

**Report of the**

**BEIJING FAO/NACA/GOVERNMENT OF CHINA EXPERT WORKSHOP  
ON GUIDELINES FOR AQUACULTURE CERTIFICATION**

**Beijing, China  
6 – 8 May 2008**



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FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS  
THE NETWORK OF AQUACULTURE CENTRES IN ASIA-PACIFIC

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## **PREPARATION OF THIS DOCUMENT**

This document provides the report of the Beijing FAO/NACA/Government of China Expert Workshop on Guidelines for Aquaculture Certification, Beijing, China 6 – 8 May 2008.

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#### ABSTRACT

The Expert Workshop on “*Guidelines for Aquaculture Certification*” was held in Beijing, P.R. China from 6 to 8 May 2008, hosted by the Government of China. The workshop was jointly organised and conducted by FAO, NACA, the Chinese Academy of Fisheries Science and the Department for Certification and Accreditation Administration of the People's Republic of China. The workshop is the fifth in a series of workshops and consultations to prepare the international guidelines for aquaculture certification. This workshop had a strong emphasis on aquaculture products from China, and explored opportunities and challenges for implementing the certification guidelines in China towards improving overall aquatic production and trade of aquaculture products nationally, regionally, and globally. The Expert Workshop was attended by 65 participants, including aquaculture experts and stakeholders from government agencies, private business, and agencies involved in certification schemes and food safety from China, as well as international experts from FAO, NACA and SEAFDEC.

The workshop considered that international guidelines for aquaculture certification are of significant relevance to the current development of aquaculture and aquaculture certification schemes in China, providing a useful basis for development of standards and mechanisms for certification of aquaculture products in China. The participants provided a number of specific recommendations to the draft version of the international guidelines and implementation issues and mechanisms as detailed in this report.

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## INTRODUCTION

1. Global production from aquaculture has grown substantially, contributing increasingly significant quantities to the world's supply of fish for human consumption. This trend is projected to continue in forthcoming decades with the sector envisioned to contribute to food security, poverty reduction and economic development by producing - with minimum impact on the environment and maximum benefit to society - 83 million tonnes of aquatic food by 2030, an increase of 37.5 million tonnes over the 2004 level<sup>1</sup>.

2. The FAO Committee on Fisheries Sub-Committee on Aquaculture, while recognizing the value of certification for increasing public and consumer confidence in aquaculture production practices and products, also noted that many non-governmental (private sector) certification schemes have resulted in higher costs for producers without delivering significant price benefits to small-scale producers. It was pointed out that the costs of such schemes were disadvantageous to small-scale producers, adding to the costs of market access, and recognized that there are different needs between small-scale and large-scale producers and that these differences should be adequately addressed. The Sub-Committee noted that the emergence of a wide range of certification schemes was creating confusion amongst producers and consumers alike and stated that there was a need for more globally accepted norms for aquaculture certification, which could provide more guidance and serve as a basis for improved harmonization and facilitate mutual recognition and equivalence.

3. Within the context of the application of the FAO Code of Conduct for Responsible Fisheries (CCRF), the Sub-Committee requested FAO to organise an Expert Workshop/Consultation to make recommendations regarding the development of harmonised shrimp farming standards and review certification procedures for global acceptance and transparency, to also assist in elaborating norms and reviewing the diverse options and relative benefits of these approaches. In this regard, the Sub-Committee encouraged FAO to play a lead role in facilitating the development of guidelines which could be considered when national and regional aquaculture standards are developed. Several members of the Sub-Committee as well as a number of inter-governmental organizations offered to cooperate at national, regional and international level, and requested FAO to provide a platform for such collaboration. The Sub-Committee also requested setting up of an expert group on reviewing certification of shrimp farming systems.

4. The Sub-Committee on Trade held in Spain 2006 also recommended work to be done related to certification and harmonization. The Sub-Committee on Trade supported future work by the FAO to widen and expand the implementation of the Hazard Analysis Critical Control Point (HACCP)-based safety and quality systems and use of risk assessment as the basis for the development of fish standards; to promote equivalence and harmonization; to monitor the border sanitary and quality controls used to regulate, restrict or prohibit trade including their economic consequences. FAO was also requested to broaden the perspective and discussion on the topic to include (i) how developed countries could support the integration of small-scale fisheries into international trade through, for example, standards setting; (ii) intermediation including financing issues; (iii) potential loss of bargaining power of small-scale fishers in getting fair prices for their products; (iv) traceability and eco-labelling; and (v) value chain analysis.

5. China being a world leader in aquaculture production, export and consumption is a major stakeholder in the aquaculture sector. The Expert Workshop on development of guidelines for aquaculture certification was organised by FAO and NACA, and hosted by the Government of the People's Republic of China, in response to the recommendations of the Aquaculture Sub-committee (ASC) of the FAO Committee on Fisheries. This workshop is the fifth in a series of consultations and workshops to assist FAO in the development of guidelines for aquaculture certification. Being held in Beijing, PR of China this expert workshop has a strong emphasis on aquaculture certification in China and issues of special interest for Chinese stakeholders were addressed.

6. The workshop discussions were informed by the draft aquaculture certification guidelines developed from the past expert workshops and consultations, together with a selected number of expert presentations. The major part of the expert workshop was spent on discussions and working together, and further development of the aquaculture certification guidelines with input from the Chinese aquaculture industry stakeholders from government and private sector. The Agenda for the expert workshop is provided in Annex 1 and list of participants as Annex 2.

A series of nine presentations were made at the workshop, outlining the status of aquaculture and certification in PR of China by Chinese experts, and the ongoing process to develop international

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<sup>1</sup> State of World Aquaculture 2006: *Fisheries Technical Paper No. 500*. Rome FAO. 2006 134p.

guidelines for certification of aquaculture products and other issues of importance to certification presented by FAO and NACA.

## **OBJECTIVES AND EXPECTED OUTPUTS**

7. The purpose of the Beijing Consultative Expert Workshop was to bring stakeholders, mainly Chinese, to present, discuss and build consensus on the draft FAO guidelines for aquaculture certification. The workshop also discussed opportunities and challenges in implementing the provisions of the guidelines in aquaculture certification in China, how to further improve quality and safety of aquatic products from China, and how to improve compliance to international trading requirements of aquatic products for better market access and responsible trade.

8. The expected outputs from the workshop, driven by the discussions and perspectives of the participants, were as follows:

- i) Stakeholders brought together to discuss aquaculture certification status and constraints in China.
- ii) FAO aquaculture certification guidelines discussed, reviewed and consensus built on further development.
- iii) Consensus built on the guidelines for aquaculture certification and implementation strategies in China.

## **PARTICIPATION**

9. The workshop was held in Golden Harbour Hotel, Beijing, China from 6 – 8 May 2008 and was attended by 65 participants, including aquaculture experts and stakeholders from government agencies, private business, and agencies involved in certification schemes and food safety from China, as well as international experts from FAO, NACA and SEAFDEC. The list of participants is provided in Annex 2.

## **OPENING CEREMONY**

10. The opening ceremony included welcome addresses by the FAO Representative of China, Ms Victoria Sekitaleko, Director General of NACA (Prof. Sena De Silva), LIU Zheng (Deputy Director of Bureau of Fisheries, MOA), Mrs. LIU Zhou-hui (Deputy Director of CNCA), ZHANG Xian-liang (Vice President of CAFS). The opening statements are attached in annex 4.

## **PLENARY SESSION I: INTRODUCTION**

### **Chinese aquaculture: A general overview**

*(Presented by Ding Xiaoming, Bureau of Fisheries, MOA)*

11. In 2006 the annual total output of aquatic products in China was 45.84 million tons of which 31.18 million tons were aquaculture products being 68% of the total output. The total area utilized for aquaculture was in 2006 more than 5.5 million hectare distributed on 4.25 million hectare of freshwater and 1.27 million hectare of marine and brackish water. There is no exact figure on how many species are being cultured but a good estimate is that more than 200 different species are being produced in China including several species of fish, crustaceans, shellfish, aquatic plants, reptiles, amphibians and echinoderms. Culture methods are very diverse and span from large scale high technology facilities to small-scale low technology low investment units.

12. Aquaculture has been practiced in China for thousands of years and is as such not a new development. However due to the growth of both the Chinese and world economy together with population growth, aquaculture has expanded over recent years. As with any industry there are some main problems that need to be addressed to sustain a healthy development of aquaculture. These are related to environmental issues, aquatic animal health issues, low level of organization in the industry, overall management issues. It is believed that the FAO certification guidelines for aquaculture certification will be an important reference point to develop certification schemes in China and be a tool to help develop not only certification of aquaculture products but the whole industry.

13. The vision and trend in aquaculture development in China is to build a modern aquaculture industry which is resource efficient, environmental sound practices that will support the many people relying on the industry and the consumers. Promotion of aquaculture management plans, promotion of aquatic animal health management plans, further develop organization of producers and work closely to link all in certification schemes are all part of the future of aquaculture in China.

#### **International trade in Chinese aquaculture products: - Constraints and challenges**

*(Presented by Guo Yunfen, MOA)*

14. The international trade with Chinese aquaculture products is rapidly increasing. In 2007 the total value of aquacultured products reached 14.46 billion US\$ and a volume of 6.528 million Mt. The export value in 2007 was 9.74 billion US\$ and having a volume of 3.064 million Mt. At the same time China imported 3.464 million Mt in 2007. The most important exported species are shrimp, mollusc, eel, tilapia, large yellow croaker, freshwater crayfish and river crab. These species accounts for 36.6% of the total export value.

15. Some of the main achievements due to this increased trade are an expanded space of Chinese fisheries industry, promoted large-scale operation and integration of the industry. The development have resulted in increased employment opportunities and improved income level of fishermen and aqua farmers. For example the shrimp culture industry provides 500,000 jobs, processing and export of imported raw materials provides 300,000 jobs. More focus on international trade in Chinese aquaculture products have also strengthened the Chinese voice in the development of international trade rule, trained a large number of specialized professionals in international trade of aquatic products and diversified aquatic products also for the domestic consumer's market.

16. There has been concern over the quality and safety of aquatic products. At times the quality and safety issue have become used as a trade barrier and at times even politicized. Other constraints are the increasing production cost due to appreciation of Chinese local currency (RMB) with more 13% in 2 years, increased bank interest rate, increased cost of labour and other key production factors and fuel prices. Furthermore there have been an increase and intensified competition with the country and from other aquaculture producing countries

#### **Aquaculture certification: Current status**

*(Presented by Song Yi, CAFS)*

17. In recent years, fishery in China has witnessed a transformation from a "catch-based" fishery to an "aquaculture based" fishery, with more and more aquatic consumption relying on the aquaculture sector. Issues of quality and safety of aquaculture products have increasingly attracted attentions following this development and to meet the need for social and economic development, the quality certification of aquaculture in China have gradually risen and with more speed in recent years. This is a reflection of the high commitment and the consideration which the government and society place on quality and safety of agricultural products and on effective administration efforts to ensure the livelihoods of both producers and consumers.

18. There are currently eight different certification systems currently applied in Chinese aquaculture. There are five varieties of "product" certification namely: safe agri-food, green food, organic food, ChinaGAP and ACC. Furthermore there are three "system/process" certification systems includes three varieties being, ISO9000, ISO14000, HACCP. The safe agri-food and green food certifications are created according to China's own market demand, while the other six certification varieties are introduced to China for accessing the international markets. National certification of safe agri-food is undertaken by the Center for Agricultural Products Quality & Safety, Ministry of Agriculture and three subordinate sub-centres under MOA, and institutions at the provincial level.

19. The development of safety agri-food, green food and organic food should adhere to the principle of "emphasizing quantity and quality with both certification and supervision". It gives prominence to identify the origin of product use and the supervision and management of certified products and monitors the certified products by sampling. The Ministry of Agriculture organizes sampling of certified production bases annually all over China, and conducts law-enforcement inspection concerning the certified environment, input use, production records, certificates and other marks to correct violations in a timely manner and to highlight issues of special rectification.

## **PLENARY SESSION II: AQUACULTURE CERTIFICATION**

### **Compliance requirements for international trade in aquatic animal product: a challenge to China**

*(Presented by Lahsen Ababouch, FAO)*

20. FAO statistics show that there has been an increase in world fish production steadily over the past 50 years. During the last 20 years this increase has been achieved within aquaculture production with China as a major producer and exporter. The main importers of the world fish trade are Japan, EU and USA markets and on the other hand 50% export comes from developing countries and emerging economies like China, Thailand, India, etc. The most important internationally traded products (by value) are shrimp, tuna, salmon and demersals. There are different market access requirements depending on the species concerned but also whether the product comes from wild capture fisheries or of aquaculture origin.

21. The presentation outlined the framework set for international trade and some of the challenges these rules and regulations might have for aquaculture production in China. There is a fine line between protecting the consumers of a country or protectionism of domestic producers from external competition. The international regulatory framework to deal with this is under the World Trade Organization (WTO) as the Technical Barriers to Trade Agreement, (TBT) and the Agreement on Sanitary and PhytoSanitary measures (SPS). FAO and WHO together host the Codex Alimentarius where countries can discuss and agree on guiding standards for aquaculture amongst other agricultural products. China as a leading producer should play a leading role in setting the standards under the Codex Alimentarius. This has not been the case so far where China has been using the standards set by others. China should try to change this and take a more active role, commensurate with its leading role as a producer. In order to keep and gain further access to international markets it is crucial that China develop its standards in accordance with SPS and TBT agreements and also according to relevant international organizations namely OIE (Aquatic Animal Health), Codex Alimentarius Commission (CAC), and International Plant Protection Commission (IPPC). It is important to notice that WTO through its two committees (TBT and SPS) is monitoring progress of international harmonization set through the standards setting bodies but does not set standards itself. The main message in this presentation is that in the future China should play a leading role in developing standards for products they are main producers of. It is the responsibility of researchers, policy makers and international negotiators to get involved in the process. It would be a natural development that the product and process standards are developed with major input from the major producers and not only the importing consuming partners.

### **Experiences and concerns about promoting good aquaculture practices (GAP) in China**

*(Presented by Zhu Xiao-nan, CNCA)*

22. Aquatic products account for an increasing part in public daily food consumption in China. Food safety issues related to aquatic products are of increasing concern both by the consumer and by the government. It is necessary to apply effective monitoring and control measures for each step from the farm to the processing in order to ensure the food safety and quality of aquatic product. By introducing and implementing the HACCP principles to the processing of aquatic product in 1990s, food safety management system in China was dramatically improved. However the food safety management at the farm level is not at the level expected by consumers and government. Therefore initiatives to improve this have been taken.

23. The introduction of Good Aquaculture Practices (GAP) system at the farm level we can establish a scientific, systematic, traceable and reviewable system to control the whole process of aquatic breeding. Hence ensure the strictness and effectiveness of the control process. There are two main problems implementing the GAP namely: Lack of capacity of food safety and hygiene management of most Chinese aquatic farms. The establishment of farmer groups has proven an effective way of raising the level of knowledge among the more marginal farmers. Secondly the supply of chemicals like pesticide and aquatic drugs are not effectively controlled in China. Currently we are working on implementation of Good Supply Practices (GSP) to improve the current chemical managing system. The GSP are based on international management standards. The work with the implementation of GSP and strengthening of farmer cooperatives and groups has improved the output and the food safety of products produced in the province Fujian that have worked on the projects.

24. Some of the more advanced farms are now working on setting up a traceability system to demonstrate a competent food safety control system to customer (Consumers and retailers) and government supervision department. A pilot system is in place where the consumer online can check the food safety control details of the seafood products they purchased. The system has two

interfaces namely one for consumers and one for relevant monitoring and controlling government office.

### **Discussion**

25. A question was raised regarding the international regulatory framework particularly to the ISO management certification standards. It was asked if such advanced management systems are appropriate for aquaculture management. The main standards to be used are the Codex and the OIE standards. The ISO standards are generic and are not specifically addressing aquaculture management but management in general.

26. It was asked if the traceability system presented in the presentation on experiences and concerns about promoting good aquaculture practices (GAP) in China were available online. The system was still a pilot model and under development but will be available online when completed. The on-line model presented was a good example of a traceability system that would be of interest to other countries in Asia.

27. Have FAO developed a research based environmental baseline related to site selection? It was informed that the Code of Practice for Responsible Fisheries (CCRF) includes generic guidance on environmental considerations related to siting and other environmental aspects. However, detailed aquaculture standards were not provided in the CCRF.

28. The scientific input to setting standards was requested. It was asked if there are any regulations available for setting these standards. There is a Codex committee on veterinary drugs that uses science-based risk analysis to define standards for veterinary drugs. Further information available on the FAO/WHO *Codex Alimentarius* website. It was suggested that Chinese researchers and policy makers should more actively contribute to the work of the *Codex Alimentarius* Commission and OIE international standard setting bodies.

### **Food safety and quality aspects of certification: Current status**

*(Presented by Kong Fan-ming, CNCA)*

29. Certification and accreditation system for food in China have been implemented for some time. CNCA do overall management and supervision of certification and accreditation in China. Currently there is organic certification, safe agri-food certification, GAP certification, green marketing certification, HACCP certification and so on. Currently there are more than 400 companies that have joined the GAP system. GAP system includes crop, vegetable, stocking, aquaculture, tea, cow models. The main focus of the certification is on the food safety and welfare for people and animal. The use of the HACCP system has been done in China for many years. Currently (2007) there are more than 3000 companies that have the HACCP certification. HACCP systems are used to control China's national food system process and improve it to meet the requirements from both the international market as well as improve the food safety and quality for the Chinese domestic market.

### **Social and environmental aspects of certification: Current status**

*(Presented by Lu Zhen-hui, CNCA)*

30. With practices and experiences of aquaculture certification by running certification programs of organic and ChinaGAP, it has been discussed, in this presentation, the roles of certification in responsible aquaculture to the issues of social and environment. The criteria of social and environmental responsibilities to aquaculture are also discussed as a comparative study between the FAO guidelines and ChinaGAP. In this context and for mutual recognition between different aquaculture certification programs the author suggests/recommends that: 1) For standards equivalency: setting a FAO aquaculture benchmark, which are minimum and basic requirements, for standards benchmarking from different certification programs, based on the principles and requirements developed from the FAO Guidelines for Aquaculture Certification; 2) For accreditation equivalency: adopting the IAF/MLA regime, which has been signed by 37 member countries with world-wide recognitions, for accrediting aquaculture certification programs based on accreditation criteria ISO Guide 65/ISO 17065; and 3) Scope of aquaculture certification: apart from aquaculture production, the inputs to aquaculture, capture and post capture processing as well as the chain of custody should also be covered in the aquaculture certifications.

## **Discussion**

31. A question related to the different shellfish standards in the EU, US and Japan related to pathogens and algal blooms. Monitoring requirements for pathogens are different for EU and US markets, including whether pathogen sampling is required in the water or in the shellfish. The Codex Alimentarius Commission has recently analysed this issue, and an agreement on different monitoring methods based on the same ISO based analytical method for E.coli at the border has been obtained.

32. China already has numerous certification schemes and the participants asked how these schemes would perform against the guidelines. They suggested if possible to develop one guideline to fit all countries and regions and that the FAO guidelines on aquaculture certification be used as a basis for harmonisation and equivalence arrangements. FAO explained that one of the reasons for developing the guidelines was the increasing number of aquaculture certification schemes, not only in China but globally. The guidelines are intended cover all species and environments. The guidelines do not include certification standards that would be developed to be more specific in relation to aquaculture species and the culture siting. Several groups are developing standards but this is not the objective of the FAO and NACA work on the guidelines. It was suggested that further work be undertaken on harmonization of standards for aquaculture.

33. The involvement of Chinese scientists in Codex Alimentarius standard setting work was also discussed. The participants asked how this should be done in practice. Codex Alimentarius documents have been translated to Chinese and are available. It was also noted that the involvement of Chinese scientists in this workshop had contributed to the development of the FAO guidelines for aquaculture certification.

34. A question raised was raised about the FAO Fisheries Technical Paper 442 and FAO Fisheries Technical Paper 444. FAO staff explained that an update for the FTP 444 is underway and contributions from China for this update will be very welcome. The updated English version will be available in December 2008 and translation into Chinese would be welcome.

35. Regarding mutual recognition and equivalence between certification requirements of importing countries, it was also noted that there is material available on the Codex Alimentarius website.

36. It was noted that there is a difference between the HACCP guidelines and FAO guidelines for aquaculture certification. The guidelines will be a more generic document assisting development of certification schemes, including those addressing animal health/welfare issues, food safety issues, environmental issues and social issues, whereas HACCP only relates to food safety. The development of aquaculture standards and conduct of certification should be without conflict of interest and a scheme could involve both NGO, government, private sector. As long as there is no conflict of interest between the different elements of the scheme, anyone could develop standards and certification as they find appropriate, as long as they follow the principles of the guidelines.

## **WORKING GROUPS SESSION I**

### **Introduction to aquaculture certification guidelines**

*(Presented by Rohana Subasinghe, FAO)*

37. Aquaculture has performed well over the last 20 years and has become an increasingly important source of fisheries products for consumers around the world. Latest figures show that 50% of the world's consumption of fish will come from aquaculture by 2012. The social, environmental and economic landscape aquaculture is operating in is changing and new challenges and opportunities for the sector. Given the projected population growth, an additional 40 million tonnes of aquatic food will be required by 2030, at least to maintain the current per person consumption.

38. At the FAO Committee on Fisheries Sub-Committee on Aquaculture III (COFI/SCA III) held in India in September 2006 the members were mindful that currently, many non-governmental certification schemes have resulted in higher costs for producers without delivering significant price benefits to small-scale producers and expressed concern that the costs of such schemes were disadvantageous to small-scale producers. They also commented that the emergence of a wide range of certification schemes and accreditation bodies was creating confusion amongst producers

and consumers alike. To address this it was stated that there was a need for more globally accepted norms for aquaculture production, which could provide more guidance and serve as a basis for improved harmonization and facilitate mutual recognition and equivalence of such certification schemes. The members requested FAO to convene a number of Expert Workshops and encouraged FAO to play a lead role in facilitating the development of guidelines which could be considered when national and regional aquaculture standards are developed.

39. This expert workshop is the fifth workshop out of a total six workshops to be held to develop the FAO guidelines for aquaculture certification. The scope of the guidelines is to set forth the minimum substantive requirements and criteria for granting a certificate (certification) of an aquaculture system, practice, or a product. Any certification scheme may apply additional or more stringent requirements and criteria.

#### **Discussion**

40. There was a question about the different draft guideline documents. All the drafts are available on the dedicated website. The development and changes made to the document are based on comments and discussions received from experts and stakeholders at the expert workshops and comments received from the website and from the email lists. It was noted that there are already Chinese versions on draft 2 and draft 3

41. There was a question raised on how the guidelines can take into account both the consumer needs and at the same time take into account the constraints and challenges some producers might have. It was replied that the guidelines are a way of ensuring exactly that. The guidelines are not a certification scheme and FAO will not develop a certification scheme. It is up to the individual certification schemes to ensure that requirements for producers are fair and not only address consumer needs but also address producer needs.

42. If the Chinese producers will strictly follow the FAO guidelines on aquaculture certification, will this ensure no problems from the importing countries? The answer is that there should be no problems if they are followed but as with all international trade there are often problems. However if you can show you are following the FAO international guidelines for aquaculture certification you will be able to have a strong case. At a previous meeting in London more than 40 key retailers agreed that the guidelines were an important initiative that they would use for their certification when final. There was complete consensus that the FAO guidelines were urgently needed.

#### **Working group I: Minimum substantive criteria: Animal health and welfare**

**Group members:** Zhu Yu, Li Yun, Li Se-dong, Tang Shou-ting, Wang Shi-huan

**Chair:** Wei Pu. **Interpreter:** Chen Shu-ping **Facilitator:** Rohana Subasinghe

43. The group discussed the minimal substantive criteria related to animal health and welfare seen from a Chinese perspective. Especially animal health is of concern for producers and there are some good experience related to this. Animal welfare was also considered as an important area. However this topic is newer to most farmers and there were some concern if the requirements could be fulfilled by the less developed farmers. A number of specific points were raised by the group:

- Suggest changing the word “high health” to “health”. Otherwise, high health should be quantified (a standard?).
- There should be room for cultural difference and local conditions should be considered.
- Suggest changing the word “rigorous” to “effective”.
- Suggest changing the word “strategies” to “practice”.
- The use of the word “as appropriate” should be used more to ensure the flexibility needed in the guidelines.

#### **Working group II: Minimum substantive criteria: Food safety and quality**

**Group members:** Bing Xu-wen, Zou Shi-ping, Hu Hong-lang, Xia Yu, Liu Shou-tang, Meng Xue-song, Chen Yun-hua, Han Zhi.

**Chair:** Ma Bing. **Interpreter:** Miao Weimin and Lu Qi. **Facilitator:** Lahsen Ababouch

44. The group worked on the minimum substantive criteria related to food safety and quality. A general observation was that food safety and quality should be mentioned before animal health and welfare due to more importance. It was understood that the order was due to the relation between food safety and quality and animal health and welfare. The following recommendations were made:

- add “When feeds are used,” to the front of Paragraph 4 on page 17

- change the text “ - Authorized veterinary drugs and chemicals or medicated feeds should be used according to manufacturer’s instructions, - “ to “Authorized veterinary drugs and chemicals or medicated feeds should be used according to the instructions of manufacturer or *personnel authorized under national regulations*”.
- change the text - “Banned antibacterials, veterinary drugs and/or chemicals should not be used in aquaculture production or product processing” - to “Banned antibacterials, veterinary drugs and/or chemicals should not be used in aquaculture production, *products circulation* or product processing”.
- Change: - “The source of broodstock and seed for culture (larvae, post larvae, fry and fingerling)” – should be changed to - “The source of broodstock and seed for culture (larvae, post larvae, fry and fingerling etc.)”.

### **Working group III: Minimum substantive criteria: Environmental integrity**

**Group members:** Fang Jin-cen, Zhang Zhi-hua, Jia Li, Xu Jun-zhuo, Wang Ning, Yu Sen-ji, Zhao Gui-lin, Liang Xiao-jun, Yao You-fu

**Chair:** Liu Qiaorong. **Interpreter:** Fang Xiuzhen. **Facilitator:** Michael Phillips

45. The third working group reviewed the environmental integrity aspects of the guidelines, and related requirements and criteria. The working group considered the list of minimum substantive criteria appropriate with no major issues missing from the perspective of Chinese aquaculture. Some re-organisation was suggested and the following points were emphasised during discussions:

- Small-scale farmers will face difficulty complying with the requirement for “off-farm” environment monitoring. This requirement may be possible to implement when small farmers are organized in groups or will require assistance to implement.
- The use of native species and use of appropriate combination of species in polyculture should be emphasised as a means of minimizing adverse environmental impacts.
- Consider merging two bullet points:
  - *Minimize release of all culture species into natural habitats.*
  - *Encourage the use of native species in aquaculture whilst minimizing their escape into the wild.*
- The sequence of bullet points should be re-arranged with similar and/or related points together.

46. During plenary discussions following the group presentation, the issue of environmental monitoring was discussed in more detail. Participants noted that routine environmental monitoring is needed to identify environmental trends, both positive and negative; however a significant challenge was to encourage small-scale aquaculture farmers to conduct routine monitoring. The guidelines should therefore consider development of monitoring systems for small-scale farmers. The discussions also emphasised the importance of regular assessment of the impact of aquaculture on the environment, but that this does not mean that the farmers always have to conduct this monitoring. It can be done by farmer groups, government or non-government organizations and/or farmers depending on capacity and financial resources. There are similar situations related to food safety in shell fish farming where government has invested monitoring.

### **Working group IV: Minimum substantive criteria: Social responsibility**

**Group members:** Chen Wen, Li Wing-ren Song Yi, Liu Qi, Zhang Rui, Zhu Xiao-nan, Wu Xiao-lun, Martin Bjerner, Yan Huai

**Chair:** Huang Lei. **Interpreter:** Jing Yin and Kong Fanming. **Facilitator:** Jia Jiansan

47. The fourth working group worked on the minimum substantive criteria on social responsibility. Social responsibility should be for both workers and for small-scale farmers. A number of specific recommendations to the criteria were given:

- It was suggested that the text “workers should be paid wages according to national rules and regulations”, should be changed to “workers should be paid wages *and other welfares* according to national rules and regulations”.
- Reading over the items there seems to be some overlap. The group suggest that some similar items are combined. As an example, one item states that “Socio-economic issues should be considered at all stages of aquaculture planning, development and operation, in

order to maximize benefits and equity and to minimize any negative economic consequences to workers and/or communities”, while another item states that “All efforts must be taken to minimize negative social and economic impacts to workers and communities. They all mention “to minimize negative social and economic impacts to workers and/or communities”. It is recommended that these two items are quite similar and could be combined in one item. Another example is one item stating that “special measures to ensure participation of resource poor small scale producers” while another stating “Ensure that the special concerns and interests of resource poor small scale producers are considered, especially the financial costs and benefits of participation.” The text would benefit from a second read-through and some criteria might be combined

- The group suggested that criteria could be re-arranged in a better manner. Some items could be better summarized according to the different objective. It is suggested to summarize the items of the 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup> and 6<sup>th</sup> of the sector.
- It was discussed and suggested that the term “small-scale aquaculture farmers” should be extended to include not only small scale aquaculture farmers, but farmers from poverty-stricken areas or where minorities live. We suggest the term could be changed into “resource poor aquaculture farmers”. The reason why we suggest a change of the term is due to the fact that (1) in some parts of China, aquaculture is used as an effective way to reduce poverty and a lot of poor people rely on aquaculture. (2) We have some aquaculture enterprises in regions where minorities dwell in, and they should be given consideration. Therefore, besides small scale aquaculture farmers, poor farmers as well as minority farmers in China should be given special measures to ensure participation and their interests.

48. The group had some points for clarification that they would like to discuss in plenary. More explanation was needed on who should share social responsibility, for example, who should “not create unnecessary obstacle to trade, and should facilitate market access? Social responsibility or corporate social responsibility is the responsibility of governments or large companies or organizations to have practices that are responsible towards farmers or farm workers. There is also a responsibility related to setting up the certification schemes involving all stakeholders. It was agreed that the chapter on social responsibility should be clearer and it should be clear who should share what responsibilities.

#### **Working group I: Institutional and procedural requirements: Governance**

49. Working group 1 discussed institutional and procedural requirements related to governance. It was agreed that there was a good description of how to practice good governance from a certifier’s point of view but no guidance on governance related to standard setting and accreditation bodies.

#### **Working group II: Institutional and procedural requirements: Standard setting**

50. The discussions related to standard setting was good and constructive The requirements seemed reasonable and there were only a few specific changes suggested:

- Change - “Standards should reflect the objectives, results and outcomes that are being pursued through the certification scheme to address animal health and welfare, food safety and quality, environmental integrity and/or social responsibility in aquaculture” to “Standards should reflect the objectives, results and outcomes that are being pursued through the certification scheme to address *food safety and quality, animal health and welfare*, environmental integrity and/or social responsibility in aquaculture”.
- Consider if there could be set a minimum requirement for who should be involved in the consultation process and some guidance on this.

#### **Working group III: Institutional and procedural requirements: Accreditation**

51. The group noted particularly the guidance of ISO on accreditation and made a number of suggestions for improvement:

- ISO 61 has been replaced and now most points are covered in ISO 17011. There was some uncertainty on what ISO guide the text should refer to and the secretariat was requested to check and amend the text as needed. Much of the section “Accreditation” is similar to that of ISO/IEC 17011, but appears as amended and incomplete. This approach may cause confusion. This section should focus

more on the special requirement on the accreditation of aquaculture certification, and refer as needed to IOS 17011.

Special recommendations regarding the treatment of developing countries should be retained (e.g. 2<sup>nd</sup> para under “non-discrimination” and last para under Change in the accreditation requirements).

- The period of accreditation of a certification body should be considered. Monitoring procedures for certification bodies and certifiers should be clearer.
- “Countries in transition” – provide a definition.

#### **Working group IV: Institutional and procedural requirements: Certification**

52. It was suggested to delete the section “Scope” and distribute the relevant contents to the other chapters in the Guidelines. The reasons are it is not appropriate to introduce the law of EU in the guidelines as minimum requirements.

53. It should be clearer what the obligations of suppliers of inputs are. It is not appropriate to require the farmer to be responsible for other links of the chain of custody except the aquaculture. Some specific recommendations were given to the chapter on certification:

- The group suggested change “Certification could include an aquaculture activity e.g. an aquaculture operation of the chain of custody of a product. Separate certificates may be issued for the aquaculture operation and the chain of custody of a product” is suggested changed to “Certification could include an aquaculture activity e.g. an aquaculture operation of the chain of custody of a product. Separate certificates may be issued for the aquaculture activity and the chain of custody of a product”
- “Conformity assessment: Whether an aquaculture operation conforms to the standard and related certification criteria” should be changed to “Conformity assessment: Whether an aquaculture activity conforms to the standard and related certification criteria”
- “Chain of custody assessment: Whether adequate measures are in place to identify products from a certified aquaculture operation at subsequent stages of processing , distribution and marketing ( traceability )” should be changed to “Chain of custody assessment: Whether adequate measures are in place to identify products from a certified aquaculture operation including production and subsequent stages of processing , distribution and marketing ( traceability )”.
- The certifying aim of the Guidelines for certification is for the supply chain of the aquaculture product, not just for the aquaculture company or aquaculture operation, so it’s suggested renaming the Guidelines, to “Guidelines for Certification of Fish and Fishery Products from Aquaculture”.

#### **WORKING GROUPS SESSION II**

##### **Working group I: Implementation of guidelines – Opportunities and challenges: Institutional arrangements.**

54. During the discussions on the practical implementations of the guidelines related to institutional arrangements the group had the following main comments:

- The authority of a certification body should be clarified. It was unclear if it included the equivalent of doing inspection.
- The guidelines should underline that standard setting should be done by the department which is in charge of aquaculture or fishery and should encourage involvement of all involved stakeholders and collect ideas from each stakeholder to build a international level and viable standards.
- The guideline should include some guidance on how to chose the certification bodies and how to management/monitor them.
- It was underlined that the small-scale farmers should not be forgotten and they should have time to adapt for new requirements.
- Harmonization of standards and certification procedures should be encouraged and done were possible to reduce the cost of certification.
- It was suggested to spend money on marketing Support should be given to marketing our company to get the marketing information and some foundation to do the aquaculture.

## **Working group II: Implementation of guidelines – Opportunities and challenges: Mandatory and legal aspects**

55. In general, China has established basic legal framework for governing aquaculture Industry, particularly to ensure food safety and quality and environmental integrity. But, such legal framework needs to be improved. For instance, there is lack of legal documents on animal health and welfares.

56. Chinese aquaculture Industry is characterized by large number of farms scattered in vast areas with great variation in natural and socioeconomic conditions. This created great difficulty in implementing relevant certification schemes, particularly when dealing with small-scale farmers.

57. As a large developing country, the implementation is going to face the constraints of limited financial resource, human resource and equipment for needed testing.

58. Currently, the policing and management team is relatively weak considering the scale of the Industry. The supervision and inspection mainly focus on export-oriented processing companies and culture bases. Further extension of such supervision and inspection to large number of sparsely distributed small scale farmers is a great challenge.

59. The low educational level of small scale farm operator will also cause great difficulty in effective implementation.

## **Working group III: Implementation of guidelines – Opportunities and challenges: Farmer compliance**

60. During certification, documentation may be a particular concern to farmers. There is a need therefore to make the required documentation and record keeping procedures as simple as possible. Give more emphasis on improvement in production process and trace-ability, and try to minimize the amount of paperwork required of producers.

61. Encourage education and training of personnel in concerned sectors.

- Training for certifiers to have better understanding of aquaculture operations
- Training for aquaculture operators to comply with requirements
- Training of Government agencies responsible to manage implementation and coordination

62. Encourage development and application of incentive policies to encourage farmers to comply with certification schemes, such as through market connections and other incentives.

## **Working group IV: Implementation of guidelines – Opportunities and challenges: Service provider's compliance.**

63. The group discussed service provider's compliance with the guidelines and agreed that the guidelines are lacking details on the obligation of the suppliers. It was suggested to carry out the relevant principles of the guidelines better and it was suggested to add the items on the inputs like broodstock, seed, chemicals, feed and other inputs, especially on the supplier of the inputs. The group suggested adding the item as following to this sector: every country shall actively facilitate the mutual recognition, not negative reject or prolong, on the premise of abiding the principles of the Guidelines and equivalence.

## **PLENARY SESSION III: WAY FORWARD**

### **Small-scale aquaculture producers and challenges in their participation in certification.**

*(Presented by Michael Phillips, NACA)*

64. The importance of small-scale farming in Asia is significant and well known. It is the largest group of aquaculture farmers in the region and a major contributor to production in many countries. It is a highly innovative sector that is critical for rural development, employment and poverty reduction throughout the region. Present trends in market and trade are working against the small-scale sector. There are presently no certification schemes targeting the small-scale sector, such as Fair Trade or other certification mechanisms focused on small-scale aquaculture farmers. Small-scale farmers also face various constraints including limited access to market, technical and

business knowledge and often commercial and government servicing is not oriented towards the opportunities and requirements of small-scale farmers.

65. There are however ways to assist small-scale farmer to participate in modern market chains and certification schemes. Recent experiences suggest pro-small-scale farmer action can result in positive benefits. Organization of farmers into producer groups is one mechanism that may allow certification of groups as opposed to individuals to participate. It can potentially allow economies of scale (e.g. bulk purchase and marketing) and facilitates communication and extension, uptake of better management practices among members and more organized marketing.

66. An example was provided from India where MPEDA, NACA and FAO had collaborated with the objective of reducing the risk of disease outbreaks and improving shrimp farm production among small-scale shrimp farmers. The collaboration had been successful in assisting farmers to produce better quality shrimps in a responsible and economically viable manner and to organize farmers under “Self Help Groups” or “Aquaclubs”, with nearly 3,000 shrimp farmers now involved in the program. The key elements of success were adoption of better management practices that benefit farm profitability and reduce risk and facilitation of farmer club formation and cooperation. The outcome was also highly favourable from an economic perspective. For example, an investment in technical services of US\$80,000 during 2006 had led to improved farm profitability of participating farmers of around US\$2 million. The main lessons from the Indian case are that facilitating organization of the small-scale farming sector can achieve positive change and profitable farming, but it takes time. Such social investment can make sound business sense and encouragement of both Government and private investment is necessary towards building of small-scale farmer services, and to assist the small-scale sector improve practices, certify and access markets.

#### **Discussion**

67. During the discussions it was noted that there is a parallel between certification and the problems small-scale farmers are facing in relation to insurance. It was asked if there was a way to link certification and insurance. The formation of farmer groups bringing farmers together can offer many opportunities to the group also in connecting with banks and insurance companies.

68. It was clarified that the guidelines address the production of aquaculture products but do not relate to processing. Other guidelines were available on post-harvest aspects, which were complementary to the present guideline focus on aquaculture production.

69. It was suggested that after completion of the guidelines that there should be some more specific documents maybe with some case studies to provide more guidance, standards and tool to assist in implementation of the guidelines.

70. In China the small-scale sector is very important and many people are earning their livelihood from small-scale aquaculture operations. It is therefore of concern and importance for both central and provincial government to pay a lot of attention to this sector. As an example there has been legislation to encourage the formation of farmer cooperatives. They are legally recognized as a group and can do business as a group. There have also been both financial and technical assistance to small-scale farmers and the number of farmer groups is now “mushrooming” in China. The issues of self regulation and internal control within farmer groups are of great importance. Successful small-scale farmer groups have some things in common, namely: i) Management of farmer groups should be transparent and democratic. ii) Participation should be voluntary; hence no force should be used to make farmers join the group. iii) Groups should adapt and take advantage of local conditions. Good communication is a key for farmer groups, within groups and with other stakeholders including government and others. The key point is that farmers joining the groups should have an economic benefit.

71. A case of promotion of contract farming that is currently promoted by government was given as an example of a partnership between government, a larger company and smaller farmers. The principle is that a larger company supports smaller farmers with input and training and they get the harvest at an agreed price. There are some experience from Thailand on both farmer clubs and contract farming. It should be remembered that any approach should benefit all involved stakeholders.

72. The importance of self-regulation was noted, as a few farmers not following agreed management practices within the group could risk losing buyer confidence in the whole group. Self regulation and internal monitoring is very important for farmer groups and required for

certification. A good system of group certification needs to be established and strongly implemented.

#### **WORKSHOP CONCLUSIONS AND RECOMMENDATIONS**

73. The workshop had been a very important contribution to the development of the guidelines and the process had benefited greatly from the experience and knowledge of the experts attending the workshop.

74. The secretariat noted that the meeting report and all material presented at the workshop would be made available at the dedicated website at [www.enaca.org/certification](http://www.enaca.org/certification) . Any comments that the participants might have should be sent to the secretariat to be included in the next version of the international guidelines document.

75. The way forward after this workshop is that relevant comments from the workshop will be included in the next version of the document that will be presented at the upcoming meeting in Silver Springs, USA from 29-30 May 2008. Then, the final document will be edited and presented at the Sub Committee for Aquaculture.

76. The Expert workshop was closed with remarks from representatives of FAO, NACA and the Government of China. The secretariat thanked the participants for their active and fruitful involvement in the meeting, and looked forward to further co-operation in the development of the aquaculture certification guidelines and implementation of the recommendations.

Advance Draft

## **ANNEX 1: AGENDA OF THE EXPERT WORKSHOP**

**Day 1:           6 May 2008**

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### **Opening Ceremony**

- 09.00 – 10.00   Opening remarks:  
                          Address by FAO  
                          Address by NACA  
                          Address by Bureau of Fisheries, MOA  
                          Address by CNCA  
                          Address by CAFS
- 10.00 – 10.20   Tea Break

### **Plenary Session I: Introduction**

- 10.20 – 11.00   Chinese aquaculture: A general overview  
                          *(Presented by Ding Xiao-ming, MOA)*
- 11.00 – 11.30   International trade in Chinese aquaculture products: Constraints and  
                          challenges  
                          *(Presented by Xiao Fang, MOA)*
- 11.30 – 12.00   Aquaculture certification: Current status analysis  
                          *(Presented by Song Yi, CAFS)*
- 12.00 – 12.30   Discussions
- 12.30 – 14.00   Lunch

### **Plenary Session II – Aquaculture Certification**

- 14.00 – 14.30   Compliance requirements for international trade in aquatic animal  
                          products: A challenge to China  
                          *(Presented by Lahsen Ababouch)*
- 14.30 – 15.00   Experiences and concerns about promoting good aquaculture practices  
                          (GAP) in China  
                          *(Presented by Zhu Xiao-nan, CNCA)*
- 15.00 – 15.40   Food safety and quality aspects of certification: Current status  
                          *(Presented by Kong Fan-ming, CNCA)*
- 15.40 – 16.00   Tea Break
- 16.00 – 16.30   Social and environmental aspects of certification: Current status  
                          *(Presented by Lu Zhen-hui)*
- 16.30 – 17.00   Discussion
- 17.00 – 17.30   Working group arrangements

**Day 2: 7 May 2008**

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**Working Groups – Session 1**

- 08.30 - 09.00 Introduction to aquaculture certification guidelines  
*(Presented by Rohana Subasinghe, FAO)*
- 09.00 – 12.30 Implementation of guidelines
- Working group I: Institutional arrangements
  - Working group II: Mandatory and legal aspects
  - Working group III: Farmer compliance
  - Working group IV: Service providers compliance
- 12.30 – 14.00 Lunch

**Working Groups – Session II**

- 14.00 – 17.00 How to improve compliance with international trading requirements of aquatic food in China:
- Working group I: Legal and institutional perspective
  - Working group II: Farmers perspective
  - Working group III: Processors and service providers perspective
  - Working group IV: Understanding the value chain and traceability in aquatic production and marketing in China.

**Day 3: 8 May 2008**

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**Plenary Session III – Way forward**

- 08.30 – 10.40 Working Group presentations and discussions
- 10.40 – 11.00 Tea break
- 11.00 – 12.30 Working Group presentations and discussions (continued)
- 12.30 – 14.00 Lunch
- 14.00 – 14.30 Small-scale aquaculture producers and challenges in their participation in certification  
*(Presented by Michael J. Phillips, NACA)*
- 14.30 – 15.40 Discussion
- 15.40 – 16.00 Tea break
- 16.00 – 17.00 Final remarks and closing ceremony
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## ANNEX 2: LIST OF PARTICIPANTS

### List of Participants

#### Workshop on Guidelines for Aquaculture Certification 6-8 May 2008, Beijing, P.R. China

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### ANNEX 3: PROSPECTUS OF THE EXPERT WORKSHOP



## CONSULTATIVE WORKSHOP ON GUIDELINES FOR AQUACULTURE CERTIFICATION

06-08 MAY 2008

GOLDEN HARBOR HOTEL, BEIJING, P.R. CHINA

### BACKGROUND

Driven by concerns over food safety, environmental and social sustainability of aquaculture production, over the years there have been attempts to respond to the consequent public perceptions and market requirements. Food safety standards have been elevated and international trade regulations tightened. Policy and regulations governing environmental sustainability have been put in place in many countries, requiring aquaculture producers to comply with more stringent environmental mitigation and protection measures. In some countries these changes were initiated by the aquaculture sector itself, usually within the more organized private industry sector to ensure its sustainability and protect operations from poorly managed activities. The private sector has made significant advances in the management of its activities and there are many examples of improved management of farming systems that have reduced environmental impacts and improved efficiency, including profitability, in all regions.

Owing to the need for responding to these environmental and consumer concerns on aquaculture production and in order to secure better market access, there is increasing interest in certification of aquaculture production systems, practices, processes and products from aquaculture. Many markets increasingly recognize that some form of certification is a way of assuring buyers, retailers, and consumers that fishery products are safe to consume and originate from aquaculture farms or capture fisheries adopting responsible management practices. Certification has been introduced to capture fisheries for some time and guidelines for eco-labelling of capture fishery products were developed by FAO in 2005<sup>2</sup> and efforts are being made to develop eco-labelling guidelines for inland fisheries<sup>3</sup>.

In several countries, aquaculture producers are introducing environmental certification of aquaculture products, either individually or in a coordinated manner, in order to credibly demonstrate that their production practices are non-polluting, non-disease transmitting and/or non-ecologically threatening<sup>4, 5</sup>. Some countries are attempting to introduce state-mediated certification procedures to certify that aquaculture products are safe to consume and farmed in accordance with certain environmental standards<sup>6</sup>. Most of the work done on improved management has been on salmon and shrimp, mainly due to their high commodity value and the importance attached as the most internationally traded products.

Within the context of the application of the Code of Conduct for Responsible Fisheries (CCRF), the FAO Committee on Fisheries Sub-Committee on Aquaculture (COFI/SCA) requested FAO to organise Expert Workshops to make recommendations regarding the development of harmonised shrimp farming standards and review certification procedures for global acceptance and transparency, which will also assist in elaborating norms and reviewing the diverse options and relative benefits of these approaches. In this regard, the Sub-Committee encouraged FAO to play a lead role in facilitating the development of guidelines which could be considered when national and

<sup>2</sup> FAO. Guidelines for Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries. Rome, FAO. 2005. 90p.

<sup>3</sup> Report of the Expert Consultation on Guidelines on Ecolabelling of Fish and Fishery Products from Inland Fisheries Rome, Italy. 23 May 2006 - 26 May 2006

<sup>4</sup> ABCC. 2004. "Código de conduta para desenvolvimento sustentável e responsável da carcinicultura brasileira". ABCC - Association of shrimp growers of Brazil.

<sup>5</sup> The state of world aquaculture 2006. FAO Fisheries Technical Paper. No. 500. Rome, FAO. 2006.

<sup>6</sup> FAO: TCP/CHI/3002 Certification of the compliance of the environmental regulations by the aquaculture industry in Chile.

regional aquaculture standards are developed. Several members of the Sub-Committee as well as a number of inter-governmental organizations offered to cooperate at national, regional and international level, and requested FAO to provide a platform for such collaboration. The Sub-Committee also requested setting up of an expert group on reviewing certification of shrimp farming systems.

Past and future planned activities are as follows:

- |  |                  |
|--|------------------|
| • Setting up of the Secretariat  | December 2006    |
| • Establishment of Advisory Group  | January 2007     |
| • Bangkok/Thailand workshop  | March 2007       |
| • First draft of guidelines available for comments   | April 2007       |
| • Fortaleza/Brazil workshop  | July/August 2007 |
| • Kochi/India AFS meeting  | November 2007    |
| • Second draft of guidelines available for comments  | December 2007    |
| • London/UK (buyers and retailers)   | February 2008    |
| • Beijing/China (National)   | May 2008         |
| • Washington DC/USA (buyers and retailers)   | May 2008         |
| • Third draft of guidelines available for comments   | June 2008        |
| • Puerto Varas/Chile: Submission of final draft guidelines to FAO Committee on Fisheries Sub-Committee on Aquaculture (Session IV) | October 2008     |

Details could be found at:

[www.enaca.org/certification](http://www.enaca.org/certification); or <http://www.fao.org/fishery/about/cofi/aquaculture>.

A Consultative Workshop on “*Guidelines for Aquaculture Certification*” will be held in Beijing, P.R. China from 06-08 May 2008. The Beijing Workshop will be hosted by the Government of China. It will be conducted as a joint FAO/NACA/CAFS/CNCA Consultative Workshop.

The workshop is the fifth of the series of workshops/consultations held to prepare the international guidelines for certification in aquaculture. This workshop, being hosted in China, will have a strong emphasis on aquaculture products from China. The workshop will also look at opportunities and challenges for implementing the certification guidelines in China towards improving aquatic production and trade of aquaculture products nationally, regionally, and globally.

#### **OBJECTIVES**

The purpose of the Beijing Consultative Workshop is to bring stakeholders, mainly Chinese, to present, discuss and build consensus on the draft FAO guidelines for aquaculture certification. The workshop will also discuss opportunities and challenges in implementing the provisions of the guidelines in aquaculture certification in China, how to further improve quality and safety of aquatic products from China, and how to improve compliance to international trading requirements of aquatic products for better market access and responsible trade.

#### **EXPECTED OUTPUTS**

The expected outputs from the workshop, driven by the discussions and perspectives of the participants, are as follows:

- Stakeholders brought together to discuss aquaculture certification status and constraints in China
- FAO aquaculture certification guidelines discussed, reviewed and consensus built on further development.
- Consensus built on the guidelines for aquaculture certification and implementation strategies in China.

#### **PARTICIPANTS**

The workshop will be held in Beijing, involving 60-70 invited participants with different experiences and perspectives on aquaculture production, trade, marketing and certification in China. Efforts have been made to ensure broad participation of experts and interest groups in the workshop. They will consist of both public and private sector participants.

#### **WORKSHOP ORGANISATION**

The workshop will mainly be held in plenary, consisting presentations and discussions. The draft guidelines will be discussed and debated and other issues as outline above will also be discussed in

plenary. The workshop will be conducted in both English and Chinese with simultaneous interpretation.

**VENUE**

The workshop will be held in Golden Harbour Hotel, Southeast of Sijiqing Bridge, Road xisihuan, Haidian District, Beijing.

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## **ANNEX 4 OPENING SPEECHES**

### **Ms. Victoria Sekitoleko FAO Representative in PR of China, DPR Korea and Mongolia**

Mr. Chairman, Distinguished guests, Ladies and Gentlemen,

Good morning!

On behalf of FAO, I warmly welcome you to this Workshop on Guidelines for Aquaculture Certification. I would like to express our appreciation to the Bureau of Fisheries of the Chinese Ministry of Agriculture for your great support to this workshop.

China is the world's largest producer and exporter of fish and fishery products and fisheries play a major role in the economies of its coastal communities. Recently at the opening ceremony of the Codex Committee on Pesticide residues which took place in Hangzhou, Mr. Wei Chao'an, the vice minister of agriculture said: "Now that we have the food security, food safety is the next most important issue." I wish to re-echo his words and say that while it is great to have fish and all types of fish products, it is equally important to ensure that these are safe and of course as tasty as any fish from the wild. And their production is environmentally sustainable.

Owing to the need for responding to these environmental and consumer concerns on aquaculture production, and in order to secure better market access, there is increasing interest in certification of aquaculture production systems, practices, processes and products from aquaculture. Many markets increasingly recognize that some form of certification is a way of assuring buyers, retailers, and consumers, that fishery product are safe to consume and originate from aquaculture farms or capture fisheries, adopting responsible management practices. Certification has been introduced to capture fisheries for some time and guidelines for eco-labelling of capture fishery products were developed by FAO in 2005 and efforts are being made to develop eco-belling guideline for inland fisheries.

In several countries, aquaculture producers are introducing environmental certification of aquaculture products, either individually or in a coordinated manner, in order to credibly demonstrate that their production practices are non-polluting, non-disease transmitting and/or non-ecologically threatening. Some countries are attempting to introduce state-mediated certification procedures to certify that aquaculture products are safe to consume and farmed in accordance with certain environmental standards. Most of the work done on improved management has been on salmon and shrimp, mainly due to their high commodity value and the importance attached as the most internationally traded products.

We have all learnt either personally by going to the market or from the media about the soaring food prices, it is times like these when quality must urgently be ensured so that hunger and high prices do not drive the consumers to eat non-whole fish and producers do not produce and substandard products market.

This is a very important workshop at a crucial time. I wish you success. I hope you also find time to visit Beijing, the 2008 Olympics city.

Thank you!

**Prof. Sena De Silva**  
**Director General for Network of Aquaculture Centres in the Asia-Pacific (NACA)**

Good Morning to all and welcome to this very important meeting.

The Network of Aquaculture Centres in Asia-Pacific, popularly known as NACA, an inter-governmental organization with a membership of 17 governments of the region, is pleased to collaborate in this important activity, addressing issues on Certification of Aquaculture produce with the FAO. This is the fourth collaborative meeting of this nature, and no better could be the venue than the PR of China the epicentre of global aquaculture production, epicentre of global sea-food consumption, and the epicentre of trade of fisheries product. As such let me take this opportunity to thank the Chinese Government for hosting this meeting and the local organizing committee for making these excellent arrangements, an ideal setting for effective and fruitful deliberations over the next three days.

Aquaculture is gaining more and more momentum and significance as a food production sector and equally as an important sector contributing to many livelihoods and poverty alleviation in the developing world. Currently aquaculture accounts for 40-45 percent of all sea food consumption of the world and is expected to reach as much as 60- percent in the foreseeable future. Aquaculture although known to have originated over 2500 years back, again in this great country, became a significant contributor to the human food basket only a few decades ago. In these few decades it is often said it was the fastest growing primary production sector and this momentum is still continuing and very much visible, especially in the Asian region. The momentous growth of the sector however, began to be manifested when the world as a whole was revisiting its aspirations and the way forward. It is in this context when universal consensus was reached that development goals should be sustainable; we should use our limiting resources carefully and in all development it was imperative that environmental degradation and perturbations were kept to a minimum. Acceptance of these basic development goals and principles underlying such development also began to go hand in hand with increasing awareness amongst the consumers- irrespective of whether they were from developed and or developing countries. Increasingly, consumers began to inquire the origin the mode of production and quality of food products- in other words a greater degree of “public policing” came into being on determining on the manner how the contents of their food basket was produced and what are the quality assurances that the producer could guarantee them of.

Aquaculture can not be and should not be immune to any such demands. In fact being a new food production sector it is scrutinized much more closely, most parties literally using high powered magnifying glasses to find blemishes in the sector, and more often than not misinterpret and extrapolate odd misdoings to the sector as a whole. Often there is an extrapolation amongst lobby groups to the happenings in shrimp and or salmon farming to the whole of the aquaculture sector, but conveniently forgetting that these commodities account for less than 10 percent of the total aquaculture production. Similarly, it is often not taken into account that the backbone and the great bulk of aquaculture production in Asia, as in the other food production sectors in Asia, is small scale, family owned and family managed units. As such development of standards and certification procedures for aquaculture have to take into account this simple and straight forward fact- that is do not lose sight of the producer.

Many aquaculture standards are being developed; equally there are rumbling as to how these standards could be incorporated into certification procedures; in other words how could these be stamped with a legal entity. However, often and sadly, it is alleged that development of some of these standards occur through computer links in the 25<sup>th</sup> to 50th storey of extravagant office blocs; may be an exaggerating a bit but I assure it is not far from the truth. Standard` developments and certification procedures need to be pragmatic and take into account all stakeholders and not only the supposedly the consumer demands and aspirations.

It is in the above context that NACA as a policy decided to join hands with the FAO in the present exercise; expend much energy so that suitable, acceptable and most of all pragmatic certification procedures are developed and put in place, after extensive consultations and ensuring that the small producer in the aquaculture sector- the back bone of the sector, is not marginalized.

Once again my most sincere thanks to the Government of China, a close friend and supporter of NACA, and the local organizing committee for hosting the meeting.

I wish all the participants a pleasant stay in this great country and most of all fruitful deliberations over the next few days.  
Thank you all

**Dr. ZHANG Xian-liang**  
**Vice President of Chinese Academy of Fisheries Science (CAFS)**

First of all, please allow me on behalf of CAFS to extend my warm welcome and heartfelt thanks to all the experts, officials and guests present.

For the establishment of global aquaculture production and certification criteria as well as for coordination and mutual recognition among different types of certification, FAO is developing a unified "FAO aquaculture certification guidelines", to serve as reference for conducting aquaculture practices in countries around the world.

China's aquaculture production is relatively high while aquaculture products exports also accounts for a large share in the international markets, consequently, China's views and recommendations concerning aquaculture product quality and safety and its certification have been given general attention by FAO, other relevant countries and international organizations.

Today's workshop is jointly sponsored by CAFS , Food and Agriculture Organization of United Nations( FAO), Network of Aquaculture Centres in Asia-Pacific (NACA) , Department for Registration of Certification and Accreditation Administration Commission (CNCA) of China . Its aim is to focus on seeking views and suggestions regarding certification in aquaculture and to the form the final draft of the guidelines.

This workshop will bring forward a more direct and effective reflection of different views from China's administrative departments, technical experts, producers and other relevant aspects to the FAO, to make the guidelines more suitable for industry management, certification management and producer adaptation, and to ensure the impartiality, Effectiveness and traceability of the guidelines and to ensure interests of aquatic products in international trade.

As one of the organizers of the workshop, CAFS is a state fishery research institute in China and it has 9 fishery research institutes (centres), and 4 fishery resource enhancement stations with a total of more than 2000 scientific and technological personnel. CAFS shoulder important responsibilities in the research on quality and safety of aquatic products and in the certification of aquaculture products in China. Currently, Centre for aquatic product quality and safety of CAFS acts as the subordinate centre of Centre for Agri-food Quality and Safety MOA to conduct certification for safety aquatic food nationwide. Since 2003, the pollution-free fishery products certified by the Centre totalled 4,954.

We hope that the participating experts would cherish this opportunity to discuss and present views on FAO aquaculture certification guidelines for the better development of China's aquaculture industry and relevant aquaculture certification. Similarly, we sincerely hope that experts from FAO and other organizations could offer us ideas and suggestions in the aquaculture sector we hope to promote our common understanding and cooperation. And experts both home and abroad are welcome to our academy to conduct academic exchange or cooperative research. Together we will contribute unremitting efforts to the development of aquaculture.

The workshop is strongly supported by the Bureau of Fisheries, MOA, and Certification and Accreditation Administration Commission (CNCA). I would take this opportunity to express my heartfelt thanks!

At the same time, our gratitude also goes to our co-sponsors: Food and Agriculture Organization of UN, Network of Aquaculture Centres in Asia-Pacific NACA and Dept. for Registration of Certification and Accreditation Administration of the People's Republic of China.

Here, I would also like to say thanks to all the colleagues for the excellent preparations for this workshop.

Finally, I wish this workshop a complete success! I wish all the experts, officials, guests good health and smooth work!

**Dr. Liu Zeng**  
**Deputy Director for Bureau of Fisheries, Ministry of Agriculture (MOA), China PR**

Today, fishery experts both from home and abroad gather at this workshop to discuss the guidelines of FAO aquaculture certification, it is a meaningful event that would promote the management of aquaculture and development of international aquatic product trade. First of all, please allow me on behalf on MOA to convey the warmest congratulation on the convening of this workshop and express our gratitude to the secretariats working and preparing for this workshop.

In 1886 Chinese government issued the Fishery ACT, which established the principle of aquaculture based fishery and Chinese fishery thereafter have transformed its emphasis on aquaculture. In 1988, the aquaculture production overweighed the capture production for the first time. Most Chinese aquaculture species are filtering or omnivorous feeding which are environmental friendly and resource saving and keep a sound trend of development. In 2007, the aquaculture production accounts for 69% of all aquatic production and Chinese fishery has achieved the historical transformation from capture based fishery to aquaculture based fishery.

The sustainable development of Chinese aquaculture sector has not only satisfied the domestic demand for aquatic product, but also greatly promoted international aquatic trade. In 2006, aquatic products import and export accounts for 10.5% and 4.6% of world aquatic import and export. The aquaculture sector in China has contributed to world food safety.

In order to promote the imparity and transparency of aquatic international trade, FAO has issued the international norm for marine capture product in 2005, and now it is working on developing aquaculture certification. In recent year, China has conducted some work in the certification of safety agri food, green food and organic food, and has achieved some good results.

We believe FAO would play a positive role in the field of aquaculture certification and through the implementation of regulatory documents, guidance for various certification mechanisms, to promote the liberalization of trade of healthy aquaculture product. Therefore, I greatly appreciate efforts of FAO and NACA experts to provide us the opportunity to offer views and suggestions concerning guidelines of aquaculture certification. I am also grateful that you are willing to listen to the voice from Chinese stakeholders. Thank you for your excellent preparation.

At present, with the rapid development of economy, we are faced with problems like large population, lack of food, resource recession and environment deteriorating. I hope participants present would take this workshop as an opportunity to communicate and exchange ideas, firstly, to go into the details of the guidelines of aquaculture products, to make it applicable and feasible for various certification mechanisms and to prevent unfair trade barriers in international trade;

Secondly, to study the relationship between export quality and safety and certification, to promote the development of management of enterprises and to ensure that aquatic products enjoy a more active role in international market.

Thirdly, I hope that the interest of aquaculture farms as well as small scale farmers would also be protected in the guidelines and also technical assistance to developing countries could also be considered in the guidelines. In addition, I hope all the participants take a responsible attitude and fully express yourselves, so that the guidelines could be adopted in a more balanced manner and could contribute the development of world aquaculture and international trade. At the same time, I also would like to invite participants to go around in Beijing, to experience the exhilarating atmosphere of Olympics in this ancient city of Beijing.

Finally, I wish this workshop a complete success. I wish all the participants a pleasant stay in Beijing. Thank you.

**Mrs. Liu Zhouhui**  
**Deputy Director for Certification and Accreditation Administration of the PR of China**  
**(CNCA)**

Dear officers from FAO, Experts and guests, ladies and gentlemen, good morning !

Today, The FAO expert workshop on development of guidelines on aquaculture certification organized by FAO, NACA, CAFS and CNCA were opened at Beijing. I am honoured act as a representative for CNCA, say to all guests who attend this workshop to welcome and gratitude.

The FAO expert workshop on development of guidelines on aquaculture certification hold in China, it takes a chance for the expert from certification and aquaculture area to exchange their opinion widely with the counterpart from all over the world, the workshop set up a good flat for China and the world to understand each other.

As a big country in aquiculture, the workshop also give us a good chance to participate in the establishment of the international certification and aquaculture guide, and the workshop also can make the guide more pertinently and manoeuvrability.

CNCA were setup and authorized by Chinese State Council to implement an administration management for accreditation and certification works. Since CNCA were setup in 6 years, a uniform national accreditation and certification system has been established. CNCA leads a unify management system with more than 20 ministries and commissions in China through a joint conference. A supervise frame for certification market were built up with restrict by law, supervise by government, normative by the accreditation, self-discipline by the calling and supervisory by the society. Make the certification market in good order through the neaten and criterion; Succeeded to organize the national compulsive certification systems (CCC certification), effectively protected the consumers safety , environment, animal and plants safety and national security; Helped realize the first laws for certification and accreditation in China 《Regulations of the People's Republic of China on Certification and Accreditation》 and make Chinese certification and accreditation work followed legalization and standardization.

At the same time, CNCA has built up a certification system in the whole food chain from farm to table. It is including GAP, organic, Safety Agro-food certification and food safety management system certification, HACCP, Green market, Food quality and safety and Green food certification systems. Up to the present, the CNCA had already organized to issue 24 national standards in GAP certification. It is covered crop, livestock, aquiculture area. CNCA develop the cooperation and communion with GLOBALGAP and CHILEGAP in some area such as recognize the certificate each other. At this workshop, there will be some introduction about China's food safety and agriculture certification. Certifications for food/agriculture make a positive effect to push the producer advance the capability in food and agriculture safety guarantee.

In the end, I wish the workshop make a great success!

Thank you!