

Addressing Emerging International Fish Trade Concerns to Support the Sustainable Development of Fisheries

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International fish trade is a complex web of actions of importers and exporters, considering that global trade in fishery commodities involves billions of US dollars. In 2008, global fish trade reached US\$ 102 billion (export value) representing an 11% growth relative to that of 2004. The top five global fish markets were Japan, USA, Spain, France, and Italy meanwhile Thailand and Vietnam were among the top five exporters of fishery commodities (FAO, 2010). About one-half of all fish exports are produced in developing countries, while the big consumers are developed countries accounting for 80% of all imports. This indicates that developing countries have found a stable market that can be relied on, the market niche carved for the fish and fisheries products from developing countries, providing them bright future in terms of job opportunities and increased incomes, contributing to the socio-economic well-being of their people. Nevertheless, developing countries do not have the same resources, guidelines or know-how that developed countries have such as the United States and Japan. Thus, if developing countries do not take advantage of such guidelines and know-how, the growth of the countries' export fish trade could be jeopardized. Moreover, if unsustainable fishery practices continue to prevail in developing countries, food security could even be threatened. Therefore, promoting responsible international trade in fish and fisheries products should be seriously considered by developing countries, where advocating such important issue is also being addressed during discussions and negotiations in the global arena.

With the objective of promoting fish trade in a sustainable manner, the global Code of Conduct for Responsible Fisheries specified that "*Promotion of international fish trade and export production should not result in environmental degradation or adversely impact the nutritional rights and needs of people for whom fish is critical to their health and well-being*". Specifically for the ASEAN region, the 2001 Resolution and Plan of Action on Sustainable Fisheries for Food Security stipulated that ASEAN Member Countries should "*Strengthen the joint ASEAN approaches and positions on international trade in fish and fishery products indigenous to the region by harmonizing standards, criteria and guidelines*".

The establishment of the COFI Sub-committee on Fish Trade in 1986 illustrated the importance of global fish trade. The Sub-committee is tasked to provide a forum for consultations on the technical and economic aspects of international trade in fish and fishery products including the applicable standards for production and consumption.

However, the issues on trade in fish and fisheries products have also been greatly discussed and driven by international markets and by various trade-related agencies which rarely involves the fisheries authorities and sometimes even devoid of contributions from the aspects of sustainable fisheries development and management. The developing countries are therefore confronted with difficulties in integrating such global instruments and requirements into their national trade legislations and policies. Nevertheless, global instruments which are agreed or enforced by international organizations should ascertain that the impacts of such instruments on the sustainable development of fisheries in developing countries and particularly on the small-scale fisheries in Southeast Asia are taken into consideration during the formulation of such instruments. Since it is important to reconcile the international driven issues with the promotion of sustainable fisheries development, therefore the implications of fish trade to the fishery resources and the environment, and on the quality and safety of fish and fisheries products as well as the adoption of trade barrier agreements both tariff and non-tariff on imported fisheries products, should be raised for negotiations in the international arena.

Fish Trade-related Measures

In 2008, the total fishery production of the Southeast Asian countries was 27.3 million metric tons valued at US\$ 28.6 billion of which production from marine capture fisheries, inland capture fisheries and aquaculture accounted for 51%, 9% and 40% of the total production, respectively (SEAFDEC, 2010). In 2009, the annual growth rate of fish exported as food from Southeast Asia was recorded at 7%



with reference to that of the data in 2000 (WTO, 2010). Fisheries also create employment opportunities for peoples in the region, where in 2007 for example, the fisheries sector engaged about 3 million people accounting for 1.5% of the total employed persons in the region (SEAFDEC, 2008).

While the demand for fish and fisheries products continues to increase, the concern on food quality and safety is also escalating. The sustainable use and proper management of the resources have been brought into the picture by various agencies and importing countries. The exporting countries are therefore forced to comply with the requirements reflected in the growing concerns of consumers on contamination and transfer of diseases from animals and on the chemical residues in fisheries products, as well as on the trade measures that aim to address the sustainable harvesting of resources by the fisheries sector.

Box 1. Concerns raised by ASEAN countries with regards to the application of SPS and TBT

Several concerns have been raised by the ASEAN countries with regards to the application of such Agreements:

- Limited knowledge and expertise in risk assessment and SPS/TBT measures constrained the further strengthening and harmonization of the technical regulatory mechanism within ASEAN;
- Insufficient involvement of scientific expertise from the academe and industry, as well as consumers in strengthening the scientific basis for food control decision making processes;
- Difficulties in accessing information on import requirements and limited financial support for capacity building and harmonization activities like ASEAN training activities, meetings and other means of sharing information and experiences; and
- Limited capacity in terms of laboratory facilities where only few countries have their laboratories accredited for ISO/IEC 17025. Currently, key laboratories in Indonesia, Malaysia, Philippines, Singapore, Thailand and Vietnam have been accredited for ISO/IEC 17025 (FASOR, 2011).

Box 2. ASEAN regional position on fisheries subsidies

- Fisheries subsidies is recognized as a tool either used as temporary or long-term measures under a broad national development and management framework to ensure sustainable fisheries development
- The use of fisheries subsidies needs to be coupled with close monitoring and evaluation of status of fishery resources as well as the impacts of subsidies on socio-economic and the resources, which are different from countries to countries
- Fisheries subsidies contributing to sustainable fisheries as well as people livelihoods and poverty alleviation should be permitted
- Some fisheries subsidies whether they should be permitted or removed will depend on a number of factors including management regime, status of resources and the length of time that subsidies will be applied
- Fisheries subsidies contributing to over-exploitation of resources or unsustainable fisheries and trade distortion must be removed
- Close coordination between fisheries related agencies and trade related agencies in each country should be promoted to reflect the requirements and complexity of the fisheries

As a step towards the realization of the ASEAN Economic Community in 2015, the ASEAN Ministers adopted in November 2004 the ASEAN Framework Agreement for the Integration of Priority Sectors. The roadmap which is an integral part of the Agreement, includes issues specific to the fisheries sector, as well as horizontal issues cutting across all sectors such as: tariff elimination; non-tariff measures; customs cooperation; effective implementation of the Common Effective Preferential Tariff (CEPT) scheme; Improvement of Rules of Origin, Standards and Conformance; future investments; and improvement of logistics services. Among others, assurance that actions relevant to SPS/TBT on the development and application of fisheries quality management systems that ensure food safety through the implementation, validation and verification of the Hazard Analysis and Critical Control Point (HACCP) had also been required. Such efforts had been envisaged to enable the ASEAN community to be more competitive in trading its fish and fisheries products. As a condition for exporting fish, several measures related to trade of fish and fisheries products both non-voluntary and voluntary, have been initiated by international organizations and agencies. Among such regulatory measures are the General Agreement on Tariffs and Trade (GATT), the Agreements on the Application of Sanitary and Phytosanitary Measures (SPS) and Technical Barriers to Trade (TBT) shown in **Box 1**, the Agreement on Subsidies and Countervailing Measures (SCM) shown in **Box 2** and **Box 3**, and CITES issues. Moreover, some of the voluntary schemes include: Catch Certification, Catch Documentation and related documentation schemes (**Box 4**); Aquaculture Certification (**Box 5**); Traceability (**Box 6**); Eco-labeling (**Box 7**). It should be noted that the international NGOs have a strong influence in shaping the regulatory framework of trade in fish and fisheries products. Some NGOs lobby with the WTO and UN agencies to raise the profile of the environment, sustainable development and food safety in their trade agenda. Other organizations such as the Marine Stewardship Council (MSC) also set up practical tools such as eco-labeling schemes to foster sustainable trade in fish and fisheries products (**Box 8**).

Non-voluntary International Agreements

Tariff

Tariffs are duties levied on imported products. Tariff barriers are however, considered obstacles to trade and remained the principal legitimate type of government intervention. Nevertheless, tariffs could also be subjected for negotiations and could be progressively decreased based on the provisions spelled out by the World Trade Organization (WTO) which is the main international structure responsible for dealing with rules/negotiations on trade among nations. At the Uruguay Round of WTO

Box 3. Progress on the WTO negotiations on fisheries subsidies

The debate among the WTO Member Countries could not yet be settled, since there is no right answer to the different fisheries situation that vary throughout the world. Therefore, the Chair of NGRs set up a “Roadmap for Discussion on Fisheries Subsidies” which requires a stronger and more detailed justification from the Member Countries. Currently, the negotiation on fisheries subsidies at the WTO is under the third round of negotiation under the new Chairman of the NGRs and it had been changed from open-ended discussion to plurilateral format with limited number of participants by invitation only and thus far, has not included the ASEAN countries. Such plurilateral meetings are usually followed by open-ended transparency sessions where the Chair reports the matters discussed during the plurilateral meetings. In the recent open-ended informal meeting of the NGRs in February 2011, the only ASEAN Member Country Malaysia had the opportunity to meet the “Friends of the Chair (FOC)” who were appointed to take care of issues on fisheries management and that the FOC would consult with the WTO members on the technical inputs on fisheries management. After consulting with the delegations of several Member Countries, the FOC reported to the Chair that the core elements which should be mandatory for all members in respect of all sorts of fisheries and “tools” or “illustrative”, would be applied as appropriate.

The six core elements identified by the Chair of Negotiating Group on Rules (NGRs) during its open-ended informal meeting in February 2011 are as follows:

- 1) **Institutions and legislation**, to ensure that there is a management authority with sufficient legal power to do its work;
- 2) **Stock assessments**, to assess the state of the resource, with a variety of methods identified, including counting landings, catch, by-catch etc., to develop trends on how well the stock and possibly associated species are doing;
- 3) **Capacity assessments and management**, which could be effected through vessel registries, maintaining data on boats and licenses, and similar measures, with the idea being that the size of the fleet and its capacity to fish should match the amount of fisheries resources;
- 4) **Effort controls**, which could take the form of input controls, such as limits on areas, fishing seasons, gear, vessel sizes, and so forth, and output controls, that is, limits on how much a vessel can catch, through the setting of total allowable catches, quotas, etc.;
- 5) **Monitoring, surveillance and control**, which can be effected through direct control where all fish are landed in one place and counted by an inspector, or through periodic sampling, or through various forms of community organizations, including marketing cooperatives through which all fishers must sell their catch. More sophisticated methods and tools were also identified including satellite-based vessel monitoring systems, GPS, and video cameras, although such methods were not viewed as appropriate or possible for all fisheries; and
- 6) **Enforcement**, in particular penalties for violating the applicable fisheries management requirements. In some cases, there are criminal penalties, in others community based peer pressure is a main enforcement tool. In regard to all of these elements, the Friends reported that a large number of delegations had stressed the importance of technical assistance, capacity building and appropriate transition periods, which might vary by type of fishery.

As this is still an on-going process of discussion, the ASEAN Member Countries are encouraged to consult and provide views and experiences to FOC for the appropriate provision on fisheries management as updates for the Chair.

negotiations in 1995, it was agreed that 36% reduction of tariffs would be applied for the developed countries and 24% for the developing countries.

Within the Southeast Asian region, the ASEAN Free Trade Agreement (AFTA) in 1992 concurred to reduce tariffs on most processed agricultural and industrial products intended for intra-regional trading by 0.0 to 5.0% by 2003 (ASEAN, 2011).

The ongoing establishment of an ASEAN Economic Community or a single ASEAN market by 2015 has accelerated the pace of the regional integration to unify and extend the ASEAN Free Trade Area to the ASEAN Investment Area and the ASEAN Framework Agreement on Services, which are clearly aimed at facilitating trade. Although trade facilitation measures within the ASEAN had been agreed at the regional level or among a subset of members, most trade facilitation is non-discriminatory. Meanwhile, it should be noted that improved documentation, port logistics and so forth could reduce costs of trade with all partners (Pomfret and Sourdin, 2009).

Agreement on Technical Barriers to Trade (TBT)

The Agreements on the Application of Sanitary and Phytosanitary Measures (SPS) and on Technical Barriers

to Trade (TBT) were established and entered into force in 1995 during the Uruguay Round of Multilateral Trade Negotiations of the WTO to address the emerging debate over the use of standards in international trade. SPS measures aim to address and ensure that human and animal food is safe from contaminants, toxins, and diseases. It covers all relevant laws, decrees, regulations; testing, inspection certification and approval procedures; packaging and labeling requirements directly related to food safety. Nations are asked to apply only those measures that are based on scientific principles, and only to the extent necessary and not constituting a disguised restriction on international trade. The Agreement encourages the use of international standards where they exist and identifies the Codex Alimentarius Commission (CAC) food standards, guidelines and other recommendations as consistent with the provisions of SPS. Where a WTO member considers that a higher level of sanitary protection than afforded by Codex is necessary, it will have to produce scientific evidence based on valid risk assessment techniques.

The Agreement on TBT is concerned with the technical regulations on traditional quality factors, counterfeit practices, packaging, labeling, other than the standards covered by the SPS Agreement imposed on countries but

Box 4. Catch certification, Catch documentation and related documentation schemes

Catch certification refers mainly a certification scheme of the European Commission (EC)'s regulation 1005/2008 which came into force on 1 January 2010 and requires imported fisheries products entering the EC to be accompanied by a catch certification (Article 12) validated by the competent authority of the flag state of the vessel where the fish was caught. Indirect imports to the EC must be accompanied by additional traceability documentation provided by a third country. The scheme places strong emphasis on checking, inspection and verification activities. However, these requirements are not linked to the food-safety traceability and certification requirements applied to the same products.

"Catch documentation" in general refers to schemes established by Regional Fisheries Management Organizations (RFMOs) requiring documentation to accompany particular fish and fish products through international trade by identifying the origin of the fish for the purpose of determining levels of unreported fishing. There are two main types concerned under these scheme which are catch documentation schemes and trade documentation scheme.

One key difference between these types is that "catch certifications" are issued at the point of harvesting and cover all fish to be landed or transshipped while "trade documents" are issued only with respect to products that enter international trade. Both types of documents contain information relating to the fish in question, although catch certifications contain more comprehensive data. The terms "catch certification", "catch documentation" and other related terms have not been consistently applied in international practice. However, those schemes have the principle to combat IUU fishing and those documents accompany the fish through trade.

Considering that multiple formats required by each certification body may create confusion and burdensome administration and paperwork placed on operators/exporters, harmonization of these schemes would create incentives towards compliance, would promote international trade in fish products and would reduce deceit possibility or fraud. However, such catch documentation scheme should align with those of relevant RFMOs and the EC Catch Certification.

In Southeast Asia, there is a concern on the need to develop a common catch documentation scheme for the region that complies with those of the RFMOs' and EC's requirements, in order to facilitate intra-regional trade of fish and fishery products. Indonesia, for example, currently is a member of the Indian Ocean Tuna Commission (IOTC) in July 2007 and the Commission for the Conservation of Southern Blue Fin Tuna (CCSBT) in April 2008, has already adopted a catch certification scheme for tuna fisheries, which could be taken into consideration in the development of the Catch Documentation Scheme for the region. However, in the development and implementation of such common scheme, caution should be made as such scheme could adversely affect regional trade, particularly for countries that could not comply with the requirements of such scheme.

will not be more restrictive on imported products than on products produced domestically. Technical measures applied should not create unnecessary obstacles in international trade, have a legitimate purpose and the cost of their implementation should be proportional to the purpose of the measure. If the proposed measure is considered to violate the provisions of any of the two Agreements, it can be challenged and brought before the WTO dispute settlement mechanism. These agreements balance the competing demands for domestic regulatory autonomy and the global harmonization of product standards. At the same time, the agreements attempt to prevent standards from becoming a protectionist device.

The issues underlying the causes of unsatisfactory conditions in food quality and safety control in food trade include complexity of market systems, as well as the interaction and cooperation between the industry and government on food safety control matters. Several concerns have been raised by the ASEAN countries with regards to the application of those Agreements (**Box 1**).

In line with the imperative for accelerated economic integration towards the realization of the ASEAN Economic Community in 2015, the adoption and implementation of the new ASEAN Trade in Goods Agreement (ATIGA) effective in May 2010 which contains new obligations in both the SPS and TBT areas would facilitate and strengthen

intra-ASEAN trade. Under this Agreement, ASEAN has obligated its SPS related-activities in line with international standards and would explore additional opportunities for intra-ASEAN cooperation. For the TBT agreement, where applicable, ASEAN also obligates its technical regulations and conformity assessment procedures to be aligned with international standards and practices without sacrificing trade in the ASEAN. However, technical and financial assistance are still necessary to match the requirements imposed by SPS and TBT Agreements especially the insufficient capacity to assess the scientific justification of importing countries' SPS requirements, to undertake risk assessment and demonstrate any equivalence.

Fisheries Subsidies under the Agreement on Subsidies and Countervailing Measures (SCM)

With the deteriorating trend of the fishery resources globally, various international organizations are attempting to advocate the world scenarios in protecting these resources and discontinuing any actions that would threaten their sustainability. Fisheries subsidies become one of the global agenda discussed at WTO negotiations. A number of questions have been raised with regards to the financial support from governments to the fisheries sector, the incentives of which had not helped in achieving sustainable fisheries but seemed to encourage over-fishing activities. Thus, fisheries subsidies had been considered as linkage that contributes to over-exploitation of fishery resources.

The Doha Ministerial Conference in 2001 launched the negotiations to clarify and improve the WTO disciplines on fisheries subsidies, and during the Hong Kong Ministerial Conference in 2005, there was broad agreement on strengthening those disciplines especially the appropriate and effective Special and Differential Treatment (S&DT) for developing and least-developed Members which should be made integral part of the fisheries subsidies negotiations. The Chair of Negotiating Group on Rules (NGRs) circulated in November 2007 the Draft Consolidated Chair Texts of the Anti-dumping and on Subsidies and Countervailing Measures (AD and SCM) which includes disciplines on fisheries subsidies. Since then, a number of proposals pertaining to the Draft Consolidated Chair Texts have been submitted to the Chair especially the proposal on the “Need for Effective Special & Differential Treatment for Developing Country Members in the Proposed Fisheries Subsidies Text” submitted by India, Indonesia and China. The progress of the discussion has extended the disciplines on the prohibition of certain forms of fisheries subsidies to undertake further detailed work for appropriate and effective S&DT.

As such, trade negotiations in fisheries could be even more complex than in agriculture as the specificities of the sector are often overlooked. Among the specificities, the renewable nature of the resources and the question of property rights had been most manifested. These issues will again surface when the question of access to the resources and of the protection of the small-scale fisheries is dealt with. Many developing countries do not have the capacity to be active in so many fronts, especially that some countries do not have permanent representations in the WTO in Geneva and thus, would require profound assistance to be successful in those negotiations. In the past, only representatives from trade or from foreign affairs with inadequate information on the difficulties of implementing fisheries subsidies attended the negotiation rounds. With issues on fisheries raised during the negotiations, the consequent relationship between sustainable fisheries management and trade liberalization could receive less attention to some extent.

Besides, the requirements that would enable developing countries to grant fisheries subsidies in the Chair’s Text seemed too stringent and that many of such requirements would be impossible to fully comply with at this time. Such concerns had been discussed among the ASEAN-SEAFDEC Member Countries through various consultations and meetings in the last few years. The ASEAN regional position on fisheries subsidies is summarized in **Box 2** while the progress on the negotiations on fisheries subsidies is summarized in **Box 3**.

CITES issues

With the aim of ensuring the international trade in specimens of wild animals and plants without any threats to their survival, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is an international agreement entered into force in July 1975. There are currently 175 Parties including all countries in Southeast Asia. CITES works by subjecting international trade in specimens of selected species to certain controls. All import, export, re-export and introduction from the sea of species covered by the Convention has to be authorized through a licensing system. The species covered by CITES are listed in three Appendices, according to the degree of protection they need. Appendix I includes species which are threatened with extinction; Appendix II includes species which are not considered threatened with extinction but may become so if their trade is not regulated, while Appendix III includes species which are not considered threatened with extinction, but are under special management in certain countries.

CITES is one of the important issues for trading of international and regional aquatic species since any goods which may be wildlife products or even live animals controlled by international treaties must be required to have special permits to export, import, and re-export the items legally. Without necessary permits, those goods are subject to seizure and forfeiture, and the importers/exporters are liable to prosecution. In order to secure trade-flow of such species, there are more concerns on the listing of commercially-exploited aquatic species into the Appendices of CITES. Many aquatic animals of economically importance have been increasingly proposed for listing in the Appendices, *e.g.* tuna, humphead wrasse, sea horses, and sharks.

The number of proposals related to commercially-exploited aquatic species submitted to CITES are still rising, which are pushed forward by environmentalists and developed countries. Most pressure points to the species that are highly



Box 5. FAO Technical Guidelines on Aquaculture Certification

The increasing importance of aquaculture in providing fish supply for human consumption, has led to a number of aquaculture certification schemes which were established to ensure responsible aquaculture operations and product safety for human consumption. The guidelines, after four years of discussion and debate among governments, producers, processors and traders, were adopted by the FAO COFI in February 2011. As non-binding in nature, the guidelines cover animal health and welfare, food safety, environment integrity and socio-economic aspects associated with aquaculture.

The use of the guidelines will help the public and private standards to work in the same direction, reducing pressure on non-tariff barriers. During the discussion at the Regional Technical Consultation on International Fisheries-related Issues (2011) in January 2011, it was suggested that issues related to social aspects in the technical guidelines should be left under the purview of the International Labor Organization to avoid duplication of efforts. There are also concerns on the possible increased production costs resulting from the adoption of the Guidelines and under environmental integrity. The concerns should be made on the effect of the creation of trade barriers when exporting aquaculture products. Therefore, the possible assistance from FAO and developed countries in the adoption of the Guidelines should be explored.

Box 6. Traceability

The Codex Alimentarius Commission (2004) defines traceability or product tracing as “the ability to follow the movement of a food through specified stage(s) of production, processing and distribution”. Traceability makes it easy to pinpoint the source of a food safety problem very quickly. For contamination in a particular area, authorities can quickly determine exactly where the contaminated products originated. Without traceability it can take weeks to find the source of the problem. Lengthy food-safety scares can result in large recalls, unnecessarily discarded food and reduced consumer confidence. Traceability systems are basically record-keeping systems and the concepts generally used to distinguish theoretically between different kinds of traceability systems (Codd, *et al.*, 2008). Internal Traceability is traceability of the product and the information relating to it, within the company. Internal traceability systems are also aimed at productivity improvement and cost reduction. The “one step forward and one step back” approach articulates the required state at each link in the chain knowing where the products come from and where they are delivered. Chain traceability is information on the origin of materials and parts, processing history, and the distribution and location of the product at various points in its production.

By using traceability measures (ICTSD, 2006), regulators seek to: identify unsafe products that can be withdrawn and distinguished from post market safety aspects; provide consumers with information on quality *e.g.* nutritive or medical claims and air practices; comply with security aspects of food marketing such as those that fall under the US *Bioterrorism Act*; and achieve business management goals associated with quality controls, business partnerships, production and distribution and industry integration. Recently, governments and organizations around the world have also been developing different systems on seafood traceability *e.g.* TraceFish (EU), TraceShrimp (Thailand). For example, TraceFish, the short title for the “Traceability of Fish Products”, was the project funded by the European Commission. The objectives were to bring together companies and research institutes to establish common views with respect to what data should follow a fish product through the chain from catch/farming to consumer. The main outputs were three voluntary consensus-based standards for recording and exchange of traceability information in the seafood chains including Farmed Fish Standard, Captured Fish Standard and Technical Standard (TraceFish, 2011).

In order to achieve full traceability for the entire food industry, it must have traceability system of the products in the whole supply chain. Meanwhile, the costs associated with technical compliance to these tracing systems are often high and would be economical in large volume production and exports. These costs normally paid by exporting countries, relatively create problems and difficulties in accessing international market by exporting countries where small-scale and artisanal fisheries are the main contributors. During the 12th Session of the COFI Sub-Committee on Fish Trade, 2010 it was agreed that traceability initiatives were useful tools to verify the integrity of the supply chain however, recognized that the traceability requirements for food safety were somewhat different from those linked to sustainability. Therefore, it was suggested that FAO should have an ongoing role in providing technical assistance to countries implementing traceability systems or seeking to integrate their traceability systems. FAO should also monitor the technical developments and assess their applicability in traceability systems (FAO, 2010).

In addition, the SEAFDEC Program on “Traceability for the Aquaculture Products in the ASEAN region” implemented from 2010-2014 aims to provide a platform for the sharing of information and experiences among the ASEAN Member Countries on traceability systems to better enable the regional aquaculture industries to implement appropriate traceability systems for aquaculture products and to meet international traceability requirements in the network of aquaculture production, marketing, and trade.

harvested without proper management. There are different opinions between resource management organizations and wildlife conservation organizations debating during the past decade in this forum. Since Southeast Asian region is considered as an area with diverse commercially-exploited aquatic species, close monitoring on the issues should be made. However, since lack of scientific data had been noted especially on shark production and identification of shark species, countries in the Southeast Asian region may face the difficulties in the debates and negotiations on the inclusion of such species into the Appendices.

In the region, deliberations on the issues have been carried out through several fora and it was agreed that the listing of commercially-exploited aquatic species to CITES Appendices should be done under the purview of competent organizations like FAO. An FAO *Ad-hoc* Advisory Panel for CITES was therefore established in order to review the listing of commercially-exploited aquatic species and to provide the technical/scientific advice, which could also incorporate the relevant technical/scientific information from other relevant Regional Fisheries Bodies including SEAFDEC.

Among the recommendations for Southeast Asian countries are priority areas, *i.e.* improvement of data collection on sharks at the national level in order to improve compilation of fishery statistics and information on sharks and rays in the region (*e.g.* CPUE, stock assessment, population dynamics), and implementation of HRD activities on species identification of major shark species in the region as well as to continue monitoring the issue and try to come up with relevant information as basis for discussion and formulation of common/coordinated position among the Member Countries.

Voluntary Instruments

With different features from the abovementioned measures, voluntary instruments are known to be sound policy

options and could be associated with the market-driven measures. These voluntary instruments are concerned about the awareness of consumers on safety and quality of fish and fisheries products while embracing the context of ecological integrity underlining the need to address the sustainable use of the resources and ecosystems. Such measures have motivated the fisheries industry and markets to reconcile credible certification schemes to support responsible and sustainable fisheries as well as to maintain international and regional trade.

The initiatives of the recent measures are now shifting towards market-driven standards and the need for consumers' acceptance for fisheries products. Several standards and certification schemes have been developed and introduced which are mostly regulatory and voluntary

Box 7. Eco-labeling

Eco-labeling was first publicly promoted by Unilever PLC/NV and the World Wide Fund for Nature (WWF) at their Marine Stewardship Council (MSC) initiative in early 1996 (FAO, 2011). The failure of traditional governance structures to successfully implement sustainable fisheries management policy has created a niche for environmental non-governmental organizations to play an active role in drawing public attention to unsustainable fishing practices around the world and bringing pressure to bear on governments and RFMOs entrusted with fisheries management to implement more conservation-minded and sustainable measures (Shelton, 2009). Eco-labeling issues have become a special interest in the international fish trade forum which viewed eco-labeling as a potential tool to stimulate more responsible fisheries and aquaculture practices and hence improving sustainability. Whilst the eco-labeling principles are consistent with the sustainability concepts, there are however major concerns given to its impacts on barriers to trade due to compliance cost and/or lack of capacity to comply (where there is a strong demand for labelled products) as well as burden of compliance particularly on small-scale producers.

The SEAFDEC-Sida project has since the SEAFDEC Council meeting in Brunei Darussalam in 2006 worked towards the aim of developing a regional strategy regarding eco-labeling. In this effort, consultations and an expert meeting on the role of governments has been held. The results emphasized that the government has several important roles to play, particularly when it comes to being pro-active and the prerequisites for opening up for labelling and certification (food safety, infrastructure, combat illegal fisheries, market access etc.) However, the overall impressions about eco-labeling (Bjerner *et al.*, 2006), which are the main cause of hesitation in adopting eco-labeling, and the general perceptions about eco-labeling include: Eco-labeling is seen as a regulation imposed by importing countries to discriminate ASEAN products; Eco-labeling criteria is not practical for multi-species fisheries in ASEAN; Eco-labeling market is not guaranteed, neither is the premium price; and Costs associated with certification systems can be a major barrier especially for small-scale producers.

However, the study found that there are national eco-labeling schemes in some countries which could be adopted or adjusted to fisheries and aquaculture products as well as the concern on its potential to add value on traditionally produced products and to facilitate market access.

Box 8. Marine Stewardship Council Initiative

The initiative led by *Marine Stewardship Council (MSC)* is to provide support on certification, which is regarded as market incentive. The MSC became an autonomous, global, non-profit organization in 1999 whose role is to recognize, via a certification program, well-managed fisheries and to harness consumer preference for seafood products bearing the MSC eco-labeling of approval. The MSC has established a process for third-party certification of fisheries or fish stocks as well as for fishing practices. It recognizes that a sustainable fishery should be based on three principles: (1) maintain and recover healthy populations; (2) maintain integrity and diversity of ecosystems which the fishery depends; and (3) maintain and develop an effective fisheries management systems including compliance with relevant local and national laws and standards and international understandings and agreements (MSC, 2010). Its eco-labeling program is fully consistent with the guidelines for eco-labeling of fish and fishery products developed in 2005 by the Food and Agriculture Organization of the United Nations (FAO).

The greatest challenge for MSC, however, has been certifying small-scale tropical fisheries. The first small-scale tropical fishery from a developing country to be certified to MSC was the rock lobster fishery in Baja California, Mexico, in 2005. The certification expired in 2009, and is now under reassessment. So far, MSC has certified the hard clam fishery of Vietnam which is the only case of a tropical fishery certified in the Southeast Asian region (MSC, 2011).

During the Regional Technical Consultation on Adaptation to a Changing Environment in November 2010 in Bangkok, Thailand, the RTC mentioned that as MSC is not universal standards therefore, it is not possible for MSC to modify its standards to suit any particular region. However, in order to meet standards/requirements, the region could emphasize its attempts to: improve fisheries management; implement harvest strategies and harvest control rules; support catch documentation scheme and data collection; and support traceability systems.

based on the requirements of importing countries. The voluntary instruments elaborated in this paper include measures such as catch certification, the FAO Technical Guidelines on Aquaculture Certification, Traceability, Eco-labeling, and the Marine Stewardship Council initiatives.

Conclusions

In order to strengthen fisheries trade in the Southeast Asian region and beyond, it is necessary to ensure that the various measures and instruments imposed by importing countries are regularly examined in order that such requirements do not comprise the unnecessary barriers to trade. In addition, the regulatory requirements for food safety and the general voluntary schemes had encouraged many exporting countries to look into voluntary labels or certifications allowing producers and exporters of fish and fisheries products to target specific segments of consumers, and thus gaining a competitive advantage. Furthermore, the criteria on environmental sustainability and social stability should be viewed from the aspect of gaining increased access to new markets.

Although the growing global concern on environmental status, including climate change, human rights, social well-being also comprise the more stringent requirements of importing countries, such concern should also be considered from the advantage of tracing the quality of the products through the whole production chain. Therefore, in order to ensure the effectiveness and credibility of the production processes from catching the fish to processing and transporting, non-voluntary schemes should be considered and complied by the countries, and mainstreamed with their national regulations. Considering that the ASEAN countries are main exporters of fish and fisheries product to the world market, the countries should keep track of the developments of the various schemes, measures and instruments especially those which are binding with respect to sustainable fisheries and environmental practices. In this way, the countries could secure the benefits from fisheries trade as well as ensure smooth intra-regional-international trade and at the same time promote the sustainable utilization of the fisheries resources.

References

- ASEAN Secretariat website (www.aseansec.org), accessed on 15 March 2011.
- Bjerner, M., M. Boonyaratpalin, N. Wennberg and R. Mungkung. 2006. Study on Eco-labeling of Aquatic Products: General view and future considerations for the ASEAN region. Southeast Asian Fisheries Development Center. 21 pp.

- CCGP. 2004. Definition of Traceability/Product Tracing of Foodstuffs (prepared by France), Codex Committee on General Principles Agenda Item 6, CX/GP 04/20/6. Rome: Codex Alimentarius Commission.
- Coff, C., D. Barlingad and M. Korthals. 2008. Ethical Traceability and Communicating Food. The International Library of Environmental, Agricultural and Food Ethics, Vol. 15 2008, XXVI, 318 p.
- FAO. 2010. Report of the 12th Session of the COFI Subcommittee on Fish Trade, Buenos Aires, Argentina from 26-30 April 2010.
- FAO. 2010a. The Fishery and Aquaculture Statistics, 2010. Food and Agriculture Organization of the United Nations.
- FASOR. 2011. <http://www.fasor.com/iso25/> (accessed on 1 April 2011)
- <http://www.msc.org/track-a-fishery/certified/pacific/vietnam-ben-tre-clam-hand-gathered/unit-of-certification> (accessed on 30 March 2011)
- ICTSD. 2006. Fisheries, International Trade and Sustainable Development: Policy Discussion Paper. ICTSD Natural Resources, International Trade and Sustainable Development Series. International Centre for Trade and Sustainable Development, Geneva, Switzerland
- WTO. 2010. International Trade Statistics 2010, World Trade Organization.
- Marine Stewardship Council. 2010a. Fisheries Certification Methodology; 46 p
- Marine Stewardship Council, 2010. MSC Principles and Criteria for Sustainable Fishing, URL: <http://www.msc.org/documents/scheme-documents/msc-standards> (accessed on 30 March 2011)
- Pomfret, R. and Sourdin, P. 2009. Have Asian trade agreements reduced trade costs? *Journal of Asian Economics* 20: 255–268.
- SEAFDEC. 2010. Fishery Statistical Bulletin of Southeast Asia 2008. Southeast Asian Fisheries Development Center, SEC/ST/41, December 2010. 135 pp.
- Shelton, P. 2009. Eco-certification of Sustainably Managed Fisheries-Redundancy or Synergy? *Fisheries Research*, 100: 185–190.
- URL: <http://www.fao.org/fishery/topic/12283/en> (accessed on 30 March 2011)
- URL: www.tracefish.org (accessed on 30 March 2011)

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