## FAO and Aquatic Animal Biosecurity in the Pacific Islands

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It is only in recent years that animal **⊥**aquatic biosecurity in the Pacific Island region has become one of the main agenda in aquaculture development. In the past, several opportunities highlighted and discussed aquatic animal movements (e.g. introduction and transfer of exotic marine species, e.g. giant clams, trochus and other molluscs) and aquatic quarantine capabilities and regulations. These include regional meetings organized by the Secretariat of the Pacific Community (SPC, formerly the South Pacific Commission) in 1985, 1994 and 1999, the World Animal Health Organisation (OIE) in 2003, and the Pacific Islands Regional Ocean Policy Forum in 2004 (SPC, 2003)1. Despite discussions concerning aquatic animal movements at the regional level, appropriate national policies on aquatic animal movements have not been in place in countries of the Pacific region. The Pacific Island nations are very rich in natural aquatic resources, strongly unique in their abundance of seafood and possession of pristine beaches, rich mangroves and beautiful coral reefs. A strong regional biosecurity programme will be needed to protect biodiversity and these natural tropical splendor.

To overcome the lack of technical capacity and infrastructure at national level to implement biosecurity regimes for aquatic

organisms, the establishment of a Regional Aquatic Biosecurity Programme was proposed by SPC and endorsed by the SPC Heads of Fisheries Meeting in 2003 (SPC, 2006<sup>2</sup>, 2007<sup>3</sup>). This aquatic biosecurity programme was presented during the Regional Workshop on **Implementing** the Ecosystem Approach to Coastal Fisheries and Aquatic Biosecurity organized by SPC in New Caledonia from 28 October to 2 November 2007, participated by senior government officials from the fisheries, environment, quarantine and veterinary agencies and aimed at cross-sectoral dialogue to better understand how global commitments for biosecurity can be implemented at regional and national levels. This workshop was supported by FAO/SAP and FAO/FIMA.

In line with the above-mentioned regional initiatives and dialogue, FAO responded to formal requests Micronesian countries (Federated States of Micronesia (FSM), the Republic of Marshall Islands (RMI) and the Republic of Palau) to strengthen their national capacities to assess the risks in aquaculture development through its Technical Cooperation Project (TCP) resources. sub-regional **TCP** project (TCP/RAS/3101 Sustainable aquaculture development in the Pacific Micronesia) was the first opportunity for FAO in the Pacific region to organize a workshop on risk assessment and health management in Koror, Palau, in July 2006. Main topics in the workshop included an overview of risk in aquaculture development, introductions and transfers of live



The national workshop on risk assessment in aquaculture production held at the Ministry of Resources and Development (R&D), from 5-7 May 2008 was participated by 18 composed of representatives from MIMRA, Ministry of R&D, Office of Environment, Policy and Planning Coordinating, EPA, bi-lateral technical cooperation agency, the College of the Marshall Islands, NGOs and the private sector.



aquatic animals in the Pacific, and risk analysis for movements of live aquatic animals.

Further consultation with the Government of RMI, a national workshop on risk assessment in aquaculture development was conducted in Majuro, the Marshall Islands, in May 2008 under the TCP Facility project (TCP/MAS/3101 Risk assessment in aquaculture development in the Marshall Islands). This project was formulated in line with one of the recommendations on national capacity development as a priority in the region by the 7th Meeting of FAO South West Pacific Ministers for Agriculture held in Majuro in May 2007. The workshop was timely conducted during the period of consultation to address a central topic concerning the introduction of grouper and cobia to the Marshall Islands at the newly established Australian aquaculture farm, Good Fortune Bay Fisheries, Ltd., as well as an introduction of grouper under the Taiwanese International Cooperation and Development Foundation (ICDF, Taiwan Fish Farm). The workshop provided an overall perspective of risk analysis as a decision making tool, an overview of the process, the different risk sectors in aquaculture production, its application to aquaculture, and a better appreciation of what may be lacking in the recently concluded environmental impact assessment (EIA).

Currently, FAO/SAP is in the process of preparing a TCP Facility project (Risk assessment in aquaculture development in the FSM) in close cooperation with FAO/FIMA. Under the proposed project, a national workshop on risk assessment in aquaculture will be conducted in Pohnpei late 2008. It is also planned that under this project facility, a risk analysis training course material will be prepared and pilot-tested during the FSM workshop. It is anticipated that such material will be useful to concerned staff to further build national capacity including capacities of other concerned agencies/institutions on risk assessment. It is envisioned that staff from RMI will also participate in this workshop which can pave the way for initial networking (to exchange information and experiences) and building regional capacity on aquatic biosecurity.

The knowledge gained in understanding and applying risk analysis starting from the Palau workshop (TCP/RAS/3101), the Majuro workshop (TCP/MAS/3101) and the proposed Ponhpei workshop (late 2008) will provide perspectives on the local situation and specific capacity building needs in this region that will assist in better formulating a possible future aquatic biosecurity framework for the Pacific Islands.









A giant clam holding and raising facility in Majuro Island features a number of different species and sizes of giant clams for the aquarium market. Four species of Tridacna clams under cultivation include Tridacna maxima, T. squamosa, T. crocea and T. gigas. The farm operates with open flow growout systems in which fresh seawater is continuously pumped through. RMI (Majuro Island) is an ideal location for growing clams because of grow-out space and broodstock availability.

<sup>&</sup>lt;sup>1</sup> SPC. 2003. SPC-HOF guidelines for the introduction and translocation of aquatic organisms for aquaculture and culture-based fisheries, Third SPC Head of Fisheries Meeting, Working Paper No. 8, 7 pp.

<sup>&</sup>lt;sup>2</sup>SPC. 2006. Project pre-proposal: establishing aquatic animal biosecurity for responsible aquaculture and fisheries development in the Pacific region, Fifth SPC Heads of Fisheries Meeting, Information Paper No. 2, 3 pp.

<sup>&</sup>lt;sup>3</sup> SPC. 2007. Project pre-proposal: establishing aquatic animal biosecurity for responsible aquaculture and fisheries development in the Pacific region, SPC Regional Workshop on Implementing the Ecosystem Approach to Coastal Fisheries and Aquatic Biosecurity, 21 pp.