

Asia/ India**Uncertain future*****Women seaweed collectors in the Gulf of Mannar region of Tamil Nadu face an uncertain future***

This piece is based on an interview by Ramya Rajagopalan, Consultant, ICSF Documentation Centre

Shanti, a 34-year old woman from Meenarvar-kuppam, a small fishing hamlet on the Kilakarai coast of Ramanathapuram district, Tamil Nadu, India, has been collecting seaweed right from the day she was 10 years old, from the islands in the Gulf of Mannar area. She collects seaweed everyday, except on Fridays, a day designated as a no-collection day by the village leadership. Women from Meenarvar-kuppam regularly visit the islands of Appa, Valai, Muli, Musa and Manali.

Earlier, Shanti used to stay on the islands during the peak season—from December to February—and collect seaweed. Now, she goes to the islands using an outboard motor (OBM)-powered *vallam* (plank-built canoe). She goes with about 10 other women, with a man on board to navigate. They leave early in the morning by 6 a.m., cooking and packing their two meals before they set off to sea, and return by 6 p.m.

Like all the other women with her, Shanti collects seaweed with her hands. She uses goggles to protect her eyes. The net is tied to her hip, and metal plates are fixed to her legs to help her keep swimming. She dives up to a depth of 6-7 m to collect seashells and seaweed. She spends eight hours in the water, often in neck-deep waters, with her back bent, collecting seaweeds with her hands. She earns roughly Rs 50-100 (US\$1-2) per day—this is one of the main sources of income for her family of five, which includes her husband and three daughters.

Seaweed can be collected for a period of only six months, from October to March, as, during the rest of the year, it is too windy. Even during the seaweed season, collection is not possible when the waters are murky. During the off-season, Shanti catches fish and

crabs.

There are about 50 women from the same village who have been collecting seaweed on a regular basis from these islands, earning Rs 50-100 per day. They collect around 500-600 kg of seaweed each day. They also collect other molluscs and ornamental shells. These women are sure they would not like their children to collect seaweed for their livelihoods.

The main species of seaweed collected are *Gelidiella acerosa* and *Sargassum*. These are sold fresh to the trader, who comes and collects it from the village, at a rate of Rs 4 (US\$0.1) per kg in the case of *G. acerosa*, and of Rs 10 (US\$0.2) per kg for *Sargassum*. While *G. acerosa* is available throughout the year, *Sargassum* is available only for a period of three months—October, November and December. The traders collect the seaweed, dry them and sell them to the two agar-processing companies in Madurai.

The seaweed is collected from the islands closer to Meenavarkuppam. These islands are part of the 21-island chain of the Gulf of Mannar region, which was notified as a National Park (Marine Protected Area) by the Government of Tamil Nadu in 1986, under the Wildlife (Protection) Act (WPA), 1972. The national park is being managed by the Wildlife Warden, Department of Environment and Forests, Government of Tamil Nadu.

The seaweeds grow only in the shallow waters around the islands. According to the WPA, extraction of any resource from a national park is prohibited. Though the park was declared in 1986, there was no strict implementation of regulations until 2002. It was only in 2002 that people were asked to stop collecting seaweed from the area around the islands.

These islands also form part of the 'core' area of the Gulf of Mannar Biosphere Reserve, which was declared in 1989. As part of the management of the biosphere reserve, a United Nations Development Programme (UNDP)-Global Environment Facility (GEF)-Government of India (GOI) project was initiated in 2002, and the Gulf of Mannar Biosphere Reserve Trust (GOMBRT) was set up to handle the

management aspects of the biosphere reserve. A number of talks have been organized among scientists working on seaweed, seaweed collectors, traders and other related industry groups, to discuss conservation strategies for seaweed through this initiative.

In the Gulf of Mannar region, there are around 5,000 women from approximately 25 villages dependent on seaweed collection for their livelihoods. Many of them are part of the Ramnad Fishermen's Union. The sudden restriction on seaweed collection in 2002 had severe implications for these women. Several discussions took place at both the union and village level, and it was decided to regulate collection activities—the method of seaweed collection and the number of days it could be collected. Prior to 2005, for example, seaweed was collected using metal scrapers, considered destructive to their further propagation. In 2006, the union and a number of villages decided to ban collection of seaweeds using metal scrapers. Traders were also asked not to purchase seaweed collected in this fashion.

However, despite these efforts at self-regulation, women seaweed collectors face harassment on a regular basis as seaweed collection around the islands is officially forbidden. They have to pay off local forest guards and rangers if they want to go to collect seaweed.



A joint meeting of seaweed collectors, wholesale merchants, manufacturers of seaweed products (the All India Agar and Alginate Manufacturers Association), research institutes, GOMBRT and the management of the Gulf of Mannar National Park was held on 17 December 2006 in order to discuss some of these issues. The meeting agreed that seaweed collection should be avoided in national park areas, that only non-destructive methods of collection should be adopted, and that seaweed collection should be banned in the months of March, April and May, considered the growing season for seaweed, to help in further propagation of seaweeds. The traders were asked to fix a reasonable price according to the species and quality, and not to purchase immature seaweed and seaweed collected using destructive methods. The GOMBRT was asked to organize women self-help groups (SHGs) for seaweed culture, and to create awareness about the importance of seaweed in maintaining biodiversity.

With the upcoming three-month ban on seaweed collection looming large, women in the community fear they are going to be badly affected, given that seaweed collection is their main source of income and livelihood. In most villages, few options for alternative livelihoods have been provided. Discussions on the viability of culturing *G. acerosa* and *Sargassum* are still going on.

Many issues face the women seaweed collectors in the Gulf of Mannar, including restriction of access to seaweed resources, methods to be used to harvest seaweed in non-destructive ways, closed season, and low market prices. Their future in the only livelihood they have known depends on whether their perspectives are incorporated into the upcoming management plan for the national park and biosphere reserve, and on the manner in which these plans are implemented.

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