

On the Possibility of Expanding the lesser Marine Resources of Sri Lanka

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With the steadily increasing emphasis on exploitation of traditional Fishery Resources such as fishing crustacea for food, it would seem that over-fishing is imminent if not already evident particularly in accessible coastal waters.

It is true that marine food products are not only in increasing demand for local consumption, but are also being exported and form a necessary part of the diet of an increasing tourist influx.

As everyone must know, the coastal seas are not inexhaustible. There is hardly any conservation in evidence and even former legislation appears to be

ineffective, if not impossible to enforce, in the face of the increasing intensity of fishing.

However, with suitable introductory propaganda, demonstration and advertisement, other edible marine forms can be exploited profitably, thereby reducing the pressure on those which are over-fished.

Colonial influence still prevails in our choice of sea-foods. Such nourishing material as eggs of sea-urchins (*Echinus*), mussels (*Mytilus*), oysters (*Ostraea*) are virtually unknown in marketing circles, although seafood conscious visitors from Europe are constantly demanding them from star-class hotels along the coast.

Sea-urchin eggs are almost unknown as food, yet there is a plague proportion population of them along the West coast from Moratuwa to Negombo. Collecting them by wading or shallow diving is easily done during the North-East Monsoon, at which time the tourist influx is at its peak and this would not only result in additional exotic seafood availability but also a reduction in numbers of a creature which is a real discomfort to swimmers and waders near reefs.

There are several molluscs that are already finding good markets for food both here and abroad. Of them perhaps the squid is the best known and most exploited, but nowhere near the volume available during the season. Squid fishing is still more or less a primitively handled operation. The huge schools of these creatures which come close to the surface by night on the West and East coast are barely harvested by the small craft and number of fishermen in them.

The octopus is virtually unknown as food except by the fishermen themselves. Capturing them is still done in the most primitive manner imaginable yet thousands are found all over the coral and rock reefs and can be caught in the effective manner adopted in the Mediterranean; that of luring them into ceramic or earthenware flasks. From personal observation, octopuses are very much in the increase in the Negombo area, because of the abundance of their natural food viz. crayfish. Owing to intensive and, if it may be said, destructive cray-fishing methods, the use of random-laid nets, many of the crustaceans are exposed to octopus attack during the night and it is estimated that less than 50% of those netted are eventually collected. A fishery for octopuses will therefore cut down on the predation of the more valuable and exportable crayfish.

Mussels are gathered and eaten mainly by the less affluent fishing communities along stretches of coast where they grow on reefs and rocky outcrops. Elsewhere in the world they form an useful food and in fact are now coming into the high priced gourmet range in Europe. It is significant that hardly one hotel features mussels on its menu, yet literally tons of them are present a few furlongs from many hotels on the West coast.

The edible oyster used to be collected and marketed in colonial times; Bentota was famed for its oysters. For some unknown reason, possibly regional over-exploitation resulting in a diminution in catch, the fashion subsided and now one hardly even hears of oysters served as food in hotels or resthouses.

From personal observations, the oyster population in Bentota is now abundant, but may have to be collected by divers operating at high tide, possibly using basic skin-diving gear (viz. mask, flippers, possibly self-contained underwater breathing apparatus). Yet the results are certainly worth the effort. The tourist population in this area can absorb almost the entire catch and can pay well for it.

Oysters abound in the Negombo lagoon. Here, there may be a problem of pollution from organic matter, but adequate rinsing of live oysters in fresh unpolluted seawater can quite effectively serve to flush them out and render them fit for consumption.

There is an increasing interest taken in the utilisation of a former by-product of the chank fishery; the flesh of the chank itself. If an effective method can be devised to extract the animal within the shell while it is still fresh, yet not damage the shell which is an exportable commodity, a nourishing source of protein is available. Already several hundred fishermen who dive for chanks have eaten the meat with excellent results. Since up to 50,000 chanks are collected per month by some small groups of divers, the flesh of these, if extracted for food, could reach a respectable tonnage.

Another sea-food, little known anywhere in the world, is a species of sea anemone, found in abundance in the Jaffna area. This is now collected by divers spearing them in the shallow water and the flesh is processed in such a way as to make it reasonably palatable when curried. Only a relatively small population feeds on this, especially around the Nagadipa area, but it would appear that this food is safe and nutritious and therefore expansion of this fishery is feasible.

If the coastal marine resources of Sri Lanka are to be safeguarded and sensibly exploited for future generations, there must be a **programme** whereby those species over-exploited be conserved if not protected until they are once again available at suitable prices and in safe concentrations. To offset this, and also provide employment and the necessary volume of protein, the relatively unexploited material must be harvested.

The **most endangered marine form** now is the Spiny Lobster or Crayfish (*Palinurus* Sp.) which, in spite of recent conservation laws, continues to be over-fished and drastically reduced in numbers. The next could be *Penaeus indicus*, the popular prawn from coastal and brackish waters, now being trawled in ever increasing quantities along the North-West coast.



'The intake of appropriate and adequate foods and their effective utilization by the human body is the cornerstone of human growth and development to provide the basis for the maximum fulfilment of each individual's potential....'

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