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An Analytical Study on Marketing Behaviour of Coconut Growers in Coimbatore District

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

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ABSTRACT

Coimbatore tops in area and production of coconuts in Tamil Nadu. Though production had been increased in the recent years. Farmers are facing difficulties in finding new marketing channels for their produce and also facing hardships in fetching fair and remunerative price for their nuts. Coconut copra, coconut oil price had also fallen drastically recently. The study was undertaken with the objective of analysing marketing behaviour of coconut growers in Coimbatore district. An Ex-post facto research design was used for this study. The study was taken-up in Coimbatore district of Tamil Nadu. Out of the twelve blocks in Coimbatore district, "Sulthanpet block", "Pollachi (North)", "Pollachi (South) block" were selected. A sample size of 120 coconut cultivating farmers was selected by using simple random sampling technique. The required data was collected by personal interview using a well-structured and pretested interview schedule. The result revealed that nearly

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sixty percent of the respondents (58.33 per cent) had medium level of marketing behaviour, 21.67 per cent of the respondents had low level of marketing behaviour, only 20 per cent of the respondents possessed high level of marketing behaviour. Majority of the respondents sold their produce in village itself; cent percent of the respondents graded and counted their produce. Most of the respondents sold their produce through middlemen. The coconut growers are found to possess medium level of marketing behaviour. Hence, it should be definitely noted down by planners and policy makers at state and district level to make arrangement for marketing the products for maximum price.

Keywords: Coconuts; marketing behaviour; Coimbatore; copra; coconut oil; marketing channels; remunerative price.

1. INTRODUCTION

Coconut is unique among horticulture crops grown in India as it is a source of food, drink, shelter, and a variety of raw materials for industries. Production of coconut in India stood at 21,207 million nuts during 2020-21, which is 34% of the global production. In recent years due to adequate rainfall the production of nuts had been increased to greater extent but, it had bought new challenges for the farmers to find new marketing channels and strategies to sell their produce. Prices of copra, dehusked nuts, oil had fallen drastically due to adequate supply. New Coconut products and industries are growing, due to which farmers are getting employment. Marketing of coconut is more complicated as majority of the farmers are illiterate, unorganized, not aware about value addition and having poor knowledge in post-harvest practices. Nandakumar (1995) stated that marketing of coconut, copra and coconut oil is in the hands of private traders in the country. They do not have ample knowledge and skill in marketing their produce. Banu and Palanivel [1] in their study, “Problems of Marketing Practices of Coconut Products in Thiruvarur District, Tamil Nadu” mentioned that lack of transport and poor farm to market road facilities, personal contact with the village trader influence the coconut farmers to sell the produce to village trader instead of wholesaler’s market [2-8].

Yamuna and Ramya (2016) in their study, “A study on coconut cultivation and marketing in Pollachi Taluk” reported that involvement of intermediaries causes moderate level of loss to coconut farmers while selling their produce. Palanivelu and Muthukrishnan (2019) in their study, “Coconut marketing in Tamil Nadu: A Current Scenario” reported that involvement of more intermediaries in coconut marketing reduces the producer’s share [9-13].

Furthermore, lack of storage facilities forced them to sell their produce immediately after the harvest at low prices in the village itself to the local traders. In addition, there are inadequate arrangements for grading, standardization, market information, credit availability, storage, and transport. There is a huge extent of middlemen in marketing of coconuts who exploit farmers to certain extent such as delay in payment, not procuring in remunerative prices etc [14-18].

Keeping the above problems in view, the present study was taken up with the specific objective to identify the marketing behaviour of coconut growers in Coimbatore district. Marketing behaviour referred to the capacity or tendency of an individual farmer to identify the market trend to sell the produce for greater return. In this study marketing behaviour was studied in eleven dimensions viz., mode of transport, mode of sale, distance of market, time of sale, grading behaviour, counting behaviour, storage of nuts, terms and conditions of sale, payment pattern, sources of knowing price trend, middleman involvement [19-23].

2. MATERIALS AND METHODS

The study was undertaken with an objective of Analysing marketing behaviour of coconut growers in Coimbatore district of Tamil Nadu. An “Ex Post Facto” research design was used in this study. Multi stage sampling procedure was used. District was selected purposively since Coimbatore has the maximum area and production under Coconut cultivation. Block was selected using Purposive sampling based on area under coconut production. There are twelve blocks in Coimbatore district. Among which “Sulthanpet block”, “Pollachi (North)”, “Pollachi (South) block” had been chosen as the areas of research. From each block 4 villages were selected purposefully. Villages were selected using Purposive sampling based on area under coconut production. The villages selected for the study are "Senjerimalai, Pachagoundampalyam, J.Krishnapuram, Malapalayam" from Sultanpet block. "A.Nagoor, Avalappampatti, Ayyampalayam, Puliampatti" from Pollachi (North) block. "Gomangalam, Ambarampalayam, Kanjampatti, Naickenpalayam" from Pollachi (South) block. It's been selected since the area has high production of coconuts, hub for "coir and copra industries", elaborate availability of respondents, diversified coconut growers in age, landholdings, educational status, farming experience etc., familiarity about the place by the researcher. Simple random sampling was used to select the respondents. With a sample size of 120, coconut cultivating farmers were drawn using simple random sampling technique in the above-mentioned blocks and villages. The required data were collected using a pretested structure interview schedule. The collected data were coded, tabulated and analysed using appropriate statistical tools. The descriptive statistical tools such as mean, standard deviation, frequency and percentage analysis were used to draw the inference from the study [26-30].

Chart 1. Area, production and productivity status of coconuts in Coimbatore district

Area	87749.20 ha
Production	14882 lakh nuts
Productivity	16960 nuts/ha

Source- www.coconutboard.gov.in (2019-2020)

3. FINDINGS AND DISCUSSION

An attempt has been made in this study to analyse the Marketing behaviour of coconut growers. Marketing behaviour of the respondents in the activities related to coconut crop has been analysed individually and discussed. Further, their dimensions of marketing behaviour viz., mode of transport, mode of sale, distance of market, time of sale, grading behaviour, counting behaviour, storage of nuts, terms and conditions of sale, payment pattern, sources of knowing price trend, middleman involvement was assessed, and results are presented in following Table 1-12.

3.1 Overall Marketing Behavior

The data on overall marketing behaviour adopted by the respondents are presented in Table 1. The respondents were categorised into three levels viz., low, medium, and high based on the cumulative frequency method, the results are presented in Table 1.

Table 1. Distribution of respondents according to their overall marketing behaviour n=120

Sl. No.	Category	Number	Percentage
1	Low (<15)	26	21.67
2	Medium (16-25)	70	58.33
3	High (26-36)	24	20.00
Total		**120**	**100**

It could be observed from the Table 1, that nearly sixty percent of the respondents (58.33 per cent) had medium level of marketing behaviour, 21.67 per cent of the respondents had low level of marketing behaviour, only 20 per cent of the respondents possessed high level of marketing behaviour.

Hence, it could be concluded from the Table 1, that majority of the respondents had medium level of marketing behaviour. This may be because most of the coconut growers were finding new marketing channels and marketing strategies in increasing their income level manifold and contributing to the betterment of their family. In this process, most of the respondents reported that they were actively participated in time of sale, place of sale, mode of sale, mode of transport, selling pattern of farm produce, grading behaviour, counting behaviour, storage of nuts and source of knowing price trend etc. This would have resulted with majority of the coconut growers fall under medium level of marketing behaviour.

3.2 Dimension of Marketing Behaviour

Mode of transport: The data on mode of transport used by the respondents are presented in Table 2.

Table 2. Distribution of respondents according to their mode of transport (n=120)

Sl. No	Mode of Transport	Number	Percentage
1.	Sale at village itself	87	72.50
2.	Bullock	-	-
3.	Tempo van/Tractor	33	27.50
4.	Lorry	-	
Total		**120**	**100**

It could be found from the Table 2, that majority of the respondents (72.50 percent) sold their produce in village itself, followed by Tempo van/tractor 27.50 percent as mode of transport. None of the respondents used lorry and bullock cart to transport their product.

From the above findings it could be observed that majority of the respondents preferred selling their produce in their village itself as it would reduce the transportation cost to a greater extent and convenient for the local traders to procure their produce. Just more than one fourth of the respondents preferred Tempo van/ Tractor as the mode of transport since they need to transport bulk of their produce to nearby and distant wholesale merchants, retailers and institutional markets. It could be observed that none of the respondents preferred lorry since the transportation cost would be high and loading and unloading would be a difficult task. None of the respondents preferred bullock cart as it was outdated and not in use. This finding is in accordance with that of Suraliappan (1997) and Dhara [29].

Mode of Sale: The following table portrays about the people to whom the farmers sell their produce. The data were collected and presented in Table 3.

A glance at the data in Table 3, shows that more than half (69.17) per cent of the respondents had sold their produce to the Local merchants, followed by Wholesale merchant's 20 percent. 5.83 percent respondents sold their produce through Retailers. Only 5 percent of the respondents sold their produce through Institutional Markets.

Thus, from the above table it may be concluded that majority of the respondents sold their produce to local traders because local traders would procure directly from their farm, transportation fair would be nil and would procure regularly. Wholesale Merchants were preferred by big farmers having large land holdings as they would procure their produce which are bulky and pay the amount in short time than local merchants. Retailers were preferred by marginal farmers and those who had only small amount

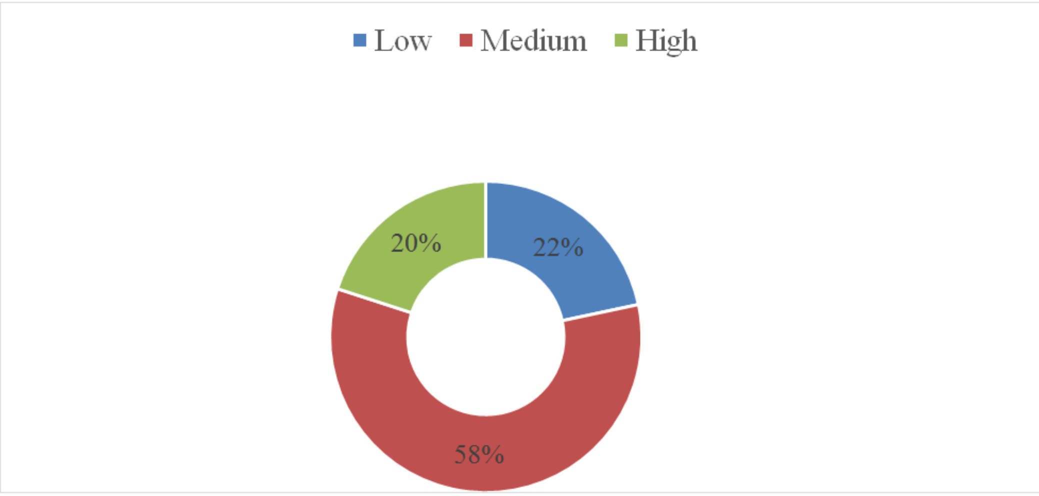

Fig. 1. Distribution of respondents according to their overall marketing behaviour

Table 3. Distribution of respondents according to their mode of sale (n=120)

Sl. No	Mode of Sale	Number	Percentage
1.	Local merchants	83	69.17
2.	Retailers	7	5.83
3.	Commission agents	-	
4.	Institutional Markets	6	5.00
5.	Brokers	-	
6.	Wholesale merchants	24	20.00
Total		**120**	**100**

of their produce to sell. Through retailers like local shops, hotels etc., they could also fetch remunerative and higher prices than selling it through wholesalers. Last preference by the respondents were Institutional Markets since they were mostly in distant places, and they would only procure after grading according to their own standards. It could be observed that the respondents didn't prefer commission agents and brokers as they were not familiar in selling their produce through them.

Distance of Market: The data on Distance of market preferred by the respondents are presented in Table 4**.**

Table 4. Distribution of respondents according to distance of market (n=120)

Sl. No.	Distance of Market	Number	Percentage
1	Village itself	83	69.17
2	5-10Km	15	12.50
3	10-15Km	13	10.83
4	15-20Km	7	5.83
5	20-25Km	-	-
6	More than 25 Km	2	1.67
Total		**120**	**100**

From Table 4, it could be observed that more than half (69.17) per cent of the respondents preferred to sell their produce in village itself, followed by 12.50 per cent of the respondents preferred to sell within 5-10 Kms and 10.83 per cent of the respondents sold their produce in 10-15Kms. Only 5.83 percent and 1.67 percent of the respondents preferred to sell within 15-20 Kms and more than 25 Kms respectively.

Thus, from the above table it could be concluded that majority of the respondents sold their produce in village itself since it was convenient for the farmers to meet local merchants, retailers and close their sale, also they could reduce the transportation cost. Remaining respondents sold their produce in 5-10 Kms, 10-15Kms, 15-20 Kms and above 25Kms based on the different locations and availability of wholesalers, retailers, institutional markets where they preferred to sell their produce regularly.

Time of Sale: The data on Time of Sale by the respondents are presented in Table 5.

Table 5. Distribution of respondents according to Time of Sale (n=120)

Sl. No.	Time of Sale	Number	Percentage
1	Immediately after harvest	73	60.83
2	After initial storage	17	14.17
3	Whenever price is high	30	25.00
Total		**120**	**100**

It could be observed from Table 5, that more than half of the respondents (60.83 per cent) preferred to sell their produce immediately after harvest, followed by 25.00 per cent of the respondents to sell their produce whenever price is high. Only 14.17 per cent of the respondents preferred to sell their produce after initial storage.

Thus, from the above table it could be analyzed that most of the respondents preferred to sell their produce immediately after harvest since they need money immediately to incur their family and other expenses. Remaining respondents sold their produce after initial storage and whenever price is high to fetch better prices when the produce is sold in future.

Grading Behaviour: The following data on Grading Behaviour preferred by the respondents is presented in Table 6.

Table 6. Distribution of respondents according to grading behaviour (n=120)

Sl. No.	Grading behaviour	Number	Percentage
1	Grading	120	100
2	Not grading	-	-
Total		**120**	**100**

From Table 6, it could be observed that 100 per cent of the respondents graded their produce either through themselves or through middlemen.

It could be interpreted from the above table that all the respondents graded their produce either themselves or through middlemen to segregate the nuts according to the grade and fetch better prices. The findings are in accordance with Dhara [29].

Counting Behaviour: The data on Counting Behaviour preferred by the respondents are presented in Table 7.

Table 7. Distribution of respondents according to counting behaviour (n=120)

Sl. No.	Counting behaviour	Number	Percentage
1	Yes	120	100
2	No	-	-
Total		**120**	**100**

From Table 7, it could be interpreted that 100 per cent of the respondents counted their produce before selling either directly or through middlemen.

From the above table we could conclude that all the respondents counted their produce either directly or through middlemen before selling their produce to avoid exploitation and maintaining transparency in sale mutually. The findings are in line with Dhara [29].

Storage of Nuts: The data on Storage of Nuts preferred by the respondents are presented in Table 8.

Table 8. Distribution of respondents according to storage of Nuts (n=120)

Sl. No.	Storage of Nuts	Number	Percentage
1	No	73	64.17
2	Yes	47	35.83
Total		**120**	**100**

It could be observed from Table 8 that majority of the respondents (64.17 per cent) of the farmers didn't store their nuts. Only 35.83 per cent of the respondents stored their nuts.

Hence, from the above table it can be concluded that majority of the respondents didn't store their produce as they sold immediately after harvest as they were expecting cash immediately. Some of the respondents stored their nuts either for domestic purpose or in a motive to fetch better price in future whenever price is high.

Terms and Conditions of Sale: The data on Terms and Conditions of Sale preferred by the respondents are presented in Table 9.

It could be observed from Table 9, that majority of the respondents (72.50 per cent) preferred ready cash on selling their produce. Followed, by 25.00 per cent of the respondents giving credit for certain extent while selling their produce. Only 2.50 per cent of the respondent preferred contract basis.

It could be observed from the table that most of the farmers preferred to get ready cash as they were in need to incur family and other expenses. Some farmers were willing to give credit by getting an advance since their produce was in bulk quantity. Only very few entered in contract basis since there would be regular procurement from them.

Payment Pattern: The data on payment Pattern received by the respondents are presented in Table 10.

Table 9. Distribution of respondents according to Terms and Conditions of Sale (n=120)

Sl. No.	Terms and Conditions of Sale	Number	Percentage
1	Credit	30	25.00
2	Contract	3	2.50
3	Ready cash	87	72.50
Total		**120**	**100**

Table 10. Distribution of respondents according to payment pattern (n=120)

Sl. No.	Payment pattern	Number	Percentage
1	Partially	41	34.17
2	Fully	79	65.83
Total		**120**	**100**

It could be interpreted from Table 10, that more than half of the respondents **(**65.83 per cent) received their payment fully in selling their produce. Followed, by 34.17 per cent of respondents who received their payment partially at the time when they sold their produce.

It could be interpreted from the above table that majority of the respondents received full payment on sale their produce. Remaining respondents received only partial payment by giving advance since their produce sold was in bulk**.**

Source for knowing price trend: To analyse the various sources utilized by the respondents for getting information about marketing of their produce data was collected and presented in the Table 11.

It could be observed from the Table 11, that a more than half of the respondents (55.83 percent) received market information from their relatives, friends, neighbor farmers in the village, followed by 18.33 percent of the respondents had received information from Information and communication technologies like WhatsApp groups and Mobile Apps. 15.83 percent of the respondents had received information from Traders and 10.00 per cent of the respondent's received information through Newspapers respectively. It could be observed that none of the respondents received information from market officials.

Table 11. Distribution of respondents according to their source for knowing price trend (n=120)

S. No	Source for knowing price trend	Number	Percentage
1.	Relatives, friends and Neighbor farmers in the village	67	55.83
2.	Traders	19	15.83
3.	ICT (mobile apps, WhatsApp groups)	22	18.33
4.	Newspapers	12	10.00
5.	Officials	-	-
Total		**120**	**100**

Table 12. Distribution of respondents according to middlemen involvement (n=120)

S. No	Middlemen involvement	Number	Percentage
1	Only through middlemen	89	74.17
2	Partially through middlemen	24	20.00
3	Direct sale	7	5.83
Total		**120**	**100**

The findings revealed that the respondents most commonly used personal- localite channels for knowing the price trend through family members, relatives and friends and neighbour farmers. This might be due to close proximity, frequent interaction, communication between each other. Other respondents received information regarding price trend through WhatsApp groups and mobile apps like "moogambika, cocomart "etc and through traders when they procured their produce. Few others through newspapers in local news page.

Middlemen involvement: The data on Middlemen involvement as mentioned by the respondents are presented in Table 12.

It could be observed from Table 12, that almost three-fourth of the respondents (74.17 per cent) sold their produce only through middlemen, followed by 20.00 per cent of the respondents who sold their produce partially through middlemen. Only 5.83 per cent of the respondents indulged in selling their produce through Direct sale.

It could be observed that most of the respondents sold their produce only through middleman as they were not aware and also faced hardships in selling through other marketing channels. Some of the respondents sold their produce partially through middleman like retailers etc., in order to find new marketing opportunities. Only very few respondents indulged in direct sale of their produce. The findings are in accordance with Surliappan (1997) and Seema [30] and Dhara [29].

4. CONCLUSION

It is discovered that coconut farmers exhibit a medium level of marketing behaviour. Planners and policy makers at the state and district levels should therefore make sure to plan for marketing the products at the highest price. To lessen the challenges faced by coconut producers in marketing and production, it is also vital to adequately streamline all the marketing channels. An effective marketing strategy also needs to be framed by the state department of agriculture in co- ordination with the regulated markets, commission agents and other marketing organisations functioning at village level. There is a need for a distinct co-operative organisation and controlled market for coconut growers.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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