CHAPTER VI

ANALYSIS OF DATA COLLECTED AND STRATEGY FOR STABILIZING THE CASHEW INDUSTRY IN KERALA.

6.1.0 A SURVEY OF WORKERS OF THE CASHEW PROCESSING INDUSTRY IN KERALA.

To ascertain the Socio-Economic status of the workers engaged in the cashew processing industry, a sample survey was conducted in the beginning of 1983 in Quilon, where the industry is concentrated. The Survey brought into sharp focus the social and economic backwardness of the cashew workers in general and the variations in the degree of such backwardness among them arising from differences in caste and community and in educational attainments. The Survey was also intended to probe into the conditions of work in the industry and the state of health of workers.

At the time of the survey about 200 registered factories and a number of cottage processing units were reported to be working at Quilon. A sample of 20 working factories, constituting about 10% was selected from the list of factories classified according to size groups. The Survey was conducted with the help of the processors, union leaders,
managers, officials and workers. The factories selected for survey were visited. Houses of the selected workers were visited to observe closely the general environment in which the workers lived and the level of their political, social and economic awareness and to record their impressions.

ECONOMIC STATUS (FAMILY SIZE, INCOME & LAND OWNED)

Majority of the workers in the cashew processing industry are socially backward and belong to the most economically backward sections.

The average family of the workers was found to consist of five to six members, with 58% of the families having a size higher than the average. The average number of earning member per family is two.

The income earned by a single member is far below the subsistence requirements of the family. This becomes evident once we look into the factors determining the incomes of the families.
During the year which preceded the survey a worker was employed on the average for about 60-70 days which meant an annual income ranging from Rs. 450-550/=. On an average there were two earning members in the family. The average family income ranged from Rs. 75 - 100/ per month.

An additional factor in the determination of family income would be the employment opportunities in alternative occupations. The scope for any land-based self-employment opportunities was ruled out in the case of the majority of workers since they had hardly any land for cultivation. Moreover, employment intensive agricultural activities like cultivation of seasonal crops were relatively few in and around Quilon. Most of the female workers were skilled in mat making. Others would seek temporary employment in the match industry while some others would be engaged in other manual works in the villages and earn Rs. 30-50/ per month from such alternative occupations. Of whatever income they get 99% goes for their subsistence. Only 1% is set apart for luxury and that too either for a little good cloth, or for a good feed on a festival day.
Only 8% of the workers owned an average more than 1/2 acre of land and 80% of them were in the suburbs. 22% were landless who lived in huts, put up on others lands, or on waste lands. 70% possessed tiny plots varying in extent between 1 cent and 50 cents. It is significant that the workers belonging to poorer sections were employed in the shelling and roasting operations.

EDUCATION, AGE & CASTE:

The education status of workers is closely associated with the social background. Although the general level of illiteracy among the workers is not above the average for Kerala (33% of the workers were reported to be illiterates), 93% of the illiterate workers were engaged in the unclean operations like roasting and shelling in which the scheduled caste/tribe and other backward communities were mostly employed. The majority of the literate, 68% of those who had education up to the primary school level, 74% upto middle school level and 66% upto secondary school level were employed in clean operations like peeling and grading.
Of the total workers 44% were educated up to primary school, 15% up to middle school and 6% up to secondary school level. Thus a higher social status, which is associated with better education fetches better jobs in the processing factories. Out of the workers 94% are women, 42% of them are employed in shelling, 42% in peeling, and 10% in grading, while men are employed only in roasting (1%) heating (1%) packing and other miscellaneous work (4%).

The age composition of workers reveal the absence of child labour in the cashew industry in Kerala. None of the male workers was below 20 years of age. 10% of the female workers belonged to the age group of 18-20 years. 85% of the workers, both Male & Female were in the age group of 20 - 50 years. Only 7% among women and 16% among men were workers above 50 years of age.

The cashew processing activities may be divided into seven categories, roasting, shelling, heating, peeling, grading, packing and other work. Roasting and shelling are difficult works and it
stains the body and clothes of the workers. The remaining operations are relatively clean.

3/4th of the workers belong to the SC/ ST; and backward communities are employed in the roasting and shelling operations. The forward castes and Muslims constituted only 14% and 8% respectively of the workers engaged in these categories of work. Workers belonging to the latter communities were engaged in peeling and other clean jobs.

HEALTH

In the Survey, workers were classified into those keeping good health, indifferent health and poor health. Only 10% of the workers were reported to be in good health. Of the total, 66% were reported to be in poor health. 24% were in to indifferent health. Those belonging to categories of indifferent and poor health were further probed to understand the nature of their ailments and the period for which they have had them. Nearly one half of these workers were reported to have lung diseases of the remaining, a large proportion
suffered from diseases, of the uterus. Since many of the women engaged in shelling complaint of uterus diseases it needs to be investigated whether there is any connection between their squatting position during shelling operations and such ailment. Two thirds of the workers who had complaints about their health conditions had been suffering for more than two years. Most of the male cashew workers consume alcoholic drinks and about 40% of them are addicted to them. Smoking is common among them.

WORKERS' OPINION ABOUT:

1 EMPLOYERS / PROCESSORS:

The workers' opinion about the employers are that they indulge in wrong recording of output weighed, creating bad blood among workers by bribing a few, underpayment of wages, etc.; The employer who is socially and politically powerful easily gets away with whatever he does to the workers. The employer keeps his accounts and official records with great care and to the satisfaction of the inspecting official. However
he conceals more than he reveals of the real state of affairs. Though aware of the various malpractices resorted to by the employer the workers are incapable of resisting them and are often afraid even to disclose these practices for fear of loss of their jobs.

2 TRADE UNIONS

Almost all the workers belong to one union or other, but even 1% of the respondents did not have a good word to say about these unions. Trade unions were criticised for their failure in ventilating the grievances of the workers and helping in the amelioration of their conditions.

3 EMPLOYEES STATE INSURANCE

All the respondents had severe criticism against the ESI and the doctors were blamed for the callousness and consequent deprivation of the workers' legitimate medical facilities. Most of the workers were not only aware of the different family planning
devices but also adopted them. However, a few entertain some fears about the consequences of sterilization; for instance, a few workers who had undergone sterilization seemed to entertain suspicion that some of their ailments were on account of the operation. Some workers hesitate to undergo the operation because of their beliefs and fear of adverse consequences.
6 2 0  A SURVEY OF THE CASHEW INDUSTRY AND THE
SOCIO-ECONOMIC POSITION OF THE WORKERS
IN TAMIL NADU AND KARNATAKA.

Unlike the cashew industry in Kerala the
cashew industries in Karnataka and Tamil Nadu are
not well organised and because of the illiteracy
and difficulties in communicating, the survey
conducted in person is not much highly appreciable.
The organisation of the factories in Tamil Nadu
is very simple and the survey shows that 90%
of the processors are from Kerala, those who have
processing units and export kernels from Kerala.
The industry in Tamil Nadu is of recent origin
and the workers are not aware of their own rights
and how they are beneficial to the processors.
The well experienced processors started cashew
factories in Tamil Nadu not for the development
of the industry but to exploit the illiterate workers
and earn more profits. All these 'Factories'
are mere sheds which are constructed at a very
small cost and which are not upto the specifications
of the Factories Act. All sorts of malpractices
are widely prevalent in the industry there and no
fringe benefits holiday wages and maternity
benefits are paid to the workers.
About 95% of the workers engaged in the processing are the natives. 90% of the highly skilled, supervisory staff, and office staff are from Kerala. 80% of the labour force are women folk and 20% of the work force are children below the age of 16. The working hours are long and go up to 9 to 11 hrs./day.

Literacy is almost nil and only about 3% of the workers know to read and write. Their social and economic condition is very deplorable. Very few of the workers own land. About 20% of them live in waste lands, and a sizable percentage are wanderers; and alternative source of jobs and income is not at all a problem for them. Family planning, education, medical care are all beyond their scope of thinking. Most of these workers belong to backward classes.

The opinion of the workers about the employers are that they are their saviours and they have no complaints about them. About 99% of the workers are not serious about being organised. The meagre salary they get is just enough to satisfy their barest daily needs.
The survey has brought out that the workers engaged in Cashew Processing in all the three states belong to one of the most socially and economically backward sections of the society. Among the workers in all the three states, the cashew workers in Kerala although they are socially backward are better than those of the other two states, Karnataka comes next, followed by Tamil Nadu. But in the case of working days, Karnataka and Tamil Nadu enjoy the maximum number of working days while in Kerala it is very low. The conditions of work prevailing in most of the factories in the three states were appalling. Most of the work sheds, especially those in which women are engaged in shelling did not have even proper ventilation. The structures were old and dilapidated, Canteen, Lavatory, Sanitation, Criesches, were not provided.

There is no technical training given to the workers and efficiency of the cashew labour is poor due to racial qualities, social, political and climatic conditions. Workers are recruited through a class of intermediaries known as Jobbers, Maisteries, or contractors by paying commission.
The general level of their education is low. Their health is generally poor. They often suffer from one ailment or another. Alternative occupations are almost non-existent. They own nothing but a few cents of land in which they have their huts. On the whole innumerable social and economic disabilities cripple them to a state of perpetual misery.
STRATEGY FOR STABILIZING THE CASHEW INDUSTRY IN KERALA

Cashew is one of the few versatile tree crops that offer considerable potential for foreign exchange earnings and employment generation. In spite of this, the attention given to its production, processing and marketing, both by public and private sectors has been far from satisfactory. This has resulted in a virtual crisis and reached a state of complete alienation of the cashew industry. There is no lack of understanding of the problems facing this industry.

In order to stabilize the industry in Kerala and to bring back to the industry its pristine glory of the late sixties, a concerted action by the Central Government, State Government, Processors, workers and Persons representing the different interests in cashew is necessary. Their assurance of participation on the following programmes will be highly appreciated.
CREATION OF A NATIONAL AUTHORITY ON CASHEW

Considering the magnitude of problems facing the industry, starting from the production of raw nuts to the processing and ultimate exports, it is evident that the cashew industry has no right leadership which can authoritatively implement the decisions taken and advise the Government on various policy matters on a national basis for its betterment. We will not be able to regain our past glory if the multitude of private and public agencies continue to deal with the production, processing, and marketing problems in isolation. In order to remove the existing constraints both at national and international plains, the creation of a central agency, it is immaterial whether we call this agency a board, a corporation, an authority or something else, is imperative. It is very important that it comes into existence as early as possible, for the coordinated development of the industry. Such a board or agency, like the Cardamom Board, with its own departments to look after the different sides of the industry or development, can bring in greater help to the Indian Cashew Industry and exports. In addition to the usual programmes
plans of a national board, the Cashew Board can solve the following problems.

At present the granting of licenses for the setting up of processing units rests with the various State Government's irrespective of the fact that the indigenous production is not at all sufficient to satisfy the needs of the licensed processing units for a month. The various State Government other than Kerala are issuing fresh licences for starting processing units. The Kerala Government has stopped issuing fresh licences since 1975. This reckless method of issuing of licences by the other states without proper raw nut production planning has affected the cashew processing industry. This licensing policy has not helped the industry as a whole and has brought about a serious set back to the Kerala Processing Units.

In order to stabilize the industry in Kerala and for a helthier growth of the industry, the proposed cashew board should take over the authority of issuing licences from the State
Government's and envisage a policy whereby fresh licences will be issued only in accordance with the indigenous production in the states. For a healthier growth of the industry, the board should, with the consent of the processors and workers, fix a base year and all those factories which were in existence before that base year should be deemed eligible for raw nuts collected in a pool from the various parts of the country. The labour strength of each factory should be taken into consideration. The board should issue further fresh licences only if the indigenous production exceeds the present processing capacity.

The Head Quarters of the Cashew Board should be situated in Kerala, since Kerala is a major producer, processor and exporter of cashew as well as because it is the only state in which the cashew industry is facing a crisis. If the Head Quarters is in Kerala, it will be able to solve the existing problems and also the problems that might arise in the future. In addition, the Kerala Government should consider setting up of a competent agency for the best interests of its
economy to look into the problems of the export oriented industries and to advise it as well as the Central Government, processors and workers, as to what action should be taken in future.

Until a single agency which can effectively direct and control the various aspects of cashew industry comes into existence, it may be suicidal if ad-hoc changes are made on purchasing, distribution, processing and marketing of raw nut and kernels.

HEALTHY COMPETITION OF PRIVATE & PUBLIC SECTORS:

Since its inception in the early thirties the cashew industry has been facing competition in one field or the other. Firstly the private processors were competing with each other for setting up of the industry in Kerala for the export of kernels and to obtain more profit. They were competing right from the start, for the import of raw nuts from the East African Countries and in the export of kernels to European Countries.
The expansion of more markets and the increased earnings from the kernels made the processors to compete further. The decrease in the National and International production pushed the processors to further competition and subsequently they were forced to start all sorts of evil practices. In this context various Government agencies came forward to save the industry from the depression it was facing and thereafter the competition got a different face and it then became between the processors and the Government. The experienced private processors joined together to compete with all the Government activities. The experience which the private processors acquired and their powerful association were all along torpedoing the activities of the Central and State Governments. The processors association which is economically and politically powerful, challenged all the policies and legal enactments of the Government which might have saved the industry and the workers.
The decentralisation policy of the CCI, the monopoly procurement operation of the KSCMF, and the implementation of the Minimum Wages and other Non-wage benefits for the workers by the KSCDC were all challenged by the private processors in various levels of court. In almost all the legal battles the verdict was in their favour and in places where they failed, they immediately found alternative measures to make sure that they received their profits. This industry will not survive long if the unhealthy competition between the public and private sector goes on.

In order to avoid the unhealthy competition between the private and the public sector the total elimination of the private sector industries by Nationalisation is not practical in a democratic set up like ours and at the same time it is not a healthy proposition, since the private sector has been more efficient than the public sector, eventhough it curbs concentration of the economic and political power. Competition between the private and public sector should be for the best interest of the nation, the industry and as well as the workers,
An alternative is, the setting up of a genuine partnership between private parties and the Government with equal sharing of capital and responsibility. But there is a slight danger of Government representatives wanting to consult at every stage, the department officials and the ministers in charge, thereby delaying decisions. This can be eliminated if either the Government representative or the private entrepreneur is entrusted with the decision making authority.

In such an organisation of private partnership inefficiency, bureaucracy, corruption and stagnation can be avoided. But if things go wrong, the private entrepreneur will blame the Government representative who in turn will try to put the blame on the shoulders of the private party.

What we require is not so much a formal joint sector as a reformed and even more efficient private sector, operating under the broad vigilance of the Government and growing and effective public sector. In the running of public sector units, the assistance of private entrepreneurs should be
mobilized. What is standing in the way of this being done is a lot of suspicion on the part of the Government regarding the bonafides of the private entrepreneurs. There are a lot of able and honest entrepreneurs who are ready to make their services available to the Government on a honorary basis.

As regards the regulation of the private sector, the trouble in the country is not lack of legislative authority, but unwillingness and incapacity to administer the laws. A sense of trusteeship should prevail in the private sector management, which must also make profits on the basis of efficiency, rather than monopolistic and unfair practices. Thereby both private benefit and public good can be harmonised.

TRADE UNIONISM

Cashew workers are not really united according to the work or trade they perform. They are divided and sub divided by political parties and they are not disciplined. Absentism, moving
from one job to another is very common. The main reason for the situation is illiteracy. Industrial progress of the country as well as the cost of production depends not only upon the nature of technology and capital used but also upon the efficiency of labour. Efficiency of the cashew workers can be improved by way of giving security of jobs, providing them sickness and accident benefits, incentives for hard work, shorter working hours with proper intervals for mid day meals, providing meals at concessional rates, fair wages, clean surroundings, providing educational facilities, adequate sanitation and hospital facilities. All these will help to raise the physical and mental fitness of the workers.

Organizing social security schemes to protect cashew workers and their families from illness, industrial accidents, and unemployment and providing housing facilities will make the labourers work harder.

By resorting to strikes and other measures the industrial workers can attempt to realise whatever they want to achieve. It is only on their
co-operation, that the planned programmes of rapid industrialisation depends. Their refusal to co-operate will lead to a collapse of the economy. It is for this reason that their complaints, and difficulties should be removed as early as possible and they should be kept happy and contented. The majority of the cashew workers are illiterate and hence do not understand the problems which affect them or the industry in which they are working. Workers are not capable of organising themselves or in managing their unions and this is one of the reasons why the leadership of cashew labour has passed on to the politician. Labour unions should be for the workmen and not enmical to the interests of the public. They should not think it necessary to accomplish the complete overthrow or liquidation of the business class. Trade Unions should develop an understanding between labour and capital. 26 At the same time a strong trade union movement is necessary both for safeguarding the interests of labour and for realising the targets of production and for replacing the industrial autocracy with industrial democracy.

POLITICAL PARTIES:

The greatest need of the day is that the political parties should keep away from the trade unions of cashew workers and the trade unions should be free from politics. They should confine their activities to the betterment of the working class in the national interest.

OUTSIDE LEADERSHIP:

Now the leaders of the trade unions of the cashew industry are outsiders with different political interests. The outside leadership should be limited to 10%.

WORKERS’ RESPONSIBILITY:

The unions should make every worker understand fully, first his duties and responsibilities and then his rights and privileges.

ONE UNION IN ONE ESTABLISHMENT:

This will remove rivalry among many unions and help the workers to achieve their objective or to organise category wise.
TECHNICAL EXPERTS:

Trade unions should have on their staff a number of technical experts who have studied and understood the techniques and other implications of the industry, so that when the unions put forward their demands, they are favoured by almost all sections of the society.

Workers should be educated and informed about the trade union activities of other places. Cashew workers were formerly recruited by maisteries/labour union leaders. They should be recruited through labour officers in charge of a labour bureau or through the employment exchanges.

Whatever the truth of the analysis, time has come for all parties to get together and to advise proper measures for increasing the productivity of labour and to bring down the cost of production.

LABOUR CO-OPERATION:

Cashew workers should be offered the opportunity to take initiative to concentrate in
the decision making process and to share responsibility.

**Participation** gives employees a sense of belonging and an opportunity to use their talents in their tasks. This enhances their interest in the work and gives them an opportunity to suggest measures designed to improve quality, productivity and working arrangements.

The scope of the participation depends on the range of managerial functions in which workers take part. Managerial functions concerned with the control of the enterprise may be distinguished from those concerned with its operation. By the degree of the participation we mean how far workers influence managerial decisions, on a scale extending from complete unilateral control by management at one end to complete unilateral control by workers at the other. What is meant by the extent of the participation is the proportion of workers taking part; this can vary widely from a few workers"
to the whole work force. Indirect participation through representatives involves less participation by individuals than that possible in direct participation.

Participation may take various forms. In ascending participation, the workers may be given an opportunity to influence managerial decisions at higher levels through their elected representatives to work councils or boards of the enterprises. In descending participation they may be given more power to plan and make decisions about their own works.27

Labour co-partnership creates mutual understanding and co-operation between the processors and employees and improves industrial relations. It is a lasting solution to industrial conflicts. But for the effective participation, trade unions, workers and the management, should contribute effectively and consider themselves as members of an industrial family and work beyond their narrow selfish interests.

27 - J.M. CLERC - Workers Participation in Management : Some preliminary considerations.
INCREASE THE EFFICIENCY OF PRODUCTION AND BRING DOWN THE COST OF CULTIVATION AND PROCESSING:

In order to stabilize the cashew industry in Kerala and to withstand the competition from other nuts as well as the cashew kernels from other countries, the Indian kernel price should be either lowered or at least brought on par with the prices of kernels of other countries and on par with the prices of other competing nuts like almonds, Hazle nuts, etc., This can only be achieved by increasing the production of raw nuts and reducing the cost of cultivation and processing. There is hardly any organisation in India to advise the producers as well as the processors and the Government, how to reduce the cost of cultivation and processing. In order to bring down the price of kernels, all costs of labour, material and the overheads have to be controlled.

Since cost of material takes a major portion of the cost of processing of kernels, any saving in the material cost will help to bring down the cost of processing. Increased availability of raw
materials will bring down the cost of raw nuts. For this the raw nut production in the state has to be increased. To step up the indigenous production in the state, various plans were laid down by the state Government and their departments, various agencies of the central Government with the aid of the World Bank. The intensive and extensive cultivation programmes with the implementation of research on high yielding selections, hybrids, plant protection measures, crop management etc., will surely help in increasing the production which would result in the free availability of raw nuts at cheap rates and on the whole it would help in stabilizing the industry in the state.

Labour is an equally important factor in determining the cost of processing. It is one of the deciding factors for the present crisis of the cashew industry in Kerala. The wages and other non-wage benefits payable to labour were increasing steeply all these years. The expenses incurred for the processing by way of wages can be saved with the introduction of mechanical processing. But the processing of cashew in Kerala is a highly labour
intensive industry. Machinery is used only in roasting and in the extraction of cashew nut shell liquid. Cashew industry in Kerala has over the years not witnessed any appreciable level of mechanisation in the processing of cashew nuts. The introduction of mechanisation has been hampered in Kerala on account of the opposition of labour towards even a semblance of mechanisation.

However with the introduction of mechanical processing, due to non-availability of adequate and skilled labour, the East African Countries showed rapid strides towards cashew processing. The Brazilian Industries have adopted semi-mechanisation processes. They have been able to control the labour cost and hence they are able to quote lesser prices in the international markets.

If mechanisation of all the operations in the processing of cashew is introduced, we will be able to bring down the cost of cashew kernels by about 20 to 30%. But with the introduction of mechanisation nearly about 90% of the present working force of the cashew industry will be thrown out of
their jobs and this would automatically result in severe unrest. But mechanisation could be achieved with the co-operation of the workers. The Government should take adequate measures to provide alternative employment for these workers in other industries, large and small scale, in the public or corporate sector. So that the interests of the workers would be safeguarded and at the same time will save the cashew industry. Even if mechanisation requires little more capital investment, it would be profitable in the long run. Mechanisation, in addition to savings in labour cost, brings additional income by way of extraction of more CNSL. It also reduces the heat and acrid fumes, avoids air pollution and safeguards the health of the workers which otherwise is a hazard to the workers. Another alternative to bring down the production cost of cashew by way of savings from wages is by paying a bare minimum wages to the workers. This is a difficult proposition because, in a situation when the workers are demanding more wages, the idea of receiving minimum wages is out of the question by them. But if they accept this proposition then the workers will be paid in addition to the minimum wages a certain percentage of profit as bonus according to the profit the industry makes.
Material cost could be further reduced if a concerted action is taken by the growers, officials and the public in all the levels of production. At present more than 10% of raw material cost is accounted by clearing forwarding and transporting charges. This is because of the fact that the factories are concentrated in the Southern part of the state where as the major cashew producing areas are in the northern parts. In order to save from transporting charges, cheaper methods of transporting will have to be resorted to or some factories will have to be shifted to the raw nut producing areas. Decentralisation brings a balanced growth of the industry and the economy.

Cashew being a seasonal crop, the processors have to procure the nuts and store them. This results in a heavy block of capital and productivity. Large amounts as warehousing costs and loss in dryage are to be spent. This unnecessary expenses add to the cost of processing. If different varieties of cashew i.e., the early and late varieties, like the spring wheat and Winter Wheat are produced,
storage could be avoided. The loss of weight of raw nuts and infestation because of storing could be eliminated if the factory uses first the materials purchased first.

An organisation should be set up in the state to control the cost of raw materials and all other expenses of processing industry. A combined demand and supply schedule is used to project future cost of materials and future prices of the kernels based on past prices and quantities sold. It should formulate methods of efficient material selection by choosing adequate quality for production after considering the availability of needed grades and sizes, efficient handling, storage of materials and issue of materials on scientific lines. Waste of materials should be minimised for eventual optimal use of the material. The control of harvesting charges and cost of supervision of plantations, handling and transporting by the grower to the wholesaler should also be minimised.

Planning required for cost control includes, job specifications, to ensure having the type and number of workers needed, efficient use of workers
and materials as well as the use of standardised pay scales, to ensure payment comparable to skill required. The fringe benefits are an expanding cost area as labour seeks increased and non-taxable benefits in addition to increased salaries. The cost of fringe benefits have been estimated at as much as 25% of cost of labour, at an average cost of about 15%. The area of fringe benefits offers considerable room for application of cost reduction methods. Labour strikes affect the cost of production, increases labour cost, affects marketing and pricing, capital investment return, etc., This should also be controlled. Factories can also reduce the labour cost with mechanisation because less human intense operation and the more skilled workers that are needed require considerably fewer supervisors. Bonus payment and their cost can be eliminated. Productivity is controlled by the equipment and no difficulty comes about shift work.

Industrialisation has created new cost areas in addition to material and labour costs. These indirect material and labour cost includes overheads in the cost of each unit of production as a basis for pricing. Reduction in overhead costs is necessary
to make a higher profit. The area of overhead cost is a particularly important area for cost reduction, as overhead cost will become a large proportion of total production cost as mechanisation expands, charges on electricity, gas, water, telephone, supplies and mail services used should also be controlled.

Identification of potential customers for the kernels, consumer preference, and habits have to be studied. Advertisement campaigns will help in boosting sales in the International markets, but some techniques have to be evolved to reduce sales cost.

The organisation has to examine and evaluate the competitors' products to determine what cost reductions have been made and how they can be applied to our product. As cashew business becomes involved in International trade a greater importance is attached to cost effects in International Law. Discriminating trade restrictions, including taxes
on imports from one country, exchange control etc., should be regulated. Control and reduction in the packing cost, container size and material used will help in reducing the overhead costs.

WAGE PARITY:

The wage level in Kerala is nearly three times higher than that in Kanyakumari District in Tamil Nadu and double that in Karnataka. This disparity in wage levels prompted the industry to migrate to Kanyakumari district and other neighbouring states. In our present set up it would be difficult for us to sustain the cashew industry for long. Either it would gradually decline as is happening in the case of coir and Handloom or wages will have to attain parity with that of the neighbouring states. Since the prospect of attaining wage parity with the neighbouring states is highly unwelcome, the Government of Kerala will have to pursue a realistic policy with a long term perspective. The main objectives of such a policy will be the maintenance of maximum employment at remunerative wages. The Government should also persuade the industrialists to diversify in such
a way to absorb those thrown out of employment
if the industry migrates to other states on account
of lower wages.

In order to stabilise the industry in
Kerala, what is necessary is not to bring about
different policies of procurement and allotment of
raw nuts, but to bring about a parity in the wage
levels and advise the labour on the whole to be less
militant and reasonable. Further, the state should
give every possible assistance to improve the
competitiveness of the industry by improving labour
productivity on one hand and eliminating speculative
intermediary profits on the other.

It is very essential to bring about a
standardisation of wages for similar types of work in
the cashew industries in all the states. The wide
disparities in wages and Dearness Allowances in the
industry in different states encourages migration
of workers to places where the wages and Dearness
Allowances are high and the industry to places where
the wages and Dearness Allowances are low.
Over and above industrial unrest and disputes, depend on wage differentials to a considerable extent. The problem of wage differentials, further, present a problem of equal pay for equal work. It does not mean equal pay for all classes of workers. It implies that there should be equal pay for the same job in all the states, equal pay for equal effort and sacrifice, equal pay for equal product and equal pay for equal value to the processors.

BYE PRODUCTS:

CASHEW NUT SHELL LIQUID:

C.N.S.L. is traditionally obtained as a bye product during the isolation of the kernel and it is a valuable raw material for a number of polymer based industries like, paints, varnishes, resins, industrial and decorative laminates, brake linings and rubber compounding resins. It is also used as a surface coating in a sea going crafts to prevent corrosion of wood. The chief importers are the USA, the UK & JAPAN and India was the sole exporter till the early sixties, after
which the East African Countries entered the field of Cashew processing. Although India was the Chief Exporter of CNSL, our exports were around only about 10000 tonnes annually.

The CNSL is extracted by roasting the raw nuts in hot CNSL bath, solvent extraction, expeller extraction and kiln method. The raw cashew nut contains about 28% by weight of CNSL of which 15-20% can be extracted on an annual average processing of 1.5 lakh metric tonnes of raw nuts. The potential for production of CNSL is about 27000 - 30000 metric tonnes. The prevalent system of extraction is not at all perfect. Because of the fluctuating demand and price the processors are not interested to invest in research and development to perfect the system of CNSL extraction or the quality without causing damage to the kernels. No research has been so far done from the part of the Government for the effective use of CNSL. Being the largest producer and exporter of kernels and CNSL, the Government has to come forward for a concertion of the CNSL exporting countries for the fixation of fair prices.
and regular demand. The internal consumption of 
CNSL is limited and in order to step up the internal 
consumption, research organisations have to come 
forward to help the people for its application in 
various levels.

CNSL and its derivatives can be used as 
external decorative lacquer for biscuit tin, wooden 
furniture and fire retardant paints by reacting 
it with hexamine, titanium dioxide, sodium silicate, 
brass and nica powder at different temperatures. 
It can also be used in the preparation of anti 
oxidants, lubricants, bactericides, fungicides, 
disinfectants, insecticides, pesticides, herbicides, 
drugs, etc., CNSL resins can be used for protecting 
the thatched roofs. Rice husk beards prepared from 
CNSL residue based resin as binders are useful for 
false roofing as insulating panels and for acoustic 
purposes.

A variety of ancillary products of great 
industrial utility such as metal salts, nitrogen 
compounds etc., are obtained through chemical 
treatment of CNSL. Hence viable ancillary industries 
may be set up to make commercial use of these important
by-products of the cashew industry. The residual oilcake remaining after the extraction of CNSL, now generally used as fuel in factories, can be used in the manufacture of plastic and container board.

**CASHW BEVERAGES - SOFT DRINKS**

**CLARIFIED CASHW APPLE JUICE**

The cashew juice can be extracted from cut fruits in a screw type juice extractor by pressing in a basket press or preferably by a combination of the two operations. The astringent and acid principles are removed. After filtration the brix of the juice is raised to 15° and acidity to 0.4% by addition of sugar and citric acid. The juice is then boiled and preserved. The clarified apple juice can be blended with 10% lime juice, ginger extract, 25% of mango pulp or with equal parts of pineapple juice would give a good palatable product.
CASHEW APPLE SYRUP

The juice from cashew apple can be made into syrup, by steaming it accompanied by stirring and then strained through thick cloth. Appropriate quantity of sugar can be added along with the preservatives, like the preparation of various other syrups. The syrup can be used after dilution and also can form a base of carbonated beverage.

CASHOLA

This is a ready to serve carbonated beverage which can be obtained from clarified cashew apple juice. This is prepared by dilution of the syrup with three volumes of water.

CAGUDA

This is the most popular cashew drink in South Brazil. Apple juice is bottled as such without any adhesives. It is mixed either with water or combined with milk and sugar.
CAJUINA:

This is prepared by pasteurising the apple juice.

CAJU APERATIVO:

This can be obtained by mixing the apple juice with sugar cane brandy.

CAJUVITA:

This can be obtained by the addition of vitamins to the apple juice.

CASSHEW APPLE JUICE CONCENTRATE:

The clear and cloudy juices yield good quality concentrates for use in the preparation of aerated drinks if it is heated up to 35° C. A golden syrup rich in nutrients, can also be prepared on commercial lines.
CASHEW APPLE VINEGAR:

The brix of the cashew apple juice when raised to 12°, and then pasteurised, cooled and inoculated with a pure strain of yeast for alcoholic fermentation would yield alcoholic ferment. This ferment if mixed with mother vinegar and passed through a column filled with corn cobs would give cashew apple vinegar. The vinegar prepared should be filtered and pasteurised. This vinegar will have more acidity when compared with other commercial variety of vinegar.

CASHEW APPLE CANDY AND JAM:

The preparation of cashew apple candy can be done after curing the ripe and undamaged cashew apple in brine solution starting with 2% concentration and increasing them to 10% and then steaming it for 10-15 minutes. This process takes five to six days.

The preparation of cashew apple and mixed jam is done by treating the fruits in 2% common salt solution for three days followed by steaming
for 10-15 minutes. Sugar equal to the weight of the fruit, citric acid, should be added towards the end of the cooling process. Mixed fruit jams are prepared by mixing the cashew apple pulp with equal quantity of banana pulp or pineapple pulp.

CANNING OF CASHEW APPLE:

Firm fruit suitable for canning is first peeled by treatment in boiling sodium hydroxide solution, followed by a rinsing in water, after steaming and cooling and draining. It is then cut into halves length wise and after trimming of the undesirable portions, it is canned in 40° brix syrup. A good quality salad pack can be obtained by mixing pineapple ring segments with cashew apples in equal proportions. Canned curried vegetables from raw green fruit in combination with potatoes, or potatoes and tomatoes, with or without tamarind are also possible.
CASHEW APPLE CHUTNEY AND PICKLES

Cashew apple chutney can be prepared from fruits treated in 2% brine and for jam, followed by washing and steaming for 5-7 minutes.

Raw green fruit is steamed, washed and kept in 10% brine for a week. It can then be pickled in the usual way as half fruits after trimming off the undesirable end portions.

Cashew apple products as preserves, juice, and wine can be commercially produced and marketed. This can be started as cottage industries. Bottled apples can also be marketed. This can be done, when the peduncle is small, the nuts are removed and the peduncle introduced in the bottles and allowed to grow. When fully matured the apples can be separated from the main branch and the bottle can be filled with sugar cane brandy. This will attract the attention of tourists. The peduncle is dried and powdered into a meal which can be used as a bait for catching fish. It can also be used as animal feed.
Production of hard boards can be possible from the waste crushing of the cashew apple.

In Brazil, from the cashew apple, the following preserves are widely produced and marketed:

1. Stewed apple in syrup (DOCE EM CALDA).
2. The typical sweet having a consistency of thick jam (DOCE).
3. Cooled pulp formed into balls and coated with sugar (CAJU CRISTALIZADO).
4. Cooked and partially dried apples in syrup (CAJU AMEIXA).
5. Jelly.

CASHEW FLOUR & KERNEL OIL:

From the lower grade kernels, protein rich cashew flour and high quality edible kernel oil can be produced and marketed.
In India, thousands of tonnes of cashew apples are wasted, especially in Kerala. Only in Goa, complete use of it is made in the manufacture of alcoholic beverages. The secret of making CAJU - FENNI lies with Goan ingenuity backed by expertise and experience extending over several years, the Goan has mastered the art and know-how of manufacturing good Fenni. The juice of cashew apple is collected in VATS which when allowed to stay is acted upon by the bacteria present in the apple causing fermentation. The fermented juice is distilled in pot stills to give ARRACK which on further distillation produces FENNI. It is further matured in wooden barrels to give 'Fineness' to the product. Fenni is derived from the word FENNO in KONKINI language which means FROTH. In Tanzania a product called KONIAGI skin to GIR is made.

Detail study of the manufacture and marketing of cashew Fenni, the licensing system, and the collection of revenue etc., are mentioned in the Chapter CASHEW IN GOA.
Goan Government is collecting nearly about Rs. 11-16 lakhs every year by way of revenue from Excise Duty levied on the liquor produced and from licence fee received for establishing stills.

In Kerala every year nearly 6 to 8 lakh tonnes of cashew apple produced is being wasted. If the Government of Kerala, through any Corporation or any other agency issue licences to the growers to establish stills, like those in Goa, the people would get a good drink at cheaper rates and the Government would get a sizeable revenue by way of Excise Duty as well as Licence Fee for establishing stills. The cashew liquor produced can be distributed through the licensed liquor and arrack shops.

In Kerala, it is more possible than Goa, to establish distilleries for the production of Fenni on Modern Scientific lines. The cashew apple juice should be extracted from good fruits by mechanical and hygienic methods, filtered, pasteurised and cooled, inoculated with a strain of pure yeast and after fermentation under close observation and distillation in a sophisticated
plant: the obnoxious smell and stringent taste
could be eliminated. Systematic maturation can
give it a mellowed taste to meet the requirements
of the foreign markets.

The free mobility and universal
acceptability of the liquor can prompt more
entrepreneurs to enter the production field
under more hygienic methods. The proper tackling
of the import duty and levies in the foreign
countries can open up a vast export market which
will serve multiple purposes.

(a) It will bring maximum apples into the
industry which otherwise is a national
waste.

(b) Turn out to be a foreign exchange earner
from a natural bye product.

(c) Serve as the best media of incentive to
the grower for further expansion of cashew
cultivation and those having waste lands
to take up cultivation.
(d) The expansion in cashew cultivation will make up the acute shortage of nuts now felt by the cashew nut processing factories in Kerala.

In the matter of tackling the duties and levies by the foreign countries, it has to be impressed upon them that as still now they do not have any home production of cashew liquor, there is no necessity of imposing heavy import duty to protect the domestic production and that such imposing of heavy import duty will only deprive their people from enjoying a unique liquor. The product is such a unique item and with such special features, passable through any chemical analysis, that all can take up its promotion with full confidence provided strict quality control is enforced.

PRODUCTS FROM BARK, STEM AND LEAVES:

The wood of cashew is fairly hard and has a density of 500 Kg/cubic metre. In Latin America it is referred to as WHITE MAHOGANY. In addition to its popular use as firewood for charcoal, as
wheel hubs, York, etc., the pulp from the wood is used to fabricate corrugated and hardboard boxes. These boxes are collapsible, but are strong enough to compete with conventional packing wooden cases. The Ash is rich in potassium and so used for applying as a manure to crop plants. Since cashew wood is able to withstand sea water, it is used in building fishing boats and also in fabricating containers usually required for transhipment of poly vinyl acetate emulsions. The wood can be used effectively for the manufacture of furniture, false ceilings, interior decorations etc., since they are less attacked by Death Watch Beetle. For arresting low concentrations of hydrogen Sulphide, Iron oxide, impregnated cashew woods can be used. The bark contains an acrid sap of thick brown resin which becomes black on exposure to air. This is used as an indelible ink in marking and printing lines and cottons. It can also be used as varnish, as preservative for fish nets and as flux to solder metals.
The stem yields amber coloured gum which is partly soluble in water. The main portion will swell into a jelly like mass. This can be used in book binding as cardol - one of the components - acts as a vesicant and has got insect repellent properties.

The leaves and branches are used by tribes as an antiseptic post - parturition bath additive. The young leaves and shoots can be used as salads.

**MEDICINAL USES:**

There are many medicinal uses of the plant. The kernels possess aphrodisiac qualities. Apple is eaten as a remedy for scurvy. Cashew syrup is a good remedy for coughs and cold. Cashew apple juice is said to be effective in treating syphilis. The root infusion is an excellent purgative. Old cashew liquor in small doses cures stomach aches. Fenini has laxative properties. Cardol and anacardic acid possess powerful rubefacient and vesicant properties. The oil obtained from the shell by maceration in Spirit is applied to cure cracks on the soles of the feet.
Keeping all these in view, the central and state governments, various organisations, and all those engaged in the industry should come forward to examine the prospects and establish industries for making use of the bye products of the cashew industry. This will help in stabilizing the industry in Kerala in an other way to a reasonable extent.

MARKETING AND PRICING:

The marketing and pricing of raw cashew nuts, cashew kernels and its bye products is a very important task to be taken up for stabilizing the cashew industry in Kerala. The canalisation of imports and the institution of monopoly procurement have relatively freed the industry from the clutches of speculative operators. But, it is a fact that in a federal set up like ours, it will be difficult for it to sustain the industry for long, unless the growers are ensured of a fair price for the produce. However the price of raw nuts should be above the parity price of the grower and below the parity price of the
When fixing the market price of raw nuts, due consideration should be given to the cost of cultivation and the parity price of the processing unit. The price of raw nuts fixed should be remunerative, based on the cost of production and the rates for kernels prevailing in the international markets. Price stabilization and price support have a salutary effect on the efficiency of the marketing system. The industry will not survive for long on the artificial stimuli of controls and subsidies which will result in huge losses to the exchequer. In order to feed the industry with raw nuts, imports from all available sources should be tapped and canalized so that competition does not push up prices in producing countries. Monopoly procurement of raw nuts should be ended or procurement of raw nuts should be strengthened and made more commercial. Other agencies should also be allowed to enter the market. All restrictions on the movement of raw nuts should be removed so that the cashew grower will get the best price for his produce, and it is evident that the availability of raw nuts within
the country for processing is not merely dependent on the measures to increase the output but also on the arrangements for marketing and through that the price received by the growers. In the sphere of marketing, the role of the methods adopted for the primary collection of nuts seems to be crucial. Incentives for increasing the output should go along with attempts at devising a more remunerative system of collection of nuts from the cashew gardens.

Marketing of cashew is a very dynamic, complicated and challenging function of the cashew business. The present marketing system of cashew kernels and its bye products are not much on scientific lines. Indian export of cashew kernels has traditionally been in unroasted kernels in bulk packing. The major consuming countries themselves, roast, salt and market the blanched nuts in consumer packs. India could have and can export roasted and salted nuts in consumer packs at much cheaper rates to the consuming countries, if there is no heavy duty tariffs levied for consumer packs. At present, most of the consuming countries have fairly heavy duty tariffs for consumer packs while raw cashew
kernels in blanched form enjoy duty free entry or attract only nominal duty. The export of roasted and salted kernels in small consumer packs is subject to very high duties, presumably to protect the salting industry in the importing countries. Sophisticated packing materials to meet the latest standards of packing are also not available in India.

Cashew is mostly used as a snack food and as an accompaniment for drinks. Broken grades of cashew are used in the manufacture of biscuits, pastries, chocolates, marzipane, etc. The use of cashew grades varies according to the taste of the people of the consuming countries. Cashew is also roasted and marketed in packages as one of the nuts in mixed nut bags. Depending upon the price of cashew and of other competing nuts, the quantity that goes into the mixed nut bags varies.

In order to impart greater health to the industry attention has to be given to the following points.

1 In the present world economic climate, the movements in the exchange rates of different currencies show violent and frequent fluctuations since expert trade
in general, it may be prudent for the exporters to secure adequate forward cover for all their export transactions to guard themselves against possible adverse movements in the exchange rates. They should be advised to avail the necessary guarantee cover from the Export Credit and Guarantee Corporation.

2 Because of the fast changing demands in the consuming countries, dependence on a single country is not quite healthy and there should be a measure of greater diversification, country wise. The Export Credit and Guarantee Corporation may like to consider fixing differential rates for exports to various countries depending on their political climate and the inherent strength of the economy.

3 It may be worthwhile to explore the possibilities of finding new markets abroad.

4 Steps should be taken to stabilize the international price of kernels because severe competition from other tree nuts like almonds will take place.
5 Adequate research for a better and more profitable use of CNSL may be undertaken and new markets should be found out for CNSL and other bye products of cashew.

6 Exporters of cashew kernels are eligible for importing packing materials at 10% of FOB value of exports. However in the case of roasted and salted cashew kernels in consumer packs, this benefit is limited to only 7 1/2%. Hence it would be better if the same benefit, as is applicable to cashew kernels in bulk, is also extended to those in consumer packs.

7 The large requirements of tin plates for the cashew industry for the manufacture of tin containers used in cashew exports are largely met from imports which attract heavy import duties. Considering the export earnings and potential of the industry and the already stiff competition faced by it in the marketing of cashew in International Markets, the Government may consider allowing the cashew exporters to import tin plates under the duty exemption scheme.
For the future prospects of marketing, there should be some new inventions as regards the packing material used and size of the packs. Packs varying from 50 gms. onwards should be introduced. Uses of cashew as an ingredient for various dishes have to be found and its application and advantages should be made known to the public. It should be served in the internal and external flights of our airlines and we should also enter into agreements with major airways corporations for the supply of roasted and salted cashew kernels. It should also be made available in steamers and duty free shops at the harbours and Air Ports. It should also be included in the menu of lunch and dinners in group of Star Hotels of Private and Public Sector Enterprises, Hospitals represent outstanding growth markets because of the consumers willingness to spend whatever is necessary for the betterment of their health. It should be marketed through super markets and chain stores. It should also be entertained through the Indian Embassys in Foreign Countries.

MARKETING FOR TOMORROW:

Competitive analysis of the present product line and capability of developing new products and markets, pricing strategies and tactics, including
under pricing capabilities, advertising and sales promotion abilities, skill in doing business with the distribution channels and expertise in marketing research, testing and marketing systems should be formulated for the effective marketing of cashew. Against the background of the technological advancements in the processing industries in other countries, intensifying competition for the resources from other countries, as well as from other nuts, increasingly fragmented and discriminating customer markets, and massive and disruptive changes in distribution markets, the Indian Cashew Industry has to rely now more heavily on marketing than at any other time.

The Government has to set up an association of experts in marketing and formulate a marketing strategy. The experts should analyse the resource market for the availability of raw materials, its price, and the consumption market, to forecast the future size of the potential consumer markets and to attempt to identify the future needs and buying behaviour of the markets and to identify the most likely moves that major competitors will make and the impact they will create. They should specify the plan of marketing
to control all the marketing activities, and spell out strategies and programmes that will be used. The plan involves the appropriate use of marketing variables, identifying specific requirements, channels of distribution, market development, market segmentation, product differentiation, broadening the lines of the product, concentric diversification of products, product guarantee, product quality, selective distribution, identification of the growth trends and success requirements of various markets, research and development of different taste combinations, finding new classes of customers, attracting new class of customers by adding new products, concentration on upper and upper middle class, (cashew being a luxurious item) where and how to be displayed, brand substitution, multi brands, marketing in new forms, flavours and colours, packaging, labelling and brand names. They should also specify the prices applicable, since monopoly pricing is non existent, a systematic approach to pricing should be formulated, it should either be demand oriented or cost oriented pricing. They should also built a Market Information System.
TERMS OF EXPORT CONTRACT:

The terms of export contracts vary from one country to another, but by and large standard terms and conditions applicable to export sales of agricultural products apply to cashew kernels also. USA, one of the earliest and most important markets for Indian kernels and the importers in USA introduced their standard contracts for purchases from all sellers. This contract has remained in use all through the history of India's export trade in cashew kernels with USA. The U.S. standard contract provides for buyers establishing letters of credit for 95% value of goods in favour of sellers enabling them to draw the 95% value against shipping documents. The US agents of exporters collect the undrawn balance of 5% from the buyers after the arrival of the goods and acceptance of quality by the buyers, retain 2 1/2% for their commission and remit the balance to the shippers. In the case of USSR, 98% of the value is drawn by the sellers against shipping documents and only 2% is to be collected subsequently. In the case of most of the other countries, the contracts provide for payment of the full invoice value of the goods shipped by the buyers against shipping documents.
The withholding of 5% by USA, and 2% by USSR buyers until the arrival of the goods and acceptance was a relic of the earlier days when the standards of quality were not fully uniform as at present and the buyers insisted on some protection in the event of there being any quality claim on the consignment.

If a Government agency exports the kernels, protection of the quality will be guaranteed and the agency can alter the terms of payment to enable the shippers to draw for 100% value soon after the shipment and it can also enter into long terms contracts with foreign buyers. The export contracts entered into with foreign buyers should be scrupulously adhered to in order to foster confidence between the buyers and sellers.

QUALITY CONTROL

The introduction of Quality Control and Pre-shipment Inspection by the Cashew Expert Promotion Council and later by the Expert Inspection Agency
want a long way in infusing confidence in the minds of the buyers located in various parts of the world, as to the quality of the product and has helped India’s Export Promotion Efforts. Since of late, the efficiency of the Pre shipment Inspection has come in for sharp criticism by some overseas buyers. If a Government agency exports the kernels produced in the country, the foreign buyers will be more confident to buy the kernels as well as the officials in the Export Inspection Agency will be more responsible about the quality of the product exported or else the Export Inspection Agency should ensure indisputable quality standards.

The workers should be allowed to participate in Quality Control Circles like in Japan. This will provide them an opportunity to suggest measures designed to improve quality.

RESEARCH ON CASHEW

The research on cashew was started very early, and the Indian Council of Agricultural Research sanctioned projects for the improvement of cashew started in the early seventies with an object to
develop the total management for improving the yield of cashew per unit area. The researches carried on so far have been on measures to improve the cashew production in the state, and this has brought improved results. To a certain extent these research agencies transfer the available known technology to the fields both by departmental agencies and through community efforts. Since all the departments which have been carrying out research programmes have been agricultural bound departments, no research has been carried out so far on the problems of processing, marketing and financing of the cashew industry. The Kerala Government has to take the initiative to set up an agency where research can be conducted for the better utilisation of the factors of production. In order to give adequate research support for the development of the production as well as the industry on a whole, it is necessary to establish a National Cashew Research Centre with adequate number of Regional Centres for intensifying research in the commodity.