Chapter - II

REVIEW OF LITERATURE

There has been a plethora of studies made by many expert committees and individual scholars on several aspects of arecanut.

Some of these studies have been reviewed here to have an idea about their main areas of study.

D.A. Hegde (1987) has studied the 'Impact of Price Behaviour on Arecanut Plantations and Growth in Karnataka. A Case Study of North Kanara District' with the following objectives.

1. To analyse the extent to which the price behaviour between 1957-81 have made their impact on the economic conditions of the plantation owners.

2. To study the extent of area shift if any, which have taken place in the rice growing area to derive the opportunity cost-benefit from price improvements of arecanut and their implications.

3. To analyse the role of marketing agencies in bringing better price advantage to arecanut plantation owners.

4. To re-emphasise the need for giving greater attention to the commercial crop in Karnataka.

5. To assess the future role of arecanut cultivation in improving the economic status of plantation owners and the contribution it can make to the economy of the state as a whole and,

6. To make suitable policy recommendations in the light of the analysis so as to influence the public policy.
The analysis has shown that the fluctuations and uncertainties created by the price movements has been a serious constraint on the income generation to small and marginal farmers. They are the first victims of any violent fluctuations in prices. Moreover the depression in the arecanut prices result in mounting overdue with the cooperative banks and other financing agencies. This leads to the demand for government intervention to provide relief by sanctioning additional installments for repayment, exemption from penal interest, writing off the debt etc.

The study reveals that the main cause for fluctuation in prices during pre-independence era was the import of cheap varieties of Arecanut from Singapore, Cylon, Malaysia and such other neighbouring countries. But this situation has changed due to positive attitude shown by the Central Government by severely restricting imports through certain tariffs impositions in the post-independence era.

It is pointed out in the analysis that CAMPCO which is the central marketing agency for South India is not able to compete effectively with the private traders in Central Indian and North Indian markets due to higher sales tax or commercial tax rates in some of these states. This is clear indication of lack of proper marketing for arecanut. So the study adds further justification for creation of a central organisation like ‘Arecanut Board’ to tackle such issue.

The study suggested that it is essential to enforce grading and standardisation of certain varieties so that the market can be widened and stabilised. The farmers should be encouraged to produce those
varieties only. Mechanical devices for processing and grading should be introduced by undertaking technological innovations.

The study has emphasised price factor and marketing system of arecanut and how they have affected the incomes of arecanut growers. In fact apart from price factor there are various non-price factors, which will also influence the cultivation and income levels of arecanut cultivators.

N.S. Vishwanath (1992), has studied 'Arecanut Marketing in Karnataka' with the following objectives.

1. To study the phase and pattern of supply of and demand for arecanut.
2. To analyse the marketing behaviour of producers.
3. To assess the structural change in marketing.
4. To elucidate the market conduct of functionaries and,
5. To evaluate the performance of the Arecanut Marketing System (AMS)

The hypothesis framed for the study are as follows:

1. Structural changes have taken place in the Arecanut Marketing System (AMS)
2. Market conduct has changed in the Arecanut Marketing System (AMS)
3. Consequent to changes in the market structure and conduct performance of the Arecanut Marketing System (AMS) has changed in favour of producers.
The study has selected Karnataka State which is predominant in production and has institutions dealing in marketing and has infrastructural facilities.

The markets, Mangalore, Shimoga and Sirsi have been selected for the study, because these markets handle about 73 percent of the total market arrivals of arecanut in the state. Moreover, they cover Districts of Dakshina Kannada, Shimoga, Chickmangalore and Uttar Kannada respectively.

The study has selected Bombay and Bangalore terminal markets in view of major varietal trade transactions of arecanut concerning the three subsystems Mangalore, Sirsi and Shimoga respectively.

In order to study the varieties of Arecanut, the monthly data on unboiled and boiled nuts collected from The Directorate of Economics and Statistics from 1972 to 1989 is used.

In each of the selected markets, selling Co-operatives (SCs) co-exist along with other Commission Agents (CAs), and are engaged in establishing backward and forward linkages. Since these Co-operatives are performing marketing functions. It was thought that these Scs need be studied for the impact created on the market functionaries and other elements. The South Kanara Agricultural Co-operative Marketing Society Limited (SKACMS) at Shimoga and the Totegars Co-operative Sale Society Ltd. (TSS) at Sirsi have been selected for detailed study. In addition to this, the existence of Taluk Agricultural Produce Co-operative Societies (TAPCMS) wherever they coexist with these Scs were studied for analysis of their role in the marketing process.
Three Primary Agricultural Credit Societies (PACS) one in each of the three subsystems were selected for the study at random depending upon the business link of the PACS with higher level selling Co-operatives.

In order to select the producers latest data on size distribution of land holdings were obtained for each selected District where the market is located. The total number of one hundred and fifty producers were interviewed.

The study has revealed that the irregular variations in arrivals and sales are marked by volatility in the three markets (i.e. Mangalore, Shimoga and Sirsi). In respect of price, it is found that the magnitude of irregular variations has increased after 1971.

The study has failed to make suitable recommendations so as to solve the problems in Arecanut Marketing System (AMS) in Karnataka.

Anitha H.S. (1997) has also worked on 'Arecanut Marketing (A case study of Shimoga Dist.)' with the following objectives.

1. To study the production and processing pattern of arecanut in Shimoga Dist.
2. To analyse the problems of arecanut growers.
3. To analyse the existing marketing pattern of arecanut.
4. To study the contributory factors for price fluctuations and,
5. To suggest suitable remedial measures to overcome the deficiencies in arecanut marketing.
The main hypothesis of the study are:

1. Most of the growers of arecanut particularly small and medium sell their produce when prices are unremunerative.

2. Intermediaries enjoy a higher share in the customer rupee than producers.

3. Absence of uniform tax policy for all the arecanut producing states has contributed to the wide fluctuation in prices.

4. Malpractices in regulated markets have affected the economic position of growers.

5. Absence of proper marketing mechanism has forced the growers to sell their produce in the village itself.

6. It is profitable to sell the produce to private merchants rather than in regulated markets.

The study has analysed the marketing structure patterns problems of arecanut marketing, contributory factors for price fluctuation of arecanut in the sample district and suggested suitable remedies to overcome the deficiencies in arecanut marketing.

The study has made certain suggestions to make arecanut marketing system more effective. According to the study for an effective functioning of any system, the human values are important. Unfortunately in recent years these values are eroded at all levels. In the interest of our farmers and our country the values are to be restored. Everybody in the system should not be just guided by economic desires but these desires should have a moral fabric. To improve the arecanut marketing system, the Government Regulated
Markets, market intermediaries have a collective role to play. Their responsibility is co-equal.

The study has stressed on ethical aspects in the system so as to bring better returns to the farmers. Such things seem to be far from reality.

Ramachandra V. Bhat (1977) has studied the 'Areca nut crop in India with special reference to Karnataka and Kerala'.

The study reveals that the production of areca nut in the country has increased at a rate of 4.58 percent per annum, over the period between 1959-60 to 1974-75, this increase was due to the expansion in area which has increased at the rate of 4.06 percent per annum. In contrast the productivity per hectare increased only by 0.58 percent per annum.

According to the study, during 1972-73 there was an unprecedented slump in areca nut prices both in Karnataka and Kerala. This was probably because of the high rate of inflation specially in food grains, cutting the purchasing power of people. Hence the demand for areca nut might have gone down. This situation was accentuated by a sudden increase in supply of about 16,000 tonnes in 1973-74.

The imports of areca nut by our country which accounted to more than 30 percent of total supply during 50's have been practically slipped since 1968-69.

The study reveals that now at this junction when our country is not only self sufficient in areca nut requirements but it has surpluses because of considerably high rate of increase in production, there is an urgent need to enhance its exports.
However, the study has failed to suggest suitable measures to stabilise arecanut prices. It has also failed to analyse scientifically, how market arrivals and sales effect prices.

K. Purandara Rao (1974) has studied 'An Analysis of Marketing Problems of Arecanut in Karnataka State' with following objectives.

1. To analyse the behaviour of arrivals and price of arecanut in the selected assembling centres of Karnataka.
2. To study the existing marketing channels and margins retained by different agencies.
3. To compare the cost of harvesting, curing and processing, grading, transportation and storage in selected districts of Karnataka.
4. To suggest measures to improve the existing marketing system.

The study was restricted to the three important arecanut growing districts viz. South Kanara, Shimoga and North Kanara, three of the important markets viz. Mangalore in South Kanara, Shimoga in Shimoga and Sirsi in North Kanara were selected for the study. Each selected market is characteristically different from the other in respect of the trade of arecanut marketed.

The study has tried to examine some important aspects of arecanut processing and methods of processing, processing costs, profitability of different methods of processing, seasonal price fluctuations, seasonal arrivals and costs and contribution of various market intermediaries in regulated markets at Mangalore, Shimoga and Sirsi.

According to the study an analysis of the relationship between prices and arrivals in the three markets though prices generally ruled
high during the lean period when arrivals were low. No definite pattern of relationship could be established between the market arrivals and prices.

The study further reveals that the seasonal variations in arrivals of arecanut showed that the arrivals were distributed according to the season of harvesting. Peak arrivals were between January to April in Mangalore, December to March in Shimoga and December to May in Sirsi.

The market information system in the three important markets for arecanut should be integrated to improve the price making mechanism.

The study has effectively analysed the marketing problems of arecanut in Karnataka. But the study has not given much attention to what measures should be taken to establish definite patterns of relationship between the market arrivals and price.

Ashok Kumar (1989) studied The Price and Arrivals of Arecanut in selected major markets of Karnataka with following objectives.

1. To study long term fluctuation in the price and arrivals of arecanut.

2. To identify the short term movements in the price and arrivals of arecanut.

3. To assess the extent of market integration.

The data used for the study are the price, arrivals of arecanut over the years taken from the records of APMC Mangalore, Shimoga and Sirsi. In the market of Mangalore and Sirsi the type of arecanut is
The study has analysed the long-term behaviour, the short-term behaviour (seasonality) of arecanut in Karnataka state. Three major arecanut markets in Karnataka namely, Mangalore, Shimoga and Sirsi have been included to provide the price arrival data required for the study.

In all the three markets the arrival was more or less constant. The trend was neither increasing or decreasing one. Arrivals were maximum during January to May in Mangalore and Sirsi. In Shimoga also the maximum arrivals period was of five months but advanced by a month. This is because of type of arecanut (Saraku – Saraku type is a resultant of tender boiled dried arecanut) market in Shimoga need early harvest of nuts, whereas the type made in Mangalore and Sirsi (Chali-type Chali type is a resultant of ripened sundried nuts) require late harvesting. High rise in arrivals immediately following the harvest indicate that the farmers sell the bulk of their produce just after harvest. The pattern of arrivals is same over the years. In Mangalore and Sirsi there are two peaks in arrivals. The first one may be associated with the farmers need for cash to meet their immediate needs. The other may be associated with the sale of arecanut to repay the crop loan. There was no cycle in the arrivals. Though seasonal patterns in price was non-significant in Mangalore and Sirsi markets bloom in prices was present during slump in arrivals.

Krishnamurthi (1991) has studied 'The Marketing of Arecanut in Shimiga District. A study of Sagar Market'. The study has following objectives.
1. To analyse the existing marketing system of Areca nut in Shimoga district in general and Sagar market in particular.

2. To identify the marketing problems faced by the Areca nut growers.

3. To identify the marketing problems of commission agents, wholesalers and retailers.

4. To study the role of Areca nut Co-operative marketing societies and regulated market.

5. To study the buying and consumption pattern of Areca nut consumers and their behaviour towards Areca nut.

6. To offer suggestions for improving the marketing of Areca nut.

It is an empirical study of analytical nature involving rigid field survey. The data are collected from the samples selected and by administering the interview schedules personally at the places of respondents.

Sagara taluk in Shimoga district of Karnataka State is purposively selected for the study. The study covers a sample of 100 growers, throughout the taluk, 35 retailers and 3 co-operative marketing societies functioning in the limits of regulated markets.

Further, 70 consumers are also interviewed of which 40 consumers are grower consumers and the remaining 30 consumers are non-grower consumers.

The study has revealed that the problems faced by the growers are low yield rate, lack of skilled workers for plucking of arecanut, lack of knowledge about scientific grading, substantial loss of produce every year due to diseases, pests and monkeys, pigs etc inadequate irrigation and transport facilities and above all uncertainty in prices.
According to the study, the overall marketing system for arecanut is well organised and the market functionaries are operating quite satisfactorily.

Jagadesh Alse (1998) studied the 'Management Appraisal of Agri business Unit. A case study of the Campco Ltd. Mangalore'.

The main objectives of the study are

1. To study the procedure-followed, pattern and costs involved in purchase of arecanut.
2. To study the existing marketing channels and costs involved in marketing of arecanut.
3. To study the grade standards followed in marketing of arecanut both at domestic and export markets.
4. To study the business performance of CAMPCO.
5. To identify the problems faced by CAMPCO in performing its functions and to suggest improvements.

To elicit the information regarding the procurement, processing, grading, sales etc the personal observations were followed. To identify the problems faced by the co-operatives in procurement and sale of arecanut discussions were held with the officials of the co-operatives.

The secondary data, relating to physical performance indicators, the annual report of the co-operative were used and the data were collected for the period from 1986-87 to 1996-97.

The data relating to the financial aspects of the co-operatives such as balance sheet, profit and loss account and trading accounts were abstracted from annual reports for the same period. The
indicators are employed in the ratio analysis to evaluate the performance of the co-operatives.

The data regarding procurement, sale of arecanut both in terms of quality and value, prices of arecanut, cost incurred for procurement and sale and other required data were also collected from the records of the co-operatives.

The study reveals that in India arecanut is grown in an area of about 2.16 lakh hectares with annual production of 2.48 lakh metric tonnes (1993-94). Karnataka stands first both in area and production of arecanut followed by Kerala, Assam, Meghalaya, West Bengal and Tamil Nadu.

India exports about 6190 qtls. of arecanut and 5029 qtls of arecanut products valued at about Rs.320 lakhs and Rs.317 lakhs respectively.

According to the study though the production of agricultural commodities in the country has significantly increased the benefits have not fully reached to the farmers. Most of the ills in the economy could be attributed to the absence of an orderly marketing management for agricultural produces, seasonality, biological nature, time lag involved in production process, bulkiness and perishability of agricultural commodities.

The study has effectively highlighted the drawbacks of marketing system and absence of an orderly marketing management not only for arecanut but also for other agricultural produce.

Krishnaraja E. (1981) has studied 'An Evaluation of Investment in Areca nut Gardens in Dakshina Kannada District, Karnataka' with following objectives.
1. To estimate the recurring and non-recurring investments in different size groups of areca gardens.

2. To assess the economic feasibility of investment in arecanut gardens.

3. To evaluate the benefits of 'purfo' irrigation system against the conventional method of 'surface' irrigation in areca gardens.

Out of the 8 taluks in Dakshina Kannada district, Puttur taluk which occupies the first position with respect of total area under arecanut (3428 ha) and accounting for 26.60 percent of the total area in the district was selected for the study, on the basis of magnitude of the area under different category were prepared. The farmers were classified as small, medium and large farmers depending upon their total land holding. The farmers having an area up to one-hectare, 1 to 2 hectares and above 2 hectares of irrigated land were classified as small, medium and large farmers respectively.

The study reveals that the Dakshina Kannada district occupied first place with an area of 12,923 hectares, thus claiming about 26 percent of the total area under arecanut in Karnataka (49,971 hectares).

The results of the study indicated that the investment in arecanut enterprise is economically feasible irrespective of the size group. However the results of discounted cash flow measures revealed that priority should be given to the large areca gardens followed by medium and small gardens.

Areca nut enterprise provides employment for both skilled and unskilled labourers. The large gardens provided the highest mandays of employment followed by medium and small gardens. The enterprise
provides employment throughout the year and employment could be increased further by adopting intercropping in the garden with intercrops such as pepper, banana, cocoa etc.

With regards to the irrigation systems in areca gardens the purfo-irrigation system was found superior over the conventional surface irrigation system in terms of less cost of irrigation and more net returns. Further purfo irrigation method is labour saving technique and hence could be adopted when labour is scarce.

However the purfo irrigation system required huge investment and it was observed that only big farmers (who have more capital base) adopted the system of irrigation. Hence, efforts should be made to provide adequate financial facilities for the needy farmers who wish to adopt purfo irrigation method.

The study on the whole indicated the remunerativeness of the arecanut enterprise in the Dakshina Kannada district of Karnataka and hence there is a scope for extending financial facilities, through institutional agencies to encourage arecanut production.

Gajanana T.M. (1985) studied 'An Analysis of Supply Response of Arecanut in Karnataka'.

The study was undertaken with the overall objective of assessing the behaviour of arecanut farmers in response to changes in price and non-price factors. The other objectives of the study are as follows.

1. To analyse the growth rate of arecanut in terms of area, production, productivity and price before and after the establishment of Central Arecanut and Cocoa Marketing and Processing Co-operative Ltd. Mangalore (CAMPCO)
2. To estimate the degree of supply response to price and non-price factors.

3. To calculate the co-efficients of rigidity to know the number of years required for adjustment of area, yield and output.

4. To suggest appropriate policy measures with respect to area, production and price.

The three districts Viz. Dakshina Kannda, Shimoga and Uttara Kannada were selected for the study mainly on the basis of their contribution to the total area and production of arecanut in Karnataka State.

The study revealed that in India arecanut is being cultivated in the states of Kerala, Karnataka and Assam. These three states together account for 90 percent of the total area and 95 percent of the total production of arecanut. In Karnataka, arecanut cultivation is mainly concentrated in the Malnad and coastal regions.

Dakshina Kannada, Uttar Kannada and Shimoga are the important arecanut growing districts of Karnataka. These three districts together constitute 62 percent of total area and 70 percent of total production of arecanut in the state.

According to the study the growth rate of output of arecanut was found to be the result of growth rate of area but not because of the growth rate in yield. Farmers brought marginal and submarginal lands under arecanut cultivation without taking much care to increase the yield. In these areas farmers should not be encouraged to expand the area under arecanut.
The study reveals that farmers were found to respond to prices in terms of area but not in terms of yield. Concerted measures may be taken up to equip the farmers with yield increasing input like seedlings, fertilizers, plant protection chemicals, provision for adequate and timely credit supported by technical knowledge.

The study highlighted only supply aspect in determining arecanut price. The study did not give much attention to demand aspect of arecanut. This is the limitation of the study.

The above mentioned studies conducted by individual scholars and research agencies have mainly focussed their attention on aspects such as marketing, price behaviour, investment in arecanut cultivation etc. But none of the studies has focussed in detail on cost and returns from arecanut cultivation among different categories of farmers into different stages of arecanut gardens and also the benefits of inter-crops along with marketing of arecanut etc. Such an attempt is made in the present study. Apart from that the present study has also tried to examine the employment and income generation from arecanut cultivation. Therefore, the present study has tried to take up the analysis of those vital aspects which were hitherto not been examined.