

Production and Marketing of Coconut Products in Ernakulam District – An Empirical study

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Abstract

The coconut tree is a generous tree, a gift from nature to humanity, providing food, drink, oilseeds, fibre, wood, health items, and a significant source of money for the people. Among tropical palms, the coconut is regarded the most vital and beneficial. Every portion of the coconut palm has a market value. Almost all of the coconut produced is used in traditional domestic markets. Coconut oil is the most important traditional commercial product. As a result, the price of raw coconut is determined by the demand and supply of this particular coconut commodity. Packaged tender coconut water, coconut milk, coconut chips, coconut milk products, desiccated coconut, coconut water products, tender snowball coconut, vinegar, coir products, coconut shell and coconut wood based products are examples of marketable value-added products.

In India, raw nuts and edible copra are essential delicacies that are used in Hindu religious events. Coconut oil is used in cooking and industrial, as well as in the production of vegetable ghee, soaps, and toiletries. The tender coconut's water is a delightful drink. The husk produces coir fibre, which is used to make yarn, matting, and brushes, among other things. The shell is burned and turned into charcoal, which is then used to make gas masks. The shell is used to make spoons, ladles, and decorative things. When fresh, the sweet juice obtained by tapping the unopened wrapping covering the new flowers makes a refreshing drink or can be converted into jaggery. When the juice is allowed to ferment, it becomes grog, an alcoholic beverage with a considerable market. Products like coir, shell, and wood can be used to substitute plastic in a variety of ways due to their high quality and environmental friendliness. Desiccated coconut, coconut cream, virgin oil, vinegar, tender coconut water, coconut milk-based product, Neera and its by-products, and other industrial non-edible goods such as coir are among the other value-added coconut products. Separation of glycerin and fatty acids, manufacturing of soaps, detergents, and bio-diesel, and coco methyl ester for mixing with normal fuel are all examples of industrial applications.

Keywords: production, marketing, manufacturing, revenue, satisfaction

1. Introduction

The coconut production market capacity was costly at \$11.5 billion in 2018, and is estimated to reach \$31.1 billion by 2026, registering a CAGR of 13.6% from 2019 to 2026. In 2018, the head lubricate sector accounted for plurality of the total top part of an animate body products retail share. Top part of an animate body is a versatile product accompanying diversified health benefits. Brand arisen coconut involve head lubricate, coconut water, head milk, dried coconut, coir, and copra. These produce find a expansive range of uses in food & liquor and beautifying & personal care corporations. Top part of an animate body oil is widely destroyed apiece cosmetic industry for production fruit, for hair and skin care uses in the way that wig oils and soaps. Many manufacturers use coconut lubricate in bundle food amount, and many buyers use it for being cooked products, to a degree preserves, fried snacks, and smoothies.

Enormous demand for coconut lubricate in the cosmetic manufacturing and increase in its recognition in fare applications are inclined drive the top part of an animate body lubricate market. Alive and well-being conscious buyers have switched their choice toward natural opportunities to caffeinated and carbohydrate-based strength drinks. Therefore, the demand for head water as a natural strength

drink is increasing rapidly on account of allure nutritional characteristics in the way that electrolytes and fibers. According to Head Output Market Study, the head produce market is separate on the support of type, application, form, and domain. By type, it is classification into head water, coconut lubricate, head milk, dried head merchandise, and others. By request, it is detached into meat, beverage, cosmetic, and so forth. By form, it is bifurcated into reliable and liquid. Domainreasonable, it is analyzed across Western hemisphere (United states of america, Canada, and Mexico), Europe (Germany, France, the UK, Italy, the Netherlands, and Rest of Europe), Asia- Peaceful (India, Indonesia, Dishes, the Philippines, Cold Korea, Vietnam, Malaysia, and Rest of Asia-Appeasing), and LAMEA (the Middle Oriental, Latin United states of america, and Land of the Sahara).On the basis of type, the top part of an animate body lubricate sector accounted for the maximum agree the worldwide market in 2018. Head lubricate located personal care production have acquire higher friction in the individual care manufacturing due to allure emollient possessions. Furthermore, on account of allure rich flavor with a gentle perfume, it has enhance a popular choice of fat in differing fare products.

Accordingly, on account of few of the key characteristics bewitched by head oil, accompanying forceful demand from cosmetic and food & drinks commerces, coconut lubricate elucidated a higher profit agree the worldwide coconut device retail.

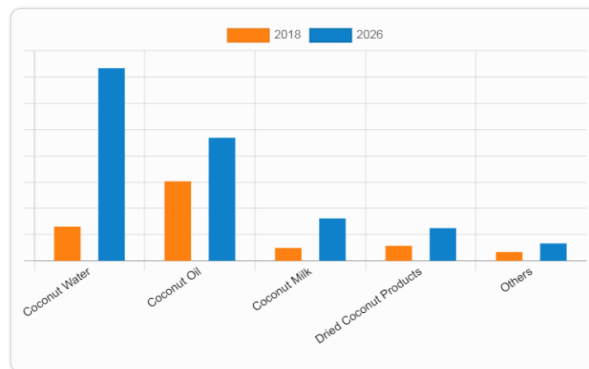


Fig.1: The coconut water segment would witness the fastest growth, registering a CAGR of 23.8% during the forecast.

On the basis of application, the cosmetics segment was dominant, which accounted for more than half of the share in coconut products market in 2018 and is expected to retain its dominance throughout the forecast period. Coconut products such as coconut oil, coconut milk, and cream are widely used in preparations of a range of cosmetic products due to their antioxidant, anti-ageing, and anti-inflammatory properties beneficial for hair and skin.

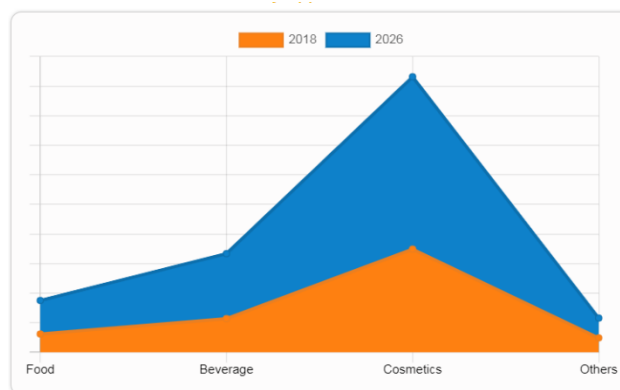


Fig.2: Beverages segment would witness the fastest growth, registering a CAGR of 14.7% during the forecast period.

On the basis of form, the liquid segment held a significant share in the global market in 2018. However, the solid segment is expected to garner a considerable share, owing to increase in demand for coconut-based snacks as healthy alternatives to conventional snack products across the globe. In addition, benefits such as easy handling and longer shelf life further adds to the solid coconut products market growth.

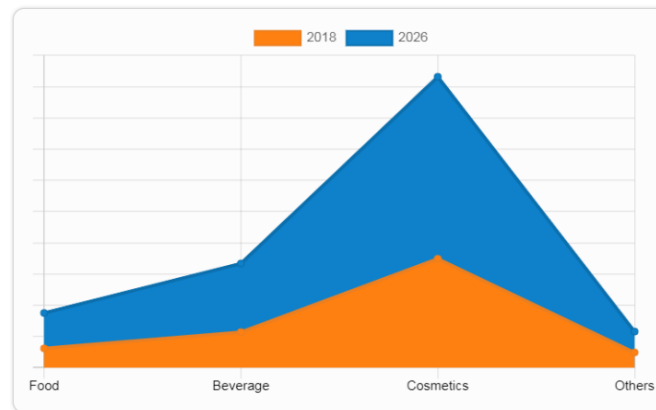


Fig.3: Liquid segment would witness the fastest growth, registering a CAGR of 13.9% during the forecast period.

On the basis of region, Asia-Pacific was the prominent market in 2018 and accounted for the maximum share in the global coconut products market. This can be attributed to high adoption of coconut products such as coconut oil, coconut water, coconut milk, and cream in various food & beverage and cosmetic applications in the region. However, North America and Europe are also expected to witness a significant CAGR, owing to growth in demand for packaged coconut water as a health drink in these regions and rise in consumption of coconut milk as a dairy alternative product. The coconut palm may be the most useful tree in the world. If you could count the stars, then you could count all the ways the coconut tree serves us” It is true in India Coconut industry is contributing more than Rs. 8300 million to the Indian GDP and this industry helps to earning foreign exchange to tune of Rs. 13000 million per annum. The major portion of coconut cultivation is from the four south Indian states, namely Kerala, Tamil Nadu, Andhra Pradesh and Karnataka, which comes up to 90 per cent of total coconut production. Coconut is cultivated in 93 countries of seven continents in an extent of 12.78 million ha. With an annual production of 54 billion nuts. Indonesia, Philippines, India, Sri Lanka together account for 78% of total world production. The other important coconut producing countries are Bangladesh, Thailand, Vietnam

Key Benefits for Coconut Products Market:

- The report provides a quantitative analysis of the current coconut products market trends, estimations, and dynamics of the market size from 2018 to 2026 to identify the prevailing opportunities.
- Porter’s five forces analysis highlights the potency of buyers and suppliers to enable stakeholders to make profit-oriented business decisions and strengthen their supplier–buyer network.
- In-depth analysis and the market size and segmentation assists in determining the prevailing coconut products market opportunities.
- The major countries in each region are mapped according to their revenue contribution to the market.
- The market player positioning segment facilitates benchmarking and provides a clear understanding of the present position of the market players in the coconut products industry.

2. Statement of the problem

Coconut is one of the leading commodities in agricultural exports; the production programmed of the crop is of critical importance in improving the efficient use of resources. The cost of production and

net return obtained per unit, would determine the profitability of the crop. The constraints in enhancing productivity among the coconut cultivators are lack of awareness on recent development related to crop improvement, lack of quality planting materials to farmers, lack of proper management practices, poor responses for marketing the products and pest problems are to be tackled consciously to make coconut farming attractive.

3. Objectives of the Study

Considering the production and marketing of coconut in **Ernakulam** district, the study was carried out with the following objectives:

1. To study the production problems that coconut farmers in the **Ernakulam** district confront.
2. To study the problems that farmers in the **Ernakulam** district confront – in coconut products marketing.

4. Review of Literature

Coconut producers' production patterns and selling behaviour were researched by Yasotha and Padmanaban (1996). The field survey was conducted in three villages in Pollachi, Tamil Nadu: Nelligoundanpalayam, Pollachi North, and Ramapattinam. Thirty coconut growers were chosen at random, with ten farmers from each village. The amount of production varies greatly according on the tree's age and season, with March, April, and May being the peak season. Harvesting might take anywhere from 35 to 50 days. In the research region, the average number of coconut palms per acre was 83. The average monthly nut production is 570. Three key functionaries, namely local dealers, commission agents, and wholesalers, were involved in large nut disposals. The farmer from Nelligoundanpalayam sold 98.13 percent of his coconuts to local traders, 1.87 percent to commission agents, and none to wholesalers. Coconut farmers in Pollachi North sold 73.10 percent of their crop to local dealers, 25.66 percent to wholesalers, and 1.24 percent to commission agents. Farmers in Ramapattinam sold 78.94 percent of their coconuts to local dealers, with sales of 19.53 percent to wholesalers and 1.53 percent to commission agents. Farmers in Nelligoundanpalayam and Ramapattinam were instructed to sell the nuts as soon as possible. The lack of or high expense of transportation was cited as the primary factor. Farmers in Pollachi North attributed their selling behaviour to a higher price and a need to sell quickly.

Nair and Rajesh (2001) present a clear picture of the country's coconut area, output, and productivity, citing factors such as high yield types and hybrids, manures and fertilizers, irrigation, intercropping, and pests and diseases as contributors to increased production and productivity. They highlight major production constraints such as the large gap between demand and supply of high- quality plants; small farms where the farmer grows other crops to meet his needs, such as nuts, fruits, vegetables, tubers, and even fuel, resulting in the neglect of the coconut; palm tree overcrowding; insufficient and inappropriate manure application; and irrigation constraints. To improve production and productivity, the study suggests the following strategies: establish a seed garden to produce seedlings of already proven high-yielding varieties / hybrids, identify varieties adapted to different agro-climatic conditions, evolve hybrids and tolerant varieties to important diseases, develop site-specific fertilizers and irrigation taking soil characteristics into account, and efforts should also be made to improve the pest management technologies that have previously been created in order to prevent crop losses.

The costs and margins of coconut marketing were investigated by Ramakumar (2001). This study's data was gathered by a field survey in four districts of Kerala: Thiruvananthapuram, Alappuzha, Thrissur, and Kozhikode. A panchayat was chosen at random in each of the four districts. Thirty farmers were chosen at random in each of these panchayats. As a result, 120 farmers in the sample were polled. Copra manufacturers and oil mills were chosen at random to provide information on setup and marketing costs, as well as marketing challenges. The marketing channels

were tracked to the oil mills through these intermediaries. The most significant marketing issue was the lack of acceptable and fair rates for coconut and its products, as well as price fluctuation. Farmers were hesitant to enter the processing sector, such as copra production and oil milling. The majority of the farmers sold their coconuts to copra manufacturers on the farm, who collected the coconuts, processed them into copra, and sold it to oil mills. Intermediaries have gained huge profit margins in this processing chain. When they sold coconuts through cooperative societies, they received a greater price as well as benefits from their participation in cooperatives, such as access to financing, medical care, and other services. According to the report, the most effective strategy to help farmers get a better price is to join marketing cooperatives. Mohamed Sharfudeen and Yasmin (2005) highlighted the importance and pattern of coconut consumption, as well as desiccated coconut and its biochemical composition, desiccated coconut issues, and marketing activities. In India, coconut is grown as a food crop and for oil production. The dry and damaged endosperm of the coconut is known as desiccated coconut. The white kernel of a coconut that has been grated and dried to around 2.5 per cent moisture content is known as desiccated coconut. Making desiccated coconut does not necessitate the use of complicated machinery or equipment. Desiccated coconut technology has been developed by the Coconut Development Board of India and the Central Food Technology Research Institute in Mysore. The desiccated coconut industry's growth has been hampered by a lack of raw materials. All of the desiccated coconut processing plants in South India are small-scale operations.

According to the Ministry of Agriculture, Government of India (2011), the country's coconut production and marketing scenario has seen phenomenal growth, particularly in terms of production efficiency, as evidenced by the development of improved dwarf varieties of high yielding cross coconut palms, traditional, non-traditional coconut products, and commercial and industrial coconut products. The current state of the coconut industry, as well as the challenges faced by producers and traders participating in the coconut marketing process, were explored, with an emphasis on the country's current deficiencies in the marketing of coconut and coconut products.

Table 1: Sampling Distribution.

S. No.	Selected Taluks	Farmers
1	Kanayannur	60
2	Kochi	100
3	Kunnathunad	120
4	Paravur	80
5	Kothamangalam	200
	Total	560

5. Coconut products marketing Practices

Coconuts are sold as fresh tender nuts, ripe water nuts, and dry nuts, and their marketing differs from that of other fresh fruits due to their natural resilience. Because coconut is mostly grown in the southern states of Kerala, Karnataka, Tamil Nadu, and Andhra Pradesh, as well as in the coastal areas of Maharashtra, Goa, Gujarat, Odhisa, and West Bengal, the marketing strategies in these states are similar.

Coconut farmers have two options for getting rid of their coconuts. The direct channel is one, and the indirect channel is the other. The direct channel is straightforward, whereas the indirect channel is complicated. The indirect channel is the most common method used in coconut products marketing. Coconut farmers prefer the indirect channel since it is more popular and frequently used. In the marketing of coconuts, intermediaries play a critical role in the assembly and equalization activities. There are number of middlemen, channels, officials, brokers, assemblers, traders, wholesalers,

institutions, and retailers who engage in the flow of coconuts from point of production to point of consumption, performing various functions.

6. Institutional Support for Coconut Production and Marketing

It is a fact that the performance of supporting institutions and programmes is crucial to the expansion of agriculture. Institutional support in the form of agricultural research, extension, credit, and marketing is critical for the well-being of the farming community's production and marketing system. In this context, the respondents were asked to state their satisfaction with the institutional support for the production and marketing of coconuts in the **Ernakulam** district.

Table 2: Annual Income and Satisfaction of Institutional Support for Coconut Production and Marketing.

Annual Income	No. of	Mean	Standard	Coefficient of
Upto 250000	63	28.16	4.35	15.45
250001-500000	178	27.83	4.35	15.63
500000 - 750000	255	27.87	4.09	14.68
Above 750000	64	27.94	3.45	12.35
Total	560	27.90	4.13	14.80

Source: Primary Data.

Table 3: Relationship between Annual Income and Satisfaction of Institutional Support for Coconut Production and Marketing.

Source of	Sum of	DF	Mean	Calculated F	Table Value at 5%	Result
Between groups	5.309	3	1.770	0.103	2.621	Not
Within groups	9521.091	556	17.124			
Total	9526.400	559				

The calculated F-value for 3 and 556 degrees of freedom is (0.103) less than the value in the table at the 5% significance level (2.621). As a result, there is no significant relationship between annual income and satisfaction with institutional support for coconut production and marketing among farmers. As a result, H01 (null hypothesis) is accepted. This indicates that the annual income of coconut farmers has no significant influence on institutional support for production and marketing. Farmers earning up to Rs. 250000 per year have the highest average satisfaction score (28.16), followed by farmers earning more than Rs. 750000 per year. Farmers earning annual income between Rs. 250001 and Rs. 500000 have a low average satisfaction score (27.83). As a result, farmers with annual incomes of up to Rs. 250000 are more satisfied with institutional support for coconut production and marketing. The variation in satisfaction is high (15.73%) among farmers with annual income of Rs. 250001-500000 and it is low (12.35) among farmers with annual income above Rs. 750000. Thus, farmers earning more than Rs.750000 per year are consistently satisfied with institutional support for coconut production and marketing.

7. Category of Farmer and Satisfaction of Institutional Support for Coconut Production and Marketing

Table 4: Category of Farmer and Satisfaction of Institutional Support for Coconut Production and Marketing.

Category of Farmer	No. of Respondents	Mean	Standard Deviation	Coefficient of
Marginal and small	231	27.63	3.87	14.01
Medium farmer	188	28.33	4.49	15.85

Big farmer	141	27.77	4.01	14.44
Total	560	27.90	4.13	14.80

Source: Primary Data.

Table 5: Relationship between Category of Farmers and the Satisfaction of Institutional Support for Coconut Production and Marketing.

Source of	Sum of	DF	Mean	Calculated F	Table Value at 5%	Result
Between groups	53.847	2	26.924	1.583	3.012	Not
Within groups	9472.553	557	17.006			
Total	9526.400	559				

At the 5% significance level, the calculated F value (1.583) is less than the table value (3.012) for 2 and 557 degrees of freedom. As a result, there is no significant relationship between the farmer's satisfaction with institutional support for coconut production and marketing and the category of farmer. As a result, H01 (null hypothesis) is accepted. This reveals that the farmer category has no substantial influence on institutional support for coconut production and marketing. Medium farmers had the highest average satisfaction score (28.33), followed by big farmers.

Marginal and small farmers have a low level of satisfaction on average (27.63). As a result, medium farmers are more satisfied with the institutional support they receive for coconut production and marketing. The variation in satisfaction is high (15.85%) among medium farmers and it is low (14.01%) among marginal and small farmers. As a result, marginal and small farmers are consistently satisfied with institutional support for coconut production and marketing.

Table 6: Taluk by Farmers and Satisfaction of Institutional Support for Coconut Production and Marketing.

Taluks	Mean	Standard Deviation	Coefficient of Variation
Kanayannur	27.53	3.90	14.17
Kochi	27.59	3.83	13.88
Kunnathunad	28.20	3.81	13.51
Paravur	28.17	4.41	15.65
Kothamangalam	27.44	4.38	15.96
Total	27.90	4.13	14.80

Source: Primary Data.

Table 7: Relationship between Taluk by Farmers and Satisfaction of Institutional Support for Coconut Production and Marketing.

Source of	Sum of	DF	Mean	Calculated F	Table Value at 5%	Result
Between groups	60.169	4	15.042	0.882	2.388	Not
Within groups	9466.231	555	17.056			
Total	9526.400	559				

At the 5% significance level, the calculated F value (0.882) is less than the table value (2.388) for 4 and 555 degrees of freedom. As a result, there is no significant relationship between farmer satisfaction with institutional support for coconut production and marketing in different taluks. The null hypothesis (H01) is thus accepted. This shows that taluks belong by farmers have no significant

influence on institutional support for coconut production and marketing. The farmers in **Ernakulam** taluk are consistently satisfied with the institutional support for coconut production and marketing.

Table 8: Type of Coconut Palm and Satisfaction of Institutional Support for Coconut Production and Marketing.

Type of Coconut Palm	No. of Respondents	Mean	Standard Deviation	Coefficient of Variation
Dwarf coconut	354	27.90	4.20	15.05
Tall coconut	206	27.91	4.01	14.37
Total	560	27.90	4.13	14.80

Source: Primary Data.

Table 9: Comparison of the Satisfaction of Dwarf and Tall Coconut Producers with Institutional Support for Coconut Production and Marketing.

Calculated Chi-square	DF	Table Value at 5%	Result
0.013	558	1.964	Not

At the 5% significance level, the calculated t-value for 558 degrees of freedom is (0.013) less than the table value (1.964). As a result, there is no significant difference between dwarf and tall coconut varieties in terms of farmer satisfaction with institutional support for coconut production and marketing. Therefore, the null hypothesis (H01) is accepted. This implies that the type of coconut palm grown by farmers has no significant influence on institutional support for coconut production and marketing. Farmers who plant tall coconut palm varieties had the greatest average satisfaction score (27.91), followed by farmers who plant dwarf coconut palm varieties.

Farmers who cultivate a tall variety of coconut palm are more satisfied with the institutional support for coconut production and marketing. The variation in satisfaction is high (15.05%) among farmers planting a dwarf variety of coconut palm and it is low (14.37%) among farmers planting a tall variety of coconut palm. As a result, there is consistency in the satisfaction of farmers who plant a tall variety of coconut palms with institutional support for coconut production and marketing.

Table 10: Effect of Farmer Demographics on their Satisfaction of Institutional Support for Coconut Production and Marketing.

Farmer Demographics	B	Std. Error	t	Result
(Constant)	28.647	1.323	21.654	Ns
Gender	-0.634	0.416	-1.526	Ns
Age	0.021	0.226	0.093	Ns
Education	-0.062	0.220	-0.280	Ns
Annual income	-0.060	0.211	-0.282	Ns
Farmer category	0.100	0.220	0.456	Ns
Type of coconut tree	0.074	0.367	0.202	Ns

Source: Primary Data. Ns Not Significant

Table 11: Farmer Demography and Satisfaction of Institutional Support for Coconut Production and Marketing: Multiple Correlation Coefficients

R	R Square	F	Result
0.071	0.005	0.473	Not significant

According to multiple regression analysis, farmer satisfaction with institutional support for coconut production and marketing and farmer demographics had a low degree of correlation (0.071). According to R-square, farmers' demographics had a 0.50 percent influence on their satisfaction with institutional support for coconut production and marketing. The change in farmers' satisfaction with institutional support for coconut production and marketing was accounted for by other variables not included in the regression model, accounting for 99.50 percent of the change. The multiple regression coefficients are not significant at the 5% level. Farmers' satisfaction with institutional support for coconut production and marketing is unaffected by gender, age, education, annual income, farmer category and variety of coconut palm.

Table 12: Respondents’ Satisfaction with Institutional Support for Coconut Production and Marketing.

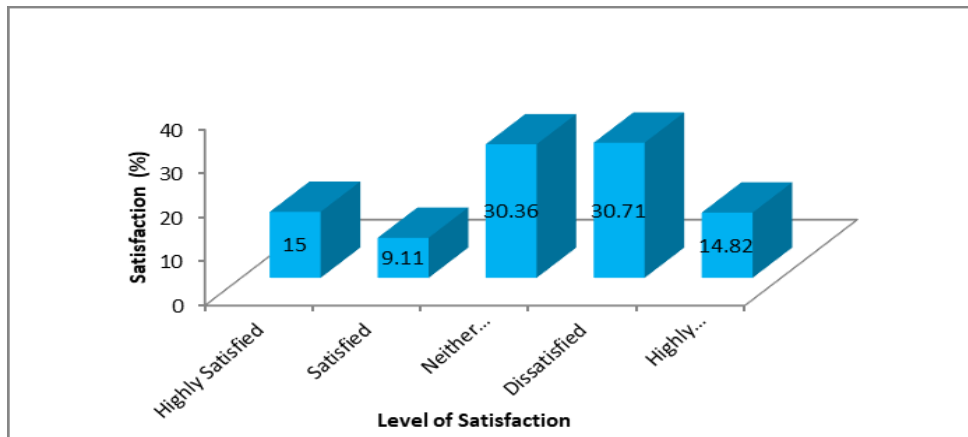
Statements	Level of Satisfaction					Total	Mean
	Highly Satisfied	Satisfied	Neither Satisfied Nor	Dissatisfied	Highly Dissatisfied		
Production	76 (13.57)	54 (9.64)	178 (31.79)	173 (30.89)	79 (14.11)	560 (100.00)	2.78
Seed supply	98 (17.50)	65 (11.61)	167 (29.82)	160 (28.57)	70 (12.50)	560 (100.00)	2.93
Fertilizer supply	83 (14.82)	55 (9.82)	173 (30.89)	164 (29.29)	85 (15.18)	560 (100.00)	2.80
Supply of inputs	82 (14.64)	34 (6.07)	176 (31.43)	178 (31.79)	90 (16.07)	560 (100.00)	2.71
Financial aid	76 (13.57)	41 (7.32)	170 (30.36)	183 (32.68)	90 (16.07)	560 (100.00)	2.70
Technical support	91 (16.25)	64 (11.78)	167 (29.82)	166 (29.64)	72 (12.86)	560 (100.00)	2.89
Information on the arrival of prices	84 (15.00)	47 (8.39)	162 (28.93)	180 (32.14)	87 (15.54)	560 (100.00)	2.75
Demand and supply situations	91 (16.25)	67 (11.96)	159 (28.39)	166 (29.64)	77 (13.75)	560 (100.00)	2.87
Transport situation	79 (14.11)	54 (9.64)	178 (31.79)	171 (30.54)	78 (13.93)	560 (100.00)	2.79
Storage facilities	81 (14.46)	34 (6.07)	169 (30.18)	176 (31.43)	100 (17.86)	560 (100.00)	2.68
Total	84 (15.00)	51 (9.11)	170 (30.36)	172 (30.71)	83 (14.82)	560 (100.00)	2.79

Source: Primary Data.

Table shows the level of farmer satisfaction with institutional support for coconut production and marketing in the **Ernakulam** district. The majority of respondents (30.71%) is dissatisfied with institutional support for coconut production and marketing, followed by with neither satisfied nor dissatisfied (30.36%) and highly dissatisfied (14.82%). Institutional support for coconut production and marketing is highly dissatisfied with 14.82 percent and satisfied with 9.11 percent, respectively. According to the average satisfaction score, coconut farmers are most satisfied with seed supply (2.93), technical support (2.89), and demand and supply situations (2.87). In terms of storage facilities (2.68), financial aid (2.70), and input supply (2.61), coconut farmers, on the other

hand, are less satisfied with institutional support for coconut production and marketing.

Fig. 4: Respondents’ Satisfaction with Institutional Support for Coconut Production and Marketing.



The purpose of this section is to investigate the association between farmer demographics and their satisfaction with coconut production.

Table 13: Gender and Satisfaction in Coconut Production.

Gender	Level of Satisfaction					Total	Mean
	Highly Satisfied	Satisfied	Neither Satisfied Nor Dissatisfied	Dissatisfied	Highly Dissatisfied		
Male	63 (14.75)	71 (16.63)	129 (30.21)	115 (26.93)	49 (11.48)	427 (100.00)	2.96
Female	14 (10.53)	25 (18.80)	27 (20.30)	44 (33.08)	23 (17.29)	133 (100.00)	2.72
Total	77 (13.75)	96 (17.14)	156 (27.86)	159 (28.39)	72 (12.86)	560 (100.00)	2.91

Source: Primary Data.

Table 14: Association between Gender and Satisfaction in Coconut Production.

Calculated Chi-square Value	DF	Table Value at 5% Level	Result
9.193	4	9.488	Not significant

At the 5% significance level, the calculated chi-square value for 4 degrees of freedom is (9.193) less than the table value (9.488). As a result, there is no significant association between the farmers' gender and their satisfaction with coconut production. As a result, the null hypothesis (H0) is accepted. This reveals that the gender of coconut growers has no significant influence on the production of coconuts. Female coconut producers have the highest average satisfaction score (2.72), followed by male coconut producers, showing that female farmers are more satisfied with coconut production.

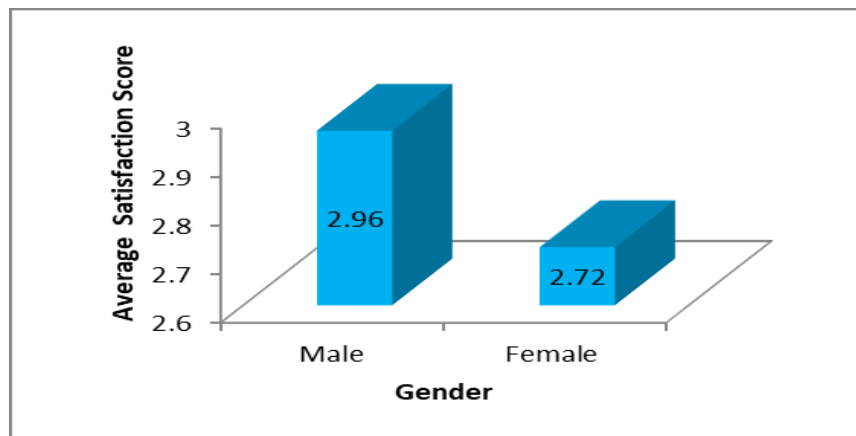


Fig. 2: Gender and Satisfaction in Coconut Production.

8. Conclusion

Marketing is just as important as production to any producer. Because it increases the product's worth, pays the producer a profit, and, most crucially, instructs the producer whether or not to continue producing. Because of their natural resistance, coconuts are sold as fresh tender nuts, ripe water nuts, and dry nuts, and their marketing differs from that of other fresh fruits. Coconut farmers have two marketing options for their coconuts. One is the direct channel, while the other is the indirect channel. Coconut growers' problems are frequently caused by weaknesses in the marketing system, so developing a robust marketing system is vital. Almost half of all coconut growers have mentioned leasing as a method of coconut disposal. Financial issues, particularly the need for money to settle past obligations and cover household needs, are the most common reasons for leasing coconut palms. Coconut growers that are financially stable do not have to lease coconut plants in such situations. For coconut disposal, large farms generally use a variety of methods. Farmers' monitoring of diverse marketing strategies is linked to disparities in farm location, as well as changes in coconut palm age and production. Lack of leases, low productivity, and insufficient tree protection on the farm, as well as seasonal harvesting, are some of the issues that push coconut growers to employ diverse marketing techniques. Overall, the existing marketing of coconut and its products is neither scientific nor coordinated, and it amounts to nearly vertical integration. Although coconut is considered a notified product in most jurisdictions, marketing lacks a defined organisational framework. Intermediaries are vulnerable to exploitation if this is not done. Almost all principal markets have a price-fixing intermediate. Almost of coconut farmers in India are unorganized smaller marginal farmers. Some farmers are obliged to sell their produce to intermediaries due to financial restrictions. In this chapter, the researcher aimed to investigate the coconut products marketing pattern, farmers' satisfaction with coconut products marketing, and the problems that coconut farmers experience when marketing their coconuts.

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