

**GOLDEN JUBILEE CELEBRATIONS**

# **Souvenir**

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# Shell Industries of Rameswaram Islands

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### Introduction

Seashore has always been a fascinating and recreational place for young and old. In every seashore, people of diverse age groups can be seen moving around and picking things. What is that they are looking for and collecting! Yes, it is nothing but the 'SHELLS'. Shells are the hard calcareous part, literally the 'HOUSE' of the soft bodied living animals called molluscs. When the animal dies in course of time, the shells are washed ashore and strewn around in the beach.

From time immemorial, people were collecting the shells and used it for different purposes as per their requirement like ornaments, vessels and weapons. Ancient tribes used Conch and Triton shells as trumpets to summon people.

The importance of these shells have become evident only a couple of decades back when the shell products and shells paved their way in to the drawing rooms of the modern world. Daily use items ranging from key chains to wall clock were made out of or with shells. This encouraged shell collecting into a small scale industry and within no time it developed into a full fledged and worldwide industry.

### Ramanathapuram District

Ramanathapuram is a backward district with limited industrial development. The only flourishing industry is fishing. Ramanathapuram coast is dotted with more than 75 fishing villages from Sundarapandian pattinam (Palk Bay) in the north down to Rochma nagar (Gulf of Mannar) in the south. Of these landing centres many are valuable shell collecting centres. Shell industry as such has taken to shape only in Kilakarai and Rameswaram. being a major tourist centre and

almost throughout the year it is visited by local and foreign tourists. The business slowly picked up and hardly 10-15 years back the industry has become a major one at this centre.

### Shell resources

No variety of shells are discarded as useless when the shell industry is concerned. The very small horn shells (*Cerithidea* spp) to the giant clams (*Tridacna* spp) are considered as resources. The industry is dependent on the seashells of different variety which are collected from the sea mainly by engaging divers. The raw materials are mostly live shells. After collection, they are accumulated and transported to this centre from almost all the fishing villages in both the coasts of the country. To enhance the speedy supply of a particular shell variety, which is in great demand, the industry people advance money to the divers and get the materials supplied. Womenfolk's from the fishing community are also involved in the collection of seashells that are available in the near shore. Apart from these there are also whole sale purchasers and suppliers of seashells who collect and forward varieties of sea shells to the shell industries throughout the India.

### Size of Industry

In Rameswaram, shell industries ranged from tiny retail outlets to major industries. In all about 10-15 major shell industries, which runs business in terms of multiples of lakhs of rupees. Apart from these another 15-20 minor sized shell industries also exist. In general, a major industry at Rameswaram is engaging about 25-30 people mostly men for cleaning and polishing alone in the sheds apart from other workers involved in different works.

## Methods of product development

The beauty and the value of the shells depend largely on the way it is cleaned, processed and decorated. Most amateurs still uses the crude method to clean the seashells and by that the natural beauty is lost and become unattractive. There are few methods of shell cleaning:

### Burying method

The shells with flesh are generally buried in soft, dry sand in which condition the soft parts of the animals gets decomposed by microbes in the soil. Later the shells are collected and cleaned with the jet of water and subsequently in warm soap water. This type of cleaning is suitable when the shells are not in immediate requirement for product development.

### Hanging method

This method is adopted for medium and big sized gastropods. The foot of the animals is strung by a rope and hung. Due to the shell weight entire animal is pulled out of the shell within a day or two. Later the shells are cleaned and used.

### Open air drying method

Shells are placed outside on the ground after removing the operculum. The shell should be placed in such way that its meat portion is shaded from direct sunlight. Flies lay their eggs inside and later hatch out as maggots which in turn eats the soft body and thus the shell got cleaned.

### Boiling method

Care has to be taken in this method of shell cleaning where the length of boiling in relation to the size of the shell is critical. Longer boiling makes the shell appear dull in colour and beauty. Shells, which are very glossy, should not be directly put in the boiling water. Gradual raising of water temperature to boiling point and remaining there for the required time and allowed to cool slowly. Sudden cooling will result in the cracking of the shell surface. The soft parts are

removed by needle and the encrustations on the shells with blunt scalpel. The remaining flesh part inside the shells can be removed by immersing the shell in 2-5% caustic soda for a period of 12 hours.

## Cleaning methods adopted in commercial sheds of Rameswaram

Cleaning of shells in a cost effective way is adopted in most of the commercial sheds. Shells of different varieties, shape and size were stacked in open and allowed to decay. They are kept in small cemented tanks with full of water, which facilitates decaying of the soft flesh. The water along with the decayed flesh is drained out and fresh water is added periodically. The shells are washed and rinsed individually and the encrustations are removed by a scalpel. Such shells are then washed in hot water with small quantity of Hydrochloric acid added to. Thus the cleaned shells become glossy.

Caustic soda and lye (mixture of sodium hydroxide and sodium carbonate) are also used to remove the calcareous castings on the shells. Normally one litre of lye will be dissolved in two litres of water and allowed to cool for 24 hours. The shells are kept immersed for 12 hours and subsequently the calcareous castings are removed. Strong Hydrochloric acid is also used for cleaning but only by experience this is possible. The shells are finely polished, beautified and defects like pores and cracks if any are masked by applying wax.

## Shell products

Shell products are of two different categories i.e. finished whole shells and shell crafts.

### Finished whole shells

Whole shells of different species like Five finger shell (*Lambis* sp), ear shells (*Haliotis* sp) beggar's bowl (*Cymbium* sp), *Pinna* sp and *Strombus* sp, are liked by people purchased and kept as show pieces in the houses. Some of the

shells like sacred chank (*Xancus* spp.) particularly the sinistral type is considered as religious symbol and keeping them in the houses is believed to would bring prosperity. Big sized polished shells are now popular and occupy a special place in Restaurants, Hotels, and places of gathering. Shells of small sized cowries are used as play tools for the kids and bigger sized shells of cowries and conus are for making key chains, as paper weight with engravings on the top. Full sized top shells (*Trochus* sp.) and turban shells (*Turbo* spp.) are used for making night lamps.

### Shell crafts

The skill of making ornament and other useful items out of polished shells either whole or sized to requirement is called shell craft. It may be too difficult to date back when exactly this art started. However, even the tribals of many of the backward area of this continent are found wearing ornaments made of crudely polished/unpolished shells with certain degree of creativity. When civilisation advanced the major industry that was originated from the shell is the bangle industry in West Bengal. Shell bangles of West Bengal made out of chanks are cutely carved and variety of designs embedded are world famous. Shell bangles are also a mark of married women.

Modern world has made use of all kinds of shells and produces variety of items ranging from key chains to wall clock and small chandeliers for household uses. Whole shells of *Babylonia* sp are stringed together to make wall hangings and door hangings. Polished whole shells of different sized shells are used in the making of decorated wall clocks and mirrors. Decorative, show pieces and ornaments like ear rings, rings, bracelet, pendant etc are made out of whole, cut and carved shells of many varieties with lustrous shining such as *Trochus*, *Turbo*, *Pinctada* are now ruling the market among the fashion lovers.

### Export potential

Indian shell crafts are widely acclaimed in many of the western countries. The most important of the export market to India is United States. Even though no export is now being done from Rameswaram centre there are many major shell industries established at Chennai and Mumbai is export oriented. As on today, the shell industry at Rameswaram is confined to the local demands within the country but has the potential to grow to the size of a leading export industry in India in no time.

### Government taxing on shell industry

Currently, the Government is levying a tax rate of 8-16% on the various items of shell products. However, full exemption of tax is given when the whole shell is polished and marketed.

The industry people are of the view that if any reduction in the present taxing rate is given it could enhance the net profit margin for them which is 5% now.

### Employment generation

Shell industry is a sort of network activity, which involves many persons right from shell collectors, whole sale buyers and suppliers artisans engaged in the shellcrafts. Womenfolks are involved in both collection and also in product development. The women collects the cleaned and polished shells from the industry and completes the job of decorating fancy and household items and returns the finished product from their home itself. They were paid either daily or per piece of work as the case may be. Retailers are the other set of people who are benefited by the industry. As a whole, a major shell industry sustains the lively hood of about 500-750 persons.