

PRICE SPREAD ANALYSIS OF ARECANUT MARKETING IN DAKSHINA KANNADA DISTRICT OF KARNATAKA

S. Jayasekhar, C.V. Sairam and S. Arulraj

Central Plantation Crops Research Institute

Regional Station, Vittal 574243, Karnataka

*CPCRI, Kasaragod 671 124, Kerala

ABSTRACT

The paper attempts to understand certain aspects of arecanut marketing in Dakshina Kannada district of Karnataka state. Objectives are framed to identify the major marketing channels, marketing process, price spread and marketing efficiency in the arecanut trade. Four different marketing channels were observed in the study. Producer's share in consumer price ranged from 63.53 to 68.10 per cent. The analysis of marketing efficiency highlighted channel-4 as the most efficient marketing channel with lowest composite index.

INTRODUCTION

Arecanut is one of the important commercial crops in India. It plays a prominent role in the religious, social and cultural life of our people. Although the production of arecanut is localized in a few states, the commercial product is widely distributed all over the country. Arecanut marketing seems to be a complicated system. Large number of intermediaries are involved beside a few co-operative organizations (Anitha, 2000). The term 'price spread' refers to the difference between the price paid by the consumer and the price received by the producer. Price spread involves not only ascertainment of actual prices received at various stages of the marketing channel, but the cost involved in the process of the movement of the product (Acharya and Agarwal, 1994).

The studies on marketing margins and costs are important as they reveal many facets of marketing and the price structure as well as the efficiency of the system.

Karnataka is the largest producer of arecanut in India with 34% area and 39% production in the country. In Karnataka, arecanut is grown extensively in Dakshina Kannada, North Kanara and Shimoga districts. The present paper on price spread analysis of arecanut is based on a pilot study conducted in Dakshina Kannada district of Karnataka. The objectives of the study are to answer the following questions. First, what are the major channels of arecanut trade in Dakshina Kannada and how do these channels operate? Secondly, what are the costs and margins for various agencies during the marketing

process? Thirdly, which of these channels is most efficient?

MATERIALS AND METHOD

I) Data used

The data used for this study were collected through a field survey in Dakshina Kannada district. The district is known for *chali supari* production. Four taluks were selected from the district, viz., Puttur, Buntwal, Mangalore, and Sullia. From each of the four taluks two villages were randomly selected and from each village ten farmers were interviewed. Thus the sample size was 80 cultivators representing the district. For the purpose of the study, the cultivators were divided into three categories depending upon the area cultivated, viz, small (less than 2 acres), medium (2-5 acres) and large (more than 5 acres). Data for the study were gathered from both primary and secondary sources. The primary data were collected with the help of a well-designed schedule by personal interview method. Twenty traders, fourteen commission agents, fourteen brokers and twelve retailers were interviewed for collecting the data on marketing practices. The secondary data were collected from Agricultural Produce Marketing Society (APMC) and CAMPCO.

II) Price spread analysis

The various expressions of marketing margins and prices are given below,

Producer's price (P_f) is worked out as $P_f = P_a - C_f$. Where, P_a is Price received by the farmer and C_f is the marketing cost incurred by the farmer.

Price spread analysis of arecanut marketing

Producer's share in consumer's price (P_s) is expressed as a percentage of the retail price (i.e., price paid by the ultimate consumer). It is given by

$P_s = (P_f/P_r)*100$, where P_r is the retail price (Anonymous, 2001).

III) Estimation of marketing efficiency

Marketing efficiency is essentially the degree of market performance. It is defined as having the following two major components: 1) the effectiveness with which a marketing service would be performed and 2) the effect on the cost and the method of performing the service on production and consumption. There are two broad approaches to measure marketing efficiency. The first one refers to the analysis of marketing margins and the other to the analysis of market structure, conduct and performance. In this study, we limit to the first approach alone. Here, we identified the different marketing channels and the marketing efficiency (R) in the alternate marketing channels is computed by ranking different performance indicators. The indicators used are producer's share in consumer's price, marketing costs of intermediaries, marketing margins of intermediaries and returns per rupee of investment. The marketing efficiency is calculated by pooling the indicators (Ramakumar, 2001).

Composite Index (C.I) = R_j/N_j

R_j = sum of ranks in each item

N_j = number of performance indicators.

The channel with the lowest composite index is the most efficient channel. Here, we have assigned equal weights to all the selected indicators. Hence the composite index should be interpreted only as a pointer to the efficiency of the channel.

RESULTS

i) Disposal pattern

The analysis of the survey data showed that 80 per cent of the farmers found to dispose the produce immediately after harvest, were small cultivators. Remaining 20 per cent who disposed the produce when the prices in the market are

favorable, were large farmers. It was observed that indebtedness and lack of proper infrastructure facilities for storage compel the small farmer to dispose the produce at the earliest.

The distribution of the farmers according to the type of buyers to whom they had sold the product is presented in the FIG 1. The majority of the farmers (63%) sold *chali supari* to traders, who reportedly paid two rupees extra of the market rate per kg of *chali* sold.

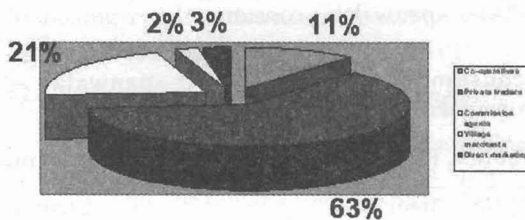


Fig. 1. Pattern of sale of arecanut in study area, buyer wise

ii) Marketing process

First crop of arecanut arrives at market by December-January. Second crop, popularly known as *naducoil* arrives by February-March. This crop fetches good price in the market. Third crop arrives by April-May. *Choll* (one year old arecanut) reaches the market by the end of September, which fetches very high price. The price depends on the type of arecanut farmers brought to the market. There are six different types of *chali*. They are *pudiadka* (newsupari), *choll* (oldsupari), *fatoura* (inferior), *karingota* (inferior) and *ulligadda* (broken nuts). *Choll* fetches the highest price while *karingota* fetches the lowest. The trader purchases arecanut through open bids. The purchaser has to bear 1% market fee to the APMC, 2% commission to the commission agent and 4% sales tax. Traders have their own processing centers for sorting and grading the purchased produce. Size wise, there are 6 different grades, viz, *mora*, *moti*, *vacharas*, *jam*, *jinni* and *lindi*. Traders grade the produce into different grades namely *ss*, *s*, *jj* and *j*, which are called, *garbled rash*. The left over are known as *ungarbled rash*.

From the traders, the produce reaches the consuming center through broker, who gets 1-2 per cent commission for handling the produce.

Subsequently, the produce reaches the retailers of the consuming center. The major market for *chali* are Gujarat, Indore and Nagpur.

iii) Marketing channels

Marketing channels are various agencies/intermediaries involved in movement of arecanut from producer to consumer. Four different marketing channels observed in the study were,

1. Producer - co-operative society - sales representative- trader (consuming center) - retailer - panwalah - consumer.

2. Producer - trader - broker - trader (consuming center) - retailer -panwalah - consumer.

3. Producer - commission agent - trader - broker - trader (consuming center) - retailer - panwalah - consumer.

4. Producer- co-operative society - co-operative society's sales depot (consuming center) - retailer - panwalah - consumer.

It is interesting to observe that once the produce reaches the consuming center the market functionaries are common for all the channels.

iv) Economics of the marketing channels

The marketing costs and margins in different channels are given in table 1.

Table 1. Price spread of arecanut in different marketing channels in the study area(Rs./q)

Sl No.	Item	Channel 1	Channel 2	Channel 3	Channel 4
1	Arecanut grower				
	i) Price received	4800(65.62)	5000(66.92)	4800(63.80)	4800(68.38)
	ii) Marketing cost	20(0.27)	20(0.26)	20(0.26)	20(0.28)
	iii) Net realization	4780(65.35)	4980(66.65)	4780(63.53)	4780(68.10)
2	Commission agent				
	i) Marketing cost	--	--	25(0.33)	--
	ii) Profit/margin	--	--	96(1.27)	--
	Co-operative society				
	i) Marketing cost	255.4(3.49)	--	--	255.4(3.63)
	ii) Profit/margin	144(1.97)	--	--	144(2.05)
3	Trader				
	i) Marketing cost	--	200(2.67)	271.05(3.60)	--
	ii) Profit/margin	--	175(2.34)	172.23(2.28)	--
	Sales rep/broker				
	i) Commission/margin	78(1.06)	80.42(1.06)	80.46(1.06)	--
4	Trader (consuming center)/ Co-operative sales depot				
	i) Marketing cost	731.2(9.99)	694(9.28)	731.20(9.72)	641.2(9.13)
	ii) Profit/margin	158.32(2.16)	163.66(2.19)	185.27(2.46)	52(0.74)
5	Retailer				
	i) Processing cost	650(8.88)	650(8.69)	650(8.64)	650(9.26)
	ii) Profit/margin	215.84(2.95)	220.95(2.95)	222.64(2.95)	206.24(2.93)
6	Pan waalaha				
	i) Purchase price	7032.76(96.15)	7184.03(96.15)	7233.85(96.15)	6748.84(96.1)
	ii) Selling price	7314.07(100)	7471.39(100)	7523.20(100)	7018.79(100)
	iii) Profit/margin	281.31(3.84)	287.36(3.84)	289.35(3.84)	269.95(3.84)
	Producer's share in consumer price (in percentage)	65.35	66.65	63.53	68.10
	Total marketing cost	1654.6(21.75)	1564(20.93)	1694.25(22.56)	1566.6(22.3)
	Total market margin	877.47(11.99)	927.59(12.41)	1045.95(13.90)	672.19(9.57)

Note: figures in parentheses denote percentages to the final price

Price spread analysis of arecanut marketing

In channel-1, the gross price received by the farmer was Rs. 4800/quintal. It constituted 65.62 per cent of the final price. Total five market functionaries were identified in this channel. Total marketing cost was found to be Rs.1656.6, which constituted 21.75 per cent of the final price. Total market margin by the intermediaries were calculated at Rs.877.47, which constituted 11.99 per cent of the final price.

In channel-2, the functions carried out by the co-operative society were bypassed with the private trader carrying out these functions. It is evident from the table that growers prefer to dispose of their produce with the private traders. Private traders attract the growers by paying one or two rupees extra per kilogram of *chali*. They compensate the initial loss by tax evasion and under billing. Because of the initial high price farmer receives the producer's share in consumer's price is higher in this channel, which accounts for 66.65 per cent of the final price. The marketing cost was found to be Rs.1564/quintal. The market margin was calculated at Rs. 997.59/quintal.

Channel-3 was the longest channel among the four channels studied. This channel has six market intermediaries. Total marketing cost and margin were found to be Rs.1697.35 and Rs.1045.95 respectively. The marketing costs and margin were the highest in this channel among

all. Producer's share in consumer's price calculated at 63.53 per cent, which is the lowest among all the channels.

Channel-4 was observed as the shortest marketing channel among the four channels studied. Traders, brokers and commission agents were bypassed with the co-operative society itself carrying out the functions. The producer's share in consumer rupee was found to be 68.10 per cent, which was the highest among all the channels. Marketing margin in this channel constituted only 9.57 per cent of the final price.

v) Marketing efficiency in the channels

The results of the analysis of marketing efficiency in the channels are given in table 2. Regarding the consumer's share in the final price channel-4 was the most efficient; it could provide the farmer with 68.10 per cent of the final price. Regarding the marketing cost, channel-2 was found to be most efficient. With respect to marketing margin, channel-4 was observed to be the most efficient; only 9.57 per cent of the final price was spent on this. Rate of return was also lowest for channel-4. Channel-4 was found to be most efficient with lowest composite index.

CONCLUSION

The present study revealed that there are four predominant marketing channels in the

Table 2. Estimates of marketing efficiency in the marketing channels of arecanut

Sl.No.	Component of composite index	Channel-1	Channel-2	Channel-3	Channel-4
1	Consumer's share in final price (per cent)	65.35	66.65	63.53	68.10
	Rank	3	2	4	1
2	Marketing cost (Rs.per quintal)	1656.6	1564	1697.25	1566.6
	Rank	3	1	4	2
3	Marketing margin (Rs. Per quintal)	877.47	927.59	1045.95	672.19
	Rank	2	3	4	1
4	Rate of return*	0.52	0.59	0.61	0.42
	Rank	2	3	4	1
	Total score	10	9	16	5
	Mean score (C.I)**	2.5	2.25	4	1.25

* Marketing margin/Marketing cost

** Composite index

arecanut trade. Producer's share in consumer price was the highest in the channel-4 where co-operative society markets the produce through it's own sales depot at major consuming centers. The producer's share in consumer price was found to be lowest for channel-3, which is the longest marketing channel with six levels of market functionaries. Marketing efficiency analysis through composite index method revealed channel-4 as the most efficient trade channel with lowest composite index. It is obvious that if we can avoid the intermediaries the marketing can be more effective and efficient. But, unfortunately, the basic structure of the arecanut trade is such that the market intermediaries are inevitable.

REFERENCES

- Acharya, S.S and Agarwal, N.L., 1994, "Agricultural prices - Analysis and policy", Oxford and IBH publishing Co.Pvt.Ltd, New Delhi: 209 - 210
- Anitha, H. S., 2000, "Agricultural marketing", Mangal deep publications, Jaipur
- Anonymous, 2001, "Price spread of major agricultural commodities in west Bengal", *Agril. Situation in India*, LVIII (9): 431-435
- Chinnappa, B., 2001, "Price spread analysis in arecanut marketing", *Journal of Plantation crops*, 29(3): 38-41
- Ramakumar, R, 2001, "Costs and margins in coconut marketing: Some evidence from kerala", *Indn.Jn.of Agri.Econ*, 56(4): 668-681

* * *