A STUDY ON MARKETING MARGINS AND MARKET STRUCTURE OF CASHEWNUT IN KERALA

By

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THESIS

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the requirement for the degree

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DECLARATION

I hereby declare that this thesis entitled "A Study on Marketing Margins and Market Structure of Cashewnut in Kerala" is a bonafide record of research work done by me during the course of research and that the thesis has not previously formed the basis for the award to me of any degree, diploma, associateship, fellowship or other similar title, of any other University or Society.

College of Horticulture,
Vellanikkara,
November 1987.

RAJASEKHARAN P.

CERTIFICATE

Certified that this thesis entitled "A Study on Marketing Margins and Market Structure of Cashewnut in Kerala" is a record of research work done independently by Sri. Rajasekharan P. under my guidance and supervision and that it has not previously formed the basis for the award of any degree, fellowship or associateship to him.

Vellanikkara,
16th November 1987.

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CERTIFICATE

We, the undersigned, members of the Advisory Committee of Sri. Rajasekharan P, a candidate for the degree of Master of Science in Agriculture with major in Agricultural Economics, agree that the thesis entitled "A Study on Marketing Margins and Market Structure of Cashewnut in Kerala" may be submitted by Sri. Rajasekaharan P in partial fulfilment of the requirement for the degree.

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Introduction

INTRODUCTION

Cashewnut (Anacardium occidentale L.), a native of Brazil, which was introduced in India by the Portuguese about 400 years ago, for the purpose of checking soil erosion along the West Coast, has by a unique set of circumstances became a prestigious item of merchandise in the international trade in edible nuts. The cashew tree is a hardy and drought resistant tree thriving in a variety of soil and climatic conditions. It is still treated as a neglected crop. In the beginning cashew seems to have been introduced in the Goa region in 1550* and in Cochin in 1578. In India it soon established itself all along the West Coast and later in the East Coast as well.

For several centuries cashew was merely regarded as a sturdy perennial tree yielding good softwood and producing a rather delicious juicy apple. The nut was invariably thrown away after eating the apple due to the presence of a corrossive liquid known as cashewnut shell liquid in the shell.

As years rolled by, interest in the nut slowly developed and extraction of the kernel from the nut after burning off the liquid was tried. The delicious

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* Source: Cashew causerie 1981 Vol.III(4)

taste of the kernel was discovered and during the course of the current century more and more people the world over have been consuming this unique nut and the industry started developing.

The principal cashew growing countries in the world include India, Mozambique, Tanzania, Brazil and Kenya. Some other countries which also grow cashew are Madagascar, Thailand, Malaysia, Indonesia, Nigeria and Angola. The world production of raw cashewnuts was declining steadily since 1973. Total world production of raw cashewnut during 1979-'80 has been estimated at 3.52 lakh tonnes. About 80 per cent of the production is from the countries in Africa and Asia, mainly from India (40.05 per cent) Mozambique (20.18 per cent) and Tanzania (14.49 per cent). Contribution of Brazil, the original home of cashew is 18.75 per cent. Other cashew growing countries contribute less than five per cent only*. Recent observation by some of the visiting experts in the African countries revealed that the production of raw cashewnuts in these countries especially in Tanzania, and Mozambique has been adversely affected by an outbreak of a new disease in the cashewnut plantation caused by a fungus belonging to Oidium sp**.

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* Source: Cashew causerie 1981 III (II)

** Indian Cashew Journal 1984 xvi(1)

The affected parts are new flushes, flowers and young fruits. The observation further revealed that 40 per cent of area in African countries is affected by this disease.

India is the largest producer of raw cashewnuts and of exporter of cashew kernels in the world. Cashew cultivation is now quite widespread in the country, the principal cashew growing states being Kerala, Karnataka, Tamil Nadu, Andhra Pradesh, Goa, Maharashtra and Orissa. Schemes for the development of cashew were implemented for the first time in India during the Second Five Year Plan. Efforts were made both in private holdings and Government owned areas to increase the area under cashew. More intensive efforts at cashew development programme was put from Fourth Five Year Plan onwards. Since then significant improvement has been made in the development of cashew cultivation in the various cashew growing states in the country.

Kerala occupies a very prominent place in the production of raw cashewnuts in India. In 1966-'67 Kerala accounted for 90,560 ha of cashewnut plantation with a production of 1,01,610 tonnes. All India figures for the above period were 2,07,280 ha and 1,67,090 tonnes of cashewnut*. In 1974-'75 Kerala

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* Source: Cashew Development in India 1983

produced 1,15,750 tonnes of cashewnut from an area of 1,03,160 ha and the corresponding all India figures were 2,28,770 tonnes from 4,14,060 ha. In 1984-'85 area under cashewnut in Kerala increased further to 1,42,139 ha with a production of 75,737 tonnes of cashewnut.

Even though production of indigenous raw cashewnuts showed an uptrend, the phenomenal growth of the cashew industry in India made possible by export demand for cashew kernels, necessitated import of raw cashewnuts from African countries due to the insufficiency of domestic production to meet the requirements of expanding cashew processing industry in India. Imports were started in the early thirties and the quantities involved were less than ten thousand tonnes per annum. However, imports doubled by 1939-'40 and by the middle of the 'sixties, reached nearly 200 thousand tonnes. Between then and 1975, imports fluctuated between 100 and 200 thousand tonnes per annum and imports dropped to insignificant level by 1980. The developments in African countries coupled with competition from other countries have made very serious inroads into the prospects for imports of cashewnuts into the country. In 1985-'86 India imported 23,310 tonnes of raw cashewnuts from different countries (Table 1.1).

Table 1.1 Import of rawnuts

Year	Import of raw nuts (tonnes)	Year	Import of raw nuts (tonnes)
1946-'47	31545	1966-'67	141021
1947-'48	35150	1967-'68	108218
1948-'49	43512	1968-'69	195528
1949-'50	54025	1969-'70	163426
1950-'51	54819	1970-'71	169359
1951-'52	42030	1971-'72	169985
1952-'53	52509	1972-'73	197938
1953-'54	65229	1973-&74	150249
1954-'55	87185	1974-'75	160358
1955-'56	63154	1975-'76	137196
1956-'57	51416	1976-'77	75131
1957-'58	99440	1977-'78	56299
1958-'59	125400	1978-'79	20496
1959-'60	95950	1979-'80	24326
1960-'61	118231	1980-'81	25715
1961-'62	101876	1981-'82	16057
1962-'63	155331	1982-'83	1405
1963-'64	157458	1983-'84	26877
1964-'65	191523	1984-'85	33215
1965-'66	160636	1985-'86	23310

Source: 1946-'47 to 1980-'81 Cashew causerie 11½(4) pp.14
1981-'82 to 1985-'86 Cashew Export Promotion Council

Although cashew has been grown in several countries for a long time, the credit for initiating commercial production and export of cashew kernels goes to India where the business has grown to be a major economic activity in recent years. Between 1900 and the out break of the First World War, very small quantities of cashew kernels, still unpeeled, were packed in wooden cases lined with newspaper and exported mainly to Marscilles but occasionally to London. There was no grading of cashew kernels as understood today and infestation was a serious problem.

Shortly after the First World War a few trial shipments were made to New York. It was in early 1920s that a new method of packing cashew kernels in the tin containers infused with carbondioxide was introduced. This enhanced the storage life of the produce and gradually eleminated the risk of infestation and largescale exports of cashew kernels became possible. India's cashew exports increased slowly but steadily until the beginning of the Second World War which caused a set back. The end of the Second World War saw the beginning of a phenomenal growth of the Indian cashew industry.

Cashew processing on commercial basis was initially started in Mangalore and by 1927 the business

was started in Quilon in the state of Kerala, which later became the centre of the trade. In the year 1923, total exports from India amounted to only about 45 tonnes;* by 1930, exports increased to about 2300 tonnes and since then the export trade has developed phenomenally.

India which had remained unassailed in the trade in cashew kernels in the 1960s started loosing ground since the beginning of the 1970s. The share of India in the world export trade in cashew was as high as 95 per cent in 1960. However, the picture started changing afterwards and by 1970 it declined to 70 per cent and further to 38 per cent in 1978. It however, picked up since then and stood at 48 per cent during 1980.

The reason for the decline in our export trade during 1970s was mainly the result of lower levels of imports of rawnuts from the traditional East African countries since the second half of 1970s. The African countries especially Mozambique, Tanzania, and Kenya did not have processing facilities earlier and almost their entire production of rawnuts was shipped to India for processing and re-export. During the past two decades however, mechanical processing factories were

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* Source: Indian cashew journal 1984 XVI (1)

established in these countries, enabling them to process a major portion of rawnut production locally, leaving a declining surplus to India. Other countries like Brazil, China and Sri Lanka have also entered the field of cashew processing and as a consequence, India's share in the world trade has declined.

In India there are about 548 cashew processing factories with a processing capacity of four lakh tonnes of rawnuts providing employment opportunities to 2.35 lakh people, of which 269 factories are located in Kerala employing 1.5 lakh people. The bulk of the factories are in the private sector. The Kerala State Cashew Development Corporation (KSCDC) is working in open competition with the private sector in the cashew processing and exporting field. It started functioning in 1973. The KSCDC at present runs 34 major cashew factories employing about 36,000 workers.

Basically cashew industry in India was functioning with the imported rawnuts. It may be observed that while the export of cashew kernels decreased from an all time high of 66,280 tonnes during 1972-'73 to 35,150 tonnes in 1985-'86, the rupee value of the exports has increased due to increase in kernel price and increase in the rupee exchange value of U.S. dollar and other hard currencies.

Table 1.2 Export of kernels from India (quantity in '000 tonnes and value in rupees 10 million)

Year	Quantity	Value	Year	Quantity	Value
1955-'56	31.36	12.92	1971-'72	60.38	61.33
1956-'57	31.28	14.53	1972-'73	66.28	68.82
1957-'58	36.74	15.16	1973-'74	52.29	74.43
1958-'59	41.02	15.85	1974-'75	65.03	118.14
1959-'60	38.79	16.05	1975-'76	53.09	95.23
1960-'61	43.63	18.91	1976-'77	51.51	106.37
1961-'62	41.76	18.17	1977-'78	39.11	147.61
1962-'63	48.56	19.36	1978-'79	26.88	80.02
1963-'64	50.99	21.41	1979-'80	37.85	117.91
1964-'65	55.68	29.06	1980-'81	36.86	151.05
1965-'66	51.27	27.40	1981-'82	30.74	181.50
1966-'67	50.76	42.75	1982-'83	30.90	135.36
1967-'68	51.04	43.03	1983-'84	36.90	150.87
1968-'69	63.66	60.93	1984-'85	32.44	180.54
1969-'70	60.63	57.42	1985-'86	35.15	215.27
1970-'71	50.28	42.07			

Source: 1955-'56 to 1979-'80 pp. 22-23 Cashew Development in India. 1980-'81 to 1985-'86 Cashew Export Promotion Council

Although in the beginning India's exports of cashew kernels were almost to Europe only, once the U.S.A. entered the field they quickly became the largest buyers. In fact, the fillip for the growth of the Indian cashew industry was provided by the importers and sellers in the U.S.A. who developed a common taste for the nut and built up a flourishing business in the roasting and salting of cashew, among other nuts. For many years it was the U.S. market which accounted for more than 80 per cent of India's exports of cashew kernels.

The late seventies and the early eighties witnessed a sharp fall in India's exports of cashews especially to the U.S. for various reasons such as shortage of supplies, high kernel price, economic recession etc. From 20,550 tonnes in 1976 the exports to the U.S. declined steadily and touched as low as 3,483 tonnes in 1981. In 1982 exports amounted to only 5,206 tonnes. Such drastic reduction in exports to U.S. in 1981/82 was because of lifting of large stocks by U.S.S.R. As a result of withdrawal of U.S.S.R. from the Indian cashew market in 1982 the industry was saddled with a huge unsold stock of finished goods at high cost price. New York market prices came down and export promotion measures were increased. As a result export increased appreciably

to 22,215 tonnes in 1983 almost on par with the 1976 level. In 1984, the export to U.S. however, registered a decline to 16,849 tonnes, perhaps in line with the fall in indigenous production of raw cashewnuts.

Brazil is presently our major competitior in U.S.A. The major advantage to Brazil in trading with U.S. is its proximity to U.S. and resultant short delivery schedules.

Cashewnut is considered as king of snacks by rich section of the society as an accompaniment for drinks. Broken grades of cashew are used in the manufacture of biscuits, chocolates etc. At higher price of cashews there is always some resistance on the part of the consumers. So also when the prices of cashews go up the confectionery and other manufacturers naturally use less of cashews. Superior grade cashews go as a replacement to almond when the price of almond shoots up and the lower grade cashews replace hazelnut etc., in the confectionery manufacture when the price of hazelnut shoots up.

Cashew kernels are used mainly by the consumers as roasted or salted nuts. This constitutes the most important segment of the market and this in turn is associated closely with cocktail drinks, for which the bland taste of cashew is generally considered highly

suitable. For the same reason there is a strong preference for nuts not broken called wholes. In United States, which is still the largest consumer of cashew kernels, most of the demand emanates from this segment.

In sharp contrast to the preference and pattern of demand for cashew in U.S.A., the demand for cashew kernels in U.S.S.R. is for confectionery and bakery purposes. In the Soviet Union as well as in most other countries of Eastern Europe, the kernels are used mainly in confectionery products. Therefore, in Soviet Union the broken grade of cashew kernels have a good market.

Cashew nut shell liquid (CNSL) which is contained in the outer shell, is the most important by-product of the cashew industry. CNSL is produced only when the exporters resort to oil bath roasting. The extraction of CNSL, through the oil bath process leads to scorching of nuts during the process as well their breakage, while kernels obtained through drum roasting method are generally white wholes which command a better market. However, during the drum roasting process almost the entire quantity of shell liquid gets burnt. Hence it is only logical that unless the return on CNSL is high enough to compensate for the loss arising

as a result of lower quality of kernels obtained through the oil-bath process, it may not be worthwhile to extract oil. If the cashew kernel price is high, it would not be advantageous to extract CNSL. It is generally considered that unless the CNSL price is 1/10th of the kernel price, it is not advantageous to produce CNSL.

The shell liquid has wide industrial application, particularly with manufacture of resin, paints, varnishes etc. The major use of CNSL in India is in the brake lining industry.

Export of CNSL from India varies per annum depending upon the export price available for the CNSL. The maximum export of 11,441 tonnes was made in 1979 fetching a foreign exchange of Rs. 12.72 crores because of the very high unit price. The export of CNSL has been coming down since 1979. It was only 3782 tonnes in 1984.

Japan, UK and USA were the main buyers till 1981. In the years 1982, 1983 and 1984 there has been no export to U.S.A. and U.K., and Japan has emerged as the biggest buyer followed by Korean Republic.

Kerala, which produces the largest quantity of raw cashewnuts in India, seems to be lacking well defined marketing polices for this crop. To avoid middlemen profitering and to ensure a fair and reasonable price to the farmers monopoly procurement of raw cashewnuts was introduced in the year 1976. The Kerala state Co.operative Marketing Federation was entrusted with the task of procurement of rawnuts which operated through 1026 village level service co-operative societies in the state. The competition from private processors could not be effectively checked by introducing Monopoly Procurement by the state, as they merely shifted their operation to areas outside the state and purchased rawnuts smuggled out from Kerala at prices higher than those that could be secured within. The Federation was not able to collect the entire quantum of rawnuts produced in the state. Later Government scrapped this programme in 1983.

Marketing policies play a crucial role in ensuring a reasonable price to the producer thereby augmenting area under this crop to meet growing domestic demand of rawnuts. Cashew processors in the country are said to be monopsonistic and exploitative. There is also a widely held belief that the producer farmer is not getting a fair share

of the market price of kernels. No empirical study has so far been made to test these hypotheses.

It is against this background that the present study has been attempted.

The specific objectives of the study are,

1. To examine the present marketing organization and structure for cashew.

2. To measure and analyse the present marketing margins and costs and to assess the influence of organization and structure on margins and costs.

3. To evaluate the efficiency of various marketing facilities and services such as storage, transportation and processing with respect to organization and structure.

4. To determine the changes needed in marketing organization and structure in the light of new technological developments in agriculture.

5. To analyse the likely impact of changes in marketing organization and structure on pricing efficiency at various levels of marketing.

The text is divided into six chapters including the present introductory chapter. Chapter two is concerned with the review of literature related to the study. Chapter three describes the methodology adopted in the generation and analysis of data. Chapter four presents the results of the study and the discussions thereon, and a few suggestions for improvement are included in the fifth chapter. The results obtained are summarised in the concluding chapter.

Review of Literature

REVIEW OF LITERATURE

This chapter briefly reviews some of the previous work done in marketing, related directly or indirectly to the problem. The literature is reviewed under two heads.

i) Studies on marketing in general

ii) Studies on marketing of cashewnut

2.1 Studies on marketing in general

Clodious and Mueller (1961) clarified the concepts of market structure, conduct and performance in a wider perspective and urged the potential research workers to conduct field investigation on the relationship between market structure, conduct, performance and technological change, the impact of market structure on aggregate farm income and the impact of Government intervention on food grains market structure.

Sosmick (1961) gave a theoritical framework for analysing market structure, conduct and performance. Major emphasis in this study was on the elaboration of the term market performance. According to the author, this term stands for the outcome of an action in the market. Market performance would be reflected in the quantity a buyer would buy from seller, market price, and profit of the firms operating in the market.

Wharton (1962) examined the factors which contributed to the monopsony situation in case of rubber in Malaya. It was found that such a market structure would arise when the dealer, who operated in the rural areas combined the tripple function of a marketer, merchandiser and money lender.

Simon (1964) conducted a regression analysis of pepper prices and exports on the price elasticity of exports and the price elasticity of exports was -0.1034 and correlation coefficient -0.4683. He pointed out that since pepper is on the non-essential list of consumers abroad, price variation will have significant effect on purchases.

Cummings (1967) examined the Indian wholesale wheat trade to evaluate the role of prices and private trade in the functioning of Indian wheat market. The study concluded that although private wheat marketing system suffered from certain imperfection, yet it was efficient and did not need overall replacement by the Government.

Kahlon (1967) examined the food grain market structure in Punjab and worked out net share of the producer when sold through the private trade and Co-operative Society.

Salim (1967) studied the market competition and price rigidity of rubber in each district of Malaysia by calculating the concentration ratio. He found that the concentration ratios were low which indicated the occurence of monopsonistic or oligopsonistic situation in the market.

Kahlon and Singh (1968) examined the trends in areas and production of groundnut and important aspects of marketing as price spread, price fluctuation, storage, grading etc. They concluded that factors other than the market arrivals contributed to the price variation in groundnut in a significant manner.

Lim (1968) estimated the marketing margins and nature of competition of rubber market in Malaysia. The margins were found to be relatively lower for good quality sheets. Similarly margins were inversely related to the volume of trade due to economies of scale. He observed that the dealers penalised small holders by deducting excessive margins and by under estimating the dry rubber content.

FAO (1974), on the basis of the study on marketing margins in Thailand, identified imperfections in the small holders rubber market such as opportunities of monopsony gains, price in elasticity of supply, malpractices in the market and inadequate grading and

processing methods.

Sam and Bhatia (1974) reported that considering the serious economic disorder due to the inefficient market structure of food grains the government decided to take-over food grains trade from 1973-'74. According to the authors, this experiment was a failure. The skewed distribution of marketed surplus in favour of big farmers, who possessed more retentive power, was one of the factors which stood in the way of government procuring sufficient quantity of wheat.

Stifel (1975) established the existence of imperfect competition in the Thailand Sheet rubber market. He analysed the market structure on the basis of concentration ratios, supply elasticities and conditions of market entry. The market performance was evaluated by the degree of monopsony profits.

Diwakar (1976) made an attempt to analyse the structural changes in potato market in Farrukhabad. In order to measure the degree of inequality in different years in the volume of potatos handled by sellers, Lorenz coefficients of inequalities were worked out. The analysis showed a high degree of concentration in market shares amongst both buyers and sellers.

Sikka (1976) studied the price spread of black pepper in Kerala. He pointed out that the farmers got low shares because they sold their produce in ungraded forms.

George and Kunju (1978) analysed the structure of rubber prices over the period 1961 to 1978. The results indicated that the seasonality in prices was not pronounced in the months in which production change is predominent. The prices were found to decline as the seasonal rubber consumption falls while a rise in consumption showed little response in respect of price which according to the authors, may be due to the oligopolystic structure of the market demand.

Sadath and Rajagopalan (1979) studied the marketing of coconuts in Tiptar taluk using a three stage random sampling design and worked out marketing margins and price spread.

Tejero et al. (1981) studied the marketing of black pepper in Batangar in the Philippines. The study identified the channels of distribution, the marketing functions at the farmers' level and the market structure characterising the industry.

Aulakh (1983) studied the nature of competition in the food grain markets, the impact of increased production of food grains on marketed surplus and the

impact of government procurement operation in food grains on private trade.

Gopal Naik and Arora (1986) studied the marketing pattern and pricing efficiency in Indian Arecanut market. They worked out price spread using concurrent margin method and in order to increase the structural and pricing efficiency in arecanut marketing emphasised the role of co-operatives in the trade.

2.2 Studies on marketing of cashewnut

The report on the marketing of cashewnuts in India (1944) mentions about the intermediaries involved in the trade and recommended the formation of an organization of producers to market their produce on co-operative basis.

Sivaswamy (1949) in his study revealed that middlemen entered into a contract with the producers and sold the produce to wholesalers in big assembling centres. Village traders also collected nuts and deducted 3-5 per cent of the weight as trade allowance. The wholesalers sold through brokers to factories. The latter formed themselves into a group and sold to certain companies in the USA. He stressed the need for exploring new markets to avoid monopsony, and

excessive merchandising charges in Cochin as compared to palasa, Quilon and Calicut. He suggested the formation of proper organisation for collection of nuts to reduce excessive merchandising charges.

Viswanathan (1962) conducted a survey in Kerala regarding marketable surplus, the mode of marketing, prices realized by the farmer for his produce, marketing charges paid by the producer etc. during July 1958 to June 1959. Marketable surplus was found to be 96 per cent of production and remaining four per cent was set apart for consumption. Marketing charges were computed as percentage to total value of crops marketed and found to be 2.03 per cent. Of this 1.41 per cent was incurred for transport and porter charges and 0.62 per cent for other marketing charges.

Simon (1964) made an attempt to study the export behaviour of few selected commodities including cashewnut. He assumed the quantity of exports as a linear function of export price, assuming other variables constant. The hypothesis was that the demand for exports was price-inelastic. Price elasticity of demand of cashew kernels was estimated as -0.3146 which was statistically not significant.

The report of the marketing survey on cashewnut in Kerala (1975) discussed the channels of distribution of rawnuts, marketing margin, processing costs etc. Seventy five villagers were selected on random sampling with eight growers from each village. The survey was conducted in two rounds and identified channels of distribution with corresponding shares of different intermediaries. The cultivators got the highest price in March and April during the peak season of the crop. Hence a paradoxical price level was noticed for cashew because dealers engaged in the collection of nuts rushed to the market to collect as much nuts as possible and consequently price increased. Marketing margins and processing cost were also worked out. The report suggested the formation of growers co-operative societies and prevention of illegal system of 'cottage processing' for the growth and development of industry.

A study similar to the one mentioned above was conducted in Goa also and the details of the study were mentioned in the report of the Marketing Survey on Cashewnut in Goa (1975). The average expenditure for processing including overhead charges, packing, grading, transportation of rawnuts etc. was also estimated.

Krishnaswamy (1976) estimated the cost of processing of raw cashewnut in Kerala after the implementation of minimum wages Act, and described the concept of parity price of growers and processors. He discussed the relevance of price stabilization polices with due importance to the price support measures.

The report of the committee on cashew cultivation (1976) emphasised the need to give better price to the cashew growers to augment indigenous production. In the existing marketing arrangements the prices received by the farmers were very low and the report suggested development of a well co-ordinated and efficient marketing system in the country.

Mashubi (1979) estimated the price elasticity of demand for the kernel grade W-320 count on New York market as -1.89 and described the world cashewnut market as 'distorted oligopoly'. He used the word distorted since instead of exporting to direct users, the producing countries were exporting through what he called speculators who tried to create some form of monopolies when facing final consumers for reaping abnormal profits. He suggested implementation of marketing polices by avoiding the 'speculators'.

Krishnaswamy (1980) reviewed the export trade of cashew kernels and found that the growth of export of cashew kernels from India during the period 1946 to 1978 was 4.1 per cent per annum as compared to the annual growth rate of 5.2 per cent of the world export. The growth rate of the component of indigenous production in export trade was three per cent during the above period. To increase domestic production he suggested adoption of efficient marketing and pricing policies which in turn foster the cashew industry.

Mathew (1980) pointed out the problems faced by the growers and workers in the industry. He demanded remunerative prices to the growers and year round work for the workers.

Balasubramanian (1981) emphasised the need to expand production to bridge the gap between supply and demand and stressed the importance of quality control and pre-shipment inspection to avoid giving room for complaints from buyers.

Sandhu (1981) attempted an econometric analysis of Indian export share of cashew kernels in the world trade. In his study the Indian export price elasticity was found be to 0.5115 with negative sign which was statistically not significant.

Balamohandas and Parvathiswara Rao (1982) studied the marketing pattern, practices and problems of cashew growers in Srikakulam district. The study revealed that 77 per cent of cashew growers sold their produce to the village trader, while the remaining 23 per cent disposed off the produce to processing units. They identified two channels viz. Farmer - Village trader - Processing unit and Farmer - Processing units and also worked out marketing costs and margins in these channels. The growers net share in the processing units total price was 95.22 per cent in the first and 96.53 per cent in Channel II. The margin of profit of the village trader was 1.58 per cent.

Ipte and Borude (1982) studied the existing method of marketing of cashewnuts, worked out the economics of processing and estimated the costs of marketing, processing, marketing margin and price spread in Maharashtra. A three stage stratified sampling design was used for this study. Three channels were identified. The value added due to processing of rawnuts was 52.66 per cent.

Kannan (1983) analysed the inter-relationship between the export of kernels, processing of raw nuts marketing and availability of raw nuts and aspects of domestic production of cashew. He worked out processing cost of a bag (80 kg) of raw cashew nut

at the 1975-'76 prices of cashew kernels and found that the share of profits was one-third of the value added when payment to labour were made according to minimum wage rates. He suggested ways to increase domestic production and discussed the problems associated with this industry in the country with special reference to the state of Kerala.

Thomas Mathew and Reena (1984) calculated compound growth rate of export of cashew kernels from India and found a declining trend during the period 1970-'82.

Mohanchandran (1986) made an investigation into the financial coverage to be given by the banks to the exporters for the healthy growth of the industry in the state.

Methodology

METHODOLOGY

The study is mainly concerned with marketing channels, market structure, market practices and marketing costs and margins involved in cashewnut marketing. Apart from farmers who produce rawnuts, all kinds of functionaries associated with the marketing of cashewnut up to export and shipping were contacted and relevant information gathered and all the services involved were studied to get a clear picture on these aspects.

Multi-stage random sampling method was adopted for selection of respondent-farmers. Two districts were selected for the study, one from the erstwhile Travancore Cochin state, viz. Quilon and the other from the Malabar region, viz. erstwhile Cannanore district because while the district with the highest area and production is Cannanore, the district in which the bulk of the processing factories are located is Quilon. Community Development Blocks within each of these districts were arranged in discending order of area under cashewnut and the first two blocks were selected from Cannanore district, and the first block was selected from Quilon district, Koothuparamba and Manjeswar were the selected blocks of Cannanore district and Kottarakkara was the block selected from Quilon district.

From each of the selected blocks one panchayat was selected randomly. Based on this procedure, Kottiyoor panchayat from Koothuparamba block, Enmakaje panchayat from Manjeswar block and Karupra panchayats from Kottarakkara block were selected. From each selected panchayat three wards each were selected further by simple random sampling.

Since a list of cashew growers was not available, a sampling frame was prepared for each of the selected wards by using list of all the farmers in the ward, available with the panchayat office. Then eight farmers were selected randomly from each ward. On field visit if a sample farmer was found not having cashew cultivation, then in his place one with cashew cultivation located nearest to him was selected. There were altogether 72 farmer respondents for the study. The selected farmers were personally contacted. The data required for the study were generated by interview method using a well-structured, pre-tested schedule. A copy of the schedule is included as Appendix-I. The data collection was done during June-August 1986, keeping the reference period as the cashew season 1986 (February to May).

From the selected wards a sample of various intermediaries such as village merchants, itinerant traders, semi-wholesalers etc. were also personally

interviewed, using a well structured schedule. A few wholesalers were also contacted from the nearest place where they existed. The information collected include monthwise details of trading of cashewnut, total sales turnover of all commodities, costs of operation etc. A specimen of the schedule is shown as Appendix-II.

A random sample of 20 processors were interviewed using a third well structured schedule covering various aspects of processing of raw cashewnut such as percentage recovery, grading, packing, processing costs, export etc. A specimen of the schedule is given as Appendix-III.

Besides this, the Cashew Export Promotion Council, Directorate of Cashewnut Development, Multi-State Cashew Project, Kerala State Cashewnut Development Corporation, Special Officer - Cashewnut Development, Export-Import Inspection Agency, Merchants Association, Indian Bank, Exporters Association and Cashew Growers Association were also contacted to collect information.

Tabular method is the main analytical tool employed for data interpretation. For working out marketing margins a varient of concurrent margin method has been used. In the concurrent margin method, margins are worked out on the basis of prices at different stages of marketing at the same point of time. Since

daily prices were not available in different stages, monthly average prices were used for computing margins. New York market prices were also available on monthly basis. Marketing margins were worked out for the months of March to May in Enmakaje panchayat and February to May in Kottiyoor and Karupra panchayats corresponding to the harvesting and marketing season of cashewnuts in the panchayats. Net margins of processors were also worked out through lagged margin method by taking into account driage and interest on inventory holding.

In this analysis marketing margins were worked out from the stage of farmers sale of nuts to the stage of New York market on a monthly basis. The study was confined to the New York market only since the kernels are mainly exported to the New York market.

Concepts used in the study

Some of the important concepts used in this study are explained below:

Market structure

Market structure means the organizational characteristics which determine the relations of sellers in the market to each other, of buyers in the

market to each other, of sellers to buyers and of sellers established in the market to other actual or potential suppliers of goods including potential new firms which might enter the market. Structure for practical purposes means those characteristics of a market which seem to influence strategically the nature of competition and pricing within the market. The characteristics of market structure are the degree of seller and buyer concentrations, the degree of product differentiation and the conditions of entry into the market (Clodius and Mueller, 1961).

According to George (1985) market structure means organizational anatomy of a market, and can be defined as all the agencies involved either vertically or horizontally in the selling and buying of the produce. It is composed of the number and size of the different firms and organizations handling the produce, their form and market share.

Marketing costs

Marketing costs consists of all items of expenditure incurred in transferring goods from the producer to the consumer. These are the costs of performing various marketing functions, such as transporting, storing, processing, selling and other

related activities, which are essential. Besides these costs, implicit costs such as depreciation and cost of family labour are also included.

Marketing margins

Marketing margin is the difference between the price paid by the ultimate consumer and the price paid by the producer. Marketing margin thus defined is the gross margin. The difference between gross margin and marketing costs is defined as net margins, consisting of profits of various intermediaries in the marketing chain. In this study marketing margin is the difference between the producers realization for one quintal of rawnuts and the price received by the processors for an equivalent quantity of cashew kernels and other by-products.

Results and Discussion

RESULTS AND DISCUSSION

In this chapter the results of the study and discussion there on, are presented. The chapter is divided into four sections.

Section one deals with general marketing practices, processing of rawnuts, grading of kernels and packaging and exporting of kernels. Section two deals with marketing practices in the study area. Section three deals with marketing channels and market structure and section four deals with marketing costs and margins.

4.1 Section - 1

4.1.1 General marketing practices

In Kerala, cashewnut trees start flowering from October-November and the fruits start maturing by February. The harvesting and marketing season for cashewnuts start by February and continues till May to June. The peak harvesting and marketing months are March and April.

Harvesting of cashewnuts is done by members of the farmers' family as well as by hired labour. Mainly women and children are engaged for this job. There are two methods of harvesting and collection of nuts. In

the first method matured nuts and fully ripe apples are picked from the trees twice or thrice a week. In the other method, nuts from the fallen fruits are picked. Nuts picked from the trees are sundried for one or two days before they are sold, while fallen nuts are sold without sundrying. Generally sales take place mainly in the villages themselves either to itinerant traders or village traders on ready cash basis. The general practice is also to sell the nuts immediately after harvest rather than later in the season.

In Kerala processing factories are located mainly in Quilon district. Rawnuts are transported to the factories in lorries and in the factories the nuts are processed to make kernels, which are the most important economic products from nuts.

4.1.2 Processing of raw cashewnuts

The processing of cashewnut is a highly labour-intensive activity. The technology of cashew processing not only involves very little investment in plant and machinery, but it also does not use any electrical energy. From open pan roasting, a very crude method that was in vogue in the early days of the industry, the present widely adopted method of drum roasting constituted only a small step forward. Thus the

present technology can be characterised as one of low capital and low energy intensity.

The kernel within the testa is the main product of the cashew industry and the art of processing is to extract the kernel whole from the nut without affecting the kernel any way. The processing of cashewnut involves the following steps:

i) Drying of rawnuts
ii) Roasting
iii) Shelling
iv) Borma
v) Cooling
vi) Peeling

Two methods of roasting are adopted in the industry, drum roasting and oil bath roasting. In the drum roasting process, the rawnuts are fed into a rotating drum fixed inside the kiln. The cashewnuts, when they are fed into the red-hot drum, get ignited due to the presence of cashew shell oil exuded out of the nuts due to heat. The nuts get roasted in this method, and are then taken for shelling. Shelling operation is done by hand and the expertise of women workers engaged in this operation is the main determinant for obtaining whole kernels from the shell. The success of cashew processing depends mainly on the

low percentage of broken kernels obtained in the shelling process. After shelling the kernels are put in wooden trays with wire nets, and fed into a hot chamber called 'Borma'. After approximately four hours of heating in the borma, during which period it is constantly stirred, the kernels are taken out and cooled overnight. Then they are ready for peeling in which operation the brown skin on the kernel is peeled away by hand.

In the oil bath process the nuts are first sorted into different sizes and nuts of the same size are fed by means of a conveyer into a bath of cashew shell oil kept heated in a tank. The shells, when they pass through this hot oil, exude skin oil contained in the shell. The cashewnut shell liquid (CNSL) which is maintained at a temperature of 200°C also brings about an effect of roasting on the rawnuts. The roasting time is adjusted by adjusting the speed of the conveyer. The roasted nuts thus obtained are conveyed to a centrifuge when the residual oil sticking to the surface of the shell is removed. The nuts are then taken for shelling. However, since it is found by experience that by using the oil bath process there is a possibility of getting more brokens in the shelling process and because the kernels might also be discloured, the widely prevalent method is drum roasting.

Apart from cashew kernel which is the main product, the other products are cashew shell, cashewnut shell liquid and cashewnut skin.

More than 150 thousand workers are estimated to be employed in these process, within the industry, in the state but 94 per cent of them are women. Women are employed in shelling (42 per cent of total employment) peeling (42 per cent) and grading (10 per cent). Men are employed only in roasting, heating, packing and other miscellaneous work*.

4.1.3 Grading of kernel

The peeled kernels are graded into different varieties according to their sizes and the scorched varieties are separated. Brokens are graded into different grades and the grading workers separate out the useable portion of the damaged nuts and these are again graded into different varieties. The graded kernels are packed in vacuumised tins filled with carbondioxide and then packed in cartons.

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* Source: Cashew Development in India, 1983; Agricole Publishing Acadamy, New Delhi.

Initially cashew grading was done according to the requirements of U.S. buyers. Standards of quality for different grades were introduced by exporters to satisfy buyers, but by and large acceptance of buyers depended on the confidence they reposed in individual exporters. With the rapid increase in export to U.S.A. and the emergence of various new markets, the need for greater standardisation was felt and in 1963, the Cashew Export Promotion Council introduced a system of quality control and pre-shipment inspection of all cashew kernels exported from India. In 1966, the job of quality control and pre-shipment inspection was taken over by the Export Inspection Agency of the Government of India. They are responsible for inspecting all export consignments and certify them as fit for export.

Government of India (Export Inspection Agency) have used specifications for 25 grades of cashewnuts (Table 4.1). The cashew kernels can be broadly divided into five categories as white wholes, sorched wholes, brokens, pieces and local varieties. The fifth category of local varieties consisting of baby bits, puzhukuthu, neeli wholes etc. are unfit for export and fetch very low value locally.

The most popular variety is white wholes 320

Table 4.1 Grade specifications for cashew kernels

Cashew kernels (whole)

Grade designation	Number of kernels per kg or lb	General characteristics
W 180	375 to 395 (170 to 180)	Cashew kernels shall have been obtained through shelling and peeling cashewnuts (Anacardium occidentale), shall have the characteristic shape; shall be white, pale ivory or light ash in colour, reasonably dry and free from insect damage, damaged kernels and black or brown spots. They shall be completely free from rancid kernels. The kernels shall be completely free from testa
W 210	440 to 465 (200 to 210)	
W 240	485 to 530 (220 to 240)	
W 280	575 to 620 (260 to 280)	
W 320	660 to 705 (300 to 320)	
W 400	770 to 880 (350 to 400)	
W 450	880 to 990 (400 to 450)	
W 500	990 to 1100 (450 to 500)	
Tolerance:	Broken kernels and kernels of the next lower grade; if any, shall not together exceed 5 per cent	at the time of packing

Scorched cashew kernels (whole)

Grade designation	Trade name	General characteristics
SW	Scorched wholes	Cashew kernels shall have been obtained through shelling and peeling cashewnuts (Anacardium occidentale) shall have the characteristic shape; shall be reasonably dry and free from insect damage, damaged kernels, black spots and testa. They shall be completely free from rancid kernels. The kernels may be light brown, light ivory, light ash or deep ivory in colour due to scorching as a result of overheating
Tolerance:	Broken kernels and kernels of the next lower grade, if any, shall not together exceed 5 per cent	at the time of packing

Table 4.1 (Contd.)

Desert cashew kernels (whole)

Grade designation	Trade name	Blemish	General characteristics
SSW or SW 1A	Scorched wholes seconds or scorched wholes I.A.	Slightly shrivelled kernels	Cashew kernels shall have been obtained by shelling and peeling cashewnuts (Anacardium Occidentale) shall have the characteristic shape; be reasonably dry and free from insect damage and testa. Slightly scorched kernels and kernels with slight speckling and discolouration permitted. They shall be completely free from rancid kernels. The kernels may also be immature. The kernels may be light brown, light blue or light ivory in colour due to scorching.
DW	Dessert wholes		Cashew kernels shall have been obtained by shelling and peeling cashewnuts (Anacardium occidentale), shall have the characteristic shape; shall be reasonably dry and free from insect damage and testa. Scorched, discoloured, speckled and shrivelled kernels permitted. Rancid kernels not permitted. The kernels may show deep black spots.

Tolerance : Broken kernels or kernels of the next lower grade, if any, shall not together exceed 5 per cent at the time of packing

Cashew kernels (white pieces)

Grade designation	Trade name	Description	General characteristics
B	Butts	Kernels broken crosswise and naturally attached	
S	Splits	Kernels split naturally lengthwise	

Table 4.1 (Contd.)

Cashew kernels (white pieces)

Grade designation	Trade name	Description	General characteristics
LWP	Large white pieces	Kernels broken into more than two pieces and not passing through a 4 mesh 16 SWG sieve	Cashew kernals shall have been obtained by shelling and peeling cashewnuts (Anacardium occidentale), shall be white, pale ivory or light ash in colour reasonably dry and from insect damage, damaged kernels, and black spots. They shall be completely free from rancid kernels. The pieces shall be completely free from testa
SWP	Small white pieces	Broken kernels smaller than those described as LWP but not passing through a 6 mesh 20 SWG sieve	
BB	Baby bits	Plemules and broken kernels smaller than those described as SWP but not passing through a 10 mesh 24 SWG sieve	

Tolerance: Up to 5 per cent of the next lower grade of pieces at the time packing

Cashew kernels (scorched pieces)

Grade designation	Trade name	Description	General characteristics
SB	Scorched butts	Kernels broken crosswise and naturally attached	Cashew kernels shall have been obtained through shelling and peeling cashewnuts (Anacardium occidentale), shall be reasonably dry and free from insect damage, damaged kernels, black spots and testa. They shall be free from rancid kernels. The pieces may be light brown or deep ivory in colour due to scorching as a result or overheating
SS	Scorched splits	Kernels split naturally lengthwise	
SP	Scorched pieces	Kernels broken into pieces and not passing through a 4 mesh 16 SWG sieve	
SSP	Scorched small pieces	Broken kernels smaller than those described as SP but not passing through a 6 mesh SWG sieve	

Tolerance: Up to 5 per cent of the next lower grade or pieces at the time of packing

Table 4.1 (Contd.)

Dessert cashew kernels (pieces)

Grade designation	Trade name	Description	Blemish	General characteristics
SBS	Scorched pieces seconds or scorched pieces IA	Kernels broken into pieces but not passing through 4 mesh 16 SWG sieve	Pieces of shrivelled kernels. May be deformed due to immature nuts and black spots	Cashew kernels shall have been obtained through shelling and peeling cashewnuts (Anacardium occidentale), shall be reasonably dry and free from insect damage and testa. Scorched pieces with surface speckling and discolouration permitted. The kernels may be light brown, deep ivory or light to deep blue in colour. May be deformed due to immature nuts and may have spots. They shall be free from rancid kernels.
DP	Dessert pieces	Kernels broken into but not passing through 4 mesh 16 SWG sieve	More shrivelled than those described as SPS and deeply scorched	
DPS	Dessert small pieces	Kernels of the same description as above but smaller than DP and not passing through 6 mesh 20 SWG sieve	- do -	Cashew kernels shall have been obtained by shelling and peeling cashewnuts (Anacardium Occidentale) and shall be reasonably dry and free from insect damage and testa. The kernels may be deeply scorched, may have surface speckling and discolouration, may be brown, deep ivory or light to deep blue in colour, may be deformed and shrivelled due to immature nuts and may have spots. They shall be free from rancid kernels.
DB	Dessert butts	Kernels broken crosswise and naturally attached	- do -	
DS	Dessert splits	Kernels split naturally lengthwise	- do -	

Tolerance: Up to 10 per cent of the next lower grade at the time of packing. Cashew kernels shall be packed in new, clean, dry and leak-proof tin containers and the containers shall be securely closed and sealed in such a manner that the cashew kernels remain in an inert atmospheric condition inside the container.

which is used as a standard quality for international price fixation.

4.1.4 Packaging and exporting

The normal pack for cashew kernels for export is two hermetically sealed tins of 25 lbs. each in one carton. Each tin is tested for any leak and then weighed prior to being filled with cashew kernels to ascertain the fare weight. After filling and weighing the tins are vacuumised and filled with carbondioxide gas. This process is known as VITAPACK.

Labels to indicate the grade of cashew kernels prescribed and supplied by Export Inspection Agency are affixed across the top portion of the tin using special tamper-proof adhesive. Two tins containing 25 lbs. of cashew kernels (11.34 kg) are packed in a corrugated card board carton which is bound by nylon strapping. The standard markings including brief grade descriptions, name of packer, gross and net weight etc. are stencilled on the carton. Now the kernels are packed and ready for shipment.

The packed cartons are handed over to the shipping agents for transporting the cartons to the shipping yard and for loading them in the ship. It may be noted that the shipping agents after taking

delivery of the cartons issue a receipt called Out Agency Receipt (OAR) against which banks advance money.

An exporter intending to export cashew kernels submits, not less than seven days before the date of commencement of loading into the ship, an application to the Export Inspection Agency, giving particulars of the consignment to be exported. The Agency shall inspect the consignments of cashew kernels as per the specification and after the inspection, if the Agency is satisfied that the consignment is export worthy, it shall within 7 days of receipt of intimation, issue the certificate of inspection declaring the consignment as export worthy. The consignments are checked at the point of loading by the Customs Authorities in relation to the Certificate of Inspection issued by the Export Inspection Agency.

4.2 Section - 2

4.2.1 Marketing practices in the study area

As stated earlier, farmer level marketing aspect of the study is based on information from erstwhile Cannanore district in North Kerala and Quilon district in South Kerala. Two panchayats viz, Kottiyoor and Enmakaje from the former district and one panchayat, viz. Karupra from the latter district were chosen for

detailed investigation. It was observed during the course of investigation that there was no uniformity in regard to collection of nuts among the three panchayats. Though Enmakaje and Kottiyoor were in the same region, whereas farmers generally collected fallen nuts in Kottiyoor panchayat, in Enmakaje they picked the matured nuts from the trees. This latter practice was also followed in Karupra. In none of the three panchayats, farmers were reported to be storing the nuts after harvest. They invariably sold the nuts immediately after harvest, as storage results in weight reduction. At the farmer level no attempt was found being made to grade the raw nuts, on account of the fact that the buyers were buying nuts in single lots and the prices quoted were for ungraded nuts.

Buyers of nuts at the farmer level were itinerant traders, village merchants, petty traders and wholesalers. Of these, the first three types of buyers predominated. These traders who bought nuts from farmers in terms of weight generally deducted ten to twenty paise per kilograme from the agreed price under one pretext or the other, but mainly on the pretext of higher moisture content. The different buyers of nuts in the villages sell the nuts to wholesalers and the wholesalers in turn sell them to processing factories through commission agents.

4.2.2 Market functionaries

The major functionaries in the marketing of cashewnuts and their role are mentioned below:

i) **Village merchants:** The village merchants combined buying of rawnuts with their merchandising activities. They had provision stores or stationary stores in the villages. Rawnuts were brought to these shops by farmers. In Cannanore district area, they bought rawnuts on all the days in the week while in Quilon district they bought only on the weekly market days. These merchants were the main buyers of rawnuts. In Cannanore district, besides cashewnuts, they purchased pepper and arecanuts. They sold cashewnuts to semi-wholesalers or wholesalers.

ii) **Petty traders:** Unlike village merchants, the petty traders did not have any merchandising activities nor did they have any permanent premises. These traders deal in different products in different seasons. During the cashewnuts marketing season these traders sat in different localities in the villages with a balance and gunny bags for buying cashewnuts. During the cashewnut marketing season their activity was exclusively buying and selling of cashewnuts. Farmers brought nuts in small lots. The nuts purchased by these traders were sold to wholesalers almost daily.

iii) Itinerant traders: Itinerant traders were the only intermediaries who bought nuts directly from the premises of farmers. They went round the villages with weighing balance and gunny bags. They also sold the nuts almost daily to wholesalers.

iv) Semi-wholesalers: Semi-wholesalers intermediated between village merchants on the one hand and wholesale dealers on the other. They bought nuts from the farmers and sold to the latter. They rarely bought nuts from petty traders and itinerant traders.

v) Wholesalers: Wholesalers bought nuts from farmers, village merchants, petty traders, itinerant traders and semi-wholesalers. They sold rawnuts to processors through commission agents.

vi) Commission agents: Commission agents, as stated above, acted on behalf of processors. They entered into a contract with wholesalers to supply specified quantities of rawnuts in lorry loads. The transport charges were met by processors.

vii) Processors/exporters: In Kerala, cashewnut processing is concentrated in Quilon district. Though information on capacity of the industry is not known with sufficient degree of reliability it is known that there is a good deal of excess capacity in the

industry. Processors after buying rawnuts through commission agents got them transported to drying yards located in different parts of the state. After drying, the nuts were again transported to the processing centres. Rawnuts purchased in Quilon district were transported directly to the factories. The processors were invariably exporters of cashew kernels also. Therefore, apart from processing; grading, packing and transportation of kernels to the port were done by processors themselves.

4.3 Section - 3

4.3.1 Marketing channels and market structure

There was no uniformity in respect of marketing channels in the three panchayats covered for the present study. Therefore, it was considered more appropriate to identify the marketing channels in each panchayat separately.

4.3.1.1.(i) Enmakaje Panchayat

In Enmakaje panchayat during the year under study viz. 1985-'86 marketing of cashewnuts began by the end of February and continued till the end of May. Farmers harvested fully matured nuts from the trees and the nuts were sundried for one or two days after harvest before they were sold. Farmers sold cashewnuts to

village merchants, petty traders, itinerant traders as well as wholesalers. Where as co-operatives (mainly primary Agricultural Credit Societies) were the main buyers during the years when monopoly procurement of cashewnuts existed, co-operatives as buyers hardly existed during the year under study when free markets were operating.

The study revealed the following five marketing channels up to the stage of export of cashew kernels:

1. Producer - Village merchant - Wholesaler - Processor
2. Producer - Village merchant - Semi-wholesaler - Wholesaler - Processor
3. Producer - Petty trader - Wholesaler - Processor
4. Producer - Itinerant trader - Wholesaler - Processor
5. Producer - Wholesaler - Processor

The sale pattern of sample farmers to different types of buyers is shown in Table 4.2.

Both in terms of number of farmers as well as in terms of quantity involved, village merchants were the most important buyers. In terms of quantity involved wholesalers were the second important buyers,

Table 4.2 Farmer sales to different types of buyers in Enmakaje panchayat

Type of buyers		Number of farmers	Number of farmers sold (per cent)	Quantity (Quintals)	Quantity (Per cent)
i)	Village merchants	16	66.67	38.54	49.21
ii)	Petty traders	2	8.33	6.85	8.75
iii)	Itinerant traders	4	16.67	10.93	13.95
iv)	Wholesalers	2	8.33	22.0	28.09
	Total	24	100.00	78.32	100.00

followed by itinerant traders and petty traders. From the data in the table it can be inferred that village sales predominated over sales outside the village, though prices received were lower for village sales. The average price received by the farmers from the village sales worked out to Rs.1,192/- per quintal of raw cashewnuts while the price realized from selling to wholesalers i.e. sales outside the village, worked to Rs.1,219/- per quintal of raw cashewnut. Ninety two per cent of the farmers sold to buyers within the village and only eight per cent sold outside the village. The quantity sold by the farmer to village buyers constituted 72 per cent of the total quantity. It can be inferred from the table that the relatively better-off farmers resorted to sales outside the villages, while the smaller farmers sold to buyers within the village. The most important reason for the predominance of village sales was the small quantum of the marketable surplus. Apparently the higher prices for market sales were not worthwhile compared to the time and cost involved in moving small quantum of surplus to the market.

Most of the farmers who sold nuts to village merchants, sold them to three or four of them who have been buying nuts during the earlier years also. On the other hand, the village merchants who were newcomers

to the business were not patronized by many farmers, inspite of the fact that prices offered by both categories were the same. Past business ties were stated to be the main reason for this particular pattern of behaviour on the part of farmers.

As indicated above, village merchants predominated in the purchase of nuts from the farmers. Out of the 19 village merchants contacted from Enmakaje panchayat three sold the nuts to the semi-wholesalers and sixteen to the wholesalers. The semi-wholesalers came with gunny bags and purchased nuts from the village merchants and then sold to the wholesalers. The sale pattern of different types of traders to wholesalers is given in Table 4.3.

Table 4.3 Sales of different types of traders to the wholesalers in Enmakaje panchayat

	Type of trader	Number of traders	Per cent of numbers	Quantity sold (Per cent)
1.	Semi-wholesalers	3	13.64	11.52
2.	Petty traders	1	4.55	0.87
3.	Itinerant traders	2	9.10	1.80
4.	Village merchants	16	72.71	86.81
	Total	22	100.00	100.00

The table explicity shows the predominance of first channel in moving rawnuts from the producers to the processors i.e. in as much as 72.71 per cent of village merchants sold 86.81 per cent ofnuts to the wholesalers. It was inferred that there was a high degree of concentration in the volume of rawnuts purchased.

The average per head transaction of village merchants worked out to 85.68 quintals of rawnuts. Among the various intermediaries other than the wholesalers, the village merchants handled bigger quantities of rawnuts. There was altogether 30 village merchants in the panchayat engaged in cashewnut business.

The data collected for the previous year, viz. 1985 showed that there were 25 village merchants engaged in cashewnut business and on an average each village merchant handled 109.38 quintal of rawnuts.

4.3.1.2 Kottiyoor panchayat

In Kottiyoor panchayat the farmers were not harvesting the nuts from the trees. Instead they picked natured fallen nuts only on daily basis or once in two days. Further they kept the ground under the trees very clean. The fruits were removed by hand and the nuts were marketed immediately without resorting to sundrying. Head load was the usual mode of transport since no other mode

of transport was feasible due to the uneven topography of the locality. The buyers at the farm level were the village merchants and the wholesalers.

Two marketing channels were found to be existing during the period of study.

i) Channel-I: Producer - Village Merchant - Wholesaler - Processor

ii) Channel-II: Producer - Wholesaler - Processor

Out of 24 farmer respondents of the study 21 farmers (87.5%) sold their produce to the village merchants which formed 74.31 per cent of the total sales of sample. Three farmers (12.5%) sold directly to the wholesalers and this constituted 25.69 per cent of the total sales of sample farmers. In selling the produce directly to the wholesalers, the farmer incurred higher transport cost. The sale pattern of farmers can be seen from Table 4.4.

The average price realization from village sales worked out to Rs. 1,236/- and that from outside village sales come to Rs. 1,285/- per quintal of rawnuts.

Table 4.4 Farmers sales to different types of buyers in Kottiyoor panchayat

Type of buyers	Number of farmers	Number of farmers sold (per cent)	Quantity sold (quintals)	Quantity sold (per cent)
i) Village merchant	21	87.5	164.85	74.31
ii) Wholesalers	3	12.5	57.00	25.69
Total	24	100.00	221.85	100.00

From the table it can be inferred that bigger farmers sold to wholesalers which meant sales outside the village and smaller farmers sold to village merchant which meant sales within the village. The village merchants were found to be the major link in transporting the nuts from the producer. The village merchants disposed off the produce on an average once in three days.

The average quantity transacted per head of village merchant worked out to 196.23 quintals of raw nuts in 1986. The total number of village merchants engaged in purchase of cashewnut was 25.

In the previous year, viz. 1985 the per head transaction of cashewnut worked out to 219.23 quintals of rawnuts and the total number of village merchants engaged in cashewnut purchase was twenty two numbers.

Thus in the study year more number of new buyers entered in purchase of cashewnut.

Other intermediaries like itinerant traders, petty traders etc. were not reported to be operating in the panchayat.

The wholesalers purchased nuts from the farmers and village merchants and sold to the processers through the mediation of commission agents who in turn transported the nuts to the drying yards.

4.3.1.3 Karupra panchayat

In this panchayat farmers harvested nuts from the trees. Majority of farmers sold the nuts without sundrying while a few farmers sold after a days drying. All the farmers interviewed, sold their nuts in the village market. Marketing of nuts was done on the two market days in a week. The traders were provision stores owners and they purchased nuts on the two market days only. No trader was found to be solely engaged in cashewnut purchase.

Three marketing channels were identified in this panchayat, as indicated below:

i) Channel-I: Producer - Village merchant - Wholesaler - Processor

ii) Channel-II: Producer - Itinerant trader - Wholesaler - Processor

iii) Channel-III: Producer - Wholesaler - Processor

Out of 24 farmers contacted in this panchayat 20 farmers who constituted 83.33 per cent of the sample, sold their produce to village merchants and this was 86.68 per cent of total sales of sample farmers. One farmer (4.17%) sold to itinerant trader (1.84% volume) and three farmers (12.5%) sold to wholesalers (11.48% quantity). Data on sales pattern of farmers is given in Table 4.5.

Table 4.5 Farmer sales to different types of buyers in Karupra panchayat

Type of buyer	Number of farmers	Number of farmers sold (per cent)	Quantity sold (Quintals)	Quantity sold (per cent)
i) Village merchant	20	83.33	77.79	86.68
ii) Wholesalers	3	12.50	10.30	11.48
iii) Itinerant traders	1	4.17	1.65	1.84
Total	24	100.00	89.74	100.00

The table shows that the influence of itinerant traders was negligible in this panchayat and that village merchants predominated in the purchase of nuts from the farmers.

The predominance of village merchants can also be seen from Table 4.6.

Table 4.6 Sales of different types of traders to the wholesalers in Karupra panchayat

Type of trader	Number of traders	Percentage of numbers	Quantity sold (per cent)
i) Village merchant	14	87.50	98.60
ii) Itinerant traders	2	12.50	1.40
Total	16	100.00	100.00

The average per head transaction of village merchants worked out to 27.82 quintals of rawnuts. The total number of village merchants engaged in cashewnut purchase was 19 numbers. In 1985 also there was only 19 village merchants and handled on an average of 34.64 quintals of rawnuts.

In contrast to what was seen in Kottiyoor and Enmakaje panchayats, no new buyers were found to be engaged in cashewnut purchase in Karupra panchayat. The per head quantity transacted by the village merchants was observed to be lower in 1986 compared to 1985. The reason for this may be due to higher production on account of favourable climatic conditions in the previous year.

The available data on market structure at the farmers level as given in this section indicate that there were fairly large number of buyers operating at that level. There was also choice of buyers available to the farmer sellers. These together with the fact that rawnuts were sold in terms of weight indicate the possibility of competition among the buyers.

As already mentioned, Kerala Government enforced monopoly procurement of raw cashewnuts in 1976 with the twin objectives of increasing the producer share of consumer's rupee and to increase procurement of rawnuts produced in the state. In Cannanore district which produces a major portion of rawnuts in the state, smuggling to Karnataka has been a perennial problem as far as this industry is concerned. Introduction of monopoly procurement further worsened this problem, since the prices offered in Karnataka were said to be higher. Due to the failure of this policy in collecting the produced rawnuts, Government lifted the monopoly procurement and allowed private trade from 1983 onwards.

Discussion with factory owners in Quilon district who are the buyers in Cannanore district through commission agents disclosed the fact that in the initial year of lifting of monopoly procurement, the private traders in Quilon district fixed rawnuts prices

'in collusion' and the situation may be described as 'collusive oligopsony'. In later years, i.e. in 1985 and 1986 this condition has changed and the competition among processor buyers tended to increase due to shortage of rawnuts in the world market for import. Consequently the domestic rawnuts prices increased.

4.4 Section - 4

Marketing costs and margins

Marketing margins consists of the difference between the price paid by the final consumer and the price received by the producer. One major element of marketing margins is marketing costs. The difference between total margins which may be defined as gross margins and marketing costs, consists of profit of intermediaries and may be defined as net margins. In this section marketing costs of various intermediaries are first estimated. Cost of traders were estimated panchayatwise. Subsequently gross margins are estimated. Finally net margins are also estimated.

4.4.1 Marketing costs - Enmakaje panchayat

4.4.1.1 Marketing costs of farmers in Enmakaje panchayat

Marketing costs of farmers in different channels were computed and shown in Table 4.7. Drying charges

formed the major item of cost and the total marketing cost varied from Rs. 15.20 to Rs. 28.63 per quintal of rawnuts.

4.4.1.2 Marketing costs of traders in Enmakaje panchayat

i) Marketing costs of itinerant traders:

One labourer usually accompanied the itinerant trader whose wages were paid on daily basis. Hence handling charges weighment charges and loading charges were accounted together because these three operations were done by the accompanying labourer. Next to this wage transportation cost formed the major item of cost since the distance between the loading points and the wholesaler was found to be more for these group of intermediaries. Since loading charges came under wages of the labour, only unloading and transportation costs were computed separately.

ii) Marketing costs of petty traders:

Transportation cost formed the major item of cost followed by loading/unloading charges. They were not having permanent shops or buying centres. They purchased nuts from different localities depending on the availability of raw nuts. Hence rent of shop, rent of godowns and electric charges were not included in the marketing costs.

iii) Marketing costs of village merchants:

Transportation charges formed the major item of expenditure for the village merchants followed by loading/ unloading and handling charges. Handling charges include weighment charges also. Rent of shop, rent of godown etc. were computed taking into account the proportion of cashewnut business in the overall business of the trader, since almost all the traders were having provision stores. Driage was also accounted in calculating costs. Some village merchants were found to purchase pepper also in the season.

iv) Marketing costs of semi-wholesalers:

These semi-wholesalers purchased nuts from the village merchants and sold to the wholesalers generally on the same day of purchase itself. They were not found to store the nuts. Transportation charges and loading/ unloading charges formed the major items of cost.

v) Marketing costs of wholesalers:

The wholesalers were found to enter into contract with the processors for supplying a specified quantity of nuts in a particular period. They need only to load the nuts in gunny bags in lorries, and the gunny bags are not returned to the wholesalers. Rent of shop, rent of godown, electric charges, telephone charges,

permanent labour cost etc. were accounted in proportion of cashewnut business to the total business of the wholesaler. Cost of holding inventory and monetary equivalent of driage were calculated for three days.

Drying charges formed the major item of cost incurred by farmers followed by transport costs. The transportation cost borne by the farmers in Enmakaje panchayat varied from Rs. 5.45 to Rs. 10.80 per quintal of rawnuts in different channels which constituted 25.98 to 37.72 per cent of total marketing costs of farmers in the panchayat. The farmers used head load or jeep depending on the quantum of nuts for transportation.

Among the marketing costs incurred by various intermediaries transportation cost formed the major item of cost, which ranged from Rs. 2.65 to Rs. 3.89 per quintal of rawnuts. This cost ranged from 19.36 to 45.71 per cent of total marketing costs in different channels. Loading and unloading charges ranged from Rs. 2.50 to Rs. 2.79 per quintal of rawnuts in various channels. These two items of costs, i.e. transportation costs and loading/unloading costs seemed to be on the higher side. Handling charges varied from Rs. 0.60 to Rs.1.50 per quintal of nuts and other costs such as rent of shop, telephone charges interest etc. were seemed to be negligible in this panchayat.

Table 4.7 Marketing costs of farmers in Enmakaje panchayat (rupees per quintal of rawnuts)

Item of costs	Channel I & II	Channel III	Channel IV	Channel V
i) Drying charges	15.20	15.20	15.20	15.20
ii) Cost of transport	7.60	5.45	-	10.80
iii) Cost of packing material	0.33	0.33	-	0.33
iv) Loading/ unloading	-	-	-	2.30
Total	23.13	20.98	15.20	28.63

Kottiyoor panchayat

4.4.1.3 Marketing cost of farmers

Marketing costs of farmers were estimated for different channels and shown in Table 4.9. Transportation cost formed the major item of cost. Total marketing cost ranged from Rs. 12.93 to Rs. 20.58 per quintal of rawnuts.

4.4.1.4 Marketing costs of traders

i) Marketing costs of village merchants

Loading/unloading charges formed the major item of cost, followed by transportation charges. These merchants were having shops, selling items of stationery. Besides

Table 4.8 Marketing costs of intermediaries in Enmakaje panchayat (rupees per quintal of rawnuts)

	Item of cost	Village merchant in channel I	Village merchant in channel II	Petty traders	Semi whole-salers	Itinerant traders	Whole-salers
i)	Handling charges	0.60	0.60	0.60	-	-	1.50
ii)	Handling, weighment and cooly	-	-	-	-	4.17	-
iii)	Loading/unloading	2.79	-	2.50	2.50	-	-
iv)	Loading	-	-	-	-	-	1.25
v)	Unloading	-	-	-	-	1.25	-
vi)	Transportation	3.89	-	3.44	2.65	3.13	-
vii)	Cost of packing materials	0.33	-	0.33	0.33	0.33	3.13
viii)	Rent of shop	0.68	0.68	-	-	-	0.31
ix)	Rent of godown	-	-	-	-	-	0.35
x)	Electricity charges	0.12	0.12	-	-	-	0.11
xi)	Telephone charges	-	-	-	-	-	0.45
xii)	Interest	-	-	-	-	-	0.16
xiii)	Miscellaneous	0.10	0.10	-	-	-	0.36
	Total	8.51	1.50	6.87	5.48	8.88	7.62

cashewnut, some of them purchased arecanut and pepper also. Therefore, for estimating other marketing costs such as rent of shop, electric charges and telephone charges etc. proportionate share of cashewnut business in overall business was taken into account. Monetary equivalent of driage was calculated and included as a cost item .

ii) Marketing costs of wholesalers

The wholesalers need only to load the nuts in the lorry of processors as in the case in Enmakaje panchayat. The gunny bags were not returned to the wholesalers and the costs of gunny bag formed the major item of cost for the wholesalers. Other marketing costs were calculated by taking into account the proportionate share of cashewnut business in the overall business of the wholesalers. The processors purchased nuts from these wholesalers once in three days, hence cost of holding inventory and monetary equivalent of driage were calculated for three days.

The transportation cost borne by the farmers in Kottiyoor panchayat varied from Rs. 12.60 to Rs. 16.50 per quintal of rawnuts which constituted 80.17 to 97.44 per cent of total marketing costs of farmers. This cost seems to be high as compared to that of Enmakaje panchayat. The undulating topography of the

Table 4.9 Marketing costs of farmers in Kottiyoor panchayat (rupees per quintal of rawnuts)

Item of cost	Channel I	Channel II
Costs of transport	12.60	16.50
Costs of packing material	0.33	0.33
Loading/unloading		3.75
Total	12.93	20.58

Table 4.10 Marketing costs of intermediaries in Kottiyoor panchayat (rupees per quintal of rawnuts)

Item of cost	Village merchants	Wholesalers
Handling charges	0.90	1.05
Loading/unloading	3.75	-
Loading	-	1.25
Cost of transport	3.13	-
Cost of packing material	0.33	3.13
Rent of shop	0.18	0.16
Rent of godown	-	0.10
Electric charges	0.02	0.01
Telephone charges	0.32	0.14
Permanent labour cost	-	0.11
Interest	-	0.17
Miscellaneous	0.35	0.07
Total	8.98	6.19

land, make it necessary to transport rawnuts for about 3-4 kilometers to reach the buyers premises. This may be the reason for the high transportation cost per quintal of rawnuts in this panchayat. The high share (percentage) of transport cost is due to absence of drying charges of rawnuts since farmers were collecting matured fallen nuts from the ground.

The loading/unloading charges formed the major share of marketing cost incurred by the village merchants in Kottiyoor panchayat which constituted 37.85 per cent of total marketing cost (Rs.3.75/q of nuts), followed by transport costs i.e. Rs. 3.13 per quintal of nuts which constituted 34.86 per cent of total marketing costs.

The cost of packing material accounted for the major share of marketing cost incurred by the wholesalers which worked out to Rs. 3.13 per quintal of rawnuts followed by loading charges (Rs. 1.25/q of nuts).

Karupra panchayat

4.4.1.5 Marketing cost of farmers

Marketing costs of farmers for various channels were estimated and shown in Table 4.11. Drying charges formed the major item of cost followed by transport costs.

4.4.1.6 Marketing costs of traders

i) Marketing cost of village merchants

Loading/unloading and cost of transport formed the major items of marketing costs of village merchants. They purchased nuts from the farmers on two market days of a week, viz. every Wednesday and Saturday. Driage was accounted in calculating marketing cost. The village merchants disposed off the produce to wholesalers directly without drying.

ii) Marketing costs of itinerant traders

The nature of operation of itinerant traders in this punchayat was similar to that of itinerant traders in Enmakaje panchayat. As in Enmakaje panchayat one child labour was found to accompany the trader and the handling charges, weighment and loading charges were included under the wages of the labourer. Unloading charges were accounted separately.

iii) Marketing costs of wholesalers

In contrast to what was observed in Enmakaje and Kottiyoor panchayats, the wholesalers in Karupra panchayat needed to transport the purchased nuts to the factories/drying yards of the processors. The cost of transport was borne by the wholesalers themselves.

Besides these costs, fixed costs and monetary equivalent of driage were also accounted in cost calculations.

Drying charges constituted the largest share of marketing costs incurred by farmers in this panchayat Transport costs of farmers ranged from Rs. 4.30 to Rs. 7.50 per quintal of raw nuts which ranged from 30.43 to 43.28 per cent of total marketing costs incurred by the farmers.

Among the various marketing costs incurred by the village merchants transport cost formed the major share, i.e. Rs. 3.70 per quintal of nuts which constituted 49.0 per cent of total marketing costs. Transport cost is followed by loading/unloading and handling charges. Handling charges of itinerant traders were found to be high since wages of the accompaning labour were also included in this item of cost. Transport cost formed the second item of cost for the itinerant traders, i.e. Rs. 4.70 per quintal which constituted 26.35 per cent of total marketing costs.

The cost of packing material shared the major item of cost for the wholesalers followed by transport costs. The wholesalers in this panchayat needed to transport the raw nuts to the processors premises and the transportation cost was borne by the wholesalers. The transport cost borne by the wholesalers worked out

Table 4.11 Marketing costs of farmers in Karupra panchayat (rupees per quintal of rawnuts)

Item of cost	Channel I	Channel II	Channel III
Drying charges	9.50	9.50	9.50
Cost of transport	4.30	7.50	-
Cost of packing material	0.33	0.33	-

Table 4.12 Marketing costs of intermediaries in Karupra panchayat (rupees per quintal of rawnuts)

Item of cost	Village merchant	Itinerant trader	Wholesaler
Handling charges	1.25	10.81	0.94
Loading/unloading	1.50	-	-
Loading	-	-	1.25
Unloading	-	2.00	-
Cost of transport	3.70	4.70	3.00
Cost of packing material	0.33	0.33	3.13
Rent of shop	0.35	-	0.90
Rent of godown	-	-	0.42
Electric charges	0.12	-	0.05
Telephone charges	-	-	0.42
Permanent labour cost	-	-	0.60
Miscellaneous	0.75	-	0.36
Total	7.50	17.84	11.07

to Rs. 3.00 per quintal which constituted 27.10 per cent of total marketing costs.

The preceeding discussion of marketing costs showed a fairly large share of transport cost borne by the farmers and various intermediaries compared to other items of marketing costs in the three panchayats.

4.4.2 Storage of rawnuts

Storage is interrelated with other marketing functions such as transportation, processing etc. The farmers in all the three panchayats are not found to be storing raw nuts since storage results in considerable weight reduction of nuts. The village merchants sold once in three days to semi-wholesalers or wholesalers. The wholesalers in all the three panchayats stored on an average for three days before selling to the processors. Interest on inventory holding for wholesalers was computed as ps. 16, 17 and 13 per quintal of rawnuts in Enmakaje, Kottiyoor and Karupra panchayats, respectively. Interest on inventory holding of village merchants was found to be negligible.

4.4.3 Processing cost

Processing of raw cashewnut is done in the cashewnut processing factories located mainly in Quilon district. Eventhough there are some factories in other districts, majority of the factories are

located in Quilon district. Therefore, processing costs are estimated on the basis of information obtained from sample factories in Quilon district.

The processors purchased rawnuts, both imported as well as indigenous. Purchases from the latter source were generally made from different producing areas within the state during the harvesting season, viz. January-February to May-June. These nuts are dried and stored in the factories for the subsequent processing. The cost of processing one quintal of raw cashewnuts was estimated as detailed below. The various costs included were the wages and other benefits to the workers, transporting charges, freight charges on kernels, loading and unloading, interest, commission paid, taxes etc.

Agricultural cess was also included as a cost item. Government fixed tariff value for a tonne of kernels as Rs. 4,000/-. One per cent of this amount (Rs.40/-) was to be remitted to the Government and the corresponding amount for a quintal of rawnuts worked out to Rs. 10.72.

The various items of costs incurred by processors are shown in Table 4.13.

The purchase tax of raw cashewnuts worked out to 6.4 per cent of raw cashewnut price. Commission agents

Table 4.13 **Processor's cost (rupees per quintal of raw cashewnuts)**

Items of cost	Rupees	Per cent
Wages	93.62	27.71
Bonus and other benefits to workers	18.36	5.44
Salaries	9.41	2.79
Bonus to employees	2.67	0.79
Electricity charges and communication	2.04	0.60
Fuel charges	0.99	0.29
Empty tins	26.59	7.87
Cartons	4.89	1.45
Strappings and soldering	2.32	0.69
Labels	1.004	0.30
Purchase tax (6.4%)	58.58	17.34
Transporting charges of kernels	5.26	1.57
Commission on sale of kernels	12.19	3.61
Shipping and forwarding charges	8.08	2.39
Freight charges	21.40	6.34
Commission on purchase of nuts	2.00	0.59
Interest	27.63	8.18
Transportation charges of rawnuts	16.74	4.95
Loading and unloading charges	0.43	0.13
Agricultural cess	10.72	3.17
Fumigation charges	0.24	0.07
Depreciation on buildings	8.19	2.42
Miscellaneous	4.44	1.31
Total	**337.804**	**100.00**

were employed by the exporters both in India and in foreign countries for marketing of kernels. Commission agents were also employed in the raw cashewnuts purchasing centers. The commission paid to the kernel commission agents and rawnuts commission agents were accounted separately.

Out of the different cost items listed, wages accounted for the highest share of processing cost followed by purchase tax and inventory costs. Interest was paid for the amount drawn from banks for the purpose of buying rawnuts from different localities. Most of the bank finance for cashew is for meeting the working capital requirements of the industry.

4.4.4 Sources of revenue

The main product in cashewnut processing is cashew kernel. One of the crucial variables in marketing margins is kernel recovery. Cashew kernel recovery was estimated on the basis of information generated through discussion with factory managers/ owners. As stated earlier different kernel grade specifications are prescribed and major exportable grades are grouped under eight grades which came to 23.52 per cent of weight of rawnuts. Total kernel recovery was 26.80 per cent. All other grades together came to 1.77 per cent and ungraded kernels

constituted 1.50 per cent. The last two categories, i.e. other grades and ungraded quantities are sold entirely in the Indian market. The latter is called rejected in the processors' parlance. Table 4.14 shows gradewise recovery of kernels.

Cashewnut shell liquid (CNSL), shell and skin are the by-products of cashewnut processing. These are sold in the Indian market. The export market of cashewnut shell liquid has been declining over the years and the processors are generally disposing of these products within the country itself. Government is giving import entitlement of ten per cent of the values of kernel exports. Return from entitlement was computed as Rs. 16.37 per quintal of rawnuts. Details of realisation from by-products and import entitlement are given in Table 4.15.

The used gunny bags are sold after the completion of the processing work. These bags are spread in the floor at the time of shelling and peeling of cashew kernels. Usually these bags are not re-used in the following season. Total return other than from kernels, from the sale of CNSL, shell, skin, empty gunnies and import entitlement worked out to Rs. 64.84 per quintal of raw cashewnuts.

Table 4.14 Kernel recovery rates

Grade	Kilogram/quintal of rawnuts	Per cent of total recovery
W 210	0.349	1.30
W 240	4.487	16.75
W 320	11.161	41.67
W 450	1.670	6.24
SW	2.478	9.25
B	0.586	2.19
S	1.038	3.87
LWP	1.747	6.52
Total	23.516	87.79
Others	1.772	6.61
Rejection	1.502	5.60
Grand total	26.790	100.00

Table 4.15 Returns from by-products and entitlement (rupees per quintal of rawnuts)

Item		Kg/q of rawnuts	Wages and cost of packing material (Rs./q of rawnuts)	Net realization (Rs./q of rawnuts)
I.	Return from by-products			
i)	Cashewnut shell liquid (CNSL)	7.35	6.30	34.125
ii)	Shell	43.75	-	12.50
iii)	Skin	1.07	-	0.64
iv)	Sale of empty gunnies	-	-	1.20
II.	Return from import entitlement			16.37
	Total returns			64.84

4.4.5 Marketing margins

Marketing margins consist of the difference between the price received by the producer and the price paid by the final consumer. In this study marketing margins are worked out from the stage of farmer sale of nuts to the stage of wholesale of kernels. Cashew kernels are mainly exported to the New York Kernel Market. Other countries include Netherlands, USSR, UK, Japan, Gulf countries etc. Since major chunk of kernels are exported to USA, marketing margins were worked out for export to USA only on the basis of New York market price. It was not possible to extend the study to the consumer level for want of data on retail price of kernels.

As already mentioned, by-products such as cashewnut shell liquid (CNSL), skin and shell are made in the processing of kernels and therefore, sales realization of processors from by-products are also taken into account in computing marketing margin. As mentioned earlier kernels are sold in several grades besides the ungraded residues. On the basis of discussion,

with factory managers and data obtained from factory owners, average kernel recovery rate was estimated. Average revenue from by-products such as CNSL, shell and skin have been estimated on the basis of average rates prevalent in Quilon district.

For working out marketing margins, a varient of concurrent margin method has been used. As stated earlier, the choice of this particular method was necessitated by the nature of available data. The method used consist of working out margins on the basis of monthly average prices. Margins have been worked out for the months of February to May which corresponds to the marketing season for rawnuts in Kerala.

Panchayat-wise and channel-wise marketing margins have been worked out and presented below

4.4.5.1 Marketing margins in Enmakaje panchayat

Marketing margins in different channels in Enmakaje panchayat are given in Tables 4.16 to 4.20.

1. Marketing margins in Channel-I

Producer - Village merchant - Wholesaler - Processor

In this channel the main intermediaries were the village merchants, wholesalers and processors. The net share of the producer worked out to 59.49 per cent of the New York kernel market price. The total marketing margin worked to 40.51 per cent of export price. Marketing costs worked out to 19.49 per cent and net margins worked out to 21.02 per cent.

2. Channel-II

Producer - Village merchant - Semi wholesaler - Wholesaler - Processor

The main functionaries were the village merchants, semi-wholesalers, wholesalers and processors. The net share of the producer worked out to 59.49 per cent, marketing costs were 19.42 per cent and net margins 21.09 per cent. The total marketing margin came to 40.51 per cent.

The total marketing margins in the first and the second channel were found to be identical. Only a slight variation in marketing costs and net margin were noticed since an additional intermediary is involved in the second channel.

3. Channel-III

Producer - Petty trader - Wholesaler - Processor

The main functionaries involved are the petty traders, wholesalers and the processors. The net share of the producer was 59.50 per cent of the New York market price of kernels. Marketing costs and net margin were 19.33 per cent and 21.17 per cent respectively. The total marketing margin came to 40.50 per cent.

4. Channel-IV

Producer - Itinerant trader - Wholesaler - Processor

Itinerant traders, wholesalers and processors were the main functionaries involved in this channel. The net share of the producer was 57.56 per cent of New York market price, marketing costs came to 18.96 per cent and net margin 23.47 per cent. The total marketing margin worked out 42.43 per cent

5. Channel-V

Producer - Wholesaler - Processor

The net share of the producer was 60.59 per cent of New York market price. The marketing costs and net

margin were 19.19 per cent and 20.22 per cent respectively. Total marketing margin worked out to 39.41 per cent.

In Channel-I of Enmakaje panchayat the village merchant on an average transacted 85.68 quintals of raw cashewnut worth Rs. 1,02,130.56 and got 0.74 per cent profit which worked out to Rs. 1,243/-. Thus in this main channel of raw cashewnut movement the profit of village merchant was found to be insignificant. The wholesaler in this channel transacted on an average of 1,600 quintal of raw nuts worth Rs. 19,48,800/- and a profit of 2.11 per cent was obtained for the wholesalers i.e. Rs. 66,128.00 for the whole period of March to May. The processors obtained a profit of 18.17 per cent. Thus profits of wholesalers and processors were high and the latter seemed to be exhorbitant.

The net margin of village merchant in Channel-II came to 0.18 per cent, semi-wholesalers 0.43 per cent and wholesalers 2.31 per cent. The average per head semi-wholesaler transaction of raw nuts was 61.33 quintals and hence their profit share was meagre.

In channel-III, the petty traders obtained on an average 0.74 per cent profit and wholesalers 2.26 per cent. The per head quantity transacted by the petty traders was only 13.9 quintals of raw nuts and hence their influence was negligible.

Table 4.16 Marketing margins in channel-I in Enmakaje panchayat

	March		April		May		Average	
	Rs./q.	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1146.87	56.01	1171.87	62.88	1186.87	59.86	1168.87	59.49
Marketing expenses of producer	23.13	1.13	23.13	1.24	23.13	1.17	23.13	1.18
Selling price of producer	1170.00	57.14	1195.00	64.12	1210.00	61.03	1192.00	60.67
VM-Total marketing cost	11.44	0.56	11.50	0.62	11.54	0.58	11.49	0.58
VM-Profit	28.56	1.39	9.50	0.51	18.46	0.93	14.51	0.74
Selling price	1210.00	59.09	1216.00	65.25	1240.00	62.54	1218.00	61.99
Wholesalers' marketing cost	10.65	0.52	10.66	0.57	10.72	0.54	10.67	0.54
Profit	79.35	3.88	13.34	0.72	29.28	1.47	41.33	2.11
Selling price wholesalers	1300.00	63.49	1240.00	66.54	1280.00	64.55	1270.00	64.64
Processors total cost	337.80	16.50	337.80	18.12	337.80	17.04	337.80	17.19
Profit	409.84	20.01	285.95	15.34	364.78	18.41	356.86	18.17
Total returns	2047.64	100.00	1863.75	100.00	1982.58	100.00	1964.66	100.00

Note: Channel-I consists of producer - village merchant - wholesaler - processor

Table 4.17 Marketing margins in channel-II in Enmakaje panchayat

	March		April		May		Average	
	Rs./q	Per cent	Rs./q.	Per cent	Rs./q	Per cent	Rs./q	per cent
Net share of producer	1146.87	56.01	1171.87	62.88	1186.87	59.86	1168.87	59.49
Marketing expenses of producer	23.13	1.13	23.13	1.24	23.13	1.17	23.13	1.18
Selling price of producer	1170.00	57.14	1195.00	64.12	1210.00	61.03	1192.00	60.67
Village merchants total cost	4.43	0.22	4.49	0.24	4.53	0.23	4.48	0.23
Village merchants' profit	4.57	0.22	2.51	0.13	10.47	0.53	3.52	0.18
Selling price	1179.00	57.58	1202.00	64.49	1225.00	61.79	1200.00	61.08
Semi-wholesalers total cost	5.48	0.27	5.48	0.29	5.48	0.28	5.48	0.28
Profit	22.52	1.10	4.52	0.24	21.52	1.09	8.52	0.43
Selling price semi-wholesaler	1207.00	58.59	1212.00	65.02	1252.00	63.16	1214.00	61.79
Wholesalers total cost	10.64	0.52	10.65	0.57	10.75	0.54	10.66	0.54
Profit	82.36	4.02	17.35	0.93	17.25	0.87	45.34	2.31
Selling price of wholesaler	1300.00	63.49	1240.00	66.52	1280.00	64.57	1270.00	64.64
Processors' total cost	337.80	16.50	337.80	18.12	337.80	17.04	337.80	17.19
Profit	409.84	20.01	285.95	15.34	364.78	18.41	356.86	18.17
Total realization	2047.64	100.00	1863.75	100.00	1982.58	100.00	1964.66	100.00

Note: Channel-II consists of producer - village merchant - semi-wholesaler - Wholesaler - processor

Table 4.18 Marketing margins in channel-III of Enmakaje panchayat

	March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share producer	1125.02	54.94	1169.02	62.72	1232.72	62.14	1169.02	59.50
Marketing expenses of producer	20.98	1.02	20.98	1.13	20.98	1.06	20.98	1.07
Selling price of producer	1146.00	55.96	1190.00	63.85	1253.00	63.20	1190.00	60.57
Petty traders total cost	10.39	0.51	10.50	0.56	10.65	0.54	10.50	0.53
Petty traders profit	43.61	2.13	4.50	0.24	8.35	0.42	14.50	0.74
Selling price	1200.00	58.60	1205.00	64.65	1272.00	64.16	1215.00	61.84
Wholesalers total cost	10.62	0.52	10.63	0.57	10.80	0.54	10.66	0.54
Profit	89.39	4.37	24.37	1.31	-2.80	-0.14	44.34	2.26
Selling price of wholesaler	1300.00	64.49	1240.00	66.53	1280.00	64.56	1270.00	64.64
Processors total cost	337.80	16.50	337.80	18.12	337.80	17.04	337.80	17.19
Profit	409.84	20.01	285.95	15.34	364.78	18.41	356.86	18.17
Total realization	2047.64	100.00	1863.75	100.00	1982.58	100.00	1964.66	100.00

Note: Channel-III consists of producer - petty trader - wholesaler - processor

Table 4.19 Marketing margins in channel-IV of Enmakaje panchayat

	March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1093.80	53.42	1126.80	60.46	1143.80	57.69	1130.80	57.56
Marketing expenses of producer	15.20	0.74	15.20	0.82	15.20	0.77	15.20	0.77
Selling price of producer	1109.00	54.16	1142.00	61.28	1159.00	58.46	1146.00	58.33
Itinerant traders total cost	8.88	0.43	8.88	0.48	8.88	0.45	8.88	0.45
Itinerant traders profit margin	92.12	4.50	54.12	2.90	52.12	2.63	54.12	2.75
Selling price	1210.00	59.09	1205.00	64.66	1220.00	61.54	1209.00	61.53
Wholesalers total cost	10.63	0.52	10.63	0.57	10.65	0.54	10.64	0.54
Profit	79.37	3.88	24.37	1.31	49.35	2.49	50.36	2.56
Selling price of wholesaler	1300.00	63.49	1240.00	66.54	1280.00	64.57	1270.00	64.64
Processors total cost	337.80	16.50	337.80	18.12	337.80	17.04	337.80	17.19
Profit	409.84	20.01	285.95	15.34	364.78	18.41	356.86	18.17
Total realization	2047.64	100.00	1863.75	100.00	1982.58	100.00	1964.66	100.00

Note: Channel-IV consists of producer - itinerant trader - wholesaler - processor

Table 4.20 Marketing margins in channel-V in Enmakaje panchayat

	March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1196.37	58.43	1176.37	63.12	1216.37	61.35	1190.37	60.59
Marketing expenses of producer	28.63	1.40	28.63	1.54	28.63	1.44	28.63	1.46
Selling price of producer	1225.00	59.83	1205.00	64.66	1245.00	62.79	1219.00	62.05
Wholesalers total cost	10.68	0.52	10.63	0.57	10.73	0.54	10.67	0.54
Profit	64.32	3.14	24.37	1.31	24.27	1.22	40.33	2.05
Selling price of wholesaler	1300.00	63.49	1240.00	66.54	1280.00	64.55	1270.00	64.64
Processors total cost	337.80	16.50	337.80	18.12	337.80	17.04	337.80	17.19
Profit	409.84	20.01	285.95	15.34	364.78	18.41	356.86	18.17
Total realization	2047.64	100.00	1863.00	100.00	1982.58	100.00	1964.66	100.00

Note: Channel-V consists of producer - wholesaler - processor

In channel-IV the itinerant traders obtained on an average of 2.75 per cent profit and per itinerant trader quantity transacted worked out to 14.38 quintals of rawnuts only.

Thus in Enmakaje panchayat the net margins of village merchants, petty traders, itinerant traders and semi-wholesalers were found to be insignificant as compared to wholesalers and the processors.

4.4.5.2 Marketing margins in Kottiyoor panchayat

1. Channel-I

Producer - Village merchant - Wholesaler - Processor

The net share of the producer was 60.23 per cent, the marketing costs and net margins were 18.32 and 21.45 per cent respectively. The total marketing margins came to 39.77 per cent.

2. Channel-II

Producer - Wholesaler - Processor

The net share of the producer was 62.26 per cent of New York kernel market price, the marketing costs and net margins were 18.11 per cent and 19.63 per cent respectively. The total marketing margins worked out to 37.74 per cent.

Table 4.21 Marketing margins in channel-I in Kottiyoor panchayat

	February		March		April		May		Average	
	Rs./q.	Per cent	Rs./q.	Per cent	R./q.	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1344.07	60.29	1229.07	60.02	1221.07	65.52	1194.07	60.23	1223.07	60.23
Marketing expenses of producer	12.93	0.58	12.93	0.63	12.93	0.69	12.93	0.65	12.93	0.64
Selling price of producer	1357.00	60.87	1242.00	60.65	1234.00	66.21	1207.00	60.88	1236.07	60.37
Village merchants total cost	12.87	0.55	12.09	0.59	12.07	0.65	12.00	0.61	12.07	0.59
Village merchants profit	16.63	0.75	3.91	0.19	46.93	2.52	22.00	1.11	34.93	1.72
Selling price	1386.00	62.17	1258.00	61.43	1293.00	69.38	1241.00	62.60	1283.00	63.18
Wholesalers total cost	9.66	0.43	9.34	0.46	9.42	0.51	9.29	0.47	9.40	0.46
Profit	39.34	1.77	52.66	2.57	9.58	0.51	22.71	1.15	27.60	1.36
Selling price of wholesaler	1435.00	64.37	1320.00	64.46	1312.00	70.40	1273.00	64.22	1320.00	65.00
Processors total cost	337.80	15.15	337.80	16.50	337.80	18.12	337.80	17.04	337.80	16.63
Profit	543.53	20.48	389.84	19.04	213.95	11.48	371.78	18.71	373.01	18.37
Total realization	2229.27	100.00	2047.64	100.00	1863.75	100.00	1982.58	100.00	2030.81	100.00

Note: Channel-I consists of producer - village merchant -wholesaler - processor

Table 4.22 Marketing margins in channel-II in Kottiyoor

	February		March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1340.42	60.13	1244.42	60.77	1275.42	68.43	1193.42	60.20	1264.42	62.26
Marketing expenses of producer	20.58	0.92	20.58	1.01	20.58	1.10	20.58	1.04	20.58	1.01
Selling price of producer	1361.00	61.05	1265.00	61.78	1296.00	69.43	1214.00	61.24	1285.00	63.27
Wholesalers total cost	9.59	0.43	9.35	0.46	9.43	0.51	9.23	0.47	9.40	0.46
Profit	69.41	2.89	45.65	2.23	6.57	0.35	49.77	2.51	25.60	1.26
Selling price of wholesaler	1435.00	64.37	1320.00	64.47	1312.00	70.39	1273.00	64.22	1320.00	65.00
Processors total cost	337.80	15.15	337.80	16.51	337.80	18.13	337.80	17.04	337.80	16.63
Profit	456.47	20.48	389.84	19.04	213.95	11.48	371.78	18.74	373.01	18.37
Total realization	2229.27	100.00	2047.64	100.00	1863.75	100.00	1982.58	100.00	2030.81	100.00

Note: Channel-II consists of producer - wholesaler - processor

In Kottiyoor panchayat first channel viz. Producer - Village merchant - Wholesaler - Processor was found to be the busiest channel sharing a profit margin of 21.45 per cent among the various intermediaries. The profit share of the village merchant worked out to 1.72 per cent and on an average per head transaction of rawnuts for the village merchant was 196.23 quintals worth Rs. 2,42,540.28 and obtained a profit of Rs. 6,854.31. The wholesalers on an average transacted 1,921.25 quintals of nuts worth Rs. 24,64,963.70 with a profit of 1.36 per cent. The wholesalers obtained a profit of Rs. 53,026.50. The processor's profit share in Kottiyoor worked out to 18.37 per cent.

Thus in this panchayat, the exhorbitant profit was shared by all the three intermediaries involved in moving rawnuts i.e. village merchants, wholesalers and the processors.

4.4.5.3 Marketing margins in Karupra panchayat

1. Channel-I

Producer - Village merchant - Wholesaler - Processor

The net share of the producer was 52.39 per cent of New York market kernel price. The marketing costs

and net margins were 18.64 per cent and 28.97 per cent respectively. Total marketing margins came to 47.61 per cent.

2. Channel-II

Producer - Wholesaler - Processor

The net share of the producer was 52.55 per cent. The marketing costs and net margins were 18.17 per cent and 29.28 per cent respectively. Total marketing margins came to 47.45 per cent.

3. Channel-III

Producer - Itinerant trader - Wholesaler - Processor

The net share of the producer was 44.64 per cent, the combined marketing costs and net margins were 19.38 per cent and 35.98 per cent respectively. Total marketing margins worked out to 55.36 per cent.

In this panchayat the first channel viz. Producer - Village merchant - Wholesaler - Processor, was identified as the main channel in moving rawnuts from the producer to the processor. One village merchant on an average transacted 27.82 quintals of rawnuts worth Rs.29,989.96 and got a profit of 1.14 per cent. The profit of village merchant was Rs. 643.20. The per head transaction of wholesalers worked out to 602.5 quintals of

Table 4.23 Marketing margins in channel-I in Karupra panchayat

	February		March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1337.87	60.01	1099.89	53.72	908.87	48.77	948.87	47.87	1063.87	52.39
Marketing expenses of producer	14.13	0.63	14.13	0.69	14.13	0.76	14.13	0.71	14.13	0.70
Selling price of producer	1342.00	60.64	1114.00	54.41	923.00	49.53	963.00	48.75	1078.00	53.09
Village merchants total cost	13.63	0.61	13.04	0.64	12.56	0.67	12.66	0.64	12.88	0.63
Village merchants profit	-35.63	-1.60	-1.81	-0.09	59.44	3.19	0.34	0.02	23.12	1.14
Selling price	1330.00	59.65	1198.00	55.96	995.00	53.39	976.00	49.23	1114.00	54.86
Wholesalers total cost	14.40	0.65	14.07	0.69	13.56	0.73	13.91	0.70	13.91	0.68
Profit	105.60	4.74	47.93	2.34	19.44	1.04	0.49	0.02	43.09	2.12
Selling price	1450.00	65.04	1260.00	58.99	1028.00	55.16	990.00	49.95	1171.00	57.66
Processors total cost	337.80	15.15	337.80	16.50	337.80	18.12	337.80	17.04	337.80	16.63
Profit	441.47	19.81	449.84	24.51	497.95	26.72	654.78	33.01	522.01	25.71
Total realization	2229.27	100.00	2047.00	100.00	1863.75	100.00	1982.58	100.00	2030.81	100.00

Note: Channel-I consists of producer - village merchant - wholesaler - processor

Table 4.24 Marketing margins in channel-II in Karupra panchayat

	February		March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1286.67	57.72	1174.67	57.37	976.67	52.40	832.67	42.00	1067.17	52.55
Marketing expenses of producer	17.33	0.78	17.33	0.85	17.33	0.93	17.33	0.87	17.33	0.85
Selling price of producer	1304.00	58.50	1191.00	58.22	994.00	53.33	850.00	42.87	1084.50	53.40
Wholesalers total cost	14.33	0.64	14.05	0.69	13.56	0.73	13.20	0.67	13.96	0.69
Profit	131.67	5.91	53.95	2.63	20.44	1.10	126.80	6.40	72.54	3.57
Selling price of wholesaler	1450.00	65.05	1260.00	61.54	1028.00	55.16	990.00	49.94	1171.00	57.66
Processors total cost	337.80	15.14	337.80	16.50	337.80	18.12	337.80	17.05	337.80	16.63
Profit	441.47	19.81	449.84	21.96	497.95	26.72	654.78	33.01	522.01	25.71
Total realization	2229.27	100.00	2047.64	100.00	1863.75	100.00	1982.58	100.00	2030.81	100.00

Note: Channel-II consists of producer - wholesaler - processor

Table 4.25 Marketing margins in channel-III in Karupra panchayat

	March		April		May		Average	
	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent	Rs./q	Per cent
Net share of producer	1074.50	52.48	854.50	45.85	790.50	39.87	877.50	44.64
Marketing expenses of producer	9.50	0.46	9.50	0.51	9.50	0.48	9.50	0.48
Selling price of producer	1084.00	52.94	864.00	46.36	800.00	40.35	887.00	45.12
Itinerant traders total cost	20.55	1.00	20.00	1.07	19.84	1.00	20.06	1.02
Itinerant traders profit	85.45	4.17	102.00	5.47	145.16	7.32	123.94	6.31
Selling price	1190.00	58.12	986.00	52.90	965.00	48.67	1031.00	52.45
Wholesalers total cost	14.05	0.69	13.54	0.73	13.48	0.68	13.65	0.69
Profit	55.95	2.73	28.46	1.50	11.52	0.58	29.35	1.50
Selling price of wholesaler	1260.00	61.54	1028.00	55.13	990.00	49.93	1074.00	54.64
Processors total cost	337.80	16.50	337.80	18.12	337.80	17.04	337.80	17.19
Profit	449.84	21.96	497.95	26.72	654.78	33.01	552.86	28.17
Total realization	2047.64	100.00	1863.75	100.00	1982.58	100.00	1964.66	100.00

Note: Channel-III consists of producer - itinerant trader - wholesaler - processor

rawnuts worth Rs. 6,71,185.00 with a profit of 2.12 per cent i.e. Rs. 13,929.80. The processors share worked out to 25.71 per cent in the first two channels.

The processors share was found to be the highest in this panchayat. The profit of village merchants was found to be insignificant as compared to wholesalers.

The marketing costs and margins worked out through concurrent margin method showed exorbitant profit for the processor-cum-exporters. The profit of wholesalers was also high as compared to that of village merchants. Due to this low profit of village merchants it can be deduced that the competition among the village merchants is more in purchasing raw cashewnuts.

4.4.6 Net margin of processors through lagged margin method

The preceeding analysis in marketing margins indicate that the net margins of processor-cum-exporters was very high. However, considering the fact that while movement of cashewnut from the farmer takes place from March to May and processing continues till November and export continues even thereafter. Hence the net margins as suggested by the concurrent method may or may not be the correct indicator of the profits of processor-exporters. In order, therefore, to probe

further into the realization of processor exporters, an additional exercise was done to compute their net margins on the basis of lagged margin method, with the following assumptions:

i) Processors accumulate inventory of rawnuts during the peak marketing months of March and April. Hence the relevant buying price of nuts is the average of prices paid in March and April.

ii) Nuts purchased for inventory holding are released for processing and export evenly from April to November.

In lagged margin method apart from processing costs, interest on inventory holding and driage were taken into account. These were computed for a period extending from April to November 1986.

The peak season raw nut prices viz. March-April prices, were taken as the base in computing interest and driage. The peak season prices in Enmakaje, Kottiyoor and Karupra panchayats were Rs. 1,266.67, Rs. 1,315.56 and Rs. 1,165.54 per quintal of rawnuts, respectively.

Interest on inventory holding has been taken as 16 per cent per annum and corresponding interest

per month was calculated for the three panchayats based on the peak season rawnut prices. From the survey data, driage for the whole period extending from April to November 1986 was estimated as 6.33 per cent and this total percentage was converted into monthly monetary equivalents, based on the peak season rawnut price in the three panchayats. Information on storage cost and driage are given in Table 4.26

Table 4.26

I - Storage costs and driage (rupees per month per quintal of rawnuts

Panchayat	Interest	Driage
Enmakaje	16.85	10.02
Kottiyoor	17.50	10.41
Karupra	15.50	9.22

II - Total cost of processors

Panchayat	Purchase price of nuts (Rs./ quintal of nuts)	Interest	Driage	Average processing cost	Total cost
		(Rs./month/ quintal)		Rs./quintal	
Enmakaje	1266.67	16.85	10.02	337.80	1631.34
Kottiyoor	1315.56	17.50	10.41	337.80	1681.27
Karupra	1165.54	15.50	9.22	337.80	1528.06

Total cost of processors was estimated for the three panchayats by taking into account the respective peak season rawnut prices, storage and driage costs, besides the estimated average processing cost of Rs. 337.80 per quintal of nuts. Highest total cost was found to be in Kottiyoor and the lowest in Karupra panchayat.

Total monthwise realization from kernels and by-products were estimated extending from April to November 1986 and the corresponding net margins were also estimated. Information on total realization and net margins are shown in Table 4.27.

The table shows that the net margin of processors in Enmakaje panchayat ranged from Rs. 232.39 to 819.32 per quintal of raw cashewnuts i.e. 12.47 per cent to 33.43 per cent of total realization. In Kottiyoor panchayat the profit ranged from 9.8 per cent to 31.4 per cent and in Karupra 18 per cent to 37.65 per cent.

Thus the results of the analysis of net margin by lagged method are also in consonance with that of concurrent margin method and indicates the possibility of realization of exorbitant profits by processors in cashewnut business.

In terms of the number of processor exporters one would have expected their behaviour to be

Table 4.27 Net margin of processors (rupees per quintal of rawnuts)

Months	Total processors cost			Total realization	Net margins					
					Enmakaje		Kottiyoor		Karupra	
	Enmakaje	Kottiyoor	Karupra		Rs./q of nuts	% of total realization	Rs./q of nuts	% of total realization	Rs./q of nuts	% of total realization
April	1631.34	1681.27	1528.06	1863.73	232.39	12.47	182.46	9.79	335.67	18.01
May	1631.34	1681.27	1528.06	1982.58	351.24	17.72	301.31	15.20	454.52	22.93
June	1631.34	1681.27	1528.06	2038.54	407.20	19.98	357.27	17.53	510.48	25.04
July	1631.34	1681.27	1528.06	2178.99	547.65	25.13	497.72	22.84	650.93	29.87
August	1631.34	1681.27	1528.06	2198.93	567.59	25.81	517.66	23.54	670.87	30.51
September	1631.34	1681.27	1528.06	2400.56	769.22	32.04	719.29	29.96	882.50	36.76
October	1631.34	1681.27	1528.06	2431.53	800.19	32.91	750.26	30.86	903.47	37.16
November	1631.34	1681.27	1528.06	2450.66	819.32	33.43	769.39	31.40	922.60	37.65

competitive but their performance does not indicate competition. Eventhough there are large number of firms engaged in cashew kernel export, these firms conceal the interconnections among these firms through family relationship. From the discussion with the factory owners and managers, it could be gathered that each business family has a number of firms with separate legal status and ownership of these firms in the private sector can be traced to six or seven business family groups.

The high net margins obtained in cashew processing and export naturally depreseed farmers' share. But the exploitation of the producers forms only one side of the story. One could also come across a good deal of exploitation of labour in cashew processing industry. The wages were recorded to be paid according to the minimum wage rates fixed by the Government and the wage costs data used by us are these. Discussion with the labour union leaders revealed the fact that they are not getting the minimum wages. The processors employ labour in their factories on a 'cottage processing' basis ('Kudivaruppu') whereby workers surrender in advance their claim to minimum wage rates. Though 'kudivaruppu' has been banned by law, it is still carried on extensively. The exporters encourage 'kudivaruppu'

because they can get processed nuts at cheaper rates. The wide margin of profit obtained through kudivaruppu encourages the exporters to take on lease the closed factories either in their name or in the name of others and to run them on kudivaruppu lines. In certain cases exporters supply rawnuts to independent kudivaruppu units and take back processed nuts. In either case the profit that the exporter realises is at the expense of workers who are denied legitimate wages and other benefits.

Since wages form a significant portion of the value added, the temptation to cut down wages is quite strong, eventhough share of profits could be high even after payment of wages at the stipulated minimum rates. This may be the reason for the shifting of cashew processing industry from Kerala to Tamil Nadu on a large scale, where the wage rates are said to be lower.

The processor-cum-exporters have been trying to maintain their high levels of profits by trying to push down the wages of labour. Since the exporters operate in a largely buyer's market in foreign countries, they have no control over the price of kernels. Given this role of processors as price takers in respect of kernels, their ability to extract as high a profit margin as possible depends very much on their ability to secure

labour at a low price as possible, besides securing nuts at low prices.

The processors import rawnuts from African countries for processing and re-export as kernels due to the shortage of domestic rawnuts production. Imported rawnuts were obtained at comparatively low prices till 1974-'75. Since then this situation have changed due to general shortage of rawnuts in the world market, consequent to the setting up of processing factories in the African countries. In order to meet domestic requirement for processing, the processors have had to obtain rawnuts at whatever prices they were being offered. Therefore, the burden of keeping the high profit margin was passed on to labour, first by not paying the stipulated minimum wages subsequently by shifting the industry out of Kerala.

Suggestions for Improvement

SUGGESTIONS FOR IMPROVEMENT

The foregoing analysis reveals that cashewnut marketing system is not efficient. The inefficiencies are mainly at the stage of processing and exporting, as revealed by very high margins of processors/exporters. Though officially there are fairly good number of processors/exporters, as mentioned above, the ownership of these firms could be traced to a few individuals and hence the market structure is oligopsonistic. The oligopsony position of processor/exporters adversely affect not only the producers of cashewnuts, but also the workers involved in processing. It is, therefore, necessary to think of ways and means of remedying the situation to safeguard the interests of cashewnut producers as well as workers. The present section is devoted to an examination of the ways and means of providing a more efficient marketing system for cashewnuts. Various possible alternatives either for replacing the existing system or for modifying it are considered.

As stated earlier, the government had, in the past, introduced monopoly procurement of cashewnuts through the co-operative credit and marketing system, with the main objective of safeguarding the interest of cashewnut producers. This venture was a failure and

it was reversed on account of persistent protest from farmers. Thus, co-operativization of marketing even with institutional monopoly did not succeed. Hence, inspite of all the theoritical advantages of co-operativization of marketing, this alternative has to be ruled out because theoritical advantages perhaps go with theoritical co-operatives as actual co-operatives diverge very much from co-operatives in theory.

Another alternative is to nationalize processing and export of cashew kernels. If the experience of the factories owned by the Cashewnut Development Corporation is any guide, even this alternative cannot be thought of seriously. The working of the Corporation for the past several years has resulted in a good deal of accumulated losses. It could be argued that with state enterprises having monopoly in processing and export, this would improve from the present situation where private enterprise dominates. The major reasons for the poor performance of public sector organization in India are the paucity of managerial talent, absence of a fair degree of autonomy in practice etc. The situation in Kerala does not appear to be different in this respect.

A third alternative is to impose certain restrictions and controls on private enterprise in order to

make them perform better. For example there can be a system of profit sharing with cashewnut producers who are the backbone of the industry. But profits can be shared only if they exist, and the act of making an income statement the way one wants it, is not very difficult to learn. Even this alternative appear to be not practicable because even some of the existing regulations (minimum wages for example) are bypassed with impunity.

From the discussion in the above paragraphs it is clear that objective conditions are not conducive to achieve improvement in cashewnut marketing through efforts to replace or regulate private enterprise. Therefore, from a practical point of view, the reforms have to be through creating conditions under which competitive forces got strengthened. In this context, the importance of market intelligence can hardly be over emphasised. Market intelligence is the heart and soul of efficient marketing. At present there is little market intelligence useable by the farmer. Information on cashew kernel prices in different markets and corresponding parity prices of rawnuts could go a long way in improving the situation.

An issue, which is related to market intelligence is grading and standardization of rawnuts and

educating the farmers about the advantages of marketing graded produces. The Raw Cashewnuts Grading and Marketing Rules 1966 are yet to be implemented. At present cashewnut producers hardly pay any attention to the quality of their product and they rush to the market under the illusion that they are doing a smart job by not paying attention to quality. If evidence is ever needed on as to who is smartter the results presented earlier may become handy.

A couple of related issues may also be mentioned. The most important among these, is project planning and development. Most of the existing stocks are of unknown genetic stock and of poor quality. Many superior cultivars and hybrids have been evolved yielding as high as 43 kg/tree/year as against the national average of 2.1 kg/tree/year. Agricultural development in the field of clonal propagation have successfully tried in this crop. Several progressive farmers have tried clonal propagation in cashewnut which ultimately increased the yield as well as the quality of nuts. The Government can formulate projects to supply quality planting materials to augment indegenous production of raw cashewnuts.

Marketing efficiency cannot be considered an end in itself. Efficient marketing through its impact

on farmers ought to be reflected in production decisions. But marketing efficiency is only one of the variables which influence production decisions which depend upon the expected relative profitability of the crop. In the case of perennial crops like cashew the time horizon for this, is large and hence the degree of uncertainity is high. Cashewnut is mainly an export product. Though export is a national priority, state policies in respect of cashew cultivation do not seem to reflect this adequately. For example, rubber is a strong competitor of cashewnut in respect of farm resources, and whereas there are various incentives for rubber cultivation, hardly any exist for cashewnut cultivation.

Summary of Findings

SUMMARY OF FINDINGS

This study on Marketing Margins and Market Structure of cashewnuts in Kerala was conducted using primary data collected from a sample of farmers and intermediaries specifically for this purpose. The objectives of the study were, to examine the present marketing organization and structure for cashew, to analyse the present marketing margins and costs, to evaluate the efficiency of storage, transportation and processing and to analyse the likely impact of changes in marketing organization and structure on pricing efficiency at various levels of marketing.

Cannanore and Quilon districts were purposively chosen for the study, the former being the district with highest area under cashew and the latter with largest number of processing factories. From the former district two panchayats viz. Enmakaje and Kottiyoor and from the later one panchayat viz. Karupra were selected for the study. Three wards in each panchayat and eight farmers from each ward were selected randomly. There were altogether 72 farmer respondents for the study. Data on marketing of cashewnuts were collected from the sample farmers through personal interview with the aid of a well structured schedule. From the selected wards a

a sample of various intermediaries such as village merchants, itinerant traders, semi-wholesalers were selected and few wholesalers from the nearest place were also interviewed using a well structured pre-tested schedule. A random sample of 20 processors from Quilon district were also interviewed using another pre-tested schedule. The reference period of the study was the year 1986 (February to May). Data for the study were collected during June to August 1986.

The general marketing practices and the marketing practices in the study area were studied. Harvesting and marketing season for cashewnut started by February and continued till May. Harvesting was done by hired labour as well as by the members of the farmer's family. Though Enmakaje and Kottiyoor were in the same region, farmers in Enmakaje panchayat harvested the matured nuts from the trees and the farmers in Kottiyoor panchayat collected fallen nuts. The former practice was also followed in Karupra.

The various market functionaries involved in cashewnut marketing were the village merchants, petty traders, itinerant traders, semi-wholesalers, wholesalers and processors. The processors were also exporters of cashew kernel. The following five

marketing channels were identified in Enmakaje panchayat.

i) Producer - Village merchant - Wholesaler - Processor

ii) Producer - Village merchant - Semi-wholesaler - Wholesaler - Processor

iii) Producer - Petty trader - Wholesaler - Processor

iv) Producer - Itinerant trader - wholesaler - Processor

v) Producer - Wholesaler - Processor

The first channel was identified as the most important channel and the village merchants predominated in the purchase of nuts from the farmers. Ninety two per cent of the farmers sold 72 per cent of the total quantity to buyers within the village and only eight per cent sold outside the village. Only better off farmers resorted to sales outside the village. The sales of different types of traders to the wholesalers showed that 72.71 per cent of village merchants sold 86.81 per cent of nuts to the wholesalers which indicated a high degree of concentration in the volume of rawnuts purchased. New buyers were found in the study year.

Two marketing channels were identified in Kottiyoor panchayat viz.,

i) Producer - Village merchant - Wholesaler - Processor

ii) Producer - Wholesaler - Processor

The first channel was identified as the main channel in moving rawnuts from the farmers to the processors. Eighty seven per cent of farmers sold their produce to the village merchant which constituted 74.31 per cent of the total sales of sample. Small farmers sold to village merchants and bigger farmers sold to wholesalers. In this panchayat also new buyers purchased nuts in the marketing season.

Three marketing channels were identified in Karupra panchayat viz.,

i) Producer - Village merchant - Wholesaler - Processor

ii) Producer - Itinerant trader - Wholesaler - Processor

iii) Producer - Wholesaler - Processor

The first channel was found to be the main channel in moving rawnuts and 83.33 per cent of farmers sold

86.68 per cent nuts to village merchants, while 12.5 per cent farmers sold 11.48 per cent quantity to wholesalers directly and 4.17 per cent farmers sold 1.84 per cent quantity to itinerant traders in this panchayat. The study revealed that 87.5 per cent of village merchants sold 98.60 per cent of total purchased quantity to wholesalers.

The market structure indicated large number of buyers at the farmer level. The farmer sellers were also found to be having choice of buyers and a possibility of competition among the buyers was identified.

Marketing costs of farmers and different intermediaries were worked out separately for each of the three panchayats. Total marketing cost of farmers ranged from Rs. 23.13 to Rs. 28.63 per quintal of rawnuts in different channels in Enmakaje panchayat. Drying charges formed the major item of cost constituting on an average 72.80 per cent of total marketing cost followed by transport costs constituting on an average 32.20 per cent of total marketing costs. The marketing costs of traders in this panchayat ranged from Rs. 1.50 to Rs. 8.51 per quintal of nuts. Transport cost formed the major single item of cost of village merchants, Petty traders

and semi-wholesalers which on an average constituted 44.85 per cent of total marketing cost of the traders. Cost of packing material formed the major item of cost for the wholesalers and the wholesalers incurred no transport costs since the processors purchased nuts from the wholesalers' premises through commission agents.

The total marketing cost of farmers ranged from Rs. 12.93 to Rs. 20.58 per quintal of nuts in Kottiyoor panchayat. The cost of transport formed the major item of cost for the farmers which constituted 80.47 to 97.44 per cent of total marketing costs of farmers. The high share (percentage) of transport cost is due to absence of drying charges of nuts since farmers were collecting matured fallen nuts from the ground. The total marketing cost of village merchants worked out to Rs. 8.98 and that of wholesalers Rs. 6.19 per quintal of nuts. Loading/unloading charges formed the major item of cost (41.80 per cent of total marketing cost) followed by transport cost (34.90 per cent of total marketing costs) for the village merchants and cost of packing material formed the major item of cost (50.60 per cent of total marketing costs) for the wholesalers.

The total marketing costs of farmers ranged from Rs. 9.50 to Rs. 17.33 per quintal of nuts in Karupra

panchayat. Drying charges constituted the major item of cost (on an average 74.0 per cent of total marketing costs in different channels) followed by transport cost (on an average 36.90 per cent of total marketing costs). The total marketing cost of traders ranged from Rs.7.50 to Rs. 11.07 per quintal of nuts and the cost of transport formed the major item of cost for the village-merchants (49.33 per cent of marketing costs) followed by loading/unloading charges (20.00 per cent of marketing cost). The cost of packing material formed the major item of cost for the wholesalers (28.30 per cent of marketing cost) in Karupra panchayat. The wholesalers needed to transport the rawnuts to processors' premises and the cost of which was borne by the wholesalers which constituted 39.40 per cent of total marketing costs.

The costs incurred by processors were estimated on the basis of information obtained from sample factories in Quilon district, since majority of the factories are located in this district. The various costs were the wages, purchase tax, interest, cost of empty tins, freight charges, bonus, commission paid transporting charges etc. The costs incurred by processors worked out to Rs. 337.80 per quintal of rawnuts (Table 4.13).

Wages formed the major share of processors' cost which constituted 27.71 per cent of the cost followed by purchase tax of rawnuts (17.34 per cent). Inventory cost formed the third item of cost (8.18 per cent). Interest was paid for the amount drawn from the banks for purchasing rawnuts.

The main product of cashewnut processing is cashew kernel. On the basis of information generated through discussion with factory owners, total recovery of kernels was estimated at 26.79 per cent. Besides kernels, by-products include cashewnut shell liquid, shell and skin. Return from kernels were worked out for different months and return from by-products computed to Rs. 64.83 per quintal of rawnuts.

Marketing margins were worked out from the stage of farmer sale of nuts to the stage of wholesale of kernels based on the New York market price. Since major chunk of kernels are exported to U.S.A. Marketing margins were worked out using a varient of concurrent margin method. In this method, monthly average prices at different stages were used to compute margins. Marketing margins were worked out for each of the month in which nuts were marketed by farmers viz. from March to May in Enmakaje panchayat and from February to May in Kottiyoor and Karupra panchayats.

Marketing margins were worked out for different marketing channels in three panchayats. The processors reaped very high profits of Rs. 356.86, 373.01 and 522.01 per quintal of nuts in Enmakaje, Kottiyoor and Karupra panchayat, respectively. The net margins of processors were found to be the highest in Karupra panchayat which constituted 25.71 per cent of total realization from kernels and by-products (Table 6.1)

Marketing margins computed through concurrent margin showed exorbitant profit for the processor - cum - exporters. Since movement of rawnuts from the farmers was from February - March to May, the processing continued till November, the net margins worked out for this period may or may not be a true indicator of profits of processors. Net margin of processors were therefore, worked out through lagged margin method also by making the assumption that the inventory accumulation of rawnuts were in March-April, and they released nuts for processing evenly from April to November. Driage and interest on inventory holding were accounted and net margin of processors were worked out from April to November 1986. Net margin varied from Rs. 232.39 to Rs. 819.32 which formed 12.47 to 33.47 per cent of total realization in Enmakaje panchayat from April to November. The net margin of processors in Kottiyoor and Karupra panchayat were

Table 6.1 Average marketing margins in Enmakaje, Kottiyoor and Karupra panchayats (rupees per quintal of nuts)

	Enmakaje					Kottiyoor		Karupra		
	Channel I	Channel II	Channel III	Channel IV	Channel V	Channel I	Channel II	Channel I	Channel II	Channel III
Net share of producer	1168.87 (59.49)	1168.87 (59.49)	1169.02 (59.50)	1130.80 (57.56)	1190.37 (60.59)	1223.07 (60.23)	1264.42 (62.26)	1063.87 (52.39)	1067.17 (52.55)	877.50 (44.64)
Marketing cost of producer	23.13 (1.18)	23.13 (1.18)	20.98 (1.07)	15.20 (0.77)	28.63 (1.46)	12.93 (0.64)	20.58 (1.01)	14.13 (0.70)	17.33 (0.85)	9.50 (0.48)
Selling price of producer	1192.00 (60.67)	1192.00 (60.67)	1190.00 (60.57)	1146.00 (58.33)	1219.00 (62.05)	1236.00 (60.37)	1285.00 (63.27)	1078.00 (53.09)	1084.50 (53.40)	887.00 (45.12)
Marketing cost (VM/PT/IT)	11.49 (0.58)	4.48 (0.23)	10.50 (0.53)	8.88 (0.45)	- -	12.07 (0.59)	- -	12.88 (0.63)	- -	20.06 (1.02)
Profit (VM/PT/IT)	14.51 (0.74)	3.52 (0.18)	14.50 (0.74	54.12 (2.75)	- -	34.93 (1.72)	- -	23.12 (1.14)	- -	123.94 (6.31)
Selling price (VM/PT/IT)	1218.00 (61.99)	1200.00 (61.08)	1215.00 (61.84)	1209.00 (61.53)	- -	1283.00 (63.18)	- -	1114.00 (54.86)	- -	1031.00 (52.45)
Marketing cost of semi-wholesaler	- -	5.48 (0.28)	- -	- -	- -	- -	- -	- -	- -	- -
Profit	- -	8.52 (0.43)	- -	- -	- -	- -	- -	- -	- -	- -
Selling price	- -	1214.00 (61.79)	- -	- -	- -	- -	- -	- -	- -	- -
Marketing cost of wholesaler	10.67 (0.54)	10.66 (0.54)	10.66 (0.54)	10.64 (0.54)	10.67 (0.54)	9.40 (0.46)	9.40 (0.46)	13.91 (0.68)	13.96 (0.69)	13.65 (0.69)
Profit	41.33 (2.11)	45.34 (2.31)	44.34 (2.26)	50.36 (2.56)	40.33 (2.05)	27.60 (1.36)	25.60 (1.26)	43.09 (2.12)	72.54 (3.57)	29.35 (1.50)
Selling price	1270.00 (64.64)	1270.00 (64.64)	1270.00 (64.64)	1200.00 (64.64)	1200.00 (64.64)	1320.00 (65.00)	1320.00 (65.00)	1171.00 (57.66)	1171.00 (57.66)	1074.00 (54.64)
Processors cost	337.80 (17.19)	337.80 (17.19)	337.80 (17.19)	337.80 (17.19)	337.80 (17.19)	337.80 (16.63)	337.80 (16.63)	337.80 (16.63)	337.80 (16.63)	337.80 (17.19)
Profit	356.86 (18.17)	356.86 (18.17)	356.86 (18.17)	356.86 (18.17)	356.86 (18.17)	373.01 (18.37)	373.01 (18.37)	522.01 (25.71)	522.01 (25.71)	552.86 (28.17)
Total realization	1964.66 (100.00)	1964.66 (100.00)	1964.66 (100.00)	1964.66 (100.00)	1964.66 (100.00)	2030.81 (100.00)	2030.81 (100.00)	2030.81 (100.00)	2030.81 (100.00)	1964.66 (100.00)

Figures in [illegible] percentage to total realization

Rs. 182.46 to 769.39 (9.79 to 31.40 per cent) and Rs. 335.67 to Rs. 902.60 (18.01 to 37.65 per cent), respectively for the corresponding period.

Net margin of processors worked out through lagged margin method also indicated the exorbitant profits of processors-cum-exporters in cashewnut business.

It can be concluded on the basis of the study of marketing costs and margins that the present system of marketing cashewnuts is inefficient. While various alternatives such as co-operativization, nationalization etc. were considered, it was felt that these are not practicable. In order to make the system more efficient, it was felt that dissemination of market intelligence was very important. Enforcing of grades and standards for marketing of nuts would also be useful.

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Appendices

Appendix - I

STUDY ON MARKETING OF CASHEWNUTS IN KERALA

INTERVIEW SCHEDULE FOR FARMERS

Date of interview:

I. IDENTIFICATION

(a) Name of the farmer :

(b) Address :

(c) Distance to the nearest market where cashew is purchased :

II. PARTICULARS OF LAND HOLDING

		Acres	Cents
(a)	Total area held (under a common management) :		
(b)	Labour utilization		
i)	Barren and uncultivable :		
ii)	Fallow land :		
iii)	Land put to non-agricultural use :		
iv)	Land under miscellaneous trees :		
v)	Net area cropped :		
vi)	Other area (specify) :		

III. CROPPING PATTERN

Name of crop	Area in hectare	Number of trees/ plants	Number of trees/ plants in steady bearing state
a.			
b.			
c.			
d.			

IV. PRODUCTION DETAILS OF NUTS

	Month			
	February	March	April	May

V. SELLING DETAILS

Type of buyer	Quantity sold	Place of sale	Distance to place of sale	Transport cost	Other charges
Local buyers					
Village merchants					
Commission agents					
Semi-wholesalers					
Itinerant traders					
Co-operatives					
Govt. Agencies					
Wholesalers					
Processors					
Others					

VI. a) Special reasons, if any, for the choice of buyer in order of importance

i)

ii)

iii)

b) Have you sold to a particular buyer during the past few years

Yes/No

c) If yes, specify the reasons

i)

ii)

VII. BORROWING FROM BUYERS

a) Do you borrow money from buyers Yes/No

b) If yes, how many times during the year

c) Amount per loan

d) Rate of interest

VIII. TIME LAG BETWEEN SALE AND REALIZATION OF VALUE

a) Is there time lag Yes/No

b) If yes, what is the average duration of time lag

IX. DRYING CHARGES (PER QUINTAL)

	Male		Female	
	FL	HL	FL	HL
i) Average No. of hours required				
ii) Average wages in cash paid				
iii) Average wages in kind given				

X. PACKING AND TRANSPORT

a) Packing

i) Type of packing material used

ii) If reusable, indicate the number of times

iii) Cost of packing material (specify unit)

b) Transporting

i) Mode of transport usually used

ii) Cost of transport (specify distance and unit)

iii) Loading/unloading charges (per unit)

XI. a) Is earlier monopoly procurement of cashewnut superior to present marketing organisation

b) If yes, why?

c) Are you satisfied with the existing marketing system

Yes/No

d) If no, why?

e) Do you experience any difficulty in marketing your produce

f) If yes, specify

XII HOLDING ON THE PRODUCE

i) Do you keep cashewnuts unsold if you think prices are unfavourable

ii) How long could you keep cashew if prices are not favourable

iii) Are you getting significant advantage by storing the dried nuts

Yes/No

iv) If yes, specify

v) Cost of storage

vi) Period of storage

XIII. ARE YOU SATISFIED WITH THE PRICES NOW BEING OBTAINED

Yes/No

XIV. DESCRIBE HOW PRICE IS FIXED

XV. WHAT ARE THE FACTORS THAT AFFECT THE PRICES OF CASHEW IN YOUR VIEW

XVI. SUGGESTIONS FOR IMPROVEMENT IN MARKETING CASHEWNUT

Appendix - II

INTERVIEW SHEDULE FOR TRADERS

Date of interview:

I. IDENTIFICATION

(a) Name :

(b) Address :

II. CATEGORY OF INTERMEDIARY

III. PURCHASE AND SALES DETAILS OF ALL COMMODITIES

Sl.No.	Name of commodity	Quantity purchased last year	Actual or approxi-mate ave-rage unit value of purchase	Actual or approxi-mate ave-rage unit value of sales
1.				
2.				
3.				
4.				

IV. DETAILS OF PURCHASE AND SALES OF RAWNUTS

Month	From whom purchased	Qty.	Price	To whom sold	Qty.	Price
February						
March						
April						
May						
June						

V. MARKETING COSTS OF CASHEWNUTS

Unit

(a) Variable cost

i) Handling charges

ii) Loading/unloading

iii) Drying charges

iv) Approximate loss in weight

v) Transportation charges

vi) Mode of transport

vii) Distance to the buyers premises

viii) Cost of packing material

ix) Brokerage

x) Other charges (specify)

(b) Particulars of fixed costs per month

i) Rent of shop/office

ii) Rent of godown

iii) Electricity charges

iv) Telephone/telegraph charges

v) Permanent labour charges

vi) Traval costs

vii) Any other costs (specify)

VI. GENERAL DETAILS

(a) Please describe the methods of purchase of cashewnuts

(b) Describe the methods of sale of cashewnuts

(c) Do you do any grading of cashewnuts

(d) Average duration of storage

(e) Average amount of trade credit given during the last year/season

(f) Average amount of trade credit obtained during the last season

(g) Please indicate the major sources of finance

(h) Comments, if any, on problems faced by traders

Appendix - III

INTERVIEW SCHEDULE FOR PROCESSORS

Date of interview:

I. IDENTIFICATION

(a) Name :

(b) Address :

(c) Location of the factory :

II. PARTICULARS OF THE FACTORY

(a) Year of establishment

(b) Nature of organization

III. INSTALLED PROCESSING CAPACITY

IV. DETAILS OF LABOUR EMPLOYED

Details of labour employed

	Permanent labourers						Casual labourers					
	Male			Female			Male			Female		
	No.	Number of hrs. of work	Wages	No.	Number of hrs. of work	Wages	No.	Number of hrs. of work	Wages	No.	Number of hrs. or work	Wages
Roasting												
Shelling												
Drying												
Peeling												
Grading												
Filling												
Packing												
Mechads												
Others												

V. DETAILS OF PROCESSING CHARGES

i) Handling charges

ii) Wages

iii) Bonus

iv) Factory salaries

v) Fuel charges

vi) Cost of packing material

vii) Labels, strappings etc.

viii) Purchase tax

ix) Drying charges

x) Fumigation charges

xi) Transportation charges

xii) Other charges

VI. DETAILS OF LOCAL NUTS PURCHASE

Month	Quantity	Price

VII. DETAILS OF RECOVERY PER QUINTAL OF NUTS

Grade of kernels	Quantity	CNSL	Shell	Skin

VIII. DETAILS OF SALES

a) Grade of kernels	Quantity	Price
b) CNSL		
c) Shell		
d) Skin		

IX. DETAILS OF MARKETING COSTS

Items of cost	Nuts	CNSL	Shell	Skin
a) Loading/unloading				
b) Transporting				
c) Shipping and forwarding				
d) Commission				
e) Other costs (specify)				

A STUDY ON MARKETING MARGINS AND MARKET STRUCTURE OF CASHEWNUT IN KERALA

By

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ABSTRACT OF THE THESIS

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ABSTRACT

A study on Marketing Margins and Market Structure of Cashewnut in Kerala was conducted during 1985-'86 season and the main objectives were to analyse the present marketing costs and margins, to evaluate efficiency of transportation, storage, processing and to analyse the likely impact of changes in marketing organisation and structure on pricing efficiency. Two panchayats viz. Enmakaje and Kottiyoor from Cannanore district and one panchayat viz. Karupra from Quilon district were selected for the study. Three wards from each panchayat and eight farmers from each ward and altogether 72 farmers were selected randomly. From the selected wards a sample of various intermediaries and few wholesalers from the nearest place were interviewed.

Harvesting and marketing season for cashewnuts started by February and continued till May. The farmers in Enmakaje and Karupra panchayats harvested natured nuts and the farmers in Kottiyoor panchayat collected the fallen nuts. The various market functionaries involved in cashewnut marketing were the village merchants, petty traders, itinerant traders, semi-wholesalers, wholesalers and processors.

Five marketing channels were identified in Enmakaje panchayat and the first channel viz. Producer-Village merchant - Wholesaler - Processor was found to be the main

channel in moving rawnuts in the panchayat. Ninety two per cent of the farmers sold 72 per cent of the total quantity to buyers within the village and only 8 per cent sold outside the village. The sales of different types of traders to the wholesalers showed that 72.71 per cent of village merchants sold 86.81 per cent of nuts to the wholesalers which indicated a high degree of concentration in the volume of rawnuts purchased.

Two marketing channels were identified in Kottiyoor panchayat and the first channel viz. Producer - Village merchant - Wholesaler - Processor was identified as the main channel and eighty seven per cent of farmers sold their produce to the village merchant which constituted 74.31 per cent of total sales of sample. Three marketing channels were identified in Karupra panchayat and the first channel viz. Producer - Village-merchant - Wholesaler - Processor was observed to be the main channel in moving nuts and 83.33 per cent of farmers sold 86.68 per cent nuts to village merchants.

The market structure indicated large number of buyers at the farmer level, and a possibility of competition among the buyers was identified.

Marketing costs of farmers and different agencies were worked out in three panchayats. Drying charges formed the major item of cost for the farmers in Enmakaje

and Karupra and cost of transport formed the major cost item of farmers in Kottiyoor panchayat. Cost of transport, loading/unloading and cost of packing material formed the major cost item of various intermediaries in the three panchayats.

The cost incurred by processors were estimated on the basis of information obtained from sample factories in Quilon district and worked out to Rs. 337.80 per quintal of rawnuts. Wages formed the major share of processor's cost which constituted 27.71 per cent of the cost. Total recovery of kernels was estimated as 26.79 per cent and the returns from by-products such as cashewnut shell liquid, shell and skin were computed to Rs. 64.83 per quintal of nuts.

Marketing margins were worked out from the stage of farmer sale of nuts to the stage of wholesale of kernels based on the New York market price using a varient of concurrent margin. The processors reaped very high profits of Rs. 356.86 (18.17 per cent of total realization), Rs. 373.01 (18.37 per cent) and Rs. 522.01 (25.71 per cent) per quintal of nuts in Enmakaje, Kottiyoor and Karupra panchayats, respectively.

Marketing margins computed through concurrent margin showed exorbitant profit for the processors and the net margins of processors worked out through lagged margin method by taking into account driage and interest on inventory holding from April to November corresponding to processing period of rawnuts also were in consonance with that of results of concurrent margin method. Net margin of processors through lagged margin method varied from Rs. 232.39 to Rs. 819.32 (12.47 to 33.43 per cent of total realization) Rs. 182.46 to Rs. 769.39 (9.79 to 31.40 per cent) and Rs. 335.67 to Rs. 922.60 (18.01 to 37.65 per cent) per quintal of nuts in Enmakaje, Kottiyoor and Karupra panchayats, respectively from April to November 1986. High margins are a symptom of inefficiency.