## A STUDY ABOUT AREA AND PRODUCTION OF APPLE IN JAMMU AND KASHMIR <sup>1</sup> DR RAJENDER SINGH <sup>2</sup> DR SHAILENDRA MISHRA <sup>3</sup>SAJAD ALI SHIEKH <sup>1</sup>HOD SCHOOL OF COMMERCE DAVV INDORE M.P <sup>2</sup> COURSE COODINATOR DAVV INDORE M.P <sup>3</sup> RESEARCH SCHOOLAR DAVV INDORE M.P Hurtedguy9@gmail.com

### **ABSTRACT:**

Apples are most widely planted and are commercially the most important fruit crop. The cultivation of apple crop in Jammu and Kashmir shows particular interest for a number of reasons. In terms of both area and production, apple is very beneficial fruit crop. Horticultural sector contributes around 5000 crores to the annual income of the state of Jammu and Kashmir. Among the horticultural crops in the state apple occupies the predominant position constituting around 45 per cent of the total area under fruit crops.. Apple is an extremely important source of nutritive diet, this provides a major source of income and employment in Jammu and Kashmir.

### Key words: Apple, Income, Employment, Horticulture, Jammu & Kashmir.

### **INTRODUCTION**

The Apple (*Pyrus domestica*) is one of principal fruits, grown in temperate region of the world. It has beautiful and colourful appearance, crispy flesh, pleasant flavor and sweet taste that attract the consumers and fetch good price. Jammu & Kashmir is home to some world famous varieties of fruits, dry fruits, honey and saffron. Horticulture is one of the most vibrant sectors for the state economy. Horticulture is the backbone of Jammu Kashmir's economy with a yearly turnover of Rs.1200 Crores. According to the state's horticulture department, around 1.5 million tons of apples are produced in Kashmir annually. Jammu and Kashmir is the major producer of apple and in India, 77 percent of apple production in India belongs to Jammu and Kashmir and percentage share of state in India's total production is showing an increasing trend and the state has been declared as the " Agri. Export zone for Apples. Apple is one of the most widely cultivated tree fruits .Apple cultivation is highly profitable economic activity in the state. Apple

production plays an important role in improving the standard of living, per capita income and employment generation .More than half percentage of the population is engaged in the cultivation of apple directly or indirectly in the state. Kashmir apple has lived up to its reputation for being one of the choicest –fruits, Kashmir has long been considered the home of apples. Hundreds and ten varieties of apple are found in Jammu and Kashmir .The chief varieties of apple are found are found in Jammu and Kashmir. The chief varieties being Delicious, American, Ambri, Moharaji, Kesri, Hazaratbali. However Ambri or Amri is the most popular and ahs a large round red and white sweet fruit, ripening in October and keeping its conditions for a long time. This variety attracts maximum consumers' attraction due to its sweetness and handsome appearance. The production of apple in the state is confined to six districts of the valley viz, Anantnag, Baramullah, Budgam, Pulwama, Kupwara and Srinagar. However in Jammu division apple cultivation is found in a limited scale in Doda district only. In two districts of the valley namely Baramullah and Kupwara, the apple cultivation is found on a large scale as these have suitable land for temperate fruits. Apple being state's main fruit has predominant position both in area under plantation and production. Apart from its profitability criteria the corporation will bring the horticulture industry of Jammu and Kashmir to an appreciable standard by the introduction of latest technological devices. This would provide export outlets for the quality fruits of Kashmir besides making them available to the local consumers in rest of the country. This step would revolutionalize the economic condition of the thousands of growers who in effected form the backbone of industry.

### **REVIEW OF LITERATURE**

**Dr. Musadiq Amin Shah, 1986 Marketing problems of apple industry in Kashmir valley.** Jammu and Kashmir is the largest apple producing state of India, but the state does not earn that from the apple industry what it should have. The main problem of apple industry in Kashmir is the lack of marketing information and techniques. Without a proper marketing information system the market opportunity cannot be fully exploited. Growers should be provided proper market information to get dispose off their produce in those markets where it can yield maximum prices.

**Dr. Zeenat Dar, 1981, Role of Agriculture in the development of J and K economy**. Agriculture including horticulture is the main ingredient of Jammu and Kashmir economy. Geographically J&K is an agro climatic state but they have not utilized all its resources for the development of agriculture. Major portion of the population is engaged with agriculture activities. With the use of scientific technology in the field of agriculture the income from agriculture has increased manifolds.

**Fida Iqbal (2004),** a researcher in the same field, discusses the importance of the horticulture and its opportunities and pointing out that the fruits of Kashmir is losing shine. The author believes that if proper measures are taken the sector is loaded with huge potential and hence can be a great source of revenue and employment.

**Rauf et al. (2011)**studied on 'Economics of production and marketing of Apple in Himachal Pradesh and Jammu and Kashmir \_A comparative study'' present study was conducted in kullu district of Himachal Pradesh and Baramullah district of Jammu and Kashmir due to higher concentration of area under apple cultivation in these areas . MVP- MFC ratio revealed that, on average situation human labour and plant protection chemicals were being used efficiently by orchardists the levels both the states. However, there exists a scope for increasing the levels of manures and fertilizers, expenditure on fixed assets and irrigation since currently they were used sub-optimally on the sampled orchards of Himachal Pradesh. In Jammu and Kashmir sample orchards, however, manures and fertilizers, fixed and irrigation revealed significant inefficiencies. Marketing aspect indicated that channel- A (producer- Pre- harvest contractor – commission agent – Retailers – consumers) was patronized by about 11% of the sample orchardists in Himachal Pradesh and more than 17% growers in Jammu and Kashmir. Channel – c (producer- commission agent- wholesaler- retailers – consumers) is largest channel through which 56% of produce in H.P and 64% in J&k are routed. This channel was found most popular among apple producers both the study.

**Sharma et al, (2010)** studied on production and marketing apple in Budgam district of Jammu and Kashmir. The present study was undertaken to examine the production of apple and to assess share of producer in consumer's price. A maximum producer share was received while apple sale was done through retailers directly by the quantum moved by the channel was only 10% of total produce. Producers share was significantly reduced when the produce sold through those channels in which number of middleman involved was large. The high marketing cost was

associated with the poor market infrastructure in terms of storage, transport, grading and processing facilities. It was observed that significant price spreads exist which indicate the potential to enhance apple growers income. A majority of farmers were reported about the lack of market information in time as well as about the numbers of processing unit to earn the global economy through red revolution.

### **OBJECTIVES OF THE STUDY**

- > To study the production and productivity of apple in Jammu and Kashmir.
- > To study the marketing of apple production of Jammu and Kashmir.

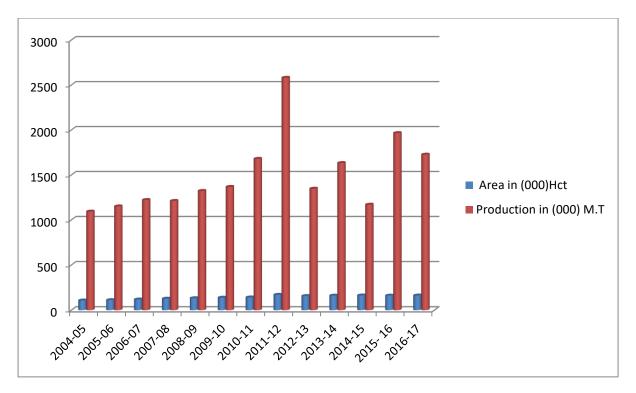
### METHODOLOGY

For achieving the above objectives the study used secondary data analyses. The data were obtained from various published/unpublished records of the directorate horticulture/agriculture of J&K state, National horticulture board and from government of Jammu &Kashmir.

# TABLE NO 1: PRODUCTION AND PRODUCTIVITY OF APPLE CROP IN JAMMUAND KASHMIR.

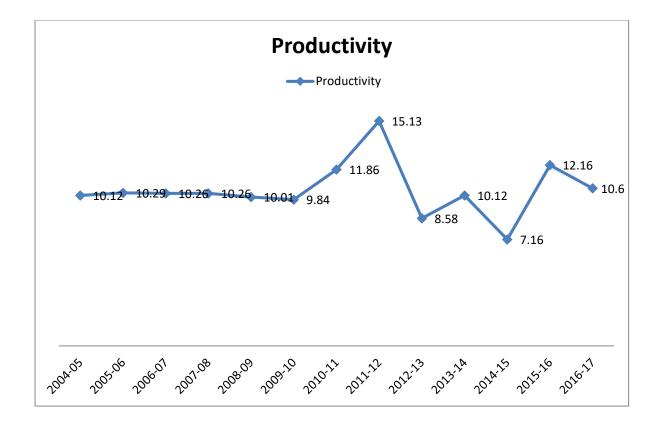
YEAR	AREA IN (000)	PRODUCTION IN	PRODUCTIVITY
	HACTARES	(000) <b>METRIC</b>	MT/ HCT.
		TONS.	
2004-05	107.93	1093.33	10.12
2005-06	111.88	1151.34	10.29
2006-07	119.04	1222.18	10.26
2007-08	127.80	1211.85	10.26
2008-09	133.10	1322.81	10.01
2009-10	139.04	1367.80	9.84
2010-11	141.72	1680	11.86
2011-12	170.60	2581.18	15.13
2012-13	157.28	1348	8.58
2013-14	161.37	1633.35	10.12
2014-15	163.43	1170.30	7.16
2015-16	161.77	1966.41	12.16
2016-17	162.97	1726.83	10.60

Source: Directorate of horticulture Jammu and Kashmir



Graphical representation of Area and Production of Apple in Jammu and Kashmir.

There was continuous progress of area under apple cultivation in Jammu and Kashmir State from 107.93 (000) hectares in 2004-05 to 163.43 (000) hectares in 2014 to 15. The main reason for the increasing trend was mainly comparative advantage of this crop over the other commercial crops grown in high altitude region in the state. During the year 2004-05 the production was worth 1093.33(000) metric tons. The production marked highest growth during 2011-12 worth 2581.18(000) metric tons. But the production decreased during 2012-13 because of untimely rainfalls in the state. The overall production of apple for the year 2013-14 and 2014-15 was worth 1633.35(000) MTs 1170(000) MTs , 2015-16 and 2016-17 was worth 1966.41(000) MTs, 1726.83(000) MTs respectively as there has been some loss to the Horticulture crop due to low temperature and due to unexpected rains followed by flood in some areas of the State.



Graphical representation of Apple productivity in Jammu and Kashmir.

The state has the largest potential for production of quality temperate horticulture crops. It has created niche production of apple, pear, cherry and dry fruits. Among temperature fruits apple ranks first position in terms of production and productivity. The annual production of apple in the state is about 9.09 lack ton at an average yield of 10.09 ton per hectare. However the production & productivity of apple crop has been fluctuating during 2004-05 to 2009-10, due to drought or some other climatic conditions. In spite of this apple production and productivity increased during the year 2010-11 and 2011-12 and marked highest as 11.86 and 15.13 Metric ton per hectare respectively. But it slightly decreases thereafter due to climatic conditions and untimely rains and followed by flood in some areas of the state.

Marking a good sign for its horticulture sector, the area under apple crop in J & k has increased.

"It contributes more than Rs 4000 crore towards the state economy and is considered to be backbone of our economy. Increase in production and area under apple crop is an encouraging sign.

### MARKETING OF APPLE PRODUCTION IN JAMMU AND KASHMIR

Marketing is a comprehensive function, it is concerned with every aspect of produce from its inception, design, pricing, distribution, setting and promotion until it finally reaches the hands of the consumer. In another way, Marketing connotes a series of activities involved in moving the goods from the point of production to the point of consumption. It includes all activities involved in the creation of time, place, form and possession utility. Phillip Koutlar has defined marketing as a human activity directed at satisfying the needs and wants through exchange process. American Marketing Association defined marketing as the performance of business activities that directs the flow of goods and services from producers to users. Marketing activity in fact begins with espousal of appropriate technology at the farm level and ends at the final consumption level. Apple dominates the horticulture produce of Kashmir in both area as well as production, but is of perishable nature. The perishable nature of commodities attributes to seasonal gluts and off-seasonal scarcity. More or less this is the case with all agriculture produce. Therefore, due to the reason, marketing of the Kashmir apple is a complex process. It needs a ready market which is not possible in small towns around the area it is produced. But this fruit finds better markets in big cities. The consumers at these places have high income elasticity in terms of demand for apples. Delhi is the biggest and most suitable market for apple where loaded trucks remain unattended for several days due to very heavy arrivals during the peak marketing months.

### MARKETING THROUGH JAMMU AND KASHMIR HORTICULTURE PRODUCE MARKETING AND PROCESSING COOPERATION (HPMC)

A joint venture of Government of India and Government of Jammu and Kashmir to implement world Bank Assisted project emerged a new channel for marketing the horticultural produce of the valley under this channel producers hand-over their packed fruits to the corporation which acts as a forwarding agent. The corporation also acts as a commission agent if the producers desire so. This, in other words, means that the corporation takes the responsibility of transporting the fruit boxes from road-head to respective markets. The fruit lots are either handed over to the wholesaler/commission agent named by the producer or sold by the corporation itself. If the producers like, the corporations keep the fruit in cold storages. Jammu and Kashmir HPMC is a world bank sponsored Public Project executed for the objectives as:

To extend marketing period and marketing in new cities and diversification of trade.

To improve the marketing efficiency and reduce marketing costs in all respects including transport, intermediary margins etc.

To improve the fruit quality and its public usage by introducing quality control, higher grading standards etc.

To establish competent and efficient marketing organization engaged in trade of fruit and fruit products by creating an alternative to the existing unsatisfactory wholesale channel of commission agents with their malpractices.

This corporation has its centers at Sopore, Handwara, Anantnag, Sumbal, Chandura, Baramullah, Pattan and Pulwama. Some packing and grading houses have also been installed in different districts of Kahsmir valley. The JKHPMC has a sale centre at Delhi. Although it is expected that it will prove highly beneficial to the fruit growers of the state in marketing their produce as this corporation on the principal minimum marketing costs. But at present no fruit is marketed through this channel.

### CONCLUSION

Apple is one of the most widely cultivated tree fruits. Apple cultivation is highly profitable economic activity in the state, which is famous for its quality apple. It is farm based labor intensive and commercially attractive economic activity .The income per acre is much higher than any other horticulture crops, if it is done in systematic way. Apple production plays an important role in improving the standard of living, per capita income and employment generation .More than half percentage of the population is engaged in the cultivation of apple directly or indirectly in the state. Apple being state's main fruit has predominant position both in area under

plantation and production. Apart from its profitability criteria the corporation will bring the horticulture industry of Jammu and Kashmir to an appreciable standard by the introduction of latest technological devices. This would provide export outlets for the quality fruits of Kashmir besides making them available to the local consumers in rest of the country. This step would revolutionalize the economic condition of the thousands of growers who in effected form the backbone of industry. During the year 2004-05 the production was worth 1093.33(000) metric tons. The production marked highest growth during 2011-12 worth 2581.18(000) metric tons. But the production decreased during 2012-13 because of untimely rainfalls in the state. The overall production of apple for the year 2013-14 and 2014-15 was worth 1633.35(000) MTs 1170(000) MTs respectively. In spite of this apple production and productivity increased during the year 2010-11 and 2011-12 and marked highest as 11.86 and 15.13 Metric ton per hectare respectively. But it slightly decreases thereafter due to climatic conditions and untimely rains and followed by flood in some areas of the state. The production increases in 2015-16 to some extent as compared to previous year. But it decreases in 2016-17 due to unrest in parts of Kashmir valley.

#### SUGGESTIONS

The Government should continue to procure C-grade apples from the growers so that the best quality apple is exported into the markets

The govt. should offer a package of incentives to the growers for improving the quality and volume of production in the State.

There is need to shift to commercial farming to increase fruit production.

There is a need to properly implement the market intervention scheme to help facilitate growers to sell their produce with improved returns.

The department should identify areas which have potential for commercial farming which will provide huge economic gains in national and overseas markets.

Emphasizing upon the need for promoting high-density orcharding with facility of microirrigation to arrest the fall in apple production.

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