

Opportunities in Challenging Sea Shell craft industry in Rameswaram, South India.

Rameswaram and sea shell crafting business

Rameswaram is a municipality in the Ramanathapuram district of Tamil Nadu, India. It is in Pamban Island separated from mainland India by the Pamban channel and is about 40 kilometres from Mannar Island, Sri Lanka. It is in the Gulf of Mannar, at the tip of the Indian peninsula. Pamban Island, also known as Rameswaram Island, is connected to mainland India by the Pamban Bridge. Rameswaram is the terminus of the railway line from Chennai and Madurai. It is considered to be one of the holiest places of Hindus, like Varanasi, in India. It is said the Hindu god Rama built a bridge from here across the sea to Lanka to rescue his wife Sita from her abductor Ravana. The Ramanathaswamy Temple, dedicated to the Hindu god Shiva, is at the center of the town and is closely associated with Rama. The temple and the town are considered a holy pilgrimage site for Shaivas and Vaishnavas. Tourism and fishery employ the majority of workforce in Rameswaram. Fishing community provides raw materials to shell craft industry and this industry in this place mainly depends on tourists.

Sea shell marts are the most unique and familiar in Rameswaram. One can see rows and rows of sea shell shops selling different shapes and sizes that suit every kind of budget. The street leading from the beach to Ramanatha Swamy Temple is filled with such Sea shell shops. Apart from individual shells that come in different sizes, the sea shell marts are full of products made from sea shells such as mirrors, wall hangers, shell curtains that can be used as a separators in a home, watches, shell jewelry, shell lamps, shell key chains, shell pen holders, shell carvings and even hair accessories made out of shells. There are two dominant Sea Shell Marts in this town possessing major market share in this business.

The fishing community considers sea shell collecting as a part of fishing process and it provides additional income. They sell the shells to the shell marts as raw materials at a very low price, which is then cleaned, further processed and sold at a gross margin of 75-100%. The fisherman and the people in villages near the sea who collect the shells are aware of the profits earned by shell marts. As these people are not aware of the

business aspects and are not able to invest money they keep themselves away from such profitable and challenging business.

The women in these villages in addition to collecting the shells are also skilled in making primitive hand crafted shell products. In some villages, the shell marts themselves outsource the work by providing the raw materials to the women in the villages and collect the partly finished products from them and assemble final products at their manufacturing unit. In certain cases the women themselves buy the raw materials from the shell marts and sell the finished product again to the shell marts at a very minimum price. For example, they get raw materials worth of Rs.150 and make around 3 dozens of shell garlands and sell those garlands for Rs.90 per dozen. The same garland is sold at the retail shop for Rs.40-60 per piece.

Painful Social conditions with blissful opportunities

In most of the fisher men families, men are addicted to alcohol and spend major portion of their earnings for buying alcoholic drinks. The income that these women earn, are used not only to support the household expenses but also for the education of their children. Many families in the villages around Rameswaram have monthly income of less than Rs. 6000 and having houses slightly better than huts. The women to fight against their poverty involve themselves in doing these low end shell craft activities earning around 50-60 rupees per day. The dominant two players in sea shell business are very particular in getting the more minute carving done in Bengal and keeping the local people away from doing this work at their processing Units. This approach of outsourcing minute carving for high end products at Bengal, keeps the local people ignorant of the special carving skills. The local people have to work on the already existing 3-4 types of models which is commonly known to everyone.

Six BIM students Om prabu, Sunny Razak, Vishnu, Akshaya Sudha, Amritha and Thinesh Identified these skill gaps in the local community and opportunities for improving their earnings. They selected villages in the locality where women are eagerly involving themselves in shell craft work and conducted meeting for creating awareness on shell craft training programs of central and state governments. The team identified, persuaded and collected prospective list of people in Thoppukadu, Chinnapalam and Olaikuda villages who are interested to attend shell craft training sponsored by the central government and

thereafter to venture into the shell crafting business with high end products. After the training, the villagers can form groups and get loans from the state government to start their own business through which they could make and sell high end hand crafted shell products. The Products produced can be sold either directly through the person selected among them or by the existing intermediaries of the market. The market value of the product has to be monitored on regular basis depending upon the demand of the product and supply of the raw material.

One more idea was also sowed in their minds to use laser machines for carving and developing new products. BIM Students identified that skill upgradation through training in making extensive crafts using shells and usage of laser machines would provide better results in products and earnings to those families involved in this business.

Migration to high end products: Skill upgradation or use of technology

Most of the women from these villages are skilled in sea shell crafting and they have been doing this for decades for minimal wages. They stick to few known designs which are very old but abundant in production. Migrating from these known and familiar models will require new skill sets. Possessing these skill sets will encourage the women to produce new models with artistic value. With the skill upgradation in handmade shell crafting and use of laser machines, venturing into a new business module will enhance the chances of sustainable and profitable business by women entrepreneurs. Once the training is completed, the Artist can form Self Help Groups or a co-operative society. Via this SHG or the co-operative society, they can avail loan with subvention rate of interest and capital subsidy.

Stages of the proposed project:

Before getting into the new venture it becomes important to inculcate the required sea shell crafting skill sets for building confidence and developing innovative products.

1. Getting Artisan ID cards for those women who exhibit interest in improving their crafting skills and are willing to enter into new business venture.
2. On receiving the Artisan ID card (also known as 'PEHCHAN' ID card), the prospective candidates will be given one month training by Tamil Nadu Handicrafts Development Corporation with a stipend of Rs 300 per day.

3. Once the training is completed successfully, the Office of DC (Handicrafts), issues a recommendation letter, for facilitating credit access for handicrafts artisans, through introducing interest subventions from scheduled banks. 7% interest subvention will be available for artisans, for the loan taken from Scheduled banks. Maximum benefits of Rs.1 00,000/- for a period of 3 years are admissible.
4. Upon receiving the loan, the Artists will start their Entrepreneurial Venture and carry forward with their operations

Narration of the process involved in shell crafting:

1. Shells are collected from sea shore and sold to agents and sea shell mart owners. The shells are stored in the open yard. (Picture -1).
2. Before cleaning the shells, they are soaked in water for 10 days to remove flesh from the shell. (Picture-2).
3. After 10 days, shells are cleaned using bleaching powder. (Picture-3)
4. Cleaned shells are dipped in HCL for further cleaning (picture-4)
5. After cleaning in HCL, water washing is carried out (Picture-5)
6. To further clean them, shells are dried in sun light (Picture -6)
7. Finally polishing of shell are carried out using hand and machine made brushes.

Picture-1



Picture-2



Picture -3



Picture -4



Picture -5



Picture -6



Different varieties of products are made using these shells depending upon the market requirements. The Product pictures are in the exhibits.

In India shell craft is popular in four states West Bengal, Kerala, Tamilnadu and Andaman. In Tamilnadu shell craft industry is flourishing in places like Rameshwaram, Kizhakkari, Tirupullani, Nagercoil, Thoothukudi and Kanyakumari. Rameshwaram is one of the richest conch fisheries and an important place for conch products. Conch is a symbol associated with Lord Vishnu and is used in all Hindu temples during pujas and ceremonies. In certain places conches are tied in Mangalsudra (holy garland), in the door lintels, around the neck of cattle and children as talisman to bring prosperity or ward off evil. Conch is also used as a spoon for giving milk to children. It is also used in the preparation of medicines. With the latest development in interior decorations the shell craft industry has lesser scope to develop. Either in the form of paper-weight or key-chain or women's ornaments, the originality and kaleidoscopic colors could invite the attention of the people in this business.

Use of Technology – Laser engravings

In china laser machines are used for engraving sea shells. In India similar work is done manually and the labour cost pushes up the price and minimize the margin to producer/sellers. Laser machines can also be used for carving on other raw materials like wood, tiles, paper, and along with shells. When a business invests in this versatile machine capable of carving on variety of materials will ensure better utilization of assets. This will minimize the risk in investment and business. The price of the machine will be around Rs. 200000. Currently the price of nicely engraved high quality conch is around Rs.10000. With the help of this machine we can make this product for less than 5000. Scallops can be used as gifts, it can be customized like it is done in Archies, photos and name can be engraved on scallops. In this way, the value of the product can be increased as it can be sold for Rs.500-800. To minimize the risk and to have product proliferation, BIM students suggested for high end handmade shell craft products and laser engraved customized products to have better margin with lesser business risk. The investments, income and profit projections are given in the exhibits 1,2,3 and 4.

Projections

Products consists of 4 products in high end segment and they are chandelier-Type1, chandelier-Type2, Cypraea Tigris(Kenya conch), white conch. People in the identified village with their level of experience can create these products utmost precision and if the prescribed training is given they can create the extensive detailed engravings on the white conch. And with the proposed laser machines we can do many complex engravings with reduced cost and timing. Projected Pricing is 20-25% less than the market price, the price of the products will be Rs.550 for chandelier-Type1, Rs.880 for chandelier-Type2, Rs.150 for CypraeaTigris (Kenya conch) and Rs.11000 for white conch in this way we can capture the market by competitive pricing. The places that are to be focused are Handcraft exhibitions, tourist and Pilgrimage places.

Exhibit-1

Project Investment (Rs.)	
Building Structure	150000
Machinery & Tools	80000
Furniture & Fittings	40000
Working Capital	1500000
Total	1770000
Contingency @ 10%	177000
Total Investment Required	1947000

Exhibit- 2

Source of Fund (Rs.)	
Bank Loan for Working Capital	1200000
Government Subsidy for Plant & Machinery	54000
Term Loan	172800
Own fund For Capex	43200
Own fund For WC	477000
Total Own Fund	520200
Total Fund	1947000

Exhibit - 3

Project 1 – High End Handcrafts Shell Products						
Profit Before Tax	Rs.	855679	832712	901423	950500	981132
Tax @20%	Rs.	171136	166542	180285	190100	196226
Profit After Tax	Rs.	684543	666170	721138	760400	784905

Exhibit - 4

Project 2 – Laser Engraved Shell Products						
Profit	Rs.	659075	767757	889279	1024827	1175809
Tax 20%	Rs.	131815	153551	177856	204965	235162
PAT	Rs.	527260	614205	711423	819862	940647

Assumptions underlying the project projection:

1. Projected Selling prices for products are 60-70% of the prevailing market price.
2. Annually increase of 5% in selling price, raw materials and other overheads are considered.
3. The price of the product depends on two factors, Raw materials and the perceived value.
4. *Raw material stock 3 months, finished goods stock one month, suppliers do not extend credit and hence cash payment for suppliers.*
5. *Subsidy: 25% of Capital expenditure for Plant, machinery and buildings is subsidized through government scheme.*

Challenges ahead

After preparing this project, students started discussing on the issues relating to competition, demand fluctuations, investment risk, the tactics of pricing, promoting into interior parts of the country, use of internet, customization for niche markets, product development, managing working capital, managing cash flows and sustaining profits, business and developing a sustainable business model suitable for village women entrepreneurs.

This case is the summary of field work carried by Six BIM students in three villages from Rameswaram Island (Thoppukadu, Chinnapalam and Olaikuda) and was prepared by Dr.R.Subramanian from the details collected by them.

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Annexure: Types of products



Chandelier -1



Chandelier -2



Cypraea Tigris(Kenya conch)



Laser engraved shell

