



## **A STUDY ON THE DEMAND FOR TENDER NUTS WITH REFERENCE TO COIMBATORE DISTRICT IN TAMIL NADU**

**Ms.P.Senthamarai      Dr.P.Kuppuraj**

*\*Ph.D Research Scholar, Department of Commerce, Sri Ramakrishna Mission Vidhyalaya College of Arts and Science. Coimbatore.*

*\*\*Associate Professor & Head, Department of Commerce [CA]&[PA], Sri Ramakrishna Mission Vidhyalaya College of Arts and Science. Coimbatore.*

### **Abstract**

*The study analyses the demand for tender nuts with reference to Coimbatore district in Tamil Nadu. Tender nuts have emerged as an important value added agricultural products and a natural substitute for conventional soft drinks. It is based on empirical survey of motels located along state highways across Koundampalayam, Pollachi and Mettupalayam Taluks. Data were collected during both summer and non-summer seasons to analyse spatial and temporal variations in demand, sales volume, pricing patterns and market share of tender nuts in comparison with other soft drinks. The findings reveal significant seasonal and regional variations in demand, with high sales during summer months and in areas with tourist and pilgrimage traffic. The market share of tender nuts is around 37 percent in soft drinks segment with noticeable seasonal fluctuations. The study highlights the growing economic importance of tender nuts and need to improve marketing strategies to enhance farmer income and market stability.*

**Key Words: Tender Nuts, Demand Analysis, Market Share, Seasonal Variation, Marketing, etc.,**

### **1.1.Introduction**

Coconuts, primarily known as oil seed, are viewed by consumers as value added-consumer goods today. They are converted into multi line consumer products, each one with distinctively varied utilities serving heterogeneous market segments both within and outside the country. Moreover the tender nuts, which once could not be sold in large scale in markets, are being offered as an effective product in the soft drinks markets. As of now, coconuts find increased demand as also the expanded markets. It is often stated that the coconut farmers obtain larger share of the consumers price of tender nuts than that of the coconut product while the manufacturers of coconut products seem to be little hesitant in sharing their profits among farmers. Moreover, the increased demand coupled with development of marketing channels for tender nuts have accounted for large-scale production and sale of tender nuts in recent years. Therefore among the measures on promotion of value addition activities among coconut farmers, it is equally very important to promote the demand for tender nuts since it facilitates for enhancing the returns to farmers, besides laying foundation for the creation of stable markets for coconuts in the long run. In this regard, understanding the demand for tender nuts through addressing certain issues is a sine-qua-non. The issues to be addressed are: What is the nature of demand for tender nuts? Are there seasonal as well as spatial variations in the demand for tender nuts? What is the market share of tender nuts in the soft drinks industry? Are there relationship between the demand for tender nuts and other soft drinks? etc. Although full picture on the marketing of tender nuts is not presented here, this paper addresses the above issues through empirical analysis with the presumption that the inferences of the empirical analysis will facilitate development of the indicators useful for estimating and forecasting the demand including market share of tender nuts in the soft drinks industry.



### 1.2.Means and Method

Understanding the demand for tender nuts demands an in-depth empirical research conducted among a cross section of various segments of respondents such as producers (farmers), marketing functionaries, Organisational/ household as well as individual consumers located/ operated at different geographical locations and at different time spells. However, an empirical attempt is made to understand the nature and type of the demand for tender nuts prevailing in motels on State Highways. Although, generalization of the inferences of this empirical research is constrained by methodological limitations, Three Taluk level which ploughs across and stretches North taluk, Pollachi taluk and Mettupalayam taluk of Coimbatore viz., between Koundampalayam, Pollachi and Mettupalayam, were selected on convenient basis and on census sampling, all the motels that sell tender nuts on the taluk level were interviewed twice, one during non-summer (Oct. - Dec. months) and other during summer (Mar. – May months). For the purpose of analysis, the motels that is located in places. A summary of the results of analysis of the survey is presented in this paper.

### 1.3. Major Inferences

#### Location of motels in State Highways

There are 41 motels in the sample and they are located at different places in Coimbatore District.

**Table 1, Motels Selling Tender Nuts in the Sample in taluk wise**

S. No.	Geographical Segment	Number of Motels		
		Dealing with Tender Nuts	Do not deal with Tender Nuts	Total
1	Koundampalayam	18 (60.0)	12(40.0)	30(73.2)*
2	Pollachi	4(66.7)	2(33.3)	6(15.9)*
3	Mettupalayam	2(40.0)	3(60.0)	5(11.0)*
<b>Total</b>		24(58.54)	17(41.46)	41(100)

Figures in brackets are percentages to row total.

\* Figures in brackets are percentages to column total

Thus out of 41 motels under the study, 58.54 per cent have offered tender nuts for sale both during summer and non-summer days. However, the number of motels at Koundampalayam offering tender nuts for sale is greater as compared to that in any other places. The reason could be the existence of more pilgrimage and tourist centres in the Koundampalayam (Marudamalai Hills).

**Table -2, Sale of Tender Nuts in Motels – Mean Sales per Day (Number of Nuts)**

S. No.	Geographical Segment	Mean sales per day per motel						Overall Average (per day)
		During Summer			During Non-Summer			
		Min.	Max.	Avg.	Min.	Max.	Avg.	
1	Koundampalayam	354	460	407	195	291	243	325
2	Pollachi	117	157	137	67	94	81	109
3	Mettupalayam	78	90	84	58	68	63	74
<b>Average (per motel)</b>		<b>183</b>	<b>236</b>	<b>209</b>	<b>107</b>	<b>151</b>	<b>129</b>	<b>169</b>

#### **Spatial variations in demand:**

Table 2, shows the temporal and the spatial variations in demand (sale) for tender nuts. On an average, 183 to 236 tender nuts are sold daily in motels during summer and it ranged between 107 and 151 tender nuts during non-summer days. This indicates the temporal variations in the demand for tender



nuts. As for spatial variations in the demand for tender nuts, we may infer also that besides temporal variations, sale of tender nuts varied among regions. Average daily sale of tender nuts in motels in the southern region is 325 whereas it is lower in other regions as compared to southern region (it ranges from 74 to 109 nuts per day). Thus, there are spatial as well as temporal variations in the demand for tender nuts among regions in particular and Tamilnadu general.

**Table- 3, Selling Price of Tender Nuts – Mean Price per Nut**

S. No.	Geographical Segment	Price per Nut ( <i>in Rs.</i> )					
		Summer			Non-Summer		
		Min	Max	Avg.	Min	Max	Avg.
1	Koundampalayam	35	40	38	25	30	28
2	Pollachi	30	25	28	25	35	30
3	Mettupalayam	40	55	48	35	40	38

**Variations in selling price:**

Table 3 shows that there are variations as well as differences in the selling price of tender nuts among motels and also between taluk and seasons. Differences in the selling price of tender nuts among motels could be due to differences in the quality of tender nuts as well as differences in the location of motels. For instance, the motels located near/ on the outskirts of urban/ city centres have sold at tender nuts a lower price than those located at further places. Moreover, the motels that procured tender nuts locally have sold at a lower price than those that procured through/ from wandering assemblers/ traders. Whereas, differences in the selling price of tender nuts among seasons could be due to change in the demand for tender nuts, which primarily might be due to change in the consumers buying behaviour.

**Table – 4, Temporal Variations in Sale of Tender Nuts – Month Wise**

S.No.	Geographical segment	Months		
		High sale	Moderate sale	Low sale
1	Koundampalayam	Mar. – Apr.	Oct. – Nov.	June - July
2	Pollachi	Feb. – June	Dec. – Jan.	Aug. – Nov.
3	Mettupalayam	Apr. – July	Dec. – Mar.	Aug. – Oct.

**Temporal variations in demand**

Temporal variations in demand of tender nuts are indicated in the Table 4. It is leant that high sales occurred during summer days largely between February and April months and in few cases till July month. The sale was moderate during October to December months and till March in a few motels. The sale was low during June to November months and the lowest during June.

This temporal variation in the demand for tender nuts also differed among motels located in different taluk in Coimbatore District. Such temporal variations in the demand for tender nuts could be due to variations in the climatic and monsoon factors. For instance, Pollachi taluk of Coimbatore usually witnesses hot summer during March – April months.



**Table 5, Market Share of Tender Nuts**

S. No.	Products category Geographical Segment	Percentage sale of different product items to soft drinks sales						
		Tender Nut	Cool drink	Sugar cane juice	Fruit juice	Mineral water	Others	Total
1	Koundampalayam	128	141	19	16	19	17	100
2	Pollachi	123	144	18	18	19	18	100
3	Mettupalayam	127	141	17	17	19	19	100
<b>Average</b>		<b>126</b>	<b>142</b>	<b>18</b>	<b>17</b>	<b>19</b>	<b>18</b>	<b>100</b>

**Variations in the market share of tender nuts**

The products like cool drinks, including ice and ice cream (branded and non-branded), fruit juices including sugar cane, palmyra water etc. and mineral water and thirst quenching agricultural products like cucumber, watermelon, tender palm fruit etc., were regarded as competing products of tender nuts. Sales effected for each of the above product items in each motel was analysed to assess the market share of tender nuts. The study found variations in the share of tender nuts in cool/ soft drinks market between motels, between places and between seasons. On an average, the proportion of tender nuts sales to cool/ soft drink sales in motels was 126 (37 per cent) an average, while other cool drinks (cool drinks including ice and ice cream, branded and non-branded), fruit juices, including sugar cane, palmyra water, etc. and mineral water and thirst quenching agricultural products like cucumber, watermelon, tender palm fruit etc., constituted 63 per cent an average (Table 5).

**Table 6, Market share during summer**  
 (Mean sales per day per motel) (Amount in Rs.)

S. No.	Geographical Segment	Minimum Sales (Average per motel)			Maximum Sales (Average per motel)		
		Average sale of Soft Drinks	Average sale of Tender Nuts	% sale of Tender Nuts	Average sale of Soft Drinks	Average sale of Tender Nuts	% sale of Tender Nuts
1	Koundampalayam	1956	972	33.2	2686	1150	29.9
2	Pollachi	1392	445	24.2	1671	624	27.2
3	Mettupalayam	1485	448	23.2	1698	523	34.5
<b>Average</b>		<b>1611</b>	<b>622</b>	<b>26.9</b>	<b>2018</b>	<b>766</b>	<b>30.5</b>

**Market share during summer**

As shown in Table 6, seasonal variations in market share of tender nuts in the cool/ soft drinks industry could be observed among motels. It is noticed that during summer days, the value of sales effected through cool/ soft drinks per day ranged between Rs. 1,611 and Rs. 2,018, while the value of sales effected on tender nuts per day ranged between Rs. 622 and Rs. 766. On an average, the mean percentage of tender nuts sales to cool/ soft drinks was ranging between 26.9 and 30.5 during summer.



**Table- 7, Market share during Non-Summer**  
 (Mean sales per day per motel) (Amount in Rs.)

S. No.	Geographical Segment	Minimum sales (Average per motel)			Maximum sales (Average per motel)		
		Average sale of Soft Drinks	Average sale of Tender Nuts	% sale of Tender Nuts	Average sale of Soft Drinks	Average sale of Tender Nuts	% sale of Tender Nuts
1	Koundampalayam	1125	357	24.1	1592	609	27.7
2	Pollachi	766	149	16.3	1030	233	18.4
3	Mettupalayam	1118	268	19.3	1283	333	20.6
<b>Average</b>		<b>1003</b>	<b>258</b>	<b>19.9</b>	<b>1302</b>	<b>392</b>	<b>22.2</b>

### Market share during Non-Summer

As shown in table 7, during non-summer days the value of sales per day effected on cool/ soft drinks ranged between Rs.1003 and Rs.1302, while the value of sales affected on tender nuts per day ranged between Rs.258 and Rs.392. On an average, the percentage sale of tender nuts constituted 20-22 during non-summer.

This indicates the seasonal variations in consumers’ purchase behaviour towards tender nuts that are offered for sale in motels as well as seasonal variations in the market share of tender nuts in the cool/ soft drinks market. Moreover, among other factors accounting for the change in consumers buying behaviour, the location of motels and their distance from urban/ city centres, and the duration of the break of journey to be spent at the bus stop in case of potential customers travelling by bus, and the purpose of travel in case of potential customers travelling by their own mode of conveyance seem to contribute for the differences in the purchase behaviour of consumers.

### Conclusion

Majority of the motels that are located on the State Highways in Coimbatore sell tender nuts throughout the year. However, such motels are found larger in numbers in Pollachi than that in middle and Koundamplayam taluk of Coimbatore. Existence of pilgrimage as well as tourist places is attributed for the existence of the motels large in numbers that sell tender coconuts. On an average 169 tender nuts are sold per day. However, the range of variations in the sale of tender nuts is wider during summer than that of non-summer days. Differences in the quality of tender nuts, the location of motels, the climatic and monsoon factors etc. seem to influence the range of variations as well as differences in the selling price of tender nuts. High sales occur during summer days, and it is moderate during spring days. It is low during winter days. Temporal variations in the demand for tender nuts thus occurs primarily due to climatic and monsoon factors. The tender nuts retain on an average 37 per cent market share of the cool/ soft drinks industry. However, seasonal variation in the market share of tender nuts is also observed. The above indicatives thus prove the temporal as well as spatial characteristics of the demand of tender nuts on the one hand and trend in the consumers purchase behaviour towards tender nuts on the other. This paper therefore concludes by emphasizing the relevance of embarking further query on the factors influencing the purchase behaviour of consumers of tender nuts in Coimbatore.



## **References**

1. CDB. (2021). Tender Coconut, Kochi.
2. Child R. (1953). New Biology, The Coconut, Longman Group Ltd., London.
3. Coconut Development Board. (2003). Demand and Supply of Coconut Products and Consumers Buying Behaviour in Tamil Nadu; Research Report.
4. Coir Board. (2018). Annual Report, Kochi.
5. Das P.K. (1999). Coconut- based cropping system in India and Sri Lanka in Modern Coconut Management- Farm cultivation and Products, (Ed.) Johan G. Ohler. FAO.
6. Edachal Mohammed. (1963). Coconut Stories, Coconut Bulletin, 17 (6).