

CHAPTER V

ANALYSIS AND INTERPRETATION OF DATA

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DATA

- 5.1 The proceeding chapter explains the prevailing marketing systems and the role of cooperatives in marketing of Mango. As pointed out earlier one of the objective of the Study is to suggest grower oriented marketing mechanism. In order to fulfill this objective a survey of mango growers was conducted. Total 70 growers from Ratnagiri and Deogad Taluka were contacted during the survey. Data collected during the survey is presented in this chapter for further analysis.
- 5.2 Table No. 1 represents the distribution of Mango growers according to their income

Table No.1

Distribution of Mango growers according to Income.

Year: 1983-84:

No.	Total Income	No. of growers	Percentage to total No. of growers.
I	Upto Rs. 12,000	43	61.43 %
II	12000 to 24000	19	27.14%
III	24000 to 60000	7	10.00 %
IV	Above 60000	1	1.43%
		<u>70</u>	<u>100.00%</u>

(Note income is computed considering income from mango orchards only. Correctness and accuracy of individual income is not cross checked 100 percent in all cases).



(Hapus) Mango from this region. But now position has changed. This is evidence from the data presented in Table 3.

Table No. 3

Mango Distribution according to Area : year: 1983-84.

<u>Sr.No.</u>	<u>Name of Market</u>	<u>No. of growers</u>	<u>Percentage to total No. of growers.</u>
1	Bombay market	52	74.28 %
2	Poona Market	8	11.43 %
3	Kolhapur Market	4	5.72 %
4	Local Market	6	8.57 %
		<u>70</u>	<u>100.00 %</u>

This table indicates the even at present. 74.28% Mango growers favour Bombay market for their produce. Though their is good scope in nearby Market like Kolhapur. This may due to the fact that they have weldeveloped business relations with the commission agents at Bombay Market. Another important aspect is that, local consumption is 8.57% this is also a good sign from Marketing point Because generally local consumption encourages direct channel with the economic development of region Local consumption will shown an increasing trend and strengency link. Now there are some signs of development are experiance particularly nearby of Chiplun, Ratnagiri and Kudal town ships. Similarly Poona Market and Kolhapur market are gaining some popularity within growers. New trading relations are now developed by some growers in these market.

Distribution of Mango growers according to Business scale:

Distribution of mango growers according to business scale is also important from determing, general level of mango business

in this region. These information is worth studying in this course.

5.4

Table No. 4

Distribution of Mango growers according to business scale  
(1983-1984)

<u>Sr.No.</u>	<u>Total area</u>	<u>No. of growers</u>	<u>Percentage to total No. of growers.</u>
1	Upto 1 Hector	39	55.72 %
2	1 Hector to 2 Hector	22	31.43 %
3	3 Hector to 5 Hector	06	8.57 %
4	5 Hector to above	03	4.28 %

This table gives the information regarding economic status and classification of sample size. 1 Hector cultivation of Mango orchard include 95 to 100 trees of Mango. So Majority population of cultivators belongs to this group (i.e. 55.72%) upto 2 Hectors to be sample percentage is 87.15%. It indicates and confirm the same aspect of Mango trade that in this area Mango trade belongs to low income group farmers. Big Mango kings having orchards more than 5 Hectors are really very few .

5.5 Pre-harvest finance:

Pre-harvest expenses are important and determining factor for channel of distribution in case of agricultural goods. At the time of pre-harvest certain recurring and non-recurring expenses are necessary but the Indian farmer in most of the time is not in position to incur these expenses from his own funds. So he tries to developed alternatives. In case of mango growers various alternatives available and which were noticed during the sample survey. In following table four important alterna-

tives of mango growers are summarised.

Table No. 5

Pre harvest finance to mango growers.

<u>Sr.No.</u>	<u>Source of finance</u>	<u>No. of grower</u>	<u>Percentage to total No. of growers.</u>
1	From Preharvest Contractor	17	24.28 %
2	From Wholesalers	34	48.57 %
3	From Co-operatives	4	5.72 %
4	From other sources (Own, friends, relatives, money lenders, etc.)	15	21.43 %
		<u>70</u>	<u>100.00%</u>

This table explain why mango growers are dependent on preharvest contractor and wholesalers. In mango market nearly 72.85% of total sample size is financed by these two agencies. Secondly finances are made available to growers as in case of need. Then in this case mango grower has no other alternative but to sale entire crop, to wholesaler or preharvest contractor to clear his dues of previous year. Another interesting information in this regard was available to researcher that this position remains continued years after year and lastly time come when financier developed total control over mango growers by advancing a small portion at pre-harvest time. Agents of wholesalers is a peculiar person who can be easily traceable in preharvest season. It look like that this man is distributing the money to growers just for to help them.

**5.6 Channel of Mango distribution:**

Generally Marketing firms, operating in a competitive

environment need to improve operational efficiency for their existence in market. All though their goal may be to enhance profit position, often the benefits derived from the improved operation accrue to society in the form of lower unit cost. These may be passed on to consumers in the form of lower prices and or shared with producer.

The mango fruits are sold through four channels in the area under Study viz. Direct Sale to consumers, Co-operative Sale, Sale through commission, agents and sale through preharvest contractors. The individual mango grower generally uses one of these system depending on their business scale, economic position, monetary need, etc. These factor also play very vital role in individual case for determining the channel of Marketing of Mango.

Table No. 6

Distribution of Mango growers according to system of sale  
(1983-84 )

<u>Sr.No.</u>	<u>System of Sale</u>	<u>No. of growers</u>	<u>Percentage to total No. of growers.</u>
1	Direct sale to consumers	5	7.15%
2	Sale through cooperatives	4	5.71%
3	Sale through commission agents	44	62.85%
4	Sale through preharvest contractors	17	24.28%
		<u>70</u>	<u>100.00%</u>

It seems from the above table that majority of the mango growers (62.85%) sold their marketed surplus through wholesalers and through commission agents, followed by -

pre-harvest contractors (24.28%), direct sale (7.15%), and cooperative sale ( 5.71%).

5 Growers out of 70 sample growers sold their fruits through co-operatives marketing societies. Co-operatives handle in all Mango trade at 5 to 6 percent of total turnover as per one estimate. General Method of co-operatives for Mango selling may be summarised as follows. Co-operatives assemble produce of members and even of non members in some case. Then send it to Bombay Market for sale. Society arrange sale directly to the consumers or through the sales depots which are temporarily opened by society itself during the mango season. These temporarily depot depends upon the availability of space at Bombay market during mango season, which is not certain in every years at same location.

#### 5.7 Marketing cost and producers' share:

Marketing cost of product and producers share is important aspect for study particularly for selection of better system for marketing from mango growers point of view. The per crate marketing costs incurred by the producers and their share in consumers price in different systems of Marketing is given in the following table.

Table No. 7 ( 1983-84)

<u>Sr.No.</u>	<u>Particulars</u>	I	II	III	IV
1.	Net price realised by producers	68 ( 80%)	53.75 ( 70.72%)	70.75 (67.30%)	62.75 (59.76%)
2.	Marketing cost incurred by producer contractor	17 (20%)	22.25 (19.28%)	34.25 ( 33.62%)	42.25 ( 40.34)
3.	Consumer price	85 ( 100 )	76 (100)	105 (100)	105 ( 100)



Notes:

(Channel No. one represents Direct sale to consumer, while second channel for sales through co-operatives. While third channel records data for sale by wholesalers through commission Agents and Fourth channel gives details of sale through pre-harvest Contractors in this table respectively.)

The per create marketing cost of Alphonso mango incurred by the producers was maximum in the sale through commission agents and pre-harvest contractors (Rs. 32.25 and 42.25 respectively), followed by direct sale to consumer (Rs. 22.25) and minimum in sale through the co-operatives (Rs. 17).

The lowest per create cost of Marketing in the Co-operatives sale attributed to the economy derived in transportation cost, due to the size of consignments depatched by Co-operatives. Moreover the direct sales were organised by the Cooperatives and thereby eliminated commission agents and their charges.

On the basis of per create cost of Marketing incurred on various Marketing functions in different marketing systems revealed that sale through cooperatives was the most efficient and sales through commission agents and pre-harvest contractors were the least efficient one.

Share of producer:

The share of producer in consumer rupee in case of Alphonso mango formed 80.00, 70.22, 67.38 and 57.76 percent in system I to IV respectively. The analysis shows that the producer's share in consumer's rupee was comparatively lower in system III and IV. The producer's share in system IV was the lowest

because the producer marketed their supplies through preharvest contractors and middlemen. They took away the lion's share from consumer's rupee. But producer's share in system III was higher compared to system IV because of the elimination of pre-harvest contractors whose share was shared by the producers themselves.

The producer's share was the highest (80%) in system I, in which they had disposed of their marketed supply directly to the consumers. This higher share was made possible due to total elimination of middle men intervening between producers and consumers. The profits earned by the middlemen went to the producers, which enabled them to get the maximum share.

In system II, the producer's share was higher than the producers who sold their consignment through system III and IV. In system II co-operative societies directly dealt with the consumers in Markets. It had thus vertically integrated the functions of wholesalers and retailers. The profit margin earned by these functionaries went to producers sellers. Also the costs incurred by the whole salers and retailers were saved. This reduced the spread between producers and consumers. Thus next to system I ( direct sale to consumer), system II (Sale through cooperatives seemed to be most profitable growers.

However when seen from the consumer's point of view, the system II seemed to be most rewarding as the prices paid by them was the lowest when the produce come to the market through cooperatives. Next to this from consumers point of view system I was also profitable.

After analysing the various channels of marketing of mango, to understand more, detail study of cooperative marketing a case study is presented of a co-operative society that was dealing in the marketing of Alphonse (Hapus) Mango from 1981-82 onwards.

### 5.8 Case study of Shirgao Co-operative Society:

#### History:

Shirgao Vividh Karyakari Sahakari (Vikas) Seva Society Ltd.,

At post Shirgao, Taluka and District Ratnagiri was registered as co-operative society on 12th December 1928. The society can be classified as multifunctionary co-operative society.

Main business of the Society may be listed as below:

- a) Advancing funds to its members for domestic purposes.
- b) Selling of regulated cloth through it's selling Centre.

This centre was started by Society from 15th March 1978.

- c) Janata Bazar Similarly from 1st July 1979 Society started a store named as 'Janata Bazar' to sell Tea powder, Match box and Soap and other essential commodities. At present this is only Janata Bazar is in existence in entire Ratnagiri Taluka.

- d) Open sale shop for grains.

This shop is run by society as a part of ration shop.

- e) Monthly savings deposit Scheme:

This scheme was started by the Society from 1st Jan. 1980 for its members. Minimum subscription accepted in this scheme Rs. 5 or in multiple of Rs. 5/-. Interest payable on deposit of members was fixed at rate of 5/-. Similarly 80% of total deposits can be withdrawn any time by depositor as Loan at 8% rate of interest.

f) Death fund; Society is also seems socially aware. Society started a 'Death fund' in the meeting of members which was held on 1st Nov.1980. On the occasion of death of member, Society will give Rs. 51 from this fund as consolidation to the family of member. Now this amount has been increased to Rs.101 from 2nd Jan. 1986 onwards.

Mango sales:

From year 1980-81 the Society and its office bearers were thinking to sale mangos of its members through Society. But at that time lot of difficulties was arose for Society particularly regarding the place for selling centre at Bombay. Lastly in the year 1981-82 Society was able to get place for its selling Centre at Dadar and Society started mango marketing from that year. At this Centre from 26th April, 1981 to 19th June 1981 Society sold 975 creates of Hapus mango, which were collected through 31 mango growers including members as well as non members residing in the area of society. During the year 1981-82 society earned net profit Rs. 1509.81 from mango business. Though this was first year the members actively participated in Mango grading not only at local level but even at Bombay.

1982-83;

In the year 1982-83 the Society was started its mango selling Centre at Dadar, Bombay on 9th May 1983.

Sales during the year from 9th May 83 to 19th June 1983 total 499 creates sold by society. These creates were collected to from members as well as non members as same as previous year. Total net profit earned by society was Rs. 1134.51. From this

year Society developed a practice of charging 8% commission on sales price to meet its expenditure incurred for mango business.

With comparison to last year there was reduction in total quantity of mango sold as well as proportionate reduction in net earnings of the society from mango trade. Another important thing of this particular year is that Society entered in mango market a bit of late i.e. on 9th May while in last year its centre was started on 26th April.

1983-84:

This year society developed its marketing centre at Forivali, Bombay Centre was started from 22nd April 1983. Total crates sold during the year amounted to 509 and they were assembled from 22 persons including both members and non members growers. Total income earned as net profit during the year Rs. 1678.60 The important characteristic of this year trade that Society contracted with consumers cooperatives at Bombay for direct trade between producers cooperatives and consumers cooperatives. To some extent this approach was necessary and important from growers point of view. In this year there was marginal increase in total turnover and net profit earned by the society over last year.

Year: 1984-85:

The performance of the year 1984-85 was totally discouraging in all respects like previous three years, co-operative society had started its marketing centre at Ambewadi, Girgaon, Bombay from 4th April onwards. Total sale in this year was

reported only 121 creates. These were collected through 8 persons including members and non members. Result of this year that society was to bear loss of Rs. 1301.65. This loss was due to poor response from members and non members for collection of mango creates non members for collection of mango creates and reduction in total quantity of sale.

Observation.

Participation of members.

The Society under study is well reputed Society with long rich tradition of 50 years especially. Executive members and Chairman Mr.M.V. Damale seems to very active, enthusiastic and working together in real sense of co-operative movement. But the members participation in Mango Marketing seems to be not upto requirement. The following Table will give more idea regarding the members participation in mango trade.

Table No. 8

<u>Year</u>	<u>Total members of Society</u>	<u>Members participated in Mango trade</u>	<u>% of total members.</u>
1981-82	482	31	6.43%
1982-83	513	15	2.92%
1983-84	544	22	4.04%
1984-85	568	08	1.41%

Moreover the members participation seems to be on decreasing lines. This also indicate that members prefer Society's marketing centre as a channel for their produce as a last alternative.

Details of Mango trading.

As per records of Society maintained and audited following details may be presented for total mango trade for last four years. Pertaining to this particular Society. Following table shows the necessary details.

Table No. 9

<u>Year</u>	<u>No. of crates sold</u>	<u>Total sales Rs.</u>	<u>expenses Rs.</u>	<u>Amt. paid to producers</u>
1981-82	965	76041	14909.08	61,131.92
1982-83	499	40650	9018.20	30,731.80
1983-84	509	50355	10914.05	39,440.95
1984-85	121	8080	1998.10	6,081.90

The percentage of total expenses to sales from the year 1981-82 onwards were 19.60%, 22.18%, 29.30% and 24.72% respectively This indicates one important aspect that when sale of Mango will crossed Rs. 75000 and onwards the ratio of total expenses to sales will be 19% to 20% of selling price and when sale will decrease the ratio of expenses to sale will increase as due to most of fixed expenses.

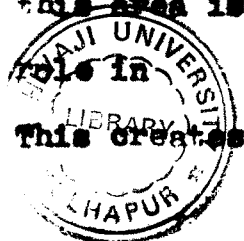
5.9 After studying the marketing system and a performance of cooperative society general observation of this study may be concluded as follows.

On the basis of data collected through mango growers and facts presented from Shirgao society's record the following findings may be noted with necessary concluding remarks as a result of present study.

1) Present mango marketing system is more beneficial to middle-

men and whole salers than growers of Alphonse mango.

- ii) Present marketing system is also not beneficial from consumer view as consumer has to pay ~~large~~ more price due to the large chain of middlemen i.e. sale in the most of cases through pre-harvest contractors and commission agents .
- iii) Lions share in marketed produce was eaten by wholesalers and commission agents in present marketing.
- iv) Mango system growers in this region belongs to typically low income group and their land holding also seems to be low.
- v) Mango orchards at most the cases belongs to low and middle income group farmers.
- vi) Mango growers to some extent seems to be realised the loss that they have to bear from present marketing system. So they are in search of alternatives.
- vii) Co-operative movement is not popular in this region not only in Marketing but also in other region.
- viii) Mango is a commercial crop this concept is new to some extent. Secondly at present mango growers are concentrating on plantation. Their belief is more plantations and more production will generate additional wealth for them. Marketing is totally neglected area in Mango business like other crops. More production is an aim of mango growers by applying modern technology at production level.
- ix) Entire region has lack of speedy transportation and communication facilities. Importance of transportation in this area is realised by the mass in general but its important role in mango business is yet to be understand properly. This creates some problems for marketing of mango.





- x) Co-operative Societies are working as multi-functional societies. Secondly people go to cooperative not as means of development but as a last helping hand in case of emergency only.
- xi) In general people in this region are happy to accept new ideas at normal level. They are responding new Horticultural Schemes positively but at a slow speed.

5.10 Recommendations for further research in this area:

After noting the observations of the study the recommendations for further research in this area may be noted as under.

- i) People should be trained formally and informally at both level to be active in the business of co-operatives in general and marketing cooperatives in particular.
- ii) Mango growers should realise that their individual bargaining capacity is less in the market. So they should follow the practice of cooperation. For this purpose cooperative department can play a very active role in forming cooperatives at village as well as taluka level.
- iii) Mango marketing is performed as one of the function at present by co-operative societies as well as Taluka Kharedi-Vikri Sangh. This way of functionary is dilute the importance of mango marketing through cooperatives. Instead of this an independent cooperative structure should be formed at District Level for entire trade of Mango in the particular District. The proposal for said cooperative Mango structure may be presented as under:

**5.11 Proposed Co-operative Marketing organisation for mango trade:**

At district level i.e. for both Sindhudurg and Ratnagiri District, there should be a committee of representatives from Taluka Marketing cooperatives. While Taluka level co-operatives should be from within the representatives of member growers of Mango in particular taluka.

Taluka cooperative should be held responsible for collection and assembling of mango from its members. At this level proper grading and standardisation should be done.

District cooperatives will be particularly responsible for Marketing of mango within the state as well as outside. Marketing should not be restricted only towards Marketing of fruits but District Co-operative should develop other channels like canning of fruits, export etc. Then the producer will be able to control supply of fruits in market. In such a circumstance rate level in the market will be governed by Mango growers.

The proposed cooperative structure should not work only as Marketing organisation, but it should advance funds to its members for pre-harvest investment in business. Similarly necessary commodities like fertilisers, supply of properly graded trees and allied functions may be performed by this cooperative structure which directly relates to this particular trade. The advantages of this cooperative structure may be restricted towards members only. This will generate general feelings and positive effect of the development co-operative movement in this region.

Necessary funds for proposed cooperative structure may be provided through District co-operative banks.

These banks have idle and unutilised funds in every large quantity. Similarly Maharashtra State Government can provide necessary additional funds from its own source as a investment as a part of compensation of back log of this area. For this purpose the report of Dandekar Committee on back log in the various regions in Maharashtra State may be useful. Similarly Konkan Krishi University can play a very active and positive role in this area. At present research is going on at Konkan Krishi Vidyapeeth, Dapoli on plantation and quantitative development of mango but now research is also necessary on proper and efficient marketing of mango. Mango trade and mango business can transform this entire region from well known 'Money order economy' to self supported economy But mango trade is not easy job at present. As Mango is a perishable fruit but good taste and recognition all over the world, there is a scope for export but this business should be reformed in such way that Mango grower will get reward not for his skills and labour but he should received such a reward as an incentive, then he will think for further expansion and development of this business in future. This will be possible with a proper training at all level couple e with proper introduction of farmers cooperatives especially to perform Marketing function, which is vital one in present circumstances.

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