of what is adequate. Especially the last item: testament of community or non farmer. I agree with including the last item since many farmers will not have access to aerial photographs and so on. However, the sentence might be more clear—does any one of these constitute adequate proof? If the farmer uses testament, how to ensure that a friend doesn’t so testify regardless what was once there? Once again, I’d turn to getting these from local appropriate authorities as well as a few community members.

Many small farmers will have no idea which species are at risk, and not be able to connect to the website (for language reasons, lack of access to computer etc) to find out what they may be. Can an auditor or other agency assist with this? Perhaps a local checklist? I am not convinced this provision needs to be in the standards; this is a matter for national governments to take action on, and should be covered in the provision for mandating compliance with national regulations. Or, is there a way to address the issue of species at risk without relying on farmers to understand, obtain information etc.? Some more general approach?

I hesitate to say this but the 25 year storm or flood risk implies that the past predicts the future, but we all know that climate change means that we can no longer do so, many of the problems of climate will come through increased frequency of major storms and other events. At least find another way of expressing this? In many ways climate change is rendering many of the provisions outlined here potentially meaningless.

Regarding provisions for buffers and barriers: I’d let local government/community have some input in what constitutes appropriate. *ie., solicit community input not just through the community impact assessment, but on specific technical provisions as well.*

2.4.1 Here is an example of where the committee wants to refer back to technical standards, but could instead rely more on local knowledge. One problem is that ‘undisturbed’ is a problematic term. In most agricultural landscapes and arguably even in most non---agricultural landscapes vegetations have been managed actively, or at least transformed substantially by humans for 100s of years. I would drop this idea altogether, and think instead about simply specifying some kind of vegetative barrier, or leaving it

to local communities/authorities to specify what should be there. Also the width of the zone should be left open for local determination. I know of lots of farmers closer to the ocean/lagoons than 100 meters, but whether this is bad or not depends a lot on local ecological context, how water flows etc. The 25 meter zone for waterways may also not be consistent with the history of local land use. The item is also unclear on what qualifies: what of 'man-made' (can't you make this gender-neutral) in agricultural areas? Many rice growing zones have many such canals, indeed this infrastructure is often what facilitates the expansion of shrimp farming. At least could say 'normally' the zones would be 100 and 25 meters, but that exceptions based on local ecology and history of land use would be accepted. As to impact on these canals and water bodies: It's the local people who will often tell you (in no uncertain terms) what a shrimp farm operation is doing that might compromise these ecologies or other livelihood uses. My impression is that all this borrows from regulations found in places like Canada around streams and conservation areas, but these sorts of regulations are not always directly translatable to places with much more intensive land use.

2.4.2 is not workable. If I understand right the BEIA specifies whether corridors are needed or not? I assume no farmer will want to see this need identified. If it is, and we take 2.4.2 literally, that means that if there are elephants or other large animal in a park within 50 km, the farmers needs to allow for elephants to pass through? Or am I reading this incorrectly? Rather than this 50 km provision the standard should refer to what wildlife has used the area near the farm in recent history.

2.5 Salinization. Would the testing take into consideration seasonality? I'm not an expert on hydrology but would expect that there could be major differences in results based on wet and dry season. Every six months does not cover that, since sampling could be timed so as to miss the season when seepage and salinization is at its worst. I suggesting adding an appropriate line on testing during most vulnerable seasons.

Second, I'd suggest consulting with owners/operators of adjacent farms and following up on any complaints with respect to place and time of possible salinization with appropriate testing. This would be easy to do and could help with improving community relations. Again, I would argue for putting this into the standards for salinization, not leaving it all for the pSIA. pSIA is done once? While salinization is ongoing.

Finally, besides soil types or lining are there other acceptable strategies for reducing seepage? In one area I know, shrimp farmers used to dig deep trenches around farms in response to complaints. Is there scientific evidence that this works?

Labour: 3.3: While prioritizing hiring local people is important, the criteria needs to be careful with respect to violation of laws regarding discrimination in hiring---here,
Item 4.3.1. It seems to me that these two standards contradict each other. The word 'migrant' worker is vague and could refer to people from other parts of the same country, or workers from other countries. Do all migrant workers fall into this one category? If workers from a relatively poor region of the country, or from a country that is politically repressive and economically a disaster come looking for work, are there not arguments that hiring practices might take this into account? While a provision mandating the prioritization of local people is acceptable, I'd suggest that the committee carefully consider these issues as well, and phrase 3.3 as a preference, but subject to the non-discrimination principle.

From a social justice point of view, what may be more pressing is the violation of the rights of migrant workers from out-of-country. This comes up in principle 4: the question of identity documents is crucial and must be retained. The question of relationship to labour contractors is also important. While labour contractors are not about to disappear, their activities should be fair, transparent, and not abusive.

Regarding flagged question on age limits: seems to me that hiring local youth aged 15 years up who have dropped out of school anyway is preferable to refusing them employment so that they have to look for work elsewhere, possibly considerably more hazardous. There may be a few risks working on shrimp farms but I suspect these are small compared to many of the alternatives—on fishing boats, in construction and the like. Hazards in the workplace should be dealt with regardless the age of the worker.

Wages: I wonder if the 50 percent of median income is doable? While this may work for the OECD, much depends on distinct regional economies (e.g., medians may be pulled up or down in regions distant from the shrimp farming areas in ways that have little bearing on what is reasonable wage on a shrimp farm). In addition, this does not account for how different kinds of workers may be paid differently— young men just out of school doing unskilled work may be paid a minimum wage that does not meet the 50 percent criterion, while permanent workers may be paid more. These sorts of arrangements would seem quite fair and normal among the parties concerned, but could violate the standard. Can the standard be phrased to account for this?

More generally the giant loophole here is subcontracting: much of the work involved in shrimp farming and harvesting (and later, processing) involves subcontracted labour. Do the standards apply to this labour? *The likely effect of standards pushing the price of labour higher than what is the norm in the region would be to create a push to hiring more subcontracting.* See Saidul Islam's work on labour in Bangladesh for examples. The question of fair wages is important—unskilled or semi-skilled labour is paid far too little in most shrimp farming areas, but this needs to be addressed more comprehensively in country, its not clear that these issues can be revolved through the certification of shrimp farming.

4.9.4 addresses subcontractors, but unlike the monitoring and auditing of direct workers in the other standard, workers for subcontractors are protected only by 'proof on paper' supplied by the contractor. This opens up a lot of space for problems and cheating. Why not apply same provisions on monitoring to subcontractor as for the farm owner/operator? Second, to minimize pressure to turn to subcontracting, perhaps a bit more flexibility with respect to the wage standard so as not to produce more subcontracting.

Principle 7:

7.6: Effluent load and sludge disposal: the amount and methods that will negatively impact local ecologies and livelihoods cannot be measured using mass balance alone. This is another standard in which local input could be usefully incorporated (see above). An additional standard I would recommend is that the community or affected people be informed before effluents are released into local water bodies and be invited to observe the process; similarly local communities should also be able to inspect sludge disposal and observe how sludge is disposed. Local people could also participate in deciding where to measure dissolved oxygen as they will often know the local water movements, and how and where poor disposal practices may affect particular livelihoods.

Local people are more concerned with these practices than with biodiversity assessments.

Other comments on some of the other technical standards:

6.1.2: Need to be specific on what kind of documentation, and how farmer would access necessary information (do not assume internet access!).

Managing escapes: Cyclone Jal, which passed through Southern Thailand early November last year, makes it clear that there will be escapes and that especially with climate change increasing the probability of major storms, that the ShAD should work from the assumption that regional norms for weather are of limited use in predicting likely future events.

Although there is no alternative, mention of MSC may not do much for legitimacy of ASC as MSC's legitimacy has been under sustained criticism? The hope is that ASC will not repeat their mistakes?

COMMENT # 40 – Dan Fegan - Cargill

Comments on the Second Shrimp Aquaculture Dialogue Draft Standards for Responsible Shrimp Aquaculture

General

We appreciate the amount of time and effort that has gone into the preparation of ShAD draft standards document but note that many of the standards still require further input of a fundamental nature (much of the “red flag” content). In our opinion, the document is far from a final draft and we would like to respectfully suggest that a further draft is needed to have a clearer, more defined set of standards. We would recommend that a third draft be prepared and submitted for public comment before final approval.

Further, we believe that the third draft should be prepared by a Technical Working Group, as provided for by the ISEAL guidelines. This TWG should have a more balanced representation of the global shrimp farming industry and NGO's and have a broad remit to review the comments from the first two public comment periods as well as solicit information from outside to support the setting of metrics for the standards.

Structure

We note that the Global Steering Committee has limited representation of producers, especially from Asia and the major producing countries in Latin America. The GSC appears to have a preponderance of members from the NGO community and lacks accurate representation of stakeholders from the shrimp farming community in Asia or Latin America. This is an issue that needs to be addressed if the standards are to reflect the realities of the global industry rather than a niche group.

The description of the duties and selection criteria of the GSC require a level of commitment and cost that prohibits the involvement of most producers. For example, of the 10 GSC meetings, only 2 have been held in shrimp producing countries with 6 in Europe and 2 in north America. This is likely to have hindered full participation of Asian producers in the process. Given the GSC's role as the decision-

making body for the ShAD, this could result in the standards being viewed as impractical and likely to benefit niche suppliers.

We would respectfully suggest that the governance of the ShAD be reviewed with particular consideration of the level of participation from the mainstream production industries in Asia and Latin America. In our view, the timeframe of the ShAD needs to be extended in order to ensure a more representative and meaningful involvement of industry stakeholders.

Standards Document

The draft standards document is difficult to read as it uses a level of detail and terminology that is complex and difficult for even a native English speaker to follow. This begs the question of accuracy in the translated versions and the ability of many of the directly-affected stakeholders to fully understand and comment on the document.

Large sections appear to have been imported from other documents, especially the sections on BEIA and Labour. In total, these two sections take up 22 pages and are written in largely generic terms with limited reference to the shrimp standards. It is strongly recommended that these sections are rewritten in simpler language and clearly linked to the relevant issues and standards.

The geographic scope (p7) mentions that the standards are “...intended for internationally traded shrimp, as it is expected that shrimp production in less-developed countries will continue to be promoted in an effort to bolster food security in those regions.”. This is not a statement of geographic scope but a scope limited to international trade and lacks logic if viewed in terms of sustainability of the farming operation. I suggest that this section be removed entirely. It is true that the current demand for certification is driven largely through international trade but that is no reason to make any distinction in the standards between shrimp farms producing for international and domestic markets.

If not, it will be necessary to determine which “less developed countries” will be exempted and if shrimp exporters from these countries would also be exempted? Activities to break the poverty cycle and improve food security policies cover food production, stability of food supplies, generating rural employment and improving accessibility to food¹, not simply the production of food for domestic consumption. Shrimp farming (for whatever market destination) clearly can and does play a role in improving food security in many countries so that this reasoning could equally apply to internationally traded shrimp.

In several standards there is a clear lack of consideration of the role of local and national policies and regulations with respect to the issues. For example, in standard 2 there is no mention of coastal zoning for aquaculture which is a feature of some government policies. This could lead to a farm operating legally within a government designated zone being ineligible for certification for reasons that have little or nothing to do with shrimp farming per se.

The standards are also intended to be practical for “...the top 20 percent of farms to achieve.”. However, the document lacks clear definition of what the top 20% of farms would be for any of the standards. Given the lack of representation from Asian producers who are among some of the most efficient producers in the world, this is an important factor if the standards are to have any clear meaning in a global context.

Finally, a number of footnotes in the document state “references being developed” or “needs definition”. This suggests that further work is needed to prepare a final draft for full public comment.

¹ Tacon. 2001. Increasing the contribution of aquaculture for food security and poverty alleviation. Aquaculture in the Third Millennium pp. 63-72. NACA, Bangkok

Unit of Certification

Farm Level vs Pond Level Standards

Given that the standards are “farm standards” and are meant to be addressing the impact of the farm, it would seem to be self evident that the standards should be addressed at the aggregate level of the farm. Indeed, at several points in the document, there is specific mention of this (e.g. on p5. “The ShAD seeks to set performance standards at the farm level.” and again on p7. “...the unit of certification is the farming operation”). This would be a practical and pragmatic approach as farms will typically have one or more ponds that will not meet one or more of the criteria for reasons outwith the control of the farmer. By using an aggregate score, these ponds will not affect the farm's ability to meet the standards unless there is sufficient impact at the whole farm level. This would also apply to and help resolve other issues and would greatly reduce the complexity of implementing and auditing the standards.

In the section on p7 the issue of collective farms or “farm clusters” is raised. The concept, although valid and aimed at inclusivity, requires more thought. For example, what does “...have the same production system...” mean or what is the significance of “a common market outlet.”? Both of these would appear to cover farms located at widely different locations with different impacts on their local environments. To be consistent, the farms in a cluster should be geographically close and have a common impact that is capable of being addressed through the standards.

The issue of cumulative effects is complex but there is no logic in the statement that “ ... some of the ShAD standards are independent of what a producer can achieve at farm level...”. This ignores the concept that these are farm standards and place an unfair restriction and burden on the individual farm seeking certification. In principle, if something is not within the direct control of the farm, or cluster of farms, seeking certification then it should not be used as a standard by which to measure that farms performance. This statement also contradicts that on p. 8 which states “The ShAD GSC focused on developing standards that can be audited through farm records...”.

As an editorial comment, the last paragraph is incomplete “...defining socially and environmentally”.

Principle 1

Criterion 1.1: In the case of countries where government permitting/licensing is not required, is this criterion waived?

Principle 2

Overall, this section is too long, too detailed and too general. The language is very technical and the section seems in large part to have been dependent on other documents for its text. There is rather limited reference to the practical aspects of applying the principle and standards to shrimp farms. The principle as stated is problematic since any farming activity will, by its very nature as a monoculture, tend to reduce (not conserve) overall biodiversity. The key question is whether the farming activity will critically damage biodiversity in such a way that it cannot recover. The introduction gives a very wide definition of biodiversity and then goes on to state that “...the ShAD considers the maintenance of biodiversity of critical importance...”. This results in a series of standards that are unmeasurable and relatively meaningless.

There is also a serious issue with separating the long-term impacts of farming on biodiversity with short-term impacts on local biodiversity caused by natural cycles, particularly within the context of auditing timeframes. For example, the environmental impact of shrimp farming operations can be shown to be less than the impact of seasonal weather patterns such as monsoon and dry seasons.

There is no mention of what constitutes an “environmentally suitable location” for shrimp farming or any mention of coastal zoning for aquaculture which is a feature of some government policies. Several countries have set aside areas (and in some cases provided funding or infrastructure) for shrimp farming

operations. For simplicity, if farms are located in an area zoned or designated for shrimp farming by a national government, then this should be accepted as a reasonable basis for meeting this standard. While the benefits of such an approach, and the weight given to environmental issues versus social ones, can be debated, this is outside the control of the individual farm and should be taken up at government level.

Criterion 2.1

As the wording stands, a BEIA that shows major impacts on biodiversity would have the same value as a BEIA that gave the farm a clean bill of environmental health. The BEIA on its own is not a standard as it does not provide any measure of an “acceptable” impact nor does it provide any guarantee of environmental stewardship. An indicator and standard that consists simply of carrying out an assessment with no regard for the outcome of the assessment seems strange.

The lack of available baseline data on which to set a standard suggests that this should be adopted as an aspiration rather than a standard. The lack of a proper standard of acceptable or unacceptable impact on biodiversity means that there is a vastly disproportionate amount of detail on a single approach (BEIA) to dealing with the issue of farm siting in relation to environmental impacts. Much of this section is dependent on this single activity such that it represents a complete barrier to meeting the standard. It is also strange that this approach is cited as the rationale for the principle which appears to be a case of circular reasoning. It would be useful to understand why BEIA was chosen as the best means to cover the issues identified in this principle.

Requiring (“mandating”) a BEIA will bias certification against small-scale farms and farmers who lack the necessary resources, finances and understanding to invest in the process. As a result, it will favour large, well-funded and resourced producers who, in some cases, may actually be less efficient than smaller farmers. In particular, it will work against many of the producers in Asia who appear to be under-represented in the GSC, despite producing over 80% of global farmed shrimp. This raises further concerns that this standard could prove unintentionally to be a barrier to trade. Is there any thought of adopting a “critical” farm size below which this requirement is not needed?

The relevance of a farm-level BEIA in situations where there are large numbers of small farms also needs to be considered. The ability of individual farms to have much impact, positive or negative, is likely to be so small as to render the process meaningless in terms of assessing environmental impact. It would be useful to know if the whole issue of assessing environmental impacts at this level was referred to a technical working group for recommendations and guidance.

I suggest that this principle requires further discussion and should be referred to a qualified technical working group as allowed for under ISEAL so that a final standard can be developed. This is especially required given that the guidance for implementation of section 2.1.1 still has not defined either “appropriate expertise” or what constitutes a significant biodiversity impact (p. 16).

Criterion 2.2

2.2.2

Given the lack of any baseline, how will a farm identify historical impacts, even when a BEIA has been conducted?

There is an implicit assumption that all coastal wetlands are “...critical habitats and HCVA’s”. This is not always the case. Such designations should themselves be developed through a credible process and specifically identified either at local or national government level. If a farm is located in an area zoned or approved for use by government for shrimp farming, it should be exempted from this requirement.

The requirement for farms sited prior to 1999 to reforest 50% of an area is unreasonable and appears to be based on the debatable assumption that shrimp farming has been responsible for all the estimated mangrove loss. Similarly, what is the basis for the requirement that the reforestation be of similar relative composition and include 80% of tree species that were in the original communities? It is highly unlikely that this information would be available and may not be appropriate to the local ecosystem as it currently exists. It is also inconsistent with the stated requirement for a BEIA to determine actual, not theoretical, impacts.

Criterion 2.5

It should be made clear if the unit being considered in this criterion is the individual pond or the farm. To be meaningful, the farm should be used since one way to prevent salination of surrounding soils and freshwaters is to maintain a buffer area within the farm property.

The standards should focus on the actual impact of the farm on surrounding soils and freshwater areas and whether this impact is detrimental. Rather than specifying fixed values, the standards should relate to the existing baseline conditions and the change associated with the farm operations. Many farms are located in estuarine areas that have tidal and seasonal differences in salt content of surrounding areas due to variations in the rate of flow of freshwater and incursion of saline water. Indeed, it is possible to find areas where shrimp and rice culture are alternated depending on the prevailing water conditions. There should be a programme in place to prevent salinization of surrounding areas and to monitor soil and water quality to identify impacts of the farming operations on surrounding farmland. A mitigation plan should also be in place if adverse impacts are identified.

2.5.1:

This section uses an extremely dated approach and completely ignores the use of farm design and construction techniques to minimize or eliminate the issue of salinization. Farms may have an internal buffer zone to prevent escape of salt water from the farm site, dikes can be built with an impermeable core, pond bottoms can be capped or lined and farms may be designed for low or zero water exchange. None of this appears to have been taken into account.

The section on calculation of water loss in ponds appears to be redundant in this section and it is not clear what issue it is meant to be addressing. Since seepage and its effects should be clearly visible, calculation of a theoretical water loss in excess of evaporation has little meaning, especially when water exchange rates are factored in. We suggest that this section be removed.

2.5.3:

Is there any qualification for the wells and surface waters under consideration? Are they within the farm system? In the vicinity? Directly impacted by the farm?

2.5.4:

What is the justification for taking samples 100 m from ponds or canals rather than 20 or 500? This requirement raises issues related to trespass or land encroachment if the land concerned is not within the jurisdiction of the farm. It would also be quite difficult to determine a single point source of salinization at such a distance as there are may be a number of possible sources of salt in addition to the farm in question.

2.5.4/2.5.5:

The use of specific conductance rather than the standard refractometer available at most farms is understandable if accuracy is required. However, perhaps it would be simpler to allow the farmer to use

whatever method he chooses to routinely monitor salinity with the proviso that the auditor would measure conductance during the audit if soil salinization was suspected at the time. This would retain some degree of freedom for the farmer but would likely lead to the gradual adoption of conductivity without being too prescriptive.

For simplicity's sake, it is better to restrict the method of choice to conductivity rather than allowing chloride as an alternative.

Principle 3

The text for this section is over-long and complicated with far too much detail for standards document. Once again, this section does not take adequate account of local and national government planning and permitting as an alternative to the Impact Assessment.

I do not understand the rationale for choosing a highly bureaucratic approach to resolve this principle rather than a simple requirement for systems to be in place to allow grievances to be raised and addressed with an audit requirement for these to be reviewed and independently verified. This was the approach used in other dialogues and would appear to be a satisfactory compromise. It also fits in better with social norms in many of the areas where shrimp farming actually takes place. If the simpler approach does not resolve this issue, then a more complex one could be considered in future revisions.

Criterion 3.3

This section once again reflects a "big business" mentality in its approach to this issue quite out of touch with the realities of shrimp farming in many Asian communities. The level of paperwork required to satisfy an auditor would be beyond the ability and ken of many small-scale farmers to comply. If the argument is that only large scale operators with the administrative capability to do this represent the best performers or those capable of being certified, then the standards would appear to reflect an assumption that could be quickly falsified.

In Asia, some shrimp farming activities such as harvesting depend on itinerant harvesting crews who travel great distances providing services to farms. The decision to hire migrant workers is not simply a ploy to avoid hiring locals but may reflect a number of considerations. Perhaps it would be better to adopt a standard that a farm has a minimum ratio of local to migrant unskilled labour?

Principle 4

Criterion 4.1

The ILO Minimum Age Convention 1973 abrogates the responsibility for implementation to the national Competent Authority of member states who have ratified the convention and in any case permits a minimum age of 15 years with provision for the Competent Authority to adjust this down to 14 years. This standard should follow the ILO convention or national law where this differs. To do otherwise would potentially expose the employer to legal action.

On a less legalistic note, it is not unusual for a 15 year old to be the primary breadwinner in rural communities and marriage/parenthood at ages between 15 and 18 is by no means uncommon. It is proposed that the standard remain at 15, unless legally set at a different age but that workers aged 15-17 are not required to undertake hazardous work (as not all work in a shrimp farm is inherently hazardous).

We would further recommend that an additional note be appended to ensure that any contractors or sub-contractors employed on the farm should adhere to the same standards.

Criterion 4.2

Neither of the indicators actually directly address the issue of forced or bonded labour. Items mentioned in the guidelines such as contracts and legal permits to work should be included in the standards and available for audit. Any worker employed on the farm should be legally employed and registered with the relevant authorities.

4.2.1: Suggest addition of "...without due cause." At end of standard. This would allow for withholding of money to cover damages, unpaid taxes, reimbursement of cash advances etc.

4.2.2: The standard is unclear in that original copies of identity documents are usually needed to apply for official work permits. The standard should cover permanent retention rather than surrender.

Criterion 4.3

It would greatly simplify the standards if this, and the other labour standards, were included as a general requirement to have a clear written labour policy in line with international norms to cover the various issues raised. The policy could then be audited and changes made where they were not in line with the norms.

Has this criterion be considered in light of small scale farmers? Is there a size limit below which the standards do not apply? In criterion 4.4.1, for example, farms below 5 employees are exempted.

4.3.1: The standard contains a contradiction with criterion 4.1 in that it requires equal access to ALL jobs regardless of, among others, age. A proviso should be added referring to criterion 4.1.

It is also not clear what would be considered as evidence of proactive anti-discrimination and the term itself suggests a desire for positive discrimination to address perceived imbalances. It is suggested that the wording be changed to simply address discrimination.

4.3.3: The wording of this standard again needs to be revised or at least clarified in the guidelines. While the intention is clear, it could be interpreted as forbidding the use of bonus schemes and similar individual rewards.

Criterion 4.4

4.4.1: Does the limit of 5 employees refer to farm staff only or would it also include administrative staff? For example, if a farm has 4 farm workers, an administrator and a domestic helper, would it be included in this requirement?

4.4.3: The standard may be strengthened by having a record of the number of man days lost as a result of lost-time accidents. This could then be used to set limits as a proportion of total man-hours worked. There should be some reference to the availability of first aid equipment and expertise relative to the proximity/access to medical aid such as doctors surgeries or hospitals.

Criterion 4.5

4.5.1: The requirement to pay the highest of the two figures is unreasonable especially in the case of small-scale farms and given the lack of information generally available to farmers on median incomes. For simplicity, the legal minimum wage should be the standard, especially since the guidelines state that "...minimum wage levels compare reasonably well to this OECD guideline". Many farm workers are also paid a bonus based on production – how is this to be accounted for? Some farms also provide food and accommodation which effectively increases the take-home pay.

The guidelines again appear to assume that the farm is a large operation with facilities for formal human resources and payroll functions. Again, this is not the reality for the majority of farms producing shrimp in Asia.

Criterion 4.8

In general this section replaces the standard working conditions in Asian shrimp farms with a factory-style work regime. Typically, farm workers will fit their working hours to the needs of the business. It is generally accepted by farm employees that they will work for an extended period of several weeks followed by a few weeks break after harvest. Daily working hours/times are flexible and the workload on a typical small farm provides plenty of opportunity to rest (it is quite common to visit a shrimp farm and find more people sleeping than working!). There needs to be a recognition that the working style of a shrimp farm follows an agricultural rather than a manufacturing pattern.

Principle 5

Criterion 5.1.

Many of the standards actually fall under the remit of 5.1.2 and would be part of any health management plan. Again, the standards assume a fairly sophisticated operation with extensive written procedures. This would limit the ability of small, well-managed and efficient farms without detailed procedures from being certified.

5.1.1: Unfortunately the reality of product authorization by national governments does not necessarily provide the level of safety envisaged in the standard. In some countries these simply do not exist and in others, the process may simply be a rubber stamp of existing practices. It also begs the question of which national authority is intended (often the producer and importer authorities have different standards). This standard should require positive evidence of the safety of products being used on the farm.

5.1.2: Should be simplified and reworded to identify issues/areas to be covered by the health management plan.

5.1.4: If DO is an issue of shrimp health, why is there a distinction between aerated and non-aerated ponds? If non-aerated ponds cannot be maintained above 3 ppm it would suggest that aeration is required to maintain shrimp health.

5.1.5: pH >7 of itself is not an indicator of shrimp health. Shrimp can grow perfectly well at slightly lower pH and can suffer from problems with ammonia toxicity at pH >9.

5.1.6: Again, there would seem to be no justification for accepting lower survival rates simply based on production systems. It seems illogical that survival rates, used as a proxy for health, are permitted such high variability (min .30% to min. 70% depending on system). This would seem to suggest that an inherently "less healthy" system is acceptable as long as it does not use feed and is not aerated and that the more "healthy" the system becomes, the higher the standard. This standard also appears to ignore the desire to reflect the top 20% performers. Recommend that a fixed minimum value of 70% be used for all systems to reflect best practices

In the event of unusual mortalities outside of the control of the farm, this could be dealt with by the auditor on a case-by-case basis.

5.1.7: This standard is meaningless in its current form without any reference to the major pathogens of concern. Simply providing a list of pathogens is not sufficient given that it may consist of pathogens that are of minor interest. It also ignores the fact that there are other ways of reducing disease risks without using SPF or SPR approaches, and that technically, all shrimp held outside of a biosecure facility are no longer SPF.

Rationale:

In paragraph 1, the standards "...mandate a health plan...improvement.". In the event that a national sector-wide HACCP plan was available, would this suffice as meeting the requirement for small farms?

Para 2: The use of targeted pesticides with low toxicity to other animals and a short half life to eliminate disease carriers should also be encouraged.

P 46 para 1: If it is only required that pH>7, litmus paper would also be sufficient

Para 2: As previously stated, there is no reason to accept low survivals if the intention is to target the top 20% of producers. Providing exemptions to large size ponds effectively promotes lower land-use efficiency.

Para 3: This section needs careful consideration in light of the realities of the SPF and SPR technologies. The rationale for providing a national exemption to a global standard is also unclear (...less than 20% of national production). In fact, testing seed is an alternative approach to some diseases that can be effective in reducing the risk of outbreaks and should also be accepted as a valid approach. What is the rationale behind using 20%?

Guidance

5.1.1.: In general, it may be more realistic for the auditor to have copies of the national regulations, especially when the auditor is based locally. Even for visiting auditors, getting a single (translated) copy would be more efficient than requiring each individual farm to provide their own.

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5.1.3: The guidance states the average value for three days should be used whereas the standard says three days in a row. Also, again, the logic behind the exception for biofloc ponds is not justified as the shrimp is exposed to sub-optimal oxygen levels.

5.1.5: For a parameter with a strong daily cycle, measuring pH once per week is not a best practice. Many small farms measure pH once or twice daily.

Survival rate calculations provide at best a rough estimate as they are based on an average number stocked and an estimate of harvest number based on average size at harvest.

Criterion 5.2

If we start from the premise that a farm has the right to protect itself from the depredations of predatory animals using non-lethal means, then some level of “harassment” should be acceptable. Bird scarers, scarecrows, anti-bird lines could all be construed as harassment devices but should be permitted under the standards.

5.2.1: The requirement for a monitoring program to document predator visits is unreasonable and impractical and should be dropped.

Criterion 5.3

Attempting to separate individual ponds from a certified farm that are to be ASC labeled or non-ASC labeled would make the farm certification meaningless and should not be an option. The farm is the certified unit, not the pond.

Permitted veterinary medicines prescribed by a qualified veterinarian and respecting appropriate withdrawal periods should be allowed under any standards attempting to promote animal health and welfare. Although there are no such medicines available at present (and therefore no allowance), this would be a more positive way to phrase the standard.

In the footnote (58) lime is referred to as a hazardous chemical. This is true of quicklime (CaO) but not of agricultural lime (CaCO₃) or dolomitic limestone. This distinction should be made clear.

P 50: Use of probiotics

This is a highly contentious field where the theory is at odds with the practice and raises many issues. There should be a requirement for farms using probiotics to demonstrate that they are safe. There should definitely be no acceptance of probiotic fermentation on farm, even if it is seeded with a

compliant commercial product. The risk of such fermentation resulting in dominance of bacteria from the pond water (if used in the fermentation process) rather than those in the commercial preparation, is high.

Recommend that this guideline require that the safety of any probiotic product be demonstrated at the point of use – either direct or after fermentation – to show that what is put into the pond is safe.

Principle 6

Both principles 6 and 7 refer to an “eco-label” It was our understanding that the dialogues and the standards were not intended to develop an “eco-label” but were more directed towards promotion of farm sustainability.

We would recommend option 2 as this principle is outside of the direct control of independent farmers. It would unfairly discriminate towards large, vertically integrated farms that had greater control of their PL and broodstock sources.

Principle 7

Again, this section covers a large number of issues that are not directly related, or under the control of, the farmer for whom this standard is intended. We would support removing this section or extensively revising it to reflect what is under the control or influence of the farmer.

If retained, we would recommend that the standard be developed along the same lines as the Tilapia and Pangasius standards by focusing on those indicators that are under the direct control of the farmer , such as FCR and Fish in Fish out ratios using information provided by the feed supplier.

As written, this principle, does not accurately reflect the realities of the aquafeed business. We would support these issues being dealt with by a separate feed mill standard with adequate representation of the feed industry and ingredients suppliers. This is especially the case for the indicators in criterion 7.1.

Criterion 7.1

The requirement to disclose all major feed ingredients used at greater than 1% in the feed raises serious IP concerns for feed formulations. The justification for this requirement for a farm standard is not clear and, in the absence of an ISEAL-compliant process focused on aquafeed production, we would recommend that this requirement is dropped from the shrimp farm standards.

With regard to traceability, the industry best practice, as used b y human food industries as well as animal feeds, is a “one-step forward, one-step back” line of sight up and down the supply chain. This allows for effective risk identification and risk management and has been shown to be effective in managing situations requiring product recall. We would recommend that this approach be adopted in any standard for traceability.

With regard to terrestrial ingredient sourcing, we believe that this is also misplaced in a farm standard where the farmer has little or no ability to control this. Again, we would encourage this being identified as an issue for a separate dialogue on feed standards. Further, we note that aquafeeds are comparatively small users of these ingredients compared to the terrestrial livestock industries and see no justification for considering aquaculture in isolation with respect to the environmental impact related to soybean and palm oil. It would be more effective to deal with the issues of the Amazon biome and palm oil directly through the soybean and palm oil initiatives currently in place.

Criterion 7.2

7.2.2: The refusal to allow feed ingredients based on penaeid shrimp is based on a perceived risk of disease transmission if material from infected shrimp is used to feed healthy shrimp. However, this has never been shown to be a significant route of transmission as long as the ingredients are adequately processed to destroy any infective agents. All cases of disease transmission from shrimp being fed to shrimp have been using fresh or frozen product and not from heat processed products such as shrimp meal or shrimp head meal. The heat from pelleting feeds alone is enough to inactivate known viruses. This indicator and standard should reflect the scientific risk assessment and allow certain forms of processed shrimp ingredients.

Interim plan

7.2.1b: The interim standard remains a serious constraint since FS has only one scored feed fishery in Asia (Bali Sardinella) with minimal geographic scope and for which all categories score <6. The problem lies with a lack of available information on which to base the FS score rather than any inherent lack of sustainability. As a result, more reliance will be placed on sourcing imported fishmeal and oil.

We would also suggest that the IFFO RS scheme be included as an interim measure as it represents a significant improvement over the current situation and involves stakeholders with a direct impact on fishery management and sustainable practices, unlike FS which simply provides a snapshot opinion of the state of a given fishery. This would also be consistent with the Guidelines for the indicator on p 64. We would also encourage adopting a flexible approach to the timing to allow for the fact that the timeframe is outside of the control of farmers, requiring independent bodies to establish fishery standards, provide scientific assessments and management schemes for fisheries and implement sustainable fisheries practices. In the event that these have not been put into place by the stated deadline, there should be some provision for an extension of the deadline.

Page 62:

The information that FS reports that 88% of global fishmeal and oil have a FS score of >6 is erroneous as this percentage relates only to the small number of fisheries that have been scored, not the global catch. Based on recent discussions with FS, scoring Asian fisheries will take some time and effort due to the need to develop appropriate information sources.

Guidance:

7.2.1c: Suggest removing the guideline that documentation must be provided to prove that fisheries by-products are not suitable for human consumption. It would be difficult to identify an appropriate Competent Authority to provide such documentation and some by-products would be usable (albeit not really acceptable) for human consumption.

Criterion 7.3

7.3.1: Recommend removal of the soy and palm oil requirements. Provide provision for extension of the deadline in the event that certified ingredients are not available in sufficient quantities for reasons outside of the farming industry's control

7.3.2: Suggest dropping this requirement for reasons given earlier.

Criterion 7.4

We support science-based safety and environmental regulation of biotechnology, including GM ingredients and foods, and recognize that consumer preferences and variations in producer use will ultimately determine demand. We would recommend that the issue of GM ingredients be removed

from the current farm standards. This issue is more properly dealt with through an ISEAL compliant feed standards process. There is also a growing consensus that the use of GM ingredients and foods should be dealt with on a case-by-case basis using the best available scientific assessments.

Use of Land Animal By-products

We do not believe that there is sufficient basis in a farm standard to mandate requirements for ingredients used for feed production. These should be left to a separate ISEAL compliant feed standards process.

Criterion 7.5

7.5.2: Removing FCR from the standards would not be justified as this is the major aspect of farm management that has an impact on the FFER.

If the standards are required to reflect the top 20% best performers, the FCR targets seem rather high, especially for *P. monodon*. It is suggested that some time be taken to collect actual farm data to support a realistic BMP value for FCR.

Criterion 7.6

The basis for the N and P limits is said to be a well-operated, semi-intensive shrimp farm using low protein/low fishmeal feed. This would appear to favour such land-intensive systems over smaller, more intensive and efficient shrimp producers. We would suggest that time is taken to benchmark also against other systems to ensure that the limits set are fair, reasonable and do not favour any individual production model.

The calculations are also largely theoretical and do not appear to require actual confirmation of N and P discharge in the effluent. We believe that this is a significant oversight and should be corrected by placing limits on the effluents.

The justification of DO as a surrogate variable for the impact of a farm on the receiving water bodies is not clear. DO levels are impacted by a range of factors intrinsic to the receiving waters themselves and so DO cannot be taken to be solely, or even largely, due to the effect of effluents from shrimp farms. We would suggest that this section needs to be revised.

Criterion 7.7

This section should be dropped from the current standards due to the fact that "...there is insufficient data for setting energy use standards.". This should be identified as an area for further information collection with a view to proposing a future standard rather than a mandated requirement to keep records.

If retained, we would suggest that it be amended to require a farmer to support a commitment to reducing the energy demand per tonne of shrimp over time.

COMMENT #41 – WWF Germany, Austria, Sweden, and Switzerland

Official Comment and Review Process 2011: Draft Shrimp Aquaculture Dialogue Standards (ShAD)

This Document provides joint comments from the WWF offices in Germany, Austria, Switzerland and Sweden to the WWF Aquaculture Dialogue for Shrimp (ShAD) for following document:

ShAD Draft Standards for Public Comment Version 2.0

Comments and Review

Principle 1: Comply with Laws / Regulations

- Generally in this section the question is on options to address / deal with official documents / papers that have been produced by illegal / corrupt processes. Some guidance should be provided for CB's to address this critical issue (although quite tricky and complex)
- Strong support for the goal to go beyond the law and produce more rigorous standards than the law requires, as long as the legal structure of the country is respected. The certification scheme is voluntary and so the possibility is there to agree for improvement beyond the legal statement if needed. This would also secure the standards regardless of what nation the farm is situated in.
- *Possible / potentially important standards to add:* Although the ShAD does not want to specify which laws are important, we feel that compliance with laws for spatial planning / zone planning / siting of farms still are worth considering.
- The possibility of losing a certification must be alerted and realised to farms which do not comply with the standard.

Principle 2: Siting of Farms

- **General remark:** WWF highly welcomes stringent and effective regulations with regards to siting consideration for new shrimp farms and compensation / adaptation measures for existing shrimp farms with regards to former (illegal or critical) habitat conversion.
- It does seem that many metrics are being made depending on the outcome of the BEIA. This allows farms to address their specific concerns more individually but at the same time, makes many important issues much depending on the BEIA. It is therefore of utmost importance that the BEIA is conducted by (accredited) professional and capable consultants/organisations and that the scale / benchmark being used to assess a given farm i.e. in Thailand is the same as for a farm in Vietnam (Consistent BEIA in all countries !)
- **Criterion 2.1:** As a general feedback, siting standards for new shrimp farms should be very stringent and clear. BEIA transparency is very important, and communication with people who are not efficiently reading or illiterate also needs to be included in the BEIA. There should always be information available for all people involved in the business.
- BEIA: For small scale farms there should be provisions in place to combine BEIA for a cluster / area of small farms. As a limit for performance of BIEA for individual farms, annual production volumes could be taken as the indicator, since this is often reflecting the financial capacity of a given farm. The same indicator could be used to determine the size of a cluster of farms subject to BIEA. e.g.

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BEIA is mandatory for single farm with output of > 250 t / year and cluster of farms with combined output of > 250 t / year.

- **Indicator 2.2.2:** Restoration efforts must compensate at least 1:1 the lost habitats (for both ponds built before and after 1999). Restoration must be done in such way that ecosystem functionality is allowed, best in combination with establishment of buffer zones around the farms or towards aquatic water bodies². For existing and new farms, standards 2.2 should incorporate specific standards for extensive, zero-input systems (e.g. such as *Silvofishery* systems). For such systems it is recommended to include standards for both buffer zones (2.4.2) as well as a new standard for mangrove coverage area on an individual farm. In *Silvofishery* systems optimum yields and ecosystem function are reached by a coverage of 60 – 70% mangrove (and ponds / water surface area 30 – 40% of a given farm), therefore it is suggested to include this as an additional new standard.
- A proposed timespan should be set for the farmer responsibility in ensuring that the re-growth of mangrove is successful. Notify that replanting as such is not enough, successful re-growth is crucial. For how long is the farmer expected to be economically responsible for ensuring a successful re-growth of mangrove?
- *Silvofishery* systems should be further accepted within ShAD when they are in compliance with the regulation on riparian buffer zones with a minimum width of coastal buffer zone of 200 m (+ 100m in comparison to current draft 2.4.1) and 100 m for adjacent natural water bodies (e.g. riparian zones along farms).
- Some national regulations already require a minimum of a 400 meter coastal barrier and a 200 meter riparian barrier which indicates that such a standard should be more appropriate. Would suggest at least 200-300m on each side of the farm as a buffer zone and a minimum width for riparian buffers of 100-200m, to not be on the edge of protection.

Criterion 2.5 Prevention of salinization of adjacent freshwater and soil resources

- 2.5.3: Farming of marine shrimp (in saline water) in freshwater habitats should generally be banned and not allowed under the ShAD standard. (Exception may be fully closed farming system with proper treatment of sludge. This is however very difficult in a freshwater habitat and it will always have serious impacts on soil and water).
- Within Criterion 2.2 we do not find an indicator / standard making sure that farming of marine shrimp in freshwater habitats is excluded from certification by the ASC. Indicators 2.5.4 and 2.5.5 are addressing the changes of salinity in the water / soil (conductance and chloride concentration) but the important issue is on timing of such analysis: Most saline water is being discharged into the surrounding water bodies *upon harvesting* (pulsating effect), which has a clear and major impact on water and soils. Such practice must be prevented and not allowed.
- Soil erosion : Often shrimp farm embankments are subject to serious erosion on the outside of the farm, having consequences on aquatic ecosystems. This issue seems to have disappeared from the standards. It should however be noted that dykes and embankments outside the farm, forming the border of the farms and the surrounding environment should be included in the standards, since the

² Recent study has revealed that the current global mangrove area is 12.3% smaller than earlier estimates (Giri C. et al, Status and distribution of mangrove forests of the world using earth observation satellite data. *Global Ecology and Biogeography*, July 2010.). This makes a strong case for restoration efforts under the ASC scheme!

issue of soil erosion from the perspective of the surrounding water bodies, is more important to include in objective standards (since it is the interest of the farmer anyway that he prevents erosion on the inside of his farm, because this may have impact on the production output and process).

Principle 3: Develop and operate farms with consideration for surrounding communities

General remark for P3: We feel that the issues at stake have been adequately addressed so far. As a general feedback we do think that the *unit of certification* needs to be taken into account when addressing small scale farms for P3. For Criterion 3.1 – 3.3 standards must take into account the realities of small scale farmers and allow for farmer group / clusters to address and solve these issues.

In order for the ASC to be credible, these criteria must be designed in dialogue with representatives for local communities. Access to coastal area should be granted to local community by farm owners.

Criterion 3.1 Impacts on communities / stakeholders

- No specific comments

Criterion 3.2 Conflict Resolution / Complaints

- No specific comments except that conflicts ought to be solved before certification!

Criterion 3.3 Local Employment

- No specific comments

Criterion 3.4 Contract Farming

- This is an important part of social responsibility and we do welcome the proposed indicators and standards for contract farming models.
- 3.4.3 Preferably a meeting every quarter of a year to stress the importance of fair and mutual understanding of both the contract and the workload.

Principle 4: Responsible Labour Practices

General remark for P4: We feel that the issues at stake have been adequately addressed so far. As a general feedback we do think that the *unit of certification* needs to be taken into account when addressing small scale farms for P 4.

Criterion 4.1 Child Labour

- The first and most responsible option should be a minimum age of 18 for employees. A recommendation is still to provide all standards in 4.1.2 for higher credibility.
- The current proposal of 15 years of minimum age of employees is considered , providing all standards in 4.1.2 are strictly adhered to and no hazardous work is included. It is advised that a list with hazardous works is elaborated, and that youth's under the age of 18 will not be exposed to such duties.

Criterion 4.2 Forced Labour

- No specific comments, we do agree on the proposed standards

Criterion 4.3 Discrimination

- No specific comments, we do agree on the proposed standards

Criterion 4.4 Work Environment and Safety

- No specific comments, we do agree on the proposed standards

Criterion 4.5 Fair Wages

- No specific comments, we do agree on the proposed standards

Criterion 4.6 Freedom of Association

- No specific comments, we do agree on the proposed standards

Criterion 4.7 Disciplinary Practices

- No specific comments, we do agree on the proposed standards

Criterion 4.8 Overtime Compensation

- No specific comments, we do agree on the proposed standards

Criterion 4.9 Worker contracts

- No specific comments, we do agree on the proposed standards

Criterion 4.10 Fair worker management systems

- We do agree on the proposed standards but suggest that: 4.10.1 Meetings should be held no less than every quarter of a year for conflict solving or avoidance. It is mostly more efficient with meetings within shorter time laps.

Criterion 4.11 Living conditions for employees accommodated on the farm

- It is advised that for these issues, - where cultural factors play an important role-, a local organization for workers rights/womens' rights shall be included in the "culturally adequate" application of sanitary conditions and facilities.

Principle 5: Shrimp Health

The overall question is if it can be assured that, the use of therapeutants and chemicals authorized by national authorities can be neutralized before discharged, if they are allowed. There need also to be a plan of how this can be measured.

Criterion 5.1 Disease Prevention

- General remark: Specific measures or exemptions should be granted for extensive, zero input farming systems which are in constant exchange with natural surroundings (e.g. Silvofishery systems in the intertidal zone). Such farms are usually not having any kind of BMP in place to prevent disease, since they are in constant exchange with the environment, or are part of the surrounding environment rather than separated unit
- 5.1.6: For extensive, zero input systems the SR and RSD are hard / impossible to measure since recruitment / stocking of shrimp is also by natural influx into the farming systems (PL's are passively taken into the farm by tidal movement), so SR is difficult to calculate. Provision need to be in place for such systems.
- Farming of marine shrimp in freshwater / low salinity: It is well known that farming of marine shrimp in freshwater and / or low salinity levels increases risks of disease. Therefore it may be appropriate that the ShAD is addressing this issue and is defining some minimum salinity levels in order to prevent outbreak of disease due to farming of shrimp in low salinity / pure freshwater areas (of course such standard must be coordinated with Criterion 2.5 (salinization) in order to prevent farmers transferring brine solution to inland areas for reaching the desired salinity levels)

Criterion 5.2 Predator Control

- No specific comments, we do agree on the proposed standards

Criterion 5.3 Disease Management / Treatment

- 5.3.1 WWF does clearly favour option 1: The entire unit of certification must adhere to the same rule as a general principle. It does not make sense to have pond-based practices in place, strict traceability to pond level is in most cases not possible on a reliable basis!
- 5.3.3 Instructions should not only be *present* and trained on the farm, but the farming personnel must prove that proper instructions are *being followed and implemented in the daily practice*
- 5.3.4 We have a Question: Which pesticides are allowed, and why? “Use of pesticides” states that there is allowance for treating water with tea-seed-cake, rotenone and chlorine if water is free from shrimps. What about impact after water change or seepage?
- 5.3.5. If chemicals are being used, they must be neutralized before being discharged into the surrounding ecosystems (e.g. Metabisulfit for treatment of harvested shrimp to prevent *Melanosis*)

Principle 6: Broodstock

General Remark on the proposed options: WWF proposes that Principle 6 shall remain in the standards. As with feed, the auditing system on farm level must encompass the element of integrating hatcheries supplies into the overall management scheme on a given farm (as long as the ASC is not addressing the auditing / standard on hatchery and feed mill level!)

Criterion 6.1 Exotic Species

- No specific comments, we do agree on the proposed standards

Criterion 6.2 Origin of PL's

- 6.2.3 Unless sustainable and traceable, wild-caught brood stock should not be accepted in the standard. Also, ablating of capture brood stock to maturation should be banned as quickly as possible.
- 6.2.4: Allowance for exception for zero-input systems (e.g. Silvofisheries). Natural influx of PL's into the farming ponds should be allowed / accepted by the ShAD

Criterion 6.3 GMO / Transgenic

- No specific comments, we do agree on the proposed standards

Principle 7: Resources

General Note with regards to feeds: Feed as one of the major impact factor in aquaculture must be handled and addressed as a crosscutting issue for all dialogues in *exactly the same way*. There is no rationale why an ASC certified Pangasius / Tilapia should have different indicators or standards for the sustainability of the raw materials being used (marine and terrestrial) in comparison to e.g. Shrimp and Salmon / Trout. It is of outmost importance for the market acceptance and the success of the ASC in Europe that this issue is dealt with by WWF with highest priority before the launch of the ASC.

Retailers, importers and consumers will not understand different regulation with regards to feed raw material sources for different species, also it cannot be explained because there is no rationale for doing so!

Another important remark with regards to feed raw materials and feed manufacturing: It is the responsibility and the job of the feed industry to supply farmers with ASC compliant feedstuffs, not an

individual farmers' job to check on the correctness of the feed ingredients. The feed industry must become part of the ASC from the beginning, for manufacturing of ASC-compliant feedstuffs.

If the feed industry is not subject to auditing for ASC-compliance, the farmers cannot rely on the correctness of the stated product specifications and there is a huge potential for fraud and non-compliance / incorrect labelling on the side of the feed industry.

Until the ASC is moving forward with a feed standard for all species, Criterion 7 must form a part of the standards, and shall thus not be taken out of the standard as some GSC members suggest.

Criterion 7.1 Traceability of raw materials in feed

- 7.1.1. We welcome the inclusion of Traceability of raw materials in feed. We propose the standard to be <2 years of the date of ShAD publication (5 years is too long period, things can be improved quicker than that!) If feed cannot be proven to be sustainable certification should wait.
- 7.1.2: Agreement
- 7.1.3: Agreement, but the term "evidence of policies" is not strong enough: Policies must be implemented and verified by documentation of exact origins of raw materials by the feed supplier!

Criterion 7.2 Use of aquatic ingredients

- 7.2.1. Agreement: One question: How will it be assessed if a certain standard is in line with FAO Guidelines for Eco-Labeling?
- 7.1.1.a – 7.1.1 c: As interim solution, we do welcome the proposed scheme!
- Other alternatives, such as including combined mussel and algae farming in the standard should also be considered.

Criterion 7.2 Terrestrial Feed Ingredients

- Agreement with the proposed standards!

Criterion 7.3 Terrestrial Feed Ingredients

- ISEAL is a good base to start from as accepted by mostly for certified products. However, if a farm cannot be supplied with 100% ISEAL certified ingredients within five years, the ASC need prepared to break the certification.

Criterion 7.4 GMO Feedstuffs

- WWF offices from Germany, Switzerland, Austria and Sweden do have following position on the proposed options:
 - GMO should generally be excluded in feedstuffs for sustainable and ecological products.
 - If this cannot be assured at 100% , this has to be declared with "traces of GMO can be found" on the product as consumers have the right to know, therefore option 7.4.1. is preferred
 - The use of GMO in feed is not a b-t-b concern, this must be a b-t-c concern (that is: Consumer do have the right to know how shrimp have been fed on a farm, therefore all

proposed options of documentation towards the buyers (b-t-b) does not serve the transparency needs of a credible eco-label towards consumers!)

Use of animal by-products (formerly 7.4)

- In order to use natural resources more efficiently, we do propose to allow animal based by-products under following conditions: (a) safe manufacturing process (b) no residues of chemicals / therapeutics (c) no food-safety risk and other hazards involved (d) products must be from known and approved origin and fully traceable.
- A suggestion is preferable insects as feed production when talking about land animal by-products in feed.

Criterion 7.5 Use of wild fish for fishmeal and oil

- 7.5.1. FFER: Agreement with the proposed standards
- 7.5.2. eFCR: Agreement with the proposed standards

Criterion 7.6 Effluent Contaminant Load

- 7.6.1. – 7.6.2. The ShAD should promote shrimp aquaculture moving towards more closed and controlled systems with only little direct discharges of N and P into the surrounding environment. It does seem to us that the currently proposed standards are rather in line with current practices than really promoting the use of more closed systems that are not directly discharging production water anymore!
- This second draft of standards has doubled the allowable amount of Nitrogen and Phosphorus allowed as effluent per tonne of shrimp produced. The amounts should be corrected to the levels of the first draft standards.
- The BEIA must take the natural environment into consideration when determining the effluent load for the specific ecosystem in which the farm is situated. Densely farmed areas or farms in sensitive ecosystems must have a corresponding re-assuring system so that the contaminant load will not be too high.
- Production of mussel/algal can be included in the standards as a mean to reduce nutrient load. Could this be an extra measure to reduce nutrient load to (initially) be used in farm intensive areas?

Criterion 7.7 Energy Efficiency

- We do welcome the future incorporation of energy efficiency standards into the ShAD based on data available from audited farms
- We do propose to incorporate also the feed as component for energy efficiency / carbon emissions, since the feed is a major contributor to overall carbon footprint of farmed shrimp

Criterion 7.8 Hazardous Materials

- Agreement with the proposed standards.
- All waste handling should be recorded and for the hazardous waste a secured management system should be shown before certification.

COMMENT #42 – Vu Ngoc Ut (CanTho University)

Principles 5

Rationales

- pH measurement is mentioned with method of measurement (using pH paper, test kit....) BUT NOT FOR DO → DO measurement should be also oriented with measurement method/equipments (e.g. calibrated probe...).
- Area determined for different systems of fed and aerated or non-aerated ponds seems to be too larger to reality (>50 ha for fed and non-aerated) and continuous aeration small ponds (<5 ha). In the reality, intensive systems contain only small ponds of 4000-10,000 m2 (max is 1 ha)

Guidance for implementation

- 5.1.5. “water pH must be measured in all ponds at least once per week”: seems to be not enough as pH is fluctuating in a daily basis → should be measured at least every 3 days both in the morning (6-7 am) and afternoon (14-15 pm) to detect any large difference in daily pH (this for necessary adjustment action)

Principles 6

Rationales

- Should also mention about management of the current introduction of African tiger shrimp (P. monodon from Mozambique) which are more competitive to the native strain (they are now being introduced to culture in Soc Trang, Ca Mau; Minh Phu company is the first one to introduce and culture this strain. They imported the broodstocks and spawn them here, not imported the juveniles)

COMMENT #43 – Vu Ngoc Long of the Centre for Biodiversity Development (CBD)

	Comment	Suggestion
Principle 3: Develop and operate farms with consideration for surrounding communities		
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	<p><i>-After conducting the field study in the Hoa loi village model: In generally, these standards provided beyond from reality of people living in Mekong river delta. Some of these standards are still on the nature of theory and followed a model of industrialization only. But in fact, people in some regions, such as Hoa Loi cooperative model, difficulty meet requirements of these standards by themselves. However Inter NGOs or social specialist from some Institutes such as Can Tho Uni., they can do.</i></p> <p><i>- In some cases, the local people here did not follow instructions exactly although being prior trained and provided</i></p>	<p><i>- Firstly, we select out an initially common standard which is be integrated to all regions when making standards as we have done.</i></p> <p><i>- Secondly, the detailed instructions should be built and applied to different production areas under spheres of geography and culture as Hoa Loi village model.</i></p> <p><i>-Technical languages standardized in a set of the principle / criteria should be filtered once again and</i></p>

	<p><i>knowledge and guidance, If the farmers are asked, they can learn these standards by heart and response our questions. But if we conduct surveys of observation and more carefully investigation in their field, especially regarding to the SIA standards, it is hard for them to meet the requirements of the standars.</i></p> <p><i>- It may be causes: Habits of production have ingrained in Vietnamese farmers and difficult to change immediately. Meanwhile, a group of young people who have knowledge go to the city and looking for jobs there; they do not want to come back with farming hence their habits hardly to change.</i></p>	<p><i>translated into local languages and suit to local culture.</i></p> <p><i>-Encourage local farmers implementing the p-SIA with more support and supervision from outside.</i></p>
	<p><i>- Sometimes, the negative impacts of aquaculture is not so easy to identify as well as evaluative by local farmers. So there is lack of opportunity to address concept of transparency or fair.</i></p>	<p><i>Creating more common meeting with support by academic moderator to addressing all negative impacts</i></p>
<p>Documents and processes can be checked and verified through confidential conversations with participating stakeholders, local government and/or a civil society organization.</p>	<p><i>- The voices of civil society org. is weakness in the rural country of Mekong delta.</i></p>	<p><i>Support and enhance the role of Farmer Union is needed.</i></p> <p><i>Creating the local association groups</i></p>

COMMENT #44 – Dr. Tuan (MARD Vietnam)

Comments on the Compliant to the ShAD Standards relating to Labour Issues

1. Introduction

The labour use play an important role in shrimp cultivation which needs varying labour categories such as daily employment, periodic employment and labour service providers; therefore, the labour issues regarding the compliance to the ShAD are explored through the context of a rice-shrimp Hoa Loi cooperative in Soc Trang province. Generally, the standards in respect to labour issues may be applied in shrimp farmers; however, several issues (e.g. labour contracts between employers and employees, work permit) need to be performed and regulated by stakeholders. Both technical concerns and labour use for the compliance to the ShAD require skills and education of shrimp farmers; however, most of household heads got just primary school, except one graduating from high school. These constraints have influenced shrimp farmers to comply with the standards relating to labour issues such as contracts and labour use regulations.

Small-scale shrimp farming and shrimp pond locations close to farmers' houses have led shrimp farmers to essentially use their family labour. In fact, almost all rice-shrimp households in Hoa Loi cooperative have a small-scale land area which varies from 0.7 to 2.5 hectares, and their land locations are close to their houses. Most of work in raising shrimp such as taking care of shrimp and harvesting is done by household members. The remaining work is done by service providers or temporary employees, for example, pond preparation and harvesting. The primary ponds are constructed by machine provided by service providers, and then annual pond preparation is done by temporary employees or also service providers. Normally regarding small-scale shrimp cultivation, annual pond preparation is usually carried out by family labourers. Taking care of shrimp is essentially done by shrimp producers; however, several shrimp farmers employ periodic employees who observe directly shrimp ponds during 2-month shrimp stage of shrimp until harvesting. Harvesting is mainly implemented by family labour through labour exchange; however, large-scale shrimp producers need to employ temporary workers or taken by service providers. This report discusses on employees more than service providers within the context of shrimp cultivation at the research site regarding the compliance with the ShAD standards.

2. Detailed comments

Criterion 3.3

Job advertisements (3.3.1) provide opening opportunities for employees, and they are relevant to employ a permanent workers (e.g. periodical employees); however, temporary off-farm activities which sometimes urgently raised and implemented regarding sudden required activities of agricultural practices, particularly shrimp cultivation. In these cases, the advertisements don't work since the advertisements with the employing explanation and recruitments (3.3.2) take time.

All households in Hoa Loi cooperative employ shrimp workers in their community whom shrimp famers have known well; therefore, it can be seen as an income-generating activity for local labourers. They have never advertised information regarding employments in the public places such as school, village committee and public media communications because of their small-scale shrimp production and very short period of employment.

Criterion 4.1

The minimum age of employees (4.1.1) and the restrictions of young workers (4.1.2) can be applied since most shrimp employees observed are over 18 years old that are also higher than the general schooling age. Among shrimp workers employed by shrimp producers in Hoa Loi cooperative, only one employee is 18 years old, and no employees are pupils. Therefore, all members of the Hoa Loi cooperative could be compliant with these restricted age standards.

Criterion 4.2

Forced, bonded compulsory labour is not observed in shrimp cultivation in Hoa Loi cooperative since employees have rights to keep their identity documents and receive full final payment and benefits. Permanent employees are free to leave the workplace and manage their own time. Temporary employees are paid by shrimp producers after they finish their jobs. Permanent employees are paid monthly salary or final payment due to their agreements, and they could get extra payments thanks to successful shrimp production. As information collected, temporary and permanent payments varied regarding the situations of labour needs.

Criterion 4.3

The discrimination in respect to the working environment in terms of gender, origin, race or religion were not found since almost all employees were male and came from the same community. Shrimp producers have generally paid attention to employees' effective performance. In Hoa Loi, women do not participate in shrimp cultivation; therefore, the discrimination in terms of gender (4.3.1) and inequality salary (4.3.3) and respect of maternity rights (4.3.4) are not applicable. According to the respondents, few women (both employees and employers) participating in shrimp cultivation have been shaped by not only hard work, but also belief that is expected to provide luckiness to shrimp production. Women shrimp producers only share several marketable activities such as labour employment, material preparation, food supply, and shrimp sale.

Criterion 4.4

Work environment health and safety are necessary to protect employed labour from hard working conditions (e.g. shrimp production); however, current conditions need to be improved in order to comply with the ShAD standards. Employees in a small-scale shrimp production are not safe and healthy in their working environment since they have not been adequately trained in health and safety practices and other relevant procedures and provided protected equipment for shrimp employees. Consequently, employees were exposed to hazardous chemicals, heavy equipment and machinery and other potential accidents. These training courses could be held by the cooperatives, and training costs could be shared among shrimp producers. However, these training courses for temporary employees (e.g. pond preparation, harvesting) should be considered since they shrimp producers employ them very short period of time. It may cause the marginalization of employees who are not trained by specific techniques or procedures. Moreover, health and safety insurance for temporary employees are expected to provide more benefits to shrimp workers; however, it has also influenced shrimp producers to try to use family labour because of the current inconvenience of insurance systems in the rural areas. It means that income-earning activities for rural labourers may be reduced. The shrimp producers do not concern much about their working environment in terms of health and safety as described in the standard document. Briefly, in the future both shrimp farmers also need to be trained in terms of health and safety practices, and buy health and accident insurances for their employees; otherwise, they need to pay higher wages or benefits for their shrimp employees.

Criterion 4.5

Normally, most of employees receive the same amount of daily wages or periodic salary for their shrimp cultivation such as pond preparation, shrimp care and harvesting; however, daily wages and salary are sometimes paid higher than normal prices regarding labour need situations. In Hoa Loi cooperative, the minimum daily wage and month salary are 75,000 and 1,200,000 VND, respectively, which are higher than the basic wage and salary set the government. In other words, fair wage level can be found here.

However, the mechanism for setting wages and benefits is not established; therefore, conflicts between employers and employees may occur with shrimp cultivation.

Criterion 4.6

Currently employees can have access to freedom of work association or local government and discuss with employers in order to bargain collectively about their activities and wages; however, access to the rural work associations is not regularly practiced by shrimp employees. Generally, employers have not interfered shrimp workers to take access to freedom of work associations or local government in order to improve wages and benefits to shrimp employees.

Criterion 4.7

Harassment and disciplinary practices in the working environment causing physical and mental harm to employees are not found in shrimp cultivation in Hoa Loi cooperative. Since shrimp cultivation has absorbed few workers, particularly temporary employees, physical and mental effects to employees are not complicated. In Hoa Loi cooperative, all temporary and permanent employees are employed from the community; therefore, employees have social relations with employers and usually contact with their family. These enable to reduce the physical and mental harm of employees in shrimp production. It means that these shrimp producers would comply with the ShAD standards.

Criterion 4.8

Overtime compensation and working hours are informally practiced in shrimp cultivation in Hoa Loi cooperative. The daily working time which is applied for temporary employees is normally 8 hours. In Hoa Loi cooperative, no overtime in shrimp employment was observed. However, if the daily working time exceeds 8 hours, shrimp employees are usually compensated due to their extra working time. Regarding permanent employees, they usually stay over 8 hours in shrimp producers' households; however, real working time does not exceed the basic normal working time. They are also taken extra payment thanks to successful shrimp cultivation or employers' kindness. Temporary employees could leave shrimp farm after finishing their work while permanent employees have to take care of employers' shrimp ponds at night. Permanent shrimp workers could have rights to occasionally leave their work; however, shrimp farmers have to adjust their schedule to take care of shrimp ponds or employ new employees for shrimp care in order to comply with these ShAD standards. If daily working time is calculated by total time which permanent employees stay in shrimp farm, it makes shrimp producers non-compliant to the standards. Furthermore, as mentioned, women labourers have rarely participated in shrimp cultivation; therefore, a right to maternity leave is not applicable. Shortly, shrimp farmers could adjust their labour employment and implement overtime policy in order to comply with the ShAD standards.

Criterion 4.9

According to the standard in the document, employee and worker contracts should be fair and transparent; however, there have been no contracts between shrimp producers and employees in Hoa Loi cooperative. Shrimp farmers verbally make agreements with their daily employees, permanent workers, service providers and sub-contractors for work, time and payment without any written documents. In subcontracting or home-working arrangements, shrimp farmers have not followed any laws, social security laws and other labour use regulations which are mentioned in the standard documents. In short, shrimp producers comply with the ShAD standards when they need to sign fair and transparent contracts with employees, and work permit for certain employment especially shrimp cultivation should be operated.

Criterion 4.10

Fair and transparent worker management systems in the standard document have not been applied yet in those households because pond several activities such as preparation and harvesting are usually done by service providers. No issues and complaints were registered in observed shrimp farming households; therefore, shrimp employers have also no plan to resolved raised concerns. In addition, no official meetings which enable to communicate between shrimp producers and employees about labour rights and working conditions were held in the community. In other words, these standards were not compliant in Hoa Loi cooperative.

Criterion 4.11

Permanent shrimp employees were employed to take care of shrimp ponds; therefore, living conditions for employees imply that small huts for shrimp care should be upgraded in order to meet relevant habilitation (e.g. clean, salinity, safe and suitable conditions). These standards are not applied for temporary workers since they live in the same community with farm owners. According to shrimp producers, better huts could be improved; however, it just satisfies the basic living conditions which both employees and employers could shortly stay rather than constructs these living conditions as employers' houses. Moreover, according to the last exploration in Hoa Loi cooperative, no woman undertook shrimp care at night; therefore, women facilities were not applicable. Briefly, when involving in these standards in the future, shrimp farmers need to prepare better living conditions for shrimp care.

3. Conclusion

No shrimp employers have complied with the standards in respect to labour issues which have been shaped by both the institutional framework and individual shrimp producers. Job advertisements, contracts and official meetings between shrimp producers and employees, training courses and work permits for employees are considered as major "soft" concerns. Protected equipment, living condition upgrading and other financial supports are main "hard" requirement to meet the ShAD standards.

Most of households raising shrimps are small scale shrimp producers; therefore, shrimp employment is not a main issue since they usually use family labour for shrimp cultivation or employ shrimp employees in the community. Moreover, shrimp employers have low level of education; therefore, understanding labour issues and implementing contracts for shrimp cultivation has challenged them. Short-term employment need and complicated issues relating to job advertisements, individual contracts, official meetings, labour insurance, training courses and labour use strategies have shaped employers to increasingly use their family labour or ignored "new" shrimp employees.

Although many standards are not officially practiced in shrimp cultivation, they have been informally done by shrimp farmers. For instances, informal agreements between employers and employees, age of employees, rights to leave the farm, anti-discrimination overtime compensation and medical expenses coverage are informally practiced by shrimp farmers. Moreover, shrimp production employs essentially male labour; therefore, several standards regarding female labour use are not applicable.