

**Development of Standards for Responsible *P. monodon* Shrimp Aquaculture,
Madagascar and East Africa**

**June 3 and 4, 2008
Hotel Carlton
Antananarivo, Madagascar**

Tuesday, June 3

Official Opening

Ms. Nanie Ratsifandrihamanana, WWF Madagascar, welcomed the guests. She thanked GAPCM (Madagascar shrimp producers association) for its work with WWF and presented a short history of their relationship and work started through dialogue on shrimp aquaculture. She underlined that the main goal of the workshop was to develop standards as well as to organize a steering committee for the Madagascar and East Africa region. She also reminded participants that there are already 25 certification processes throughout the world, and that shrimp aquaculture in Madagascar is one of the best in the world and represents a flagship product of the Madagascar export market. She thanked the people who traveled great distances in order to participate in this workshop and excused those who could not make the journey, notably the industry players from the countries in the region.

Mr. Claude Brunot, President of GAPCM, reminded that GAPCM's role is to manage to the best of their ability a shared resource. The members all have both a social and environmental responsibility. Mr. Brunot thanked the Minister, who has devoted much attention to GAPCM, as well as the *Agence Française pour le Développement* (French development agency) that is supporting them in their development.

Throughout the world, GAPCM activities have been held up as a model in terms of responsible industry. It is the collaboration with WWF that has allowed them to develop an approach to responsible aquaculture. We are at a new stage in this approach, a vital step towards the certification of Madagascan aquaculture. This sector is currently experiencing difficult times, which have become worse because of rising energy costs. And the environment is at the center of this strategy. It is a challenge. Rigorous efforts are being undertaken to maintain product quality. We must react, and quickly.

After this workshop, much work will remain to be done to achieve final ecocertification. But the process is proof of a constructive collaboration.

Presentation and workshop goals, presentation by Eric Bernard, WWF, on the goals of the workshop, notably the identification of relevant indicators and the organization of the steering committee, a reminder of the international principles for responsible shrimp aquaculture at the core of this initiative, the different levels of participation in the "Aquaculture Dialogues," and a possible organization between the different regions

(Central America and Mexico, Madagascar and East Africa, Asia). *Link with Presentation I*

Question: Can we already have a more precise definition of the SC (steering committee) and the work load that is expected of its members?

Answer: The SC can work in several ways. Let me clarify that WWF's work also extends to other species (tilapia, salmon, pangasus, shellfish, etc.) with the same structure (SC); each SC includes around a dozen members (feed suppliers, scientists, governmental agencies, etc.). It is composed predominately of experts or decision-makers. The SC has different modes of operation. For example, in Belize there are three producers, three NGOs, and one governmental organization, which is a relatively technical make-up. However, for salmon the group is made up mostly of decision-makers. It will thus be up to the SC members to organize themselves over the phone and by email. Meetings can be organized around other planned workshops, conferences, and meetings. It is of course possible to let a week go by in order to allow the SC members to confirm their participation.

Presentation on proposed indicators, by Liet Chim, Michel Autrand, and Jean Louis Martin. *Link with Presentation II*

- Dr. Liet Chim, IFREMER, specialist in nutrition and physiology
 - Dr. Jean-Louis Martin, retired from IFREMER, environmental specialist
 - Dr. Michel Autrand, independent expert in shrimp aquaculture, consultant to GAPCM
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- Structure for defining standards: impact, principles, criteria, indicators, and standards
 - Presentation of breeding indicators: oxygen, water renewal, critical biomass, and system production capacity, survival in ponds, Feed Conversion Ratio (FCR), Fish Feed Equivalent Ratio (FFER), feed quality
 - Presentation of environmental indicators: energy consumption versus biomass produced (EB), “quantity of nitrogenous wastes” (quantity of nitrogenous waste/kg of shrimp), accumulation of “labile organic matter” (LOM)
 - Indicator: Secchi disk in intermediate grow-out

Question: I know the presentation was only an outline, but it only discussed parts (ponds and farming), whereas last year there were 8 principles. Why didn't we have the same approach for these 8 principles?

Answer: The working group worked for 3 months and the members have expertise in specific areas. That is why all 8 principles were not covered by this group. That will be done tomorrow morning when we review the 8 principles and collect participant proposals. Based on last year's discussions, the SC members will go over these proposals and study them in order to define the indicators together. The work done by the group of experts is an example of how we should proceed and the presence of certification organizations will allow us to verify the “auditability” of the chosen indicators.

Additional information: The principles that were discussed last year are the fundamentals, right? We're basing this year's work on last year's, correct?

Answer: Yes. We have to create a useful document, practical specifications that will be used as the basis for certification.

Question: A comment on the EB indicator. GAPCM is thinking about this. It is risky to say that we know how to calculate carbon waste per kg of shrimp produced. This could be an interesting argument.

Answer: We are currently reflecting upon this. There are still wastes. The carbon budget is easy to figure out as long as we don't minutely analyze what is going on: what goes in and what comes out of the shrimp. The difference between the two numbers is the waste.

Additional information: We can't forget the pumping. Can we include that in the budget?

Answer: Yes. The most difficult thing at the beginning were the environmental problems and that will be resolved.

Question: Why isn't waste treatment discussed in these indicators?

Answer: Not all of the possible indicators were studied. However, the missing indicators can be proposed tomorrow, especially waste treatment which could be included under social responsibility.

Certification Process in the Aquaculture Industry, presentation by Laurent Galloux, Bureau Veritas *Link with Presentation III*

Mr. Laurent Galloux presented Bureau Veritas and the official aquaculture certifications in France before reviewing certification rules and the related costs.

Question: Laurent Galloux, based on any information you may have heard, are we on the right path? Are our indicators "auditable"?

Answer: I don't have the technical skills needed to tell you one way or the other. You are on the right path in terms of measures and in terms of determining conformity, both of which are important to certification bodies.

Question: It is unrealistic from a scientific perspective to have indicators regarding environmental impact. On the other hand, would working on something else be allowed in certification?

Answer: A certification standard is created so that it is followed by everyone. However, it is up to you to explain why you chose specific criteria. It should be designed so that someone who is not an expert in the field can understand it.

Comments: To add to this point, certification processes are based on the regulations that exist in a given area. Madagascar has specific recognized regulations, a best practices code, qualified administration at the ministry of the environment, and there are

regulations in the countries where the products will be imported. Thus, it is important to use these foundations and go from there. The regulations must be coherent. If we take a step back, we see that the regulations are very important.

Answer: The players from this field were sought out and continually informed so that they could make comments. The foundation is indeed the regulations in the producing and importing countries.

Presentation of the criteria proposed in Belize and the goals of the workshop in Madagascar, by Eric Bernard, WWF. Central America's farming systems are very different from those in Madagascar. Reminder of the connection between the principle and the impact. Brief review of the principles discussed during the April 2008 workshop. *Link with Presentation IV*

Question: A question on strategy. Why is WWF only using this approach on 3 continents? Why not have one international approach?

Answer: The International Principles are the foundation. The major impacts were identified and the principles were defined. They are the starting point. The regional approaches make it possible to work with different species, types of farms, and regional constraints. This approach requires more resources and time but makes it possible to listen to the involved parties, create relevant indicators, and gain a wide consensus on the approach and indicators that must be developed.

Additional information: There is an almost dogmatic approach. WWF should have a vision that is for or against antibiotics, for or against GMOs, chemical pollution caused by wastewater, etc. These parts require a more driven approach so that ecocertification in Madagascar is coherent with what is going on in Asia and Latin America, even if the economic context is different. Making the foundation uniform would be a good idea.

Answer: Uniformity will occur by learning what is going on in each region. In doing so, the SC will be able to decide what could be considered a common relevant indicator. However, figuring out the lowest common denominator should be avoided. We want to move the profession forward. We are discussing GMOs, but it will not be easy to define a global WWF position because even from a scientific point of view, this question is not cut-and-dried.

Question: Could WWF audit the 2 industries (native species and imported species) in Asia and does backing the imported species also mean backing breakdowns in biodiversity?

Answer: We must first clarify that it is not WWF's job to perform audits. Regarding the question, this topic will be part of the discussions. We will have to examine this from scientific and legal points of view.

Round table: reviewing the indicators

The indicators proposed by the working group are discussed one after the other and the participants are invited to comment on these proposals. Michel Autrand will present a summary of these discussions on Wednesday morning. *Link with the comments summary document of the comments V*

Wednesday, June 4

Presentation of the strong points from the first day by Michel Autrand. Summary of the discussions on indicators. (See below)

Definition of the indicators for the other principles

After a discussion with the participants regarding the best way to process, the 2007 document was used and reviewed to validate (or not) each criterion. The SC must clarify the technical points. The comments are directly noted on version 2 of the Principles and Criteria for Responsible *P. monodon* Shrimp Aquaculture in Madagascar. *Link with document VI*

Presentation of the steering committee's role and mission by Eric Bernard, for creation of SC for the Madagascar and East Africa region. Review of the roles of the working group, consultant group, individuals, and dialogue. *Link with Presentation VII*

Question: Is WWF part of the SC and where will the SC have its headquarters?

Answer: It can meet anywhere but ideally it should meet in the region. The SC is organized by its members. SC meetings can take place at the same time as other meetings or events (e.g. professional conferences) in order to take advantage of the members being together. WWF is part of the SC.

Question: Business Plan? Do we have an idea of when it will be finished?

Answer: We would like to move ahead as quickly as possible in order to have a preliminary version of the standards by the 1st quarter of 2009 and a final version by the 2nd quarter of 2009.

Question: Will the Madagascar SC communicate in English?

Answer: For the sake of the involvement of all parties, WWF will allocate a budget to have the documents translated into several languages.

Question: Why not integrate South America?

Answer: For logistical reasons, especially the fact that it would require working in Portuguese. There is a strong demand to move ahead quickly in this region of the world and WWF understands this. It will certainly take place during the next Dialogue.

Question: Why only 10 people? Because there are several GAPCM members who would like to participate.

Answer: The number is flexible but a limited number of people will help the group and its discussions to be more efficient. The number of GAPCM members in the group will be discussed.

Question: Do we have an idea of how long this will take?

Answer: We don't know yet. It will depend on how technical the discussions are and whether or not it is necessary to call on experts from specific fields.

Eric Bernard initiated **setting up this SC** by proposing the following make-up (the following people volunteered):

- 2 producers: to be named
- 1 GAPCM member: to be named
 These 3 people will be identified during a GAPCM meeting on June 25, 2008.
- 1 feed supplier: LFL Aqua et Extrusion Division, Mr. Julien Boulle
- 1 governmental organization: DPRH, Ms. Alice Rasolonjatovo Norosoa Alice – Head of the *Service de la Promotion de l'Aquaculture* (Department for the Promotion of Aquaculture)
- 2 NGOs: SeaFood Choices Alliance, Ms. Melanie Siggs; WWF, Mr. Eric Bernard
- 1 scientific organization: Institut Pasteur Madagascar, Ms. Eliane Chungue
- 1 certification organization: Bureau Veritas, Mr. Laurent Galloux. Mr. Sebastien Moinsnard of Bureau Veritas will be able to give a more technical opinion and will participate in some meetings

Comment: The SC is not exactly representative of the region because all the countries in the region are not represented.

Closing Ceremony

Speech by Mr. Georges, the Executive Director of GAPCM:

I would like to thank Eric as well as the 3 experts, the GAPCM team, and WWF.

Speech by Mr. Claude Brunot, president of GAPCM:

The shrimp industry is a difficult environment. We have to push ourselves in order to distinguish the shrimp from Madagascar and the region from other shrimp. I would like to thank the ministry, WWF, and Eric Bernard, the General Director of GAPCM. They all worked hard to make sure that this workshop would be a success. "Madagascan shrimp is the best farmed shrimp!"

The representative from the *Ministère de la pêche et des ressources halieutiques* (Ministry of fishing and fishing resources) closed the workshop by reviewing the strong points of the WWF-GAPCM agreement. During the UNESCO conference in January 2005, it was recognized that Madagascar is one of the richest countries in terms of biodiversity and that it is our duty to preserve it. This sums up our country's willingness to commit itself to sustainable development. The legal framework has been set up for several years. In 2005, WWF and GAPCM signed a memorandum of understanding in order to collaborate in all the spheres of activity of the shrimp industry. During a first workshop, the principles and criteria were discussed and validated. This 2008 workshop was the next logical step and will make it possible to achieve the memorandum goals. Numerous projects related to the shrimp industry would not be possible without the participation of public and private partners, as well as the support of international organizations and NGOs.

The ministry is aware of the problems that the industry is currently facing, which is why we are working together to decide what measures must be taken.