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Apple marketing in India: A case of Kashmiri Farmers

R. A. Lone . A. A. Turrey

Centre for Studies in Economics and Planning, Central University of Gujarat

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ABSTRACT

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Key words: Apple Marketing, Kashmir, Commission Agents, Marketing Channels, Intermediaries. The paper deals with the marketing of Kashmiri apple, the process and intermediaries through which apple is traded from grower to the ultimate consumer all are considered in this paper. Kashmir is the major producer of apple almost producing more than two third of total apple production in India. Marketing of the fruit have lot of impact on the net earnings of farmers (growers). Efficient marketing system provides lot of imputes to the growers and improves their standard. There are about six channels of apple marketing prevalent in the state and lot of problems exists in whole marketing process. The paper tries to find out various channels and marketing agents involved in apple trading from grower and terminal market to ultimate consumer and locate the existing problems. The paper is based on both primary and secondary data, well designed questionnaire was framed to execute the study and further tabulation based on simple averages etc. were put in use in the paper.

1. Introduction

Apple is one among the prominent temperate fruits produced in the states like Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Arunachal Pradesh. Jammu and Kashmir accounts for more than 80 percent of total Apple production of the country in the year 2011-12 (National Horticulture Board, 2012). The State is famous for various horticultural products especially Apple, Plum, Cherry, Pear, Walnut, Almond, Saffron etc. But apple Accounts for lions share both in terms of area and production in the State. Apple is basically a commercial crop and almost all the growers produce the crop for market and any inefficiency prevailing in the marketing channel will reduce the margin and net revenue of farmers, hence their standard of living and motivation towards cultivation will diminish down.

Marketing connotes a series of activities involved in moving the products from the point of production to that of consumption. It deals with all the channels and intermediaries involved in the transition of a product from production centre to its consumption hole. Agricultural marketing can be seen such a part of agricultural production without which the sector cannot progress. It dictates how often the producer will increase or produce their output. Vegetables and fruits are produced at some specific locations in the State and supplied to the local markets and to the neighboring states of the country. Apple fruit in India is concentrated in Western Himalayas, but entire country is consumer of apple. The major markets identified for collection and distribution of large volumes of fruits (apple) are Delhi, Chandigarh, Ahmadabad, Kolkata, Mumbai, Ajmer, Bangalore, Kanpur, Chennai, Lucknow, Madras etc. The market actors namely producers, collectors, brokers, transporters, traders, consumers, and exporters play different roles along the market chain.

Efficient marketing with a dynamic supply chain is essential for the development of the horticulture sector. There has been great concern in the recent years regarding the efficiency of marketing of fruits and vegetables in India. It is believed that poor efficiency in the marketing channels and poor marketing infrastructure is leading not only to high and fluctuating consumer prices, but also to only a small proportion of the consumer rupee reaching the farmers (Gandhi & Namboodiri 2002, Kaul, 1997, Ashturker & Deole, 1985). Birthal *et al.*, 2005 have estimated the marketing costs to be around 20 per cent of the sale price of vegetables.

Marketing is a key factor in the success of horticultural enterprises that sell produce directly to consumers. In the present global and liberal world, marketing has emerged as one among the best factors for the sustenance of any product in the market due to open competition prevailing. Efficient marketing means fewer intermediary costs and less wastage which clears way for low prices at consumer level and enables the product to fetch more market share and sustain the competition in the market along with production efficiency. It is necessary to improve the marketing system for the development and welfare of economy for two reasons; firstly it may work as an incentive to increase production; secondly, if the market does not supply consumers with produce at reasonable, compatible and affordable prices and at the time and place needed, then the increased production has no meaning in a welfare of society (Gunwant et al., 2012).

Status of Apple Production

India is ranked as the second largest producer of fruits after China. In the production of apple, the country holds sixth position. Almost all apple production in the country is grown in three mountainous states of North-Western Himalayas-Jammu and Kashmir, Himachal Pradesh, Uttarakhand, and states like Arunachal Pradesh, Mizoram, Manipur and Meghalaya also contributes marginally in the production. Apple is typically grown at an altitude of 4000

to 11000 feet. Jammu and Kashmir lie much ahead in the total production and yield compared to other Apple growing states in the country. During the year 2010, J&K state accounts for 67 percent of total apple production and 50 percent of total apple exports of the country. India annually exports Apple worth of RS 400 million, out of which Apples worth RS 200 million comes from J&K's northern region i.e. Kashmir Valley (Reshi et al., 2010). Apple was introduced into the country by the British in the Kullu Valley of State of H.P., dates back as 1865, while the colored 'Delicious' cultivars of apple were introduced to Shimla hills of the same State in 1917. The apple cultivar 'Ambri' is considered indigenous to Kashmir and had been grown long before Western introductions (Bhardwaj et al., 2012). Apple is said to be produced in the state from very ancient past. However, during the Lalitaditya's rule apple production is said to have received some impetus and encouragement. The commercial apple production in the state has started in the second half of nineteenth century and beginning of twentieth century after the cultivation of different varieties brought from Europe (Masoodi, 2003). Nearly 20 varieties of Apple possess commercial footing like Ambri, Delicious (Red Delicious, Royal Delicious, Kullu Delicious) American, Maharaji, Kasri, Trel, Golden, Chamura, Razakwari, Hazratbali, Bulgaria etc. Apple production has increased from just 6000 metric tons in 1950-51 to more than 17.4 lakh metric tons in 2011-12. Area has increased from 7000 hectares to more than 173.3 thousand hectares in the same period (Directorate of HPM, J&K 2013).

Table 1: Area, Production and Productivity of Apple in J&K

Year	Area (000	Production	Productivity	
	ha)	(000MT)	(MT/ha)	
1990-91	68.72	658.16	9.58	
1995-96	78.00	714.83	9.16	
2000-01	88.14	757.61	8.59	
2005-06	111.88	1151.34	10.29	
2010-11	141.71	1852.41	13.07	
2011-12	154.72	1747.22	11.3	

Source: Agriculture Production Department, J&K.

Apple production is the main occupation in the Kashmir Valley. It is pertinent to say that horticulture sector directly or indirectly provides employment to a huge sum of people numbering about six lakh families comprising about 30 lakh people. Apple accounts half of the horticulture area under production in the state. Of the twenty-two districts of state, Jammu and Samba district does not produce any apple. District Baramulla has highest acreage under apple production followed by Shopian. In terms of percentage area under apple production District Shopian occupies first position with 73.5 percent area, followed by district Baramulla with 28 percent area under apple production in the year 2007-08. District Kulgam accounts about 16 percent of total area under apple cultivation (Economic Survey J&K, 2008-09).

2. Objectives

- To study the existing marketing system of Apple prevailing at grower level and after reaching to terminal (fruit mundi) level.
- To locate various intermediary agents prevalent in the marketing chain from Apple grower to actual consumer.
- To identify various problems faced by marketing agents at different level

Methodology

Descriptive research design has been undertaken to furnish the study. The study works on two segments of marketing system prevalent in Apple marketing. One segment related with market mechanism operated at farmer (grower) level and other segment deals with market system prevalent from terminal i.e. fruit mundi level to ultimate consumer. The study is based on both primary as well as secondary data sources.

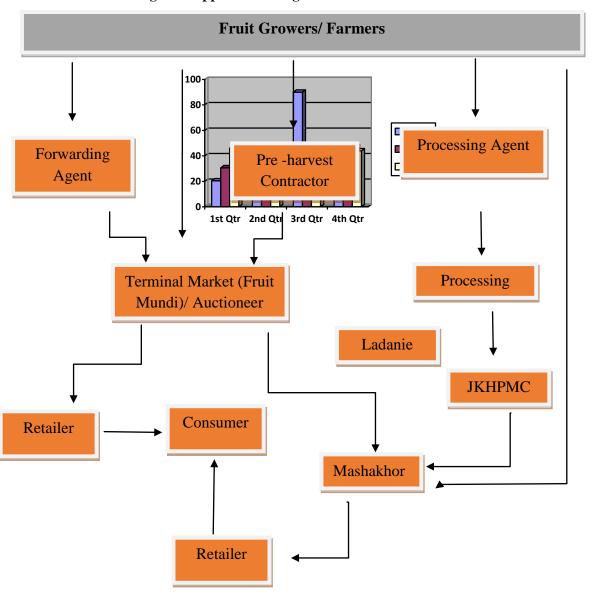
The primary data related to study was collected through questionnaires and respondents were selected at two stages as per objectives of study. At grower (farmer) level two districts Shopian and Kulgam were selected. In district Shopian more than 85 percent of area is under fruit cultivation and Apple accounts 92 percent of total area under fruits. Similarly, in district Kulgam, Apple accounts for about 81 percent total area under fruit production and district holds about 25 percent of total area under fruits and vegetables. 40 Apple growers were selected, 20 from each district on the non-probabilistic basis and were asked to fill a predesigned questionnaire. Questions were translated to them in their native language and response was noted down by researcher himself in the month of July and August 2013.

To collect data about market agents prevalent at terminal level onwards, Azadpur Fruit and Vegetable Market (Delhi) was selected. Azadpur mundi handles about 70 percent of India's domestic Apples. The market agents were interviewed in the format of well-designed questionnaire. 20 Auctioneers (Arthies) were selected purposively and since convenience who acts as auctioneer of Apple fruit in the market. A few Mashakhors and Ladanies were informally interviewed and observation was made regarding market behavior and supply chain prevalent at various levels. The Azadpur mundi was visited during the month of October for a period of one week. Secondary data and material pertaining to study was Secondary data and material pertaining to study was collected from existing written literature. Information regarding apple production, apple arrival at Azadpur fruit mundi, market intermediaries etc. were collected from JK Horticulture Produce Marketing (Srinagar), Horticulture departments of Kulgam and Shopian district, Agricultural Produce and Marketing

Committee (APMC) Office, Azadpur Fruit and Vegetable Market (Delhi) and other sources like journals, articles, books and internet. Collected data was coded and tabulated and analysis of data was done through simple arithmetic averages, percentages etc. using Microsoft Excel.

- 2. Grower -----> Pre-harvest Contractor -----> Auctioneer/ Commission Agent -----> Mashakhor/ Ladanie -----> Retailer-----> Consumer
- 3. Grower -----> Auctioneer (Arthi) -----> Mashakhor/ Ladanie -----> Retailer ----> Consumer
- 4. Grower -----> Mashakhor/ Ladanie -----> Retailer/ Processing unit -----> Consumer
- 5. Grower -----> JKHPMC -----> Mashakhor/ Ladanie -----> Retailer ----> Consumer
- 6. Grower -----> Agents of processing units ----> Processing

Diagram: Apple Marketing Channels Prevalent in J&K State



Sample Selection

Unit	Sample	Procedure
	number	
Farmer (Apple	40	20+ 20 (Kulgam+
grower)		Shopian district),
		Non-probabilistic
		and convenient.
Commission Agents	20	Convenient based
(Auctioneer/Arthi)-		on snowball
Apple		sampling.
Mashakhors/	05	Informal interview
Ladanies- Apple and		
other fruits		

4. Result and Discussion

The marketing pattern of Apple in the state is a bit different from other agricultural produce. Apple production is first sent to various terminal markets (Fruit mundies), from there the produce is auctioned and sold to different primary and secondary markets, wholesalers, sub- wholesalers, retailers etc. The process involves lot of middle men who acts as a link mechanism between the apple growers located in the remote villages and consumers around the urban markets at distant places spread throughout the country. Apple marketing in the entire state and Valley Kashmir is being carried out by private sector comprising different agents and actors from grower to consumer in the form of Forwarding Agents, Pre-harvest Contractors, Transporters, Auctioneers/Arthi, Wholesalers, Sub-wholesalers, and Retailers.

During the period of 1980s to about 2005, all Apple marketing was carried by these different commission agents. But now certain alternative marketing channels come into existence which somehow rescued the apple growers. The comprehensive observance and past literature envisage about six types of marketing channels prevalent in the state shown as below;

Marketing Through Forwarding Agent (FA)

Forwarding Agent is none but one among the local money lenders in the state. Marketing through Forwarding Agent is prevalent in the state since long period and after 1990s it

got new footings and gets flourished throughout the state. In this channel farmers (Apple growers) usually borrow from local money lender (FA) a sum of money on the term that the grower will sell his produce through him (FA) and he will charge a commission ranges in between rupees 18-25 per peti (box) based on the total amount borrowed. FA acts as a forwarding agency between the grower and the Auctioneer (commission agent) at the terminal market.

The FA performs the function of transporter to the desired markets. He manages it to market small lots of apple quantity of small orchardists well in time which a small and medium apple grower cannot manage individually. FA, through their planning, makes full use of transportation capacity by gathering small lots of different producers of an area to be sent to same destination. The FA also supply input material in the form of boxes, paper, packers and transport and charge usually 2-5 percent higher prices than market. The produce is sent to terminal market (fruit mundi) by FA, where Auctioneer bids the produce who acts as wholesaler on behalf of FA and charges 12 percent of total sale as his commission and many other handling costs. Some percent of this share is even deposited into the credit of FA. If a peti (Apple box) is sold at a rate of rupees 700 then rupees 84 plus about 4-5 rupees of handling, unloading charge and transport fare etc. must be deducted per peti and rest amount is credited into the account of farmer via FA.

The Auctioneer sells the produce either to retailer or processing unit or to Mashakhor/ Ladanie who charge their margin and supply the production to other markets, retailers processing units and actual consumers.

Out of 40 Apple growers, 17 means 42.5 percent have responded that they sell their produce through this channel of marketing. They choose the channel due to financial requirement throughout the year, to market their produce at due time which the FCAs manage to provide them due to economies of scale enjoyed by him in his trade.

Marketing through Pre -harvest Contractor

This channel of apple marketing in the state was prevalent since very past times now its percentage share in terms of marketing channel has come down but still some apple growers choose this channel for marketing their produce. In this channel, the Contractor buys the orchid of the apple grower before the harvest time even after blossoming season. The marketing is future oriented, sometimes it is based on nil and sometimes contractor just makes targets based on certain parameters, but lot of risk involvement is there. One thing is clear that Pre-harvest Contractor is local and knows the area under orchid, total apple trees in the orchid, pattern of productivity and on these bases the transaction is fixed. Both parties agree on certain amount, and the amount is paid in different installments to the farmer, about 25 percent of agreed sum is paid at the time of transaction. Then other steps involved in the marketing process are carried out by the Preharvest Contractor himself.

Usually there is lot of exploitation to apple growers in this marketing channel, but lot of risk is also beard by Contractor. Sometimes the famers sell their orchid for the period of more than one year, even for three years. This type of marketing is not based on economic rationality as horticulture is based on natural factors but still 5 farmer's means about 12 percent of apple growers responded that they sell their produce through this channel. This channel is mostly prevalent in the North Kashmir districts like Baramulla and Kupwara at large scale. Farmers prefer this channel to avoid all the risk involved in production and marketing process of their produce while as Contractor chose this channel for chances of higher profit.

Marketing through Auctioneer (Commission Agent)

This channel of apple marketing holds second place in the present time as per the surveyed districts are concerned. In this channel the apple grower directly contacts the Auctioneer locally known as 'Arthi' quite in advance and borrows some money from him on the pre-signed contract i.e. to sell his produce through him only and Auctioneer

advances money mostly at the scale of rupees ten to twelve thousand against one hundred apple boxes (Peties).

After picking and packing of apple produce, the farmer transports the produce to the terminal market where Auctioneer (Commission Agent) just sells or auctions this produce to Mashakhors, Ladanies, etc. or can himself buy the produce at prevailing auction price and stores the produce at his own cost. The Auctioneer charges a commission of 6-12 percent of total sales as his auctioning and advance money lending charge. The rate varies as per the time of advances, early lending means 12 percent commission charge and advances just one or two months before harvest period leads to about 8-9 percent commission while as no advance lending caters about 6 percent commission for facilitating auctioning only. Other costs of handling, unloading and forwarding credit etc. all is charged and deducted from gross sales of produce. 14 farmer's means 35 percent farmers responded that they sell their produce through this channel.

Marketing through Mashakhors/ Ladanie (Sub-wholesalers)

In this channel of Apple marketing, the buyers from other states known as Mashakhors and Ladanies come to the local villages and at door steps of apple grower and buy the produce from him at an agreed price. The transportation cost and risk involved in transportation and marketing fluctuations all are beard by them not by grower. They supply the produce to latent markets of the country. This is one among the efficient and profitable channel of apple marketing as the grower cannot sell produce to ultimate consumer, he must adopt intermediary. In this case a smaller number of intermediaries is involved, and no extra commission is charged on the farmer. But this channel of marketing has shown its existence since past 5-6 years and is progressing more and more. 10 farmers' means (25 percent) have responded that they sell their apple production through this channel of marketing.

Table 2: Different Apple Marketing Channels in J&K

District	FA	Pre-harvest	Auctioneer/	Mashakhor/	JKHPMC	Processing
		Contractor	Arthi	Ladanie		Agent
Shopian	6	2	8	7	1	20
Kulgam	11	3	6	3	0	20
Total	17 (42.5)	5 (12.5)	14 (35)	9 (25)	1(2.5)	40 (100)

Source: Field survey, 2013.

Figures in parentheses represent percentage

FA: Forwarding Agent JKHMPC: Jammu and Kashmir Horticultural Produce and Marketing Corporation

Marketing through Jammu & Kashmir Horticulture Produce Marketing and Processing Corporation (JKHPMC)

The Government of India and Government of Jammu and Kashmir implement World Banks Assisted project namely JKHPMC which emerged as a new channel for marketing the horticultural produce of the valley. In this channel producers' hand-over their packed fruits to the corporation which acts as a selling agency and facilitate buyers from all corners of the country as its main function is to diversify fruit marketing, reduce marketing cost, improve quality packing etc. But, it is unfortunate that farmers are quite unaware of this agency besides its offices exist in almost all districts. Just only one farmer from district Shopian revealed that he has sold his produce through this agency.

Marketing through Processing Agents

Lot of overall fruit production is processed, and various processing units thus act as big consumer of fruits. Same is case with Apple in Kashmir, in this channel local processing units send their agents with load carriers to the villages to collect the pre-harvest fall down apples. Almost every farmer avails this channel of marketing. About 15-20 percent of apple falls before ripping, so they sell such produce to these agents as such fruits cannot reach to faraway fruit markets without any wastage and damage.

During one season same farmer (grower) can market his produce through different channels. He can sell some quantity through Auctioneer at terminal market and some quantity to Mashakhor/ Ladanie at his doorstep and even sells lot of 'C' grade apple to Processing Agents. But in case he chose FA as his channel of marketing he has to sell

all his produce through him and again in case of Pre-harvest Contractor Channel, a farmer sells all his produce to him but in some cases some famers have more than two to three apple orchids located at three different places and he sells just one or two among them to Pre-harvest Contractor and can sell rest quantity of apple production as per his choice. The apple marketing channels are presented in the table 2, framed from the farmer's response. Table shows that all the farmers adopt two channels at least for their production one is through Processing Agent for pre-fall down apple, grade 'C' and other is any one among the above discussed channels

Marketing System at Azadpur Fruit and Vegetable Market/ Terminal (Delhi)

Azadpur fruit and vegetable market of Delhi was selected because it is one among the big and busiest fruit and vegetable markets not only in India but also in Asia. The Mundi handles about 70 percent of India's domestic apples. In Azadpur market, there are mostly four kinds of Mundi functionaries namely Auctioneer/ Arthi (Commission Agent), Mashakhors, Ladanies and retailers outside terminal. There are around 2200 Auctioneers in the market.

There is well managed entry and exit in the Mundi. Entry is open mostly overnight period and exit is open for day time in order to cut down chances of jam etc. Gate-passes are issued to every vehicle, full or empty, that enters the market, for a certain amount of money. A gate-pass contains information about the quantity and type of produce being brought in and the name of Auctioneer to whom the owner of the vehicle would unload his

vehicle. Different agents and functionaries work in the market and play different parts in total market chain, described as below;

Commission Agent/ Arthi (Auctioneer)

The Commission Agent must collect apple produce from the growers or from Forwarding Agents etc. and must auction the produce in the fruit market, collect the money and manage all other formalities towards apple grower or Forwarding agent. Growers have an option of selling at the prevailing market price or keep for storage in the hope of getting a higher price during off season. Auctioning may be open or under cover, usually under cloth by using code word or finger signals but the biding price is presented to the grower. They charge 6-12 percent commission for this from farmers. Commission agents also charges 3-5 percent commission from buyers and deposit a bit portion of it as market fee with APMC. When the produce is sold, all marketing costs, including transport, handling, and storage costs and the Agent's commission are deducted and a net price is paid to the grower.

Auctioning in the mundi is started at early morning usually starts from 5:30 am to about 9:30 am. The Commission Agent started to auction the quantity whose sample is presented at site to the buyers. The auction generally happens under a piece of cloth by finger signaling but minimum price is declared by Commission Agent himself and the buyer who gives highest bid buys the quantity under auction. The buyer may be Mashakhor, Ladanie, Retailer and processing agency. Most of sales happened under credit basis.

Mashakhors

Mashakhors are important market functionaries who act as a sub-wholesaler in the market chain of fruits and vegetables. They buy fruits and vegetables from Commission Agents (Auctioneer) and sell these fruits and vegetables to different retailers over a period. They act as big dealers, buy apple from Fruit Mundi Azadpur, dump some quantity in stores and sell in small lots to various retailers and charge different margin on them depending on the demand and supply of the product in the market. A few Mashakhors were interviewed

and they responded that they usually try to get 30-40 rupees per box (Peti) of apple as their margin during peak season and about 70-80 rupees during off season. They sell the product both on cash and credit basis depends upon the existing trade relation between the Mashakhor and retailer. They sometimes sell to processing units also.

Ladanies

Ladanies are other important market functionary in the market chain of fruits and vegetables. They buy the apple from this Mundi and export the product to buyers located outside Delhi on their demand and charge 3-4 percent commission from them on the overall value of produce send to them. However, they also send the purchased produce to other fruit mundies outside Delhi and contact the Commission Agents there to auction the fruit, same as farmers do in primary market. The Commission Agent charges 3-5 percent commission to Ladanie. Ladanies send on credit basis to Commission Agents. They generally buy from one mundi and sell in other mundi, keep no stock with them in cold stores for off season. Ladanies re- grades, repacks and re-design the fruit as per their own market experience.

Retailers

Certain retailers themselves go to the terminal markets and buys fruits (apple) from Commission Agents while auction and keeps inventories with them to sell in the market over a long period of time. They also use rickshaw pullers and different Vendors to sell the fruit in different segments of market at fixed wages or on commission basis. Retailers always sell on cash basis as he sells the product to ultimate consumer.

Mode of Transaction Payment in the Market Chain

Commission Agent (CA) advances money to apple growers 4-5 months before the period of harvesting season. He advances money in 3-4 installments. Out of 20 CAs, 14 (70 percent) revealed they advance money at the rate of about 10-12 thousand rupees against 100 boxes (petis) of apple. 6 CAs (30 percent) told, they advance in the range of about 15-20 thousand rupees against 100 boxes of apple. Average advances paid by

Table 3: Sale Statement (Watak) of 200 Apple boxes (Peties)

Grade and	Rate in Rs.	Amount	Expenses in Rupees				
(Quantity)	Per box		Freight (70/	Sri exp.	Commission	Labour etc.	Trader
			box)	(25/box)	(6 percent)		Commission
G/5 + G/4	700	115500					
(90 + 75)	700	113300					
C F/4+5/20)	220	(400	14000 5000	7620	240	7620	
` '							
G/5 R (15)	340	5100					
Total Boxes = 200		= 127000	Total expenses = 34480		0	Net sales = 95520	
200	680	136000	0	0	0	0	0
Gross	Sales = 136000		Net Sales = 136000				
$C/5 \pm C/4$	720	110000			<u> </u>		<u> </u>
	720	110000			10460		
(90 + 73)			14000	0		240	
G/ 5R (15)	330	4950	14000	0	(@	240	0
G/ 3R (13)	330	7/30			• '		
S E/4+5 (20)	350	7000	1		commission)		
3.17413 (20)	330	7000					
Total Boxes = 200		= 130750	Total Exp	penses = 2470	00	Net Sales =	= 106050
	G/5 + G/4 (90 + 75) S.F/4+5(20) G/5 R (15) 200 Gross G/5 + G/4 (90 + 75) G/ 5R (15) S.F/4+5 (20)	Quantity Per box	(Quantity) Per box G/5 + G/4 (90 + 75) 700 115500 S.F/4+5(20) 320 6400 G/5 R (15) 340 5100 200 Gross Sales = 127000 200 680 136000 Gross Sales = 136000 G/5 + G/4 (90 + 75) 720 118800 G/ 5R (15) 330 4950 S.F/4+5 (20) 350 7000	Quantity Per box Freight (70/box)	(Quantity) Per box Freight (70/box) Sri exp. (25/box) $G/5 + G/4$ (90 + 75) 700 115500 14000 5000 S.F/4+5(20) 320 6400 5000 $G/5$ R (15) 340 5100 5000 200 Gross Sales = 127000 Total expenses = 3448 200 680 136000 0 0 $G/5$ R (3) 720 118800 14000 0 $G/5$ R (15) 330 4950 14000 0 $S.F/4+5$ (20) 350 7000 7000	(Quantity) Per box Freight (70/box) Sri exp. (25/box) Commission (6 percent) $G/5 + G/4$ (90 + 75) 700 115500 14000 5000 7620 $S.F/4+5(20)$ 320 6400 5100 5000 7620 $G/5$ R (15) 340 5100 Total expenses = 34480 200 680 136000 0 0 0 $G/5$ R (74 (90 + 75) 720 118800 14000 0 10460 (@ 8 percent) $G/5$ R (15) 330 4950 14000 0	(Quantity) Per box Freight (70/box) Sri exp. (25/box) Commission (6 percent) Labour etc. $G/5 + G/4$ (90 + 75) 700 115500 14000 5000 7620 240 $S.F/4+5(20)$ 320 6400 14000 5000 7620 240 $G/5 R (15)$ 340 5100 Total expenses = 34480 Net sales = 200 680 136000 0 0 0 0 Gross Sales = 136000 Net Sales = 136000 Net Sales = 136000 10460 (@ 8 percent) commission) 240 $G/5 R (15)$ 330 4950 14000 0 0 240

Source: Apple growers from surveyed villages 2013.

CAs to apple growers were about 1.05 crore rupees in the year 2013. 8 CAs means 40 percent responded that they advance total of rupees 50-80 lakh during the year 2013 to apple growers. 6 CAs (30 percent) revealed that they advance in the range of about 100-120 lakh rupees to the apple growers of Jammu and Kashmir State. 4 CAs (20 percent) told they have advanced 120-170 lakh rupees to apple growers. 2 CAs i.e. 10 percent of respondents told that they advance more than two crore rupees during the year to apple growers.

Out of total 20 CAs, 14 (70 percent) revealed that they sell about 75 percent of apple sale on credit basis and rest 25 percent sales on cash basis. 5 i.e. 25 percent CAs told they sell about 50 percent of sales on credit and 50 percent on cash basis. Just 1 CA (5 percent) said that he sells more than 80 percent sales on credit and only 20 percent on cash.

It also comes to forefront from the Commission Agents that on the average, they offer the credit sales for a time of one month. Sometimes it may last longer due to inability of buyer to pay on time, certain buyer's even default sometimes on the reason that they got loss on the transaction made.

Sale Statement (Watak) of Apple at Terminal Market, Azadpur Mundi

Sale statement known as Watak among grower class is prepared by Commission Agent after auctioning the total quantity send to him by a grower in the mundi. It states price per unit (box or peti) of different grades, sums the amount into gross sales amount, then deducts various costs and charges out of the total sale and yields at end the net amount out of all sales given to grower. Several Wataks from different apple growers have been collected and on the basis a sales statement table is prepared to compare different marketing costs under different marketing channels.

Table 3 presents, sales statement of different marketing channels; it shows that various exorbitant costs and commissions are incurred upon apple grower in the

channel first means when apple is marketed through Forwarding Agent. While no such cost is incurred on channel via Mashakhor and Ladanie because fruit is sold at door step of grower in this channel. Less costs and commission are incurred in a marketing channel through Auctioneer or Commission Agent. It is also seen and observed from almost all farmers that about bid of 15-25 rupees more is paid to such apple grower in the terminal market who him selves bring the produce to Commission Agent for auctioning as is shown in the Watak presented by table 3

5. Problems Faced by different Market Agents

Different market functionaries were facing different types of problems in the market chain of apple. Some of them are dealt as below;

Problems Faced by Apple Growers

Apple packing need skilled labour, which all the growers does not possess so they must hire a packer, who during those hey days charge higher wages touching up to rupees 500 a day, generally above 400 rupees per day. Not only this, the packer does not pay utmost care while packing the apple, he sometimes pack 'B' grade apple in 'A' grade box, which proves fatal for grower at the time of auctioning the fruit at terminal market. So, grading and packing needs much skill and patience, any mistake done by labour proves harmful in the form of fewer prices to actual growers of fruit.

Transportation is most important factor for sending the apple to terminal market. During the peak season shortage of transport creates lot of panic among farmers. Drivers charge exorbitant fares and even load more than the schedule, which damages the fruit and results in low price.

- Inadequate storage is big problem to all apple growers. They are not able to store their production if remunerative price is not paid to their produce. There is lack of storage capacity.
- Threat of malpractices at terminal market by auctioneer as auction happens under cover and is conducted in coded words. Sometimes Commission Agent makes false sales statement. Forwarding Agents may also sometimes prepare Wataks by themselves to take advantage of asymmetric information of auctioning.

- Time lag also is a big problem to almost all small and medium apple growers. A truck usually carries around 600 boxes of apple which small farmers cannot manage at once. Sometimes good prices prevail in the fruit mundies but long distance, unsafe road and transport shortage create time lag between apple supply from villages to terminal market hence expected price is not assured to farmer.
- ➤ High rates of commission i.e. 12 percent of total sales by Commission Agent (Auctioneer) and about twenty rupees per box of apple in some cases sums a huge amount, leaves a meagre amount to the disposal of actual grower.

Credit is not easily available to growers from institutional sources and even small growers are denied due to certain hard and fast precondition of credit advances.

Problems to other Market Agents

- Mixed grading i.e. presence of Scab, other diseased apple in 'A' Grade apple box makes the Mashakhors and retailers to suffer losses. In terms of size again there is mixing, small apples are packed with normal sized apple box and bid is paid for normal size only.
- About 55 percent Commission Agents reveal that they
 advance money before 4 to 5 months to growers and the
 growers cheat them by not sending the appropriate
 quantity as per contract. When CAs inquiries about
 contract breach, farmers respond there was less
 production during the year.
- CAs also sell production on credit and about 70 percent of them told that credit is not paid in time and about 30 percent told that sometimes buyers' default and does not pay the amount due to loss suffering reason etc.
- Ladanies and Mashakhors also face problems of prevalence of credit sale and repayment of money is not done on due dates.
- Few Mashakhors also told that sometimes they are forced and compelled by Auctioneer to buy low quality produce due to reason of credit buying Poor grading and input like card board boxes damaged the apple before reaching the terminal market.

Conclusion

Jammu and Kashmir are one among the major apple producing states of India and accounts more than 65 percent of total apple production of the country. About 30 lakh people are directly or indirectly related with horticulture in the state and apple fruit occupies prominent place. Nearly about 20 varieties of apple possess commercial footing in the state. District Baramulla, Shopian, Anantnag, Kulgam, Budgam, Kupwara, Pulwama are major apple producing districts in the state. About six channels of apple marketing are prevailing in the state and all channels incur lot of commission charges on the farmers except two channels i.e. marketing through Mashakhor/ Ladanie at door steps of grower for 'A' and 'B' grade apple and to processing agents for downfall or 'C' grade apples. Fewer intermediaries are involved in these two channels of marketing. Different market functionaries started from Grower, forwarding Agent, Commission Agent, Mashakhor/ Ladanie, Processing agent, retailers, cart vendor, transporter and consumers are involved in marketing chain. Problems related to grading, packing, transportation, credit sale, inadequate storage capacity, unavailability of institutional credit to small growers, malpractices of auctioning etc. are prevalent in the marketing system of apple. Such problems should be redressed through transparent and building close link between grower, auctioneer Kaul, G. L. (1997). Horticulture in India-production, and buyer. Government also has to play its role by supplying proper infrastructure like adequate cold storage facility, constructing well surfaced roads national as well as local, easy and cheap credit facility and availability to apple growers. Fixing of transport fares and commission rates will also mitigate farmers suffering. Minimum Support Price Policy for National Horticulture Board. (2013). Indian Horticulture apple can prove much strengthened factor for the future progress and growth of the sector in the state and whole country.

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