

COASTAL FISHERIES MANAGEMENT SECTION

Sub-regional workshop on the ecosystem approach to coastal fisheries management held in Guam

A sub-regional workshop on the ecosystem approach to managing coastal fisheries in Pacific Island countries was held in Guam from 30 March–3 April 2009. The workshop was conducted for Micronesian countries and the northern Pacific region, and was jointly funded and coordinated by the UN Food and Agriculture Organization, SPC and The Nature Conservancy.

Like the sub-regional workshop conducted for the South Pacific region in Nadi, Fiji in 2008, the initiative was in response to needs identified by the “Pacific Islands Regional Coastal Fisheries Management Policy” (referred to as the Apia Policy), which calls for implementing the ecosystem approach to fisheries (EAF) management in Pacific Island countries and territories (PICTs).

Workshop objectives were to:

- further elaborate on concepts and principles to implement EAF;
- further familiarise PICs with EAF principles and practices;
- review priorities to implement EAF management practices in PICs, with an emphasis on coastal fisheries;
- review obstacles in implementing EAF management practices in the region and find ways to overcome them; and
- draft a programme of action for improving EAF implementation in PICs.

Eighteen participants from Guam, Federated States of Micronesia (FSM), Marshall Islands, the Northern Mariana Islands, and Palau attended the workshop. In FSM, the responsibility for managing coastal fisheries lies with each state;

therefore, six participants were representatives of the four FSM states and one was a representative of the national government.

The workshop covered a wide range of issues and processes needed for implementing EAF management in PICs, including (among others) EAF principles and processes, risk assessment and risk analysis, existing processes within countries, developing fisheries management plans consistent with EAF, and developing an EAF management strategic plan for PICTs.

The five-day workshop concluded with comments and recommendations for implementing the EAF management in participating countries, including:

- The EAF process is good but needs to be defined and applicable to the local context;
- It may be difficult to include communities in the process. Currently, the process is applicable to the manage-

ment/industrial level but needs to be redefined to address communities given the management, resource use and ownership of resources by communities.

- The FAO tool-kit for EAF needs to be adapted to the Pacific region.
- Other tools are available within the region, and these will enable stakeholders to formulate a process that is applicable in the respective country.
- Biologists and researchers also need to be aware of and involved in the EAF process.
- A data gap assessment will identify any available and relevant scientific and cultural information relating to EAF.



Participants debating and sharing ideas at the EAFM workshop in Guam.



Participants to the Guam workshop.

Tonga's national ecosystem approach to fisheries management workshop

The community-based ecosystem approach to fisheries (EAF) management workshop for Tonga was undertaken as part of SPC's continuing role in supporting national fisheries agencies with implementing an ecosystem approach to managing coastal fisheries. This initiative was prompted as a result of a directive from Pacific Island Forum Leaders to SPC to promote EAF management as part of fisheries management in the region and, an obligation by SPC's Coastal Fisheries Management Section to support Tonga's community-based fisheries management programme (CBFMP).

The workshop's main objectives were to build the capacity of Tonga's CBFMP staff, review Tonga's CBFMP, and incorporate EAF principles to current fisheries management programmes and practices.

With a wide range of representatives from government departments, non-governmental organisations and participating communities in the CBFMP, the workshop offered a consultative framework for developing an EAF management model to be implemented in Tonga. This model takes Tonga's cultural and traditional protocols into consideration.

The five-day workshop consisted mainly of presentations and discussions. Major presentations were delivered by Dr Michael King (consultant), Ueta Faasili (SPC's Coastal Fisheries Management Adviser) Etuati Ropeti (Coastal Fisheries Management Officer) and selected speakers from Tonga's Fisheries Division and the Department of Environment.



Participants to the Tonga workshop.

Developing an ecosystem approach to coastal fisheries management for Pakin Atoll, Pohnpei

"The model used to implement the ecosystem approach for the management of coastal fisheries in Pohnpei State is ours. It was developed by state authorities, community representatives and our partners" Donald David (Administrator for the Office of Fisheries and Aquaculture)

SPC's Coastal Fisheries Programme, in response to a request from the Pohnpei State Government (through the national government of the Federated States of Micronesia), assisted with developing a management programme for Pohnpei's coastal fisheries resources. A preliminary study to assess the local situation in terms of staff, resources, existing management efforts, and how SPC could assist was conducted in 2007. This was followed by a consultative workshop and an attachment programme for two officials from Pohnpei to SPC to develop a management model for resource management. Representatives from the State Gov-

ernment (Office of Fisheries and Aquaculture, OFA) and the Conservation Society of Pohnpei (CSP), a local non-governmental organisation, undertook the attachment. The model considered existing management efforts by CSP, community organisations and state partners. With financial assistance from AusAID to Pohnpei State (Office of Fisheries and Aquaculture) and major support from other partners, a resources management programme for Pakin Atoll was implemented.

Pakin Atoll is approximately 45 km northwest of Pohnpei. The atoll consists of 17 small islands and islets with a barrier reef sur-

rounding the group. The atoll has a land area of about 0.67 km². Five of the islets are inhabited, and the island of Nikahlep is the atoll's main centre. The atoll's lagoon is estimated to be 8.8 km², with the deepest part at around 100 m. The lagoon and surrounding coastal areas provide food and livelihood for the community and is considered to be one of the richest marine ecosystems within Pohnpei State. The atoll has an estimated population of 120 residents with the main sources of income coming from fishing, copra production and small-scale agriculture.

The atoll's community is a recipient of a pearl trial project

funded and run by the College of Micronesia Cooperative Research and Extension. The project works with island communities as a component of integrated economic development. The objective is to work on pilot pearl farms that will eventually be turned over to communities as income-generating activities. The trials provide a platform for community participation and “hands on” training in farming and grow-out operations.

FISHING AND STATUS OF FISHERY

In the past, the main fishing techniques used specialised spears, hooks, and lines made from plant materials, all of which were made in accordance with tradition. Fishing gear was blessed by community chiefs, with certain gear used for particular species and for specific occasions. For example, it was forbidden to fish at night for parrotfish — which was highly prized and had cultural significance.

The use of traps built of stone walls near the shoreline was one important fishing method used in Pakin. A fish school was driven through an entrance of the wall where they were then trapped within the wider end of the trap. The fish were kept inside the trap for days and were harvested for consumption on a daily basis and when the need arose.

Traps made of hardwood were also commonly used in the lagoon area. These traps were

baited and left in the water for several days. Fishers would selectively harvest certain fish for consumption.



Detail of a wooden trap commonly used in the past.



Remains of a stone trap.



Using an icebox while speafishing.

The introduction of “ice boxes” coupled with new, highly efficient fishing gear and techniques

resulted in a change in how people fished and their attitudes towards the marine environment. Traditional fishing practices have disappeared, and the uncontrolled harvest of some marine species is becoming noticeable in lagoonal areas.

With an increasing human population and a shift from a primarily subsistence lifestyle to a cash-based economy, coastal fisheries resources and coral reef ecosystems are being subjected to enormous pressure not only from the island community but the main island of Pohnpei. A rapid ecological assessment and market surveys recently conducted by CSP and OFA have revealed that coastal fisheries resources in the area are declining. Anecdotal reports also reveal a decline in most of the important fish and shellfish species around the atoll.

A COORDINATED APPROACH

With a request for assistance from the Pakin community, OFA and CSP sourced financial resources for implementing the programme. Experiences from existing community-based resource management programmes revealed a limitation on responsible authorities to undertake management activities. This is due mainly to the fact that some undertakings fall under the jurisdiction of other authorities and, therefore, a coordinated approach needs to be taken. This has resulted in the development of the Pohnpei State Project Team. The team

comprises representatives from various authorities such as OFA, CSP, Tonga's Department of Lands and Natural Resources, the Environmental Protection Agency and the local municipality. SPC's role is to facilitate the process and offer technical advice when needed.

DEVELOPING THE PAKIN FISHERIES MANAGEMENT PLAN

Through community consultations and discussions, fisheries problems (and their causes) as

well as management undertakings were identified. The authorities responsible for performing these undertakings were identified.

A Fisheries Management Committee was established to liaise with the project team and to coordinate community actions. The committee consists mainly of representatives from various community sectors.

Pakin's Fisheries Management Plan, which is now in draft

form, highlights the need to manage fisheries resources in a sustainable manner. The undertakings highlighted in the plan require the community to take the leading role, while members of the project team address these issues within their respective department or organisation. Some of the undertakings require the combined effort of the project team and some involve decision-making at the highest level of the state government. The project team provides the technical assistance and support for community activities.



Participants to the community consultations and workshops.

In the absence of substantive information or scientific assessment, the objective of the management plan is to impose sensible and locally relevant principles of a precautionary approach to exploiting coastal fisheries resources. The management plan also highlights some alternative income-generating activities to reduce the pressure on fishery resources.

SPC's Coastal Fisheries Programme will continue to assist in developing the final copy of the Pakin Fisheries Management Plan, while also providing technical support when required.



Members of the Pakin Fisheries Management Committee with the project team.