

Nauru's new fish market project complete

Nauru's new Fish Market Project is now in operation. Construction of the new market began in December last year.

Chief Executive of the Nauru Fisheries and Marine Resource Authority (NFMR), Anton Jimwereiy, said the project is intended to provide the people of Nauru with more fish for consumption through new fishing activities.

"The primary objective of the Fish Market Project is to provide a facility where local fishermen can readily sell their catch, and for local consumers to purchase good quality, reasonably priced fish," he said. The total cost of the project is approximately SAUS0.75 million, which is funded by the NFMR.

Source: PACNEWS, July 1999

SOLOMON ISLANDS

Black pearls cultured in the Solomon Islands

Solomon Islands has harvested 800 black pearls, a record number since the country started the aquaculture farming project. The black pearl farm at Gizo in the Western Province is the first to successfully culture pearls since the project started two years ago. A pearl farmer from the Cook Islands was contracted to operate on oysters to produce pearls and recently returned to extract them.

Principal Farm Scientist, Doctor Johann Bell says another farm has been set up in Noro, also in the Western Province as a back up for the Gizo farm. The Solomon Islands Agriculture Ministry has not revealed the value of the 800 black pearls harvested. Dr Bell said the result of the research on black pearl farming is of great significance to the country.

Source: PACNEWS, April 1999

The Beche-de-mer divers of Ontong Java Atoll

by Bob Gillett and Michelle Lam

Ontong Java is one of the more isolated places in the Solomon Islands. Located about 500 kilometres north of Honiara, it is about halfway between the capital and the equator. The nearest major island is Isabel Island about 250 kilometres to the southwest. Ontong Java is a classic atoll—a ring of about 120 small islets on a reef surrounding a large lagoon. None of the land is more than a metre or so above sea level.

The island was first sighted by a European in 1643. Abel Tasman named it Ontong Java because it resembled some islands near Java in Indonesia. The island acquired another name, Lord Howe, by the Captain Hunter in 1791. Although both of these names have stuck, the atoll has always been known as Luaniua to the people who live there. An interesting feature of Ontong Java is that its inhabitants are actually Polynesians, as distinct from the darker-skinned Melanesians on the neighbouring islands. The Ontong Java people are closely related to those of Tuvalu and Tokelau islands north of Samoa, over 2,000 kilometres to the east of Ontong Java. There are actually several of these Polynesian outlying islands in the Solomons (the islands of Sikiana, Tikopia, Anuta, Rennell, and Bellona), as well as others in Papua New Guinea and the Federated States of Micronesia.

Ask a visitor to Ontong Java what they remember about the place and you will hear stories of incredibly tidy villages, tattooed elderly people, pristine white sandy beaches, large numbers of very inquisitive children, and custom dancing throughout the night.

As with most atolls, the land resources of Ontong Java are quite limited. The few food plants and limited economic opportunities on land have encouraged the residents to make maximum use of the 2,000 sq km lagoon and nearby ocean. This has resulted in the Ontong Java people being excellent fishermen, divers and sailors. Quite simply, if they were not skilled ocean people, they would have perished centuries ago.

In addition to the seafood used for local consumption, the two most important marine resources of Ontong Java are trochus shells (used for making mother-of-pearl buttons) and beche de mer (mainly exported to Asia for food). These two products have formed the backbone of the Ontong Java economy for most of the current century. Beche de mer is an interesting commodity. The term refers to the dried product manufactured from the marine animals commonly known as sea cucumbers, sea slugs, or more scientifically, holothurians. According to G. L. Preston,

an authority on beche de mer, there are about 1,200 species of holothurian worldwide, but only about 300 are found in the shallow waters of the Indo-Pacific region. Of these less than 20 species are currently exploited for beche de mer.

Beche de mer is produced by a process of boiling, cleaning, drying and in some cases smoking. The finished product, which has a hard rubbery texture, is normally rehydrated by repeated soaking or boiling prior to consumption. The product is considered a delicacy and an aphrodisiac in China and South-east Asia where it is principally consumed.

Beche de mer has been especially important in Ontong Java in recent years. Because the prices up to S\$130 per kg (US\$27/kg) are paid on the island for the product, it is easy to understand why diving for these creatures is big business in a place where there are few economic alternatives. The high prices have, however, led to the overexploitation of beche de mer in the shallow water of Ontong Java. Because SCUBA and other forms of compressed air diving are not allowed on the atoll, deep free-diving for beche de mer is currently a major occupation of young Ontong Java men.

To learn more about Ontong Java diving we spent a day with Kelaepa, an 18-year-old beche de mer fisherman. Kelaepa is the leader of a four-man diving team, which includes two other divers (11 and 12 years old) and a person to man the canoe (10 years old). According to Kelaepa, he has been diving since he was 12 years old and that young divers are much better because they can dive deeper. It is said that after 24 years of age, the boys can not dive nearly as deep and they “retire” to easier types of fishing.

The actual diving techniques are interesting. In water 20 metres (65 ft) deep, using mask, fins and snorkel the boys hyper-ventilate then slowly descend (rather than race against time) to the bottom using only a partial “dog-paddle” type arm stroke. They are able to remain leisurely at that depth for a considerable period, before calmly, slowly rising to the surface. The absence of any long arm strokes or quickly scratching back to the surface at the end of the dive is noticeable.

In water deeper than 20 meters, a “torpedo” is used to collect beche de mer. This device is a lead weight with finlets and a barbed shaft at one end. Mono-filament line is attached to the other end. When a beche de mer is spotted in deep water, the torpedo is dropped over the target. Like a wire-guided missile, the torpedo can be directed after a launch by tugging to one side on the fishing line. If the diver is a good shot, a beche de mer will be stuck and subsequently pulled to the surface. Pity the poor turtle which may stray into range.....



Beche de mer diver, Ontong Java

The diving is not without danger. According to the Ontong Java divers, sharks are sometimes plentiful but rarely cause problems. Of far greater concern is free-diving blackout. Deep diving for six to eight hours per day can be very exhausting, especially when there are competing divers in the area. It is not uncommon for Ontong Java divers to lose consciousness while holding their breath down at 20+ metres. According to Pakoa, another beche de mer diver, this has resulted in several deaths in the past few years.

This danger does not seem to bother our friend Kelaepa. Diving is the only employment he has ever known and is the only work which interests him for the future. Of greater concern to Kelaepa is the supply of beche de mer.

Presently there are high prices for beche de mer, a huge overseas market, and eager divers. These factors, combined with the limited area of the Ontong

Java lagoon, has resulted in a situation where over-exploitation is becoming a serious problem. Too much beche de mer is being harvested. Without some form of regulation, the market forces could easily drive the Ontong Java beche de mer resources to commercial extinction. To prevent over-exploitation of this precious resource, the leaders of Ontong Java have devised a home grown management system. To assure sustainability, the island's authorities close the island for beche de mer during alternate years.

During the closed years, the lagoon is open to trochus diving. Although there are problems (coordination between the two villages, commercial temptation to keep the season open), it seems to reduce somewhat the fishing pressure on the beche de mer, while providing alternate employment for the divers during the closed season.

The future for Kelaepa and his diving team is unsure. Whether they will be able to continue with their favoured occupation of beche de mer harvesting depends largely on this management system and the determination of Ontong Java's leaders to make the system work.

The Ontong Java visit was done in the context of the Pacific Islands Comparative Coastal Management Study supported by the World Bank. For further information about the study or the Ontong Java visit, please contact Mr Robert Gillet at Box 3344 Lami, Fiji.

The finding, interpretations, and conclusions expressed in this article are entirely those of the author(s) and should not be attributed in any manner to the World Bank, to its affiliated organisations, or to members of its Board of Executive Directors of the countries they represent.

NEW CALEDONIA

Export market

The territory is once again on the list of countries authorised to export seafood products to the European Union after its special export dispensation expired on 1 January 2000. On March 23, the European Union approved the territory's new food hygiene and sanitation regulations.

However, the test is not over until European Union inspectors visit the territory later this year to ensure the required standards have been attained.

Meanwhile, companies have been invited to submit their candidature for the construction of a prawn packaging factory in the northern province, where prawn farming is a major activity. Currently the territory's only prawn packaging factory, situated in its southern province, cannot cope with the amount of production. The majority of New Caledonia's prawns are destined for overseas markets.

Source: Islands Business, May 1999

WALLIS AND FUTUNA

The fisherwomen of Futuna

The Territory of Wallis and Futuna lies 600 km northeast of Fiji and 300 km west of Samoa. It is the smallest of France's three South Pacific territories and remains relatively isolated from its neighbours geographically, culturally and politically. The Wallisians are descended from the Tongans, while the Futunans are descended from the Samoans, and the local language spoken on each island reflects these roots. The total population is around 14,400 with a similar number estimated to be living in New Caledonia.

The majority of the working population of Wallis and Futuna (80%) live off traditional agriculture and fishing. In Futuna the women are very involved in fishing as well as reef gleaning. The men look after the gardens which are often located a long way from the villages, on the steep slopes of the hills, while the women need to stay closer to home.

Fishing and reef gleaning enable them to work close to the family.

It is interesting to see the way the geography of Wallis & Futuna has dictated the traditional roles of men and women—on Futuna, the villages are built around a very narrow coastal strip and the gardens are planted on the mountainside, which rises abruptly from the sea. To work the gardens means a steep climb and time away from the home. Men do go fishing in small boats (trolling, and bottom fishing), use cast nets and spear lobsters, but it is mainly the women who provide the daily seafood on Futuna. The island of Wallis is relatively flat compared to Futuna and gardens do not have to be made in difficult terrain so far away from the villages. The women of Wallis are not involved in fishing in the same way as the Futunan women.