CHAPTER IV
CASHEW IN KERALA COST AND ITS SIGNIFICANCE

410 INTRODUCTION

Cashew as a rare fruit, one on which the nut stayed outside was introduced by the Portuguese settlers about four centuries ago, not for harvesting nuts but for checking soil erosion. The plant has found hospitable environment and has established itself just as at its native home.

Centuries rolled by, and the days of cashew as a tasty and nutritive food had arrived. The economic and commercial value of cashew also came to be recognised, though belatedly, new entrepreneurs came into the picture and those with foresight ventured into the cashew expert business. The pioneering spirit of the early entrepreneurs and the unsurpassed skill of Kerala Women in extracting kernels from the nuts made a start of the industry much early in the century at Quilon in the state of Kerala around which the phenomenal trade of the latter years was built.

Relatively small capital investment, low level of technology, availability of skilled labour in abundance, constant growth of world consumption, expanding markets and invention that enhanced the storage life of cashew, aided by the raw nut supplies from the East African.
Countries to supplement the indigenous supply of raw nuts, had contributed to the rapid proliferation of processing units.

The speed of the growth of the industry was so great and the kind of expansion which might formerly have taken centuries to accomplish was achieved in the matter of decades. For quite a long time we were enjoying a virtual monopoly in the export of cashew kernels and the foreign exchange earnings were increasing by leaps and bounds. It was in this phenomenon of rapid and persistent growth of the industry, that the benefits were accruing only to the aristocracy of the society and not to the workers of the cashew industry.

This did not last for long, and for the first time in the history of the cashew industry in the seventies, we saw the sudden reversal of the growth. The golden age was followed by the Dark age, the feast by the famine. For the majority of cashew workers long periods of under employment and a meagre return have been the basic facts of the industry. Until a couple of years ago, Kerala was the home of the delectable Indian cashew nuts, but now she has a story of unrelieved gloom, sordid in its details, with all the elements of persecution, blackmail and unalloyed greed.
From the day the first cashew factory came into existence, decades ago, it was all hunky-dory for the private industrialists. Though local production of raw nuts was not adequate it could be liberally imported from East Africa. Occasional strikes sponsored by competing trade unions, were minor pin pricks and could be dealt with.

Then came on the scene the Government owned cashew Development Corporation which took over a number of factories and began processing on its own, to put a stop to the free wheeling tendencies of the private processors and to save at least a section of the work force from the worst type of exploitation. Import of raw nuts also came to be restricted and canalised through the Cashew Corporation of India. Local procurement of the commodity was entrusted, on a monopoly basis, to the Co-operative Marketing Federation. All thought that after the setting up of the Cashew Corporation of India and Cashew Marketing Federation, the empire building tendencies of the cashew barons would come to an end. But they were a hardened lot and would not go down that easily. They collect whatever amount of raw nuts was available under the counter, smuggled them to the neighbouring Tamil Nadu where labour was cheap and trade unions less
organised and they were cock-a-snook at the local trade unionists and the state Government which were trying to be the spokes in the cashew wheel.

That was the beginning of the crisis, a solution to which is nowhere in sight. While the worker starves and the Government and the trade unions produce the required noises and leaves a tale of private avarice, public apathy and governmental bungling, thousands of workers with the lines of poverty etched on their faces are the hapless, starving spectators.

The basic problem of the industry is shortage of raw nuts. To give full employment to the entire work force of over a lakh and a half, over four lakh tonnes of raw nuts will be required. The indigenous production is less than half of this, while the imports have almost dried up in the recent years.
KERALA'S PRESENT POSITION:

PRODUCTION, SUPPLY & PROCUREMENT OF CASHEW IN KERALA

Kerala is one of the principal cashew growing states in India and it accounts for 2/3rd of the cashew produced in the country while the area is only 1/3rd of the total area under cultivation of cashew. The yield per hectare of cashew is the highest in the country but the availability of indigenous nuts was never sufficient to feed the factories on a regular basis. The production of nuts in the state was estimated to be less than a lakh tonnes. The figure has remained static for the past few years. The factories in the state require 4 to 5 lakh tonnes of cashew to provide employment to the workers throughout the year. The processing capacity of the cashew factories in the state was built up with the help of imports. Since the indigenous production was very limited the factories were all along depending very heavily on the imported raw nuts. In fact more than 60% of the raw nut requirements of the industry was met by the imports. The imports since of late have dwindled very much and in 1980 it was only 20,000 tonnes while it was nearly 2 lakh tonnes in 1972. The sudden decline in the level of imports, owing to the various changes that took place in the traditional supplying countries, brought
the industry, which was of great socio-economic importance to the economy of the state, to a standstill. In order to save the industry the Government of India set up the C.C.I. in 1970 for stabilizing the price of raw nuts available for processing and for its equitable distribution. They canalised the import of raw nuts which was managed completely by the private trade.

The canalisation policy of the C.C.I. (which was securing large quantities for the processors from the East African countries) was not challenged and questioned till 1976; but after 1976 it became increasingly difficult to secure raw nuts and the private agencies forced the government of India for decanalising the imports. The Government of Kerala opposed such a relaxation policy for fear that it may adversely affect the deteriorating position of the cashew workers in the State. Under the canalisation scheme, despite all its limitations, the factories in Kerala were eligible for 80% of the imported raw nuts since a majority of the factories were located in Kerala at the time of canalisation. Relaxation of this policy allowed the processors to import raw nuts freely, freed them from their obligation to process the raw nuts in factories in Kerala, and helped them to divert imported raw nuts on a large scale for processing in factories outside the state in areas where the wage rates were very low.
Relaxation has strengthened the interests of big processors. Further they found it economical to import the raw nuts directly and half the nuts imported by them could be processed anywhere and this enabled them to openly divert the processing to the areas outside Kerala.

Though the C.C.I. had helped the Kerala processing industry for a long time, it was also responsible for the present situation of the industry. The C.C.I.'s offer of lower prices as well as its belated entry in the international markets for the raw nuts helped other countries in developing their processing industries and also created a competition for the available raw nuts from all over the world.

The history of the C.C.I. as a monopoly organisation has made it amply clear that this organisation had failed in importing larger quantities of raw nuts. It is evident that the C.C.I.'s canalisation, partial decanalisation and full decanalisation policies in the 1970's and 80's had not saved the Kerala Processing industry from the crisis it was facing. The import policy of the C.C.I. in different periods only led to elimination of many small and medium processors from the trade. It was all standing for the interests of the big processors. Had the canalisation not been imposed,
the story of imports of raw nuts and the export of Kernels and the position of the Kerala Cashew Industry as a whole would have been quite different, without ruling out the fact the price of cashew kernels would have been higher and there would not have been any stability in the price of imported raw nuts.

In 1955 the Government of India with the object of promoting the export of cashew kernels and CNEL organised the Cashew Export Promotion Council. In 1963 the Export Inspection Agency was formed for Quality Control and for the Pre-shipment Inspection of Exports. It is relevantly required whether these National Organisations have done anything worthwhile for the Kerala Cashew Industry. It can be even said that the Kerala Cashew Industry would have flourished and achieved greater laurels even without the help of these agencies.

Keeping all these in view, it can be stated that the Kerala Processing Industry is not going to survive unless indigenous production is stepped up. To understand the nature of the crisis in Kerala and to find out means to stabilize the industry it is necessary to have a clear perspective of the special features of the industry.
Cashew as a crop has not been taken seriously by the farmers. It was grown more as a means of checking soil erosion and as a source of fuel supply. This was because cashew was treated as a wild crop and found mainly on lands unsuitable for cultivation of other remunerative crops. The crop has never received systematic manural irrigation and plant protection care; still the crop has been generous to us. Even in the midst of these heart-burning indifferent treatments, it continued to flower and bear. The growers were not motivated in taking up cashew cultivation in the early days because of poor economic returns compared to that of the other cash crops like pepper and cardamom. The poor economic returns and low production can be attributed to a large proportion of plantations consisting of self-sown seedlings. As the years rolled by, after the recognition of the commercial importance of the crop, we witnessed a shift from wild production of cashew to production on commercial lines.

The area under cashew as well as the raw nut production has been increasing in Kerala, the home of several cash crops, till the mid seventies. Thereafter
although the area under cashew was increasing the production has stabilised to around 80,000 tonnes annually. The following table shows the area and production of cashew in Kerala during the last 3 decades:

**TABLE - 12**

4 2 1  AREA AND PRODUCTION OF CASHEW IN KERALA *

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AREA IN HECTARES</th>
<th>PRODUCTION IN TONES.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1952</td>
<td>35,410</td>
<td>54,750</td>
</tr>
<tr>
<td>1962</td>
<td>62,120</td>
<td>92,040</td>
</tr>
<tr>
<td>1972</td>
<td>1,00,661</td>
<td>1,12,943</td>
</tr>
<tr>
<td>1977</td>
<td>1,18,139</td>
<td>1,29,020</td>
</tr>
<tr>
<td>1978</td>
<td>1,40,748</td>
<td>84,527</td>
</tr>
<tr>
<td>1980</td>
<td>1,47,891</td>
<td>83,843</td>
</tr>
</tbody>
</table>

* Source - State Planning Board and Bureau of Economics and Statistics, Trivandrum.
The indigenous production of raw nuts even in the peak periods was not sufficient to meet the needs of the processing industry of the State. To feed the processing industry in Kerala with indigenous raw nuts, schemes for the development of cashew were implemented even in the second Five Year Plan itself, and even in 1950's ad-hoc research schemes on cashew were started for standardising methods of cultivation. Efforts were made both in private holdings and Government owned areas to increase the area under cashew. Various incentives and assistance were given to the growers. The departments of Agriculture, Horticulture, Soil Conservation and Forest in the State were responsible for increasing the area under cashew in Government lands. More intensive efforts on cashew development programmes were put from the next Five Year Plan onwards.

The Kerala Agricultural Department started another research station at Anakkayam in 1963. The ICAR sanctioned All India Co-ordinated Project in the Fourth Five Year Plan for the improvement of cashew with its head quarters at the Central Plantation Crops Research Institute at Kasargod. Future planning for cashew nut development in the state is under way.
INTENSIVE DEVELOPMENT:

Considerable research has been undertaken by the ICAR on the genetic development of cashew with the object of increasing the yield rate. Improved methods of crop production, plant protection methods, scientific use of fertilizers, etc., were implemented as part of the effective crop management.

EXTENSIVE CULTIVATION:

This comprises of the area development of cashew by the public sector as well as the private sector enterprises. The Private Sector in Kerala is represented by the Small holders while the Public Sector Enterprise has been undertaken by the Plantation Corporation of Kerala.

PLANTATION CORPORATION OF KERALA LIMITED:

The Corporation was established in 1962 for the development of the plantation industry with its head quarters at Kottayam. The Corporation is engaged in the cultivation of cashew on a large scale and it owns a number of cashew estates extending to over thousands of hectares in the different districts of the State. At present, the Corporation
has taken up cultivation on a very large scale with the assistance of the World Bank under the Kerala Agriculture Development Programme. The World Bank extension of finance for cashew production programme in the state of Kerala covers the undulating midlands in the districts of Cannanore, Calicut, Malapuram and Palghat.

The project envisages provision of finance over the five year period from 1980-84. Provision of adequate infrastructural facilities, extension services, and credit institutions are represented in the project areas. Land Development Banks, Rural & Commercial Banks have co-operated in extending Credit Facilities.

The World Bank Project covers an area of 12275 hectares in Kerala, out of which 10000 hectares are for new planting by small holders and 2275 hectares for new planting by corporations. The Plantation Corporation of Kerala is currently diversifying itself into cashew Corporation and Palm Oil Corporation with separate divisions for them.

Though there has been significant increase in the area of production as well as in research done for increasing the yield under the various projects and during
the successive plan periods, the productivity of cashew
did not improve satisfactorily.

MARKETING OF RAW NUTS:

Marketing of raw nuts in the early days was
not organised in a systematic manner. The ungraded
produce was bought by the itinerant merchants who
visited the growers' premises for the collection of
nuts during the harvesting season.

After the setting up of the processing factories
in the twenties, the collection of indigenous raw nuts
produced in the state and the distribution among the
processing factories went to the hands of the agents
of private processors, who opened collection centres
in important producing areas for buying nuts directly
from the farmers. The petty dealers who bought the nuts
from the growers also disposed of the nuts in these
depots. As there are a number of intermediaries operating
in the field between the primary producer and the processing
unit, the different costs and margins in the total spread
between the producer and the processing unit are quite
significant and the producer's share in the price paid
by the processing unit is generally low.
Malpractices like underweighing, unjustified cut for supposed inferior quality, delayed payments, payment in instalments without interest etc. were widely prevalent. In the event of a bumper crop the price would naturally fall and the growers would have to be contented with a lower price, since most of the cashew growers in the state were small and marginal farmers. Prospects of unremunerative prices for raw nuts had not enthused them to increase production. Most of the processing companies were also at a disadvantage in as much as they, not being able to collect nuts in competition with the big processing companies, failed to provide employment to their labourers and forced them to close their operation rendering large labour force jobless for a major part of the year. The economic exploitation of cashew growers and the jobless workers had been a source of grave concern to the State Government.

The exigencies induced the state government to effectively intervene and to introduce monopoly procurement of raw nuts produced in the state. This served the twin objectives of ensuring remunerative prices to the cashew growers for their produce, thereby making cashew cultivation a profitable proposition, leading to increased production through the application of modern
agriculture practices, and of securing equitable distribution of all available indigenous raw nuts among the processing factories according to their muster road strength.

LEGAL ENACTMENTS:

With the object of saving the cashew industry from gradual extinction, the State Government requested the Central Government to declare cashewnut as an essential commodity. This request was not acceded to by the Central Government and the State Government therefore issued the Kerala Raw nuts (Movement Control) Order 1975 under the Defence and Internal Security of India Rules 1971, restricting the transport of nuts from one district to another or from any place in the state to any place outside the state without a permit from the Cashew Special Officer. The State Government also declared raw cashew nut as an Essential Article under the Kerala Essential Articles Control Act 1961 and detailed provisions for the purchase and distribution of raw nuts by authorised agents of the Government at notified prices, were issued by the Kerala Raw Cashew nuts (Restriction & Marketing ) Order 1976.

In April 1977 the Kerala Raw Cashew nuts (Procurement & Distribution) Order bought the procurement of raw nuts extensively in the Co-operative Sector and
appointed the Kerala State Co-operative Marketing Federation as the sole monopoly agent of the State Government. The Supreme Court on the 23rd of January 1981 squashed this order on the ground that raw cashew nut, though a food article is not an essential article and as such does not come within the purview of the Act under which the order was issued. To overcome the crisis caused by the judgement of the Supreme Court, the State Government, promulgated on 3rd February 1981 in Kerala Raw Cashewnut (Procurement & Distribution) Ordinance 1981, under Article 213 of the constitution, treating cashew nut as an essential raw material of the cashew industry, retaining the raw nut procurement within the Co-operative sector with the Marketing Federation as the exclusive agent of the Government.

PRESENT PATTERN OF MARKETING

KERALA STATE CO-OPERATIVE MARKETING FEDERATION

The Federation is an apex body of over 70 Taluk Level Marketing Societies spread over the entire state of Kerala. The Federation was formed to provide marketing support to the cultivators of the state for their agricultural operations, to ensure fair prices for the produce by eliminating exploitation. The Federation
over a short period of its existence entered into a wide range of marketing activities covering produce like Pepper, Cardamom, Ginger, Turmeric, Copra, Cocoa, Cashew etc. The Federation has an extensive network of societies for the distribution of fertilizers and other inputs required by the agriculturists. The Federation is one of the Major exporter of spices and the sole exporter of cocoa beans from India.

The Federation was nominated as the sole agency for the procurement of cocoa, besides cashew from the state. The current dealings in the sale of cashew nuts produced within the state comprises of the following operations:

Growers are required to sell their cashew nuts only to agents or sub agents of the Federation, who shall not refuse to purchase any raw nuts offered to them for sale. The agents are required to furnish a weekly return to the Government showing the place or places where the raw nuts have been stocked by them, the quantity thereof, the price paid by them etc. The agents are authorised to appoint any co-operative societies as their sub agents for the purpose of procurement and every sub agent is also required to submit a return to the respective agents on the stipulated dates. The agents/sub agents are however prohibited to process raw nuts or sell them except in accordance with
the provision contained in the ordinance in this regard. It further stipulates that no person other than the agent/sub agent can hold at any time raw nuts in excess of 50 Kgs. The ordinance has also placed restrictions on the transport of cashew nuts produced in the state. However there is no restriction on the movement of raw nuts by cultivators to agents/sub agents for sale thereof. The growers are expected to keep safely the bill they receive from the collection Depots as and when the sale is affected. The growers should demand for the bill in case it is not given to them. These bills if kept safely will enable them to a bonus which will be given by the federation if the processing industry gets a profit. All raw nuts purchased by the agent/sub agents are required to be sold to cashew factories in the state registered in pursuance of Rules made under the Factories Act 1948 and which are eligible for imported raw nuts. The eligibility criteria governing the quantity of cashew nuts to be sold to the factories are muster roll strength or the licensed strength of workers in the factory as on Jan-1-1976, whichever is lower and the quantity of raw nuts purchased by the agents/sub agents from time to time as regards the sale of raw nuts to eligible factories by the agents. The offer of sale to such factories will stand cancelled if raw nuts are not taken delivery of within 7 days from
service of the requisite notice by the authorised officials. The Ordinance vests adequate powers with the competent authorities to seize raw cashew nuts whenever contravention of the ordinance is being or is about to be committed and to avoid penalties for such contravention of the ordinance.

PROCUREMENT PROCEDURE OF THE FEDERATION:

APPOINTMENT OF SUB-AGENTS

For the effective procurement operations the federation has appointed about 1100 Service Co-operative Societies as sub agents for the procurement of raw nuts, functioning at the village level in cashew producing areas where there are a very large number of individual growers. With such large membership and extensive coverage of growing areas only service co-operative societies are able to provide the most suitable infrastructure for implementing the cashew procurement programme. Only agricultural societies and societies exclusively formed for the welfare of Harijan & Girijan Communities are eligible for appointment as sub agents by the Federation. After being selected as sub agents, procurement operations can be undertaken by them only after completing the formalities laid down by the Federation, just as execution of agreement in the prescribed form, and receiving appointment order.
OPENING OF COLLECTION DEPOTS BY SUB AGENTS:

Sub agents would set up sufficient number of collection depots/collection agents and appoint Depot Managers in their allotted areas with the sanction of the Zonal Officer. As far as possible, collection Depots are to be set up in the producing centres. There are about 7000 collection Depots/Collection Agents operating in the field of procurement.

OPENING OF DRYING YARDS:

The Federation has opened 75 drying yards having a drying area of 15 lakhs square feet in the various districts of the state and has also provided godowns for storing the dried raw nuts.

ZONAL OFFICE:

The Federation has formed 11 Zones for making effective supervision over the sub agent societies, Collection Depots/Agents and Drying Yards. As far as possible Zonal Offices are set up at the Drying Yards situated at the Zonal Head Quarters. In almost all the districts the Zonal Divisions have the same boundary as the Revenue Districts. But in Cunnanore which accounts for 40% of the total procurement in the State has 3 Zonal Divisions.
FINANCE:

The finance required by all sub agent societies together in the state would be funds to the tune of roughly Rs. 15 crores for the estimated procurement targets during the peak period of procurement i.e., during the month of April. The District Co-operative Banks in the state cater to the requirements of the societies. When the societies deliver the stock at the yards of the Federation payment is to be made to the societies. The funds required by the Federation for such operation are sanctioned by the Kerala State Co-operative Bank with the approval of the Reserve Bank of India.

DISTRIBUTION OF NUTS TO THE PROCESSING FACTORIES:

The eligibility criteria for the allotment of indigenous raw nuts to the processing factories are the same as for imported raw nuts, according to which 194 factories out of the 270 in the state are eligible for allotment. The competent authority for making allotments is the cashew Special Officer. The Federation delivers the dried nuts to the factories against allotment orders on payment of the allotment money to its financing bank.

QUALITY CONTROL:

Quality less decayed havoc in the cashew procurement in the early years. The Federation has lost heavily because of the reluctance of the processors to take allotment of
raw nuts in view of their poor quality. Lately, only quality nuts are collected by adopting strict quality control measures, in the face of sharp criticism from the growers and sub agents. Untimely rains also caused trouble making the drying operations a tough task.

VIGILANCE:

Whenever there is monopoly procurement considerable smuggling of cashew out of the state takes place. To check this smuggling of cashew about 100 checkposts including the existing checkposts of the Sales Tax Department were set up. District level Vigilance Committees have also been constituted under the Chairmanship of the District Collectors. The representatives of the political parties and trade unions are also included in the Vigilance Committee together with the concerned officers of the Government.

PROCUREMENT PRICE:

The year 1983 is the seventh year of implementation of monopoly procurement programme, factors influencing the fixation of raw nut prices now are the price of cashew kernels in the International Markets as well as the price of imported raw nuts. Since both these prices have gone up considerably the government have fixed the procurement prices in the various districts at higher levels than in the previous years.
PERFORMANCE OF THE FEDERATION (K.S.C. M.F.) IN THE PROCUREMENT OF RAW CASHEW NUTS.

The Federation could show substantial progress in procurement during the initial stages when monopoly procurement was introduced in 1977. In the year 1977 it collected 68191 MTS in 1978 79293 MTS, in 1979 37144 MTS and 1980 60781 MTS of raw cashew nuts. The following table shows the districtwise data of raw nuts procured between 1978 to 1980 and the average comparative prices for raw nuts fixed by the Government of Kerala.
As can be seen from the table, since the last two to three years the procurement of raw nuts has reached a low ebb, due to the reasons given below:

1. **Systematic cultivation of cashew received attention only very recently.** Till then, cashew was grown in marginal lands under poor management. A large proportion of the plantations consisted of self-seen seedlings attributed to wild or semi wild growth. The older plantations have outlived and their productivity has come down below economic level for any good management and the newly raised plantations have yet to bear economic yield.

2. **The problem in increasing the procurement of raw nuts from indigenous production is not so much of non-availability of land for the cultivation of cashew, but the very low levels of yield in all the cashew growing regions.** The present yield rate of 3-5 Kg/tree is considered to be far below the potential yield of 15-20 Kg/tree.

3. **In southern and Central Kerala the area under cashew has been declining at an alarming rate while there has been an increase in the area under rubber.** The increase in the area under rubber in southern and Central Kerala during the last two decades was far in excess of the decline in the area under cashew and cashew is progressively being displaced
by other plantation crops not only because of the high
levels of income at the present levels of yields and prices
but because of the land ceilings under the Kerala
Government Land Legislation Act. The following table
shows the change in area under Rubber and Cashew in
Southern and Central Kerala.

### TABLE - 15

**4 2 4 CHANGE IN AREA UNDER CASHEW & RUBBER BETWEEN:
1964 & 1978 ( IN 000 HECTARES )**

<table>
<thead>
<tr>
<th>DISTRICT</th>
<th>Cashew</th>
<th>Rubber</th>
<th>Change</th>
<th>Cashew</th>
<th>Rubber</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trivandrum</td>
<td>4.63</td>
<td>4.47</td>
<td>4.35</td>
<td>-0.28</td>
<td>4.34</td>
<td>7.64</td>
</tr>
<tr>
<td>Quilon</td>
<td>9.30</td>
<td>8.69</td>
<td>8.30</td>
<td>-1.00</td>
<td>23.04</td>
<td>32.38</td>
</tr>
<tr>
<td>Kottayam &amp; Eriakulam</td>
<td>8.99</td>
<td>7.24</td>
<td>7.09</td>
<td>-1.90</td>
<td>63.48</td>
<td>87.32</td>
</tr>
<tr>
<td>Trichur</td>
<td>9.32</td>
<td>6.79</td>
<td>6.30</td>
<td>-3.02</td>
<td>6.90</td>
<td>8.93</td>
</tr>
<tr>
<td>Alleppey</td>
<td>2.98</td>
<td>3.62</td>
<td>2.90</td>
<td>-0.08</td>
<td>2.50</td>
<td>3.79</td>
</tr>
</tbody>
</table>

* Source - State Planning Board.
4 The indiscriminate felling of cashew trees for firewood and pulp has retarded the growth and spread of cashew plantations. Apart from this indiscriminate felling, large number of cashew trees were felled down in the state and replaced by rubber planting as the growers were much attracted by the incentives offered by the rubber board.

5 The pest problem caused a serious constraint to increasing the productivity and thereby the procurement of cashew. The stem borer and tea mosquito menace could not be effectively controlled so far.

PROBLEMS OF THE K.S.C.M.F. IN MONOPOLY PROCUREMENT OF RAW NUTS

1 Pricing of raw nuts is a difficult task before the Federation and it plays an important role in the success of monopoly procurement operations. The task before the agency is to ensure remunerative prices to the growers, as well as to see that the price satisfies the processors also for the profitable running of the industry. Being an article of international trade the price of kernels is subject to wide fluctuations. Price fixation and monopoly procurement depends upon three situations:

(a) If the price of raw nuts is low it would act as a deterrent to the growers who would not be enthused to sell the nuts to the Federation.
(b) If the price is high procurement would also be high. However high prices would dissuade the processors from lifting the stock. Such an eventuality can cause damage to the nuts and heavy loss to the Federation.

(e) If the international price falls below the price fixed by the Government on procured nuts, this would result in a crisis in the industry undermining the procurement programme.

2 The entry of the Federation into the area of procurement operations late in the season indirectly helps interstate smuggling of cashew especially in the early stages of the crop season. The reason adduced for the late entry of the Federation is the paucity of funds with the Federation in its early stages of operation and because of the delay by the Government in fixing procurement prices.

3 Low wages in the neighbouring states as well as the helpful attitude of labour coupled with loop holes in procurement operations had led to large scale smuggling all along the state borders.

4 In view of the uncertainties as to the very legality of centralised procurement operations in Kerala, the Federation is unable to evolve any long term strategy for the procurement of nuts which can avoid monetary loss on account of inadequate planning.
COMPLAINTS AGAINST THE K.S.C.M.F.:

1. The Federation, it is alleged, does not dry the nuts properly which ultimately affects the output and quality of nuts from the processing units.

2. The processors and exporters have no choice in regard to the nuts allotted to them.

3. It is also alleged by the growers that all sorts of malpractices like underweighing, discard of nuts, etc. by the sub agents of the Federation are largely prevalent.

COMPLAINTS BY THE K.S.C.M.F.:

1. The buying and selling rates for cashew nuts are fixed by the Government and the Federation as an agent of the Government has no freedom to alter them. All expenses in connection with the procurement are to be met out of the margin provided by the Government which is included in the difference between the selling and buying prices. It is the responsibility of the Federation to see that only good quality nuts are delivered to the allottees. Even if defective and inferior nuts are procured, quality standards, at the time of despatch will have to be ensured by the Federation and the loss, if any, on this account also is to be borne by it.
There is no undertaking on the part of the Government to compensate the loss, if any, sustained by the Federation in its operation.

However there is a general impression that if monopoly procurement is dispensed with, the growers will get a better price, but it is not so, because in the absence of monopoly procurement the farmers will be at the mercy of the private traders whose main motive is profit making and ultimately the cultivators will be the losers. The prices fixed by the Government for monopoly procurement of raw nuts over the years have been far higher than the price obtained prior to the monopoly procurement.

There is a clamour for dispensing with the services of the Federation for the procurement of raw cashew nuts and for entrusting it to some other agency. How a different agency can offer better results than the Federation is still a question. The Federation has a staff whose expertise and experience in this field, acquired over the years cannot be matched by persons from any other agency.

The problem of price fixation of raw cashew nuts by the Federation and the alleged complaints of the growers of underweighing, discard of nuts on the ground of low quality standards and the resultant low prices to growers
and the higher rates that can be obtained in the
neighbouring states, the Federations belated entry into
the market, low wage rate and liberal treatment by the
processors of neighbouring states led to a situation where
large quantities of raw nuts are clandestinely smuggled
across the borders to the neighbouring states particularly
Tamil Nadu. The share of such smuggled nuts in the total
nuts produced in the state is said to be over 50% and
in the absence of restriction on movement of cashew across
the borders perhaps very little raw cashew nuts are likely
to be available to the local industries resulting in a
large scale displacement of local labour,
The following are the various suggestions to overcome the difficulties and to increase the overall effectiveness of the K.S.C.M.F.'s procurement operations:

1. In order to avert the important problem of the price fixation of raw cashewnuts and to arrest large scale smuggling of raw nuts from Kerala and for the effective overall procurement operation, the Government has either to fix a remunerative price for raw nuts based on the cost of production and current rates for kernels in the international markets or atleast those ruling in the preceding year; or the Government has to fix some sort of a base price for the raw nuts in the first instance on parity with the average international price for the cashew kernel in the preceding year and to make the processing industry share its profit in excess of the realisation, with the growers by a system of bonus or some similar arrangement. Thereby both the interest of the grower and the industry can best be safeguarded.

2. To eliminate the general feeling among the growers that cashew cultivation is not a profitable proposition, the Government may consider fixing minimum support prices
for cashew. Such a measure would provide the necessary
impetus for the growth of cashew plantations in the
country, leading to a considerable increase in the supply
of indigenous nuts.

3 Cashew is an annual crop and the season normally
is between February and June with varying yields. Yields
varying every year depends upon the vagaries of nature,
such as rainfall, moisture, fog, etc. and hence forecasting
of production for any year is difficult. So the Federation
should start the procurement operation before the commencement
of the season to combat active smuggling which takes place
in the early part of the season. For this adequate finance
should be made available to the various levels of operation
well in advance.

4 The lack of good marketing facilities and payment
of inadequate price to growers and collectors have been one
of the serious threats of the Federation. To ensure better
results of procurement, better marketing facilities in the
cashew growing regions will have to be adopted. This would
also help in minimising the wastage of cashew produced in
the country. Besides, the setting up of large number of
collection centres has helped to strengthen the procurement
operations by eliminating the necessity of the growers to
trevers large distances to sell their produce.
In view of the open market trade in cashew in the other states and in the light of the recent directive of the Government of India decanalising the import of raw nuts, the Government of Kerala should consider having an open market, free trade in raw nuts produced in the state, on the condition that at least 50% of the nuts purchased by the individual processors is tendered to the Federation for distribution to the eligible factories in the state. The Government should also stipulate that raw nuts purchased by the individual processors in the state should be processed in the factories situated in the state itself. The movement of raw nuts across the state borders should however be prohibited and the prohibition should be enforced strictly. This would not only ensure better prices to growers but also eventually lead to a tapering off inter state smuggling. The Government should also fix lower and upper ceiling rates for purchase of raw nuts by individual processors.

The principal cashew producing areas are concentrated in Cannanore, Malappuram, Quilon and Trichur Districts which together account for 75% of the total production in the state. To make a success of the procurement programme concerted efforts in these districts are essential. The Government should tighten anti-smuggling measures in these four major cashew growing districts. In fact in
Cannanore District about 50% of the nuts produced are procured, while in the other three districts about 60 - 80% nuts are procured, the balance being generally smuggled out.

7 In order to avoid the alleged complaints from the processors for improper drying of raw nuts by the Federation which affects the quality of the kernels etc., the Federation should ensure that proper drying is done and also allow inspection of raw nuts or permit cutting tests prior to their delivery and also ensure proper packing of nuts.

8 To ensure good quality in regard to raw nut procured by it, the Federation may educate the cashew growers to desist from the undesirable practice of collecting unripe nuts.

9 Transport of nuts from the collection centres of the sub agents to the drying yards of the Federation should be the responsibility of the sub agents themselves for which they should be paid on a slab scale.

10 Due to some reason or the other most of the sub agent societies of the Federation prefer setting up of agency depots rather than direct depots. The Federation should persuade them to set up direct depots by diverting
the services of their own staff. The societies in Quilon, Alleppey and Trivandrum Districts heavily depend on hawkers for the collection of nuts from growers for which they are appointed as collection agents. Since hawkers have neither a defined area for procurement nor a permanent place of business it is impossible for the supervisory staff to control their activities. The Federation should therefore, as far as, possible discourage the system of appointing hawkers for collection.

11 At present procurement operations are carried on, on a yearly basis. This involves a lot of additional expenses to the Government as well as for the Federation. If the policy is settled once and for all, the Federation can make permanent arrangements for procurement and plan its operations accordingly.

The following are the various suggestions to increase the level of production of cashew in the state and it would certainly help in improving the overall situation of the industry:

1 Since cashew is found as a wild growth and there is the absence of organised cropping programme, the implementing of proper cropping programme by competent authorities on scientific lines will help in increasing the yield rates,
2 Cashew is generally being planted up to now on the hill slopes with shallow soils, red sandy areas, littoral sand and denuded and degraded hills. The early planting made on eroded soils with a view to rehabilitate them proves the importance of the tree as a soil binder and its ability to rehabilitate degenerated soils. It is however fallacious to think that cashew needs to be planted on such poor soils. In order to obtain higher production fertile areas with deep soils, loamy and alluvial soils are to be preferred.

3 To increase the yield rate of cashew and to improve the overall production standards of cashew, plant protection methods, and crop management should be effectively implemented. In India now cashew is known to be infested by more than 60 species of insects during the different stages of its growth and development. Important among them are the stem and root borers, which are capable of killing the tender shoots, flower bunches and developing nuts. The leaf minor and the leaf and blossom webber, tea mosquito account for more than 50% of the crop lost every year. Though technology is available to control the pest problem by spraying of endosulphan, an effective systematic pesticide applied as a high volume spray and also as a low volume spray at the time of emergence of new flushes, inflorescences
and at the time of fruit set is necessary. A community action for the control of pests is however necessary since spraying insecticides in patches is not found to be effective in controlling the pests. Where extensive areas are to be covered it is advisable to go in for aerial spraying of insecticides. It will be effective and cheaper. The phyto sanitary would be more effective in controlling the stem borer pests.

4 In Kerala, Cashew Plantations come under the Land Legislation Act for land ceiling. If plantation status is granted to cashew and the consequent exemption of cashew farmers from the provision of land ceiling legislation, cashew will not be replaced by other plantation crops. To prevent further shift to other plantation crops in view of the higher returns they offer compared to cashew, the state authorities may have to formulate more suitable schemes under which small cashew growers in particulars are provided with assistance in the form of subsidy, supply of free nuts etc.

5 The Government has to take effective steps both at the administrative and legislative levels for the prevention of indiscriminate and unauthorised axing of cashew trees.
The per unit value as well as the per unit productivity of plantation crops are quite high and they contribute a sizable amount to the state and Central Exchequers besides generating additional employment potential. Cashew is to be accorded plantation status, it is imperative that a portion of suitable lands is to be allocated for the plantation of cashew.

The State Government should consider cashew as a cash crop and evolve suitable measures to expand the cultivation of cashew on scientific lines and not with a view to merely helping in soil conservation or for the prevention of encroachment of Government waste lands.

The Government should consider leasing out areas to individual cashew processors or exporters on the condition that the produce from the area would be used solely for export.

The Government should impose a levy on the profit realised by the cashew processors/exporters and utilise the proceeds, thereof to subsidise, encourage cultivation, indigenous production of raw nuts etc. The processors on the other hand should use a part of the high margin of profit for increasing the domestic output of raw nuts in their own long term interest which is not however done.
10 In the absence of definite recommendation on the optimum dose of fertilizers for cashew and the spacing of trees, varying norms are being adopted by different agencies which may cause below optimal effect on production. Effective propaganda and advice on judicious and optimal use of fertilizers should be undertaken. Identification and propagation of the root stock and scion material with dwarf characteristics and high yielding nature may be helpful to these issues.

11 There is a popular variety of cashew in Brazil called "THE SIX MONTH CASHEW", that flowers in less than one year. Another variety flowers and fruits throughout the year. Cashew being a seasonal crop in our country, the processing factories will get raw nuts only during the harvesting season, which means that the processing factories will have to be shut down for the major part of the year leaving lakhs of workers out of jobs. If the processing factories are to be worked throughout the year, they have to store up sufficient quantity of nuts, which at the present situation is impossible, for a long period of time. It would be a loss to them since the raw nuts are liable to be spoiled or eaten up by insects and also a huge amount of capital will be blocked. Keeping this in view, research has to be carried out to develop early ripening and late ripening varieties of cashew, like that
of "WINTER WHEAT and SUMMER WHEAT", which will be able to provide the industry with raw nuts throughout the year.

12 About 20-30% of the indigenous production of raw nuts are getting lost before it could ripen for harvesting. This is because it is being used especially in Kerala by the people as a vegetable for the preparation of various dishes unknowingly of the fact that it would add to the national exchequer and to the economy of the state. A public conscience has to be created, letting them know the value of raw nuts.

13 To ensure effective management of cashew plantations taken up for the development of the crop, the minimum size of the block of land has to be fixed at 2000 hectares on the condition that at least 2 or 3 such blocks are situated within a radius of 15 KMs from each other. In the project areas the poor condition of feeder roads is a constraint and suitable measures should be implemented to improve it.

14 Rehabilitation of existing plantation should be taken up expeditiously.
15 Various existing research agencies should conduct more and regular research for the genetic improvement of cashew and should arrange to disseminate the results of such studies to the field staffs and growers, by means of brochures and the provision of adequate advisory or extension services. A national Cashew Research Centre with adequate number of regional centres for intensifying research in the commodity should be set up.

16 Cashew is a means of preventing soil erosion in the high lands. Research has been taken up for the cultivation of cashew on the coastal plains of Kerala. Crores of rupees is being spent for the checking of sea erosion and it would not be much difficult to cultivate. The World Bank Project in Orissa covers the coastal plains.

17 The present method of estimating area, output and yield need to be replaced by statistically more sound procedures and made uniform throughout the country, so that more accurate assessment and reviews of the state of cashew cultivation will become possible. To cite an example of the present methods of poor statistical technique production estimate of cashew in the country
as obtained from the concerned state authorities for the year 1980 was only 1.42 lakh tonnes. During 1980, India exported 36856 tonnes of kernel. As the average recovery is about 24% about 1.54 lakh tonnes of raw nuts, out of which 20682 tonnes were imported raw nuts, should have been processed for that export. It means that only about 1.33 lakh tonnes came from indigenous production. The internal consumption is roughly estimated at about 10000 tonnes of raw nuts. Therefore the total production of raw nuts in the country should be about 1.75 lakh tonnes against the official estimate of 1.42 lakh tonnes. Hence it is necessary that correct statistics of area and production of cashew should be collected. Timely reporting schemes on cashew industry should be undertaken to review the status of the industry, to establish costs and returns of raw nut production, processing, kernel, export, local sales, institutional arrangements, etc.

In a densely populated state like Kerala it would be uneconomical to use more fertile land for cashew cultivation. The high man–land ratio and the intense competition for the available land from the various crops, do not give cashew any hope of getting land where more remunerative crops can be grown. The draw back of cashew being grown on relatively poor soil and terrain scattered all over is that it would be
difficult to give cashew the kind of attention that cash crops generally receive, resulting in the low yield per tree. This can be overcome by way of intensive cultivation than extensive cultivation by the adoption of special agronomic practices.

In Kerala one will come across more than two associations of growers for every crop. Some times even before the crop covers an area of 1000 hectares, one will hear the cry to protect the interests of the growers, whose group may include even those who are thinking to grow the particular crop.

In order to improve the overall production, efficiency of cashew plantations, and to ensure better procurement, cashew may be grown in concentrated holdings since close and continuous supervision of cashew gardens is essential to check pilferage. Since the cost of supervision and collection in respect of small holdings is minimal and supervision does not require external help beyond the confines of the farmers household, the Government should through allotment lease out land not exceeding 2 hectares to each cultivator, preferably to members belonging to scheduled castes/tribes for
cashew plantation. The State Government should, under the agricultural Development Programme also take up cultivation of cashew as is done by the Plantation Corporation of Kerala Limited to ensure that the entire crop is produced bearing very little scope for wastage. The Government should make effective propaganda about the economics of cashew cultivation among the people, in order to eliminate the general feeling that cashew cultivation is not a profitable one.
Correct data to obtain the cost of cultivation of cashew nut is not available because most of the cultivators do not maintain proper accounts. Whatever quantity harvested is sold. Moreover the cost of cultivation also varies from place to place and it mainly depends on the cost of labour and maintenance.

It is estimated that the cost of cultivation of cashew in Kerala is about Rs. 1100/ per hectare for a ten year old plantation when full bearing is expected. The grower will have to incur an expenditure of Rs. 1/ per Kg. for collecting the nuts and the total cost of collection per hectare will work out to Rs. 1000/. The total cost of production of raw nuts works out to Rs. 2100/ per hectare. Though with proper management, scientific planting techniques, timely fertilizer application and plant protection measures, yields up to 1500 Kg. per hectare can be obtained. It is estimated that the average yield will be from 100 Kgs. per hectare in the fifth year gradually increasing to 1000 Kgs. per hectare in the tenth year. The cost of maintaining one hectare cashew orchard from the sixth year onwards
will be ₹. 1100/ and the total cost for the first five years for establishing the orchards will be ₹. 6000/ at the present cost of fertilizers and labour. However these costs do not include the cost of farm machinery and sprayers.

Thus if we consider the annual recurring cost to be ₹1100/ and the cost of raw nuts to vary around ₹. 6/ to ₹ 8/ per Kg. the break even yield would be less than 160 to 240 Kgs. per hectare or 1.5 Kgs/tree after the trees have started bearing regularly. The average yield in Kerala is reported to be above 5 Kg. per tree for several years now. With selected planted material and regular fertilizer application, the average yield should be above 10 Kgs. per tree out of which 1.5 Kgs. of nuts per tree could meet the maintenance cost of the orchard and the profit would be the cost of 8.5 Kgs. nuts per tree or nearly 1.5 tonnes of raw nuts per hectare fetching between ₹. 9000/ and ₹ 12,000/.
The benefit of the grower will be at a minimum of ₹. 5/ per Kg. of raw nuts.

The fertilizer application has been assumed at the rate of 250 gms. of N, 125 gms. of P2 O5 and 125 gms. of K2O, per bearing tree, (200 trees/ht).
On fourth of this dose will be applied in the first year of planting, half in the second year, three fourth in the third year, and full dose from the fourth year onwards. Plant protection method of spraying endosulfan 35 EC at the rate of 750 ML per hectare, thrice annually is to be introduced. In the long run, there is potential to realise yield upto 2000 Kgs/ht in various cashew growing states under fresh planting. The indirect benefits of the cashew plantations which are not quantifiable are checking of soil erosion on hill slopes and coastal sand dunes, improvement of waste lands, augmenting fuel supply, stepping up the general economic activity with the increased income of cashew cultivation.
PRODUCTION ESTIMATE:

On the basis of the performance of the past production, existing cashew acreage and the programmes planned for new plantation, the following table gives the production estimate of cashew in Kerala.

**Table - 17**

4.4.2 *Actual and Estimated Cashew Production in Kerala till 2000 A.D.*

<table>
<thead>
<tr>
<th>YEAR</th>
<th>AREA</th>
<th>PRODUCTION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ACTUAL</td>
</tr>
<tr>
<td>1952</td>
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<td>54750</td>
</tr>
<tr>
<td>1962</td>
<td>82120</td>
<td>92040</td>
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<td>1972</td>
<td>100661</td>
<td>112943</td>
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<td>83843</td>
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<tr>
<td>1985</td>
<td>150000</td>
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<tr>
<td>1990</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1995</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2000</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Compiled data from various issues of Cashew Journal.
It can be seen from the table that since cashew cultivation was taken up on commercial lines, the area under cashew as well as the production was steadily increasing till 1977. Between 1952 and 1977 production increased by an average of about 6% or nearly 3000 tonnes per annum. From 1977 to 1980 only the area under production was increasing and the production showed a decreasing trend by about 10% or 12000 tonnes annually due to the absence of cultural operation as well as the climatic failures. But now the situation has changed. Intensive and extensive cultivation, of cashew, adoption of scientific methods of cultivation, implementation of the results of the research, and the growing public consciousness together with the better prices offered for the raw nuts have helped in increasing the production in the state. It is now expected that by the mid eighties the production will increase by 6% annually as it was in the fifties and seventies.

Eventhough prediction of the production of raw nuts is arbitrary, under the circumstances, of the increase in area of production and scientific lines of cultivation, the present yield of nearly 5 Kgs. per tree will definitely be increased. If the climatic conditions are favourable if no serious set backs in the cultivation takes place and if all the area under production covers a minimum of 200 trees per hectare and the yield rate reaches 7 Kgs. per tree in 1990 the production will be nearly 140000 tonnes, and in 2000 A.D. the production will be around 240000 tonnes.
Even though according to official classification, cashew processing is a traditional industry, it has a history of only half a century. Commercial processing started in the late twenties and was almost concentrated in the District of Quilon in Kerala. Till the mid sixties nearly 90% of the total world exports of cashew kernels was accounted for by these factories in Quilon.

Export of a few tonnes of kernels to the north American Market in the twenties may indeed be said to have laid the foundation of the processing industry. The growing demand for kernels coupled with the geographical advantages it had, was the favourable factor for the rapid growth of the cashew processing industry. According to the enumeration done in 1972 by the cashew corporation of India there were about 390 factories in the country with more than 50% of them located in Quilon District of Kerala.

The importance of the cashew processing industry to the economy of Kerala is three fold. It gives employment to about 1.5 lakh people of whom 94% are women, and it provides a substantial income to the processors as well as the growers and in addition it gives to the State Exchequer considerable amount of revenue.
The factories in Kerala have a total processing capacity of three to four lakh tonnes of raw nuts annually, built up on the imports from the East African Countries. The supply of raw nuts, required for processing has fallen for short of the requirement for full use of the capacity in recent years. The inadequacy of raw nuts has resulted in the curtailment of the days of employment for the large number of workers dependent on cashew processing for their livelihood, nevertheless, since cashew processing requires very little fixed capital, profits are high and various administrative regulations have provided incentive for the creation of additional capacity, such expansion has proceeded along with growing underutilisation of capacity and severe unemployment of labour, within the existing, factories.

The processing of cashew in the state is a highly labour intensive activity. The processing technique in Kerala is inimitable and not amenable to machines. Indeed factory production is merely a systematic co-ordination of a number of stages in manual processing. Processing can be broadly classified into the following operations.

**ROASTING**

The raw nuts are roasted to make the shell brittle and to facilitate the extraction of the kernel. The roasting process involves soaking the nuts in water, initially raising
the moisture content of the kernel to restrict the risk of scorching during the process, as well as making it more flexible and less liable to breakage. The raw nuts are sprinkled with water and allowed to remain in moist condition for 24 to 48 hours. This step is known as conditioning. The optimum moisture level at the end of conditioning is reported to be 15 to 25%. The two important points to be taken care of during conditioning are:

1. the water does not seep through the brown tests;

2. the water should be free from iron contamination.

Iron contamination in the water interact with polyphenolic materials of the tests and the resultant bluish black complex may give patches on the white kernel.

The earliest process was the pan roasting wherein the nuts are heated on a metal pan over an open fire. Due to the heat and slight charring the shells become brittle. Pan roasting is not followed in organised sectors of the industries. The two important methods of processing now adopted are:
Drum roasting.

Oil Bath Roasting.

**DRUM ROASTING:**

The nuts are fed into a rotating red-hot drum which ignites the shell portion of the nut and the ignition starts. The drum maintains its temperature because of the burning of the oil, oozing out of the nuts. The drum is kept in rotation for about 2 to 4 minutes. The roasted nuts which are still burning are covered with wood ash to absorb the oil on the surface. The rate of shelling and out! turn of whole kernels are very high in this method. However the main disadvantage is the loss of CNSL which has a very good export potential. In addition there will be considerable heat and intolerable fumes in the vicinity of this operation.

**OIL BATH ROASTING:**

The conditioned raw nuts are passed for 1 to 3 minutes through a bath of heated cashew nut shell oil maintained at a temperature of 190 – 200°C by means of screw or belt conveyor. The vessel is embedded in brick work and heated by a furnace which uses spent shells as fuel. During the roasting the shell gets heated and call walls get separated releasing oil into the bath.
As the level rises the oil is recovered by continuous overflow arrangement. The roasted nuts are then conveyed into a centrifuge where the residual liquid clinging to the surface of the shell is removed by centrifuging. The roasted nuts are mixed with wood ash and sent for shelling, the balance of oil contained in the shell is subsequently obtained through expeller method and by solvent extraction method. This method is fairly automatic and the technique followed in different factories varies to some extent with regard to temperature and time of roasting. However a small percentage of kernels obtained through oil bath process gets scorched and hence do not compare favourably with the white wholes obtained through the drum roasting method. Despite, this, the extraction of CNSL more than adequately compensate the loss due to the minor decline in the quality of kernels.

In addition to the above two methods in some places only a mild roasting is carried out and shelled by hand & leg shelling machines. In some places, where conventional roasting is prevalent, nuts are exposed to intense sun and the well dried nuts are hand shelled. In this method the complete CNSL remains in the shell and which is later recovered by heating the shells in kilns.
SHELLING:

The second stage in the processing of cashew nut comprises of shelling operations. The nuts after roasting are shelled manually except in some units where hand and leg operated shelling machine are used. The manual shelling is an operation which required some amount of dexterity. The nuts are knocked two, three times on each of the long edge by wooden mallets, taking care to see that the whole kernels are released without damage or breakage as far as possible. Such operations are carried on generally by women workers who are required to contribute a basic level of output every day. The wages paid to such workers are generally on their cut turn of whole kernels, which is 7 Kg - 10 Kg per 8 hour working days, wages being denied in respect of shelled broken kernels to ensure optimum efforts on the part of the workers and a certain degree of skill in their effort.

HEATING (DRIYING), COOLING & PEELING:

After the Kernels are removed from the shells, they have to be dried to reduce moisture and to loosen the adhering testa. To facilitate the removal of the testa, the kernels are heated in a bormah, to the
required temperature. The dried kernels after removal from the bormah are kept aside for one or two days to enable them to absorb some moisture from the atmosphere.

Peeling is the operation of removal of the testa from the kernels. The skin can be loosened from the kernels by the drying which enables easy peeling off. The kernels are then peeled manually. The testa has been found to be an excellent source of tannin.

**GRADING:**

The next stage in the processing is the grading of kernels on the basis of specifications for exportable grades. There are 25 approved exportable grades depending on colour, size whether wholes or in pieces, on the basis of visual characteristics. The wholes are again size graded on the basis of the number of kernels per one pound. Almost all grading operations, are done manually.

**PACKING:**

The graded kernels are then packed in 25 lb (nett) tins from which the air is removed and replaced with carbon-di-oxide gas to prevent infestation of
kernels. The tins are packed two in a carton. The nuts are put to quality control tests on a random basis before they finally leave the shores of the country.

For nearly half a century this processing industry was under the monopoly of the private processors. The competition among them brought the traditional industry to the brink of total fragmentation, but the Government of Kerala came forward and put a keel of its own processing industry in the non-capitalistic path of industrialisation.
The K.S.C.D.C. was set up in 1970 as a Public Sector Undertaking to combat the ills of the industry and put it back on its feet without in any way being a competitor to the innumerable private sector units saddled with their problems which had its repercussions on the hapless workers who have the least mobility of labour.

The birth of the unit with the help of the Central and State Government was a compulsive one, since it aimed at infusing new life and vigour into a highly labour intensive and rather moribund industry employing lakhs of workers.

The growth of the K.S.C.D.C. was phenomenal. Starting with 3 factories in 1970, the K.S.C.D.C. at present runs 34 major cashew factories employing about 36000 workers and staff. From 1975 onwards the K.S.C.D.C. continues to be the biggest processor and exporter of cashew nuts in the whole of India. From the point of view of employment it is the biggest public sector undertaking in South India. Accounting for about a quarter of the total processing capacity in Kerala, the K.S.C.D.C. has attained a commanding position in the
field of processing. The President's merit
Certificate for outstanding expert performance was
awarded to it for 3 years. This honour is a factual
recognition of the unmistakable trend of the progressive
expansion and consolidation of the Public Sector in the
field of Cashew Processing and Exports.

The factors that paved the way for the
remarkable growth of the K.S.C.D.C. are the concerted
demand of the organised working class in Kerala for
the expansion of the Public Sector in Cashew Industry,
the effective support of overwhelming sections of the
public, the central Trade Unions, all Political Parties,
the State Legislature, the State as well as the Central
Government unhesitating co-operation of its workers and
staff and the timely financial assistance and guidance
from the State Government.

**ROLE OF THE K.S.C.D.C.**

More important than the rate of growth is the
progressive role of the K.S.C.D.C. in the field of
Cashew Processing. This was borne out by the significant
changes which took place in the cashew industry of Kerala
in the recent past.
1 The K.S.C.D.C. fought hand in hand with the Cashew Workers and State Government for the welfare of the workers and of the industry in general. It was first in the field to oppose open General Licence for import of nuts and for the establishment of a new policy of rawnut allocation to the processing units based on the number of workers employed and prohibition of unauthorised diversion of allotted nuts from one factory to another.

2 The K.S.C.D.C. which has implemented the minimum wages laid down by the State Government which were deemed over much by certain interests has proved that the minimum wages need not in any way affect outputs and reasonable profits.

3 The K.S.C.D.C.'s willingness to take over factories of the recalcitrant private processors has considerably strengthened the position of the cashew workers even in the private factories.

4 The systematic increase in the rate of bonus and betterment in the service conditions, fringe benefits, Minimum Wages, D.A., Leave Facilities, P.F., Gratuity etc., of the workers of the K.S.C.D.C. are fast catching up in the private sector units also.
Another pace setting activity of the unit has been its management policy which had led to cordial industrial relations. There are multi-tired negotiating forums starting from factory level, in which problems arising are thrashed out and finally put, if needed to higher forums and finally to the sub-committee of the Board of Directors, in which the labour force is fully represented.

The management set up is unique. The predominant number of members on the Board are representatives of accredited trade union’s in the industry. This has contributed largely to providing a congenial climate for harmonious industrial relations.

It would be desirable if measures are taken to ensure economical working of the factories through reduction in overall costs, especially in the backdrop of falling cashew nut shell liquid prices. Processing factories should examine the feasibility of introducing semi-mechanised processing in cashew factories to improve the overall profitability of the industry in consultation with their unions.
The State Government, in co-ordination with the Central Government, should take immediate steps to examine the prospects of setting up industries engaged in processing the by-products of cashew industry. It should also examine the scope for the establishment of industries engaged in the processing of cashew apples.
Processing of Cashew nuts in Kenya is mechanical. The raw nuts are first fed into a set of mechanical units for cleaning after which they are separated into nuts of three sizes mechanically as large, medium, and small nuts. These nuts are then conveyed into three different hoppers according to calibrated sizes. After this they pass through washing cylinders and later to a storage area for humidification to increase the moisture content of the kernels.

The second stage comprises of roasting of raw nuts. Roasting is done through oil bath maintained at a temperature of about 200°C. The nuts are subsequently discharged into a centrifuge to extract excess oil. The nuts obtained from the centrifuge are then cooled and conveyed to storage hoppers where they rest for at least 12 hours. The next stage consists of shelling and detachment of shells mechanically. A machine shells about 90 nuts per minute, roughly 20 kgs. per hour. The nuts discharged from the machines are fed into a group of separation benches; from there on to a sorting conveyor. The kernels are placed into trays and then on to trolleys for the subsequent weighing.
The kernels placed on the trellies are then taken for drying. They are subsequently taken for mechanical peeling. The presence of an electronic colour sorter enables rejection of kernels not fully peeled. The peeled kernels are then graded according to counts and then packed in cans filled with carbon-di-oxide before they are finally marketed.

**PROCESSING IN BRAZIL**

Cashew nut processing in Brazil is semi mechanised, occupying a position between the almost completely manual practices in India and the mechanical processing techniques in East Africa.

The processing consists first of cleaning the raw nuts followed by their being graded into three sizes, small, medium and large. This is necessary because the nuts are autoclaved to soften the shell and processing by size category prevents scorching. In addition the manual shelling machines are also calibrated to three categories, according to their size. Removal of the shell is done by a simple manual cutting apparatus mounted on a wooden work bench. If the cutting apparatus function’s properly and the operator is skilled a total of 35–40 Kgs. of nuts can be shelled in an 8 hour shift. To protect their hands from the
caustic shell liquid, the operators dip them into a pan of vegetable oil as they work. This semi-mechanical system of shelling has some major drawbacks. Firstly, broken kernels are easily exposed directly to the shell liquid which is on the cutter and the work table. Contact with the liquid discolours and affects the taste of the kernel, the cutting apparatus are subject to frequent breakdowns.

After the shell is removed the kernels are heated and then cooled to loosen the testa and facilitate its removal. Once cooled, the kernels are placed in a perforated receptacle where steam jets from a branched manifold removes the skin.

The next stage is grading into their respective sizes. This is done mechanically and manually. The kernels are then packed into air tight cans.

In Brazilian Cashew Processing, women typically perform the shelling, and Grading operations, while men handle the auto claving, removal of the testa and packing.

In Brazil, the shell liquid is recovered by processing the shells after the kernels have been removed. The shell oil is extracted in a single operation by crushing the shells and mechanically extracting the oil.
The cashew industry of Kerala has all along been facing a number of problems. The most important among these had been the total inadequacy of raw nuts. From the very beginning the industry had been depending mainly on the imported raw nuts and because of the free availability of imported raw nuts the indigenous development of cashew cultivation has been hampered. The political and organisational changes in the East African Countries developed their own cashew industries more as a matter of deliberate policy than as a sound economic proposition and this resulted in the drying up of sources of imported raw nuts. To add more to the problem China and Brazil have started buying raw nuts and the competition from other nuts like Walnuts and Almonds in the International markets put the cashew industry in a difficult position.

The cashew industry of Kerala was in the clutches of the private processors for the last half a century. The growing competition among them, absence of long term development policies, rash readme activities to obtain more profits, and the evil practices of the private processors paved the way for the setting up of various public sector undertaking. To stabilize the price of raw nuts, for the effective procurement operation,
to effect equitable distribution and processing of raw nuts, the C.C.I., the Kerala State Cashew Marketing Federation, and the Kerala State Cashew Development Corporation came into existence.

The entry of the C.C.I. as the sole importer of raw nuts and their canalisation policy which ensured equitable distribution of nuts among the eligible processing factories were beneficial to the Kerala Processing Industry. About 80% of the imported nuts were allocated to these factories, since most of the factories were located in Kerala at the time of canalisation. Though the C.C.I. helped to stabilize the prices of raw nuts, the procedures adopted by it for stabilizing the price coupled with the changes that took place in the supplying countries inhibited the flow of imports. In such a situation the Government of India on the recommendation of the C.C.I. and with the pressure exerted by the private processors announced partial decanalisation in 1979, which was followed by complete decanalisation in 1981.

The decanalisation policies, both partial and complete, made it possible for actual users and export houses to import raw nuts against license on condition that atleast 50% of the quantity imported is offered to the C.C.I. and the rest could be processed anywhere.
This relaxation in the policy allowed the processors to import raw nuts directly and helped them to divert more than 50% of the imported raw nuts for processing outside the state in areas where the wage rates are lower. The new import policies also made it much easier for the processors to organise smuggling. The imported raw nuts were taken out, under the pretext that they were allotments made by the C.C.I. to factories outside Kerala and they were then substituted by equivalent quantities of raw nuts purchased from the production within Kerala in order to satisfy the stipulated export requirements.

To ensure fair price for the produce by eliminating the exploitation of middle men, the Kerala Government appointed the K.S.C.M.F. as the Government agency for the monopoly procurement of cashew. The absence of proper pricing policy for raw nuts, lack of long term strategy for the procurement of nuts, belated entry of the federation into the area of procurement operation, various legal battles between the Government and the processors to impose and to squash the ordinances issued by the Government under different circumstances and the limitations of the K.S.C.M.F. as a Government agency were partially responsible for the migration of the industry.
The setting up of the K.S.C.D.C. by the State Government in 1970, was to protect the interest of the cashew workers in the state and to salvage the industry. The K.S.C.D.C. helped the workers by obtaining for them minimum wages, better working conditions and various fringe benefits which were not given earlier by the private processors. The K.S.C.D.C's take over of the factories of the recalcitrant private processors strengthened the position of the cashew workers and at the same time weakened the entrepreneurial ability of the processors.

The C.C.I.'s decanalisation policy, the loopholes in the procurement operation, the price fixation policy of the K.S.C.M.F. and the K.S.C.D.C.'s challenge in all the levels of competition in the cashew industry in Kerala to the processors made the way easy for the migration of the industry from Kerala.

The introduction of the statutory minimum wages in the cashew industry in Kerala and its revisions in various years paved the way for the shifting of the industry to the neighbouring states where wage rates are deplorably low and encouraged clandestine processing within the state itself.
Only low level of technology being involved, the profits of the industry depend on the exploitation of labour and the speculative buying of raw nuts and disposal of kernels. The Entrepreneurs in Kerala, having limitations to their ability to influence and to have a control over prices, their profitability depends more on the cost of conversion, a major of which is the cost of labour. A majority of the companies in cashew processing and exporting, as much as 91% in 1979 were either proprietary or partnership firms. Exploitation of labour was a major factor in their profitability. They were prone to use every possible technique to avoid paying even their statutory obligations. It is not necessary to catalogue the sharp practices employed by the entrepreneurs both in trade as well as in manufacturing.

Militant Trade Unionism was a natural off shoot. In the peculiar situation of Kerala, political parties with strong working class support, have a major influence on government decision making. Therefore, as a result of the large number of struggles for wage increases wage levels in the cashew industry have been steadily increasing. Between 1953 and 1973 there has been a nearly 7 fold increase in the wage rates.
The normal strategy of the entrepreneurs to meet such increase in wage, will be to introduce technological innovations to improve productivity on the one hand and diversification into other lines of business on the other. For a variety of reasons, the Government policies being one of them, there has been no significant efforts to introduce innovations and increase labour productivity. There has also been no major efforts at diversification.

The strategy of the industry to meet the threat of high labour costs was to evade the law of minimum wages by closing down the factories and having the processing done in the cottages of workers. However, because of the Government enforcement machinery this became increasingly difficult. Therefore they adopted the alternative strategy of shifting their operation to the neighbouring states where the enforcement of minimum wages had not been as strict as in Kerala. As a result half the total quantity of nuts available for processing in Kerala was diverted to places outside the State and the cashew workers in Kerala have been loosing 2/3rd of the working days yearly.
On assessing the extent of shifting of cashew processing to the neighbouring states mainly Tamil Nadu, from Kerala it appears that this diversion took place mainly after 1967 when cottage processing was banned in Kerala. The following table shows the resultant increase in the number of factories in the neighbouring states of Kerala.

**TABLE - 16.1**

**GROWTH IN NUMBER OF PROCESSING FACTORIES**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>KERALA</td>
<td>170</td>
<td>211</td>
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<td>214</td>
</tr>
<tr>
<td>TAMIL NADU</td>
<td></td>
<td>12</td>
<td>107</td>
<td>308</td>
</tr>
<tr>
<td>KARNATAKA</td>
<td></td>
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<td>8</td>
<td>13</td>
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<td></td>
<td>50</td>
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<td>37</td>
</tr>
<tr>
<td>MAHARASHTRA</td>
<td></td>
<td>8</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>GOA</td>
<td></td>
<td>5</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>170</td>
<td>273</td>
<td>390</td>
<td>600</td>
</tr>
</tbody>
</table>

*Source - C.C.I. Limited, till 1972.


Report of the Cashew Enquiry Committee.*
Between 1967 and 1977 the number of factories in Tamil Nadu, in Kanyakumari District, adjacent to Kerala, increased 20 times, the quantity of nuts processed increased nearly 7 times and the number of workers 12 times. The process of shifting accelerated further after 1975 when the minimum wages were revised last.
SMUGGLING

FACTORS THAT INFLUENCED SMUGGLING, CENTRES OF SMUGGLING, VARIOUS TECHNIQUES ADOPTED BY SMUGGLERS AND SUGGESTIONS.

Smuggling of cashew nuts started as early as in the Seventies. The setting up of various Government agencies for import, procurement, distribution and processing and their various policies reduced the profitability of the business and thus the private processors were forced to shift the industry to areas in the neighbouring states where the atmosphere was favourable. The loop-holes in the policies of the Government agencies helped them to openly divert the raw nuts from Kerala to such places. Things have come to such a pass that factories in Tamil Nadu cannot work without the raw nuts smuggled out from Kerala. The number of licensed processing units in Tamil Nadu have been growing from year to year, while that in other southern states have been static. The private processors in Tamil Nadu employ various techniques to get the maximum quantity of raw nuts out of Kerala, by offering high prices, thereby providing additional incentives for smuggling. Banning the movement of raw nuts to areas outside the state and deploying the police to watch its movements have hardly been able to contain the flow of raw nuts to other states.
Despite the effective arrangements check posts, Mobile Squads, Vigilance Committee's - Smuggling takes place through scheduled and unscheduled routes of the hill tracks and forest along the border areas of the neighbouring states.

The smuggling activity has spawned a new class of operator, who makes an easy and fast income on every kilo of raw nuts pushed across the state borders. The smuggling of raw nuts has reached such a state that even the consignment of raw nuts despatched by the marketing federation to the Government owned K.S.C.D.C. was recovered from the godowns of a private processor in 1981. Such instances of wheeling and dealing, sometimes with the connivance, overt or covert, of the powers that be are however many.

Smuggling activities are mainly concentrated in the northern and southern part of Kerala. In the Northern Region, Cannanore is one of the major cashew producing areas and it is through this region, that the major part of smuggling takes place. The nuts are smuggled out via Kasargod in Cannanore District to Coorg in Karnataka State. Coorg has become a smugglers' paradise and the commodity traded is cashew. In the absence of streamlined machinery for procurement it
is only natural for the cultivators to try to reach the nearest market and fetch a handsome price. Due to the lack of enough official collection depots of the federation at vantage points, farmers from the Eastern parts of Taliparambu will have to travel more than 100 Kms, and change a couple of buses to hand over the nuts to the federation, that too for a far lower price, than what the agents of the smugglers offer. The smugglers' agents collect cashew nuts in small quantities from house to house at prices far above the one fixed by the Government. The process is going on in all the parts of the producing districts. These unauthorised mobile depots pay higher prices and that too at the door of the farmer. Most of the cashew collected in this mode from Cannanore and its neighbouring districts will get to Nakoottam, a border town which has become an important centre in cashew smuggling. Nakoottam is only 2 Kms, away from Kottupuzha bridge which connects Kerala and Karnataka State. Due to the belated entry of the K.S.C.M.F., smugglers are smuggling out, the complete raw nuts of the first harvest of around 10000 tonnes from Cannanore district through various points between Majeswaran and Kottupuzha.
Smuggling takes place also through the Eastern Ghats from Navali to Kottupuzha, Iritty, Analam, Payam, Kottiyeer, Kelakkam, Kanicher, Peravoor, Muzhakumnu, Punnadu, Krumathadam, Tellisherry, Koottuparambu, Mattenoor, Thaliparamba and Kambamadu are some of the major points through which cashew is being smuggled out of the state in the northern region.

The smugglers use various techniques to smuggle the nuts from the state. The smugglers adopt ingenious ways to evade the authorities. Cashew is being smuggled out in Sunny bags, rice carriers, oil tins, milk cans, ice cream boxes, suit cases, and through all types of transport vehicles including oil tankers. The velocity of the smuggling activities can be measured through the number of head lead workers engaged in this activity. Most of the head lead workers engaged are unemployed, which include women and child folk from the neighbouring places of Maleppuram and Pennani who take this opportunity to earn fast money. The average wage received varies from Rs. 50-100 per day.

After crossing many hurdles and greasing many palms the raw nuts reach Coorg to change hands for double the price than quoted at Cannanore. The Karnataka Government's attitude is encouraging for the
smugglers, enacting them to cut down the valuable forests and put up sheds for the storage of nuts. The Karnataka Forest Department stands to gain as they collect exorbitant charges Rs. 250/ for a 2 sq. Mtr. stall, - without any official receipts.

In the southern region, Quilon and Trivandrum districts, borders linking the state with Tamil Nadu, are the important centres through which cashew is smuggled out. The raw nuts from Quilon district reach Pulalur, Edamun, Ottakkal, Thenmala, and are smuggled out to Aryankavu an important centre. From there it is transported to the various processing factories in Tamil Nadu. The nuts are transported from these regions to Tamil Nadu, mostly by the trains of the southern Railway. The smugglers either take it along with them in the train or book the nuts are parcels with the contents in it mentioned as jack seeds, etc,. It is a pity that Quilon, an important centre of cashew processing which has 95% of the processing factories in the state are not able to work atleast two months in a year, and the nuts which would have helped the Quilon factories are smuggled out mainly by the agents of the Quilon processors who have set up factories in Tamil Nadu.
The techniques followed for smuggling nuts to the neighbouring states are the same both in the northern and southern regions. In the northern region the smugglers depend more on manual operations and road transport vehicles, but in the south it is mainly through the rail transport. Because of the curbs on the movement of raw nuts from the state, the processors in Quilon with the help of private parties have started smuggling even processed cashew kernels from the state, which is not prohibited. Private parties with the help of industrialists started hundreds of licenced and unlicenced cottage processing units in the important raw nut producing centres like Kadakkal, Anekal, Kottarakara, Kundara etc., and these nuts are smuggled out through Aryankavu, Bhagavathipuram, and Shencottah. The prevailing unemployment problem forced the workers to work for very low wages offered to them by the cottage processing units. These units and the agents are not only smuggling out the kernels but also a part of the revenue of the state and further worsen the situation of the industry and the position of the workers in the state.
From Trivandrum district the nuts are smuggled out to Tamil Nadu through Amarevilla, Arattukadavu, Kannankuzhi, Karakonam, Dhanuvasapuram, and Kunnamthukalu using the various techniques and all means of transport including water barges.

It is noticeable that all the processing factories in Tamil Nadu are situated only a few kms away from the Kerala State border which makes smuggling easier. It is a fact that 99% of the processors of Tamil Nadu are either processors or exporters from Kerala and a majority of the people engaged in the smuggling activities are also Keralites. Knowingly or unknowingly Keralites, both processors and smugglers, are responsible for the distintegration of the cashew industry in the State. Had not the experienced processors and big time smugglers indulged in this type of activities, the situation of the state would have been completely different.

In order to check the smuggling activities the Government should increase the punishment and penalties which now is very meagre under the Essential Commodities Act. A much more sincere and co-ordinated action of the police, revenue department,
sales tax department and marketing federation officials is inevitable. Foot-patrolling should be imposed on all the border areas where smuggling usually takes place. A public opinion should be created that smuggling of cashew nuts is a serious crime and those indulging in it are a curse to the society. The people should come forward and co-operate with the officials to check smuggling and save the cashew industry in the state, which is on the brink of extinction, and which was once the pride of the state and which put Kerala on the international map.
Trade Unionism in the cashew industry in Kerala has a long history starting in the thirties and ranging from the economic protection it provides to the workers, to the migration of the industry. In the early stages of the industry, working conditions in the factories were miserable and inhuman and the disorganised workers were under the heels of their employers. In order to equalise the bargaining power of labour and capital and to establish uniform, minimum standard of wages, working hours and working conditions and to establish their status in the society the workers organised together and the first trade union among cashew workers was formed in 1939 - the All Travancore Cashew Workers Union, which had political affiliation with the then communist party of India.

In the years that followed each major, minor, regional political parties started organising workers in the cashew industry as part of a strategy for countering the ideological and organisational weight and in later years all the major unions got further
split into two or more unions. Such fragmentation and proliferation of unions was a corollary of the broader political developments in the State. The cashew workers are organised today under:

1. All Kerala Cashew Factory Workers Federation - UTUC (S) Revolutionary Socialist Party (S)

2. All Kerala Cashew Factory Workers Federation - UTUC (B) Revolutionary Socialist Party (B)

3. Kerala Cashew Workers Centre - CITU Communist Party of India (Marxist)

4. Kasuvandi Thozhilalli Kendra Council - AITUC Communist Party of India

5. Kerala Cashew Workers Congress - INTUC

6. Kasuvandi Thozhilalli Congress - Indian National Congress

7. K.T.U.C. - Kerala Congress (M)

8. K.T.U.C. - Kerala Congress (J)

9. S.T.U. - Indian Union Muslim League

10. OTHERS.

The first six unions are recognised by the Kerala State Cashew Development Corporation.
These unions have done a lot to the workers for lowering the hours of work, payment of bonus, better terms and conditions of work, fixation of wages, payment of D.A., etc., In order to implement all these, and to revise their demands according to present standards, they were engaged in a constant struggle with the employers. The employers adopted a variety of methods to evade payment of minimum wages and other non-wage benefits. The methods resorted to included reducing the quantity of raw nuts supplied to each worker by recruiting more workers, thereby asking them ineligible for the payment of D.A., under weighing their output, false recording of the number of days worked, thus denying the advantages of P.F., E.S.I., Maternity benefits, etc., and keeping several workers on rolls as apprentices. Often they closed down the factories on grounds of shortage of raw nuts or some other pretext, informally allowed the workers to work in the factories, encouraged cottage processing at half the minimum wage rates with no other benefits.

On the other hand the pressures generated by the raw nut shortage and strong trade union movement with active support from the state government
affected the relative bargaining power of labour and capital within the industry, consequently migration took place.

WEAKNESS OF THE TRADE UNIONS:

1 NOT MUCH WORK EXCEPT TO ORGANISE STRIKES

The trade unions in Cashew Industry is often looked upon as strike committee's and the leaders are all the time thinking about organising strikes. Trade Unions have been an arena for the struggle of the conflicting political ideologies. It is common that all promises are made and strikes are arranged only to serve the selfish aim's of the political parties. Every year there will be a number of strikes by different parties for the same demands. Illiteracy and outside leadership are the deficiencies.

2 ABSENCE OF UNITY:

There is no unity in the trade union movement of the cashew industry. In each factory there may be three or four unions controlled by different parties. If one declares a strike, the other may even go to the extent of aiding the employers. In most of the cases,
the attitude of the employers has been found to be hostile to the organisation of trade unions. They have been setting up rival trade unions, employing spies, goondas, and strike breakers to sabotage the union activities.

In order to stabilize the industry in Kerala, the processors, trade unions and the workers have to co-operate. Workers must come to accept private enterprise not as a necessary evil, but as an affirmative good. 25.

.......

Japanese trade unions do not look upon their role as one of permanent opposition to management as elsewhere and at the same they are not an instrument of the management. They preserve their own dignity, independence and self respect without creating hostility. Their basic approach to any problem is as follows:

1. Japanese unions appreciate more fully the fact that each worker wears at least two masks, one that of the producer and another that of the consumer. When a group of workers goes on strike it may hurt itself as a consumer and further the advantage sought may be at the expense of other workers.

2. The unions are keenly aware of the fact that Japan is not endowed with rich natural resources and therefore ultimately her affluence depends upon her productive efficiency and her competitive position in the world market.

3 Japanese unions realise fully that management and unions have common long term interests in higher productivity.

4 Ultimately the interests of the workers, i.e., wages, welfare, facilities, security of employment etc., depend upon the prosperity of the nation and the firm. What hampers productivity, ultimately harms the workers themselves. A strong trade union pre-supposes an efficient and affluent firm. In a firm on the verge of liquidation, the trade union itself is on the verge of disappearance.

5 Union leaders as well as Managers share the conviction that a real mud-slinging stand up fight would not be ultimately beneficial to anyone.

6 Japanese trade unions attach greater importance to harmony, efficiency and order rather than to individual dignity, freedom and equality. They respect managerial authority.

7 They feel that co-operation with management will be ultimately more beneficial to workers. They look upon themselves as collaborators of management on a footing of equality.
The unions accept the need for hard work, higher productivity, pride in skill and high quality of goods.

In Japan, unions usually launch their offensive for new wage claims at the end of March every year. If the negotiations fail, there may be generally a strike for a day or two. The flags and the red arm bands appear in the pre-strike evening rally. They do not try to humiliate management personnel. Their fight is against capital. The management may then make a fresh offer which is accepted and the strike ends and production resumes. Strikes are mostly symbolic. The trade unions on the whole show a great sense of responsibility and statesmanship of a high order.

**INDUSTRIAL RELATIONS OF BRITISH, AMERICAN AND JAPANESE WORKERS AND THEIR ATTITUDE TOWARDS THE FIRM**

In England Trade Unions are organised on the basis of Craft Guilds. Social security schemes cover all the working classes. Apart from the agitational aspect, trade unions have well developed constructive
side. Trade union leadership has emerged from amongst the workers themselves. Dismissals and Victimization of trade union workers seldom take place. The worker values his independence and wears his own uniform and may also own some of the tools. He is individualistic and looks upon his work as a contractual obligation towards the firm.

The American Factory seems almost like an armed camp. The foreman stands guard to make sure that workers do not slack off. The workers grumble at the foreman and the foremen are cross with the workers.

On the contrary, Japanese workers are proud of their firm and work even without the foremen watching. They do not hate the firm. On holidays the workers like to wear the badge of the firm. Japanese management too shows genuine concern for the welfare of the workers.

We in India have been facing a grave situation on the Industrial relations' front. Industrial conflict in India is endemic and unpredictable. There are no permanent solutions nor any instant cures for this.
4 12 0 

COMPARATIVE STUDY

OF COLLECTION & MARKETING OF RAW NUTS IN
KERALA, TAMIL NADU & KARNATAKA

Cashew trees flower in the month of February
and most of the nuts mature in the month of March
and April, though collection of nuts continues till
the end of May. During these months, the nuts will
have to be picked up 2 or 3 times every day as the
ripened apples along with the nuts keep dropping.
Continuous close supervision of cashew gardens is also
then required to check pilferage. The attention given
to primary collection of nuts has therefore been
dependent on the cost of supervision and collection
in relation to the price offered for nuts. This
tends to vary with the size of the cashew gardens.
The field investigations in Kerala, Tamil Nadu and
Karnataka reveals the following:

The method employed for primary collection
seems to differ with the size of the area under cashew
and the economic status of the growers. Three systems
were found to be widely practised:
1 through family labour.
2 through wage labour.
3 through tenants to whom the cashew gardens are leased out.

A large numbers of small growers with holdings of less than 2 hectares, collect the raw nuts themselves, directly from the holdings for sale to the local merchants. Collection is made by family labour, mainly women and children who go around the garden in the early hours of the morning and in the late afternoon. Since the holdings are small this group of growers do not have to incur any expenditure for checking pilferage.

Those who have holdings between 2 - 5 hectares in size generally engage wage labour either in daily wages or piece rate basis. Such labour consists mainly of children in the age group of 10 - 15 years. The wages are paid depending on the age of the worker and the acquired skill in collection. There is however an additional element of cost of collection to be taken into account in this size range of holdings i.e., cost of supervision of the gardens for checking pilferage. Such supervision is done either by family members or by employing some one for the period of harvesting.
The size group of 5 hectares and above is of crucial importance both in terms of quantity of nuts produced and the problems posed in the collection of nuts. The third method of primary collection through tenants to whom the gardens are leased out, appears to be widely resorted to in this size group. Even though it is much less remunerative from the point of view of the grower. The main reason is that, when the holdings are of large size, effective methods of guarding the gardens during the harvesting period lasting over several months become difficult, especially when there is no fencing. In such a situation employment of wage labour for direct collection can also be risky as no proper checking or accounting of the nuts collected could be possible.

The leasing of such land appears to be usually done by landless farmers, small cultivators or petty traders in the vicinity. The entire area would thus be leased out to several sub-collectors. While such persons should enter into lease agreements with the land owner, they hardly possess any financial resources to pay the lease amount in advance. Therefore a system has emerged, whereby the local trader would advance money to such prospective collectors at a price fixed by him for the produce. Because of these two factors, relative high cost of collection and supervision
that would have been incurred by the grower if he was to organise direct collection and, the two layers of intermediation, involved in the leasing arrangements, the rent commanded by the cashew gardens tend to be low. The cost of collection and supervision are relatively low in small and medium holdings on account of the feasibility of organising direct collection. But in the case of large plantations, primary collection proved to be costly and the scope for pilferage is considerable.

In Tamil Nadu and Karnataka, the system of collection of nuts are almost the same as in Kerala. The crop is gathered from the ground after the apple is allowed to drop down naturally with the nut. The fruits are collected every day and the nuts are separated. Allowing the fruit to fall by itself ensures a fully matured nut. The nuts gathered are sun dried for 2.5, days before storing.

In Tamil Nadu and Karnataka, the cost of supervision and pilferage are very low. In holdings less than 5 hectares collection costs are very little as the entire work of collection is done by the family members of the growers. In holdings more than 5 hectares leasing out is not so common, and the nuts
are collected by engaging child as well as adult labour for a very low payment. Supervision is done either by the grower or his family members or by employing some one only for the period of harvesting.

The system of marketing of cashew nuts seems to differ from one cashew growing state to another. Kerala which produces the largest quantity of raw nuts in India had a dual system of marketing. Till the introduction of a Government procurement programme in 1976, the system was marked by two to three layers of inter mediation by middle men in the northern districts where cashew growing is concentrated, and by a system of direct sale in the local market by the growers in the southern districts.

In the northern part, the representatives of the processors establish contacts with big merchants in the different market centres well before the arrival of the marketing season extending from March to May. The big merchants in turn, make advance payments to growers through their agents who are generally small traders or local merchants. Thus the grower consigns his entire produce to the agent well in advance of the harvest at prices expected to prevail
during the harvesting season. Another method of the system is the one in which the processors agents make payments in advance to merchants in the major marketing centres against proposed purchases to be made in the following weeks. The advances so made cover the entire value of the proposed purchases. The entire operation of collection and marketing of raw nuts was based on a three tier system, at the base are the collectors of raw nuts some of whom are growers themselves and others who have leased the cashew gardens and petty village shop keepers who buy and keep raw nuts. All these groups of people sell the raw nuts to the local merchants who in turn sell them to the big merchants. In the southern region of Kerala which accounts for a smaller proportion of the total output of the state, they mostly have holdings much smaller than those in the northern districts. They sell their produce to the agents of the processors who visit the market centres and the raw nuts are purchased on cash basis.

While the collection of raw nuts at the field level continues more or less on the same lines as mentioned earlier, the role of the traders has been sought to be eliminated in Kerala since the introduction of the monopoly procurement programme by the Government in 1976.
In Tamil Nadu also the system of direct purchase either from market centres or from growers exists. Another system of marketing of raw cashew in Tamil Nadu is through the regulated markets. The Government of Tamil Nadu, in order to streamline the marketing system of cashew and to increase the producers share in the consumers price by regulating the costs and margins of different market services and functionaries brought cashew as a notified crop under the Agricultural Produce Market Act in that state. Cashew being a notified commodity, significant quantities are marketed through more than 20 regulated markets in the different parts of the state.

These regulated markets are meant for particular products. The management of such a market is entrusted to a market committee which is set up by the Government for a definite period. The committee represents different interests like state government, local bodies, traders, brokers or commission agents and farmers, and thus can take care of almost all the viewpoints in making decisions. It issues licenses to the functionaries of the market and fixes charges for weighing, brokerage, etc. Arrangements are also made for providing reliable and up to date market information.
The regulated markets receive cashew nuts from producers. The produce of each seller is given a lot number and the lot is sold to the trader who offers the highest price provided, the seller agrees to the price. The nuts are disposed off in closed bid auction system.

Apart from Tamil Nadu, the other states where the system of regulated market exists are Maharashtra and Goa.

In Karnataka, Andhra Pradesh and Orissa the agents of the processors do visit the marketing centres for purchase of raw nuts. But in these states there is not much systematic collection of raw nuts, like those prevailing in Kerala and Tamil Nadu. In situations where growers' accessibility to market centres is limited due to distance and lack of modern transport, there is a possibility that a portion of the quantity of raw nuts does not reach the processing sector.
With regard to the price of the produce, except in a few cases as where regulated markets or direct sales exist, the producer is at the receiving end of the bargain in all the three states. However, the producer has of late been able to secure a higher price, if not a higher share of the market price as a result of the rise in the prices since 1973. The following table shows the trend in average wholesale prices for the period 1968 - 80 in the main marketing centres in the major cashew producing states of Karnataka, Kerala and Tamil Nadu, Maharashtra and Andhra Pradesh.
<table>
<thead>
<tr>
<th>YEAR</th>
<th>KERALA</th>
<th>KARNATAKA</th>
<th>TAMILNADU</th>
<th>MAHARASHTRA</th>
<th>ANDHRA PRADESH</th>
<th>GOA</th>
</tr>
</thead>
<tbody>
<tr>
<td>1968</td>
<td>136</td>
<td>113</td>
<td>144</td>
<td>142</td>
<td>190</td>
<td>138</td>
</tr>
<tr>
<td>1970</td>
<td>156</td>
<td>148</td>
<td>178</td>
<td>183</td>
<td>211</td>
<td>180</td>
</tr>
<tr>
<td>1972</td>
<td>181</td>
<td>168</td>
<td>201</td>
<td>183</td>
<td>193</td>
<td>160</td>
</tr>
<tr>
<td>1974</td>
<td>338</td>
<td>358</td>
<td>375</td>
<td>350</td>
<td>355</td>
<td>365</td>
</tr>
<tr>
<td>1976</td>
<td>233</td>
<td>249</td>
<td>313</td>
<td>300</td>
<td>325</td>
<td>310</td>
</tr>
<tr>
<td>1978</td>
<td>610</td>
<td>555</td>
<td>570</td>
<td>625</td>
<td>650</td>
<td>690</td>
</tr>
<tr>
<td>1980</td>
<td>600</td>
<td>763</td>
<td>764</td>
<td>810</td>
<td>795</td>
<td>765</td>
</tr>
</tbody>
</table>

* Source - The K.S.C.M.F. Ltd.

It can be seen from the table that till 1976 the prices in Karnataka were lower than those in Kerala, while in Tamil Nadu the prices were higher. In Tamil Nadu the nuts being traded through regulated markets seems to have been the reason for securing higher prices. However, the higher prices obtained with greater margin both in Karnataka and Tamil Nadu after 1976 were made...
possible because of the Government fixation of prices for the Monopoly Procurement. Over the period from 1968 - 80 the increase in the prices in the states has been considerable. By the end of 1973, the average wholesale price doubled in all the three states and in 1980 there has been a four fold increase in Kerala, more than five fold increase in Tamil Nadu and more than six fold increase in Karnataka.

Such an increase in prices acted as an incentive for increasing the availability of cashew. The long term impact is likely to be felt at a later stage only when growers take to extension of area under cashew in response to the increase in prices.
The processing of cashew in Kerala, Tamil Nadu, and Karnataka is a highly labour intensive activity. Indeed factory production is merely a systematic co-ordination of a number of stages in manual processing. Barring Mangalore where a certain degree of mechanisation has been introduced in the form of cutting apparatus for nuts, the industry in all the three states comprises mostly of women workers.

The technology of cashew processing involves very little investment in plant and machinery and electrical energy when compared with other industries. No major change in technology has been recorded since the inception of the industry except the change from open pan roasting, an unhygienic method that was in vogue in the early days of the industry to the present widely adopted method of drum roasting. It was only a small step forward. Oil bath roasting which has the additional advantage of obtaining the CNSL is adopted by only a few processors, presumably because the capital investment required for the adoption of that technology is nearly ten times the investment required for drum roasting.
The technology of cashew processing adopted is slightly different in all the three states.

The following charts show the various processing methods adopted in these states:

**CHART - 1**

**PROCESSING METHODS**

**KERALA - (QUILO)**

- RAW NUTS
  - Conditioning
  - OIL BATH ROASTING
  - HAND SHELLING

- SHELLS
  - BORMA DRYING
  - HAND PEELING

- TESTA
  - GRADING
  - PACKING
CHART - 2
PROCESSING METHODS
( KARANTAKA (M ANDALORE))

RAW NUTS

CONDITIONING

MILD ROASTING

SHELLING IN HAND & LEG
OPERATED MACHINE

SHELLS

EXPELLER

CNSEI

RESIDUE

BORMA DRYING

HAND PEELING

TESTA

GRADING

REHUMIDIFICATION

PACKING
CHART - 3

PROCESSING METHODS - TAMIL NADU (PEARUTI)

RAW NUTS

V

SUN DRYING

V

HAND SHELLING

V

SHELLS

V

BORMA DRYING

V

CNSL

V

HAND PEELING

V

KILNS

V

TESTA

V

GRADING

GRADING

V

RESIDUE

V

PACKING.
It can be seen from the charts that the processing after shelling is almost similar except for adoption of re-humidification in some factories in Mangalore (Karnataka). Shelling in general is done entirely by hand. The units in Mangalore (Karnataka) employ the modern techniques prevalent in India. Here the shelling gadget used, gives improved output per worker without affecting the yield of whole kernels. Another notable feature is the use of mild roasting and efficient extraction of CNSL by means of motor driven expellers. The technology employed in Panruti (T.N.) is comparatively less developed, its interesting feature being the removal of CNSL by kilns after shelling operations.

Because of the low level of technology the capital investment on machinery is confined mainly to the setting up of a roasting unit which is locally fabricated. A major share of the capital investment in Kerala, Tamil Nadu and Karnataka is on land and buildings to provide sufficient work space for the processing activity. Of the total investment in fixed capital in Kerala buildings accounts for 45% Plant and Machinery 32% and land 20%. In Karnataka, buildings account for 42%, Plant and Machinery 36% and land 20%.
Since there are no economies of scale, the size of factories varies considerably in Kerala and the annual capacity ranges from 100 tonnes to 2000 tonnes and the labour strength varies from 200 workers to more than 2000 workers. But in the case of Tamil Nadu and Karnataka, the annual capacity and the labour strength are much lower.

In the case of capital investment Kerala accounts more, since the factories were started earlier and almost all the factories are built as per the stipulations laid down by the Factories Act. In Karnataka, investment for the factories is not so much. But in Tamil Nadu the capital investment on factories is very little, due to the fact that land is comparatively cheap and the factories set up are not on the lines of those set up in Kerala. The Tamil Nadu factories are more on a temporary basis and that too not as per the specifications laid down in the factories Act.

The working capital is however of crucial importance to the processors of all the three states since it is required for the purchase of raw nuts and payment of wages. The share of wages itself comes to
between 50-60%. The organisation of the cashew processing industry in all the three states has to be looked at keeping in mind this crucial role of working capital.

Processing as such warranted only very little technical coordination and management in the factories and the social character of capital of a large number of factories in Kerala is either proprietary or of partnership firms. In Kerala more than 90% of the Processor/Exporter firms are either proprietary or partnership. In Kerala, 90% of the factories are owned by 7 or 8 business family groups. But the large number with separate legal status conceals the interconnections among these firms. These business families carry on, because of their economic power and considerable political weight. In Kerala, a few factories are owned by the Government, but in Tamil Nadu and Karnataka all the factories are either proprietary or partnership firms. There are no government processing factories, even though the Government has set up cashew development corporations, the reason being that the processing industry does not face any serious crisis like that which Kerala Industry is facing.
PROFITABILITY - COST OF PROCESSING IN KERALA, TAMIL NADU AND KARNATAKA.

The processing of Cashew is a very profitable business. The rates of gross profit seem to be considerably higher than in other major industries like coir manufacturing, cotton textiles and tea manufacturing in Kerala, Tamil Nadu and Karnataka. However the rate of profits of the industry used to vary from state to state and also from firm to firm, in each state. This was mainly because of the variations in the rates of wages paid.

In the case of Kerala, which pioneered the processing of cashew, the processors were able to secure very high rates of profit in the earlier days, which was made possible because of the abundance of skilled and unskilled labour and imported raw nuts, that too at very cheap rates. The processing expenses of a Kg of raw nut at the time was less than a Rupee. But with the advent of the seventies, the general shortage of raw nuts in the world, and the bargaining power of the cashew workers increased the processing cost of cashew. Meanwhile, the processors were vigorously trying to maintain their high levels of profit by pushing down the labour cost.
The shortage of raw nuts made the processors to obtain them at whatever prices they were being offered. The high prices and the severe competition for the scarce indigenous raw nuts; the difficulties in obtaining the imported raw nuts, the entry of the Kerala State Cashew Development Corporation in the field of processing and the imposition of the minimum wages and other non-wage benefits in their factories, the revision of these in the later years, increased the processing cost further and brought down the profit margin. The processing cost which was less than a rupee in the sixties reached to about four to five rupees in the eighties.

The following data shows the increase in processing cost of a ton of raw nuts in Kerala in 1974, 1975 and 1976.
# Table 20

## 4.13.1 Processing Cost of Raw Nuts/Tonne in 1974, 75, 76

<table>
<thead>
<tr>
<th>Items of Work</th>
<th>As on the end of 1974</th>
<th>After Imposition of Minimum wages in 1.9.1975</th>
<th>As on the end of 1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Nut Clearance Expenses</td>
<td>57.00</td>
<td>57.00</td>
<td>71.87</td>
</tr>
<tr>
<td>Wages and Benefits to Workers</td>
<td>695.50</td>
<td>1262.13</td>
<td>1338.75</td>
</tr>
<tr>
<td>Factory Salaries and Over-heads</td>
<td>68.37</td>
<td>22.87</td>
<td>224.75</td>
</tr>
<tr>
<td>Tin container, Label, Cartons, Strapping, Cess, etc.</td>
<td>306.75</td>
<td>306.75</td>
<td>257.00</td>
</tr>
<tr>
<td>Administrative Over-heads</td>
<td>23.75</td>
<td>28.75</td>
<td>69.25</td>
</tr>
<tr>
<td>Financial charges and depreciation</td>
<td>52.50</td>
<td>52.50</td>
<td>115.00</td>
</tr>
<tr>
<td>Shipping and forwarding</td>
<td>49.2</td>
<td>50.00</td>
<td>69.37</td>
</tr>
<tr>
<td><strong>Total Cost</strong></td>
<td><strong>1252.99</strong></td>
<td><strong>1850.00</strong></td>
<td><strong>2145.99</strong></td>
</tr>
<tr>
<td>Cost of processing 1 kg.</td>
<td>1.25</td>
<td>1.85</td>
<td>2.15</td>
</tr>
</tbody>
</table>

Compiled data, Source – Cashew – Page 126 CPCRI.
It can be seen from the above data that the cost of processing a ton of raw nuts which was $125/ in 1974 went up to $185/ in 1975 soon after the minimum wages was revised. The percentage of increase in the processing cost was nearly 45% between 1974 and 1975; thereafter the increase was between 7 to 10% annually. The above mentioned data gives the cost of processing, the material cost not being included. The cost of raw nuts in 1974 was on an average rate of $3.50 per Kg. in 1975 $3.75 and in 1978 $5.80.

The rate of recovery of kernels was on an average of 24% of different grades of kernels and that of cashew nut shell liquid about 15%. Average unit value for kernels in the New York Market in 1974 was US $ 1.35 per pound, in 1975 $ 1.29 and in 1976 $ 2.08. The average unit value of CNSL in 1974 was $ 2.37, in 1975 $ 2.49 and in 1976 $ 6.95 per Kg.

On the basis of these we can conclude that the private processors were making huge profits in the early days and as time went on it was coming down. In the case of the public sector undertaking in Kerala, i.e., K.S.C.D.C., they were making profits in the early stages, but later on started running at heavy loss.
The reasons were the shortage of raw nuts, both imported as well as indigenous the heavy liabilities in respect of payment of wages and other non-wage benefits. The rate of expenditure and profits of the KSCDC in 1977 and 1978 is given below:

**TABLE - 21**

<table>
<thead>
<tr>
<th>ITEMS</th>
<th>1977</th>
<th>1978</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of Materials</td>
<td>50.56</td>
<td>67.55</td>
</tr>
<tr>
<td>Wages</td>
<td>32.91</td>
<td>21.93</td>
</tr>
<tr>
<td><strong>MANUFACTURING COST</strong></td>
<td>83.47</td>
<td>89.48</td>
</tr>
<tr>
<td>Packing and Selling expenses</td>
<td>12.09</td>
<td>6.69</td>
</tr>
<tr>
<td>Interest &amp; Banking charges</td>
<td>0.86</td>
<td>1.84</td>
</tr>
<tr>
<td>Head Office over-heads</td>
<td>2.17</td>
<td>1.11</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>98.59</td>
<td>99.12</td>
</tr>
<tr>
<td>Net Profit before taxation</td>
<td>1.41</td>
<td>0.88</td>
</tr>
</tbody>
</table>

|                      | 100.00 | 100.00 |

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In the early eighties, the trend of the cashew processing industry in Kerala, both in the private as well as the public sector has been showing very low margin of profit. The KSCDC even after the diversification of its lines of business reached to a stage where its losses amounted to eleven times its paid up capital. But still the private processors managed to secure profits by employing labour on a cottage process basis whereby the workers surrender in advance their claims to Minimum Wages Rates.

TABLE - 22

A 15 3 WORKING COST LIST OF RAW CASHEW NUT

DATA BASED ON KERALA FACTORIES (PUBLIC & PRIVATE SECTOR)

RAW MATERIAL SOURCES - INDIGENOUS ONLY - 9 lb. 7/ kg.
APPROXIMATELY - BEST QUALITY (YIELDING 32 lbs WHOLE AND
2 lbs BROKENS) RATE OF RECOVERY - 24%.

<table>
<thead>
<tr>
<th>ITEM OF EXPENDITURE</th>
<th>1980</th>
<th>% AGE OF TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw nuts 9 lb 7/ per kg 7000</td>
<td></td>
<td>68.62</td>
</tr>
<tr>
<td>Purchase tax, Marginal expenses for surcharge, Commission on nuts processed, Incidental exp. 420</td>
<td>4.11</td>
<td></td>
</tr>
<tr>
<td>Transport to factory &amp; handling expenses on an average 6 lb. 1.05</td>
<td>7525</td>
<td>1.03</td>
</tr>
<tr>
<td>ITEMS OF EXPENDITURE</td>
<td>1980</td>
<td>% AGE OF TOTAL COST</td>
</tr>
<tr>
<td>----------------------</td>
<td>------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Labour - Salaries, Wages, Bonus, P.F., E.S.I., Labour Welfare, Gratuity @ 8 h. 136.25 per 100 Kgs.</td>
<td>1561</td>
<td>15.30</td>
</tr>
<tr>
<td>Factory expenses - Rent, Registration licence fee, Taxes, Electricity charges, Insurance, Fuel, Water charges, Repairs, Maintenance etc., @ 8 h. 15/</td>
<td>210</td>
<td>2.06</td>
</tr>
<tr>
<td>Establishment expenses: Administrative over-heads, Office Rent, Lighting, Depreciation of Office equipment, Salaries, Postages, Telegrams, Cables, Telephones, Telex, etc.</td>
<td>140</td>
<td>1.36</td>
</tr>
<tr>
<td>Cost of Packing: Tin containers, Labels, Cartons, Strapping, Cess, shipping, clearing and forwarding, fumigation (Providing for less of cartons, additional expenses, etc.).</td>
<td>420</td>
<td>4.11</td>
</tr>
<tr>
<td>Shipping and forwarding: Freight charges</td>
<td>280</td>
<td>2.74</td>
</tr>
<tr>
<td>Other contingencies excluding compensation for Unemployment</td>
<td>70</td>
<td>0.67</td>
</tr>
</tbody>
</table>

COST OF PROCESSING/TONNE 10206 100%

Cost of Processing of
1 ton of raw nuts (Excluding interest charges)
From the above data it can be seen that the total cost of processing 1 ton of raw nuts comes to about K 10206/ which includes cost of raw nuts of K. 7000/. The balance of K 3206/ is the processing cost for 1 ton which works out to nearly about K 3.21 per Kg. The expenses for processing would be more if the amounts spent on compensation for unemployment, interest on processing cost i.e., storage cost, and the interest on working capital at a minimum of 12% is taken. The loss on account of dryage at the hands of the processor @ 5% is also not taken into account.

Recovery of kernels @ 24% and CNSL @ 15% will be obtained. Nearly 240 Kgs. of different grades of kernels possessing different rates at the International Markets, average @ US $ 5.12 per Kg. and about 110 Kgs. of CNSL at an average price of $ 1.10 per Kg.

In Tamil Nadu, the cashew processing industry is of recent origin. The processors in Kerala who failed to achieve higher profits due to the sudden changes that took place in the state were forced to start cashew processing factories in the Kanyakumari district of Tamil Nadu, adjacent to Kerala, where the wage rates were very low. The wage rates
prevailing there were only about 40-45% of the wage rates in Kerala. Material too was very cheap at that time and the rates of profit were naturally high. This was made possible not only because of the availability of raw nuts and labour at cheap rates, but also because of the non-payment of non-wage benefits like D.A., P.F., Gratuity etc., to the workers. Moreover, child labour was available on a large scale at very cheap rates in Tamil Nadu. At the time, the factories in Tamil Nadu were able to process a Kg. of raw nuts for nearly 60 paise.

But now the situation has changed, the material cost is much higher than those prevailing in Kerala. The reasons for the increase in the price of raw nuts and the willingness of the processors to buy at higher prices are because the processing capacity built up in the state is more than that of the production of raw nuts in the state. This forced them to obtain the raw nuts from any source, by any means, and at any cost. Still they were able to make more profits, due to the reason that labour was comparatively cheaper. The conditions of labour, minimum wages other non-wage benefits to the workers of the Tamil Nadu Cashew Processing Industry are on the way. Workers have started organising themselves. Even though, all these come
to save the labour from the exploitation of the processors, the experienced processors will make his ppy for some more years.

The following data shows the processing cost of 1 ton of raw nuts in 1974 and 1980.

**TABLE - 23**

<table>
<thead>
<tr>
<th>PROCESSING COST OF 1 TON RAW NUTS IN TAMIL NADU IN 1974 AND 1980.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ITEMS OF EXPENDITURE</th>
<th>1974</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price realised by the Producer:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>@ Rs. 3.00 + Rs. 8.00 per Kg. in 1974 &amp; 1980 respectively (includes expenses incurred by the produce in packing, carrying, loading and transporting, commission of retailer and wholesaler, expenses of the wholesaler and his margin).</td>
<td>3100</td>
<td>8000</td>
</tr>
<tr>
<td>Factory Expenses:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drying, Storing, Loading, Unloading, Soaking, Roasting, Shelling, Baking, Peeling, Grading etc.</td>
<td>450</td>
<td>850</td>
</tr>
<tr>
<td>Establishment charges:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postage, Telegrams, Telex, Telephone, Cable, Depreciation, Supervisory, Advertisement, Correspondence, etc.</td>
<td>75</td>
<td>120</td>
</tr>
<tr>
<td>Packing charges:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tin containers, labels, cartons, strapping, ccs, fumigation, shipping, forwarding etc.</td>
<td>300</td>
<td>530</td>
</tr>
<tr>
<td>TOTAL COST</td>
<td>3925</td>
<td>9500</td>
</tr>
</tbody>
</table>
The total cost of processing a ton of raw nuts in 1974 comes to about Rs 3925/ out of which material cost alone comes to Rs 3100/; the balance of Rs 825/ is the processing cost, which works out to only about 0.82 ps./Kg. In 1980, it works out to around Rs 1 and 2/ per Kg.

In Karnataka, even though the industry was started much earlier in the century, the wage rate did not increase as steeply as that in Kerala and hence the processing cost was almost stable during the early days. The quantity processed and exported was very little when compared to Kerala. Since the processing in the factories there was mechanised to a certain extent, the processing cost remained steady. The number of processing factories in Karnataka are very few when compared to Kerala and Tamil Nadu. The cost of raw nuts and labour was very low and the processors were able to make higher profits. But since of late, the prices of raw nuts are higher than that in Kerala and yet they are able to make profits more than what a processing factory makes in Kerala. A processor in Karnataka is able to pay more price for raw nuts which is compensated by the low wage rate. They were able to process raw nuts at a cost of 80 ps. to 1 Rupee per Kg. in the seventies and between Re 1 and 2/ in the early eighties.
The following data shows the increase in processing cost of 1 ton of raw nuts from 1974 to 1980.

<table>
<thead>
<tr>
<th>ITEM OF EXPENDITURE</th>
<th>1974</th>
<th>1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw nut cost</td>
<td>3100.00</td>
<td>7870.00</td>
</tr>
<tr>
<td>Raw nut Clearance Expenses.</td>
<td>37.50</td>
<td>65.63</td>
</tr>
<tr>
<td>Wages &amp; Benefits to Workers.</td>
<td>373.00</td>
<td>931.25</td>
</tr>
<tr>
<td><strong>Factory Expenses:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rent, Registration, License fee, Tax, Electricity, Fuel, Water charge.</td>
<td>55.88</td>
<td>191.25</td>
</tr>
<tr>
<td><strong>Packing Cost:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tin, Labels, Cartons, Strapping, Cess, fumigation, Clearing and forwarding.</td>
<td>291.62</td>
<td>301.87</td>
</tr>
<tr>
<td><strong>Shipping &amp; Forwarding:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Freight charges</td>
<td>40.00</td>
<td>63.75</td>
</tr>
<tr>
<td><strong>Administrative Over-heads:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Office, Lighting, Postage, Telegrams, Telephones, Cables, Telex.</td>
<td>12.00</td>
<td>65.00</td>
</tr>
<tr>
<td><strong>Financial Charges &amp; Depreciation:</strong></td>
<td>56.25</td>
<td>118.75</td>
</tr>
<tr>
<td><strong>TOTAL COST</strong></td>
<td>3968.75</td>
<td>9607.50</td>
</tr>
</tbody>
</table>
It can be seen from the Consolidated and Comparative Cost Statement - Table 25 - that the material cost from the early seventies was almost the same in the three states of Kerala, Tamil Nadu and Karnataka, but there was a wide disparity in the cost of labour.

In Kerala, the labour cost for processing one tonne of raw cashew was almost about Rs. 1262/ in 1975, while at the same time it was only Rs. 450/ and Rs. 375/ in Tamil Nadu and Karnataka respectively. Like in Tamil Nadu and Karnataka, in Kerala also the labour cost was low before the revision of the Minimum Wages Act in 1975. At that time it was only around Rs. 695/ per tonne. The reasons for the increase in the labour cost in Kerala is mainly because of the increased wage levels and payment of other non-wage benefits to the labourers and also because of the ban on cottage processing, setting up of public sector processing units under the auspices of the Government of Kerala, and the organised bargaining power of the labourers. The increase in labour cost was sudden and very steep, that in 1980 it reached to around Rs. 1561/ per tonne.

The cost of processing in Tamil Nadu and Karnataka too increased, but it was not as much as in Kerala. In 1980, the cost of processing one tonne of raw nuts in Tamil Nadu was only Rs. 850/ while that
in Karnataka is ₹ 931/. When compared with the labour cost of Kerala there is a difference of nearly about ₹ 600/ to ₹ 700/. It is because of this fact that the processors in Kerala started opening factories in Tamil Nadu and other places where the labour cost is less.

The non-availability of raw material to satisfy the needs of the processing factories in Tamil Nadu and Karnataka paved the way for increased competition among the processors for the available raw nuts and resulted in the increase in price of raw nuts. But in Kerala, even though there was a scarcity for the raw materials the prices did not increase due to the fact that the procurement and distribution of raw nuts was under the control of the K.S.C.M.F. a Government owned public sector enterprise. This led to the smuggling of the raw nuts produced in the state to other places where the prices were higher.

In Kerala, even though raw material was not costly as in Tamil Nadu and Karnataka, the cost of labour and its allied problems made the cashew business a less profitable one. In Tamil Nadu and Karnataka, although the raw materials are purchased at higher prices as can be seen from the table, they are able to make higher profits because of the savings from labour and benefits of labour. All the other expenses of the processing industry are more or less fixed in the three states.