

## ■ NEW PUBLICATIONS FROM SPC'S DIVISION OF FISHERIES, AQUACULTURE AND MARINE ECOSYSTEMS<sup>1</sup>

### The future of Pacific Island fisheries

By Robert E. Gillett and Ian Cartwright

Fisheries are the most significant renewable resource that Pacific Island countries and territories (PICTs) have for food security, livelihoods and economic growth. As Pacific Island populations grow, the future benefits that these resources can provide will depend on how well we are able to balance the increasing demands on fisheries with the capacity of oceanic, coastal and freshwater fish stocks to sustain those harvests. Aquaculture's role in supplementing wild fisheries production is also a consideration.

This report considers the future of fisheries over a 25-year timeframe (2010–2035). It is intended to provide the basis for long-term strategic approaches to developing and managing fisheries at national and regional levels. The first part of the report provides a brief overview of the status of and trends in the region's fisheries, the major issues and challenges, and gaps that need to be addressed. The second part examines ways in which the contribution of national and regional institutions can be enhanced, and regional cooperation strengthened, to provide countries with the capacity and adaptability they need to address emerging needs and priorities.

While it is impossible to accurately predict what Pacific Island fisheries will be like in 2035, this study identifies and briefly describes the most likely significant factors driving change in fisheries, and their possible impacts. These factors were identified through discussions with Pacific Island fishery stakeholders and global specialists, and a review of the fisheries literature.

Access to the online version:

<http://www.spc.int/fame/en/component/content/article/59-future-of-fisheries-study>

### Management plan for the sea cucumber fishery of Yap State

By Magele Etuati Ropeti, Kim Friedman, Kalo Pakoa and Andy Tafleichig

The management plan for the sea cucumber fishery in Yap was developed in response to a request from the Yap State Marine Resources Management Division (MRMD) for technical assistance from the Secretariat of the Pacific Community's (SPC) Coastal Fisheries Programme. The SPC Coastal Fisheries Programme facilitated the process of developing the plan through wide consultation with resource custodians and industry stakeholders. Data from fieldwork in Yap were also incorporated. Scientific advice and relevant information on the fishery were provided on site to enable all parties to make informed management decisions.

Like most other small island states, Yap has limited land for agriculture development. However, it possesses a vast ocean area rich in marine life and fisheries resources, including sea cucumbers. Although sea cucumber species are not traditionally used as a protein source by Yap communities, the fishery has been increasingly harvested due to the high value of dried sea cucumber (*bêche-de-mer*) on the Asian market. Easy access and quick cash returns have seen the sea cucumber fishery become one of the most important sources of income for some coastal communities. Given the potential benefits for all communities and the likelihood that the fishery will collapse if present harvest rates continue without a management framework, a more fair and precautionary approach has become necessary to prevent unsustainable exploitation.

This plan provides a management framework that will enable the State Authority to guide the exploitation and harvesting of the sea cucumber fishery in Yap. The recommended management actions require close collaboration between government, resource owners, communities and agents to ensure sustainable utilisation and to optimise economic benefits for everyone.

Access to the online version: <http://www.spc.int/coastfish/>

### Guidelines for a community-based ecosystem approach to fisheries management

SPC's Coastal Fisheries Science and Management Section, in collaboration with the UN Food and Agriculture Organization and The Nature Conservancy, has produced a new publication entitled "A community-based ecosystem approach to fisheries management: guidelines for Pacific Island countries". These guidelines have been produced to describe how an ecosystem approach to fisheries management

(EAF) can be merged with community-based fisheries management (CBFM) in Pacific Island countries and territories (PICTs). This merger of approaches is referred to in these guidelines as the community-based ecosystem approach to fisheries management (CEAFM), and represents a combination of three different perspectives; namely, fisheries management, ecosystem management and community-based management. CEAFM is the management of fisheries, within an ecosystem context, by local communities working with government and other partners.

The main requirement for such a merger is the involvement of a broader range of stakeholders and access to the expertise and experience of several government agencies in addition to a fisheries agency. CEAFM is not seen as a replacement for current fisheries management but an extension that combines a high degree of community and other stakeholder participation to minimise the impacts of fishing and other activities on ecosystems. In addition to fishing activities, coastal ecosystems in many PICTs are affected by excessive shoreline development and by coastal waters that contain high levels of nutrients and silt.

CEAFM aims to involve the participation of community stakeholders to ensure that future generations of Pacific Island people will continue to have access to the benefits associated with sustainable fisheries and healthy ecosystems.

Access to the online version: <http://www.spc.int/coastfish/>

### **Solomon Islands Tilapia Aquaculture Action Plan 2010–2015**

Small-pond aquaculture of tilapia fish is identified as one of four top priorities in the Solomon Islands Aquaculture Development Plan 2009–2014, so now more detailed work is needed on this sector. The Solomon Islands Tilapia Aquaculture Action Plan 2010–2015 has been prepared to 1) set out a logical and structured pathway for sustainable tilapia aquaculture development in Solomon Islands, and 2) identify potential roles for partner agencies in supporting tilapia aquaculture and helping meet national needs for food security and sustainable livelihoods. The publication details what Solomon Islands needs in order to achieve their vision for a responsible and sustainable tilapia aquaculture industry for food security and income generation!

Access to the online version: <http://www.spc.int/aquaculture/>

### **Proceedings of the Regional Workshop on the Management of Sustainable Fisheries for Giant Clams**

These are the proceedings of a four-day workshop that involved technical consultation between a wide range of stakeholders, including government, private and public sectors, and specialists who are active in the production of giant clams for the global marine aquarium trade in the Pacific region. Attendance included representatives from American Samoa, Australia, Cook Islands, Federated States of Micronesia, French Polynesia, Fiji, Kiribati, New Caledonia, Palau, Papua New Guinea, Republic of the Marshall Islands, Samoa, Solomon Islands, Tonga and Vanuatu.

Access to the online version: <http://www.spc.int/aquaculture/>

### **A review of aquaculture in the Pacific Islands 1998–2007**

A provisional desktop review of aquaculture in the Pacific was carried out by the Secretariat of the Pacific Community (SPC) on behalf of its 22 Pacific Island member countries and territories in order to bridge an information gap. During the period 1998 to 2007 a peak value of USD 222 million was recorded in 1999 and in 2005, associated with high levels of pearl and shrimp, respectively. The maximum volume was 6,900 metric tonnes (t) in 2005. In 2007 the region's production was worth USD 211 million and volume was 5,300 t. Aquaculture has an important role in diversifying trade, increasing capacity for fisheries production, and contributing to rural development. One of the immediate challenges to overcome is to provide a suitable investment climate for private enterprises.

Access to the online version: <http://www.spc.int/aquaculture/>

<sup>1</sup> Documents produced by SPC's Coastal Fisheries Programme can be downloaded free of charge (in PDF format) from: <http://www.spc.int/coastfish/>.

To obtain paper copies, please contact the Fisheries Information Unit ([cfpinfo@spc.int](mailto:cfpinfo@spc.int)). Please note that paper copies are only sent for free to SPC member countries and territories.