CHAPTER - 4

MARKETING ANALYSIS

4.1 Analysis of Cultivator Sellers

4.2 Analysis of Local Traders

4.3 Analysis of Processing Units

4.4 Analysis of Retailers of Kernels.

CHAPTER - 4

MARKETING PRACTICES

The object of the research is to study the marketing practices followed, and the channelwise cost spread analysis of cashew product in Savantwadi tahasil. In order to achieve the objectives the researcher has to follow the analysis of cultivators, intermediaries, processing units and retailers in consumers' market.

4.1 Analysis of cultivator sellers :

Plantation :

The information, regarding the behaviour of cultivator sellers, is obtained through the personal interview method. Ultimately about 104 cultivators from seven different villages, have been selected and interviewed.

Table No. 4.1 presents the classification of cultivator sellers, according to land holding. Out of 104 cultivator sellers under the study, about 14 cultivators holding land upto 5 acres i.e. about 13.46 % are marginal. About 34 cultivators i.e. 32.69 % are holding land more than 5 acres but less than 10 acres, About 26 cultivators i.e. 25 % are holding land about 10 to 15 acres and about 30 cultivators i.e.28.85 % are holding land above 15 acares.

It is evident from the table that the percentage of

marginal cultivators is less than other cultivators because they could not use their land for cashew cultivators, they have to prefer the agriculture for their survival and the agricultural land which they posses is not suitable for cashew plantation. The small and medium size farmers prefer cashew plantation in addition to agriculture as a supplimentary cash crop, and the big cultivators prefer the cashew plantation to engage the plenty of dry and hilly land.

Table No. 4.2 indicates that about 16.27 % of the land is irrigated by natural resources as river and well, and about 83.73 % of the land under the study is non - irrigated. Tilari dam project is in process which will benefit the farmers in near future out of total non - irrigated land, about 72.48 percent is cultivated and about 27.52 % of the land is not yet cultivated, which is available and suitable for further cashew plantation.

It is evident from table No. 4.3 that out of 670 acres of land under study, about 63.58 % is occupied by cashew cultivation, about 15.82 percent of the land is occupied by mango plantation, about 15.67 % of the land is occupied by coconut plantation and remaining 4.93 percent is occupied by cultivation of miscellaneous crops as Betelnut, Banana, Chikku etc. This trend of analysis shows that most of the cultivators prefer the cashew plantation.

Table No. 4.1

Classification of Cultivator sellers according to land holding.

SR. No.	Size of Group	Size of holding (Acr)	Total Respondents	Percentage
1.	Marginal Cultivators	Upto 5	14	13.46
2.	Small Cultivators	5.1 to 10.0	34	32.69
3.	Medium Cultivators	10.1 to 15.0	26	25.00
4.	Big Cultivators	15 and above	30	28.85
			104	100.00

Table No. 4.2

Classification of land under study (1993)

(Figures in acres)

Type of Land	Irrigated	Non-Irrigated	Total
Cultivated	197.5	785	982.5
Uncultivated	13.0	298	311.0
Total	210.5	1083	1293.5

Table No. 4.3

Product wise classification of land under study (1993)

SR.NO.	CROPS	AREA (ACRES)	PERCENTAGE
1.	Cashew	426	63.58
2.	Mango	106	15.82
3.	Coconut	105	15.67
4.	Other	33	4.93
		670	100.00

Table No. 4.4

Price given to farmers at different villages under study (1993)

SR.NO.	Village	Minimum Rate (Rs.)	Maximum Rate (Rs.)	Average Rate (Rs.)
1	Ajgaon	24	30	27.0
2	Dhakora	26	27	26.5
3	Sonurli	25	27	26.0
4	Aros	24	28	26.0
5	Kondura	26	27	26.5
6	Degave	28	30	29.0
7	Tamboli	28	30	29.0

It is observed from the data collected from cultivators that about 58 % of the plantation is old, giving the present production and about 42 % of the plantation is planted recently during last three Four years and not yet matured for production. The new plantation of 3912 hectares of land during last four years, containing 7,82,400 cashew trees i.e. 200 trees per hectare, will produce nearly about 7,800 tonnes of cashewnuts per year at the average rate of 10 k.g. of cashewnut per tree, which will earn about Rs.2.34 crores at the current rate of Rs 30 per k.g. in near future.

Further about 16,900 hectares of land is still uncultivable according to the land record of Tahasildar office of Sawantwadi taluka. This land is suitable for horticulture and preferably for cashew plantation because of non-irrigation. If this land is brought under cashewnut plantation, further 33.80 lakhs of trees i.e. 200 plants per hectare, can be planted, which could produce about 33,800 tons of cashewn ts, and will fetch Rs 101.4 crores per year at the current market rate i.e. Rs 30 per k.g.

Even of " one man one cashewnut plant " methodology is applied, about 1,48,818 plants can be planted which produce about 1,488 tons of cashewnut yielding Rs 4.46 crores per year.

The big cultivators have adopted cashew plantation to coverup the land possession. But the same needs to be intensively cultivated.

According to the information available from the respondent cultivators, about 19,760 plants are giving a produce of about 74,090 k.g. of cashewnuts, i.e. each of the tree is giving about 3.75 k.g. of cashewnuts per year on an average. But according to scientific research by " Horticulture Research Centre, Vengurla ", each cashew - tree should give about 15 to 20 k.g. of cashewnuts per tree per year. The existing output rate in comparison with scientifically expected one is 25 % only, which indicates a very poor performance and poor results. A due consideration is necessary in this regards to improve the further yield.

Sale of produce

As regards the sale of product, the farmers get a minimun rate of Rs 24 per k.g. and maximum rate of Rs 30 per k.g. The fluctuation of rates depends upon the season purchasing place, area providing particular quality of product, distance from market and competitors. A branch of cooperative society from Goa gives a stable rate of Rs 30 per k.g. at Banda Market and its agent of Ajgaon Market, otherwise, the cooperative societies in Sawantwadi taluka are not taking any interest in this dealings, and hence the rates given by private local Traders fluctuates

from Rs 24 to Rs 29 per k.g. at all other places in this taluka. (Ref-Table No. 4.4)

Table No. 4.5 shows the alternative tendency of cultivators to sell their product. About 65 % of the respondent cultivators sold about 13 % of the total product under study, as and when the product is available. Mostly the marginal cultivators sell their product as and when available because of pressing need of money. Thus about 13 % of the total produce under study is being sold immediate after the harvest where as about 36 % of the cashewnut product is being sold to Local Traders in weekly Bazar or at permanent shop of Local Traders as per market prevailing rate; This tendency is followed by about 47 % of the cultivators under the study. It is very interesting to note that about 51 percent of the product under this study is being sold to Local Traders, when they visit the home of cultivators. Thus more than 50 % of the produce is preferred to sell at home, because of inadequate transport facilities or shortage of time or to avoid carrying efforts.

Table No. 4.6 indicates that about 19 % of the total product under study is being sole on weekly market day only, whereas 73 % of the product is being sold, otherthan weekly bazar day, either at market or at home, to the Local Traders. No product is being sold directly to cashewfactories. About 8 % of the prodcut is sold to

Table No. 4.5

Alternate Selling tendency of Cultivators

SR. NO.	Mode of Sale	No. of Cultivators	Cashewnuts sold K.g.	Percentage
1	As and when product is available	68	9,720	13%
2	At market opportunities	49	26,295	36%
3	Intermediaries approach to farmer home	62	38,075	51%
	Toal	--	74,090	100%

Table No. 4.6

Classification of Selling Sources of Cultivators

SR. No.	Source	No.of Cultivators	Cashewnut sold kg.	Average Rate Rs.
1.	Weekly Bazar	63	14,140	27
2.	Intermediaries at home	89	54,250	26
3.	Cashew Factory	--	---	--
4.	Cooperative Society	15	5,700	30
	Total	--	74,090	--

society. The percentage of selling to cooperative society is very low because the Society is having only one branch in Sawantwadi taluka purchasing cashewnuts since last year, and it is not yet popular, though it gives a stable and higher rate of Rs 30 per k.g.. Comparatively the rates on Bazar day are higher than the rates prevailing other than Bazar day, except cooperative society. At Bazar day rates varies from Rs 24 to Rs 30 per k.g., where as othe than Bazar day it varies from Rs 24 to Rs 28 per k.g.

Table No. 4.7 presents seasonwise selling pattern of Cultivators, which reveals the tendency of preservising the produce for taking advantage of changing market rates. About 63 % of the respondents selling their product as the beginning of the season i.e. First fifteen days of March. Out of the total produce under study about 9.5 % produce is being sold at the beginning of the season because of two reasons. Firstly, the pressing need of money and secondly, little high rates in market. The rates reduce at peak of the season, but about 80 % of the product is being sold in the period o.e. period of one and half month ending Month of April. The cashewnuts need to be dried properly in sun rays for at least 3 to 4 days; Cultivators avoid these efforts by selling the produce immediately further the cultivators have no storing systems, and for the want of transport facilities they sell their produce to intermediaries who visit their home, though the rates are low at that time. The remaing 10.5 % of the produce,

under the study, is sold at the end of the season i.e. the month of may. Generally the big cultivators can wait for the increasing rates in market. No produce is being sold by the cultivators at off season because of lack of storing facilities. Cashewnuts can be preserved in good condition, without much storing efforts, for not more than six months.

As regards the adequacy of the rates ofcashewnuts in market the 53 respondents are satisfied with the prevailing rates, out of which 15 respondents are selling their produce to cooperative society, and getting fair and high prices. But other 38 cultivators satisfy themself with whatever they are getting. Because they have neither to retain cashewnut at home, nor they try to get the better prices by other means. They are not cautio s of the increasing rates. They are neglecting the facts of changing rates Remaining 51 respondents are not satisfied with the rates they get in market, but they have to sell their produce even at low price because of inadequacy of transport and storing facilities.

As regards the payment of produce to respondents, almost all the cultivators are getting their payments on the spot. All transactions are done on cash basis.

As regards the advance payment, rarely about 1 % of the cultivators getting an advance about 25 % of his previous produce, who are urgently in need of money, but

on the agreement of providing the produce at low rates. Therefore, generally the cultivators avoid the advance against their products.

Out of the 104 respondents under the study, only about 57 cultivators are comparing the cost and revenue of the produce, other 47 cultivators are not aware of the cost-revenue comparison. They are satisfied with whatever they receive from intermediaries. They are looking at this product as a supplimentary to their agricultural income.

As regards the cooperative society, about 81 % of the respondents are in favour of it, realising its advantage. But about 19 % of the respondents are not in favour of it because of following reasons.

1) They will not get better prices because of the monopoly of cooperative society in market.

2) The cooperative marketing is benefited to certain members only, who are the close friends of the trustees. Further, the trustees may not be faithfull.

3) The cooperative market will not provide home service, as the Local Traders are providing, and which is necessary to the cultivators in remote area, where the adequate transport facilities are not available.

There are no storing facilities at market place also. All transaction are carried out on cash basis. Cultivators and Local Traders are storing the produce in gunny bags at their home for some more time and selling

whereever prices go up.

The information, regarding market rates, intermediaries, other available facilities, is rarely available to about 22 % of the respondents, other respondents do not get any information regarding the market conditions, 15 % of the respondents, get the information on notice-board at public place, where the cooperative society is in working, but 78 % of the respondents depending on the information provided by the Local Traders at market of at cultivator's home. Cultivators have no alternative than to believe the information provided by Local Traders.

As regards to the Government assistance about 72 % of the respondents receiving the subsidy at 100 % of the cost of plantation during last three years.

4.2 Analysis of Local Traders :

Local Traders play a dominating role in marketing channel of cashewnut product. It is the major linking source between cultivators sellers and cashew factories.

The Local Traders have their shops at market place, where the 41 % of their purchase is done. They also visit to weekly bazars at various markets where about 10 % of their purchase is done and about 49 % of their purchase is done at cultivator's place. Local Traders taking their own vans to cultivator's home and collect the cashewnuts.

It is revealed from the table No. 4.8 that, the Local Traders are more emphasizing on purchasing at cultivator's place.

" The Goa Bagayatdar Kharedi Vikri Sahakari Sanstha Phonda-Goa, has it's 14 branches at different places in Goa state. The society has established one branch at " " Banda " market in Sawantwadi taluka in 1992-93. This society purchase cashewnuts on comparatively high rates than indivisdual Local Traders i.e. Rs 30 to 31 per k.g., and selling them to cashew factories in Karnataka state, charging a profit of 50 paisa per k.g.

Though the cooperative society, paying higher rates for cashewnuts, most of the cultivators do not approach to society, because society is not providing any home services, which are necessited by cultivators due to interior, remote area and inadequate transport facilities. But as the society giving high rates at market place, he private intermediaries have to increase the rate to compete, with the society. Thereby the cultivators are getting a good amount of return.

The small intermediaries collecting cashewnuts at cultivator's place, weekly bazar or at their permenent shop and selling them to factories in taluka, or to wholesale Traders or to cooperative society. The small local charging their commission at 6 to 10 percent on their sells.

Table No. 4.7

Season-wise selling pattern of Cultivators

SR. NO.		Nc. of Cultivators	Product(Kg)	Percentage
1	Beginning of Season	66	7,029	9.5
2	Peak of Season	103	59,385	80.0
3	End of season	60	7,685	10.5
4	Off season	--	--	--
	Total	--	74,090	100.00

Table No. 4.8

Purchasing pattern of Intermediaries

SR. NO.	Place	Quantity (kg)	Percentage
1	At Bazar day	1,20,000	10.0
2	Cultivators' home	5,80,000	49.0
3	Permanent Shop	4,93,600	41.0
	Total	11,93,600	100.0

At Ajgaon market an agent of cooperative society is visiting at weekly bazar and purchasing cashewnuts from cultivatcrs as well as small Traders who are purchasing throughout the week. The rates of cashewnuts in market raises to Rs 31 per kg. at weekly bazar day, when an agent of society visits, otherwise the rates remain low at Rs. 26 to 27 per k.g. It indicates that, cooperative society is needed in this market to protect an interest of cultivators.

Table No.4.9 indicates that about 99 % of the product is being purchased in season and the purchase by intermediaries from cultivators in off season is negligible i.e. one percent only. It is only because inadequate storing facilities available to farmers.

Table No.4.10 shows that about 84 % of the total purchase by intermediaries is being sold to factories outside the tahasil, and only about 2 % of their purchase is being sold to the factories in tahasil. Thus, it seems that most of the factories in Sawantwadi tahasil has either to seek for self origanised machinery for purchasing their raw material (raw cashewnuts), or to purchase from intermediaries outside tahasil. Most of the market in this tahasil is already captured by the existing Local Traders who are selling their purchases to factories in Karnataka state and could offer the higher rates to cultivators than the local factories. According to the

Table No. 4.9

Seasonwise purchase by intermediaries

SR. No.	Season	Quantity (k.g.)	Percentage
1	Beginning of season	2,74,500	23 %
2	Middle of Season	5,81,000	49 %
3	End of Season	3,28,100	27 %
4	Off season	10,000	01 %
	Total	11,93,600	100 %

Table No. 4.10

Selling pattern of intermediaries

SR. NO.	Sales to	Quantity	Percentage
1	Factories in tahasil	24,000	2.00
2	Factories outside tahasil	10,06,000	84.00
3	Wholesalers in tahasil	40,000	3.00
4	Wholesalers outside tahasil	1,23,600	11.00
	Total	11,93,600	100.00

experience of the intermediaries, if the agents from Karnataka states do not approache to the Local Traders in tahasil, then the rates reduce suddenly in market because the factories in taluka are not offering the rates, which the factories in Karnataka state offer. The factories in taluka are not offering the rates equal to factories in Karnataka, because the labour cost in this taluka is higher than in Karnataka.

As regards the commission charged by the intermediaries, the wholesale Traders who are directly selling their purchases to factories in Karnataka are generally charging a commission of 2 % of their sale. They have a good contract with the factories personnel in Karnataka state, and will give assurance of sale of their purchases. Thus intermediaries need not store the purchases for long time. As soon as a sufficient purchase is made, it sent out to factory.

The local small Traders, who in turn, selling their purchases to wholesale Traders charging a commission of 6 to 10 % because they have to suffer a loss of low quality cashewnuts, or pre matured cashewnuts included in purchases. Further they have to store the purchase for some days to collect certain amount of quantity for selling to wholesalers. They have to sustain more risk than the wholesalers and also has to take more efforts than the wholesalers to collect the cashewnuts from the in terior

area of cultivators. They have to spend the loading and unloading charges of Rs.500 per load of one truck i.e. Rs.500 per 10,000 kg. of cashewnuts. Normally each gunny bag contains 80 kg. of raw cashewnuts and each load of truck contains 125 bags.

The table No. 4.11 indicates that the cooperative societies are charging the least commission thereby, can offer hopeful rates to cultivators.

The efforts have been made to develop a system of purchase the cashewnuts through cooperative society. A meeting of the chairmans of all cooperative societies in Savantwadi taluka, was held in 1990 and a decision was taken, regarding the purchase of cashewnuts from village to village, providing home service, by local cooperative societies, and Savantwadi Consumers' cooperative will purchase all the collections of local societies on commission basis. But these efforts have not found successful due to following reasons.

1) Most of the cultivators taking advance from local Traders due to pressing need of money, which is a fact, neither disclosed by cultivators, nor by Local Traders in personal interview with them. This fact is disclosed in discussion with officers of local cooperative societies. This facility of advances is not available with cooperative society.

Table No. 4.11

Commission charged by intermediaries

SR.NO.		Percentage
1.	Local Traders	6 to 10 %
2.	Wholesale (large scale) Traders	2 %
3.	Cooperative Societies	1.66 %

Table No. 4.12

Classification of workers in cashew factories under study

Workers	Male	Female	Total
Skilled	6	46	52
Unskilled	11	128	139
Semiskilled	--	---	---
Total	17	174	191

2) The cashewnuts purchased are dried for storing. There is a loss of about 2.5% in weight. This loss of weight is not accepted by Government Auditors in the accounts of cooperative society. The Auditor expects that the total quantity purchased is either sold or in stock. Thus the co-operative societies are coming in technical difficulty while auditing their accounts.

3) The purchases from local cooperative societies, sold to central cooperative society. But the central cooperative society has to sell all the purchases, again to a wholesale Traders, because of the absence of centralised purchasing system by Government, as in Karnataka State. And the Traders whith whom, the societies are competting, are having the personal contacts with such wholesale intermediaries. Thereby the societies are again brought in difficulty by reducing the rates. So that the small Traders are protected from the competitors. These are the market barriers faced by cooperative societies in marketing cashew product.

4.3 Analysis of Processing Units :

Procuring the kernels from cashewnut shell is the process requiring technical skill. Therefore the functioning of cashewnut processing units is also observed. About five processing units have been interviewed for collecting the information regarding their

workings, and the role played by the factories in the whole chain of cashew market.

The factories processing the cashewnuts are mainly labour intensive. All most all the processes are handle by labours. About 191 labours are being employed in five factories under the study, out of them 91% are Female and 9% are Male. Further out of the total employees under study 73% are unskilled and 27% are skilled one. (Ref table No. 4.12)

Thus the factory provides an employment at village level, where an unskilled labour is available, which is required by the factory on large scale.

As regards the purchase of raw cashewnuts by factories, about 13.5 % of total purchase is made at the beginning of season i.e. 15 days in second half of the month of March. Generally, the processing units are not willing to purchase the raw cashew in this season, because the cultivators are hurriedly getting the pre-matured and not properly dried cashewnuts, therefore it causes the loss in weight to the factories. About 68.5% of the required produce is purchased by the factories during the maiddle season i.e. one and half month ending first half of the month of May. In this season the cashewnuts are available on large scale, which are properly matured and also properly dried. About 18% of the total purchase of

the factories, is made at the end of the season i.e. 15 to 20 days ending first week of June. The factories purchasing the cashewnut in the end-season have to dried the cashewnuts properly, because in the month of June rainy season starts, and factories have no more chance to make them dry. Whatever the stock, the factory requires, they purchase it in season and drying them properly and stores it in their own way. Because thereafter, there is no guarentee of getting dried and qualitative cashewnuts in market and they are not durable for more than six months, unless they are properly dried.

The average rate being paid by the factories for purchase of cashewnuts during this year (1994) is Rs.30 per kg. in this taluka, whereas, the same is Rs.31.50 to 32 in Karnataka.

Out of the total purchases about 9% of purchases are made from cultivator sellers and about 78% of the total purchases are made from wholesale Traders, who are supplying the cashewnuts on large scale and giving guarenteed quality. About 13 percent of purchases are made through their own agent at the various Bazardays. The factories generally prefer to purchase from wholesaler, because of bulk purchase and good quality. While purchasing the raw cashewnuts the sample at random of one kg. of cashewnuts is put into the water. Generally, 160 to 170 cashewnuts are cantained in one kg.

Table No. 4.13

Seasonwise purchasing by factories in Savantwadi

Season	Quantity(k.g.)	Percentage
Beginning of Season	68,000	13.5
Middle of Season	3,45,000	68.5
End of Season	90,000	18.0
Off Season	----	----
Total	5,03,000	100.0

Table No. 4.14

Purchasing pattern of factories

Source	Quantity(k.g)	Percentage
Cultivators Sellers	45,000	9 %
Wholesale intermediaries	3,94,000	78 %
Through own Agents	64,000	13 %
Total	5,03,000	100 %

of weight, after putting them in water, about 4 to 40 cashews may be floating on the water. The cashewnuts floating on water are of low weight and of inferior quality. Generally floating rate of about 20 cashewnuts is accepted.

The next step followed by the factory is processing. Generally there are two processing methods which are followed by the factories. These are as follows :

A) Roasting of cashewnuts - Method

Under this method of processsing the process is conveniently classified into eight stages. They are discussed as follows :

1. Drying of nut sheel :

After procuring the required cashewnuts, they are scattered on the floor for sun-drying for three to four days. There will be a loss of weight in this process, i.e. 3%. The loss may be still more, if fresh nuts are procured immediately after harvesting, than those of previous years nuts. For storing purpose, a dry grass or waste is put on the floor in store room and nuts are packed in 80 kg. gunny bag and stored in packed store-room, so that in could be protected from moisture. Then the actual process is followed.

2. Roasting of nuts :

There are three methods of roasting of cashewnuts and they are (a) Drum roasting (b) Oil bath roasting

and (c) Mild roasting. The processors generally adopting the drum roasting technique, because of its easy operation and handling. Required temperature is provided by burning cashewnut shells and firewood. The shell liquid comes out from the nuts and catching fire. Thick dark smoke is produced. The wood ash is mixed with it to absorb shell liquid. Roasting is done for about one to two minutes. One disadvantage of drum roasting is that, cashewnut shell liquid is lost, which is having a major commercial value in the market. About 15 bags of raw ruts can be roasted at a time in roasting drum. Roasting is skilled process, because if more heat is given then the kernels may turn into coal and if less heat is given, then the oil in nut shell remains unaffected, and it will damage the human skin, while further processing. The reddish colour of kernel depends upon the heat given in roaster drum.

3. Shelling

Roasted nuts are colled for some time and are broken by beating them with wooden mallets. This is a manual process. Due care is to be taken to see that the kernels are not broken. This process is time consuming, which means each labourer can shell only 10 k.g. of nuts per day of eight hours.

4. Drying of shelled kernels

The shelled kernels are dried upto loosen the kernel coat which facilitates easy peeling of it. A tray

drier is used for this purpose. It contains the chembers, each chember contains six trays and each tray can hold about 10 k.g. of shelled kernels. The temperature maintained inside the chember is at 80° to 90° C. kernels are dried for about 4 to 7 hours and during this period, tray are interchanged for uniform heating. Latter the trays are taken out and the kernels are spread out on mats before they are sent for peeling.

5. Peeling

This is an important process but labourious and time consuming kernel coat is peeled off by hands. If small piece of coat is still remaining, it is removed with the help of sharp bamboo sticks or knives. Some factories in Savantwadi taluka sell the kernels without peeling, in local market and it is called as 'Natural Grade'. But comparatively it fetches low rate.

6. Grading

Kernels are graded by hand. They are sorted out on the basis of their size, quality, weight, nature and breakage. There are about 33 grades, as Jumbo special (w-180), Jumbo Special (w-210), Jumbo special (w-240), special (W-320), special (W-400), W-1, W-2, SW, SSW, BW, J.H., SS, DS, K, SP, DP, SWP, LP, BB etc. only 26 grades are commercially available and exported. W-180 means the kernels counts 180 pieces per pound. This special quality is very rare in total production i.e. about one percent. W-210, W-240 are considered as

first, second quality in the Grade of whole nuts; Grade B, S, LWP are vertically or horizontally broken into two pieces. Grade SWP, are the kernels broken into one fourth pieces, Grade BB means kernels broken into 1/8 portion 'W' means white whole kernels and 'SW' means scorched whole kernels.

7. Conditioning

When the kernels are meant for export purpose, then only they are conditioned. Kernels packed in the tin are given carbondioxide treatment to avoide breakage of kernels. Kernels are heaped on mesh bottom plate. On the ground, sand is spread out and water is sprinkled on it. Fans are run overhead which evaporates the moisture int he sand and it is absorbed by kernels. These soften the kernels which resist breakage during packing and transit.

8. Packing

The conditioned kernels are packed in a tin. The weight of kernels contain in each tin should be 25 lbs. or 11.340 k.g. excluding the weight of tin. The tins are printed with code number of kernels contain in it.

B. Boiling Methold :

Under this method raw cashew nuts are put in to the boiler. The another boiler attached to it, containing water which is boiled with wooden fire and the steam passes through the pipeline in to the boiler containing cashewnuts. The cashewnuts are boiled on steam at

certain temperature for about 15 minutes. About four bags of raw cashewnuts can be boiled at a time in this boiler. The boiled cashewnuts are scattered on mats for about 8 to 10 hours, and fans run-overhead to evaporate moisture. Thus the boiled cashewnuts are dried carefully. If they are not properly dried, the shell oil will be spread-out while cutting the shell and it spoils the kernel and it is harmful to human skin on the other hand the nuts will not cut properly on the cutter. The benefit in this process of boiling is the shells are still available to extract the shell oil and the white whole kernels are obtained where as scorched whole kernels are obtained from Roasting process. The factories in this taluka do not extract the shell oil as by-product because of insufficient quantity of shells, rather they sell it to factories extracting the oil. The shells are sold at an average rate of Rs. 1.50 per k.g.

2. Cutting process :

The boiled shells are sent for cutting after properly dried. Shell is vertically cut in to two pieces on cutter and kernel is seperated. About 10 k.g. of cashew shells can be processed by one labourer per day of 8 hours.

3. Drying of shelled kernels :

This process is same as in roasting method, but kernels

are tobe kept in drier for about 10 to 12 hours instead of 4 to 7 hours under roasting method.

Ths method of boiling is mostly followed because in this method kernels remain more white and shining than the roasted one. The other processes remain same in both the methods.

Process loss suffered by processing units :

The processing units has to suffer the process loss to a great extent. Each gunny bag of cashewnut contains 80 k.g. of nuts at the time of purchasing, but after drying it for storing or process purpose, the 80 k.g. of purchases reduces to 75 k.g., it means about 6 % of the wieght loss has to suffer in first stage of process. Then about 29 k.g. of finished kernels could be obtained from 100 k.g. of raw cashewnuts. In thrid process of heating for peeling the kernels, the output of 29 kg. turns in to 28 k.g. Thus there is about 3.5 % loss in this process, has to suffer. In peeling process again about 2 % loss in weight is tobe suffered. The finished output 28 kg. turns into 27.5 kg. of saleable kernels. Again out of 27.5 k.g. of finished kernels, about 50 % are in damaged condition i.e. broken in to pieces and 50 % are unbroken.

Analysis of Process cost :

It is evident from the table No. 4.15 that the

processing units have to bear the processing cost of Rs.215 per 80 k.g. of raw cashewnuts. Out of this total cost, material cost is 25.58 % and labour cost is 74.72 %, indicating the major share of labour cost in process of cashewnuts, which implies that the cashew processing is a labour intensive industry.

Among the various labour costs the major share is occupied by shelling operation i.e. 30.70 % of total processing cost and followed by the peeling cost of 25.53 % of total cost, and grading charges at 14 % of total cost.

Some of the industries in Savantwadi taluka use to produce kernels for local market. They have not to spent for peeling or grading charges or heavy packing charges. Because in local market kernels without much grading and without peeling are sold in small plastic packets, costing Rs.140 per k.g. and the kernels with peeling but without much grading are sold in local market at Rs.160 per k.g. of kernels to retailers.

Out of the total production of kernels under the study of 1,40,840 k.g., about 5 % is sold in locak market and remaining 95 % is being sold in Bombay market. Table No.4.16 shows the average rates at Bombay market for different grades in this year.

Table No. 4.15

Process cost of raw cashewnuts in Savantwadi taluka (1994)

(Cost per 80 kg. of cashew nuts i.e. 22 kg.of kernels)

SR. No.	Item of Cost	Material (Rs)	Labour (Rs)	Total Cost (Rs)	Percentage
1	Drying of nuts		4.00	4.00	1.86
2	Boiling of nuts	6.00	1.50	7.50	3.50
3	Shelling of nuts	--	66.00	66.00	30.70
4	Drying of shelled Kernels	1.00	1.50	2.50	1.16
5	Peeling of Kernels	--	55.00	55.00	25.53
6	Grading of Kernels	--	30.00	30.00	14.00
7	Packing of Graded kernels	48.00	2.00	50.00	23.25
	Total	55.00	160.00	215.00	100.00

Total processing Cost per 80 kg. of raw cashew nuts(22kg.of Kernels) = Rs. = Rs.215.00

Total processing cost per kg.of rawnuts = Rs. 2.69

Total processing cost per kg.of kernels = Rs. 9.77

Table No. 4.16

Average rates of kernels per tin (11.34 kg.) (1994)

SR.NO.	Grade	Rat (Rs.)
1.	Jumbo Special - W-180	3,000
2.	W-210	2,500
3.	W-240	2,2350
4	W-320	2,000
5	W-400	1,900
6	W - 1	1,850
7	S.W.	1,700
8	S.S.W.	1,500
9	B.W.	1,400
10	J.H.	1,850
11	S.S.	1,750
12	DS	1,450
13	K	1,800
14	SP	1,700
15	DP	1,300
16	SWP	1,000
17	LP	1,100

Source - Officers in cashewnut processing factories in taluka.

Table No. 4.17

Recovery of kernels from 80 kg of rawnuts

SR NO.	GRADE	Quantity Obtained	Percent-age	Price per kg.	Total (Rs.)
1	Jumbo-W-210	1.00	4.54	220	220
2	Jumbo-W-240	3.00	13.64	207	621
3	American-W-320	7.00	31.82	176	1232
4	Standard-Broken Whole	2.00	9.09	142	284
5	Splits	2.00	9.09	148	296
6	Pieces - K	5.00	22.72	159	795
7	Other	2.00	9.09	113	226
	Total	22.00	100.00		3274

Table No. 4.18

Purchase of Kernels by Retailers in Savantwadi (1993-94)

SR NO	GRADE	Quantity (kg)	Percent-age	Rate(Rs)	Value(Rs)
1	S.W.	4524	33.77	170	769250
2	B.W.	1350	10.07	160	216000
3	Special-(W-320)	400	2.98	190	76000
4	Special-(W-240)	250	1.86	210	52500
5	N.W.	1150	8.58	135	155250
6	N - 1	1725	12.87	140	241500
7	N - 2	2750	20.52	150	412500
8	Broken	1250	9.35	120	150000
	Total	13400	100.00		2073000

Table No. 4.19

Selling pattern of kernels in Savantwadi market (1993-94)

SR. No.	GRADE	Quantity (kg)	Rate (Rs.)	Value(Rs)
1	S.W.	4,525	180	8,14,500
2	B.W.	1,350	175	2,36,250
3	Special (W-320)	400	200	80,000
4	Special (W-240)	250	220	55,000
5	N.W.	1,150	140	1,61,000
6	N - 1	1,725	150	2,58,750
7	N - 2	2,750	160	4,40,000
8	Broken	1,250	140	1,75,000
	Total	13,400		22,20,500

Table No. 4.17 implies the internal percentage of different grades produced from one gunny bag of 80 k.g. of cashewnuts in Savantwadi taluka. Table shows that about 27.5% of finished product is obtained from raw cashewnuts. In total output of kernels, Grade-W-320 contains major portion i.e. 31.80 % followed by pieces-k i.e. 22.72%. This internal percentage may change according to the quality of raw cashewnuts. Some times percentage of special-W-210 may increase to 31.8% from 4.5% and American-W-320 may reduce to 4.5% from 31.8%, if good quality of raw nuts is received. The quality of raw nuts is received. The quality of raw cashewnuts varies from region to region, village to village and farmer to farmer. The average recovery of cost of 22 k.g. of kernels is Rs.3274 i.e. Rs.148.8 per k.g. of finished kernels, or Rs.40.92 per k.g. of raw cashewnuts.

Thus it can be concluded that the processing is an important operation in order to get the final consumable product from cashewnut.

4.4 Analysis of Retailers of kernels in local market.

There is no much scope for selling the kernels in local market, because the residentials have their own source and the market is still having a tradition of weekly bazar day. The visitors are mostly the consumers of this local market. Less than 5% of the product of

cashew factories in this region is being sold in local market, and remaining is sent to outside region as Bombay market for export or domestic sale.

The relailers are not selling only the kernels but they also sell confection. It is evident from the table that the Grade sw (full reddish) kernels having comparatively more demand at 33.77 percent, in this market followed by Grade ' N-1 ' N-2 (without peeling) at 12.87% and 20.52 % respectively. The special grades as W-320, W-240 are rarely sold at 2.98 % and 1.86 % respectively. Only few grades are being sold in local market.

Comparing the sales and purchases (Ref table No.4.18 and 4.19) it seems that the retailers are charging on an average profit of about 7 % on sale. Most of the retailers using their purchased kernels in confections sole by them, if purchased kernels are not sold out within particular period, so that it should not be waste due to lack of storage facilities.