There have been four major milestones in the history of aquaculture development: 1) the FAO Technical Conference on Aquaculture and Kyoto Declaration of 1976; 2) the Code of Conduct for Responsible Fisheries in 1995; 3) the Conference on Aquaculture in the Third Millennium and the Bangkok Declaration and Strategy (BDS) of 2000; and 4) the establishment of the United Nations Food and Agriculture Organization (FAO) Committee on Fisheries (COFI) Sub-committee on Aquaculture as the only international governmental forum for discussion of aquaculture development issues.

The Global Aquaculture Conference and Phuket Consensus 2010 will be the fifth milestone. The purpose of the conference and consensus is to 1) review the progress in addressing the Millennium Development Goals (via aquaculture) against targets set by the BDS, and 2) re-assess the priorities for international efforts to further the development of aquaculture for people and food. Among other things, it is proposed that Africa be regarded as a “least aquaculturally developed” region that needs priority treatment under international efforts to further develop aquaculture.

SPC and FAO jointly funded five SPC member country representatives to attend the conference, as well as the back-to-back 5th COFI Sub-committee on Aquaculture meeting held in Phuket, Thailand. The Pacific Island countries represented were Cook Islands, Fiji Islands, Nauru, Papua New Guinea and Tonga. This is a historic event because it is the largest-ever Pacific contingent that has participated in a COFI Sub-committee on Aquaculture meeting.

The idea for a Global Aquaculture Conference started with the Network of Aquaculture Centres of Asia-Pacific, or NACA (of which SPC is an associate member), and the government of Thailand in 2008. A Phuket Consensus document was drafted in advance for endorsement by the conference, which was attended by 650 participants. There were 41 scholarly presentations and 10 plenary lectures at the conference, during which 20 “expert panels” were also convened. A range of keynote addresses reviewed emerging trends and development progress over the last decade against the BDS pillars. In addition, a series of participatory discussions, led by the expert panelists, developed a set of recommendations for adoption as an annex to the Phuket Consensus.

The Global Aquaculture Conference revealed that aquaculture continues to be the fastest growing food production sector in the world, although the rate of growth is now decreasing. Millions of people worldwide derive their livelihoods from aquaculture, which is a vital means for helping to keep rural areas populated. Some unexplored opportunities remain for expanding aquaculture into new species (such as striped catfish), new environments (offshore aquaculture), and new techniques (culture-based fisheries and stock enhancement are still under-developed).

New challenges since 2000 include climate change. Aquaculture can be a major climate change adaptation and mitigation strategy. Compared with other food production sectors, aquaculture provides high-quality food (in terms of nutrition), and so is a major tool to counter the “hidden hunger” of nutrient deficiencies.

A range of needs for improved aquaculture development were highlighted during the conference, including better dissemination of aquaculture technologies to small-scale farmers, less dependence upon fishmeal for feeds, and better integration of small-scale aquaculture into global markets. Aquaculture governance needs further strengthening. Ecosystem-based approaches to aquaculture need to be adopted. Biosecurity capacity must be increased, and aquatic genetic resources must always be used responsibly and equitably. More work is needed on using “alien” species for aquaculture, by addressing knowledge gaps and through adopting principles and procedures such as risk assessment and a precautionary approach. To enhance aquaculture’s contribution to food security and poverty alleviation, issues of gender, youth and indigenous knowledge must be considered. It needs to be recognised that income generation through commercial aquaculture is a key element to food security through the creation of employment. Aquaculture statistics need to be improved, in particular, more information is needed along the value chain than just production values and tonnes.
In an after-hours side-meeting, FAO’s sub-regional office in Samoa and SPC jointly organised an “Evening of Pacific Aquaculture”, in which a group of international organisations were invited to hear Pacific Island participants explain their aspirations for aquaculture and the constraints they face. A representative of FAO’s sub-regional office provided an overview of issues arising from that organisation’s recent review of aquaculture in selected Pacific Island countries and territories (PICTs). Tim Pickering, from SPC, gave a short presentation that made a case for PICTs to also be considered a “least aquaculturally developed” region that needs to be given priority. The organisations present, led by FAO, responded that the Pacific is recognised as a region of great aquaculture potential and so is deserving of international support. There was agreement (in principle) to hold a high-level meeting in the Pacific in 2011 to explore ways that FAO can partner with SPC, NACA, the Southeast Asian Fisheries Development Center, Australian Center for International Agricultural Research, Australian Agency for International Aid, Japan International Cooperation Agency, WorldFish Center, and other relevant agencies to prepare a Pacific Regional Strategy and Workplan for strengthening international cooperation and involvement in regional aquaculture development.

With the adoption by the Conference of the Phuket Consensus, it was reaffirmed that the BDS will continue to provide guidance for responsible aquaculture development. Overall, progress has been achieved in line with the BDS principles. The Phuket Declaration now adds some newly emerging issues not considered in the BDS. The international aquaculture sector takes BDS into consideration and uses it to guide its actions. The Phuket Consensus 2010 is a consensus of the conference only, and is not binding, but like the BDS it will be enormously influential.

The FAO COFI Sub-Committee on Aquaculture reports to the biennial FAO Committee on Fisheries and is the means by which FAO is mandated to set priorities for assisting member states in the area of aquaculture food production. Participation by Pacific FAO members has, in the past, been scanty, although an unprecedented five SPC members were represented at this 5th session of the sub-committee.

Meeting participants heard that increased quantity of fish could, in the future, only come from aquaculture and not from fishing. Further, it will have to come from mariculture because of limits on land-based water resources. Offshore aquaculture is predicted to be a new and emerging sector for which governance arrangements may need elaboration under international law. Good governance of aquaculture is essential to ensure sustainability in accordance with the FAO Code of Conduct for Responsible Fisheries, and to avoid biodiversity problems. Climate change and variability represents a major challenge. Certification of food safety of aquaculture products will be increasingly important to reassure consumers.

FAO draft Guidelines on Aquaculture Certification had been prepared to help members assess the implications of the profusion of private certification schemes that have mushroomed in the fisheries and aquaculture sectors. The draft guidelines proved controversial however, because of concerns by some members that certification may discriminate against small-scale farmers or could be used to erect trade barriers. Considerable work was done to reach a compromise wording that, in the end, no one at the meeting was 100% satisfied with, indicating that whatever wording is adopted, will need to be skillfully written.

Biosecurity was a key theme of the conference, with requests made for assistance with strengthening national capacity and policy frameworks for implementing the Code of Conduct for Responsible Fisheries, and measures addressing biosecurity and aquaculture development. Proper use of aquaculture genetic resources was emphasised, particularly with regard to countries accessing and sharing benefits from such resources. An emerging issue for member states is that “alien” species are often being wrongly synonymised as “invasive” species. Contradictory dialogues in food security and biodiversity are confusing policy-makers. Views were expressed that aquaculture species are no different from other agricultural species that keep people from hunger, so should not be treated any differently. Meeting participants also heard that the aquaculture of alien species urgently needs appropriate guidelines to be developed that will allow governments to make considered decisions.

Other key issues in which Pacific Island states made interventions, included climate change, offshore aquaculture governance, and revised international procedures for aquaculture statistics. Several requests were made by members, including those from the Pacific, for capacity-building in the area of statistics, and for common standards on statistical guidelines. FAO noted that regional organisations such as SPC and NACA have been actively involved in the ongoing FAO aquaculture statistics review process. One achievement is the recent agreement that ornamental fish be included in future statistics, notwithstanding FAO’s primary focus on food items, because of the economic importance of ornamental fish to rural livelihoods in several regions.

At the meeting, the five Pacific countries acted as a “bloc”, in which each country’s intervention was clearly presented as being made on behalf of other Pacific Island countries. The united stance of Pacific Island nations was a conspicuous feature of their attendance; so much so that by day two, the meeting began to refer to them as “the Pacific Islands Group”. Afterward, the central Asian states (e.g. Azerbaijan, Kazakhstan) began to adopt a similar approach, using similar language as the Pacific states when making their individual interventions. At this COFI sub-committee meeting, some important markers were laid by Pacific Island representatives to help guide FAO’s work in aquaculture over the next couple of years.