

FAO GUIDELINES FOR AQUACULTURE CERTIFICATION

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1. INTRODUCTION

1.1 Background

Global production from aquaculture is growing substantially and provides increasingly significant volumes of fish and other aquatic food for human consumption. This trend is projected to continue. Although aquaculture growth has potential to meet the growing need for aquatic foods and contribute to food security, poverty reduction and more broadly to achieving sustainable development and the Millennium Development Goals, it is increasingly recognised that improved management is necessary to achieve this potential.

Aquaculture is a highly diverse sector comprising many different systems, sites, facilities, practices, processes and products. There is also a wide range of political, social, economic and environmental conditions within which the aquaculture development is taking place, or will take place.

As aquaculture has grown, concerns about the possible negative impacts of some forms of aquaculture on the environment, communities and consumers have arisen. Growth of the sector has seen a wide range of social issues, environmental issues, food safety and quality issues, or animal health and welfare issues raised, discussed and addressed. The Code of Conduct for Responsible Fisheries provides some guidance on principles for responsible management of the sector, and increasingly the FAO/WHO *Codex Alimentarius* has expanded work on food safety and quality to encompass the products from aquaculture.

Governments, public and private sectors, consumers and civil society organisations, are increasingly interested in establishing and applying standards for aquaculture production and processing and marketing of products from aquaculture with the view to increase responsibility of the stakeholders involved in aquaculture and to increase the sector's sustainability. There exist many standards (e.g. European Union Food Safety and Quality Standards) which are mandatory by law, and require compliance with regulatory requirements during production, processing and marketing.

There also exist many voluntary standards relevant to aquaculture, particularly those of the *Codex Alimentarius* Commission and the World Organisation for Animal Health (OIE). The *Codex Alimentarius* consists of internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety and quality. With the World Trade Organization (WTO) agreements on Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT), the work of the *Codex Alimentarius* Commission (CAC) has taken on unprecedented importance with respect to consumer protection and international food trade. The *Codex* standards are meant to be voluntary and adopted by consensus. However, as the *Codex Alimentarius* is recognized by the WTO as an international reference point for the resolution of disputes concerning food safety and quality and consumer protection, under the WTO SPS/TBT agreements, the *Codex* standards can not be called voluntary, nor are they fully mandatory. The World Organization for Animal Health has established standards for animal health and welfare as advisory to member governments for improving sustainability and compliance to the WTO SPS/TBT Agreements. There are also voluntary standards developed by various private sector entities in response to consumer and retailer demand for enhancing responsible aquaculture production and marketing.

The certification of aquaculture against these various standards is viewed as tool for improving transparency, minimising potential negative impacts and increasing societal and consumer benefits and confidence in the process of aquaculture production and marketing. The aquaculture industry and market increasingly recognize that credible certification schemes have the potential to reassure buyers, retailers, and consumers regarding these concerns and provide a further tool to support responsible aquaculture production.

Aquaculture certification can be either *voluntary or mandatory*.

Mandatory certification is a tool for the national authorities to ensure compliance to national and/or international standards which are legally binding for aquaculture production and/or trading of aquatic animal products.

Voluntary certification can be applied to verify compliance with national and/or international standards which are legally binding for aquaculture production and/or the trade in aquatic products. It can be used to improve compliance to relevant national or international voluntary standards, however, compliance to those could improve the responsible aquaculture production and processing and marketing of the products from aquaculture. Certification can also be used by parties concerned about responsible aquaculture production and, in particular, either addressing consumer concerns and retailer demands or addressing the aspects of a product or production practice that may not be adequately covered by the existing national and/or international legally binding or non-binding requirements or international agreements (e.g. certain aspects of social welfare, animal welfare, and environmental protection and conservation).

Due to concerns by varied stakeholders about social, environmental, food safety and quality, or animal health and welfare, as well as demand and competition among large retail chains for certified product, an increasing number of *voluntary* certification schemes are being developed in different locations. Compliance with credible certification schemes is one way in which owners and operators can be responsible for ensuring that aquaculture operations are sustainable and encourage corporate social responsibility among the aquaculture industry.

With the emergence of a wide range of *voluntary* aquaculture certification schemes, some of which duplicate each other, as well as existing mandatory schemes, there is increasing risk of confusion among producers, consumers and other stakeholders. As a result, there is a need for globally accepted norms for aquaculture certification schemes that establish and maintain the trust and confidence of producers, consumers and other stakeholders. The equivalence between various schemes also needs to be further explored, with a view to reducing compliance costs that may be associated with multiple requirements for certification within wide and varied markets.

To address such issues, FAO was requested by its members, during the Third Session of the Committee on Fisheries Sub-Committee on Aquaculture held in New Delhi, India in September 2006, to play a lead role in facilitating the development of the guidelines for aquaculture certification. The Network of Aquaculture Centres in Asia-Pacific (NACA) offered to assist in developing the guidelines in partnership with FAO. The development of the guidelines for aquaculture certification presented in this document builds on the experience of FAO in developing guidelines for eco-labelling of marine capture fishery products in 2005, the efforts underway to develop eco-labelling guidelines for inland fisheries and the *Codex Alimentarius* work on food safety and quality.

1.2 Preparation of the Guidelines

Following initial request by its members, the FAO Fisheries and Aquaculture Department, in partnership with NACA, established a Secretariat and developed a roadmap for preparing these aquaculture certification guidelines. A web site was also established and all documents relating to the process for development of the aquaculture guidelines were placed on the web site for public information and comments (www.enaca.org/certification).

The roadmap was developed at an Expert Workshop entitled Guidelines for Aquaculture Certification, held in Bangkok, Thailand, from 27-30 March 2007, convened by FAO, NACA and the Department of Fisheries of the Royal Government of Thailand. The workshop assisted in scoping the content of the certification guidelines and laying the groundwork for the programme of work on aquaculture certification. An Advisory Committee of experts, with varied backgrounds from public, private and civil society sectors, on aquaculture and certification, was also established to obtain expert advice into the process.

Following the Bangkok workshop, an initial draft of the FAO Guidelines for Aquaculture Certification was prepared and circulated to the Advisory Committee for review, and also made available for public comment on the web site. Based on the comments received, Draft 1 of the guidelines was prepared and presented to the Second Expert workshop on guidelines for aquaculture certification, which was held in Fortaleza, Brazil, from 30 July-3 August 2007, and convened by FAO, NACA and the Government of Brazil.

Following the Fortaleza workshop, Draft 2 of the guidelines was prepared and was discussed at the Aquaculture Certification Meeting held in Cochin, India, in conjunction with the 8th Asian Fisheries

Forum, on the 23rd November 2007. Taking into consideration the recommendations of Fortaleza Workshop and the Cochin Meeting, and the comments and suggestions received from many individuals and parties, this draft version was prepared by the Secretariat and is being circulated to the participants of all workshops and other interested individuals and parties for review and comment, and is made available for public comment on the FAO/NACA Aquaculture Certification web site (www.enaca.org/certification).

1.3 Structure and Contents of the Guidelines Document

The structure of this aquaculture certification document was developed through stakeholder inputs during the Expert Workshops, from the Advisory Group and public comment received, and is intended to reflect the major elements to be considered in establishing and operating an aquaculture certification scheme.

- Section 1: Introduction

This section provides the background to preparation of the guidelines and the objective of them.

- Section 2: Terms and Definitions

This section provides the terminology and definitions used in aquaculture certification and these guidelines.

- Section 3: Purpose and Scope of the Guidelines

This section outlines the rationale for aquaculture certification, how certification can be used to support responsible aquaculture and lays out the coverage of the guidelines in relation to the components of a certification system, the geographic scope, the unit of certification, the legal context, the range of activities and the aquaculture value chain.

- Section 4: Users and Application of the Guidelines

This section describes the principle and secondary user audience for the guidelines and how these groups would apply the guidelines.

- Section 5: Principles

This section lays out the core values that must be addressed in the development and implementation of aquaculture certification schemes.

- Section 6: Considerations

This section describes cross-cutting factors of importance to the development and implementation of aquaculture certification schemes, covering the following areas: procedural and institutional, small scale producer, economic and financial aspects. It gives special attention to the implementation of certification schemes for small-scale producers, which comprise the majority of aquaculture farmers in many developing countries.

- Section 7 Minimum Substantive Requirements

This section provides necessary issues and aspects of aquaculture that should be considered in the establishment and implementation of aquaculture certification schemes, with special reference to the development of standards. The Minimum Substantive Requirements defined in the guidelines cover four areas: a) social aspects, b) environmental aspects, c) food safety and quality, and d) aquatic animal health and welfare.

- Section 8 Institutional and procedural requirements

This section provides guidance on the institutional arrangements and procedures necessary for the establishment and implementation of aquaculture certification schemes and all its components for the scheme to be considered credible, robust, have the confidence of participants, stakeholders and consumers and avoid a conflict of interest. The section provides guidance on the following four institutional and procedural requirements of key importance in aquaculture certification schemes: a) governance, b) standard setting, c) accreditation and d) certification.

2. TERMS AND DEFINITIONS

For the purpose of these international guidelines on aquaculture certification, the following terms and definitions apply. These terms and definitions come from or were derived from existing material of ISO, CODEX, Ecolabelling, FAO/CCRF and others, and inputs during the process of developing the guidelines.

Accreditation

Procedure by which a competent authority gives formal recognition that a qualified body or person is competent to carry out specific tasks.

Accreditation body

Body that conducts and administers an accreditation system and grants accreditation.

Accreditation system

System that has its own rules of procedure and management for carrying out accreditation. Accreditation of certification bodies is normally awarded following successful assessment and is followed by appropriate surveillance.

Aquaculture

The farming of aquatic organisms including fish, molluscs, crustaceans and aquatic plants. Farming implies some sort of intervention in the rearing process to enhance production, such as regular stocking, feeding, protection from predators, etc. Farming also implies individual or corporate ownership of the stock being cultivated. The planning, development and operation of aquaculture systems, sites, facilities and practices, and the production, transport, packaging, distribution and sales of aquaculture products from the point of origin and throughout the chain of custody to the point of retail.

Better Management Practice(s) (BMP(s))

Management practices aimed at improving the quantity, safety and quality of products taking into consideration animal health and welfare, environmental and socio-economical sustainability. BMP implementation is generally voluntary. The term “better” is preferred rather than “best” because aquaculture practices are continuously improving (today’s ‘best’ is tomorrow’s ‘norm’).

Certification

Procedure by which an official certification body or officially recognised certification body gives written or equivalent assurance that a product, process or service conforms to specified requirements. Certification may be, as appropriate, based on a range of audit activities that may include continuous audit in the production chain.

Certification body

Competent and recognized body that conducts certification audit activities. A certification body may oversee certification activities carried out on its behalf by other bodies.

Certification scheme

The processes, systems, procedures and activities related to standard setting, accreditation and implementation of certification, including the labelling of practices, operations and products.

Chain of custody

The production, processing, distribution and marketing chain of aquaculture products and the verification that a certified product originates from a certified aquaculture production system, has not been part of any non certified production system and is not mixed with non-certified products. Chain of custody verification measures should cover both the tracking and traceability of the product all along the production, processing, distribution and marketing chain, tracking of documentation and quality control/quality assurance.

Codex Alimentarius

The Codex Alimentarius is a collection of internationally recognized standards, codes of practice, guidelines and other recommendations relating to foods, food production and food safety and quality

under the aegis of consumer protection. These texts are developed and maintained by the Codex Alimentarius Commission (CAC), a body established in 1963 by the FAO and the World Health Organization (WHO). The Commission's main aims are to protect the health of consumers and ensure fair practices in the international food trade. The Codex Alimentarius is recognized by the World Trade Organization as an international reference point for the resolution of disputes concerning food safety and quality and consumer protection.

Conflict of Interest

A situation in which a person or body in a position of trust has competing interests that make it difficult to fulfill a role impartially. A conflict of interest exists even if no unethical or improper act results from it. A conflict of interest can create an appearance of impropriety that can undermine confidence in a certification system.

Conformity assessment

Any activity concerned with determining directly or indirectly that relevant requirements are fulfilled. Typical examples of conformity assessment activities are sampling, testing and inspection; evaluation, verification and assurance of conformity (supplier's declaration, certification); registration, accreditation and approval as well as their combinations. Conformity assessment procedures are technical procedures — such as testing, verification, inspection and certification — which confirm that products fulfil the requirements laid down in regulations and standards.

Equivalence

Equivalence is the capability of different inspection and certification systems to meet the same objectives and should be recognised by exporting and importing countries as such. Equivalence may be confirmed by auditing the relevant inspection and certification systems and, as appropriate, the facilities and procedures in the exporting country.

Feed conversion ratio

Ratio between the dry weight of feed fed and the weight of yield gain. Measure of the efficiency of conversion of feed to fish (e.g. FCR = 2.8 means that 2.8 kg of feed is needed to produce one kilogram of fish live weight).

Genetically modified organisms

An organism that has been modified by the application of recombinant DNA technology.

Group certification

Certification for a group of producers, normally considered for small-scale aquaculture farmers, for whom individual certification is cost prohibitive and who have key characteristics in common, e.g. common marketing of the produce as a group, homogeneity of members in terms of location, production system, products, the group has an Internal Control System to ensure compliance with the standards by all members of the group. The group of facilities or operations that are considered collectively may: a) be in close proximity to each other, b) share resources or infrastructure (e.g. water sources or effluent discharge system), c) share a landscape unit (e.g. watershed), d) have the same production system, e) involve the same farmed species; or f) other common characteristics as appropriate.

Guidance/Technical guidelines

Documents that provide (technical) guidance on implementation of Codes of Conduct, Codes of Practice, certification principles, criteria and standards.

OIE- World Organization for Animal Health

The World Organization for Animal Health is an international organisation whose mission is to guarantee the transparency of animal disease status world-wide, collect, analyse and disseminate veterinary scientific information, provide expertise and promote international solidarity for the control of animal diseases and guarantee the sanitary safety of world trade by developing sanitary rules for international trade in animals and animal products.

Precautionary approach

A set of agreed cost-effective measures and actions, including future courses of action that ensures prudent foresight and reduces or avoids risk to the resource, the environment, and the people, to the extent possible, taking into account existing uncertainties and the potential consequences of being wrong.

Product certification

Verification that a certain product has passed performance and/or quality assurance tests or qualification requirements stipulated in standards or regulations or that it complies with a set of criteria governing quality and/or minimum performance requirements.

Responsible aquaculture

Aquaculture conducted according to the principles provided in the FAO Code of Conduct for Responsible Fisheries.

Small-scale aquaculture

Aquaculture farms with small production volume, and/or relatively small surface area, mainly without permanent labour, and typically lacking technical and financial capacity to support individual certification. Depending on the production systems used, other considerations include production technology; resources; number of workers, including owner; economics, including annual income; relative importance of aquaculture as contributor to total income; ownership. Small-scale aquaculture farms are typically: 1) family sized operations; 2) using family labour; 3) based on the family's land; and 4) owner operated. Small-scale aquaculture may be diffused through a local area or district, or highly concentrated around specific resource (e.g. water supply or processing plant).

Small-scale producers

Individuals or groups of people involved in small-scale aquaculture production, i.e. aquaculture production facilities and processes with small production volume, and/or relatively small surface area, and typically lacking technical and financial capacity to support individual certification.

Socially responsible aquaculture

Aquaculture that is developed and operated in a responsible manner, i.e. that benefits the farm, the local communities and the country; that contributes effectively to rural development, and particularly poverty alleviation; has employees who are treated fairly; ensures benefits are shared equitably; minimizes conflicts with local communities; ensures worker welfare and fair working conditions; minimizes risks to smallholders; and provides training to workers in responsible aquaculture practices.

Stakeholder

An individual or group of individuals, whether at institutional or personal level, who has an interest or claim that has the potential of being impacted by or having an impact on a given activity. This interest or claim can be stated or implied and direct or indirect. Stakeholders and stakeholder groups can be at the household, community, local, regional, national, or international levels.

Standard

Document approved by a recognized organization or arrangement, that provides, for common and repeated use, rules, guidelines or characteristics for products or related processes and production methods, with which compliance is not mandatory under international trade rules. It may also include or deal exclusively with terminology, symbols, packaging, marking or labelling requirements as they apply to a product, process or production method.

Standard setting body, organization or arrangement

Organization, entity or arrangement that has recognized activities in standard setting.

Third party

Person or body that is recognized as being independent of the parties involved, as concerns the issue in question, and involves no conflict of interest.

Third Party Certification

Procedure by which an accredited external, independent, certification body, which is not involved in standards setting or has any other conflict of interest, analyzes the performance of involved parties, and reports on compliance. This is in contrast to first party certification (by which a single company or stakeholder group develops its own standards, analyzes its own performance, and reports on its compliance and second party certification (by which an industry or trade association or NGO develops standards, analyzes the performance of involved parties, and reports on compliance).

Traceability

The ability to follow the movement of a product of aquaculture through specified stage(s) of production, processing and distribution. The documentation and other evidence by which a certified product can be traced back from each buyer to each supplier through the chain of custody all the way to the certified production area from which it originated.

Transparency

While respecting legitimate concerns to preserve confidentiality, certification systems should be open to scrutiny by consumers and their representative organizations, and other interested parties. Transparency seeks to achieve a greater degree of clarity, predictability and information. Transparency also implies answering reasonable questions and publishing information and standards. Transparency refers to a process that is open, inclusive, well documented and includes proactive communication to stakeholders and public disclosure of the process, decisions and results.

Unit of certification

The scale or extent of the aquaculture operation (s) assessed and monitored for compliance. The unit of certification could consist of a single farm, production unit or other aquaculture facility. The certification unit could also encompass a group or cluster of facilities that should be assessed and monitored collectively.

3. PURPOSE AND SCOPE OF THE GUIDELINES

3.1 Purpose of the Guidelines

Certification is used in various ways in aquaculture, along the value chain from seed to farm to consumer. The scope of certification includes assurance of the quality of inputs (such as seed and feed), used in aquaculture production, and certification of the procedures used in harvesting and post-harvest processing. All certification schemes, mandatory or voluntary, must be credible and robust.

Certification schemes must also establish and maintain the confidence of the producers and industry operators participating in the scheme, as well as the confidence of other stakeholders, including consumers, governments and civil society groups.

The development and implementation of aquaculture certification schemes must ensure that there is not a conflict of interest among the entities that are responsible for standards setting, accreditation, and certification. Ideally, there should be separate entities for each of the three components of a certification scheme, i.e. standards setting, accreditation, and certification. This is to ensure that there is sufficient distance and distinction between the entities and to avoid any conflict of interest, or the perception of a conflict of interest. However, if an entity can ensure, demonstrate and document that there is no conflict of interest, it would be appropriate for an entity to undertake more than one of the components of a certification scheme.

These guidelines provide guidance and information for parties involved in developing aquaculture certification schemes and engaged in aquaculture certification. The guidelines provide information on components of a certification scheme, how to create or establish credible and robust certification schemes, and minimum substantive criteria to be included in certification. The guidelines are envisaged to increase confidence among participants and stakeholders responsible in developing and implementing aquaculture certification. While it will minimise conflict of interest among the parties involved, it will also serve as a basis for improved harmonization and facilitate mutual recognition and equivalence of such certification schemes.

3.2 Scope of the Guidelines

3.2.1 Scope of certification

These guidelines provide guidance on development and certification of aquaculture for a wide range of potential issues that may be considered for certification in aquaculture. Broadly, aquaculture certification schemes may consider: a) social aspects, b) environmental aspects, c) food safety and quality, and/or d) animal health and welfare associated with aquaculture. Aquaculture certification schemes may address some or all of these aspects. The specific issues to be addressed are defined in the objectives of a scheme when it is established. For the subject areas that a certification scheme targets in its objectives, the guidelines provide minimum substantive requirements for the standards that should be applied.

In general, current *mandatory* certification schemes mostly cover food safety and quality and aquatic animal health and more recently welfare, whereas *voluntary* schemes tend to cover, in various ways, a broad scope of environmental and social issues. Compliance with *mandatory* certification is a legal requirement for trade. Compliance with *voluntary* certification is not legally required for trade. However, buyers within the chain of custody and/or consumers may give preference to purchasing products certified using voluntary schemes. Companies may more formally establish policies to purchase only certified products or buy only from certified suppliers.

3.2.2 Components of certification schemes

There are three main components to a certification scheme, i.e. standards, accreditation, and certification. The certification is intended to verify compliance with the certification standards. A standard setting process is required to develop certification standards.

This document provides guidance on the institutional arrangements and procedures for undertaking these functions. Creating and implementing a certification scheme may be undertaken by any entity able to do so in accordance with the institutional and procedural requirements of these guidelines. The entities that may undertake standard setting, accreditation, or certification include, *inter alia*, Government, NGOs, private companies, a group of private sector entities (e.g. a trade association) or consortia comprising these different stakeholder groups..

3.2.3 Legal context for aquaculture certification

a. Mandatory compliance with laws and regulations

Compliance with all national laws and regulations and international agreements developed and agreed by governments in relation to aquaculture is an obligation of anyone undertaking aquaculture activities.

Some issues and concerns have an extensive national and/or international legal regime already in place for all or parts of aquaculture and its value chain. For example, there is a considerable body of national regulations and international agreements in place regarding food safety and quality, especially for processing, export and import, and aquatic animal health. Compliance to such national and/or international agreements, standards and procedures are legally binding and mandatory and recognised competent authorities are empowered to verify compliance with these.

Voluntary schemes for aquaculture certification should seek to build on and strengthen existing mandatory schemes.

b. Voluntary certification schemes

Voluntary certification schemes are usually developed to address aspects of aquaculture that are considered by the industry, buyers or other stakeholders to be not adequately addressed by national laws and regulations and/or inter-governmental agreements. Such certification schemes are preferably developed through the transparent, multi-stakeholder processes described in these guidelines. The development of voluntary schemes may involve government, NGOs, industry groups or coalitions of groups with similar interests. The minimum substantive criteria for voluntary certification are outlined in this document and covers environmental aspects, social aspects and animal welfare issues.

Voluntary certification schemes may also seek to provide added confidence that compliance with government and inter-governmental requirements (in particular food safety and quality and animal health) is being achieved, providing additional verification and documentation of such compliance. For example, a certification scheme may be set up by a group of retailers to provide additional verification that the government food safety and quality requirements are being met, as a way to compliment government monitoring of compliance in order to reassure their consumers.

In this case, voluntary certification schemes are only undertaking to verify that an aquaculture operation is in compliance with existing legal requirements and not to certify against compliance to such mandatory requirements. The process of setting the standard has already been undertaken by the governmental process of creating the national law, regulation or international agreement.

As mentioned in the Background section, compliance with voluntary certification is not legally required. However, buyers within the chain of custody and/or consumers may give preference to purchasing certified products or buying from certified businesses.

3.2.4 Aquaculture systems and value chains

Aquaculture and its value chain consist of the following components:

- Supply chain/Input systems (e.g. seed, feed)
- Production system (e.g. all kinds, scales and components of production)
- Harvesting and post-harvest processing
- Chain of Custody (e.g. export, import, distribution, retail)

These guidelines are intended primarily to support certification schemes that deal with production systems and the immediate inputs to the production, such as aquatic animal feed and seed.

There may be certification schemes that seek to address various aspects of aquaculture and its value chain beyond the production system and their immediate inputs. In this case, the guidelines should be applied to the extent possible. The guidelines may need to be updated and expanded in the future to encompass these applications.

The guidelines do not distinguish between different aquaculture commodities and are intended to provide more generic guidance to developing and implementing certification schemes. The minimum substantive criteria provide a framework for development of standards that might be applicable to different commodities of aquaculture products.

3.2.5 Geographic scope and unit of certification

These guidelines have been developed to apply globally to aquaculture production systems and value chains, covering the wide range of farming locations and scales of aquaculture operations. The scale of aquaculture operations can vary considerably and the objectives of a certification scheme need to address the scale that the scheme is designed for.

The unit of certification i.e. the extent of the specific aquaculture operation assessed and monitored for compliance with certification standard, will also depend on the objectives of the certification scheme. The guidelines seek to provide guidance on determining an appropriate unit of certification and how to ensure the scheme is credible and robust for the scale and unit of certification that it targets. As the focus of the guidelines is on aquaculture production and the immediate inputs to production, the typical unit of certification considered in the guidelines include a single farm or cluster (groups) of farms, or other production units that could be assessed, certified and monitored collectively.

The size of production unit can vary considerably and needs careful consideration when developing and implementing the certification scheme. Small sale producers and the types of commodities produced require careful consideration. The guidelines therefore give special attention in Section 2 to the development of certification of groups of small-scale farmers. If the scheme is going to address clusters or group certification, this needs careful consideration as per how to define a cluster.

3.2.6 Equivalence and aquaculture certification

The importance of equivalence is recognised by Codex Alimentarius as the capability of different certification systems to meet the same objectives. To achieve equivalence, the TBT Agreement encourages WTO Members to use existing international standards for their national regulations, or for parts of them, unless “their use would be ineffective or inappropriate” to fulfil a given policy objective.

These guidelines provide an international instrument for assessing and comparing aquaculture certification schemes and determining the equivalence of schemes that are developed and implemented in accordance with the guidelines, as described in the section on Users and Application of the Guidelines. Whilst no formal mechanism yet exists for comparing certification schemes, adherence to the guidelines should be considered as a means of implementation of the relevant principles on equivalence of the WTO Agreements on SPS and TBT.

4. USERS AND APPLICATION OF THE GUIDELINES

4.1 Users of the Guidelines

4.1.1 Direct users of the guidelines

The direct target audience for use of the guidelines are entities that develop and implement (or are already implementing) a certification scheme for aquaculture. In other words, the users of the guidelines are a) standard setting bodies, b) accreditation bodies, or c) certification bodies (or an entity that is undertaking more than one of these functions).

These entities should use the guidelines in developing and implementing new certification schemes (or revising existing schemes) that seek to address any or all of the following issue areas: a) social issues, b) environmental issues, c) food safety and quality, d) animal health and welfare.

Producers or other individuals, companies or entities that are part of the aquaculture industry are not the direct user audience for these guidelines.

4.1.2 Indirect users for the guidelines

The indirect audience for the guidelines are the stakeholders with an interest in any particular certification scheme and the issues that it seeks to address. Stakeholders include aquaculture producers, or other parts of the aquaculture industry or sector, as well civil society groups, government agencies, and other interested parties (e.g. intergovernmental bodies, funding institutions). The stakeholders relevant to a particular certification scheme will depend on the objectives of the scheme, e.g. geographic scope, production systems covered, issue areas addressed.

4.2 Application of the Guidelines by Users

4.2.1 Application of the guidelines by direct users

The direct user of the guidelines, (i.e. a standard setting body, an accreditation body, or a certification body) would employ the guidelines to ensure that their efforts to develop and implement a certification scheme are in accordance with the principles, considerations, relevant minimum substantive requirements and all institutional and procedural requirements in the guidelines.

The entities responsible for new and existing aquaculture certification schemes should undertake to assess, verify and document that they have been developed and are being implemented in accordance with the guidelines as soon as possible. If there are deficiencies in the way an existing scheme was developed and/or in how it is being implemented, the entity responsible for the function (i.e. standard setting, accreditation, or a certification) should act quickly to define and implement a corrective action plan. When this is completed, the entity should verify and document that the scheme is in accord with the guidelines.

4.2.2 Application of the guidelines by indirect users

If the entities responsible for an aquaculture certification scheme do not provide credible assurance, verification and documentation that the scheme has been developed and is being implemented in accordance with the guidelines, stakeholder groups (especially those being certified under the scheme) may wish to use the guidelines to undertake such an evaluation of the scheme themselves, or seek an appropriate body to do so.

Stakeholders could use the guidelines to evaluate if the scheme is developed and implemented in accordance with the guidelines regarding, *inter alia*:

- Whether the principles have been adhered to.
- Whether the considerations have been addressed.
- Whether the objectives of the scheme and issue areas have been addressed in accordance with the appropriate minimum substantive requirements.

- Whether the standard setting, accreditation and/or certification have been developed and implemented in accordance with the institutional and procedural requirements.

5. PRINCIPLES

The following principles should apply to aquaculture certification schemes.

5.1 Principles Related to Global and National Agreements, Regulations and Codes of Practice

Certification schemes for aquaculture should:

- Recognise the sovereign rights of States and comply with all relevant local, national and international laws and regulations.
- Be consistent with relevant international agreements and conventions, in particular:
 - The 1982 United Nations Convention on the Law of the Sea (UNCLOS).
 - The Convention on Biological Diversity (CBD).
 - The FAO Code of Conduct for Responsible Fisheries (CCRF).
 - The rules of the World Trade Organization (WTO), notably the the Agreement on the application of sanitary and phytosanitary (SPS) measures and the Agreement on technical barriers to trade (TBT).
 - The FAO/WHO *Codex Alimentarius*.
 - OIE Aquatic Animal Health Code.
 - The labour standards of the International Labor Organization (ILO).
 - The Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar Convention).
- Be consistent with the following document:
 - The International Principles for Responsible Shrimp Farming.

5.2 Principles Related to Trade Issues

Certification schemes for aquaculture should:

- Allow and encourage for fair trade.
- Not create unnecessary obstacles to trade and not be more trade-restrictive than necessary to fulfil the legitimate objective of the standards.
- Facilitate market access and provide the opportunity to enter domestic and international markets.

5.3 Principles Related to the Requirements and Structure of a Certification Scheme

Certification schemes for aquaculture should:

- Be of a voluntary nature and market-driven.
- Be multi-stakeholder, including fair participation by all interested parties.
- Be practical, viable and verifiable.
- Provide for clarity.
- Apply transparency to all aspects of developing and implementing a certification scheme, including its organizational structure and financial arrangements.
- Promote a transparent and credible scheme through the avoidance of conflict of interest.
- Not discriminate against any group of producers (e.g. based on scale, intensity of production, or technology).
- Promote cooperation, e.g. among certification bodies and producers.
- Incorporate reliable, independent auditing and verification procedures.
- Be as cost efficient and cost effective as possible to ensure inclusive participation at least cost.

5.4 Principles Related to the Technical and Compliance Aspects of a Certification Scheme

Certification schemes for aquaculture should:

- Ensure traceability of aquaculture products within the processes covered by the scheme.
- Promote continuous and measurable improvements in performance.
- Establish clear accountability for all involved parties, including the owners of certification schemes, auditors and the certification bodies in conformity with international standards (e.g. ISO Guide 65, ISEAL Code of Good Practice for Setting of Social and Environmental Standards).

- Be based on the best scientific evidence available, (or use meaningful proxies when such data is not available), also taking into account traditional knowledge, providing that its validity can be objectively verified.
- Ensure that short-term aquaculture development considerations do not compromise the ability to address long-term concerns or cumulative impacts regarding a) social issues, b) environmental issues, c) food safety and quality issues and d) animal health and welfare issues.
- Ensure that certification information and labels are adequate and correct.
- Strive for equivalence and harmonization by being based on, at a minimum, on the minimum substantive requirements, criteria and procedures outlined in these guidelines.
- Achieve “fitness for purpose”, i.e. be fully effective in achieving their designated objectives having regard to the determination of the acceptable level of addressing the issues which is required.
- Address the need for “special and differential treatment” of developing countries, i.e. importing countries should take into account of the capabilities of developing countries to provide the necessary implementation.

6. CONSIDERATIONS

6.1 Country Application

The principles, minimum substantive requirements, criteria and procedures set out in this document will apply equally for developed, transition and developing countries. Recognition should be given to the special circumstances and requirements of developing countries and countries in transition, including consideration of financial, technical assistance and sufficient time to address, *inter alia*: stakeholder participation, capacity building for small-scale producers, accreditation and certification, technology transfer, training and scientific cooperation.

6.2 Data Deficiencies

The availability of data and information and the means to identify, evaluate and address concerns in relation to: a) social issues, b) environmental issues, c) food safety and quality and d) animal health and welfare may differ substantially for different types and scales of aquaculture. There may be a need for capacity building to improve ability to acquire data and flexibility in data requirements, especially for small scale producers and developing country situations. The lack of data should not prevent consideration for compliance with standards.

6.3 Institutions and Procedures

These guidelines outline the procedural and institutional components that all aquaculture certification schemes should encompass, i.e. 1) the setting of standards, 2) the accreditation of independent certifying bodies, and 3) the certification of the compliance of aquaculture operations with the standard, including the product chain of custody. These functions must be undertaken in a way to ensure that there is no conflict of interest. Ideally, entities that develop standards, hold them, and verify compliance with them must be separate. However, legal requirements and verification of compliance can be set and certified by the same entity, often a government institution, as long as there is no demonstrable conflict of interest.

The process of setting the standards is among the most critical tasks of any certification scheme, as it encapsulates the objectives of a scheme and largely determines the scheme's credibility, viability, practicality and acceptance. The certification standard expresses the specific criteria that a product and/or production process and methods have to meet to become certified. The ISEAL Standards Code provides comprehensive guidance on standard setting. The process of setting standards must be multi-stakeholder and transparent and not prejudice any class of producers or industry segment. The standards themselves must be housed in an entity different from the group that developed them.

Certification must be undertaken by entities independent of the standard setting. Compliance with the certification standards must be verified by independent, accredited third parties. After the standard has been established, assessing (or auditing) compliance with the standard must be undertaken by an independent, third-party certification body (or certifier).

Accreditation of a certification body verifies that the body is appropriate, qualified and capable of conducting the certification assessments. Accreditation also ascertains that the certification body is neutral and independent and has the technical and financial capacity to perform a certification of the conformity of an aquaculture operation with the standard. Similar requirements apply to the accreditation body itself. The accreditation body needs to have the technical and financial capacity to undertake accreditation tasks, and perform these tasks in a neutral, non-discriminatory and independent manner.

While standard setting is the main effort conducted at the start of a certification scheme, accreditation and certification are regular activities of the scheme once established. However, there must also be a process to regularly review and revise, as needed, the certification standard in view of new knowledge and experiences or market demand. The ISEAL Standards Code provides guidance on this. Monitoring and reporting on these institutional and procedural considerations is an important aspect of maintaining the credibility of a certification scheme.

Certification schemes, either based on process certification or on product certification, either addressing consumer or being a business to business agreement, shall be transparent. Consumers should have the possibility to know what a label stands for. All information shall then be available on request. It could be acceptable that specific information call for a restricted diffusion. In such a case one should designate the governance body that will have access to information. Non compliance shall not be regarded as subject to restricted diffusion. In any case, the recourse to "restricted diffusion" should be kept to the minimum.

6.4 Small-Scale Producers

A significant percentage of aquaculture production comes from small-scale producers in developing and transition countries. The following special considerations in relation to these producers should be taken into account by aquaculture certification scheme when small scale producers are potentially concerned.

- The certification standard must be practical and accessible for small-scale producers.
- Special efforts need to be undertaken to ensure that small-scale producers play a key role in the setting of standards.
- Small-scale producers have special needs for education, capacity building, and the transfer of technology and technical information.
- There is a need to develop a model and identify methods that facilitate the ability for small-scale producers to enter the certification scheme and become certified, e.g. a step-wise (i.e. phased) system might be more accessible to small-scale producers.
- Education, training and capacity building programmes should be developed to help ensure that small scale producers have the skill and expertise to apply best management practices up to the state of the art.

Group certification should be considered as a means to foster and facilitate the participation of small-scale producers, e.g. cooperatives, clusters or unions of producers, federations (group of clusters). Group members should agree to specific commitments in relation to compliance, *inter alia*:

- Shared obligations and benefits.
- Use similar aquaculture systems.
- Geographic proximity and/or use shared resources, such as water.
- Certified entity for the group as a whole.
- Internal cohesion/organization, e.g. so that sampling can be applied.
- Organizational structure for the group, e.g. a board.
- Financial support structure for the group, e.g. member dues.
- Transparency, accountability, and monitoring within group.
- Capability to support a viable internal control system, e.g. a contract signed by each member.
- Documented audits of all group members for compliance, carried out annually (as a minimum) by the internal control systems.
- Consequences for lack of compliance, at the group and individual level, reflecting the severity of the non-compliance, and if mitigation measures are not possible or appropriate, the entire group loses certification for serious non-compliance.
- Operational support for members, including training.

7. MINIMUM SUBSTANTIVE REQUIREMENTS AND CRITERIA

7.1 Introduction

General requirements for establishing certification schemes are included in these guidelines, along with more specific requirements and criteria for setting standards on each of the following areas: a) social issues, b) environmental issues, c) food safety and quality and d) animal health and welfare. It is noted that many of the issues are interlinked and that social, environmental and food safety issues, as well as animal health issues, sometimes overlap. The minimum substantive requirements and criteria in these guidelines should be met by certification schemes that seek to address all or some of these four areas in relation to aquaculture. The extent to which a certification scheme seeks to address the issues in all or some of these four areas depends on the objectives of the scheme, which should be explicitly and transparently stated by the scheme.

The minimum substantive requirements and criteria in these guidelines apply to the development and implementation of certification schemes for aquaculture, and could also be used for benchmarking existing certification schemes.

The requirements and criteria presented below are to be based on, and interpreted in accordance with, the current suite of agreed international instruments that pertain to aquaculture (see Section 5.1).

7.2 General Requirements

7.2.1 Compliance with laws and regulations

Certification schemes should require that the aquaculture systems, sites, facilities, practices, processes or products addressed by the scheme comply with relevant local, national and international laws and regulations.

7.2.2 Data and information

Certification schemes should ensure that adequate data and/or information is collected, maintained and assessed in accordance with applicable international standards and practices for identifying, evaluating and addressing: a) social issues, b) environmental issues, c) food safety and quality and d) animal health and welfare. Data and information may include relevant traditional knowledge, provided its validity can be objectively verified.

7.2.3 Precautionary approach, risk assessment/risk management, polluter pays

Certification schemes should also consider the following approaches:

- “Precautionary” approach, i.e. the absence of adequate scientific information should not be used as a reason for postponing or failing to take corrective (or appropriate) measures to address environmental impacts.
- “Risk assessment/risk management” approach, i.e. relevant uncertainties should be taken into account through a suitable method of assessing the likelihood and magnitude of impacts. Appropriate reference points should be determined and remedial actions should be taken if reference points are approached or exceeded.
- “Polluter pays” approach, i.e. those who cause pollution or contamination are responsible for its effects and compensate for the damage incurred and/or rehabilitation efforts and by taking measures to avoid creating further pollution. This approach should apply up to the limits prescribed by national and international laws.

7.2.4 Criteria and indicators

Certification schemes should include criteria and related measurable performance indicators for the aquaculture systems, sites, facilities, practices, processes and/or products addressed by the scheme. A corresponding monitoring system should be developed and implemented to measure performance and assessing conformity with the standards and other operational requirements of the scheme. In

developing and applying standards and assessing conformity, the views and opinions of States and existing FAO agreements should be fully considered.

7.2.5 Small-scale producers/small holders/small-scale aquaculture

Certification schemes should ensure that the interests of aquaculture producers are taken into account in developing and implementing the scheme, with special consideration given to small-scale aquaculture producers, especially the financial costs and benefits of participation and compliance to certification standards.

7.2.6 Unit of certification

Certification schemes should ensure there are methods in place and implemented for determining an appropriate unit of certification. The unit of certification may consist of a single farm, production unit or other aquaculture facility. The unit of certification may also encompass a group or cluster of facilities or operations that should be considered collectively as the aquaculture operation under consideration for a number of reasons, particularly when considering small-scale farmers. For example, they may: a) be in close proximity to each other, b) share resources or infrastructure (e.g. water sources or effluent discharge system), c) share a landscape unit (e.g. watershed), d) have the same production system, and/or e) involve the same species.

7.3 Social Issues

7.3.1 Requirements

Aquaculture should be conducted in a socially responsible manner that benefits the workers, local communities and the country; contributes effectively to rural development, poverty alleviation and food security; and delivers benefits to the local community and surrounding resource users.

7.3.2 Minimum Substantive Criteria

Certification schemes should consider the following minimum substantive criteria to address the social impacts of aquaculture.

a. Stakeholder participation and community issues

Aquaculture should take into account labor issues and work conditions ensuring that:

- Relevant community stakeholder groups are identified and appropriate consultation is undertaken with these groups, with special consideration given to participation by small-scale producers, processors and retailers.
- Conflicts with local communities are minimized, e.g. regarding land tenure, land and water use, siting and resource use rights and needs, with special attention to traditional and indigenous communities.
- Negative social impacts on local communities are minimized, e.g. access to, and use of, fishing grounds is not negatively affected, with special attention to traditional and indigenous communities.
- Gender and generation issues, impacts on women and youth, and opportunities for women and youth are identified, evaluated and addressed.

b. Labor and work conditions

Aquaculture should take into account labor issues and work conditions at all stages, ensuring that:

- Workers are treated fairly and labor rights are respected in accordance with ILO Conventions.
- Worker health and welfare are maintained through safe and hygienic working conditions.
- Child labor should be considered within the context of existing ILO conventions/standards.
- Workers are provided training in responsible aquaculture practices.

c. Socio-economic aspects

Socio-economic issues should be considered at all stages of aquaculture development in order to optimize benefits and avoid or minimize any negative economic consequences by taking into consideration that:

- Rural communities, producer organizations and farmers are supported and provided a decent living wage.
- Risks to small-scale producers are minimized through training, extension and appropriate technical and financial support.
- There is equitable sharing of benefits.
- Employment and alternative livelihood opportunities are created for local community members.
- There are no negative impacts on the livelihoods of local communities.
- There are fair contract conditions and fair prices, including for “contract farming”.

7.4 Environmental Issues

7.4.1 Requirements

Aquaculture should be undertaken in an environmentally responsible manner.

Management practices to address environmental issues in aquaculture can differ substantially for different types of scale of aquaculture and for different aquaculture farming systems. Certification schemes should not be overly prescriptive, but set measurable benchmarks that encourage improvement and innovation in environmental performance of aquaculture.

7.4.2 Minimum Substantive Criteria

Certification schemes should ensure that aquaculture addresses the following minimum substantive criteria regarding environmental impacts.

a. Types of environmental impacts

Aquaculture should ensure that the potential environmental impacts associated with the following are addressed:

- Biodiversity, habitats and ecosystems.
- Genetic diversity.
- Endangered species, including migratory species.
- Fishery stocks and species and the associated ecosystems, e.g. impacts from harvesting wild caught seed, broodstock harvest.
- Water, soil and air quality.

b. Impacts related to the general development and operation of facilities

Aquaculture should ensure that the issues associated with the development and operation of facilities are addressed, include potential impacts from:

- Siting of facilities, including impacts to surrounding natural ecosystems and habitats of high conservation value, habitat fragmentation, changes in land use and visual impacts on the landscape.
- Construction activities, infrastructure development and use of improper building materials.
- Disposal of solid waste, sludge, excess drugs and chemicals, and dead or diseased animals.
- Over use of feeds, feed additives, manure and fertilizers.
- Use of therapeutants, hormones, drugs, antibiotics and other chemicals, e.g. the responsible use of chemicals, pesticides and no use of banned antimicrobials, veterinary drugs and chemicals.
- Disease outbreaks that could affect wild populations or other aquaculture operations.
- Slaughtering of animals and further handling of production.
- Preventing or reducing wildlife predation on aquaculture products.
- Atmospheric emissions and energy use.

c. Impacts related to the kinds of organisms cultured

Aquaculture should:

- Ensure there are no escapes and no introduction of dangerous or exotic species.
- Avoid the culturing of any genetically modified organism (GMO) species and not use GMO species in ways that compromise biodiversity and aquaculture.
- Ensure exotic species are only used when they have low potential ecological risk to the natural environment and biodiversity.
- Encourage the use of native species in aquaculture.
- Escapes or introductions from the transfer of eggs, larvae, fingerlings or adults among river basins or large bodies of water.

c. Impacts related to water use

Aquaculture should employ water quality and effluent management measures that ensure operations:

- Do not exceed the assimilative capacity of receiving waters.
- Do not cause salinization of surrounding land or fresh water resources.
- Promote efficient water use, such as the use of recirculation systems.

d. Impacts related to feed

Aquaculture should use good quality feed sources, ingredients and feed management that:

- Reduce in use of fish meal and fish oil.
- Use of sustainable sources of fish meal and oil.
- Minimise impacts to natural fish stocks.
- Improve ecological efficiency.
- Encourage continuing improvement in feed conversion ratio.

e. Impacts related to seed

Aquaculture should use of sustainable seed sources by:

- Encouraging the use of seed from hatcheries.
- Ensuring that seed from wild-stocks are from well managed fisheries.

d. Environmental assessment and risk assessment

Aquaculture should ensure that the most probable adverse environmental impacts are identified by using environmental risk assessment as a tool to assess and classify environmental impacts according to their risk level, with the following considerations:

- Risk assessment and science based information are used to define environmental impacts.
- Standard methods are used for assessment and accredited laboratories are used for analyses and monitoring.
- Procedures are established prior to constructing aquaculture facilities and operations.
- Methods are evaluated for their applicability to local conditions and site characteristics.
- Provisions are included for obtaining baseline data and for monitoring.
- Sufficient data and information are required, including relevant traditional knowledge, to identify adverse environmental impacts.
- Timely scientific advice on the likelihood and magnitude of identified impacts is obtained.

e. Environmental monitoring

Aquaculture should ensure that there is environmental monitoring, with the following considerations:

- Plans are developed for environmental monitoring.
- Farmers are involved in monitoring when possible, with the diversity of aquaculture and farmers capacity taken into consideration.
- Monitoring focuses on the main environmental concerns and impacts.
- Data collection and record keeping are required.
- Traditional knowledge is integrated into monitoring and management.

f. Spatial, ecosystem and cumulative aspects

Aquaculture should use procedures for identifying, evaluating and addressing the spatial, ecosystem cumulative aspects of environmental impacts, including:

- Location of impacts, e.g. on site, off site.
- Scale of impacts, e.g. farm level, watershed level.
- Cumulative impacts, e.g. from different components of the same aquaculture operation; from unrelated aquaculture operations in the same area.
- Restoration of previously damaged habitats.

7.5 Food Safety and Quality

7.5.1 Requirements

Aquaculture should be undertaken in a manner that ensures food safety and quality by implementing appropriate standards and regulations and as defined by FAO/WHO *Codex Alimentarius*. This should include implementation of quality standards agreed within the context of the *Codex Alimentarius* Commission and other relevant organizations or arrangements.

7.5.2 Minimum Substantive Criteria

Certification standards should address the following minimum substantive criteria regarding food safety and quality.

a. Farm site

Aquaculture facilities should be located in areas where the risk of contamination by biological, chemical, or physical food safety hazards is minimal and where sources of pollution can be controlled. Potential sources of contamination from the surroundings (e.g. farms, industries, sewage) should be evaluated and considered. In particular, fish farming should not be carried on in areas where the presence of potentially harmful substances would lead to an unacceptable level of such substances in aquaculture products.

b. Feed and feed additives

Aquaculture should include procedures for avoiding feed contamination and promoting efforts that improve selection and use of appropriate feeds and feed additives. Feed and feed ingredients should not contain unsafe levels of pesticides, biological, chemical and physical contaminants and or other adulterated substances.

Feed which is prepared industrially or at the farm should contain only substances which are permitted by the competent national authority, such as additives, growth promoting substances, fish flesh colouring agents, anti-oxidizing agents, caking agents or veterinary drugs. Medicated feeds should be clearly identified in the package and stored separately, in order to avoid errors. Fish feeds should be handled and stored in such a way to prevent spoilage, mould growth and contamination. Fish silage, trash fish and offal from fish, if used, and where necessary, should be properly cooked or treated to eliminate potential hazards to human health.

c. Growing water quality

The water used for aquaculture should be suitable for the production of food which is safe for human consumption. Farms should not be sited where there is a risk of contamination of the water in which animals are reared by chemical and biological hazards. If waste water is used, WHO guidelines for the use of wastewater in aquaculture should be followed.

d. Source of fry and fingerlings

The source of post larvae, fry and fingerling should be such to avoid the carryover of potential hazards (e.g. antibiotics, parasites, etc.) into the growing stocks.

e. Veterinary drugs and chemicals

All veterinary drugs and chemicals for use in fish farming should comply with national regulations and international guidelines. Wherever applicable, veterinary drugs and chemicals should be registered with the competent national authority. Control of diseases with drugs should be carried out only on the basis of an accurate diagnosis. Products should only be prescribed and distributed by personnel authorized under national regulations. Authorised veterinary drugs and chemicals or medicated feeds should be used according to manufacturer's instructions, with particular attention to withdrawal periods. Banned antibacterials, veterinary drugs and/or chemicals should not be used in aquaculture production or product processing.

f. Traceability

Traceability and record keeping of farming activities and inputs which impact food safety should be ensured by documenting, *inter alia*:

- The source of inputs such as feed, fry and fingerling, veterinary drugs (dosage and withdrawal times), additives, chemicals.
- The use of inputs.
- Type, concentration, and withdrawal times of veterinary drugs.
- Hygienic practices and harvesting practices.

g. Good hygienic practices

Aquaculture facilities and operations should maintain hygienic conditions, including (Codex Recommended International Code of Practice: General Principles of Food Hygiene):

- Good hygiene practices in the farm area should be applied aiming at minimize contamination of growing water, particularly from waste materials or faecal matter from animals or humans.
- Farms should institute a pest control programme, so that rodents, birds and other wild and domesticated animals are controlled, especially around storage areas.
- Farm grounds should be well maintained to reduce or eliminate food safety hazards.
- Equipment such as cages and nets should be designed and constructed to ensure minimum physical damage of the animals.
- All equipment and holding facilities should be easy to clean and to disinfect and should be cleaned and disinfected regularly and as appropriate.
- Diseased animals should be quarantined when necessary and appropriate and dead animals should be disposed of in a sanitary manner.

7.6 Animal Health and Welfare

7.6.1 Requirements

Aquaculture should be undertaken in a manner that addresses animal health and welfare of the cultured stocks by minimizing stress, optimizing health, minimizing the risks of disease and maintaining a healthy physical environment for the animals at all phases of the culture cycle.

7.6.2 Minimum Substantive Criteria

Certification schemes should ensure that the following minimum criteria for animal health and welfare are addressed/applied.

a. On-farm health management

Aquaculture should ensure the optimal health and welfare of the animals in aquaculture facilities by developing and implementing a health management plan that includes, *inter alia*:

- Complying with OIE Aquatic Animal Health Code standards, guidelines and recommendations to prevent the introduction of infectious agents and diseases pathogenic to animals and humans into the importing country during trade in animals, animal genetic material and animal products (recognizing the importance of the OIE Manual of Diagnostic Tests for Aquatic Animals to ensure a uniform approach to the diagnosis of OIE-listed diseases and other diseases of importance to international trade).

- Complying to CCRF Technical Guidelines on Health Management for Responsible Movement of Live Aquatic Animals during movement of live aquatics and setting up of health management programmes.
- Using preselected stocks of healthy aquatic animals.
- Maintaining a healthy environment at all phases of the culture cycle in order to prevent problems before they occur by:
 - Thoroughly preparing the culture environment before stocking (e.g. system disinfection and fallowing according to the OIE Code).
 - Maintaining optimal environmental conditions through management of stocking densities, aeration, feeding, water exchange and phytoplankton bloom control etc.
 - Employing rigorous quarantining when necessary.
- Implementing health management practices that reduce animal stress.
- Routinely monitoring and recording of animal health to detect any developing problems.
- Implementing management strategies that avoid or reduce the likelihood of disease transmission within and between aquaculture facilities or to the aquatic fauna.
- Focusing on disease prevention rather than treatment.
- Ensuring responsible use of veterinary drugs, minimal use of antibiotics and implementing management strategies that avoid or reduce the release of excess quantities of drugs and vaccines in the surrounding environment.
- Minimizing disease transmission between broodstock, hatchery and growout systems.
- Treating any disease immediately and effectively, with the minimal use of chemicals or drugs, with no use of antibiotics as a growth promoter.
- Use of humane slaughtering procedures

8. INSTITUTIONAL AND PROCEDURAL REQUIREMENTS

The institutional and procedural guidelines are presented in four parts: 1) Governance, 2) Standards Setting, 3) Accreditation and 4) Certification.

The sections on Standards Setting, Accreditation, and Certification are each further subdivided into four sections: i) Purpose, ii) Normative references, iii) Functions and structure; and iv) Requirements. The Requirements are the minimum requirements that a body, person or arrangement should meet to be recognized as competent and reliable in its domain. The Principles listed earlier in these guidelines apply equally to procedural and institutional aspects of certification schemes for aquaculture.

The information presented draws heavily on available guides, especially those produced by the International Organization for Standardization (ISO) and the International Social and Environmental Accreditation and Labeling Alliance (ISEAL).

8.1 Governance

There are several options for the governance of a certification scheme. Typically the owner or developer of a certification scheme is the standards setting body. The initiative for a scheme could be taken by a government, an intergovernmental organization, a non-governmental organization, or private industry association. There are also various options for the geographical range of a scheme. It could be national, regional or international in scope. The owner of a certification scheme must not be directly engaged in its operational affairs, i.e. undertaking accreditation or certification.

The owner or developer of a certification scheme must have a contract with a separate independent specialist accreditation body to take on the task of accreditation of certification bodies on its behalf. The accreditation body could be private, public or an autonomous body governed by public service rules.

Implementation of the certification must be handled by an organization or arrangement that has been specifically set up for this purpose. It could be public, non-governmental or private. The owner of the scheme may lay down rules and regulations under which the certification body or arrangement is required to operate. The certification body may implement one certification scheme for one specific sector (e.g. aquaculture) or may have responsibilities for a number of sectors.

8.2 Standards Setting

8.2.1 Purpose

Standards define the requirements, the quantitative and qualitative criteria and the indicators for certification of aquaculture. They reflect the objectives, results and outcomes that are being pursued through the certification scheme to address social issues, environmental issues, food safety and quality, and animal health and welfare issues.

8.2.2 Normative basis

The normative basis for standard's development includes the following existing documented procedures:

- WTO TBT. Annex 3 *Code of Good Practice for the Preparation, Adoption and Application of Standards*.
- FAO. Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries. 2005.
- ISO/IEC Guide 59. *Code of good practice for standardization*. 1994.
- ISO Guide 62. *General Requirements for bodies operating assessment and certification/registration of quality systems*. 1996.
- ISO/IEC Guide 65. *General requirements for bodies operating product certification systems*. 1996.
- ISEAL. *ISEAL Code of Good Practice for Setting Social and Environmental Standards*. 2006.

8.2.3 Functions and organizational structure

Standard setting encompasses the tasks of setting, monitoring, assessing reviewing, and revising standards. These tasks can be fulfilled through a specialized standard setting body or through another suitable arrangement. The standard body or arrangement is also responsible for ensuring appropriate communications and outreach regarding the standard and the standard setting process, and ensuring that the standard and associated documents are available.

The organizational structure of a standard setting arrangement should include, *inter alia*, a technical committee of independent experts and a consultation forum with stakeholder representatives whose mandates are established.

A standard setting body must be legal entity, with sufficient resources to support its function in undertaking standard setting. The governance structure should include appropriate stakeholder representation. Governance, administration and other support staff should be free of conflicts of interest

8.2.4 Requirements

a. Transparency

Transparency in the setting of standards is necessary. Transparency will help ensure consistency with relevant international standards. Transparency will facilitate access, and participation of all interested parties, especially those of developing countries and countries in transition, particularly small-scale stakeholders

Standard setting organizations or arrangements should carry out their activities in a transparent fashion and following written rules of procedure. Procedural rules should contain a mechanism for the impartial resolution of any substantive or procedural disputes about the handling of standard setting matters.

A standard is under preparation (under review or under revision) from the moment a decision has been taken to develop, review or revise a standard until that standard has been adopted in accordance with the procedural rules.

Once a standard has been adopted, it should be promptly published, with information about its availability widely disseminated and it should be accessible on the Internet.

At least once every six months, the standard setting body (organization or arrangement) should publish a work programme containing:

- Its name.
- Its address.
- The list of standards currently under preparation.
- The list of standards currently under reviewing or revision.
- The list of standards that were adopted in the preceding period.

A notice of existence of the work programme should be published in a national or, as may be, regional or international publication of standardization activities and/or should be accessible on the Internet whenever possible.

On the request of any interested party, the standards setting organization or arrangement should promptly provide, or arrange to provide, a copy of its standard setting procedures, most recent work programme, draft standard or final standard.

Based on the needs of countries, translation into the appropriate languages should be made for the standard setting procedures, most recent work programme, draft standards or final standards should be provided upon request, within the means of the standard setting body or arrangement.

b. Participation by interested parties

The standard setting body or arrangement should ensure balanced participation by independent technical experts and by representatives of interested parties in the standard development, revision and approval process. Development of standards for aquaculture should include representatives of the aquaculture industry (producers, processors, traders and retailers of aquaculture products), aquaculture workers organizations, the scientific community, community development groups, environmental interest groups, accreditation bodies, certification bodies, as well as consumer associations.

Interested parties should be associated in the standard setting process through an appropriate consultation forum or be made aware of an appropriate alternative mechanisms by which they can participate. Where more than one forum is designated, appropriate coordination and communication requirements should be determined.

The standard setting body or arrangement should have written procedures to guide decision-making in the standard setting process.

c. Content and comparable systems

The standard setting process should seek to:

- Identify and review comparable systems.
- Identify research needs and knowledge gaps.
- Include requirements of relevant international agreements.
- Include reference standards in social issues, environmental impacts, food safety and quality, animal health and welfare, and economic and financial issues.

d. Notification provisions

Before adopting a standard, the standard setting body or arrangement should allow a period of at least 60 days for the submission of comments on the draft standard by interested parties. No later than the start of the comment period, the standard setting body or arrangement should publish a notice announcing the period for commenting in a national or, as appropriate, regional or international publication of standardization activities and/or on the Internet.

The standard setting body or arrangement should take into account, in further processing of the standard, the comments received during the period for commenting. The reply should include an explanation why a deviation from relevant national or international standards is necessary.

e. Keeping of records

Proper records of standards and development activity should be prepared and maintained. The standard setting organization or arrangement should identify a central focal point for standards-related enquiries and for submission of comments. Contact information for this focal point should be made easily available including on the Internet.

f. Review and revision of standards and of standard setting procedures

Standards should be reviewed at regular published intervals and, if appropriate, revised following such reviews. This should take place every five years according to the ISEAL Standards Code. Certified aquaculture operations should be given a period of three years or less to come into compliance with the revised standards.

Proposals for revisions can be submitted by any interested party and should be considered by the standard setting body or arrangement through a consistent and transparent process.

The procedural and methodological approach for setting standards should also be updated in the light of scientific and technical progress and of the experience gained in standard setting for aquaculture.

g. Validation of standards

In developing and revising standards, an appropriate procedure should be put in place to corroborate the standard vis-à-vis the minimum requirements for aquaculture as laid out in these guidelines. Validation is also required to ensure that standards:

- Are meaningful, objective and auditable.
- Do not contain criteria or requirements could cause barriers of trade or mislead the consumer.
- Take into consideration practicality and cost of standard development and maintenance.

8.3 Accreditation

8.3.1 Purpose

Accreditation provides assurance that certification bodies responsible for conducting conformity assessments according to standards for aquaculture in relation to social issues, environmental issues, food safety and quality and animal health and welfare issues are competent to carry out such tasks. Accreditation provides assurance that the certification body is able to assess and certify that a specific aquaculture product comes from a certified aquaculture operation and conforms to the standard.

8.3.2 Normative reference

- ISO Guide 61. *General Requirements for assessment and accreditation of certification/registration bodies*. 1996.
- ISO/IEC 17011. *Conformity assessment - General requirements for accreditation bodies accrediting conformity assessment bodies*.

8.3.3 Functions and structure

Accreditation is an independent assessment of the competence of the certification body. The task of granting accreditation following successful assessment should be undertaken by competent accreditation bodies. Accreditation is carried out on the basis of a system that has its own rules and management, i.e. an accreditation system.

An accreditation body must be legal entity, with sufficient resources to support its functions in undertaking accreditation. The governance structure should include appropriate stakeholder representation. Governance, administration and other support staff should be free of conflicts of interest. In order to be recognized as competent and reliable in undertaking the assessment in a nondiscriminatory, impartial and accurate manner, an accreditation body should fulfill, *inter alia*, the following requirements.

8.3.4 Requirements

a. Non-discrimination

Access to the services of the accreditation body should be open to all certification entities irrespective of their location. Access should not be conditional upon the size of the applicant body or membership in any association or group, nor should accreditation be conditional upon the number of certification bodies already accredited.

Full recognition should be given to the special circumstances and requirements of certification bodies in developing countries and countries in transition including financial and technical assistance, technology transfer, and training and scientific cooperation.

b. Independence, impartiality and transparency

The accreditation body should be independent and impartial. In order to be impartial and independent, the accreditation body should:

- Be transparent about its organizational structure and the financial and other kinds of support it receives from public or private entities.
- Be independent from vested interests, together with its senior executive and staff.

- Be free from any commercial, financial and other pressures that might influence the results of the accreditation process.
- Ensure that decision on accreditation is taken by a person(s) who has (ve) not participated in the assessment.
- Not delegate authority for granting, maintaining, extending, reducing, suspending or withdrawing accreditation to an outside person or body.

c. Human and financial resources

The accreditation body should have adequate financial resources and stability for the operation of an accreditation system and should maintain appropriate arrangements to cover liabilities arising from its operations and/or activities.

The accreditation body should employ a sufficient number of personnel having the necessary education, training, technical knowledge and experience for performing accreditation functions in aquaculture.

Information on the relevant qualifications, training and experience of each member of the personnel involved in the accreditation process should be maintained by the accreditation body. Record of training and experience should be kept up to date.

When an accreditation body decides to subcontract work related to accreditation to an external body or person, the requirements for such an external body should be no less than for the accreditation body itself. A properly documented contractual or equivalent agreement covering the arrangements including confidentiality and conflict of interests, should be drawn up.

d. Accountability and reporting

The accreditation body should be a legal entity and should have clear and effective procedures for handling applications for accreditation procedures. In particular, the accreditation body should maintain and provide to the applicants and accredited entities:

- A detailed description of the assessment and accreditation procedure.
- The documents containing the requirements for accreditation,
- The documents describing the rights and duties of accredited bodies.

A properly documented contractual or equivalent agreement describing the responsibilities of each party should be drafted.

The accreditation body should have:

- Defined objectives and commitment to quality.
- Procedures and instructions for quality documented in a quality manual.
- An established effective and appropriate system for quality.

The accreditation body should conduct periodic internal audits covering all procedures in a planned and systematic manner to verify that the accreditation system is implemented and effective.

The accreditation body may receive external audits on relevant aspects. The results of the audit should be accessible by the public.

Qualified personnel, attached to the accreditation body's team, should be nominated by the accreditation body to conduct the assessment against all applicable accreditation requirements.

Personnel nominated for the assessments should provide the accreditation body with a report of its findings as to the conformity of the body assessed to all of the accreditation requirements. The report should provide sufficiently comprehensive information such as:

- The qualification, experience and authority of the staff encountered.
- The adequacy of the internal organization and procedures adopted by the certification body to give confidence in its services.
- The actions taken to correct identified nonconformities including, where applicable, those identified at previous assessments.

The accreditation body should have policy and procedures for retaining records of what happened during the assessment visit for a period consistent with its contractual, legal or other obligations. The records should demonstrate that the accreditation procedures have been effectively fulfilled, particularly with respect to application forms, assessment reports and other documents relating to granting, maintaining, extending, reducing, suspending or withdrawing accreditation. The records should be identified, managed and disposed of in such a way as to ensure the integrity of the process and confidentiality of the information.

e. Resolution of complaints concerning accreditation of certifying bodies

(Procedures by the accreditation body on the resolution of complaints and appeals concerning certification are provided in the following chapter on Guidelines for Certification.)

The accreditation body should have a written policy and procedures for dealing with any complaints in relation to any aspect of the accreditation or de-accreditation of certifying bodies.

These procedures should include establishment, on an ad hoc basis as appropriate, of an independent and impartial committee to respond to a complaint. If possible, the committee should attempt to resolve any complaints through discussion or conciliation. If this is not possible, the committee should provide a written ruling to the accreditation body, which should transmit it to the other party or parties involved.

The accreditation body should:

- Keep a record of all complaints, and remedial actions relative to accreditation.
- Take appropriate corrective and preventive action.
- Assess the effectiveness of remedial actions.
- Safeguard confidentiality of information obtained during the investigation and resolution of complaints.

Information on procedures for handling complaints concerning accreditation should be made publicly available.

The above does not exclude recourse to other forms of legal and administrative processes as provided for in national legislation or international law.

f. Confidentiality

The accreditation body should have adequate arrangements, consistent with applicable laws, to safeguard confidentiality of the information obtained in the course of its accreditation activities at all levels of its organization, including committees and external bodies acting on its behalf.

Where the law requires information to be disclosed to a third party, the body should be informed of the information provided, as permitted by the law. Otherwise information about an applicant certification body should not be disclosed to a third party without a written consent of the body.

g. Maintenance and extension of accreditation

The accreditation body should have arrangements to ensure that an accredited certification body informs it without delay of changes in any aspects of its status or operation.

The accreditation body should have procedures to conduct reassessments in the event of changes significantly affecting the capabilities, or scope of accredited activities of the accredited body or the conformance with any other relevant criteria of competence specified by the accreditation body.

Accreditation should be re-assessed at sufficiently close intervals to verify that the accredited certification body continues to comply with the accreditation requirements. The periodicity for carrying out reassessments should not exceed five years.

h. Suspension and withdrawal of accreditation

The accreditation body should specify the conditions under which accreditation may be suspended or withdrawn, partially or in total, for all or part of the scope of accreditation.

i. Change in the accreditation requirements

The accreditation body should give due notice of any changes it intends to make in its requirements for accreditation.

It should take account of views expressed by interested parties before deciding on the precise form and effective date of the changes.

Following a decision on, and publication of, the changed requirements, it should verify that each accredited body carries out any necessary adjustments to its procedures within such time as, in the opinion of the accreditation body, is reasonable.

Special considerations should be given to accredited bodies in developing countries and countries in transition.

j. Proprietor or licensee of an accreditation symbol, label or a logo

(The provisions on the use and control of a certification claim, symbol, label or logo are addressed in the following chapter on Guidelines for Certification.)

The accreditation body that is proprietor or licensee of a symbol or logo, intended for use under its accreditation programme, should have documented procedures describing its use.

The accreditation body should not allow use of its accreditation mark or logo in any way that implies that the accreditation body itself approved a product, service or system certified by a certification body.

The accreditation body should take suitable action to deal with incorrect references to the accreditation system or misleading use of accreditation logos found in advertisements, catalogues, etc.

8.4 Certification

8.4.1 Purpose

Certification is the procedure by which a third party gives written or equivalent assurance that the aquaculture operation and/or chain of custody under consideration conforms to the relevant standard in relation to social issues, environmental issues, food safety and quality and/or animal welfare. Impartial certification based on an objective assessment of all relevant factors provides assurance to buyers and consumers that a certain aquaculture product comes from an aquaculture operation that conforms to an established standard.

8.4.2 Scope

There are two types of certification, certification of the aquaculture operation itself and certification of the chain of custody between the time the aquaculture product is harvested and the time it is sold to the final consumer. Separate certificates may be issued for the production system and for the chain of custody.

Two types of assessments are required for certification:

- a) Conformity assessment: Whether an aquaculture operation conforms to the standard and related certification criteria.
- b) 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.

Aquaculture products that are labelled to indicate to the consumer their origin from a certified aquaculture operation require both types of assessments and certificates.

8.4.3 Normative references

- ISO Guide 62, *General Requirements for bodies operating assessment and certification/ registration of quality systems*. 1996.
- ISO/IEC Guide 65, *General requirements for bodies operating product certification systems*. 1996.
- WTO. *Agreement on Technical Barriers to Trade, Article 5*.

8.4.4 Functions and structure

The tasks of carrying out conformity and chain of custody assessments should be undertaken by accredited certification bodies. In order to be recognized as competent and reliable in undertaking the assessments in a non-discriminatory, impartial and accurate manner, a certification body has to fulfill, *inter alia*, the following requirements.

8.4.5 Requirements

a. Independence and impartiality

The certification body should be legally and financially independent from the owner of the certification scheme.

The certification body and its assessment and certifying staff, whether directly employed by the certification body or sub-contracted by it, should have no commercial, financial or any other interest in the fishery or chain of custody to be assessed other than for its certification services.

The certification body should ensure that different personnel conduct the certification decision and the certification assessments.

The certifying body should not delegate authority for granting, maintaining, extending, reducing, suspending or withdrawing certification to an outside person or body.

b. Non-discrimination

Access to the services of the certification body should be open to all types of aquaculture operations. Access to certification should not be conditional upon the size or scale of the aquaculture operations nor should certification be conditional upon the number of aquaculture operations already certified.

c. Human and financial resources

The certification body should have adequate financial resources and stability for the operation of a certification system and should maintain appropriate arrangements to cover liabilities arising from its operations and/or activities.

The certification body should employ a sufficient number of personnel having the necessary education, training, technical knowledge and experience for performing conformity and/or chain of custody assessments in aquaculture.

Information on the relevant qualifications, training and experience of each member of the personnel involved in the certification process should be maintained by the certification body. Record of training and experience should be kept to date.

When a certification body decides to sub-contract work related to certification to an external body or person, the requirements for such an external body should be no less than for the certification body itself. A properly documented contractual or equivalent agreement covering the arrangements including confidentiality and conflict of interests, should be drawn up.

d. Accountability and reporting

The certification body should be a legal entity and have clear and effective procedures for handling applications for certification of aquaculture operations and/or chains of custody for aquaculture products. In particular, the certification body should maintain and provide to the applicants and certified entities:

- A detailed description of the assessment and certification procedure.
- The documents containing the requirements for certification.
- The documents describing the rights and duties of certified entities.

A properly documented contractual or equivalent agreement describing the rights and duties of each party should be drafted between the certification body and its clients.

The certification body should have:

- Defined objectives and commitment to quality.
- Policies and procedures for quality documented in a quality manual.
- An established effective, appropriate system for quality.

The certification body should conduct periodic internal audits covering all procedures in a planned and systematic manner to verify that the certification system is implemented and effective.

The certification body may receive external audits on relevant aspects. The results of the audits should be accessible by the public.

The certification body should have a policy and procedures for retaining records for a period consistent with its contractual, legal or other obligations. The records should demonstrate that the certification procedures have been effectively fulfilled, particularly with respect to application forms, assessment reports and other documents relating to granting, maintaining, extending, reducing, suspending or withdrawing certification. The records should be identified, managed and disposed of in such a way as to ensure the integrity of the process and confidentiality of the information.

The certification body should ensure that, in the event of changes, all affected parties are notified.

The certification body should make appropriate documents available on request.

e. Certification fees

If the certification body asks for fees, it should maintain a written fee structure for applicants and certified aquaculture operations that should be available on request. In establishing the fee structure and in determining the specific fee of a certification assessment, the certification body should take into account, *inter alia*, the requirements for accurate and truthful assessments, the scale, size and complexity of the aquaculture operation or chain of custody, the requirement of non-discrimination of any client, and the special circumstances and requirements of small farmers, developing countries and countries in transition.

f. Confidentiality

The certification body should have adequate arrangements; consistent with applicable laws, to safeguard confidentiality of the information obtained in the course of its certification at all levels of its organization.

Where the law requires information to be disclosed to a third party, the client should be informed of the information provided, as permitted by the law. Otherwise information about a particular product or aquaculture operation should not be disclosed to a third party without a written consent of the client.

g. Maintenance of certification

The certification body should carry out periodic surveillance and monitoring at sufficiently close intervals to verify that certified aquaculture operations and/or certified chains of custody continue to comply with the certification requirements.

The certification body should require the client to notify it promptly of any intended changes to the management of the aquaculture, or the chain of custody, or other changes that may affect conformity.

The certificate body should have procedures to conduct reassessments in the event of changes significantly affecting the status and management of the certified aquaculture operation, or the chain of custody, or if analysis of a complaint or any other information indicates that the certified aquaculture operation and/or the chain of custody no longer comply with the required standard and/or related requirements of the certification body.

The period of validity of a certificate should not exceed five years in the case of an aquaculture operation and three years in the case of the chain of custody. The assessment required for re-certification should give particular attention to changes that have been made in the conduct of the aquaculture operation or in the management practices, and on any new conditions that changes in standards might require.

h. Renewal of certification

On the basis of prior regular monitoring and auditing exercises and a full reassessment, the validity of certification can be renewed up to the time limits of five years in the case of an aquaculture operation and three years in the case of the chain of custody.

i. Suspension and withdrawal of certification

The certification body should specify the conditions under which certification may be suspended or withdrawn, partially or in total, for all or part of the scope of certification.

The certification body should require that a certified aquaculture operation and/or chain of custody upon suspension or withdrawal of its certification (however determined), discontinues use of all advertising matter that contains any reference thereto and returns any certification documents as required by the certification body. The certification body should also be responsible for informing the public about the withdrawal or suspension after the appeals process is exhausted.

j. Maintaining the chain of custody

Chain of custody procedures are implemented at the key points of transfer. At each point of transfer, which may vary according to the type of aquaculture product traded, all certified aquaculture products must be identified and/or segregated from non-certified aquaculture products.

The certification body should ensure that a recipient of certified aquaculture products should maintain pertinent chain of custody records, including all records relating to shipment, receipt and invoicing.

The certification body should have documented procedures defining auditing methods and periodicity of audits. The periodicity of audits should depend on:

- The technical processes undertaken at the point of transfer.
- Such risk factors as the value and volume of the certified output.

Any breach or apparent breach of the chain of custody identified during an inspection/audit should be explicitly recorded in the inspection/audit report together with:

- An explanation of the factors that allowed the breach to occur.
- An explanation of the corrective actions taken or required to ensure that a similar breach does not re-occur.

All inspection/audit records should be incorporated into a written inspection/audit report that is available to pertinent parties and filed at the certification body office.

The inspection/audit report should contain, as a minimum:

- The date of the inspection/audit.
- The name(s) of the person(s) responsible for the report.
- The names and addresses of the sites inspected/audited.
- The scope of the inspection/audit.
- Comments on the conformity of the client with the chain of custody requirements.

k. Use and control of a certification claim, symbol, label or a logo

The certification body, accreditation body or owner of the certification scheme should have documented procedures describing the requirements, restrictions or limitations on the use of symbols, labels or logos indicating that an aquaculture product comes from a certified aquaculture operation. In particular, the certification scheme is required to ensure that symbols, labels or logos should not relate to claims that are of no relevance for certified aquaculture operations or products and could cause barriers of trade or mislead the consumer.

The certification body, accreditation body or owner of the certification scheme should not issue any license to affix its mark/claim/label/logo or issue any certificate for any aquaculture operations or products unless it is assured that the product bearing it is in fact produced from certified sources.

The certification body, accreditation body or owner of the certification scheme is responsible that no fraudulent or misleading use is made with the use and display of its certification mark, labels or logos.

If the certification body, accreditation body or owner of the certification scheme confers the right to use a symbol, label or logo to indicate certification, the aquaculture operation and any aquaculture product from it may use the specified symbol, label or logo only as authorized in writing by it.

The certification body, accreditation body or owner of the certification scheme should take suitable action to deal with incorrect references to the certification system or misleading use of symbols, labels and logos found in advertisements, catalogues, etc.

All certificates issued should include:

- The name and address of the accreditation body or owner of the certification scheme.
- The name and address of the certification body.
- The name and address of the certification holder.
- The effective date of issue of the certificate.
- The substance of the certificate.
- The term for which the certification is valid.
- Signature of the issuing officer.

8.4.6 Resolution of complaints and appeals

a. Policy and procedures

The accreditation body or owner of the certification scheme should have a written policy and procedures, applicable to accredited certification bodies, for dealing with any complaints and appeals from involved parties in relation to any aspect of certification or de-certification. Such procedures should be timely, clearly define the scope and nature of appeals that will be considered and should be open only to parties involved in, or consulted, during the assessment. Costs of appeals should be borne by the appellant.

These procedures should include an independent and impartial committee to respond to any complaint. If possible, the committee should attempt to resolve any complaint through discussion or conciliation. If this is not possible, the committee should provide a written finding to the certification body, accreditation body or owner of the certification scheme as appropriate, which should transmit the finding to the party or parties involved.

The above does not exclude recourse to other forms of legal and administrative processes as provided for in national legislation or international law.

b. Keeping of records on complaints and appeals concerning certification

The certification body, accreditation body or promoter/owner of the certification scheme should:

- Keep a record of all complaints and appeals, and remedial actions related to certification;
- Take appropriate corrective and preventive action.
- Assess the effectiveness of remedial actions.
- Safeguard confidentiality of information obtained during the investigation and resolution of complaints and appeals concerning certification.

Information on procedures for handling of complaints and appeals concerning certification should be made publicly available.

9. IMPLEMENTATION ASSISTANCE

Countries, relevant international organizations, whether governmental or non-governmental, the seafood business, and financial institutions should recognize the special circumstances and requirements of aquaculture producers and other stakeholders in developing countries, especially those in least-developed countries and small island developing countries, to support the effective implementation of these guidelines. States, relevant intergovernmental and non-governmental organizations and financial institutions should work to address these implementation needs, especially in the areas of financial and technical assistance, technology transfer, education and training. Such assistance should also consider direct support towards the possible high costs of accreditation and certification.

Assistance is needed in building the capacity and enhancing the ability of stakeholders to participate in developing and complying with aquaculture certification schemes consistent with these guidelines. This includes ensuring that stakeholders have access to, and understanding of, these guidelines, as well as provisions of relevant international conventions and applicable environmental and other standards that are essential for responsible aquaculture. Appropriate and up-to-date technologies may be required to comply with certification standards. Full benefit from such technologies would require extension, training, education, skill development and other local capacity building programmes for farmers and local communities.

Governmental and other institutions should support cooperation, especially at regional and sub-regional levels, in capacity building for developing and complying with aquaculture certification systems most suitable to their regions, and in the elaboration of mechanisms and protocols for the exchange of knowledge, experience and technical assistance in support of these objectives.

Different aquaculture certification systems may be capable of meeting the same objective and are therefore equivalent. Provisions for recognition of other systems include memoranda of understanding, mutual recognition agreements, equivalence agreements and unilateral recognition, all of which need to include appropriate controls and verification of the certification systems involved. Assistance may be required for countries or other parties to develop and implement equivalence agreements and monitoring that facilitate the adoption of aquaculture certification schemes consistent with these guidelines.

10. REFERENCES

- APEC International Standards for the Live Reef Food Fish Trade.
- Codex Alimentarius* Code of Practice for Fish and Fishery Products: Sections related to aquaculture.
- Codex Alimentarius* Guidelines for the Establishment of a Regulatory Programme for Control of Veterinary Drug Residues in Foods.
- Codex Alimentarius* Principles for Food Import and Export Certification and Inspection.
- Codex Alimentarius* Recommended International Code of Practice: General Principles of Food Hygiene.
- Codex Alimentarius* Recommended International Code of Practice for Control of the Use of Veterinary Drugs.
- Recommended International Code of Practice: General Principles of Food Hygiene.
- FAO Code of Conduct for Responsible Fisheries. (CCRF)
- FAO Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries.
- FAO Technical Guidelines for Responsible Fisheries 5: Aquaculture Development. (TGRF-5)
- FAO, NACA, World Bank, WWF, UNEP/GPA International Principles for Responsible Shrimp Farming.
- ISEAL Code of Good Practice for Setting Social and Environmental Standards.
- ISO/IEC Guide 2. Standardization and related activities. General vocabulary. 2004
- ISO/IEC Guide 61. General requirements for assessment and accreditation of certification/registration bodies. 1996
- ISO/IEC Guide 59. Code of good practice for standardization.1994.
- ISO/IEC Guide 62. General Requirements for bodies operating assessment and certification/registration of quality systems. 1996.
- ISO/IEC Guide 65. General requirements for bodies operating product certification systems. 1996.
- ISO/IEC Guide 17011. Conformity assessment. General requirements for accreditation bodies accrediting conformity assessment bodies. 2004.
- OIE Aquatic Animal Health Code.
- OIE Manual of Diagnostic Tests for Aquatic Animals.
- WTO Agreement on the Application of Sanitary and Phytosanitary Measures. (SPS)
- WTO Agreement on Technical Barriers to Trade. (TBT)
- WTO TBT ANNEX 3. Code of Good Practice for the Preparation, Adoption and Application of Standards.

11. ACRONYMS

APEC	Asia Pacific Economic Cooperation
CAC	Codex Alimentarius Commission
CBD	Convention on Biological Diversity
CCRF	FAO Code of Conduct for Responsible Fisheries
FAO	United Nations Food and Agriculture Organization
HHT	MAC International Standard for Husbandry, Handling and Transport
ILO	International Labor Organization
ISEAL	International Social and Environmental Accreditation and Labelling Alliance
ISO	International Organization for Standardization
ISO/IEC	ISO/International Technoelectrical Commission
LRFFT	Live Reef Food Fish Trade
MAC	Marine Aquarium Council
MSC	Marine Stewardship Council
NACA	Network of Aquaculture Centres in Asia-Pacific
OIE	Office International des Epizooties/World Organization for Animal Health
SPS	WTO Agreement on the Application of Sanitary and Phytosanitary Measures
TBT	WTO Agreement on Technical Barriers to Trade
TGRF	FAO Technical Guidelines for Responsible Fisheries
UNCLOS	United Nations Convention on the Law of the Sea
UNEP/GPA	United Nations Environment Programme/Global Programme of Action for the Protection of the Marine Environment from Land-Based Activities
WTO	World Trade Organization