

Because octopus fishing is done at night, the fishermen use carbide as their source of fuel for their light source. It is not only cheap but also emits very strong light.

A tongkah is very easy to use once you get the hang of it. Since the purpose of using it is to catch small octopus that are trapped on mudflats at night, the fishermen must know exactly when the tide is low and the location where octopus can be found. Hence a fisherman go out just before the tide falls and place a pole into the mudflats for the boats to be tied to and wait. As the tide drops, a fisherman prepares his tongkah.

First, the armrest is placed on the tongkah and the rope is prepared. Carbide is then put into a container with a funnel. When water is added, the carbide emits gas at the end of the funnel. With the strike of a match, the modified torchlight is now ready to be used. A sack is then tied to the armrest, and the tongkah is set onto the mudflat.

The fisherman's left arm rests on the armrest while holding the carbide torchlight. His right arm is used to catch the octopus. One of his legs is placed on the tongkah while his other free leg pushes the tongkah forward along the mudflat.

The search for octopus starts immediately, and the fisherman does not stop until the tide comes back almost two hours later. On a good day, as much as 15 kg of octopus can be gotten.

When octopus are abundant, the scene on the mudflat is like a festival with many fishermen on their tongkahs gliding along the mudflat with a strong beam of light, on the lookout for the shy animal. The fisherman must be quick because once an octopus feels threatened, it quickly disappears into the mud.

One fisherman explained, "The tongkah has been used here for as long as I can remember". He is rightly proud of this tradition that has served him and his fellow fishermen well.

The Lakemba art of *vono*

By Dr Mecki Kronen, SPC Community Fisheries Scientist



On Lakemba, a small island in the southern Lau Group of Fiji Islands, there are women who are still regularly perform the old Fijian tradition of catching fish called, *vono*. Due to specific habitat requirements along with fishing strategies specific to Lakemba, this fishing

method is exclusive to fisherwomen from the villages of Nasaqalau and Waitabu only.

A *vono* comprises three different steps, involves at least four women, and about four different fishing methods. The overall strategy is to prepare a hiding place where fish can be trapped and easily harvested.

Although *vono* is considered an easy way to catch fish, it requires a substantial amount of effort and patience. There are three steps involved. Step one: At low tide a group of women head towards the outermost reef that fringes the lagoon. Their faces are blackened with charcoal to protect from sunburn, and they carry a couple of freshly cut leafy branches. The women know suitable places at the outer reef line that have been continuously used in the past. Suitable sites are natural holes in the hard coral cover that can be easily enlarged and deep-

ened. Every time one of the sites is selected, large hard coral blocks and pieces, and hand-fuls of coral debris are scooped out until a smooth basin is created. The basin may measure about 1–1.5 m² and may be 0.80–1.00 m deep. The basin is then carefully covered using large flat coral pieces. The *vono* site is now marked with some of the leafy branches, which are stacked into coral holes. Thus, the site will be easily identifiable if approaching from distance. Big pieces of hard coral are collected and laid in two, 100-m-long lines reaching from the sides of the *vono* radially in the direction of the beach. These blocks will be used to hold in place the nets to be set later on.

After completing step one, women may reef glean, or *qoli*, a kind of group netting in shallow water



during low tide, to make the most use out of the long walk to the outer reef fringes.

Step two: During the next high tide — weather permitting — the women return to the same site. Now, about 100-m-long and 1.5–2 m-wide nets with small mesh sizes are put into place. The nets surround the *vono* and extend at either side along the radial lines of hard coral pieces laid out during the previous low tide. One woman unfolds the net. Another woman weaves into it an equally long cord from which palm leaves are dangling in 50 cm intervals. This is mostly done under water and the woman in charge wears goggles. She also secures the net with the hard coral pieces. Once the nets are set, the group may split up. However, at least two women must stay behind to watch and tend to the nets while the rest of the group may return to the village.

Step three: During the second half of the next low tide, the women's group reassembles at the *vono* site. One or two women take charge of grinding *duva*, a poisonous root (*Derris* sp.), which they dilute in the artificially enlarged basin. The desired effect of stupefying fish becomes visible after 10 to 15 minutes. Fish escaping from their hiding places are slowed down in their movements and show obvious signs of distress. Smaller fish may die quickly. Other women surrounding the *vono* hold up the net to prevent fish from escaping. Women inside the netted

Setting the *duva* under rocks in the reef to stupefy fish.



Grinding *duva* and diluting it.



Sorting and cleaning the catch.

area collect the fish by hand, stab the bigger and still fitter ones with a knife or chase them in the net where they are easily killed and collected. Teenage boys, using home-made spears to expertly spear down all the fish that managed to slip the net, help out with this final *vono* step.

Depending on the area encircled, and the amount of fish trapped, this last step may last 1 to 1 1/2 hours. The catch is collected in hand-woven baskets made from coconut palm leaves and

defended against the hungry seabirds circling the site.

Before collecting the nets, the fisherwomen may settle on a spot in the reef where the catch

is sorted into suitable fish to be brought home, and those to be eaten on the spot. Fishermen from the village may walk by and be rewarded with some smaller fish that they can use as bait for handlining. All fish are cleaned and the livers are eaten; smaller fish are consumed raw. Usually, this feast is well prepared as the women bring cooked root crops, chillies and lemon to accompany and improve the fresh fish meal *al fresco*. Once, everybody is satisfied, the equipment is gathered up and the group heads home to the village where the catch is shared equally. On the way, small shellfish may be collected to complement the next family meal.

The life of a commercial fisherwoman

By Lyn Lambeth, former SPC Community Fisheries Officer

After five years of working in community fisheries management in the Pacific, I decided to spend a year in my old job — fishing for Spanish mackerel, *Scomberomorus commerson*, in Australia's northwest. I caught up with the boat I used to work on, F/V *Rachel*, in Darwin in February 2002, and spent a couple of months helping with the pre-season maintenance before heading to sea in April. I first worked on the *Rachel* 20 years ago when she was shark fishing in the Northern Territory. I maintained my friendship with her owners-operators, Pam Canney and Ian Lew, after leaving the capture side of the fishing industry eight years ago. This

year was to be a 'working holiday' — a chance to catch up with old friends, get away from computers and deadlines, see some more of the wonderful Kimberly coast, and exercise arm muscles by pulling in some of those big, fighting fish.

Pam and Ian are relatively unusual in the industry in that they often choose to have one or two women in their crew of three to four deckhands. The *Rachel* is their home as well as their workplace, and they've found that a mixed crew creates a more balanced work and living environment. The work can be physically demanding, but