

# The propitious shells

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**C**oconut shell, the endocarp which embodies the most economically useful kernel, is a valuable raw material for a number of industries all over the world. Coconut shell is a versatile raw material. While it serves as a bowl for a beggar, an industrialist can turn it into a valuable product and an artisan can mould it into an exquisite art ware. It serves the purpose of both common man and business man.

In India, coconut shells are used as fuel in households, bakeries, brick yards, lime kilns, iron foundries and other small scale industries. Like coconut oil, coconut shell also has exceptional properties. It has a specific gravity of 1.2, which is about twice the density of hardwood. It is twice as hard as hardwood and is also very rich in energy. The hardness of coconut shell is comparable to lower strength aluminium alloys, making it one of the hardest organic materials produced in nature. It also contains very high lignin composition which makes the shell very durable enabling it to resist quick degradation and easy decompositions even under wet conditions.

## Innovation in shells

A variety of products can be made out of coconut shell, from utility articles to showpieces. These products have good market as it always maintain the antiquity. Apart from traditional products, many innovative products can be made from shells. The new innovative shell products that have a potential international market include coconut shell ice cream cups, coconut shell bird nest and bird feeder.



## Coconut shell cups

Ice cream cups made out of coconut shells are being exported to European countries widely for serving ice cream. Receptacles made out of coconut shells are also introduced as natural containers to serve salads, puddings, cocktails etc. in the European food and

Table 1: Month – wise export of coconut shells 2015-16

Month	Value (Rs. in lakhs)
April	71.28
May	58.17
June	93.41
July	101.33
August	69.21
September	70.22
October	100.45
<b>Total</b>	<b>564.08</b>

beverage markets.

This product has captured the attention of the elite in the Western and European countries, who are slowly doing away with the synthetic non-biodegradable packing and going in for the naturally available bio-degradable packing. Spoons and forks made out of coconut shells are also exported to European countries.

### Coconut shell bird nest and bird feeder



The Coconut Shell Bird Nest is in huge demand in the national as well as the international market since this product is an excellent artefact. The Coconut Shell Bird's Nest is being manufactured in various designs and attractive patterns and these are highly durable as well as of high utility. Nowadays many people are coming forward as manufacturers and suppliers of Coconut Shell Bird Nest in India.

Table 2: Country wise export of oval coconut shells/  
shell ice cream cups/coconut shell birdfeeder /bird nest etc

Sl. No	Country	Quantity (in MT)	Value (Rs. in Lakhs)	Percentage of exports
1	United Kingdom	350.93	257.40	46
2	South Africa	137.34	101.11	18
3	Spain	103.95	76.63	13
4	Germany	74.45	54.75	10
5	Bulgaria	32.21	23.74	4
6	USA	3224.49	33.46	6
7	Japan	13.11	9.66	2
8	Other Countries	9.93	7.28	1
<b>Total</b>		<b>3946.41</b>	<b>564.08</b>	<b>100</b>

Bird feeders are easy to make and birds love them. Coconut shell bird feeder is an attractive and easy to hang product that can be filled with nutritious food to attract birds to the garden. Once the food has been eaten, the shell can be refilled again. An advantage of bird nest and bird feeder is that these are strong, eco friendly and long lasting product that turns out to be a great toy for bird perch.

### A product with export potential

Bird nest, bird feeder and ice cream cups made out of coconut shell have great potential in the international market. But the plight is that majority of the farmers are still unaware of the potentiality of the product. Even the thrown away shells can earn crores of rupees through transforming it to bird nest, bird feeder and ice cream cups.

The monthly export data reveals that bird nest, bird feeder, ice cream cups etc. have earned about Rs.5.6 crore during the period April to October 2015-16 (Table 1). The countries which import these products include U.K., South Africa, Spain, Germany, Bulgaria, U.S., Japan, China, Australia, Canada etc. United Kingdom is the largest buyer of coconut shells accounting for 46 percentage of import of coconut

shells followed by South Africa and Spain (Table 2). Since everyone eventually tends to change to eco friendly products, these bird nests, bird feeder and ice cream cups will continue to enjoy the increasing demand. Though bird nest, bird feeder and ice cream cups etc. are products having good export scope, its growth is limited. However these products are fetching very good price in international market and hence its propagation is to be continued. Making these products for the export purposes appears to be a viable proposition for the Farmer Producer Organizations in coconut sector which are engaged in primary processing activities.

The Indian Coconut Industry has to go a long way to exploit its full potential. In the field of by product utilization, only the coir industries have made significant stride in the economy. In case of coconut shell utilization, Philippines, Indonesia and Sri Lanka are far ahead of India. Only a few copra processing units in Kerala export coconut shells in the form of ice cream cups, forks, spoons and hookahs to Spain, Italy, France and other European countries. Hence, this raw material which is obtained as by-product of copra industry has tremendous untapped potential still awaiting exposure to fuller exploitation. ■