

An Empirical Study On Farmer's Perception In Selling And Distribution Of Selected Horticulture Products

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ABSTRACT In Asian Continent India is the second largest country in population. From ancient times Agriculture is the main occupation and plays a crucial role in Indian economy. Due to changes in the food habits, growth of technology, modernization, agriculture cropping pattern of the country in the recent years has undergone a major shift from cereal to non cereal crops cultivation especially towards Horticulture. It is refined by the human skills as a science to obtain more and more benefits. In India, one of the fastest growing sectors within the agriculture activities is Horticulture. Despite the government's efforts in offering various facilities and services to encourage farmers taking up horticultural crops, marketing the results is difficult. The marketing of horticultural crops is a complex process. It consists of all those functions and processes involved in the movement of the product from the place of production to that of consumption. The marketing activities involve not only the functions of buying and selling but also the preparation of produce for marketing, assembling, packing, transportation, grading, storage, processing, retailing etc. The main aim of the study is to understand the farmers' perception and their Problems in selling the horticulture products.

Keywords: perishability, farmers' perception, technology, sales and distribution problems, market efficiency

INTRODUCTION:

In India the primary occupation for major segment of rural population is Agriculture. As per the report of FICCI agriculture is regarded as backbone of Indian economy, 65 percent of the rural population in India depends on agriculture and it adds around 14.4 percent of India's GDP. Most of the agriculture based studies and research papers concentrate on crops such as wheat, paddy, jowar, cotton and also weather conditions, fertilizers, govt. subsidiaries, farming activities and harvests etc whereas stress also needs to be laid on perishable products like fruits, vegetables and flowers considered as horticulture a part of agriculture sector which occupies 18% of farming land and contributes more than 25 % of the total agricultural GDP in India. Due to the higher investment costs involved in cultivation of horticultural crops the governments are providing subsidies up to 90%. The number of functions and its type vary from product to product, from time to time and from place to place. India has achieved remarkably in the field of production and productivity of these crops. However, it is insufficient to meet the over-growing domestic and external demand. In the coming years, a major shift in consumption patterns in favour of fresh and processed fruits and vegetables is expected; hence, there is an urgent need to solve the prevailing problems in marketing of horticultural crops.

REVIEW OF LITERATURE

1) **Dr. Kh. Dhiren Meetei, Loitongbam Kirankumar Singh** (2013), studied on "Overcoming Marketing Problems of Horticultural Produces in Manipur".

The study aims at overall productions in Horticulture in general, cites the problems of marketing in Horticulture products and highlights the better marketing strategy. The study is based on the secondary source of data which is collected from the Department of Horticulture and Soil Conservation Government of Manipur. Due to lack of transportation, the intermediaries have taken advantage which lead to forced sales, weak bargaining power for the farmers. Apart from that lack of financial assistance, infrastructure developments also play a key role for the farmers to sell the farm products at uneconomical price to the itinerant traders.

Research Gap: The study highlights the problems of horticulture produce delivery to its terminal place or market. So my study is to analyze the farmer's knowledge in utilizing the new technological changes to sell their farm products without interference of itinerant traders that benefit them with minimum support price.

2) **Tara Shankar, K.M. Singhand Shudhakar Dwivedi** (2017), studied on "An Analysis on Problems of Vegetables Marketing in Farmers' Market of Jharkhand: A Case Study in Ranchi District".

The study aims at analyzing the problems of marketing vegetables in farmers' markets of Ranchi District in three blocks of Ranchi namely, Kanke, Bero and Mandar. The data is collected through structured questionnaire with a sample of 50 farmers and interpreted the results with ANOVA by using SPSS. The

study is confined to problems such as perishability nature of product, damage cost, intermediaries, transportation and high storage cost by area wise, farm size, caste and education wise respondents.

Research Gap: The study concentrates the horticulture farmer's problems with some demographical factors and others. It is suggested to study impact of using online market for farming produce.

- 3) **Vasant P. Gandhi and N.V. Namboodiri (2002) studied on "Fruit and Vegetable Marketing and its Efficiency in India: A Study of Wholesale Markets in the Ahmedabad Area"**

It focuses particularly on wholesale markets in overcoming their problems and to improve its efficiency which includes infrastructure developments, marketing function & practices and pathway from the wholesaler to ultimate customers. The data is collected in a structured questionnaire with a sample of 211 (commission agents, retailers and farmers), at Ahmedabad. The study shows price difference among farmers, Wholesalers and retailers in the form of Marginal Cost and Profit margin shares of farm products of horticulture.

Research Gap: The paper discussed price variation from the Farmer to the customer with existing market structure in Ahmedabad. It is essential to improve transparency with the adoption of E Auction mechanism for more added advantage to the farmers and the customers.

- 4) **Muluneh Bekele, Kebenu Feyisa ShimelisGetu (2016), provides on "Challenges and Opportunities of Marketing Fruit and Vegetables at Logia, Northeastern Ethiopia".**

The main objective of the study is to analyze the challenges and opportunities of marketing horticultural products. It is based on the descriptive statistics with a total of 96 retailer respondents through purposive sampling technique in Logia. Both primary and secondary data is collected. The study shows the marketing system of few items like onion, tomato and banana that were predominantly constrained by number of difficulties like manipulation of weighing, unfair pricing of products by brokers and low quality of the products and lack of cooperation in the system. The study observes it is essential to undertake improvement measures by the government as well as private sectors.

Research Gap: In traditional market the interference of middle men results in increase of price. It is necessary for a centralized online market of agricultural products which may be useful for retailer and consumer.

OBJECTIVES OF THE STUDY:

1. To study the demographics of horticulture producers in general and their perception towards horticulture products like Mango, Guava and Mosambi.
2. To study the problems and prospects of Sales and Distribution of horticulture products in Telangana.
3. To identify various aspects to improve the Sales and Distribution efficiency of horticultural products in Telangana.
4. To suggest suitable strategies to enhance the marketing efficiency for horticultural commodities in the State of Telangana.

Hypotheses of the Study:

1. There is no significant difference between the demographic profile of respondents like Age, Gender, Income, Education, and Experience towards Horticulture Products ie Mango, Guava and Mosambi.
2. There is no significant difference between the demographic profile of respondents like Age, Gender, Income, Education, and Experience towards Financial problems faced by respondents in Sales and Distribution of Horticulture Products.
3. There is no significant difference between the demographic profile of respondents like Age, Gender, Income, Education, and Experience towards Logistics and Supply chain issues faced in Sales and Distribution of Horticulture products.

SCOPE OF THE STUDY:

The scope of the present study covers **problems and prospects of distribution and sales of horticulture products i.e, Mango, Guava and Mosambi** by Horticulture Farmers in selected Districts in Telangana. **There are many studies in agriculture. Horticulture is a silent farming activity which provides a wider scope for research.** Districts are selected by considering the highest producers of horticulture products. The data was collected through structured questionnaire

NEED FOR THE STUDY:

Agriculture is the backbone of the Indian economy. A vast majority of rural population depends upon agriculture as their primary occupation. Agricultural crops required more efforts but get less revenue. A horticulture product gives good revenue. The present study aims to identify the problems faced by the farmer. The horticulture products sales and distribution is problematic due to its perishable in nature. Horticulture products are a tremendous range of our state. It helps to increase economic growth in the state. The need of the study arises due to exceptional challenges faced by the farmers in marketing their outcome.

RESEARCH METHODOLOGY:

Problem statement: Due to high perishable nature, seasonality, these crops require special care and attention in providing time, form and space utilization, which can increase marketing costs. Due to the prevalence of

imperfect market structure and the presence of a small number of traders in business, the horticultural marketing system is affected by the ultimate prices realized by growers. Effective marketing of horticultural crops is considered equivalent to their production. These horticultural crops differ from other food crops in relation to certain natural features such as moisture percentage, texture and unit size, which can be very damaging, resulting in massive crop losses. In view of the multiplicity of marketing problems, “**An empirical study on farmer’s perception in selling and distribution of selected Horticulture Products** has been undertaken.

RESEARCH DESIGN:

A Descriptive research has conducted by reviewing the literature on the subject, followed by survey method to elicit information from Farmers dealing with Horticulture farming practices. A structured questionnaire was prepared to collect the primary source data and the secondary data has collected from Government reports, websites, journals, articles, books and publications etc.

SOURCES OF DATA

- The required data was collected from both primary and secondary sources. The primary sources include administering a schedule questions on the sample Farmers respondents.
- The secondary sources include from the official Government sites, books, published articles in the journals and magazines, otherwebsites, etc.

GEOGRAPHICAL AREA:

- Considering convenience and time constraint this study is a sample of 100 Farmers in selected Districts Telangana only.

DATA ANALYSIS

- Various mathematical and statistical tools, like Percentages, Mean, Median and Mode, used for analyzing the sample data of 100 with the help of SPSS.

LIMITATIONS OF THE STUDY:

- Time would be main constraint. The sample farmers’ (respondents) have to spare some time to answer the questions in the schedule.
- The present study covers only selected District Telangana and therefore cannot generalize the findings to other areas.

DATA ANALYSIS

Table no: 1 Gender of the Sample Farmer Respondent

Gender	Frequency	Percent	Cumulative Frequency
Male	78	78	78
Female	22	22	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: From the above table, it is clear that 78% of the farmers are males’ respondents and 22% are females’ respondents. This profoundly reveals that males are more enthusiastic than females in farming.

Table no: 2 Age of the Sample Farmer Respondent

Age	Frequency	Percent	Cumulative Frequency
< 25 years	2	2	2
26-40 years	28	28	30
41-60 years	57	57	87
61-75 years	13	13	100
Above 75 years	0	0	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: From the above table clearly indicates that a maximum percentage of 57% of sample farmers respondents are in the age group of 41 to 60 years, 28% of the sample farmers respondents are in the age group of less than 26 to 40years, and 13% of the sample farmers respondents are in the age group of above 61to 75 years.

Table no: 3 Education qualification of the Sample Farmer Respondent

Education qualification	Frequency	Percent	Cumulative Frequency
Illiterate	5	5	5
Primary education	8	8	13
Secondary education	12	12	25
Graduation	65	65	95
PG	10	10	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: It is found that most of the farmers are have a good education background. 65% of the farmers are graduates, 10% are post graduates and 12% are secondary education level, 8% are primary education and the remaining sample respondents were found as illiterates. This shows that the educated farmers are able to analyze the advantages and disadvantages of horticulture farming activities and they also concede that they are able to get transparent information through television, social media, websites and magazines.

Table no: 4 Marital Status of the Sample Farmer Respondent

Marital status	Frequency	Percent	Cumulative Frequency
Single	-	-	-
Married	96	96	96
Divorced	-	-	-
Widowed	4	4	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: In the present study, it is identified that 96% sample farmers' respondents are married and the remaining sample farmer respondents are widowed which enhance importance and requirements of the horticulture crops without the moral support of the better half.

Table no: 5 Type of respondents family

Type of the respondents family	Frequency	Percent	Cumulative Frequency
Nuclear family	64	64	64
Joint family	36	36	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: In above table, it indicates that 64% farmers respondents are belong to nuclear family and the remaining farmers respondents are belongs to joint family. Here the size of the family also plays an important role in the horticultural faming activities and for the development and increasing the production capacity of the horticultural product.

Table no: 6 Family Size of the Sample Farmer Respondent

Size of the respondents family	Frequency	Percent	Cumulative Frequency
Less than 3 members	38	38	38
3-5 members	46	46	84

Above 5 members	16	16	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: When the number of dependents is more in the family, simultaneously expenditure also increases, earnings also changes significantly. The number of dependents and income and earnings are inversely proportional to each other. When the number of dependents is more in the family, they do not have ample of money for their economic requirement, need and situation.

Table no: 7 Horticulture Experience of the Sample Farmer Respondent

Respondents horticulture experience	Frequency	Percent	Cumulative Frequency
5 years	9	9	9
6-10 years	36	36	45
11-15 years	48	48	93
Above 15 years	7	7	100
Total	100	100	100

Source: Primary Source

INTERPRETATION: The above table explains the number of years of experience of the sample farmer respondents in the horticulture farming. It is clearly indicates that, majority of the sample farmer respondents that is 48% are having 11- 15 years of experience, 36% having 6- 10 years of experience, 9% are having 5 years of experience and the remaining 7% are having more than 15 years of experience. This means there is a huge demand for the production and distribution for the sale of horticulture products within the sample area.

Table no: 8 Income of the Sample Farmer Respondent

Income	Frequency	Percent	Cumulative Frequency
Less than 1,00,000	18	18	18
1,00,001-2,00,000	38	38	54
2,00,001-3,00,00	36	36	90
3,00,001-4,00,00	10	10	100
Above 4,00,000	-	-	-
Total	100	100	100

Source: Primary Source

INTERPRETATION: It is found from the table that 38% of the sample farmers respondents are belong to the income group of Rs 1,00,001- Rs. 2,00,000, 36% of the sample farmers respondents have the income of Rs. 2,00,001-Rs. 3,00,000, 18% of the sample farmers respondents belong to the income groups of Rs. Less than 1,00,000, and the remaining of the sample farmers respondents are in the 3,00,001 – 4,00,000 income level.

Result of Hypothesis 1:

- The above illustrates the demographical factors of the sample farmers respondents by using the average mean based on the descriptive statistics. In the present study higher representation of the male sample farmers respondents than female sample farmers respondents would lead to more reliable results. It is heartening to note that 57 sample farmers respondents, forming around 57 percent, fall in the age group of 41-60 years, enhancing the reliability of the present study. Education is considered as a powerful background for analyzing about advantages and disadvantages in farming activities. Income is considered as an important variable for all the farmers to allocate the saving amount for the future returns purpose. Family size, nature of the family found as one of the important determinates and acts a burden, which affects the farming activities and output.

Table no: 9 One-way ANOVA test between the demographic profile of sample farmers respondents towards financial problems faced by respondents in Sales and Distribution of Horticulture Products.

	Sum	of	Df	Mean	of	F	Sig.
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	square		square		
Between the group	11.17	2	.428	3.718	0.50
Within the group	12.69	97	.115		
Total	23.86	99			

Level of significant 0.05

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
36.532	2	97	.000

RESULTS OF THE HYPOTHESIS 2,1: The above table illustrates the one-way ANOVA for the between the demographic profile of respondents like Age, Gender, Income, Education, and Experience towards Financial problems faced by respondents in Sales and Distribution of Horticulture Products i.e. Mango, Guava and Mosambi. ANOVA was applied for 100 sample respondents based on the preferred demographical factors which influence sample farmer respondents perception towards Horticultural products i.e. Mango, Guava and Mosambi. The factors are explained with the mean and the standard deviation of the sample respondent based on the descriptive statistics 100 respondents illustrated in the table no 9. Since the p value is greater than 0.05, the null hypotheses is accepted at 5% percent level of significance with regard to the issues facing in Sales and Distribution of Horticulture products. Therefore it is concluded that is no significant difference in the perception of the sample farmers' respondents towards Horticultural products like Mango, Guava, and Mosambi.

Table no: 10 One-way ANOVA test difference between the demographic profile of respondents towards Logistics and Supply chain issues faced in Sales and Distribution of Horticulture products.

	Sum of square	Df	Mean of square	F	Sig.
Between the group	2.176	2	.170	1.915	0.126
Within the group	13.14	97	.089		
Total	15.136	99			

Level of significant 0.05

Test of Homogeneity of Variances

Levene Statistic	df1	df2	Sig.
12.835 ^a	2	97	.000

Results of the hypothesis 2,2: The above table illustrates the one-way ANOVA for the between the demographic profile of respondents like Age, Gender, Income, Education, and Experience towards Logistics and Supply chain issues faced in Sales and Distribution of Horticulture products Horticulture Products i.e. Mango, Guava and Mosambi. ANOVA was applied for 100 sample respondents based on the preferred demographical factors which influence sample farmer respondents perception towards Horticultural products i.e. Mango, Guava and Mosambi. The factors are explained with the mean and the standard deviation of the sample respondent based on the descriptive statistics 100 respondents illustrated in the table no 10 Since the p value is greater than 0.05, the null hypotheses is accepted at 5% percent level of significance with regard to the Logistics and Supply chain issues faced in Sales and Distribution of Horticulture products Horticulture Products i.e. Mango, Guava and Mosambi.. Therefore it is concluded that is no significant difference in the perception of the sample farmers' respondents towards Logistics and Supply chain issues faced in Sales and Distribution of Horticulture products Horticultural products like Mango, Guava, and Mosambi.

CONCLUSION

Most of the of the sample farmers respondents are facing the problems in distributing the horticulture products to markets and lack of transportation facilities at an economical price. With the present of the sample farmer's respondents, logistic and the supply chain issues and the sale and distribution of the horticultural products are based on the dimensions of the farming activities. In spite of assist and fully information from the Government, private agencies are playing a role in horticultural markets for the free flow and path way of the horticultural products. Uncertainty in the environment and lack of transportation and storage facilities are considering as an

important factor which influencing the sample farmers respondents in sales and distribution of the horticultural products. Sample farmers respondents are mostly depend on the Intermediaries and the private agencies in sales and distribution of the horticultural products. Awareness and positive perception level of horticultural farming is increasing in recent times with organic products, eco friendly, and healthy and nutritious society promotion activity.

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