

Vanuatu communities mobilise for sea cucumber management

Harvesting sea cucumbers is an important income-generating activity for coastal communities in the Pacific Islands region. In the Maskelyne Archipelago south of Malekula Island in Vanuatu, sea cucumbers are an important source of income, although heavy fishing pressure coupled with a lack of effective management measures have led to overexploitation of this resource. Fishers can still recall a time when sandfish were plentiful in front of their villages prior to the fishing “boom” of the 1990s. The situation is different today because sea cucumbers are continuously harvested to supply the lucrative beche-de-mer trade.

Maskelyne communities have been managing their marine resources through the customary practice of a *tabu*, but in 2007 they were led to believe that the reseeded sea cucumbers would help restore sandfish populations. Juvenile sea cucumbers imported from outside were reseeded on Maskelyne reefs in exchange for harvesting wild stocks for the beche-de-mer trade. Several months later, the community discovered that their wild sandfish stock had been fished out. Such pressures are a challenge to the effectiveness of local management. On the other hand, commercial fishing activities are beyond the capacity of local management, an area best left to national and provincial fisheries authorities. However, the sea cucumber fishery has not been well regulated, leaving communities exposed to external market pressures. Maskelyne communities are relieved that the government has stepped in to enforce the 2008 ban on the sea cucumber fishery as they have little power to control buyers.

As the end of the five-year ban approaches, Maskelyne communities are wondering whether their sea cucumber resources have recovered from the previous harvest and are ready to be fished again. The Vanuatu Fisheries Department will need to decide before January 2013 whether to lift the ban or extend it, and this decision will be based on information from resource assessments. SPC is assisting the Vanuatu Fisheries Department with training and development of a resource monitoring system.

Resources assessment surveys and training

The first training provided by SPC was completed in June 2011. Five participants from Vanuatu's Fisheries and Environment departments, two members of the Maskelyne community, and one officer from the Solomon Islands Ministry of Fisheries and Marine Resources applied their newly acquired knowledge and skills to complete a comprehensive sea cucumber resource survey in the Maskelyne area. Although only two community participants were invited to join the team, many more community members, including chiefs, were keen to follow the team each day and provide valuable information on habitats, species aggregation and fishing grounds.

Preliminary results of the resource surveys

Preliminary survey results were then presented to the leaders and community members of Peskarus, Lutes, Bellonk and Avok islands. Presentations were given on the number of sea cucumber species present, their distribution, abundance (in terms of numbers recorded) and sizes, and comparative results of a protected area versus a recently fished area. The highlight of the presentation was the status of sandfish stocks. Community leaders were happy to learn of the recovering population of golden sandfish (*Holothuria lessoni*), a species that has not been seen for many years. A small population that was recorded at Avok Island is only beginning to recruit to other areas in the archipelago. Avok community leaders were particularly happy to learn of the healthy status of their *Holothuria scabra* stocks, which have not been fished for nearly 10 years as a result of a land ownership dispute that also involves the reef area.

The community leaders of Peskarus, Bellonk and Lutes on Uliveo Island, however, were not encouraged by the low number and relatively young



Jayven Ham holds a golden sandfish (Holothuria lessoni) specimen.



Trainees (from left to right) Jason Raubani, Jayven Ham, Kassy Nagof, Paul Tua, John Laggette, Vatu Molisa and George Amos.

sandfish populations, which are the result of heavy fishing four years ago. Despite this, communities were happy overall to learn that their sea cucumber resources are recovering well, which is promising if the current management system is maintained into the future.

Community support

In response to the presentation, the chiefs of the four communities thanked the Vanuatu Government and SPC for enabling them to better understand their resources. They also thanked the government for enforcing the ban to save their resources from further depletion, and proposed that the current moratorium be extended. When the fishery is finally opened, they asked that the Fisheries Department maintain stronger control of the fishery in order to ensure that the harvest is never again depleted. The leaders also want the activities of beche-de-mer traders to be controlled in order to protect their communities from pressure from buyers. There was discussion about community members being given opportunities to participate in the beche-de-mer

trade, rather than the trade being run exclusively by foreigners as it currently is. For other resources, the leaders expressed concern on the declining status of the trochus fishery, and asked that the Fisheries Department close the fishery as it is no longer a profitable activity. They said that closing the trochus fishery would not affect their income opportunities because their main income now comes from copra, kava, finfish, root crops and handicrafts, which are exported to Port Vila markets. These demands were presented to the Director of Fisheries and will be considered when developing the sea cucumber fishery management plan for Vanuatu.

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