



News from the SPC Coastal Fisheries Management Section

Niue

Work to launch community-based fisheries management initiatives in Niue is underway, having started with initial groundwork in 2003 and early 2004.

The Fisheries Department of Niue asked the Coastal Fisheries Management Section of SPC to assess the possibility of establishing community-based coastal fisheries management. The preliminary assessment that the section then produced included a proposed plan of work and management model. It took account of key features of community-based management: that is, the people will make decisions, influence changes and set the direction in regard to the general management of coastal fisheries in Niue. The assessment also acknowledged the coastal fisheries management initiative of the International Waters Programme (IWP), which is under Niue's Department of Agriculture, Forestry and Fisheries and involves two of Niue's 14 villages. The proposed community-based management work will focus on the other 12 villages, but could include some collaborative work with the villages involved in IWP work. When work on this new project began in the first participating community in Niue, it also drew from information collected and work done by IWP in communities, to avoid duplication of efforts. During village-level workshops, additional participatory learning and action exercises will be used to collect further information on identified areas of concern, village development plans and other village-specific information.

Other information used in the assessment came from the Inshore Fisheries Management Plan for

Niue (Adams 2003) and a baseline study of Niue coastal resources (Fisk 2004). A national training of trainers workshop in August targeted fisheries officers, other government officers and community leaders. In Niue it is necessary to work with other organisations, community leaders and government departments given the limitations in human resources. Following the one-week workshop, a village management plan was developed in Alofi South, one of the major fishing communities in Niue. The community is now working with the Fisheries Department to implement some of the actions identified in its management plan. The Fisheries Department staff plan to introduce community-based management to the other villages in Niue as well.



In some parts of Niue, fishing is impossible because of the rugged nature of the shoreline.

Tuvalu community-based management work

Work on community based management in Tuvalu has started, with the preliminary survey and initial discussions and interviews conducted in October 2004. The Tuvalu Fisheries Department staff

assisted in the survey, arranging meetings, providing interpretation and helping with interviews. Backed by widespread enthusiasm and support, work on the project should continue in 2005.

Tuvalu already has in place some management initiatives. The Funafuti conservation area, established under a project funded by the Pacific Regional Environment Programme (SPREP) in 1997, is still in operation. In several documents and in interviews with people involved, the lack of a plan to guide work on the conservation area has been noted as a weakness in the establishment and running of the project. Nevertheless, the existence of the conservation area has over time made people aware of the need for management. Specifically, the initiative has motivated those in the outer islands to also set up some system of management. Fisheries Department staff were aware of requests from the islands to set up conservation areas. About seven of the nine islands were undertaking some form of management, ranging from imposing closed areas to banning certain types of gear. Restrictions in place were mostly within the boundaries of the lagoons. Discussions with government representatives and community representatives showed there was a general consensus for the need for management. Some older people recalled change in resource availability, abundance and distribution over the years. Reasons given for the decline included the growth in the human population, especially in Funafuti, and the increasing demand for fisheries products. Because the major source of protein is fish, fishing is an everyday activity, mostly done by men.

The Falekaupule Act, which came into force in 1997, also allows bylaws to be developed to assist the enforcement of any management initiatives implemented. This power is given to the Falekaupule, or island councils, consistent with the Act's purpose of formalising the devolution of powers from the central government to the Falekaupule. Under the Act, the Falekaupule can also put in place mechanisms for management and resource use where required. In addition, the Act gives islands jurisdiction over the immediate 12-mile zone.

Traditional institutions and linkages are still utilised in Tuvalu, and are especially strong in the

outer islands. On Funafuti the Toeainas are representatives of island councils. For community-based management, such institutions should be involved to maximum effect.

All islands have a community fisheries centre, with most operations subsidised by the government. People sell fish to the centres, which then sell fish locally before all surpluses are brought to the National Fishing Corporation of Tuvalu, which is the business arm of the Fisheries Department, for sale in Funafuti. Although reports and studies show that this system is uneconomic, it is still supported by government. Currently the Fisheries Department is trying to hand over responsibility for running the community fisheries centres to their communities. There was a lot of enthusiasm and support for putting in place some form of community-based plans for management of resources. Awareness and training were seen as very important before actual groundwork begins. The Fisheries Department has sufficient staff to undertake the work on management and there will be little need for any major input of funds before national training starts. For future work on management, SPC will operate within existing institutions and arrangements.



Traditional canoes are still commonly used in Tuvalu.

Training on fisheries management and statistics

A training workshop on fisheries management and statistics was held in Nadi, Fiji from 15 to 19 November 2004. The workshop, which was initiated and organised by the Coastal Fisheries Management Section of SPC in conjunction with

the Food and Agriculture Organization (FAO), was attended by fisheries officers, managers and statisticians from Pacific Island countries. It was held in response to a strategic plan for coastal fisheries management developed by Pacific Island countries and approved at SPC's third Heads of Fisheries meeting in August 2003. The strategic plan contains six goals:

- to enhance the capacity of fisheries agency staff in managing sustainable fisheries;
- to assist in collecting and analysing data;
- to assist countries with practical and enforceable fisheries regulations;
- to assist with the involvement of stakeholders;
- to assist in raising public awareness; and
- to assist in setting up marine protected areas.

One of several strategies proposed to achieve these goals was to organise regional training courses and workshops, particularly on practical fisheries management and fisheries statistics.

The Nadi training workshop was the first of a series to address this part of the Regional Strategic Plan. It was also the first workshop in which representatives from the United States and French territories and from independent countries had the opportunity to work together, thanks to funding support from FAO, the Commonwealth Secretariat and the Western Pacific Regional Fishery Management Council.

The regional training workshop on fisheries management and statistics had two goals:

- to enhance the capacity of fisheries agency staff to manage sustainable fisheries; and
- to assist fisheries agency staff in their efforts to collect, store, retrieve and analyse basic fisheries data and/or indicators to monitor the status of fish stocks.

These goals are part of the "Strategic plan for fisheries management and sustainable coastal fisheries in Pacific Islands", a document developed by SPC member countries and territories. It is the first initiative implemented under the Regional Strategy Plan since its endorsement at SPC's third Heads of Fisheries meeting.

Topics covered at the workshop included data collection and analysis, fisheries regulations, public awareness, the involvement of stakeholders, fisheries management, marine protected areas, aquaculture and the structure of fisheries agencies. All topics included extensive participant discussion and many included practical exercises in data analysis and fisheries management.

With financial support from the Commonwealth Secretariat to SPC, the Coastal Fisheries

Management Section planned the training workshop in close collaboration with the FAO Sub-Regional Office for the Pacific Islands in Apia, Samoa. The joint effort was encouraged by memoranda of understanding between the two organisations, which require them to work together in projects of common interest. Other assistance was provided by: the European Union (through PROCFish), which funded six participants; the Western Pacific Regional Fisheries Management Council, which funded the participation of United States territories; and SPC, which funded the participation of French territories.

At the workshop Mr Saimone Tuilaucala (Acting Director of Fiji's Fisheries Department, Ministry of Fisheries and Forests) delivered the opening address. He stressed the importance of fisheries resources in providing food security, economic development, employment and foreign exchange. A major challenge he identified is keeping a balance between fisheries development and management in order to sustain a fish supply for future generations. He emphasised the importance of coastal area management to food security and poverty alleviation, especially in rural areas. Challenges for Pacific Island countries include a growth in the human population, along with a corresponding increase in fishing effort and the use of overly efficient fishing methods. In addition, they face the complexity of dealing with multispecies fisheries, harvesting within sustainable limits, collecting information from resource users, raising awareness, and implementing legislation after proper consultation with stakeholders.

Mr Tuilaucala also stated that although there is huge potential in the tuna industry, it brings limited returns to the national economy. Despite the high value of subsistence fisheries, there has been little research and data collection in relation to them. Guiding principles for future work should include the involvement of communities (and traditional knowledge), government agencies (and scientific information), non-governmental organisations (NGOs), fishing industries and marketing bodies. Fisheries management involves the management of the users of fisheries resources. Mr Tuilaucala concluded with the observation that fisheries management is about managing the people who harvest the fish, rather than only those who look after fish stocks.

Dr Mike King, who was the main facilitator, coordinated most of the sessions, with topics in each covered by resource people. Discussions focused on threats to fisheries in Pacific Islands. Recent surveys suggest that causes of declining catches include overexploitation, growth in human populations, a shift from subsistence to commercial

fishing, the use of overly efficient and damaging fishing methods, and environmental degradation. Key environmental disturbances include the destruction of nursery areas (mangrove areas and corals) as well as siltation from coastal development and poor land management practices. Most fisheries agencies in the region have moved from an emphasis purely on development to a focus on development and management, thus the challenge lay in identifying threats and addressing management needs.

The session on statistics emphasised data collection. Countries were urged to make an effort to collect reliable and accurate data; collecting timely and updated data is particularly important. A wide range of uses are made of the data gathered from annual fisheries statistics questionnaires that are distributed to countries worldwide. For example, these data are used to compile the FAO annual statistics yearbook, FISHSTAT database, the Status of Fisheries and Aquaculture, Country Fisheries Profiles, Aquaculture Country Profiles, and National Aquaculture Sector Overviews.

For information to be useful for policy development, decision-making and responsible fisheries management, it is necessary to clearly understand why information is collected. Fisheries data and information can be used for assessment, for developing sound policies, for better decision-making, for tracking the performance of management plans, for planning, and for informing the public on the need to support management.

Some typical problems include poor quality of the information, limited or non-use of the information, and limited support for data collection. Such problems are caused by the difficulties in data collection, lack of capacity, a weak linkage between management objectives and information, lack of attention to socioeconomic aspects, and an invalid framework for a data collection system. One strategy to counter these problems that was proposed was a back-to-basics (why, what and how), logical approach. Fisheries data and information system should be guided by a country's information requirements.

Following a brief introduction on SPC's Pacific Regional and Oceanic Fisheries (PROCFish) project and its activities, a recently developed socioeconomic manual developed by PROCFish was presented. After these presentations, participants voted overwhelmingly to use the manual, with modifications. As a result of this vote, the PROCFish Section at SPC will meet the expressed need of Pacific Island countries for a simple method of assessing subsistence fisheries (includ-

ing an estimation of fishing effort). Participants were assured that there would be future training associated with the use of the manual. Participants also expressed a need for additional workshops designed for those with different levels of experience and noted that the practical exercises provided on the analysis of fisheries data were most useful.

The nature of subsistence fisheries, particularly in relation to how to involve owners and users of this resource in management, was discussed. For effective management, there is a need to consider traditional institutional knowledge, traditional skills, customary rules and emerging issues and how these affect fishing communities.

Many people in Pacific Island countries rely heavily on subsistence fisheries. Between and within the countries of the region, there are both similarities and differences, such as in length of fishing time, frequency of fishing, gender participation, and complexity of the fishery (commercialisation, target species, tourism, competition for resource use etc.). The subsistence fisheries in the Pacific Islands are based on many different species and fishing methods, increasing the difficulty of collecting catch and effort data.

Other presentations dealt with ongoing country assessments and fisheries surveys. Surveys discussed included a rapid statistics survey of fisheries in the Marshall Islands, and a village fishery survey and fisher creel survey in Samoa.

Types of controls that can be used to regulate fisheries were discussed at length. *Input controls* involve limiting the amount or type of fishing, such as by issuing fishing licences or restricting the use of certain fishing gears. *Output controls* involve controlling fish catches, such as by setting size limits and minimum mesh sizes on nets, or by rejecting female fish caught. An increasingly important need is to protect fish habitats.

Next was a discussion on enforcement of fisheries regulations and who should do it. Where fisheries officers are the enforcers, this role brings them into conflict with their primary role as data and information collectors. Public education to raise awareness of the need to manage resources is required; penalties and fines should be regarded as a last resort.

Mr Tuilaucala described legislation and the process followed to gain support for a new law from the Fiji Cabinet. He cited the example of the humphead wrasse, which 10 years of survey work in Fiji revealed to be a severely depleting species. He

noted the importance of consulting with different sectors (e.g. Fijian Affairs, Environment Department, NGOs) to ensure their support when a proposal such as banning fishing of humphead wrasse was submitted to the Minister for approval and presentation to the cabinet.

The development of management plans by communities is important in any management work. For community-based fisheries management specifically, communities develop and prepare plans, while the relevant government authority (e.g. Fisheries Department, Environment Department) facilitates the process.

A session on resource assessment and monitoring emphasised the need for scientific information in management. The multispecies and multi-method nature of fisheries makes management problematic; Western-style management approaches have had little success. Scientific assessment and monitoring should enhance existing community knowledge in management ventures.

Development of small to medium-sized enterprises was also presented as an essential component of coastal fisheries management and development.

The session on aquaculture looked specifically at the role of aquaculture in the management of fisheries, both in terms of re-stocking and of reducing pressure on existing coastal fisheries. One of the constraints against the development of aquaculture in the region is the lack of an aquaculture tradition in the Pacific, including the lack of associated legal frameworks, guidelines and national support. At the practical grassroots level, there is a lack of funds, capacity, seed sources, feed materials, marketing channels, and technical assistance and skills. Training in the culture industry, which differs significantly from the capture fisheries that most people are used to, is needed for fishers.

The importance of involving stakeholders (particularly fishers) in fisheries management was dis-

cussed. Fisheries co-management results in the ownership of management plans, as well as in greater compliance with rules and regulations. To involve stakeholders, extensive awareness work is needed so that people understand what the management initiative includes and so that communities are committed and can play their necessary role in the process.

Closing remarks were delivered by Mr Tuilaucala. He emphasised the importance of fisheries statistics and information in fisheries management. He said that the five-day meeting had been intense and had covered a wide range of areas and topics. The challenge was to apply the lessons learned to managing our declining resources. One of the key tools is catch and effort data, which provide baseline information on the state of our resources. In shifting effort away from fisheries, the importance of aquaculture cannot be overlooked. Although not covered in detail during the training, value-added processing is another area that needs to be supported and encouraged.

Mr Tuilaucala said that people in the Pacific have the answer to fisheries management; community participation is the key to workable management. With the shift from development alone to development and management, the focus in fisheries sector work has changed substantially. Now the emphasis is on conservation and reliance on communities is paramount.

References

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