CHAPTER - 1.

INTRODUCTION :

1.1 Horticulture : A Proem

1.2 Importance of Cashewnut Product

1.3 Significance of Cashewnut over other cash crops

1.4 Objectives of Study

1.5 Data and Methodology

1.6 Chapter Scheme

INTRODUCTION :

Horticulture plays an important role in the development of the district of Sindhudurg; and Savantwadi tahasil is at the forefrant of it. Rice and Raggie are the main crops taken in this district which fulfill the needs of the cultivators for not more than six months due to their meagre production. Cashew, mango, coconut, Betelnut and mangosteem are the important cash crops of this district and they help to raise foreign exchange on large scale. Hence horticultural development is inevitable and ultimate for the economic development of this district.

Situated in the coastal area, Savantwadi tahasil is benefited by the tropical atmosphere, plenty of dry land and ample hilly area which is verymuch suitable for horticultural products, preferably cashewnut. On the contrary agricultural produce such as sugarcane or tabacco cannot be taken here. Likewise industries could not be flourished. Further inadequate transport facilities homper the industrial growth. Ofcourse Dairy and poultry can be supplimented to the agriculture but there are also certain limitations of their progress on account of inadequate transport and storage facilities and reliable marketing channels.

Infact, a few steps, such as " Cashew plantation programme of 1965 " have been taken by the Government of Maharashtra with the intention of turning Konkan into

California. But it did not succeed due to improper plan and lack of systematic efforts. However it created some awareness in the farmers of Savantwadi. Gradually due imphasis was given on cashew production. The "Phalodhyan" scheme under Employment Guarentee scheme also given phillip to this crop and majority of dryland, ranched fields are being utilised for cashewnut plantation. Considering the past experience, present situation and future prospectus for the scope and development for the production of the 'Almond of the poor' it has been sincerely felt that some useful research be made in this field.

1.1 Horticulture : A Proem

The new milestone to be achieved in Indian agriculture is diversification of Indian agriculture from traditional land use systems which are based Predominently, on cereal based cropping systems to more productive and remunerative one. The diversification in traditional land use system, Forced to accept horticultural development. For instance Punjab achieved commendable heights in foodgrain production and in the intensity of cropping practice (175%) was forced to consider diversification as a major alternative for sustaining income from agriculture.

Economic use of dryland

The other cause of emerging trend in Indian

agriculture, which is favour of horticulture, is the arid-zone and dryland area. Horticulture provides unique and attractive alternative systems of using the dryland, most economically and there is a hope for better results in view of the vast export potential of horticultural crops.

The dryland area consists over 60% of the total cultivable area in the country, which contributes only 35 to 40 percent of the annual agricultural product. The arid-zone alone is about 20 percent of the cultivable area, measuring about 31 million hectares. This does not include seven million hectares of cold desert in Ladakh area in Jammu-Kashmir. In hot arid zone, there is a low average rainfall between 160 mm to 350 mm, Low humidity and high transpiration losses of water. The soil of this region is highly salty, with low capability and poor moisture storage capacity. Therefore under such situation, growing of foods or field crops is a risky job. In such situation horticultural crops like Ber, Date, Palm, Fig. Pomegranate are much better suited, having ability to withstand.

Irregular rainfall

Similarly, the semi-arid and dry subhumid region found extensively in Andhrapradesh, Maharashtra, Karnataka, Gujarat, Haryana, Tamilnadu etc. Bulk of which is instable for production, due to irregular and inadequate rainfall, suffers crop failure very frequently. The main product in this area is of gram which is very substantial quality.

The productivity of land and animal is low. Most of the rainfall is lost due to excessive runoff. Therefore little buildup of irrigation potential. The cost benefit ratio of fruits like mango under these conditions was 3.35, as against less than 2 in sorghum and groundnuts. There is a shift towards fruit in this area.

The remarkable shifting in favour of horticultural crops is shown by Maharashtra and Gujarat. There has been significant increase in the area and production under horticultural crops during last 10 years. In 1981-82 horticultural crops covered 3.76 lakh hectares, while in 1991-92 it was 6.40 lakh hectares. It indicates that there is a 100 percent increase in area covered by horticultural crops, consisting 10 percent average growth rate. Fruits like Grape Mango, Cashewnut, Custard apple etc. have dominated the expansion programme. Aonla (Indian gooseberry) and Ber are being planted in dryland area of U.P., A.P., Panjab, Haryana, Tamilnadu, Gujarat etc.

Tropical situation

Kerala provides another instance of trend of diversification in favour of horticultural crops under tropical agroclimatic situations. The area under paddy in the state has come down by about 22 percent, while the area under horticultural crops has increased by 33 percent. Maximum diversification of the area has taken place in favour of Rubber followed by coffee, cashew, coconut. It

indicates that there is a preference to high value crops due to their importance for Export.

Oil Palm

Oil palm cultivation is also the significant identity of diversification in favour of plantation crops. This crop has a production potential of 6 to 8 tons of oil per hectare per year. Oil palm is considered as one of the most important source for meeting edible oil requirements.

The horticultural crops encompassing a large variety of fruits, vegetables, flowers, plantation and spice crops, medicinal and fragrant plants, roots and tuber crops. This covers more than seven percent of gross cropped area, but it contributes more than 18 percent to gross value of the agricultural output of the country. Today the area under these crops is around 12.58 million hectares, with annual production of around 100 million tons. The area under fruits has increased from 1.12 million hectares in 1951-52 to 3 million hectares in 1990, while production has gone up from 11.7 million tonnes to 28.2 million tonnes during the same period. Among vegetables, the production of potato has increased by 740 percent in total production and 340 percent increase in area during this period. Among the plantation crops, area under cashewnut has increased by over 130 percent.

Higher income and Employment capability

The potentiality of horticultural crops for providing

much higher income to the farmers than the cereals, is an another major factor in favour of diversification of horticultural crops. Fruits and vegetables earn 20 to 30 times more foreign exchange per unit area than the cereals. Similarly, in the area of employment generation, these crops have greater scope over other crops. The average labour required for fruits, works out to Rs. 869 per hectare as against 140 men days for the cereal crops. Crops like Grapes, Banana, Pineapple generates much larger employment, ranging from 1000 to 2500 men days per hectare.

Nutritional Aspects

Fruits and vegetables are well known sources of essential nutrient like vitamins and minerals. These are considered to be the cheapest source of nutritive foods particularly of vitamin 'A' and 'C' and minerals like calcium, magnesium, iron etc. The increase in consumption of fruits and vegetables is one of the noticeable trend in horticulture in the country. The domastic consumption trend of Fruits and vegetables is reported to have gone up from 2.5 percent in 1980-81 to about 6.5 percent in the recent years. Consumption trend is comparatively higher in the urban areas.

Government Role

Thus the role of horticulture in enhancing productivity of the land uplifting economy of farmers and

providing overall national economy, has forced to development of these crops in recent years. In seventh five year plan, the allocation of funds for the horticulture developmental activities went up to Rs. 24 crores from Rs.7.6 crores in the fifth five year plan. The current plan has allocated Rs.1000 crores for horticulture crops accounting for increase over 4000 percent over the seventh five year plan. Therefore the eighth five year plan is considered as a major milestone in the growth of horticulture in the Country. The libaralisation policy of the Government contributes considerably to this development.

Export of Grapes and Mango has been going up year after year, facilitated by introduction of pre-cooling units, improved packing and container services for sea-transportation from Bombay to Europeon countries and other markets. Grapes made available in that part of the world, at the time when these are not available from anywhere else, and therefore fetch a premium price. The area under irrigation has increased from 1000 hectares in 1985 to 55,000 hectares in 1991-92.

Another major trend is the thrust being given to adoption of better post-harvest handling system for the perishable crops, and libaral assistance being given by Government in developing appropreate infrastructure in the country. India has been lossing 25 to 40 percent of the perishable produce annually during post harvest handling

accounting for a revenue loss of Rs.3000/- crores. The importance of introducing better post harvesting management practices is gradually being realised.

Mango is one of the major horticultural product. It covers 42% of the area of horticultural crops and accounts 39 percent of the production. India is world's largest producer of Mango. In Maharashtra State a corporation "MAHAMANGO" is established to deal with the mango crops in the state which collects the crop and exports on large scale for last tow years.

1.2 Importance of cashewnut product :

Cashew has emerged as one of the major foreign exchang earning crop with annual income of nearly Rs.340 crores. There was a monopoly in international trade, supplying about 95 percent of the cashew kernels, until decade ago.

India exported 64,692 M.T. of cashew kernels amounting to Rs.668.45 crores, and 4477 M.T. of cashewnut-shell liquid amounting to Rs. 3.96 crores in the year 1991-92, taking the total export earning from cashews to Rs.672.41 crores. The import of raw nuts during the year was of the order of 1,06,080 M.T. amounting to Rs.266.68 crores.

At present, India has a processing capacity of over 6,00,000 M.T. per annum where as indigenous production of

raw nuts is only about 3,00,000 M.T. Annual import of rawnuts is over 1,00,000 M.T. and over 2,00,000 labourers are engaged in cashew processing. But they are not getting employment for onethird of the year due to non aailability of raw nuts.

Table No. 1.1 indicates that the indigenous production of cashew nuts increased by 370% (i.e.2,15,098 M.T.) over the period of 35 years till 1990-91, indicating an average growth rate of 10 percent, which is a result of continuous and systematic efforts of the Government and cultivators to increase the production of cashewnut. However the average growth rate within the first 20 years since 1955-56, was 11 percent and in 1976-77 the production was suddenly reduced by 18% over the production of 1975-76. It remained constant for next nine years. In 1985-86 the production was suddenly increased by 160 percent (i.e.87938 M.T.) over the production of 1984-85 and since 1985-86 an average growth rate of about 19% is maintained till 1992-93.

The import of raw cashewnuts remained about 80 percent of indigenuous production during 20 years since 1955-56. It reduced to 18 percent in 1980-81 and to 9% in 1985-86 due to the policy of Government, curtailing the import and emphasis on increasing the indigenuous production. But again the percentage of import to indigenuous production was increased and the same was 28

Table No. 1.1

Production and Import of raw cashewnuts in India

Year	Production of Raw Cashewnuts (M.T.)	Import of Raw Cash-ewnut (M.T.)
1955-56	79,492	63,154
1960-61	1,11,409	1,18,321
1965-66	1,43,818	1,60,636
1970-71	1,76,723	1,69,359
1972-73	1,77,314	1,97,338
1975-76	1,71,438	1,37,196
1976-77	1,40,257	74,131
1980-81	1,45,466	25,715
1985-86	2,34,480	21,945
1986-87	2,45,580	49,149
1987-88	2,60,260	42,609
1988-89	2,74,330	45,150
1989-90	2,85,590	59,591
1990-91	2,94,590	82,639
1991-92	3,05,310	32,117
1992-93	3,49,390	65,767

Source - Cashew Export Promotion Council, Chochin.

percent in 1990-91. The increase in import is to fulfil the demands of export and home consumption of kernels.

The import was increased by 46 percent (i.e.74042 M.T.) over the period of 20 years till 1975-76, indicating an average growth rate of 2.3 percent. In 1976-77 an import suddenly reduced by 46 percent over the purchase of 1975-76 and reduced by 24 percent in 1980-81 in comparison with 1976-77. In 1982-83 import of cashewnut dwas 14,060 M.T. where as in 1992-93 it was 65,767 M.T. Thus the average growth rate of import during the period of last 10 years is 47%.

Table No. 1.2 represents exporting trend of Kernels. India was exporting about 96.9 percent of the world market in 1955-56. It shows that India was enjoying a monopoly in international market in exporting of kernels. But the trend shows that, India is lagging behind in recent years in export of Kernels. The export reduced to 40 percent in 1988-89. In 1989-90 and 1990-91 export increased from 33,994 M.T. to 45,632 M.T. and 49,874 M.T. respectively and the world export reduced from 85,075 M.T. to 81128 M.T. in 1989-90 and 75662 M.T. in 1990-91. And as a result the percentage increased from 40 percent to 56% and 66 percent in 1989-90 and 1990-91 respectively. In fact an average growth rate of export is only 4.5 percent over the last 35 years ending 1990-91. Considering the recent trend of export, it seems that India has realised the importance of kernel export in world market and have taken some sound

steps and have been succeeding in the efforts.

Table No. 1.3 shows that KERALA is at the forefront in cashewnut production in India. About 29 percent of the total area under cashewnut plantation is occupied by Kerala state, and about 74% of the total area under cashewnut plantation is occupied by four states (Kerala, Karnataka, Andhrapradesh and Tamilnadu). Maharashtra state contributes 5% of the total cashewnut plantation. The plantation of cashewnut in India is increased by 10 percent over ten years till 1992-93, indicating an average growth rate of one percent. Considering the planted area of Maharashtra, an increase of 20 percent is achieved during the period of 10 years ending 1992-93 indicating an average growth rate of 2 percent, which is double than the growth rate in India.

Table No. 1.2

Export of Cashew-Kernels

Years	World Export (M.T.)	Indian Export (M.T.)	Percentage India/World
1955-56	32,466	31,452	96.9
1960-61	41,578	39,436	94.8
1965-66	58,830	53,793	91.4
1970-71	78,336	54,074	69.0
1975-76	95,542	59,174	61.9
1980-81	64,899	32,805	50.5
1985-86	70,498	37,097	53.0
1986-87	74,940	43,004	57.0
1987-88	79,782	35,971	45.0
1988-89	85,075	33,994	40.0
1989-90	81,128	45,632	56.0
1990-91	75,662	49,874	66.0

Source :- Cashew Export Promotion Council, Cochin.

Table No. 1.3

Estimates of Area under cashewnut crop in India

(Figures in hectares)

State	1982-83	1985-86	1988-89	1991-92	1992-93
Kerala	149736	154114	155263	155491	155641
Karnataka	60289	68519	72374	74442	74592
Andra Pradesh	60512	68800	71019	71241	71716
Tamilnadu	94770	94770	95370	95970	96270
Goa	44139	44139	44239	45081	45631
Maharashtra	22692	22642	22752	22852	27352
Orissa	52454	57445	59983	60085	60135
West Bengal	6698	6698	6798	6898	6898
Pondicherry	363	363	363	363	363
Tripura	839	839	1126	1126	1126
Total	492492	518379	530869	533549	539724

Source - The Cashew Export promotion council-Cochin(1993)

Table No. 1.4

Estimate of production of rawcashewnut in India

(Figures in M.Tons)

State	1982-83	1985-86	1988-89	1991-92	1992-93
Kerale	120900	128900	136900	143200	151600
Karnataka	19060	20930	23680	26750	31260
Andra Pradesh	20040	26810	34260	40360	44880
Tamilnadu	11310	11800	12360	12710	19190
Goa	9070	10760	12760	14490	33810
Maharashtra	10010	15790	24380	31360	25590
Orissa	8490	16880	26770	31840	39060
West Bengal	2270	2320	2890	3660	3660
Pondechary	240	240	260	290	290
Tripura	50	50	50	50	50
Total	201440	234480	274330	305310	349390

Source - The Cashew Export promotion Council, Cochin (1993)

Table No. 1.5

Estimated Area and Production of Cashewnut in India

Year	Area(in hectares)	Production (M.T.)
1982-83	4,92,492	2,01,440
1983-84	5,01,953	2,10,870
1984-85	5,09,768	2,21,330
1985-86	5,18,379	2,34,480
1986-87	5,22,998	2,45,580
1987-88	5,27,395	2,60,260
1988-89	5,29,287	2,74,330
1989-90	5,30,869	2,85,590
1990-91	5,31,849	2,94,590
1991-92	5,33,549	3,05,310
1992-93	5,39,724	3,49,390

Source - The cashew export promotion council, Cochin

Table No. 1.4 indicates the production trend of raw cashewnuts in India. Kerala is a leading state in production of raw cashewnuts. While comparing Goa State to Maharashtra, it has been observed that, though the area occupied by cashew plantation in Goa State is double, the production was less than the Maharashtra State, upto 1988-89. In Maharashtra the production of raw cashewnut has been increased by 250 percent in last ten years. The annual growth rate worked out to be 25%. The total production of raw cashewnuts in India increased by 173 percent during last ten years. The annual growth rate worked out to be 17.3 percent. Thus the annual growth rate of cashewnut production in Maharashtra is higher than the average growth rate in India.

Table No. 1.5 shows the area occupied by cashewnut plantation and the raw cashewnut production in India during the period of ten years ending 1992-93. The productivity per hectare is worked out to be 0.41 M.tons in 1982-83 where as 0.65 M.tons per hectare in 1992-93. Thus it shows that the productivity per hectare is increased by 58 percent during last ten years indicating an average growth rate of 5.8 percent.

The productivity of cashew plantation in Maharashtra was 0.44 M. tonnes per hectare in 1982-83 whereas it increased to 0.94 M.tonnes per hectare in 1992-93, indicating an increase of 113 percent productivity during

last ten years. The average growth rate worked out to be 11.3 percent. Thus the growth rate of productivity in Maharashtra is twice than the growth rate in India. The increasing productivity is an indication of the successful and systematic efforts by Government of Maharashtra.

While examining the table No. 1.6 it is observed that the home consumption was only ten percent of the total production during 1955, increased to 46 percent of the total production during 1990. Thus the trend reveals that there is a reducing tendency in exporting kernels from 90 percent to 54 percent of the output, and increasing tendency of consumption in home market. This adverse trend of export of Kernels may be because of increasing competition in foreign market, participation of other countries in the above business and also an increasing demands for kernel product in home market itself. But at kernel is foreign exchange earning source, the efforts should have been made to increase the production and fulfill the needs of home consumption and foreign market.

Though there was a monopoly in international trade, supplying about 98 percent of the world's kernel market in 1958, it declined to 44 percent in 1985 and about 66 percent in 1990 only because of shortage of raw cashewnuts. Therefore these were being imported from African countries. About 33,000 M.Tons of raw cashewnuts amounting to Rs.36.49 crores were imported in 1984-85. The cashew plantation area

Table No. 1.6

Production, Export and home consumption of kernel in India

(Figures in M.Tons)

Year	Total Production	Export	Home Consumption
1995	34,945	31,452	3,496
1960	56,284	39,439	16,845
1965	74,591	53,793	20,798
1970	84,790	54,074	30,716
1975	75,615	59,174	26,441
1980	41,939	32,805	9,134
1985	62,824	37,097	25,727
1986	72,709	43,004	29,705
1987	74,203	35,971	38,232
1988	78,273	33,994	44,279
1989	84,569	45,632	38,937
1990	92,421	49,874	42,547

Source - Cashew Export promotion Council, Cochin - 1990

was roughly 5.33 lakhs hectares in 1990-91. The poor quality of raw nuts and low productivity of crops are of serious concern to cashew grower as well as to the industry. The per hectare yield is very low i.e. 435 k.g. as compared to other countries i.e. 1,000 kg. Due to the non availability of raw cashewnut, most of the processing units run for 8 to 9 months within a year.

About 22 lakh tonnes of cashew apples are produced annually most of these goes waste, except in Goa state where the 'FENI' is produced. Since liquor policies in other states do not permit preparation of wine product, an excise revenue of Rs. Seven crores is being lost. The cashew apple is rich in minerals, vitamin 'C', carotene and also has medical properties.

While syrup, juice, cocentrate, candies, jam and pickles can be made from cashew apple, these have not been marketed. Cashew shell liquid is a by-product of processed cashewnuts. It has also several industrial uses. It appears that both the central and state Government have not contributed much to the development of cashew production. This is evident from the provision made for cashew development in various five year plans. The amount provided was only Rs. two crores in sixth five year plan and Rupees five crores in seventh five year plan. Efforts should be made to step up the home production of raw cashewnuts than import.

Further reliable statistics are still not available for the important commercial crops like cashew. Estimates are being made as regards to the total production and area of crop.

The National average productivity from the available statistics is significantly low. The per tree yield is only 2.5 kg., as one hectare of land accommodates only 200 trees and per hectare production is 554 kg. only. Productivity has to be step up to increase the income of the Grower as well as to keep price of Indian cashew competitive in the International market. The reason of low productivity is old age trees and difficulty in harvesting.

Accordingly a Rs.48 crores project for developing cashew cultivation, during the Eighth five years plan, commencing from 1993-94, has been launched by Government of India. Under this project in execution in state of Kerala, Karnataka, Goa, Maharashtra, Tamilnadu, Andhrapradesh, Orissa, West Bengal, Madhyapradesh, manipur and union Territory of Andaman and Nicobar Islands, steps would be taken to achieve a target production of six lakhs tonnes of raw cashew nuts by the turn of the century from the present level of 3.50 lakh Metric Tonnes.

By exporting 54000 Metric Tonnes of cashew kernels in 1952-93, the country has earned foreigh exchange to the tune of Rs. 757 crores. Considering the significance of cashew

in Indian Commercial scenario, the Directorate of cashew development of the Union Ministry of Agriculture has drawn up a massive project, for increasing the indigenous production of cashewnut, to sustain the traditional labour-intensive Industry. The rate of growth aimed at for this development is 8 percent per annum. According to the plan, the production of indigenous raw cashewnut is expected to reach up to 4.40 lakhs metric tonnes by the end of eighth Five year plan.

The project approved by the planning commission is oriented towards the development of new cashew plantation with clones confirming to export qualities in 43 hectares, replanting or rejuvenation senile and uneconomic cashew gardens in 10,000 hectares, adoption of intensive horticultural management practices in 25,000 hectares and adoption of crops protection measures in 1,46,000 hectares. The Directorate of cashewnut development and experts in the field holds the view that the propogation of cashew through seeds and seedlings should be discouraged totally and that soft wood grafts are the ideal planting material for improving yield.

It has been reported that high yielding varieties suited to different agro-climatic tracts, have been released by the cashew research centre. The multiplication of these varieties through clones and their use in new plantation and replantation will be salient feature of this project. The

Directorate visualises setting up 40 centralised regional nurseries for the multiplication of these clones and also programme for transfer of scientific technologies to the farming community by way of farmers training, development of model clonal cashew gardens and sufficient publicity measures for crop promotion.

The development of farm based model processing unit for cashew-apple processing is also envisaged. Under this project, all inputs including planting materials, fertilizers, crop protection chemicals and other horticultural management practices would be provided to the beneficiaries to the extent of Rs.7,000 per hectare for Five years for new plantation development and Rs.9,100 for replanting programmes, Rs.1500 per hectare for intensive horticultural care and Rs.800 per hectare for crop protection measures.

Each of the component states under the project will implement the programme on an outlay, ranging from Rs.5 crores to Rs. 8 crores during the plan period.

Maharashtra state has realised the importance of horticultural development and accordingly adopted some sound steps towards the development since 1990. Maharashtra state Government had a project of developing horticulture throughout the state in eighth five year plan, to bring diversification in cultivation systems adopted by small land holders and to overcome the situation of uncertain rainfall.

The Government of Maharashtra had decided to spent Rs.100 crores on the project.

In Maharashtra, about 182 lakh hectares of land is under agriculture and out of it only 5.85 lakh hectares of land is kept open for horticulture. Out of 5.85 lakh hectares of land 2.42 lakh hectares of land is under actual cultivation of horticulture. About 28 lakh hectares of land which is uncultivated now can be brought under the horticulture.

In Maharashtra, about 2.10 crore hectares of land is cultivable, out of which near about 1.82 crore hectares of land is under cultivation and only 12 to 13 percent land is under irrigation. Therefore Maharashtra Government has undertaken a project of horticulture through "Employment Guarentee Scheme" and the target for the year 1990-91 was about 1.20 lakh hectares of land to bring under cultivation for which 100 percent subsidy has been sanctioned for cultivating horticultural crops, to small land holders.

Out of 2.42 lakh hectares of land under horticulture cultivation, 12,585 hectares of land was under cashew-cultivation in 1984-85. That means only about 5 percent of the total horticulture cultivation was covered by cashew plantation. The table No. 1.8 shows the picture of cashew plantation in Maharashtra state.

Table No 1.7

Estimated production of cashewnuts in Maharashtra State

District	1976-77 Tons	1980-81 Tons	1984-85 Tons	Percentage
Ratnagiri	3,749	2,573	1,019	13.5
Sindhudurg	5,632	5,762	6,232	82.5
Kolhapur	N.A.	66	240	3.2
Raigad	N.A.	N.A.	60	0.8
Total	9,381	8,401	7,551	100.0

Source - Office of Dy.Director of Horticulture, Kudal

Table No. 1.8

Area under cashewnut plantation in Maharashtra State

(Figure in Hectares)

District	1976-77	1980-81	1984-85
Ratnagiri	6,249	4,289	1,699
Sindhudurg	9,386	9,603	10,386
Kolhapur	--	110	400
Raigad	N.A.	N.A.	100
Total	15,635	14,002	12,585

Source - Director of land record (season and crop report)

It appears from the table No. 1.7 that Sindhudurg district is leading in production of cashewnut in Maharashtra state. It contributes 82.5 percent of the total production. Though the total production in the state reduced from 9,381 tonnes to 7,551 tonnes within eight years, the production in Sindhudurg district is constantly increasing.

Table No. 1.8 reveals that the total planted area has reduced from 15635 hectares to 12585 hectares during last eight years. This was mainly because of lack of systematic efforts by Government authorities at district level and lack of awareness among the cultivators. About 20 percent reduction had taken place in planted area under cashewnuts. However the area under the cashewnut in Sindhudurg is increasing. In short Sindhudurg district contributes about 82 percent of the total production of cashewnuts and 82.5 percent of the area under cashewnut in the state. Thus Sindhudurg district is playing a significant role in plantation area as well as production of cashewnut.

1.3 : SIGNIFICANCE OF CASHEWNUT OVER OTHER CASH CROPS :

Among the various important horticultural cash crops as Mango, Cashew, Coconut etc. the cashew product is taken for study purpose. Because this commodity enjoys the following specific merits over the other horticultural products.

i) The cashew crop is comparatively less labourious than other crops, as other crops requires continuous special labours to maintain the crop, while cashew crop requires the special efforts only at initial stage of 3 to 4 years, then after little efforts to maintain.

ii) Savantwadi Tahasil is situated in humid atmospher, tropical situation and most of the hilly area, where the rainfall range is very high. Further all the rain water falling is running off immediately to sea, and there are no other sources of irrigation as river, cannals or lakes. In such situation cashew crop is the most suitable alternative crop for using the available land most economically.

iii) Agriculture, in this area, is more labourious and low productive, not fulfilling th needs of cultivators for the whole year, thus, cultivator needs other cash crop, with little labour, and cost. Cashew is the most suitable for it, which helps to increase the standard of living of cultivators.

iv) Comparatively cashew crop is a durable one than the other horticultural crops, which provides sufficient time to cultivators, to take the advantage of changing market rates. Whereas Mango is a perishable product which has no opportunity to take the advantage of changing market prices for the cultivators.

v) Cashew kernel contains, minerals, vitamins and nutritious

aspects as proteins, Fat, Calcium, Phosphorus etc, whereas Cashew apple is rich in minerals, vitamin 'C', carotene and also has medical properties. Further shell oil can be produced from nutshell. Thus cashew is a multibenefitial product.

vi) Cashewnut requires complicated process to get the kernels, it invites cashew processing industry. Thus industrial development may be achieved. Further the processisng is labour-oriented, hence creates more employment opportunities in underdeveloped area like Savantwadi.

vii) The cashew crop is facing the problems of low productivity, old aged plants, wild plantation. It needs systematic planned efforts.

viii) Government of Maharashtra had taken sound steps in plantation of cashew through " Employment Guarentee Scheme " since last three years and still there is a scope for further plantation. But only the efforts of plantation are not sufficient, it needs further creation of awareness among the cultivators as regards protection of plants, proper harvesting, storing of cashewnuts, developing marketing systems and Government support in marketing is essential.

ix) Out of 48,418 hectares of land brought under horticulture by the end of 1993-94, in Sindhudurg district, 24,177 hectares of land occupied by cashewnut, i.e. about 50

percent of the horticulture is covered by cashew plantation. It indicates that there is a greater emphasis on cashew-plantation in this district.

1.4 : Objectives of study

In view of this, it felt necessary to the researcher to undertake the study of cashewnut growers and understand the specific problems of cashewnut growers. Besides this an attempt is made to know at what extent the interests of cashewnut growers are protected at market places. Following are important objectives of the study.

i) To take the review of horticultural development.

ii) To study marketing practices followed, with reference to cashewnut product in Savantwadi Tahasil.

iii) To study the channel-wise cost spread analysis of Cashew product in Savantwadi Tahasil.

iv) To study the problems and prospectus of horticulture Savantwadi tahasil with reference to cashew.

v) To suggest the steps for further improvement.

1.5 : DATA AND METHODOLOGY

For this investigation both primary and secondary data were collected.

PRIMARY DATA

i) Selection of Villages:

There are about 138 villages in Savantwadi Tahasil, a sample of 5% i.e. 7 villages were selected on

the basis of interdistance between villages and cropping pattern.

ii) Selection of Cashewnut Growers:

Out of 878 cashewnut Growers from 7 villages a sample of 12% i.e. 104 cashewnut Growers, was selected at stratified random sampling technique (Ref. table No. 1-9)

iii) Selection of Markets:

Out of four markets in Savantwadi taluka, a sample of 50% i.e. 2 markets were, selected on the basis of arrivals and turnover.

iv) Selection of Local Traders:

A data relating to total number of Local Traders, were not available due to unorganised market however a sample of 10 local traders, was selected from the local traders available on Bazar day in market at random sampling technique.

v) Selection of Cashew Factories:

Out of six factories in Savantwadi taluka Five Factories were selected as a sample since the sixth factory was started recently.

vi) Selection of Retailers:

Out of the total 8 retailers in Savantwadi market, a sample of 50% i.e. 4, retailers were selected on the basis of their market representation and commencement of their retailership business.

SECONDARY DATA

Secondary data has been collected from the office of Horticulture department, Government of Maharashtra, and other related departments. In addition to this, an extensive use of books, journals, periodicals, articles etc. has been made.

1.6 : CHAPTER SCHEME

The present study is divided in seven chapters

Chapter - 1 : This chapter contains introduction and importance of horticultural development in India and dominating role played by cashewnut produce in yielding foreign exchange.

Chapter - 2 : The Chapter highlights the profile of Savantwadi tahasil under this study.

Chapter - 3 : Deals with the study of horticultural development in Savantwadi tahasil as well as in Sindhudurg district during last decade.

Chapter - 4 : Contains a study of marketing practices followed by cultivator sellers, local Traders, Cashewnut processing factories, and retailers in Savantwadi taluka.

Chapter - 5 : Covers the cost spread analysis of market and margin in cashewnut produce and farmers return in consumer's price.

Chapter - 6 : Highlights the problems faced by cultivators sellers, local traders and cashewnut

processing factories. This capter also includes the glorious prospectus through the development of horticultural products in Savantwadi taluka, with reference to cashewnut.

Chapter - 7 : This chapter includes the conclusions and suggestions of the present study. It also throws light on necessity of cooperative society and regulated market.

Table No. 1.9

Selection of Respondents-Cultivator Sellers

Village	Number of cultivators	Selection of cultivation12%
1. Ajgaon	122	16
2. Dhakore	78	07
3. Sonurli	244	29
4. Aros	127	25
5. Kondura	53	5
6. Degave	141	12
7. Tamboli	113	10
Total	878	104

Source - Gram-panchayat office of respective village.