Marketing of Horticultural Crops in Maharashtra State

Research Scholar
Pankhade Rameshwar Bappasaheb

Research Guide
Dr. S. D. Talekar
Professor & Head,
Department of Commerce,
Lal Bahadur College Partur,
Dist. Jalna-431205 (Maharashtra)

ABSTRACT:

Introduction:

Maharashtra is one of the leading states in the country in horticulture development. The diverse agro-climatic conditions of the state are very congenial for cultivation of various horticultural crops. The area under fruit crop which was 2.42 lakh hectares in 1990 has gone up to 12.89 lakh hectares in 2012. Similarly, the area under various vegetables, spice crops and floriculture has also increased substantially.

This is mainly due to the govt. policies like establishment of separate department of horticulture in 1981 and linking horticulture development with Employment Guarantee Scheme in 1990. Creation of various infrastructure facilities like establishment of horticulture nurseries, irrigation facilities also helped for horticulture development. With the expansion of area under horticulture, production of fruits has increased substantially. However the marketing of fruits could not be organized simultaneously. At present markets are dominated by middlemen and they decide the prices of fruits. Unless the farmers form co-operative and open their sale outlets in urban areas, the exploitation from middlemen would not be reduced. The farmers in some areas have organized themselves and formed fruit producer’s co-operatives.

The merchants do not have knowledge of handling of produce. Transportation is more oriented towards quantitative basis rather than
qualitative basis. Timely availability of the transport is a matter of concern. e.g. Jalgaon district is well known for banana cultivation. Wagon loads of bananas are transported to North India every day from Jalgaon. However, since the railway wagons are not specially designed for transport of fruits, great losses are incurred during April to June which are months of severe heat. Due to lack of cold chain, considerable losses are incurred in fruits and vegetables. Cold chains have been established in some limited areas of grapes. This has helped to increase shelf life, storage, transport and export of grapes. Due to lack of processing facilities, great losses occur in fruits and vegetables. It is therefore necessary to give thrust on processing of fruits and vegetables both in informal and organized sectors.

The processed products have great demand both in domestic and export markets. The exports of processed products of fruits and vegetables have increased which shows that there is increasing demand for these products.

**Significance of the Study:**

Marketing of Horticultural crops has several distinctive features due to the special nature of the crop itself. Because of their high perishability, seasonality and bulkiness, these horticultural crops require special care and attention in providing time, from and place a utility which in turn adds to the marketing costs. Due to prevalence of imperfect market structure and also existence of few traders in the marketing system of horticultural crops in general and fruit and vegetables crops is influenced by the ultimate prices realized for these crops by the growers effective marketing of fruits and vegetable crops has been traded equally important to their production. Perishability, seasonality in production, scattered and small scale production, high marketable surplus in relation to total production, localized consumption and relatively less inclination
of the consumers towards the consumptions of processed products, involve a large numbers of intermediaries for performing different marketing activities like assembling, packing, storing and transporting etc. These horticultural crops differ from other food crops like cereals, with respect to certain natural characteristics like moisture content, texture and unit size which makes them highly perishable resulting in huge post-harvest losses. The post-harvest losses obviously have an impact both on macro and micro levels of the economy. Hence, there is a need to study these aspects in detail.

**Objectives of the Study:**

The specific objectives of the study are as follows:-

1. To analyze and review empirically the growth of horticultural crop in general and fruit and vegetable crops in particular in Maharashtra state.
2. To study comprehensive description of current status of marketing of horticulture crops in Maharashtra state.
3. To examine and analyze the existing marketing practices and problems of fruit and vegetable growers in Maharashtra state.
4. To examine the price spread marketing margins of fruit and vegetable crops and
5. To offer a few suggestions for the efficient and effective marketing of fruit and vegetable crops in Maharashtra state.

**Hypothesis:**

1. The existing marketing facilities such as, assembling, pooling, grading, processing, storage and transport etc. are inadequate to the special marketing needs of the fruit and vegetable crops.
2. Marketing managements has so far, been neglected area in the case of fruit and vegetable crops.
3. An efficient market structure has a stimulating as well as regulatory influence on production methods.

**Research Methodology:**

The above mentioned objectives have critically appraised by using both primary and secondary data. The main source of data, however, is field investigations carried out by the researcher. Two different schedules are prepared and pretested for administering on the farmers and traders separately. The schedule for farmers is intended to seek information on their background, yield, finance, marketing practices and problems. The second schedule for traders is meant to seek information on their background, finance and opinion on the marketing of fruits and vegetables.

The secondary data constitutes published and unpublished reports of central and state governments. Further a review of the existing literature available in the libraries of various universities, is also formed the basis for secondary data. Specifically the secondary data collected from below given sources has been utilized. National Horticulture Board, Economic Survey Government of Maharashtra, Directorate of Marketing and Inspection, Government of Maharashtra.

The data also collected through various research Journals, Magazine, Periodicals, Standard books and Websites. The researcher used various statistical tools like Indices, Average, Percentage, Ratios and other Statistical tools in this research.

**Sample Design:**

The study was conducted in Maharashtra State in India. The Maharashtra State is divided into four Regions namely Marathwada, Vidharbha, Western Maharashtra and Konkan.
From each region three districts are selected for the present study. Which account for 80 percent of the total area, under fruit and vegetable crops cultivation in the Maharashtra. From each district twenty farmers are selected. There is one main trading center in the district under study, three traders has selected from each district. The selection of farmers is based on the stratification done on the basis of the size of the cultivated land holdings. The selection of the traders is based on the willingness of the traders to co-operate with the researcher. Thus the total sample came to 240 farmers and 36 traders for purpose of in-depth survey.

**Limitations of the Study:**

1. The period of study is restricted to ten years from 2001-02 to 2011-12.
2. The study is restricted to the marketing aspects of fruit and vegetable crops only.

3. The present research is limited to the farmer and trader from each three districts of the regions.

4. The conclusions of this research depend on the responses of the selected farmer and trader.

**Chapter Scheme:-**

Present study is divided into seventh chapters, which can be justifying the title of research topic as below:-

1) Introduction
2) Review of Literature
3) Marketing - A Conceptual Framework
4) A Critical Appraisal of Horticultural Crops in Maharashtra
5) Marketing Cost and Price Spread Analysis
6) Marketing Practices and Problems of Fruits and Vegetables Growers
7) Summary, Conclusion and Suggestions

**SUMMARY:-**

**First Chapter** is introductory in nature. Development of horticulture crop in Maharashtra, it gives an overview of the growth and role of horticultural crops in human nutrition, the objectives of study, research methodology and the design of study. This chapter forms the foundation on which the supper structure of the analysis of the present research investigation as contained in the successive chapters has been built up.

**Second Chapter** deals with recent and related literature. An attempt has made to review of literature, which focused on horticultural crops. A brief review of past studies will enable us to understand the various aspects of horticultural crops.
**Third Chapter** deals with the theoretical covers the conceptual framework of marketing. This chapter discusses the definition of marketing from the mid-20th to 21st century to date. It reveals drastic change in the concept and practices of marketing worldwide, new liberalized public horticultural marketing institutions in India during WTO regime.

**Forth Chapter** consists in two parts, first part discusses on a critical appraisal of horticultural crops in the Maharashtra and second part deals with physical and financial programmed for horticultural crops in the Maharashtra State.

**Fifth Chapter** deals with data and information pertaining to the present study is collected from the respondents through structured questionnaire schedule. Data were classified, tabulated and analyzed in light of objectives of the study by using simple statistical tools such as respondents and percentages. The facts and findings derived after analyzing the data and information are presented and discussed in this chapter.

**Sixth Chapter** of the thesis is an attempt to analyze empirically, various marketing practices and problems of fruit and vegetable growers. The study has brought many problems uncounted in the marketing of the fruits and vegetables which at the sometime have the immediate bearing on grower’s returns. In the Marathwada, Vidharbha, Western Maharashtra and konkan region under investigation, the layout of the fruits and vegetables orchard is a concern. The growers are holding lands in irregular shape and spread as small holdings. Despite the obvious benefits of pruning it is surprising to note that the growers are not following scientific method of training and’ pruning of fruits and vegetables plants. Fruits growing methods have been largely carried out by trial and error methods. One of the most common and objectionable
features of marketing of fruits and vegetables is the presence of pre-
harvest contractors. Pre-harvest contractor takes the place of owner of
orchard in all marketing engagements. Some of the major problems that
have been found are picking, grading, packing, processing, transportation,
storage, risk bearing and channel selection. All these problems have
seriously affected the efficient marketing of fruits and vegetables crop.

**Seventh Chapter** is the subject matter of summary, major
conclusions of the study and important suggestions given by the
researcher to the present research work.

**CONCLUSIONS:-**

It is observed that majority of farmers (51.67 percent) were from
middle age group followed by young age group (31.67 percent) and 16.66
percent of the farmers belonged to old age group. Therefore, it can be
inferred from the results that majority of the respondents are in
productive age and also young to be aware of the hardships as the future
farming needs continuous improvements in the farm operations and farm
technologies.

It is observed that 93.33 percent of the farmers had received some
level of education. The proportion of respondents who received
secondary education was largest (66.67 percent), while 16.66 percent of
the farmers had college education and 10 percent of the farmers
completed their primary education. The rest 6.67 percent of the farmers
were illiterates. It can be concluded that the sampled farmers are quite
good at their educational levels which help them meet their technological
needs in commercial cultivation of fruits and vegetables. Better formal
education helps the farmer in improving his/her ability to know science
and modern technology and in utilizing them for betterment of living.
Education also helps in adopting better cultivation practices of the crops
as well appropriate technologies.
It is observed that majority of farmers (62.50 percent) belonged to general category followed by 26.67 percent OBC category, 6.67 percent SC category and rest 4.16 percent of the farmers represent ST category. The General caste and OBC category farmers constitute the dominating group among farmers cultivating fruits and vegetables.

It is observed that majority of farmers (66.67 percent) had farming as primary occupation and they are dependent totally on farming, whereas 26.67 percent of the farmers had other business as their subsidiary occupation of agriculture. The rest 6.66 percent of the farmers are Government servants who had agriculture as primary occupation.

The amount of land owned by a person is an important parameter to assess the economic standing of the person in the society. Landholding is also an important factor which influences acquisition of additional skills and adoption of new technologies. The farmers categorized in this study are in four categories viz. marginal, small, medium and large farmer. It indicates that about half (48.34 percent) of the farmers belonged to medium farmers category followed by small farmers (37.50 percent), marginal farmers (10.83 percent) and the rest 3.33 percent farmers being large farmer category.

Income is the major indicator of the economic status of an individual. Every individual’s living style influenced to great extent by his/her income. Expenditure on farming, allied occupations and household matters are decided by the income earned by an individual. A low level of annual income hinders acquisition of new skills, knowledge and also the assets. A better financial position enables farmers to be more enterprising in taking risks involved in trying new and advanced farming techniques and motivates farmers to adopt new technologies. Annual income was computed by opting the class interval technique and the farmers were categorized into three groups as low income group, middle
income group and high income group. Data on the income levels of farmers reveals that majority of the farmers had medium level of income (66.67 percent) followed by low income group (18.33 percent) and high (15.00 percent) income group category. The probable reasons for this trend could be due to the fact that majority of the farmers were medium size landholders and they were cultivating pomegranate, grape, orange, banana and mango, and vegetable are Brinjal, cabbage, tomato, onion and okra on commercial scale for improving standard of living.

It is observed that majority of farmers (48.33 percent) had high level of social participation followed by medium level of participation with 31.67 percent and 20 percent of the farmers had low level of participation. The low level of participation might be due to their low level of education. It can be inferred that the higher and medium level of social participation help the farmers to acquire the extra and recent knowledge for betterment of their farm practices and thereby livelihood.

It is observed that majority of farming methods used by the respondent farmers by farm size groups for both the fruit and vegetable crops. It is observed that 100.00 percent fruits and vegetables respondents are using pump sets, 68.00 and 46.00 percent are using sprinkler, 80.00 and 38.00 percent are using drip.

The constraints faced by farmers and the study revealed that ‘lack of market information’ was one of the major constraints as expressed by majority of (79.20 percent) farmers followed by 65 percent of the farmers who faced ‘lack of credit facilities’ as another constraint while marketing fruits and vegetables. ‘High cost of transport charges’ was considered by 55.80 percent of farmers and 35.80 percent of the farmers faced ‘lack of storage facilities’ as one of the constraints. The other problems faced by the farmers included ‘heavy loading by the transporters’, ‘lack of technical know-how’, ‘efficiency of transportation’, ‘lack of technical
know-how on grading’, ‘lack of knowledge on packaging’, ‘lack of processing Infrastructure’ and ‘long chain of marketing channel’, in the order of the Dimension.

It is observed that facilities marketing available at APMC regulated markets such as weighing facility, display platform for auction, stalls for merchants, telephone and electricity facilities were fully adequate as opined by the 66.67, 65.83, 60.83, 58.33 and 54.17 percent of the farmers, respectively. However, regarding the facilities such as generator, cafeteria, internet, fax, shed for storage, toilets and transport majority of the respondents expressed their opinion that these facilities were inadequate/ not fully adequate. The cold storage facility is in the alarming situation in the APMC markets and 73.70 per cent of the farmers opined that the cold storage facility for fruits is not at all adequate. Surprisingly, 10 per cent of the respondents did not respond on this aspect of the facility.

It is observed that problems faced in marketing of fruits and vegetables by the growers revealed that about 97.00 percent of the responded farmers opined that they have lack of price information followed by lack of storage facilities, higher transportation costs when fruits are sold outside the state, lack of processing facilities, fruit auction is not transparent and problem of language when fruits and vegetables are sold outside the state, fruit and vegetable spoilage due to damage during the transportation, high commission charges and problem of no guaranteed marketing accounting for 93.00 percent, 85.00 percent, 84.00 percent, 83.00 percent, 82.00 percent, 74.00 percent and 55.00 percent, respectively.

It is observed that majority of farmers [96.00 percent] faced the problem of high market charges incurred by the Hundekari. Nearly 88.80 percent farmers complained that proper storage facilities be provided for
vegetables and fruits. So as to reap the benefits of higher prices during lean periods, high cost of insecticides and pesticides is reported by 84.00 percent of the total farmers of the total responded farmers 74.40 percent were of the opinion that there is lack of technical know-how regarding improved package of practices and the cultivation of vegetables and fruits. Markets never work in favor of producers was reported by the 76.80 percent of the farmers. High cost of packing material is one of the major bottlenecks reported by the 60.00 of the farmers. Transport facilities were not major constraint for almost all.

**SUGGESTIONS:**

The present operation of marketing system of horticultural crops in general and fruits and vegetables in particular warrants a total restructure in the Maharashtra state. The researcher suggests the following suggestions are recommended.

1. Community type pre-cooling and cold storage facilities need to be created at district and Region level in the respective State.

2. As horticulture crops are perishable in nature new processing units in rural area should be set up.

3. Price forecasting information systems should be available at village levels so that farmers can directly contact the concerned in the market regarding the price.

4. Local Mandis or regulated markets should be updated and upgraded with modern information systems as well as residential facilities.

5. Number of intermediaries and their commission should be reduced in the marketing channel.

6. Storage facility should be created in the farm or village itself because decay starts soon after the harvest of the produce.
7. Increasing or improving transport facility for small growers by the state transport or corporation buses, by the marketing organization so that produce can be collected at the assembling centers.

8. State may also arrange workshops/seminars for sensitization of group of Farmers/ SHG/ cooperatives for setting up fruits ripening units at strategic Location/markets in the cities/towns.

9. Participation of SC/ST farmers in the area expansion programmed, on a cluster basis, is a welcome sign. Such farmer groups need to be encouraged to set up Post Harvest Management facilities like Pack House, besides facilitating tie up with markets.

10. Farmers availing drip irrigation need to be trained on the use and maintenance of the system.

11. The staff at the district level involved in National Horticulture Mission activities needs to be strengthened. There is a need to publicize the National Horticulture Mission programs through print and electronic media.

12. As the Maharashtra is endowed with the rich horticultural resources, the Government should start horticulture marketing training centers at important producing areas to educate the farmers and to give training in various marketing activities like picking, packing, grading and transportation.

    The above said suggestions, if implemented properly would prove a gate way to the future prosperity of the horticulture industry. Maharashtra state will become a leading enterprise making the States as “The Fruit Bowl of India.”
References:-
10. www.agrowan.com