

Shrimp Aquaculture Dialogue
Belize City, Belize
April 1-2, 2008
Meeting Summary

APRIL 1

Jose Vasquez, director of the World Wildlife Fund's (WWF) Honduran office, welcomed the Dialogue participants. He said that it is important to identify criteria, indicators and standards for sustainable shrimp farming and he noted that this will require a high level of technical assistance and participation in Dialogue meetings. He encouraged people to participate in the Dialogue meetings. He also let the group know that the Dialogue meetings will be transparent. He said Belize is a model for how the industry can move forward in a sustainable fashion.

Presentation About the Shrimp Aquaculture Dialogue

Eric Bernard, aquaculture program officer for WWF and coordinator of the Shrimp Aquaculture Dialogue, [did a presentation about the purpose and goals of the Shrimp Aquaculture Dialogue](#). Following the presentation, Eric responded to questions from the participants, as summarized below:

Question: Is the goal of this Dialogue to create standards for Central America/Mexico and then to create species-specific standards?

Answer: The objective is to create global criteria, indicators and standards. But we will develop standards specifically for *P. vannamei* in Central America and Mexico and *P. monodon* in Madagascar and Asia.

Question: You said the goal is creating performance-based standards but then you said we also will be creating better management practices (BMPs). Isn't that confusing?

Answer: Our goal is to create performance-based standards. But we do not know if we will be able to do that for everything. BMPs are a means to an end but not the end itself. BMPs will help producers reach standards. Some BMPs might end up being the standards but let's first try to identify metric standards.

Presentation About the Farmed Shrimp Market

Philip Chou of Seafood Choices Alliance then [made a presentation about the farmed shrimp market](#). Following the presentation, Philip, Eric and WWF Aquaculture Program Director Jose Villalon provided answers, as summarized below:

Question: Clarify what role your organization is playing in helping to harmonize standards. Also, you mentioned we are here to work on harmonization. That was not my understanding of the meeting.

Answer, from Philip: In terms of harmonization related to the shrimp Dialogue, I defer to what Eric says. In terms of our role, the alliance is a convener that acts on what we hear are the strong impulses of NGOs. We try to figure out how to harmonize things, if that is what they want. We try to play a neutral role.

Comment: We should strive for harmonization but what we are really after is identifying the top 10-15 percent of the industry that can meet the standards. That is different than GAA (Global Aquaculture Alliance), which is looking at 80 percent of the industry. The real goal here is identifying standards for 10-15 percent.

Comment: I disagree that the goal is to adopt the top 10-15 percent. Second, the ACC has certified 300,000 tons of processed shrimp, most which comes into the US. We need to work together to harmonize. It is a process where we should look at the standards and not whose they are when they are developed.

Question: I don't understand the 10-15 percent. Is that a goal?

Answer, from Jose: We will look at what the current industry is capable of doing. We will look at where the science is today and then identify the top 10-15 percent of people capable of reaching the standards, which will be science-based. This is not an aspirational goal. It is science-based. We want to eventually move others over with the 10-15 percent.

Question: The 10-15 is a bit confusing. It makes it look elitist. I thought we were trying to bring most of the shrimp farmers into the process.

Answer, from Jose: You are right. The ultimate goal is to create change on the water. If we shoot for a mainstream goal, there will not be much change in the environment. Don't confuse it with a goal that is not attainable today. We understand that standards also have to be economically viable.

Comment: Some of us in the industry have worked for the last 20 years to improve what we are doing. Our goal is improvement and BMPs are fine but you cannot always move the goal post. The ACC standards are the result of people working hard over the past few years.

Question: What is the role you expect of governments?

Answer, from Eric: The government is a key actor. It is very important for government representation in the Dialogue. For example, government can help with the standards related to obeying the law. A contribution from government is to see what laws can be improved.

Presentation About Shrimp Aquaculture Diseases/Health Management Issues

Carlos Pantoja of the University of Arizona then [made a presentation about diseases and health management issues related to shrimp farming](#). Following the presentation, he responded to questions, as summarized below.

Question: Are SPF larvae available for all species?

Answer: Yes. Many have been developed for years now.

Question: Are any feed-administered vaccines available for any of the viruses?

Answer: Yes, many are on the market but it is unclear if they work.

Question: What is the percentage of SPF used in Central and South America vs. Asia?

Answer: In Asia, many companies started buying SPF lines of the shrimp. The problem was that people

did not get the SPF animals from a reliable source. I do not know percentages. I think in the Americas the percentages are lower because of the costs. There is the potential to develop hatcheries where these animals are developed as SPF animals and then made available to a region. The tendency is in that direction. The industry got hit by white spot and so they tried to create animals free of white spot, so little by little they will get to the point of needing a hatchery free of those diseases.

Question: What is the cost to the producer for using SPF?

Answer: I do not have those numbers. That is an issue that needs to be addressed.

Question: Did the virus that hit Brazil spring forth from Asia or the western hemisphere?

Answer: The genetic analysis shows that it is similar to what is in Brazil. It is believed it was introduced from the western hemisphere.

Question: Could it be possible to develop resistance to INMV?

Answer: Yes, as there are similarities in how the diseases manifest. This could make it easy to develop resistance but so far we do not know anybody who has tried to do it.

Question: Is Mexico using SPF?

Answer: I do not think so. In some areas, they probably are using some survivors of some outbreaks

Presentation About the Agenda for this Shrimp Aquaculture Dialogue

Eric [did a presentation about the agenda for the Dialogue meeting](#). Following the presentation, he answered questions, as summarized below.

Question: Are we going to have more than one set of standards?

Answer: Criteria and indicators should be the same in each region. But there might be some difference in the standards because the needs of the species are different. If the standards can be harmonized, that would be great but there might be a need for specificity with certain species. Maybe at the end of the day we will not see much difference. Let's see if we can harmonize.

Question: Will the Steering Committees have to be regional? And if you are on a Steering Committee for one region, does it exclude you from being on a Steering Committee for another region?

Answer: No. It is open. It is not good or bad to be on more than one. It would help to have some overlap of Steering Committee members. But this is just a proposal. The Steering Committees will make the final decision.

Question: Are the standards going to be voluntary? Or will they be required by government?

Answer: The standards will be public information. We expect them to be voluntary but it is possible a government would adopt them and make them mandatory. If this makes sense for that country, that would be good.

Comment: It would be great if the governments would adopt the standards. For the environmental community, we see this as the development of an eco-label. We see this, too, as the development of a

certification entity like the Marine Stewardship Council. So, they are voluntary unless you want to get the eco-label.

Comment: Before implying that governments would take it upon themselves to create a law, it would be more accurate to look at this as a voluntary program that will end up with an eco-label.

Comment: If you are here as a farmer, you are here for two reasons. You are here for the long haul. This is enlightened self interest. The other side would be anticipating some economic upside from this activity. I do not find this process even remotely scary. It is very clear that this has to make economic sense. The chance for us to be in the same room and address these challenges is great. The issue is how to mitigate the impacts. If the government takes it up, that is a good thing.

Comment: This should not be a short-term investment. The standards and the general objectives of this Dialogue are to carry forward the farm siting, design, use of water, etc. so we do not put at risk any of the species and so our industry shall be here for the long term.

Question: Can we take some time tomorrow to discuss adding or deleting principles?

Answer: Yes, and we will ask the Steering Committee to do this too.

Breakout Sessions

The participants then separated into four groups. Each group was given 2 and a half hours to develop criteria and indicators for principles 1-4. To provide guidance, the groups were given the [draft criteria and indicators created for tilapia farming by the Tilapia Aquaculture Dialogue and the draft criteria and indicators developed for shrimp at a shrimp Dialogue meeting held in East Africa last year](#). One spokesperson from each group provided a [summary of the group discussion](#) to the full group before the day's meeting ended.

April 2

Breakout Sessions

Eric made a presentation summarizing the criteria and indicators for principles 1-4. The participants then separated into four groups. Each group was given 2 and a half hours to develop criteria and indicators for principles 5-8. Again, to provide guidance, the groups were given the [draft criteria and indicators created for tilapia farming by the Tilapia Aquaculture Dialogue and the draft criteria and indicators developed for shrimp at a shrimp Dialogue meeting held in East Africa last year](#). One spokesperson from each group provided a [summary of the group discussion](#) to the full group before the day's meeting ended.

Eric explained that all of the information from the breakout sessions will be given to the new Steering Committee, which will be tasked with consolidating the information into one set of draft criteria and indicators for the Dialogue participants to consider in the future.

Presentation About the Role of the Steering Committee

Eric did a [presentation about the role of the Steering Committee](#). He then answered questions from participants, as summarized below.

Questions: If we are going to broaden this Dialogue to include the Americas as a whole, should we decide what we are going to do with the Americas before choosing a Steering Committee?

Answer: When we take the Dialogue to Ecuador and Brazil, there is a good chance the Steering Committee could increase in size. This is the Steering Committee proposed for this meeting.

Question: When it is just academic and not commercial research it is not as acceptable, so maybe choose an academic and an exporter for the committee.

Answer: Yes, we do not want to exclude anybody

Eric then asked for volunteers for the Steering Committee. The following people volunteered:

Larry Drazba, Camarones de Nicaragua (Camanica)

Linda Thorton, Aquamar/Cardelli Farm

Sergio Escutia, Confederación de Organizaciones Acuícolas del Estado de Sinaloa

Carrie Brownstein, Whole Foods – tentative

Corey Peet, Monterey Bay Aquarium

Eric Bernard, World Wildlife Fund

Teresa Ish, Environmental Defense - tentative

A representative from FishWise (if Environmental Defense cannot participate)

Leobardo Montoya, Centro de Investigacion en Alimentacion y Desarrollo

Participants also suggested asking the following people to participate: Claude Boyd of Auburn University, Jim Diana of University of Michigan, Agnes Saborio of University of Central America, a representative from Belize Agriculture Health Authority, and Marcos Linne of the Fisheries Institute.

Eric then asked participants if there are any specific issues he would like the Steering Committee to discuss. The two issues raised were adding biodiversity as a principle or criteria and considering energy use/reduction when developing standards.

Closing Remarks:

Jose Vasquez thanked the participants for coming. He said he was impressed with the participation of everybody from the different groups. He also said he hoped that the attendees who are not from Belize had a nice stay in Belize.