

**A STUDY ON PRODUCTION AND MARKETING OF
APPLE IN KALPA BLOCK OF DISTRICT
KINNAUR, H.P.**

Project Report

by

ANUJ

(H-2014-ABM-O2)

Submitted to



**Dr. YASHWANT SINGH PARMAR UNIVERSITY OF
HORTICULTURE & FORESTRY
SOLAN (NAUNI) HP-173 230 INDIA**

in

Partial fulfilment of the requirements for the degree

of

**MASTER OF BUSINESS ADMINISTRATION
MBA (Agri-Business)**

DEPARTMENT OF BUSINESS MANAGEMENT

2016

RRM
658-8096377
A89S

**A STUDY ON PRODUCTION AND MARKETING OF
APPLE IN KALPA BLOCK OF DISTRICT
KINNAUR, H.P.**

Project Report

by

ANUJ

(H-2014-ABM-O2)

Submitted to



**Dr. YASHWANT SINGH PARMAR UNIVERSITY OF
HORTICULTURE & FORESTRY
SOLAN (NAUNI) HP-173 230 INDIA**

in

Partial fulfilment of the requirements for the degree

of

**MASTER OF BUSINESS ADMINISTRATION
MBA (Agri-Business)**

DEPARTMENT OF BUSINESS MANAGEMENT

2016



Dr. Y.S. Parmar University of
Horticulture & Forestry
Library, Solan - 17330

Accession No. **48516**

Date 4.16.16 Price —

— MBA

— by Check by —

COM RBM
658.80963411
A89 S

Dr. Krishan Kumar
Professor & Head


Department of Business Management
College of Horticulture
Dr. Y.S. Parmar University of Horticulture &
Forestry, Nauni, Solan (HP)-173230

CERTIFICATE-I

This is to certify that the project entitled, "**A Study on Production and Marketing of Apple in Kalpa Block of District Kinnaur, H.P.**" has been submitted to Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni, Solan (HP) by **Mr. Anuj (H-2014-ABM-02)** in partial fulfillment for the award of degree of Master of Agri-Business Administration. This project is done under my guidance and to the best of my knowledge, no part of the project been submitted for any other degree or diploma.

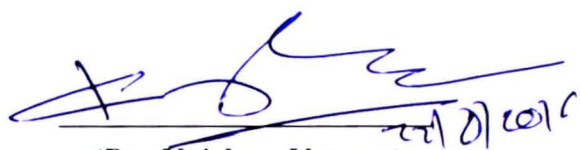
Date:

Place: Nauni, Solan (H.P)


(Dr. Krishan Kumar)
Project Advisor

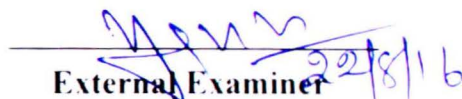
CERTIFICATE-II

This is to certify that the project “A Study on Production and Marketing of Apple in Kalpa Block of District Kinnaur, H.P.” has been submitted to Dr. Y. S. Parmar University of Horticulture and Forestry, Nauni, Solan (HP) by **Mr. Anuj (H-2014-ABM-02)** in the partial fulfillment of Master of Agri-Business Administration programme. This project has been approved by the examination committee after conducting an oral examination in collaboration with the external examiner.



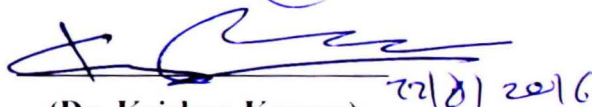
(Dr. Krishan Kumar)

Project Advisor


22/8/16

External Examiner

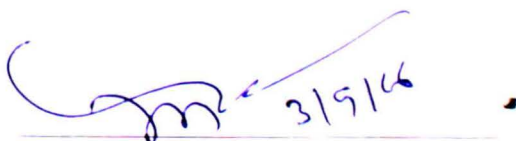
(Yashwant Kumar Anph)


22/8/2016

(Dr. Krishan Kumar)

Prof. & Head

Department of Business Management


3/9/16

(Dr. J.N. Sharma)

Dean

College Of Horticulture

Date:

Place: Nauni (H.P)

CERTIFICATE – III

It is certified that the project entitled “**A Study on Production and Marketing of Apple in Kalpa Block of District Kinnaur, H.P.**” which has been submitted to Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni, Solan (HP) by **Mr. Anuj (H-2014-ABM-02)** in partial fulfillment for the award of degree of Master of Agri-Business Administration, is my original work and that no part of the project has been copied from any other source. Information used from other sources has been duly acknowledged by me.

Date

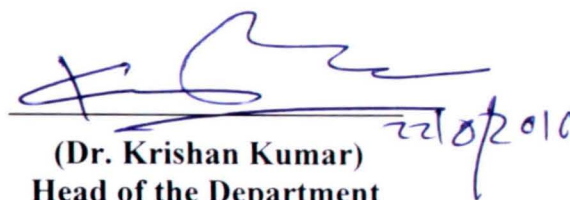
**Anuj
(H-2014-ABM-02)**

CERTIFICATE-IV

This is to certify that all the corrections/amendments suggested by the external examiner have been made in the project **“A Study on Production and Marketing of Apple in Kalpa Block of District Kinnaur, H.P.”** that has been submitted to Dr. Y. S. Parmar University of Horticulture and Forestry, Nauni, Solan, (HP) by **Mr. Anuj (H-2014-ABM-02)** in the partial fulfillment of Master of Agri-Business Administration programme.



(Dr. Krishan Kumar)
Project Advisor



(Dr. Krishan Kumar)
Head of the Department

ACKNOWLEDGEMENT

I am indebted to The God- the Almighty who blessed me with all the favourable circumstances to go through this gigantic task and for bestowing me an opportunity to be the pride student of “Dr. Y S Parmar University of Horticulture and Forestry, Nauni- Solan (H.P.) India.” I thank Almighty for giving me such honest and sacrificial parents to whom I owe all that is mine.

I feel bereft of syllable to explicate my sincere gratitude and profound personal regards to Krishan Kumar Professor and Head, Department of Business for his impeccable guidance, analytical vigor, unending zeal, painstaking efforts and excellent knowledge of the subject. I shall always remember his painstaking guidance with all reverence and awe.

I would like to express my sincere gratitude to Dr. Kapil Kathuria (Associate Professor) Mrs. Neena Ghonkrokta (Assistant Professor) Dr. Piyush Mehta (Assistant Professor) and Dr. Yasmin Janjhua (Assistant Professor) Dr. Rashmi Chaudhary (Assistant Professor) and the entire staff of department of Business Management, Dr Y S Parmar University of Horticulture and Forestry, Nauni (Solan) for their moral support extended to me from time.

I owe a special word to my family members whom I kept awaiting during all these years and who faced so many difficulties during my long period of absence.

✍

Place: Nauni, Solan

Date:

Anuj

CONTENTS

CHAPTER	TITLE	PAGE NO.
1.	INTRODUCTION	1-3
	i) Need of Study	3
	ii) Objective of the Study	3
2.	REVIEW OF LITERATURE	4-8
3.	RESEARCH METHODS	9-10
	i) Research Area	9
	ii) Sampling	9
	iii) Sample Size	9
	iv) Sources of Data	9-10
	v) Analytical Tools	10
4.	ANALYSIS AND INTERPRETATION	11-34
5.	SUMMARY AND CONCLUSION	35-36
	BIBLIOGRAPHY	37-38
	ABSTRACT	i
	APPENDICES	ii-viii
	CURRICULUM VITAE	ix

LIST OF TABLES

S. No.	Title of tables	Page No.
4.1	Age Status of the Respondent's	11
4.2	Family Type of Respondent's	12
4.3	Gender Distribution of the Respondent's	12
4.4	Educational Status of Respondent's	13
4.5	Land Holding Pattern of the Orchard Respondents	14
4.6	Land use Pattern of the Respondents.	14
4.7	Income Pattern of the Respondents	15
4.8	Number of Apple Trees of Respondents	16
4.9	Major Varieties Grown and Number of Plants with respect to that Variety	16
4.10	Annual production of boxes by the Respondents	17
4.11	Cost of Input on Orchard of the Respondents	18
4.12	Cost per box paid by Respondents	19
4.13	Harvesting Contracts	19
4.14	Reason of giving Orchard to Pre-Harvest Contractor.	20
4.15	Marketing Channel adopted by the Respondents.	21
4.16	Storage Facility Problem.	22
4.17	Transportation Problem faced by the Respondents.	23
4.18	Market Intelligence Problem	24
4.19	Malpractices in Market.	25
4.20	Support/Procurement Policy announced by Federation.	26
4.21	Traders mainly Dealing in which Line?	28
4.22	Traders Experience in this Trade?	29
4.23	Average Price paid per box by Traders to the Producer?	30
4.24	Source of Purchase of Apple by the Traders.	31
4.25	Traders Source where they Sell their Product.	31
4.26	Effect of Traders Business by entry of Big Retail Chain.	32
4.27	Do Traders also deal with Big Retail Chains?	33

LIST OF FIGURES

S. No.	Title of the figures	Page No.
1	Age Status of the Respondent's.	11
2	Family Type of Respondent's.	12
3	Gender Distribution of the Respondent's.	13
4	Educational Status of Respondent's	13
5	Land Holding Pattern of the Orchard Respondents.	14
6	Land use Pattern of the Respondents.	15
7	Income Pattern of the Respondents.	15
8	Number of Apple Trees of Respondents.	16
9	Major Varieties Grown and Number of Plants with Respect to that Variety.	17
10	Annual Production of Boxes by the Respondents	17
11	Cost of Input on Orchard of the Respondents.	18
12	Cost Per Box paid by Respondents	19
13	Harvesting Contracts:	20
14	Reason of giving Orchard to Pre-Harvest Contractor.	21
15	Marketing Channel Adopted by the Respondents.	22
16	Storage Facility Problem.	23
17	Transportation Problem faced by the Respondents.	24
18	Market Intelligence Problem.	25
29	Malpractices in Market.	26
20	Support/Procurement Policy announced by Federation	27
21	Traders mainly Dealing in which Line?	28
22	Traders experience in this Trade?	29
23	Average Price paid per box by Traders to the Producer?	30
24	Source of Purchase of Apple by the Traders.	31
25	Traders source where they Sell their Product.	32
26	Effect of Traders business by entry of Big Retail Chain.	33
27	Do Traders also deal with Big Retail Chains?	34



INTRODUCTION



Chapter-1

INTRODUCTION

India's three mountain states, Himachal Pradesh, Jammu & Kashmir, and Uttarakhand, produce nearly all of the apples grown in the country. The domestic Indian apple market was valued at approximately US\$4.1 billion in 2010 (**Rosi, 2010**). Two apple varieties, Red Delicious and Golden Delicious are the dominant varieties grown and consumed in India. Indian consumers prefer apples that are red, sweet, crunchy, and uniform in shape (**Pandey et. al, 2013**). In 2009, India produced 1.98 million metric tons of apples on 274.4 thousand hectares (**Indian Horticulture Database-2010, 2010**). In India, the great majority of fresh produce is sold through informal retailers, including roadside and neighborhood stalls, kiosks, and doorstep delivery by hand carts. Organized fresh food retailing through supermarkets is still in the nascent stage and largely confined to a few big cities. In the current, supply-driven market, buyers face great variability of supply in terms of quality, quantity, specifications, and yield. For this reason, most buyers, including food processors and retailers, do not know in advance what to expect from the supply lot (**Minton et al., 2009**).

The state of Himachal Pradesh has emerged as a model for other hill states of the country. This has been possible because of the concerted efforts of the planners and people of the state to harness the varied agro-climatic conditions to transform the traditional hill agriculture to more remunerative horticultural crops dominated commercial agriculture. Apple cultivation in the temperate areas of the state has been at the centre of the horticultural development strategy. As a result, the area under apple increased substantially from a mere 400 hectares in 1950 to 114939 hectares in 2011-12. Apple acreage now accounts for more than 80 per cent of the total fruit area in the state. This is true for the share of apple in total fruit production as well

In district Kinnaur, apple is a major cash crop leading to higher economic growth of the people. Apple in Kinnaur is grown at an altitude above 10,000 feet

above mean sea level and harvesting begins when the crop from other districts in the state is almost over. Kinnaur apple is known for its trademark.

The first apple orchard in Himachal Pradesh was established at Bandrole in Kullu by Captain Lee an English man around 1860. Thereafter many orchards were established at Manali (Raison) and Nagar in Kullu valley by English Settler like Col. Rannk, Captain Bannan. Besides many apple varieties were introduced by Alexander Coult in his orchard called Hillock Head of Mashobra in October 1887 which is now known as the Regional Horticultural Research Station of Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni-Solan Himachal Pradesh. However, apple revolution in the state came with the introduction of delicious varieties by Samuel Eudans Stocks a resident of Philadelphia (USA) in 1918 at Kotgarh in Shimla district. Slowly and steadily this crop has become very important for improving the socio-economic conditions of the people of the state.

Ever since the introduction of the fruit in this hilly state by the foreign missionaries there has been continuous increase in area and production of this fruit. At present more than dozens cultivars are being cultivated by the apple growers of Himachal Pradesh. The red coloured delicious group varieties dominate the industry. The cultivars like Golden Delicious, Red Gold, Tydemans, Early Worcestor etc. are planted as the pollinizing varieties for the main commercial delicious group and there are other minor varieties cultivated like Black Ben Devis, Jonathan, Ruspippin Cox's Organge Pippin, Starkrimson Delicious etc.

The Apple marketing system in H.P. is very often viewed as inefficient. The intermediaries in the marketing system, it is alleged, make disproportionate profits at the expense of producers and the consumers. The Central and State governments from time to time have brought legal reforms in the Agricultural Produce Marketing Act to tackle the emerging problems in the marketing system. Recently, Government of India has introduced Model Marketing Act envisaging reduction in the monopoly of Agricultural Produce Markets (APMs) and permitting free movement of goods, establishment of private markets and direct marketing. In pursuance of Govt. of India

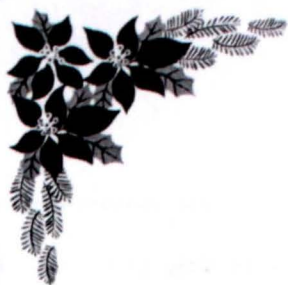
Model Marketing Act, various State Governments have brought the legal reforms in the market laws with the aim to provide for the establishment of private markets, contract farming, group marketing and direct marketing in agricultural commodities. The extent of adoption of the model act and its success is still to be studied. More empirical investigations are required to say something definitely about the improvements in the marketing system.

Need of Study

Kalpa Block of District Kinnaur in Himachal Pradesh has been known for its quality apples. However, apple production in Kalpa Block of the District is confronted with numerous production and marketing challenges due to its highly perishable nature, high-tech requirements for irrigation, harvesting, costly planting material/seed and various other inputs etc. Thus, for encouraging the production and marketing of apple as cash crop various challenging in the production and marketing of apple must be identified. Therefore keeping in the view the importance of apple as high value cash crop in the Kalpa Block and to examine various hurdles in its production and marketing the present study was conducted.

Objectives of the Study

1. To study the existing status of apple production in Kalpa Block of Kinnaur District.
2. To study the production and marketing challenges faced by the farmers.
3. To suggest policy implications for improved production and marketing of apple.



REVIEW OF LITERATURE



Chapter-2

REVIEW OF LITERATURE

The scientific research is based upon methodical view developed on the previously accrued erudition and experience. A meticulous insight into studies previously conducted relating to the research area under contemplation, therefore, becomes imperative for conceptual clarity, development of reliable methodology and for recognizing the critical gaps for further improvement in research work. Keeping this idea into view, an effort has been made in this chapter to present the resume of work done by various research workers in India and abroad which have been organized and documented chronologically in a range of broad sections. Findings have been categorized under different sections, namely.

Randev *et al.* (1992) conducted a study about rationale of resource use in apple cultivation in tribal areas of Himachal Pradesh. They studied that the expenditure on human labour indicated scope for additional absorption of labour on the orchards. The study carried out by them also revealed that there is possibility of reducing fertilizer consumption on large orchards.

Saraswat (1997) conducted a study on organization of production and marketing of apple in Himachal Pradesh. The study found that, in Himachal Pradesh the area under apple has increased at a compound growth rate of 4.71 per cent per annum while the production increased at 8.34 per cent per annum during 1966-67 to 1990-91. The study revealed that the average productivity per hectare of apple orchards was 1,285 standard boxes of each 18 kg.

Negi *et al.* (1997) conducted a spatio-temporal analysis of marketing of Himachal apples and examined the regional production advantages and analyzed the scope for improving marketing system for horticultural crops in hilly state of Himachal Pradesh and they found that Producers marketing costs were more or less

same at around 32 per cent whereas Producer's gross price decreased from 71.5 per cent to 62.40 per cent

Kar *et al.* (2004) studied the integration of Indian apple markets and marketing infrastructure in Himachal Pradesh. The objectives of the study were to examine marketing infrastructure in the state and market integration for apple. Components of market infrastructure examined in the study were number of markets, cold storage, roads, telecommunication, electrification and cooperatives. Number of markets per sq. km. in the state is low and efforts are being made to develop fruit markets in Shimla and Kullu.

Singh (2004) conducted a study about the causes of low productivity in Himachal Apple. The state of J&K occupies the first place in apple production in the country with between 62 to 67 per cent of the production and 37 per cent of the total area under apple orchards in India. Himachal Pradesh occupies the second place followed by Uttaranchal and Arunachal Pradesh. The analysis of fruit production in Himachal Pradesh during twenty years revealed that annual average production, taking the five year averages from the 1980-81 onwards into consideration, has almost stabilized between 250000 MT and 270000 MT. It was suggested that production has remained fairly static in spite of an expansion in the area at a rate of over 2500 ha per year. Available data indicated that there has been considerable decline in the productivity of apple during the last twenty years. The five year average productivity declined from 6.57 MT/ha during the period 1980-81 to 1988-2000, showing thereby a decrease of about 30 per cent. The factors which affect the yield are non-uniformity in genetic potential of the cultivars planted, the effect of climatic and environmental conditions and management practices employed by growers.

Singh *et al.* (2004) conducted a study in Shimla district on problems of financing Himachal apple marketing and concluded that the financial requirement was inversely proportional to the size of the orchard, i.e. the small fruit growers required large amount of finance for trading their apples in the distant markets, whereas large growers who were found to be financially sound could either easily

meet their loan requirements from their own resources i.e. savings, or required smaller amount of finance from other sources to market their produce. Small orchardists financed by HPMC could not get better net returns per box as compared to the large orchardists, due to inferior grading, low retention capacity and poor management. It was, therefore, suggested that small apple orchardists should be helped in strengthening their financial position.

Chidambaram *et al.* (2005) carried out a study on dynamics of costs and returns structure in agricultural farms in the perspective of the farmers in the Madurai district of Tamil Nadu. The multistage stratified random sampling method was adopted for selection of sample. Results showed that the value of output per acre was found highest in the case of small sized farms. The value of output per acre was found to be Rs. 11,041.48 Rs. 10, 915.79 and Rs. 10,301.56 respectively for the small, medium and large sized farms. Output-Input ratio for the small, the medium and the large sized farms were 1.54, 1.47 and 1.34 respectively. It was found that the output- input ratio per farms as well as per acre were found to be more in case of small sized farms compared to medium and large sized farms.

Navadkar *et al.* (2005) carried out a study on marketing of fruits around Pune city. Necessary data for the study was drawn from 120 fruit growers by simple randomization technique having maximum area under fruits. Moreover time series data on monthly arrivals and prices of mango fruit from 1991-2000 were obtained from agricultural produce market committee. The compound growth rates of annual arrivals and annual mean prices of selected fruits were worked out by fitting exponential form of equation. Results reveal that payments in primary markets was made immediately after sale, however, in terminal markets for recovery, 10-15 days were required.

Kumar *et al.* (2007) worked out costs and returns of apple cultivation in Himachal Pradesh. Multistage random sampling technique was used for selection of farmers located in Shimla and Kullu district. The initial investment was found to be very high. Maintenance cost incurred by farmers for 7 years ranged from Rs. 34,962

during first year to Rs. 67,444 per hectare during seventh year. Per hectare production costs on marginal orchards was Rs. 1,31,976 per hectare followed by Rs. 1,35,149, 1,28,099, 1,27,321 and Rs. 1,27,182 per hectare on large, semi medium, medium and small orchards respectively. Net returns per hectare from apple was highest on marginal orchards Rs.(1,53,408) followed by large Rs.(1,40,059) and least for medium category orchardists Rs. (1,29,143) respectively. Input–output ratio reveals that on investing rupee 1, orchardists get a return of Rs. 1.46, 1.48, 1.49, 1.49 and 1.50 on marginal, large, semi large, medium and small orchards respectively. Hence marginal orchardists were more productive as compared to other category of orchardists. This may be due to efficient management.

Panwar (2011) reported that apple production in Himachal Pradesh is an impending crisis for the farmers. The inherent cause of this crisis is the nature of land holding pattern and deteriorating quality of land.

Varma and Garga (2012) conducted a study on impact of size of land holding, quantity and quality of harvest on profitability of Himachal apple orchards and concluded that in Himachal Pradesh ‘quantity of harvest’ rather than the ‘quality’ is the driving force for profitability of apple farms. In other words for improving profitability of farm, apple farmers would target improvement in the quantity rather than quality of harvest. It was found that the quantity in turn is positively influenced by the size of holding meaning thereby that the larger the size of a single land holding more is the profit. Therefore to optimize profitability, consolidation of marginal and smaller farms into larger holdings is the way forward.

Mehta *et al.* (2013) conducted a study on production and marketing of Apple Fruit Crop- a Study Premise to Shimla District of Himachal Pradesh. They reported that the market structure of temperate fruits is going through a lot of changes. Commission agents were considered as the most preferred marketing channel among the apple growers. Lack of marketing information and market comparative analysis were emerged as the significant problems faced by the apple growers.

Malik and Choure (2014) conducted a study on Economics of Apple Cultivation in South Kashmir and found that an average cultivators incur Rs4105 on per kannel apple orchard, the major cost to be incurred is cost of nursery which accounts for about 44.66 percent of total initial cost, nearly 9.74 percent of total cost is incurred on layout. Digging and filling of pits and about 14.61, 21.82, 6.10 percent on manure, fertilizers and plant protection of the initial investment respectively. The overall "Variable cost" for maintenance of one kannel apple orchard was estimated Rs 7702.5 which is 43.02 % and Fixed cost was estimated to be Rs 10199.79 this constitutes 56.98% per kannel apple crop. Total return was estimated to be Rs 43341.66 and income generation from apple cultivation was Rs 508787.4/ ha which is good indicator for economy.

Natakya *et al.* (2013) conducted a study on saocio economic factors affecting apple production in South Western Uganda This found that there was positive net cash flow (US\$ 2,398.5) after the fourth year. Labour had the highest cost accounting for 41.8 percent of total production costs. Organic fertilizer, farmers experience and labour were the most critical factors of production. They had a positive and significant effect, explaining 63.6 percent of the variation in apple production. Organic fertilizer had the highest elasticity (0.77), followed by labour and land with elasticity coefficient of 0.28 and 0.01, respectively. The elasticity coefficient of organic fertilizer applied in apple fields was 0.77 and was significant at one percent level. This implies that a one percent increase in organic fertilizer applied would cause a 0.8percent increase in apple output.



RESEARCH METHODS



Chapter-3

RESEARCH METHODS

Research is a scientific and systematic search for pertinent information on specific topic. It is a part of scientific investigation for solving the research problem. Research process starts with defining the research problem, formulating hypothesis, design research, collecting data, final interpretation, analyzing the data and to form a report (Kothari, 2009).

Research area

For the concerned study Kinnaur District was purposively selected and Kalpa Block was further selected to draw a sample from five villages representing five Panchayats.

Sampling

Sampling is defined as the segment of population that is representative of whole population. A member in a sample is called a sample unit. Purposive sampling was followed for the selection of sample. The Kalpa Block of District Kinnaur was selected purposively. Five apple growing Panchayats of Kalpa Block were selected purposively. One village in each selected Panchayat was selected. Thus a total of 5 villages were selected. A sample size of 12 farmers from each of the sampled village was taken thus making a total sample size of 60 respondents.

Sample size

A total number of 60 respondents representing 5 villages in Kalpa Block were taken.

Sources of data

Primary data

It is original data or first-hand information for specific purpose of the research project. The primary data was collected on the basis of well structured questionnaire.

Secondary Data

Secondary data was collected from Directorate of Horticulture, KVK, wholesalers and retailer.

Analytical tools

a) Percentage method

Percentage method refers to the special kind of ratio which is used in making comparison between two or more series of data.

$$P = \frac{X}{Y} \times 100$$

Where, X= Number of respondents falling in specific category to be measured.

Y= total number of respondents

b) Arithmetic Mean

The arithmetic mean has been applied to study the opinion of the sample respondents on 5- point scale for different statements. The arithmetic mean has been calculated by assigning numerical value to the qualitative statements. These values have been assigned for these qualitative responses as one for strongly disagree, two for disagree, three for neutral, four for agree and five for strongly agree.

The formula used for Arithmetic Mean is:

$$\bar{X} = \frac{\sum X}{N}$$

Where

\bar{X} = Arithmetic Mean

$\sum X$ = Sum of the values of observation on the variables

N = Number of observations



ANALYSIS AND INTERPRETATION



Chapter-4

ANALYSIS AND INTERPRETATION

The present investigation entitled “A Study on Production and Marketing of Apple in Kalpa Block of District Kinnaur, H.P.” was carried out in five Panchayats of Kalpa Block during year 2016. The data obtained during research were analyzed by using different mathematical tool. The results are presented as below:

Table 4.1 Age Status of the Respondents

Age(years)	No of Respondents	Percentage
20-30	0	0
30-40	9	15
40-50	29	48.3
above 50	22	36.70
Total	60	100

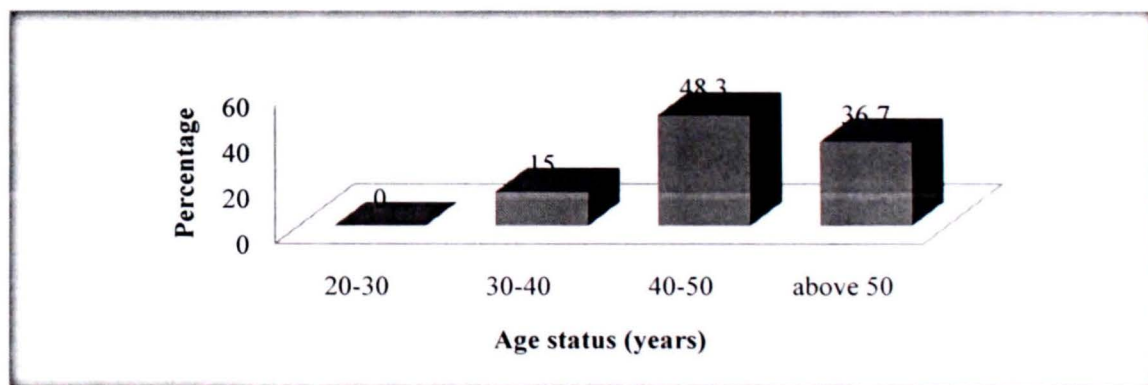


Figure 1

It is inferred from the above table that most of the orchard owners are in the age group of 40-50 year's. These respondents are generally those who have inherited the apple orchards in the family, orchardists in age group of 20-30 are negligible as head of orchards.

Table 4.2 Family Type of Respondents

Family type		
Type	No of Respondents	Percentage
Nuclear	28	46.70
Joint	32	53.30

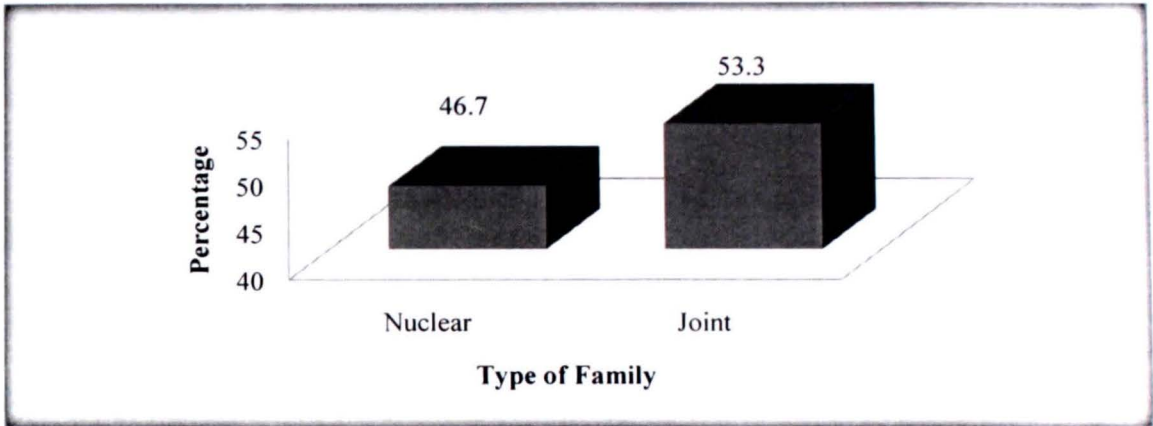


Figure 2

The above table indicates that most of the families are joint and this type of family structure is more favorable for apple cultivation as work of orchard can be distributed among the family members. This trend shows better results for performing the apple cultivation. In case of nuclear families, the labour wages count highest among the cost of production.

Table 4.3 Gender Distribution of the Respondents

Gender		
Type	Average	Percentage
Male	3.03	51.41
Female	2.9	48.59
Total	5.9	100

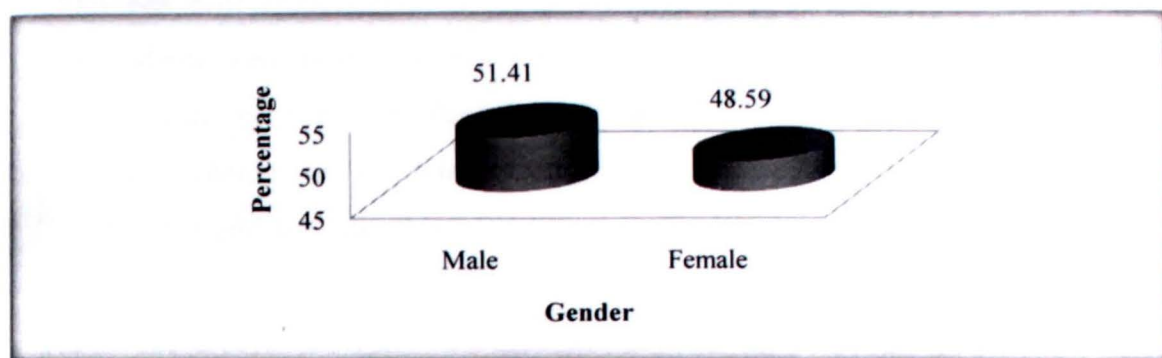


Figure 3

Average number of males (3.03) was slightly more as compared to females (2.9).

Table 4.4 Educational Status of Respondents

Education	No of Respondent	Percentage
Illiterate	13	21.7
Primary	15	25.0
Matric	11	18.3
Plus two	8	13.3
Graduate	12	20.0
PG	1	1.7
Total	60	100.0

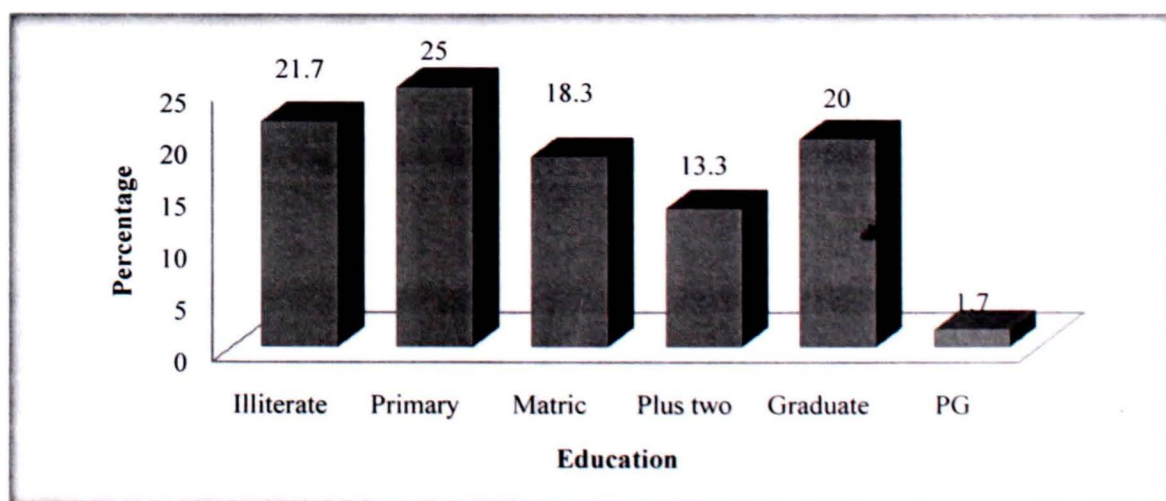


Figure 4

The above table shows that about 25 per cent of respondent have education up to primary and 18.3 per cent are 10+2. 21.7 per cent of respondents were illiterate.

20.0 per cent respondents in the study area were graduates and 1.7 per cent respondents were post graduate. Importance of education is reflected in the farm management, because it is often the case that educated person being better informed, will be in a better position to take decisions.

Table 4.5 Land Holding Pattern of the Sample Farm Households

Land holding	No of respondents	Percentage
<5 Bighas	17	28.33
5-15 Bighas	26	43.33
15-25 Bighas	10	16.67
25-35 Bighas	4	6.67
above 35 bighas	3	5
Total	60	100

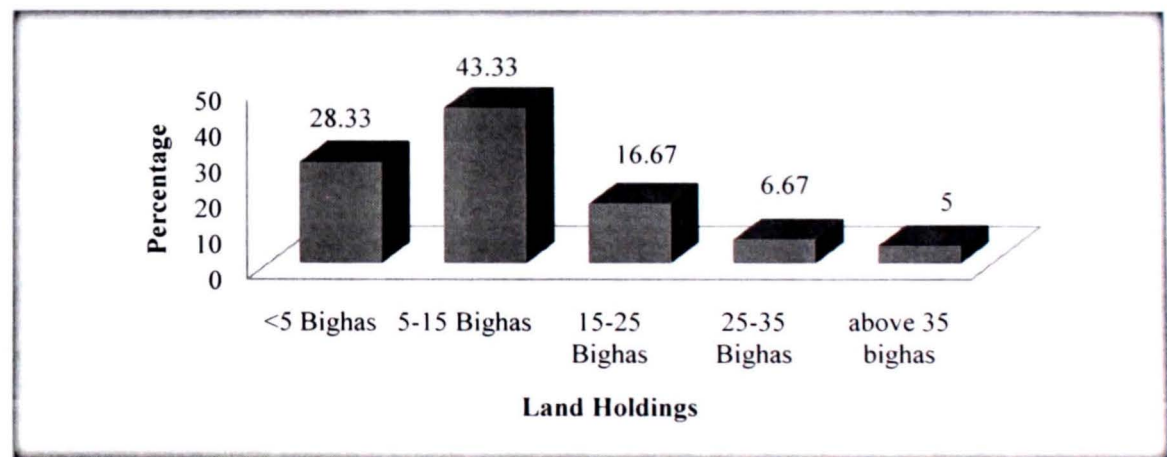


Figure 5

It is clear from table 4.5 most of respondents were having land holdings less than 15 bighas, whereas there were very less orchardists having land above 15 bighas and, a few (5%) possess land over 35 bighas. It can be stated, from the above table that the average orchard size was quite small in the region.

Table 4.6 Land use Pattern of the Respondents

Land use pattern	Avg. Land(Bigha)	Percentage
fruits	13.5	91.77
Vegetables	0.683	4.90
Ghasni/pasture	0.483	3.33
Total	14.666	100.0

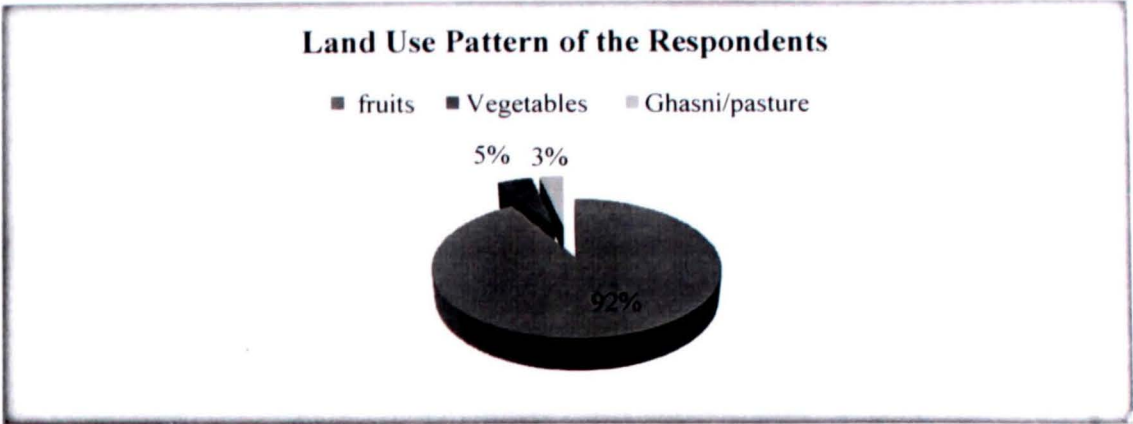


Figure 6

It is clear from the table that most of the land is under fruit cultivation i.e. (91.77%) and land under vegetables (4.90%) was comparatively very low. *Ghasni* and pastures constitute (3.33%) of total landholdings.

Table 4.7 Income Patterns of the Respondents

Income Generated from Agriculture	
Type	Percentage
Fruits	86.46
Vegetables	0.02
Jobs	6.46
Others	7.06
Total	100

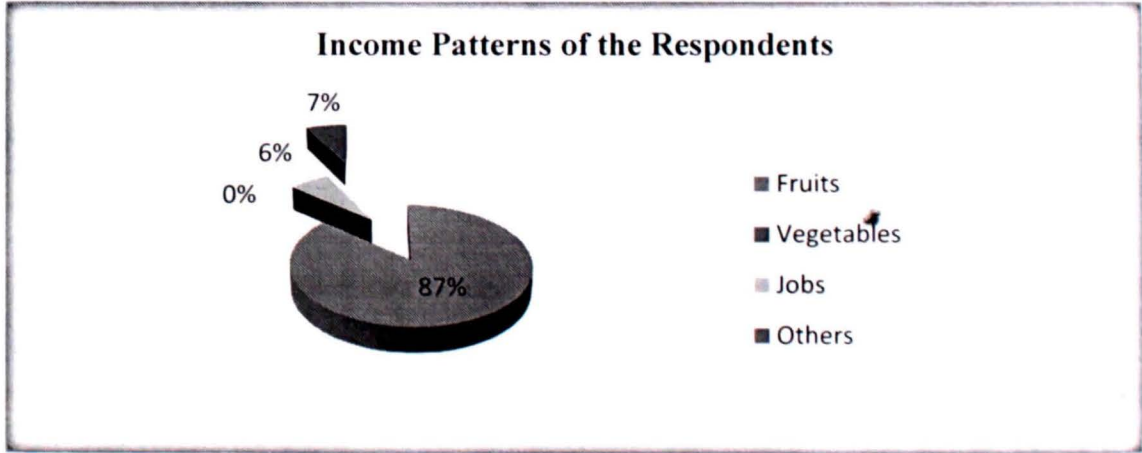


Figure 7

The above table reveals that income from fruits was maximum (86.46%) in Kalpa Block and Apple cultivation dominates the scenario as a cash crop and provides more income to the farmers.

Table 4.8 Number of Apple Trees of Respondents

Plants	Avg. no of trees	Percentage
Bearing	662.3	88.40
Non-bearing	87.5	11.60
total	749.8	100.0

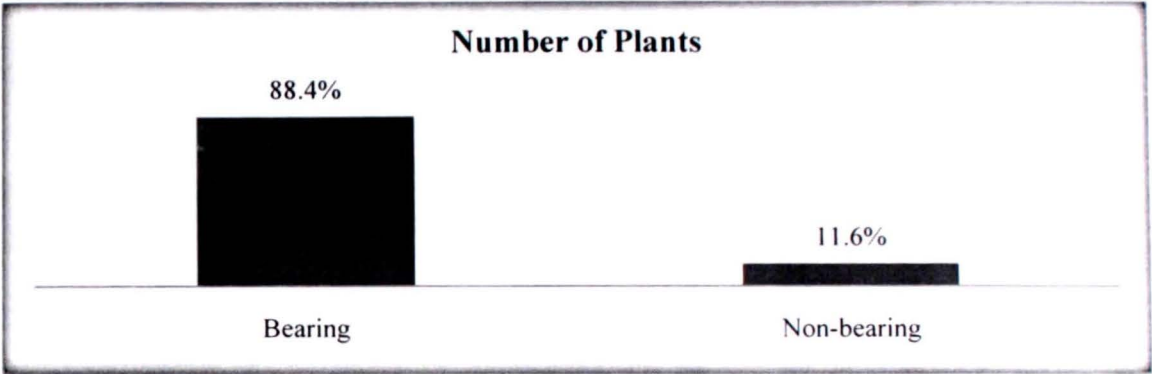


Figure 8

Table 4.8 shows the number of bearing and non bearing trees under study area trees was maximum. It was observed that there was maximum number of trees which were bearing the fruits (87.73%). Only few are in non bearing stage i.e. (12.27%).

Table 4.9 Major Varieties Grown and Number of Plants

Varieties	Percentage	No of Plants
Royal Delicious	83.69	37620
Red Delicious	4.84	2160
Rich-e-Red	4.69	2110
Golden Delicious	3.14	1370
Red Gold	1.86	840
Spur Type	1.51	680
Others	0.27	120
Total	100.0	44950

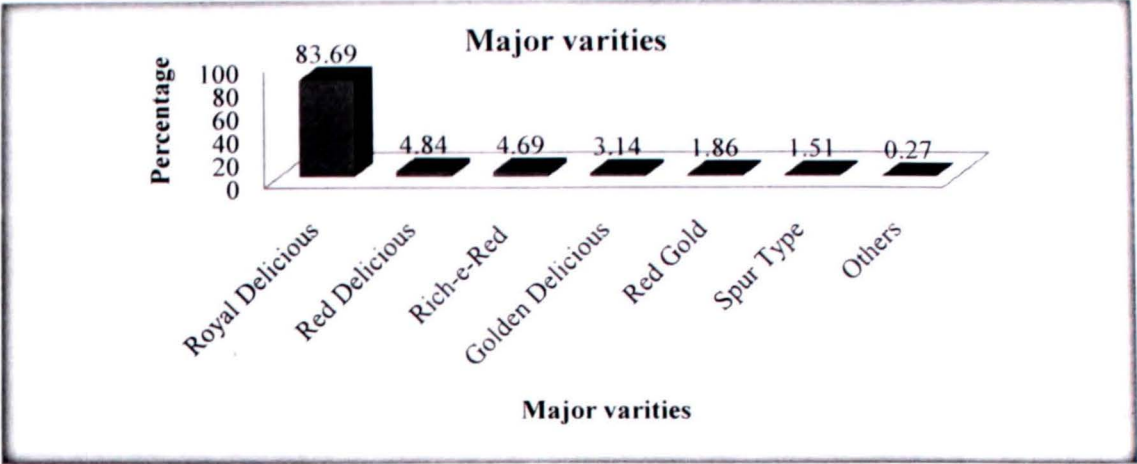


Figure 9

It is clear from the above figure that Royal Delicious was mainly grown by the respondents as it was the chief marketable variety as per the market experiences of the growers and other varieties contribute only 16.31 per cent.

Table 4.10 Annul Production of Boxes by the Respondents

Annual production of boxes	Number of Respondents'	Percentage
<500	15	25
500-1000	5	8.3
1000-1500	18	30
1500-2000	10	16.67
above 2000	12	20
Total	60	100

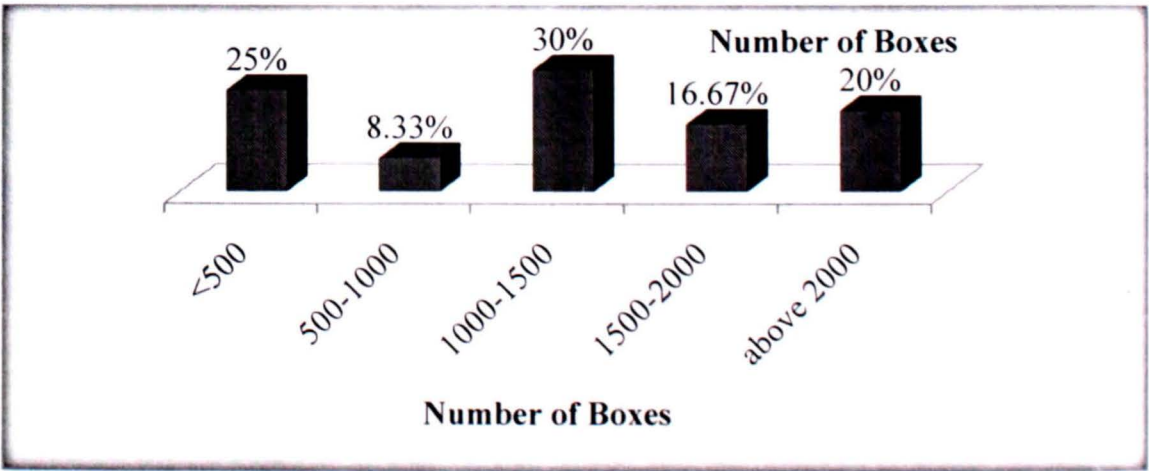


Figure 10

Above table shows the annual total production of boxes was less than 500 on the orchards of 25 per cent of respondents. Maximum numbers of respondent's i.e. 30% per cent were producing 1000-1500 apple boxes on annual basis.

Table 4.11 Cost of Input on Orchard of the Respondents

cost of input		
Input	Avrg .cost/Respondents	Percentage
Pruning	49100	32.20
Manuring	8983.3	5.89
Basin	24900	16.33
Spray	24466.6	16.05
Labour	21000	13.8
Fertilizer	24033.3	15.76
Total	152483.3	100

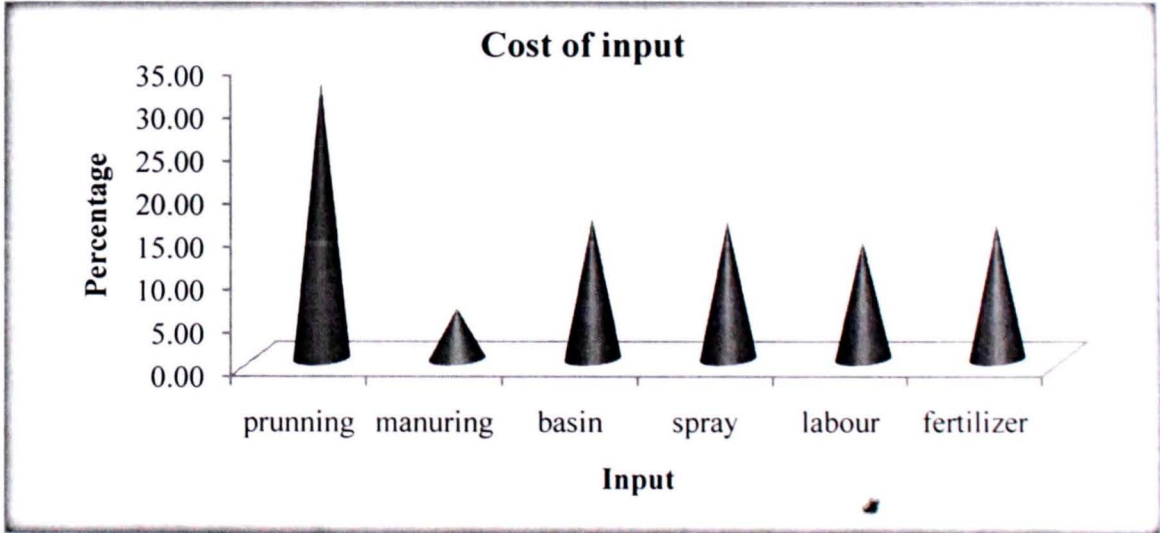


Figure 11

In table 4.11, most of the respondents pay maximum cost for the pruning as it involved skilled labour. About 13.8 per cent of total cost was spent on the labour for other cultural practices like weeding and harvesting etc.

Table 4.12 Estimation of Grading and Packing Cost on Sample Farm

cost		
Type	Total (Rs.)	Percentage
Grading	1632	27.55
Packing	4293	72.47
Total	5924	100

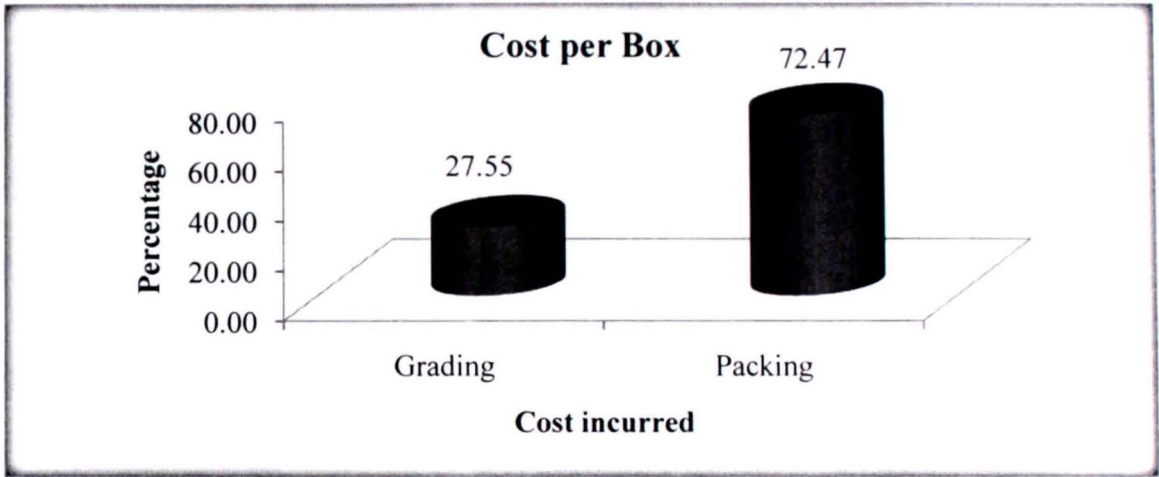


Figure 12

Grading and packing are important factors for the successful selling of the produce. Grading of fruits was done either manually or through mechanical graders. It consumed less time and involved less per cent of cost as compared to packing which involved higher per cent of cost due to greater amount of labour involved. The packing cost was 72.47 per cent of the total cost (Grading and Packing).

Table 4.13 Distribution of Respondents on the basis of Harvesting Contract

To Contract	Response (in number)
Yes	23
No	37

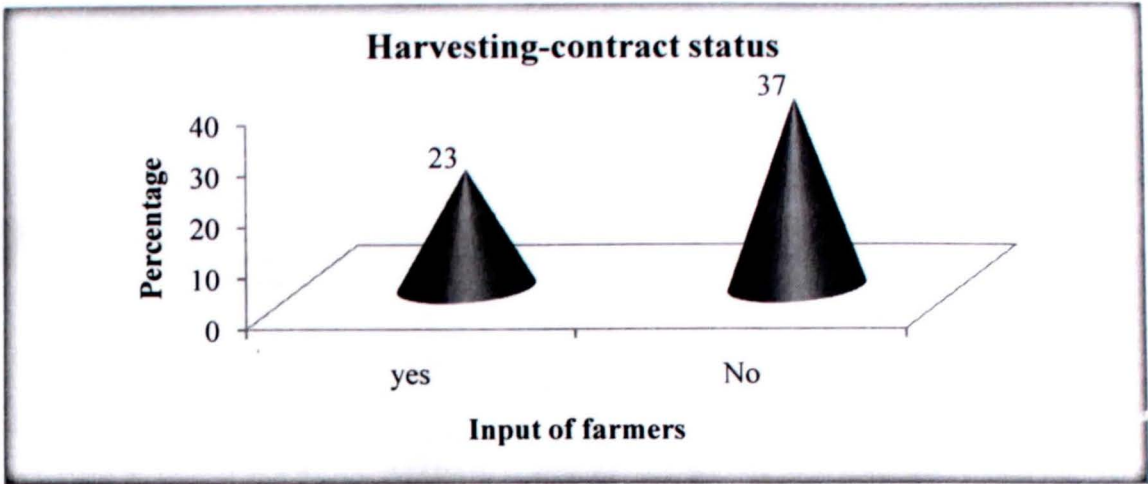


Figure 13

Above figure showed that most of the respondents did not give their orchards pre or post harvest contracts and they were fulltime orchardists. Families which were nuclear or those who were also in some other professions mostly rely on pre or post-harvest contractors.

Table 4.14 Reason of giving Orchard to Pre-Harvest Contractor

Reason of giving orchard to contractors		
Problem	Respondents	Percentage
Labour Problem	4	17.391
Market Problems	3	13.044
To avoid Risk	3	13.044
Busy in other Farm opr	4	17.391
Domestic work	3	13.043
Unaware about marketing	6	26.087
Total	23	100

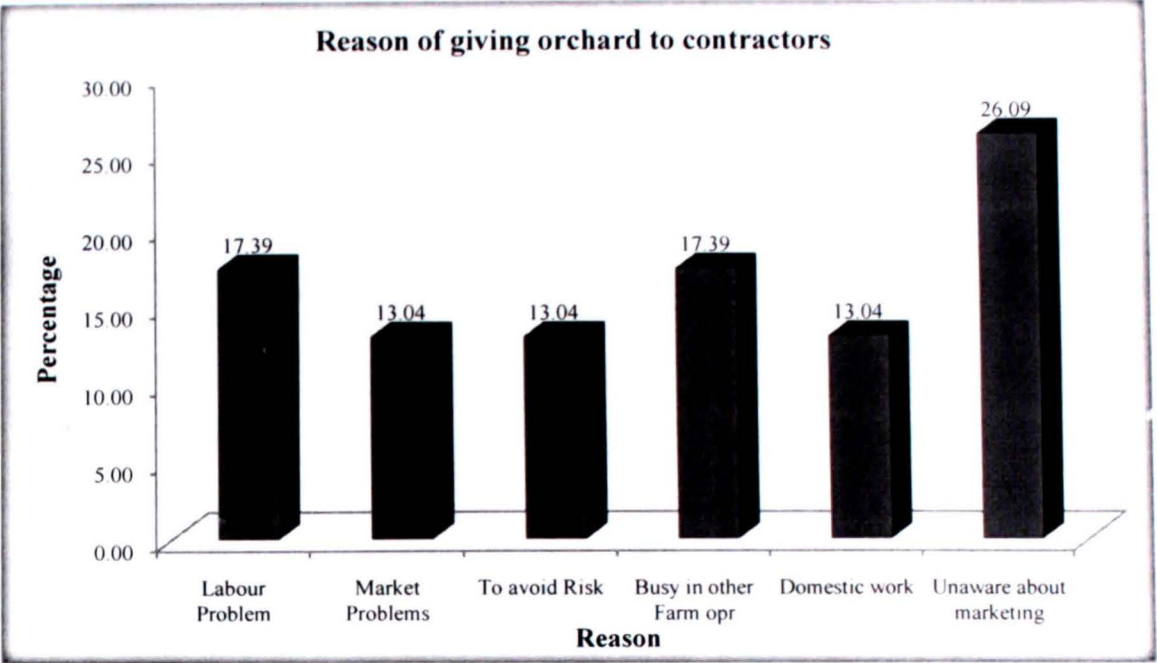


Figure 14

Form the above representation it is clear that most of the respondents implying pre or post-harvest contracts were unaware about marketing and this may be as they had less knowledge regarding the market. Less availability of labour was another reason besides avoiding market risks.

Table 4.15 Marketing Channel adopted by the Respondents

Marketing channel	Respondents	Percentage
Marketing Agency	6	10
Local Buyer	8	13.3
Commission Agent	24	40
Consumer	5	8.33
Wholesaler	7	11.67
Big Retail Chain Company	10	16.7
Total	60	100

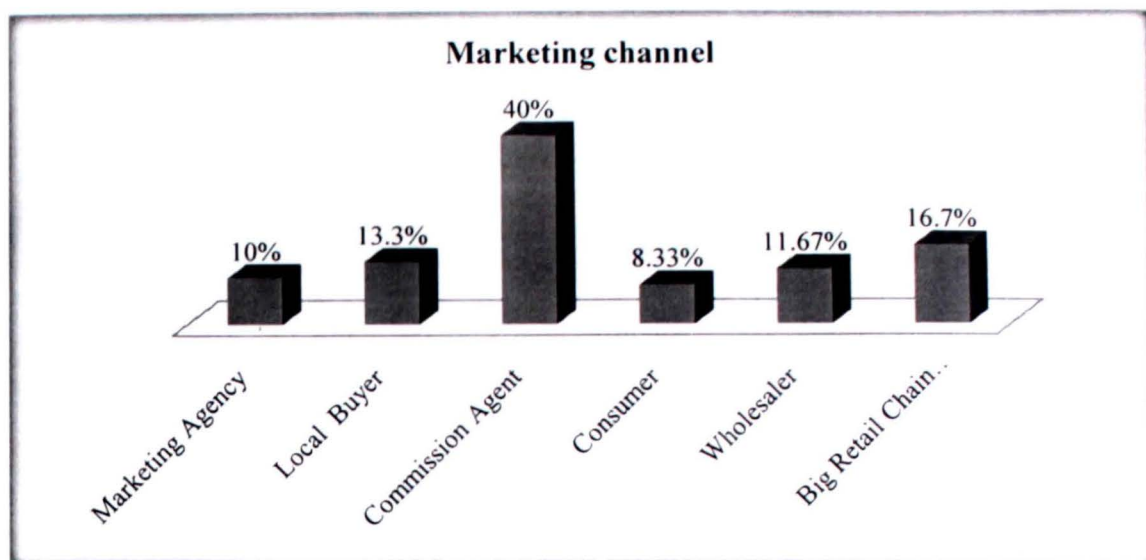


Figure 15

It is inferred from the above figure that most of respondents relied on commission agents in distant markets due to non-availability of a market nearby. Consumer as a marketing channel was low because of lesser population. Entry of big retail chains affected the marketing agencies and wholesalers involving local people in this region. These companies quoted a higher price and provided better facilities to farmers in terms of quality check and storage.

Total 4.16 Storage Facility Problems

Storage Facility		
Problem	Respondents	Percentage
No storage facility	20	33.3
Inadequate storage facility	22	36.7
No problem	18	30.0
Total	60	100.0

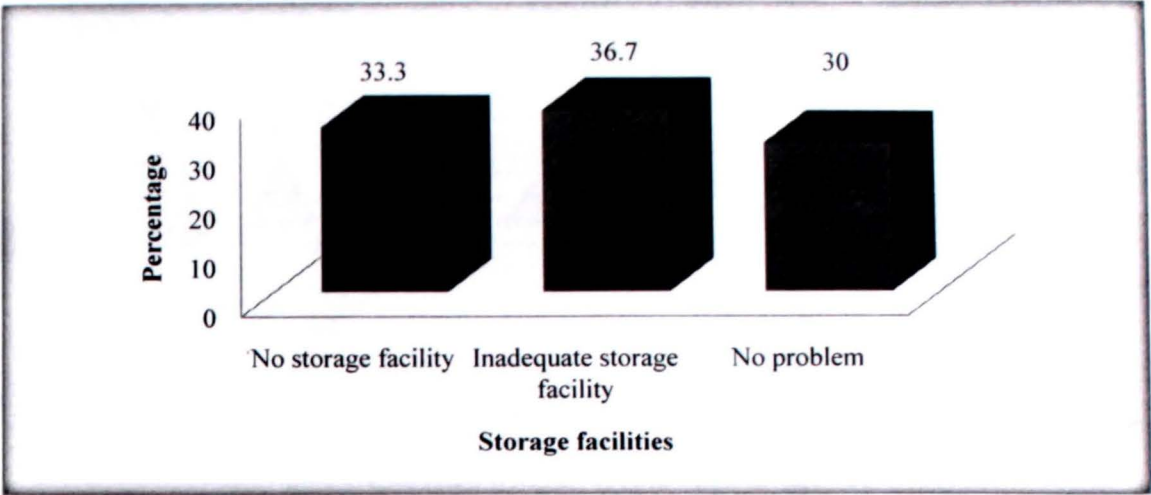


Figure 16

It can be stated from above figure and table that most of the respondents faced inadequate storage facility problem .The orchards were away from the roads and packed boxes of apple were transported to the roads where farmers did not have proper storage facility.

Table 4.17 Transportation Problem faced by the Respondents

Transportation		
Problems	Respondents	Percentage
Lack of vehicles	9	15
Vehicles not available in time	10	16.67
Villages are not linked with metal road	5	8.33
High transportation charges	21	35.00
Lack of all weathers roads	9	15.00
No problem	6	10.00
Total	60	100.00

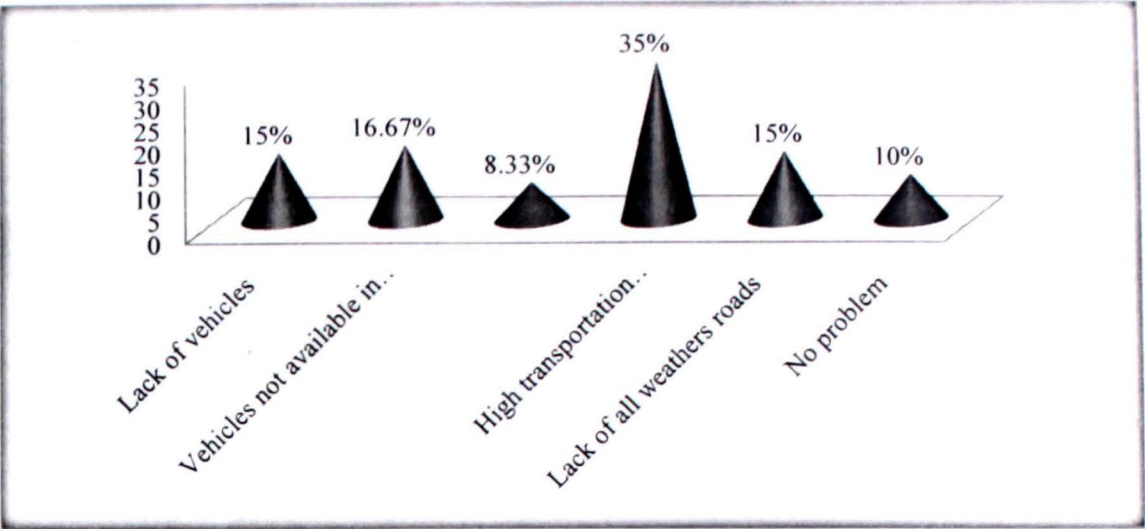


Figure 17

It can be inferred from the above table and figure that high transportation charge problem was highly faced by the respondents. Vehicles were not available at proper time. Generally at the time of apple season truck unions increase their rents and due to lack of carriage vehicles monopoly in rent was common. There was few number of respondents' who have no transportation problem i.e. 6 per cent.

Table 4.18 Market Intelligence Problems

Market intelligence		
Problems	Respondents	Percentage
Late information	10	16.67
Information available for local market only	11	18.33
Inadequate information	20	33.33
Misleading information	11	18.33
No problem	8	13.34
Total	60	100.0

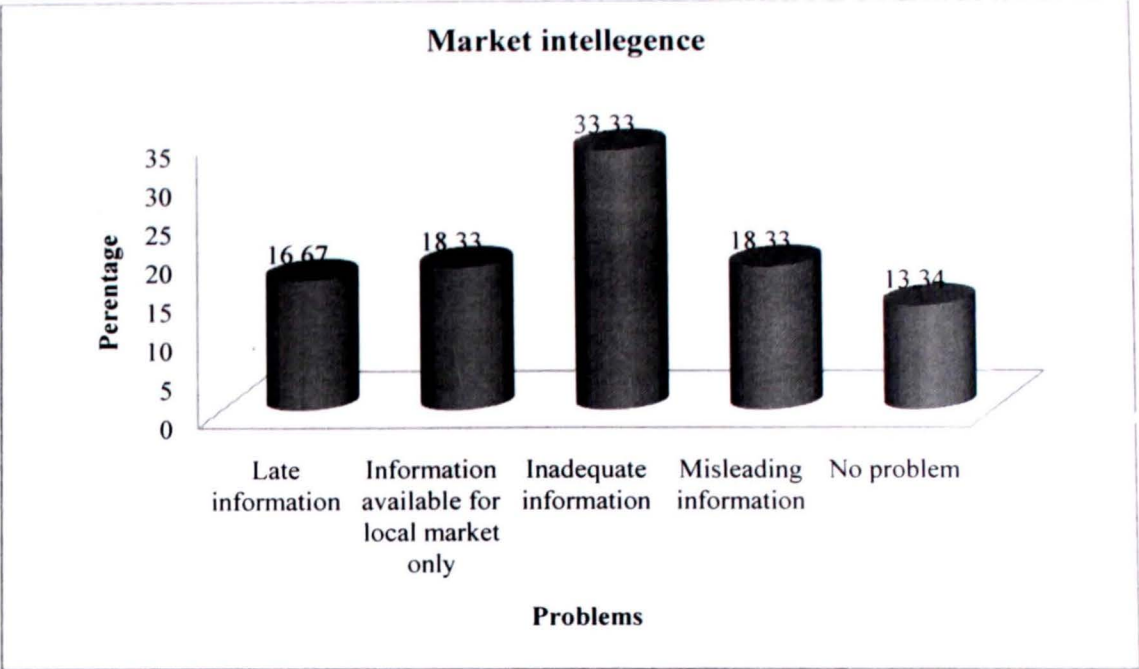


Figure 18

It is revealed from the above table and figure that inadequate market information problem was faced by respondents. Most of the farmers were unaware of present status of the market; In case of distant markets trader quote prices depend on their own interest.

Table 4.19 Malpractices in Market

Malpractices in market		
Problems	Respondents	Percentage
Deduct more charges	3	5
Part payment	10	16.7
Multiplicity of charges	13	21.7
Deduct under charges	13	21.7
Do not take the consent of farmers while selling	17	28.3
Quote lower price than actual price	1	1.7
No problem	3	5.0
Total	60	100.0

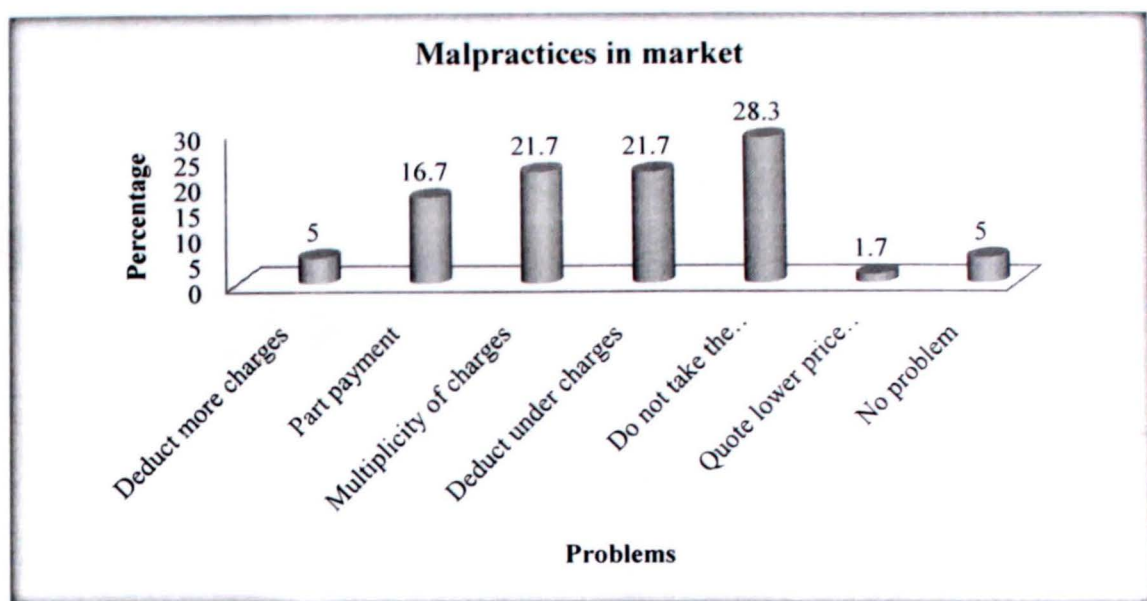


Figure 19

It can be stated from the above table and figure that 28.3 per cent respondents think, whole seller in the market did not take the consent of orchards while deciding the price of apple boxes. Moreover there were 21.7 per cent respondents who facing the problem of multiple charges while marketing of apple. From the study it was also observed that high charges were charged from farmers to enter the market. All Whole sellers quote their own decided prices in the market.

Table 4.20 Support/Procurement/Policy announced by Federation

Support/procurement price/policy announced by federation		
Problems	Respondents	Percentage
Price not announced at time	9	15.00
Price are not paid in time	16	26.67
Prices are low	28	46.67
Do not give announced prices	7	11.67
Total	60	100.00

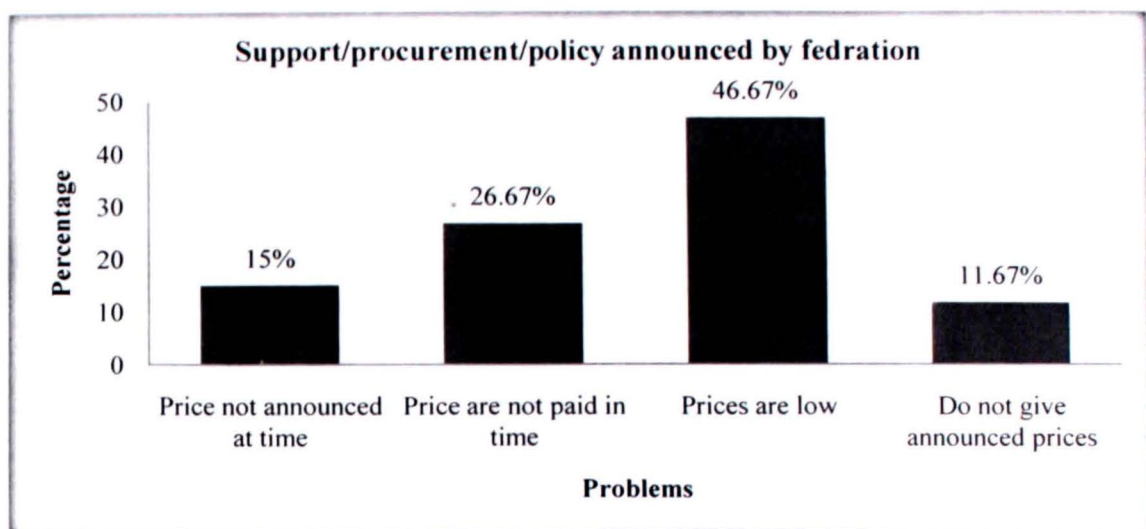


Figure 20

It can be stated from the above figure and table that there were 46.67 per cent respondents who face lower prices of their produce followed by 26.67 per cent respondents who did not receive the price of products in time. From the research it was observed that respondents faced maximum problem of lower prices whereas least faced problem was prices announced that are paid to respondents. In maximum markets these problems were faced by producer as trader increase their margin by quoting fewer prices to the producer.

RESULTS AND FIGURES IN REGARD OF TRADERS

Table 4.21 Traders mainly Dealing in which Line?

Traders dealing		
Type	No of respondents	Percentage
Fruits	4	40
Vegetables	0	0
Fruits and Vegetables	6	60
Others	0	0
Total	10	100

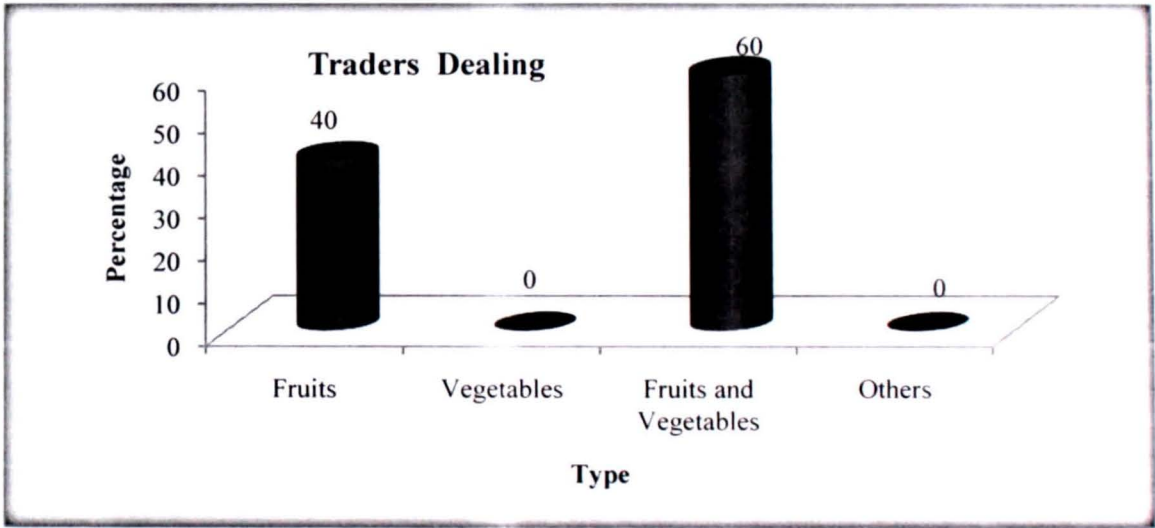


Figure 21

It can be interpreted from the above figure and table that most of the traders were trading in fruits and vegetables. Negligible traders were dealing in vegetables and this type of trading was opted by them because fruits had higher margin and less risky in further selling.

Table 4.22 Traders Experience in this Trade?

Experience in this occupation		
Year	No of respondents	Percentage
<5	2	20
5 to 10	5	50
>10	3	30
Total	10	100

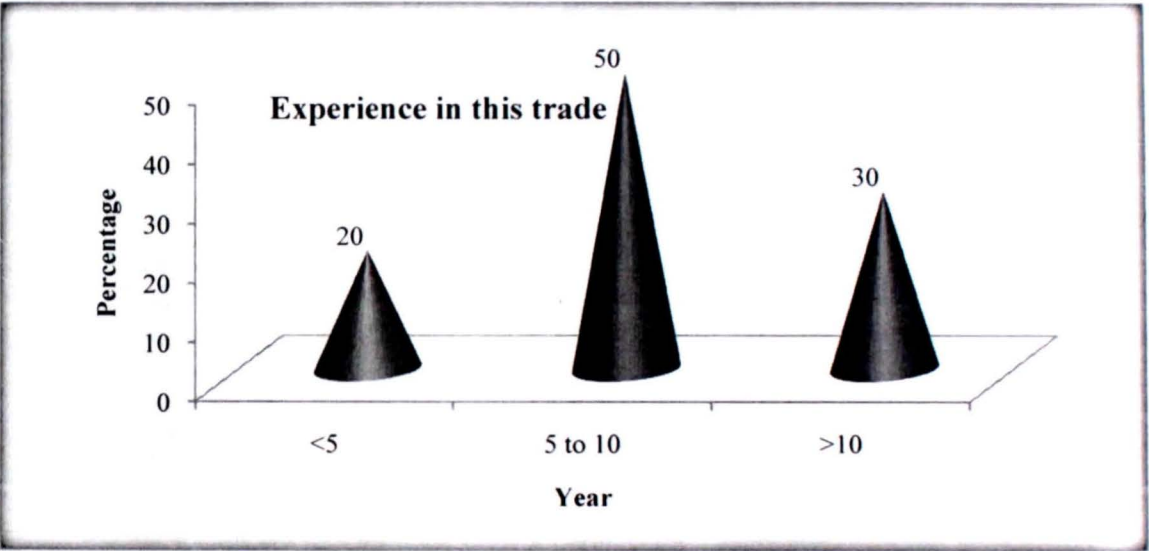


Figure 22

It is revealed from the above table that 50 per cent of traders have 5-10 years' experience in this occupation as they had good knowledge of the market and also had good relations with producer and with other market functionaries.

Table 4.23 Average Price paid per Box by Traders to the Producer?

Price paid per ox by the Traders	
Variety	Price paid per box (Rupees)
Royal Delicious	1500
Red Delicious	1100
Rich-e-Red	1000
Golden Delicious	1300
Red Gold	800
Spur Type	2000

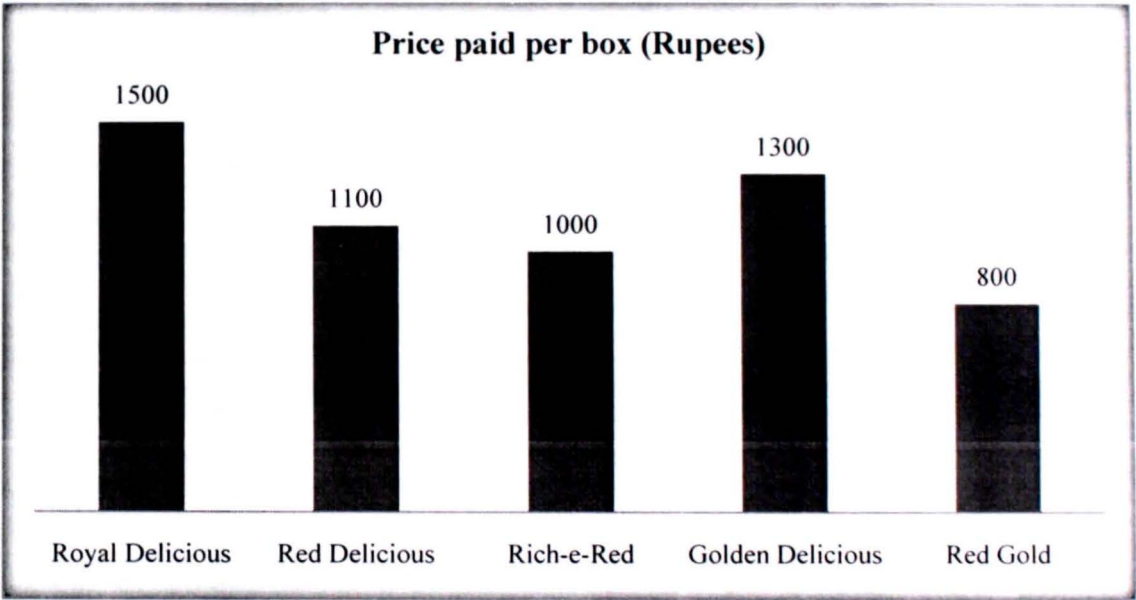


Figure 23

The above table and figure show that highest price was paid to Spur Type i.e. average Rs 2000 per box, but due to lake of such varieties in Kalpa Block Royal Delicious is the most preferred variety in the study area. The average price paid per box is Rs 1500 for Royal Delicious followed by Golden Delicious i.e. 1300 per box. Other varieties like Red Delicious, Rich-e-Red and Red Gold have less market value as compare to other top varieties.

Table 4.24 Source of Purchase of Apple by the Traders

Source of purchase of apple		
Source	No of Respondents	Percentage
From producers	5	50
Local contractor	3	30
Small traders	2	20
Sale by producer at their own shop	0	0
Total	10	100

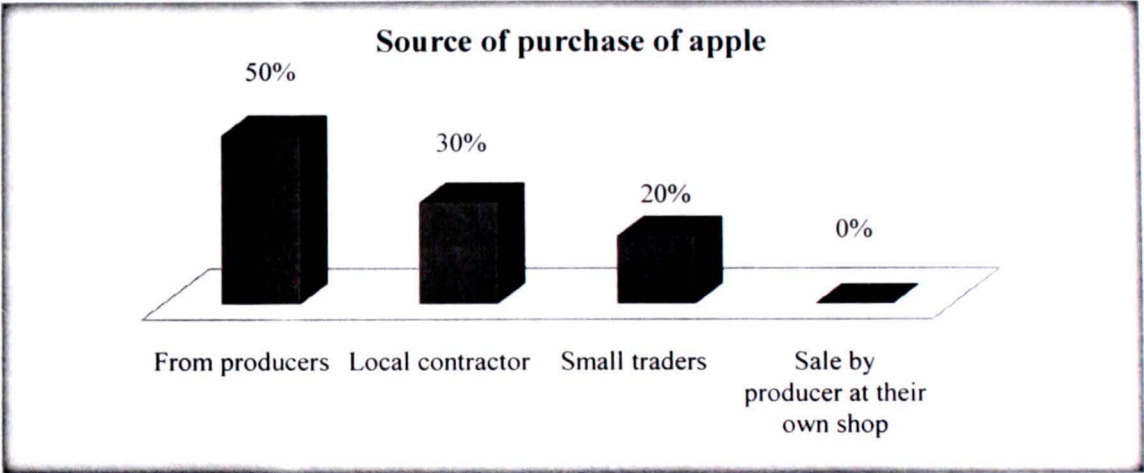


Figure 24

It is clear from the above table and figure that traders preferred to purchase most of apple directly from the producers as from this source they can increase their margin by compensating with farmers. In some areas small traders and local contractors purchased apple from farmers and then supplied it to big traders.

Table 4.25 Traders Sources where they Sell their Product

Where Trader Sell their Purchase		
Type	No of Respondents	Percentage
To retailer	5	50
Wholesaler in Distant Market	3	30
Export agency	0	0
Private agency	2	20
Big retail chains	0	0
Total	10	100



Figure 25

It can reveal from the figure that most the traders either sold their produce to the retailers or to the wholesalers in distant market or to the private agency in distant market. Moreover it can be stated that big retail chains did not purchase apple from the traders. They generally purchased it from the farmers as their quality standards were high and the quoted different price depend on the lot Moreover traders had less contact with export agencies.

Table 4.26 Effect of Trader Business by Entry of Big Retail Chain

Effect on traders business by entry of big retail chains		
Type of Effect	No of Respondents	Percentage
Volume of apple coming is less	4	40
Quality produce is sold to retail chains	3	30
Entry has forced you to offer higher prices and cut your margins	1	10
No effect	2	20
Total	10	100

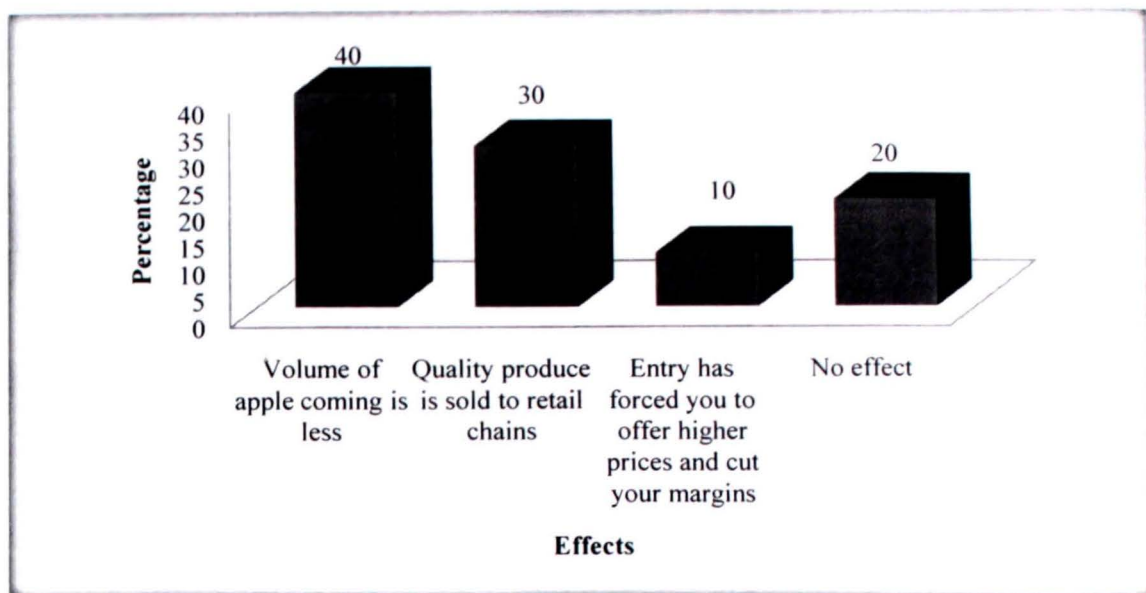


Figure 26

It is inferred from table 4.26 that traders business were affected by the entry of the big retail chains in the market as retail chains selected the best orchard and good quality product and purchase them from the farmers directly because of this reason volume of apple was coming less to the traders and quality product was sold to the chains. Moreover the chains quote paid high price to farmers which affected the price paid by the traders. Small traders remain unaffected by chains as their purchasing level was less.

Table 4.27 Do Traders also Deal with Big Retail Chains

Do traders also deal with big retail chains		
Dealing type	No of Respondents	Percentage
Volume of sales with them is higher	0	0
Financial deals are completed fast	0	0
Margins are higher	0	0
Quality standard are higher	0	0
No deal	10	10
Total	10	100

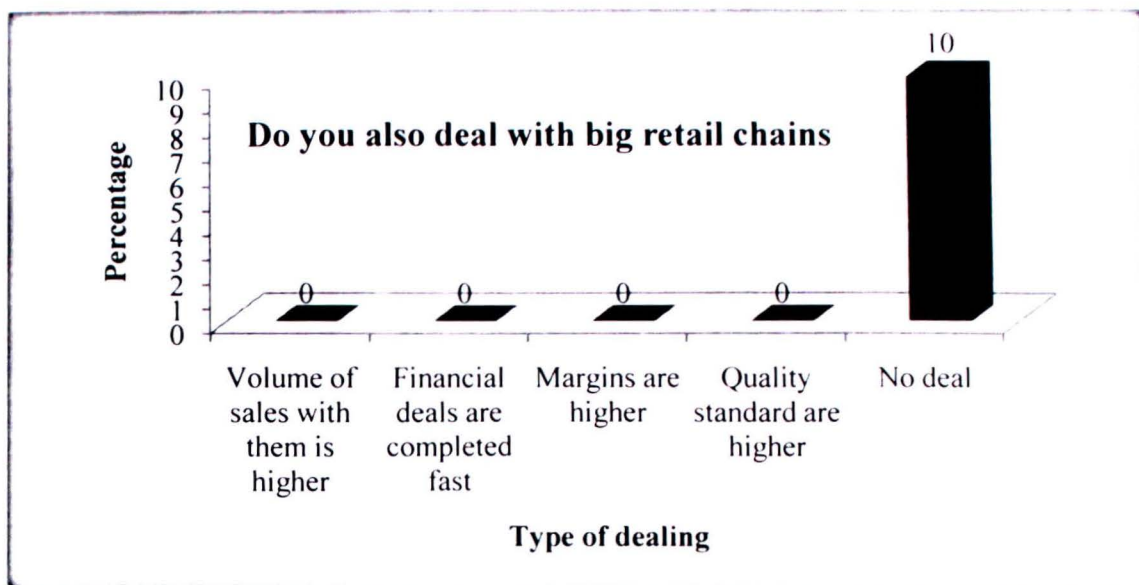


Figure 27

It is revealed from the table 4.27 that there was lack of trader deal with the big retail chains as big retail chains do not interact with the traders and directly bought the produce from the farmers. They check the whole orchard whether apple was in accordance of their wanted size, shape, colour and quality.



SUMMARY AND CONCLUSION



Chapter-5

SUMMARY AND CONCLUSIONS

Apple production in Kalpa Block of the District is confronted with numerous production and marketing challenges due to its highly perishable nature, high-tech requirements for irrigation, harvesting, costly planting material/seed and various other inputs. Demographics of respondent reveals that few orchards have area above 15 bighas and the owner or decision maker of these orchards are in the age group of 40-50 or above 50 years these are generally those people who have either inherited or developed orchard in the family. The income generated from the fruits is very high (86.46%) whereas income from other sources is 13.54 per cent. The study reveals that land under fruit cultivation is maximum which is around 92 per cent of total land holding of the respondents.

Salient findings of the study are as below:

- Through research it is found that orchardists are following the new and improved technologies for increasing the productivity. The study revealed that Royal Delicious variety has contributed major proportion i.e. 83.69 per cent out of the total number of trees as the traders pay a price of around Rs 1120 for them.
- About 13.8 per cent of total cost is spent on labour and other cultivation practices like weeding and harvesting. Cost of input on pruning and basin making is maximum as these two practices require skilled labour and more labour days.
- The study also shows that 38.3 per cent respondents give orchard to pre or post-harvest contractors. 40 per cent of the respondents rely on the commission agents in distant market to sell their produce and 16.7 per cent respondents sell their produce to big retail chains.
- The study also states that traders prefer to purchase most of apple from the producer to increase the margin. Big retail chains buy the quality produce and

quantity of apple coming to traders is less. However, big retail chains don't interact or deal with the traders.

- The study indicated that High transportation charges and lack of vehicles is faced by 51.67 per cent respondents, Inadequate and misleading information about the market faced by 51.6 per cent respondents and In market the bidder does not take consent of the farmers while selling produce. The multiplicity of charges is faced by 50 per cent respondents are the major constraints faced by the respondents.

Suggestion

On the basis of present study the following recommendations can be made to be addressed and promote production and marketing of apple.

1. The growers should maintain the quality of the fruit and take care of packing material to compete in the market.
2. Demonstration of grading standards and packaging techniques should be promoted and communicated among the growers.
3. There is large scope for food processing industries due to higher quantity of culled fruits in apple.
4. In order to reduce the post-harvest losses, expansion of road network in the apple producing areas and improvement of the road conditions is necessary.
5. Pricing is the main motivating factor that affects the decision of farmers. Therefore pricing strategy should be communicated well before harvesting.
6. Apple marketing through internet needs to be introduced and popularized in major terminal markets of the country and among orchardists.
7. Companies should not only concentrate on big apple growers, but must also pay equal attention to small growers.
8. Companies in collaboration with the Department of Horticulture should organize different awareness camps and seminars regarding apple production and technological advances in the field of horticulture.



BIBLIOGRAPHY



BIBLIOGRAPHY

- Chidambaram K, Haridoss K and Nandarajan S.2005. Dynamics of Costs and Returns Structure in Agricultural Farms. *Agricultural Situation in India* **62**(3): 179-184.
- Indian Horticulture Database-2010.2010. National Horticulture Board, Ministry of Agriculture, Government of India.
- Kar A, Atteri R B and Pramod K.2004. Marketing Infrastructure in Himachal Pradesh and Integration of the Indian apple Markets. *Indian Journal of Agriculture Marketing, Conference Special* **18**(3): 243-252.
- Kothari C R. 2009. Research methodology: methods and techniques. pp-314-390. Second edition. *New Age International Publisher*, New Delhi.
- Kumar, Suresh, Anshuman K, Singh R and Vaidya C S.2007. Cost and Return from Apple Cultivation: A Study in Himachal Pradesh. *Agricultural Situation in India* **64**(7): 307-313.
- Malik Z M.2014. Economics of Apple Cultivation with special reference to South Kashmir. *Journal of Economics and sustainable Development* **5**(9): 125-129.
- Mehta P, Thakur R K and Chauhan S.2013.Production and Marketing of Apple Fruit Crop- a Study Premise to Shimla District of Himachal Pradesh, India. *International Journal of Bio-resource and Stress Management* **4**(4): 610-613.
- Minten, Bart, Thomas R, and Vandeplas A.2009. Linking Urban Consumers and Rural Farmers in India: A Comparison of Traditional and Modern food Supply Chains. *IFPRI Discussion Paper* 00883.
- Navadkar D S, Sale D L and Patil U D .2005. Marketing of Fruits Grown around Pune city. *Agricultural Situation in India* **62**(4): 259-265.
- Negi Y S, Prasher R S and Tiwari S C.1997. Marketing of Himachal apples: A Spatio-Temporal Analysis. *Agricultural Economic Research Review* **10**(1): 88-92.
- Ntakyio P R, Mugisha J and Elepu G.2013. Socio Economic Factors Affecting Apple Production in South Western Uganda. *African Crop Science Journal* **2**(4): 311-321.
- Pandey M, Baker G A and Pandey D T.2013. Supply chain re-engineering in the Fresh Produce Industry: A Case Study of Adani Agri-fresh. *International Food and Agribusiness Management Review* **16**(1):116.
- Panwar T S.2011. Apple production in Himachal Pradesh: An Impending Crisis. *Economic and Political weekly* **XLVI**(25): 10-12.
- Randev A K, Tewari S C and Sharma R K.1992. Rationale of Resource use in Apple Cultivation: A Case Study of Tribal Area in Himachal Pradesh. *Indian Journal of Agricultural Economics* **47**(4): 669-676.

- Rossi D A.2010. The Apple Market in India. Euro Brands 2010 Report.<http://www.eurobrandsindia.com/blog/tag/apple-demand-in-india/> (accessed January 26, 2012).
- Saraswat S P. 1997. Organization of Production and Marketing of Apple in Himachal Pradesh: A Case Study of Kirari Village. *Indian Journal of Agriculture Economics* **52** (3): 630-631.
- Singh R, Sikka B K and Swarup R.2004. Impact of Regulation on Market Functioning– A Study of Fruit Markets in Northern India. *Agro-Economic Research Centre*. Occasional Paper No. 13, H.P.U., Shimla.
- Singh V.2004. Agriculture - Horticultural Marketing. *Department of Public Relations*, Government of Himachal Pradesh.
- Varma V and Garga P.2012. Impact of Size of Land Holding, Quantity and Quality of Harvest on Profitability of Himachal Apple Orchards. *International Journal of Management Research and Review* **2**(7): 1206-1212.



ABSTRACT




Dr Y S Parmar University of Horticulture and Forestry
Nauni, Solan 173220
Department of Business Management

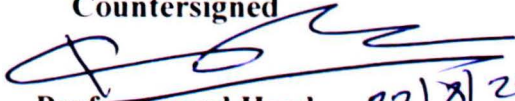
Title of Project : **Production and Marketing of Apple in Kalpa Block of District Kinnaur, H.P**
Name of the Student : **Anuj**
Admission Number : **H-2014-ABM-02**
Major Advisor : **Dr. Krishan Kumar**
Specialialization-I : **Agri- Marketing**
Specialialization-II : **Farm Business Management**
Degree Awarded : **MBA**
Year of Award of Degree : **2016**
No. of Pages in Report : **39+ix**
No. of words in Abstract : **181**

ABSTRACT

The study was conducted to identify different issues related to production and marketing of apple in Kinnaur District. For the concerned study five Villages of Kalpa Block were purposively selected. A sample of 60 respondents was selected by using random sampling. A well structured questionnaire was designed to collect data on various aspects of production and marketing of apple. The data analyzed with the help of SPSS software revealed that majority of the respondents were not able to achieve the actual value of the produce because of inadequate market information available for apple growers. The study also revealed that respondents' were also facing the problem of transportation and storage of produce. Demonstration of grading standards and packaging techniques should be promoted and communicated among the growers. Companies in collaboration with Department of Horticulture should organize different awareness camps and seminars regarding apple production and technological advances in the field of horticulture. Pricing is the main motivating factor that affects the decision of farmers. Therefore pricing strategy should be communicated well before harvesting.


Signature of Advisor १२/८/२०१६
Dr. Krishan Kumar


Signature of Student

Countersigned

Professor and Head १२/८/२०१६
Department of Business Management
Dr Y.S. Parmar University of Horticulture and Forestry,
Nauni-173230, Solan (H.P.)



APPENDICES



APPENDICES

QUESTIONNAIRE

Questionnaire for the farmers

Dear Sir /Madam

I am working on the project entitled “Production and Marketing of Apple in Kalpa Block region “as a part of MBA curriculum. Please read the following statement carefully and give your response. I assure you that information provided by you will be used for academic and research purpose only. I shall be highly thankful to you for your co-operation.

TITLE: Productivity and Marketing analysis of Apple in Kalpa Block of District Kinnaur.

Socio-economic structure of the household

Location

Village_____ Panchayat/block_____

Occupation

Main_____ Ancillary_____

Personal Information (Head of the family/Decision maker)

Name_____ Sex_____

1. Age:

20-30 ☐ 30-40 ☐ 40-50 ☐ above 50 ☐

2. Educational status of Respondents.

Illiterate	Primary	Matric	10+2	graduate	PG
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3. Gender distribution of the Respondent's.

Male _____ Female _____

4. Family type of respondent's.

Nuclear _____ Joint _____

5. Land holding pattern of the Orchard respondents (in Bighas).

<5 5-15 15-25 25-35 35 above

6. Land use pattern of the respondents (in Bighas).

- Land under fruit
- Vegetables cultivation land
- Ghasni/pasture

7. Income pattern of the respondents.

Income generated from agriculture	
Fruits	
Vegetables	
Income generated other than agriculture	
Jobs	
Others	

8. Income pattern of the respondents.

Income generated from agriculture	
Fruits	
Vegetables	
Income generated other than agriculture	
Jobs	
Others	

9. Number of apple Trees of respondents.

Plants	No of trees
Bearing	
Non-bearing	
Total	

10. Major varieties grown and number of plants with respect to that variety.

Varieties	No of plants
Royal delicious	
Red delicious	
Rich-e-Red	
Golden Delicious	
Red Gold	
Spur Type	
Others	
Total	

11. Annual production of boxes by the respondents.

Annual production of boxes	Range
<500	
500-1000	
1000-1500	
1500-2000	
above 2000	

12. Cost of Input on Orchard of the respondents.

Input	Cost
Pruning	
Manuring	
Basin	
Spray	
Labour	
Fertilizer	

13. Cost per box paid by respondents.

Type	Cost
Grading	
Packing	
Total	

14. Pre-Post harvesting contract status.

Harvesting contractor	Response
Yes	
No	

15. Reason of giving orchard to Pre-harvest contractor.

Problem	Response
Labour Problem	
Market Problems	
To avoid Risk	
Busy in other Farm opr	
Domestic work	
Unaware about marketing	

16. Marketing channel adopted by the respondents.

marketing channel	Response
Marketing agency	
Local buyer	
Commission agent	
Consumer	
Wholesaler	
Big retail chain company	

17. Storage facility problem.

Problem	Response
No storage facility	
Inadequate storage facility	
No problem	

18. Transportation problem faced by the respondents.

Problems	Response
Lack of vehicles	
Vehicles not available in time	
Villages are not linked with metal road	
High transportation charges	
Lack of all weathers roads	
No problem	

19. Market intelligence problem.

Problems	Response
Late information	
Information available for local market only	
Inadequate information	
Misleading information	
No problem	

20. Malpractices in market.

Problems	Response
Deduct more charges	
Part payment	
Multiplicity of charges	
Deduct under charges	
Do not take the consent of farmers while selling	
Quote lower price than actual price	
No problem	

21. Support/procurement/policy announced by federation/cooperative problem.

Problems	Response
Price not announced at time	
Price are not paid in time	
Prices are low	
Do not give announced prices	

QUESTIONNAIRE FOR TRADERS

1. Name of the shop and owner _____
2. Mainly dealing in :

Type	Response
Fruits	
Vegetables	
Fruits and Vegetables	
Others	

3. Number of year in business?

Year	Response
<5	
5 to 10	
>10	
Total	

4. Average price paid per box by traders to the producer?

Price Paid per box by the Traders	
Variety	Price Paid per box
Royal delicious	
Red delicious	
Rich-e-Red	
Golden Delicious	
Red Gold	
Spur Type	

5. Source of purchase of apple by the traders?

Source	Response
From Producers	
Local Contractor	
Small Traders	
Sale by Producer at their own shop	

6. Traders source where they sell their product?

Type	Response
To retailer	
Wholesaler in Distant Market	
Export agency	
Private agency	
Big retail chains	

7. Effect of traders business by entry of big retail chain?

Type of Effect	Response
Volume of apple coming is less	
Quality produce is sold to retail chains	
Entry has forced you to offer higher prices and cut your margins	
No effect	

8. Do traders also deal with big retail chains?

Dealing type	Response
Volume of sales with them is higher	
Financial deals are completed fast	
Margins are higher	
Quality standard are higher	
No deal	

CURRICULUM VITAE

ANUJ
(MBA- AGRI-MARKETING
&
FARM BUSINESS MANAGEMENT)
E- Mail: negianuj543@gmail.com
Mobile: 08894581819

EDUCATION

- M.B.A (Agri- Marketing and Farm Business Management) from Dr.Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan in 2016.
- Bachelor in Science (Hons) Horticulture from Dr.Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan in 2014.

KNOWLEDGE PURVIEW

- Working knowledge of computer.
- Knowledge of MS Word, MS Excel and MS PowerPoint.

ACHIVEMENT & EXTRACURRICULAR ACTIVITIES

- Participated in All India Agriculture Sports Meets at Jabalpur.
- Participated in All India Agri Uni Fest at Karnal.

HOBBIES AND INTERESTS

- Playing sports
- Singing

PERSONAL DETAILS

Father's Name	:	Sh. Krishan Kumar Negi
Date of Birth	:	February 23, 1991
Gender	:	Male
Nationality	:	Indian
Languages known	:	English & Hindi
Address	:	Vill- Kalpa, PO-Kalpa, Teh- Kalpa, Distt. Kinnaur (H.P.)

Place: Solan
Date:

(Anuj)

