DOI: 10.2478/cerce-2018-0010

Original Article

Available online: www.uaiasi.ro/CERCET_AGROMOLD/ Print ISSN 0379-5837; Electronic ISSN 2067-1865

> Cercetări Agronomice în Moldova Vol. LI, No. 1 (173) / 2018: 109-124

MARKETING MARGINS OF SELECTED STAKEHOLDERS IN THE SUPPLY CHAIN OF DATES IN SOUTH PUNJAB, PAKISTAN

A. ADEEL¹, M. ASLAM²*, H.K. ULLAH¹, Y.M. KHAN¹, M.A. AYUB³

*E-mail: manan.aslam@mnsuam.edu.pk

Received Aug. 24, 2017. Revised: Feb. 02, 2018. Accepted: Feb. 12, 2018. Published online: Mar. 27, 2018

ABSTRACT. Date is one of the major cash fruits in Pakistan. Presently Pakistan stands at sixth position in dates producing countries. Date occupies third position after citrus and mango in terms of fruit area and production. The present study conducted to explore the current margins of various stakeholders involved in the existing marketing system of dates in two leading districts of South Punjab district, as Dera Ghazi Khan and Muzaffar Garh. A sample of 40 farmers, 30 commission agents, 30 wholesalers, 30 retailers and 30 consumers was selected randomly. Pretested questionnaires were used to collect the data from selected respondents through personal interviews. Private sector is dominant in all major marketing activities. The market intermediaries in date marketing involve commission wholesaler and retailer. Different intermediaries were taking different margins according to form of dates and locality. In Dera Ghazi khan, commission agent was getting 13.55%, wholesaler 11.71% and retailer, 18.09% margins of marketing chain for fresh date and share of growers in consumer price was 56.09%. Commission agent was taking 14.13%, wholesaler, 10.67% and retailer 17.2%; margin of marketing chain for fresh date and share of growers in consumer price was 58% in Muzaffar Garh. The price of date is much high due to long chain of marketing system. In order to reduce the wholesale and retail prices, government should take measures to establish date marketing centers and supply chain management training programs for the date growers.

Keywords: fresh dates; marketing system; retail prices; marketing centers.

INTRODUCTION

The date palm (*Phoenix dactylifera* L.) is an important multi-

¹ University of Agriculture, Faisalabad, Pakistan

² Muhammad Nawaz Shareef University of Agriculture, Multan, Pakistan

³ Entomological Research Institute, AARI, Faisalabad, Pakistan

purpose tree, which contributes significantly towards the creation of favorable climate within the ecosystems. This tree is considered as an integral component of farming system in dry and semi-arid regions and can produce equally well in small and large scale commercial farming. Pakistan is one of the main growers of dates, it follows Egypt, Saudi Arabia, Iran and U.A.E. in the list of top date producing countries, with 10% share of global production. Due to soil and seasons Pakistan is an ideal place for date cultivation (GOP, 2013).

The fruits (dates) of the date palm contain a high percentage of carbohydrate (total sugars, 44-88%), fat (0.2-0.5%), 15 salts and minerals, protein (2.3-5.6%), vitamins and a high percentage of dietary fibre (6.4-11.5%). The flesh of dates contains 0.2-0.4% oil, whereas the contains 7.7-9.7% oil. The weight of the seed is 5.6-14.2% of the date. There are at least 15 minerals in dates. The percentage of each mineral in dried dates varies from 0.1 to 916 mg/100 g date, depending on the type of mineral. In many ways, dates may be considered as an almost ideal food, providing a wide range of essential nutrients and potential health benefits.

Date occupies third position, after citrus and mango in terms, of fruit area and production. Commercially imperative dates varieties of Pakistan comprise Fasli, Muzawati, Aseel, Rabai, Karbalai, Hillawi, Dashtiari, Sabzo, Begum Jhangi, Kehraba, Jaan, Swore and

Dhakki. Aseel of Sindh, Dhakki of Dera Ismail Kkan and Begum Jhangi of Balochistan are best in setting of demand and popularity. Varieties producing in Pakistan can compete with world 's accepted date varieties in the international date market (PHDEC, 2008). The major date palm cultivating region in Southern Punjab includes Dera Ghazi Khan, Muzaffar Garh and Multan.

Harvest season of dates Pakistan starts from the end of month of June and continues up to the September. The dates are harvested and marketed at three stages of their development. The choice harvesting at one or another stage depends on varietals characteristics, climatological conditions and market demand. The three stages of fruit ripening are as follows: Doka Stage (Khalal), physiological mature, hard and crisp, moisture contents 50-85% vellowish in color, Dang Stage (Rutab). Partially browned, reduced moisture contents 30-35% softened. Pind Stage (Tamar), color from amber to dark brown, moisture contents reduced below 25% to 10%. texture from soft pliable to firm.

Marketing constraints of dates, as reported by the growers, is directly associated with absence of farm to market roads. The major markets of dates are big cities of the country, which are too far from the date producing regions. As reported by the farmers that a huge amount of dates are being lost during transportation. Several improvements have been suggested for production and

marketing of dates so that hard working farmers of the area should get more benefits and rewards than a middleman (Ahmed, 2000).

It is noticeable that growers of dates are facing big difficulties in selling their personal produce. In assemblage and mostly in wholesale market, growers are behaved like temporary patrons without access to the credit and other facilities. Without adequate access to market information they also face high price uncertainties. Lack of capital and limited access to institutional credit lead producers to rely on relatively high cost informal credit sources and advances from date contractors. Encouraging at least progressive growers to market their own produce would introduce more competition for first stage marketing chain and help ensure that margins gained by contractors are not excessive. This requires improvement of access to credit at date flowering stage to ensure proper use of inputs in date orchard and provide working capital for labor and packing material (Khushk et al., 2009).

Generally, literature is available for various crops, margins were estimated as Chauhan & Chhabra (2005), Aujla et al. (2011), Khair et al. (2008), Baba et al. (2010), Abassian et al. (2012), Joshi (2012), Maske et al. (2012), Aslam et al. (2013), Rasool et al. (2013), but limited literature available in which dates margins were estimated as Liu (2003), Bashir et al. (2006), Khushk et al. (2009).

Even though Pakistan at present stands at sixth position in dates

producing countries, it can easily improve its score and production by modifying farm management, pre-harvesting, harvesting, post harvesting practices and marketing system. For the upgrading of existing marketing system it was necessary to conduct the study to explore the current marketing margins of various stakeholders involved in the supply chain of dates in the study area.

MATERIALS AND METHODS

The Southern Punjab of Pakistan was selected purposively for the present research because it is one of the regions in Pakistan with largest area under date palm cultivation. Within Southern Punjab, the study was restricted to two districts. namely Dera Ghazi Khan and Muzaffar Garh, because these two are leading district regarding the production of dates in Southern Punjab. A representative sample of dates marketing channel, including dates 40 growers (20 from each district), 30 commission agents (15 from each district), 30 wholesalers (15 from each district), 30 retailers (15 from each district) and 30 consumers (15 from each district) were selected. Multistage simple random sampling technique was applied for selection of 160 respondents.

Statistical techniques for data analysis

Data were edited and entered in computer for analysis purposes and following statistical techniques were used to analyze and interpret data.

Margin analysis

For calculating the margin of different market player of dates marketing, the following formula was used:

Gross margin = Sp-Pp (1),where, Sp = Sale price, Pp = Purchase price.

Net margin = Gm-Mc (2),where, Gm = Gross margin, Mc = Marketing cost

Percent margin = Ps/Sp*100 (3), where, Ps = Price spread, Sp = Sale price

RESULTS AND DISCUSSION

Analysis and interpretation of data are the most important steps in social scientific research. Without these steps, generalization prediction cannot be made, which is the objective of the research. This chapter is organized in to two sections: section 1 presents the marketing margins of these players and section 2 delineates the effects of factors affecting on marketed surplus and consumer demand of dates.

Marketing margins of different stakeholders

margin Marketing or price spread is a commonly used measure of the performance of a marketing system (Abbott & Makeham, 1990). Marketing margins are commonly used to examine difference between producer and consumer prices for same quantity of a commodity.

> Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg) Profit as percentage of margin Profit as percentage of sale price

1) Marketing margins of commission agents for fresh dates (Dera Ghazi Khan)

Price spread consists of cost and margins. Costs are divided among producers, intermediaries retailers. Producers bear the cost of transport from farm of village to market, packing charges, toll tax, labor for loading and unloading, commission, another and unauthorized charges deducted by wholesalers and commission agents. Commission agents were purchasing dates on an average price Rs 3890/100 kg and selling further to other stakeholders on an average price Rs 4500/100 kg, so the gross margin of commission agents was Rs 610/100 kg.

The gross marketing margin of commission agents was Rs 610/100 kg out of this marketing cost was Rs 225/100 kg and the net margin was Rs 385/100 kg. As far as percent margin of commission agent was concerned, he was getting 13.55% of the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 7.91%. The commission had to pay Rs 225 as a cost and got net profit as percentage of margin 63.11%.

- = 3890
- = 4500= 610
- = 610/4500*100 = 13.55
- = 225
- = 610-225 = 385
- = 385/610*100 = 63.11
- = 386/4500*100 = 8.55

Table 1 - Marketing margin of commission agents for fresh dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	4500	3890	610	225	385	
Percent			13.55	36.88	63.11	8.55

Source: author's own calculations

2) Wholesalers margin for fresh dates (Dera Ghazi Khan)

Wholesalers were selling three forms of dates fresh, dehydrated and hydrated so marketing margins for form calculated. each was Wholesalers were purchasing fresh dates on an average price of Rs 4500/100 kg and selling further to other stakeholders on an average price Rs 5100/100 kg so the gross margin of wholesaler was Rs 600/100 kg.

The gross marketing margin of wholesalers was Rs 600/100 kg out of this marketing cost was Rs 225/100 kg and the net margin was Rs 315/100 kg. As far as percent margin wholesalers was concerned, he was getting 11.71% of the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 6.17%. The wholesaler had to pay Rs 285 as a cost and got net profit as percentage of margin 52.25%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg)

Net profit (Rs/100 kg) Profit as percentage of margin

Profit as percentage of sale price

=5100= 600

= 4500

= 600/5100*100 = 11.71

= 285

= 600-285 = 315= 315/600*100 = 52.25= 315/5100*100 = 6.17

Table 2 - Marketing margin of wholesalers for fresh dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	5100	4500	600	285	315	
Percent			11.71	47.5	52.25	6.17

Source: author's own calculation

3) Wholesalers margin for dehydrated dates (Dera Ghazi Khan)

Wholesalers were purchasing dehydrated dates on an average price of Rs 7100/100 kg and selling further to other stakeholders on an average price Rs 7600/100 kg, so the gross margin of wholesaler was Rs 500/100 kg.

The gross marketing margin of wholesalers was Rs 500/100 kg out

of this marketing cost was Rs 285/100 kg and the net margin was Rs 215/100 kg. As far as percent margin of wholesalers was concerned, he was getting 6.57% of the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 2.82%. The wholesaler had to pay Rs 285 as a cost and got net profit as percentage of margin 57%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin

Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg)

Profit as percentage of margin
Profit as percentage of sale price

= 7100 = 7600

= 500

= 500/7600*100 = 6.57

= 285

= 500-285 = 215 = 215/500*100 = 43 = 215/7600*100 = 2.82

Table 3 - Marketing margin of wholesalers for dehydrated dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	7600	7100	500	285	215	
Percent			6.57	57	43	2.82

Source: author's own calculation

4) Wholesalers margin for hydrated dates (Dera Ghazi Khan)

Wholesalers were purchasing hydrated dates on an average price of Rs 5775/100 kg and selling further to other stakeholders on an average price Rs 7125/100 kg, so the gross margin of wholesaler was Rs 1350/100 kg.

The gross marketing margin of wholesalers was Rs 1350/100 kg out of this marketing cost was

Rs 285/100 kg and the net margin was Rs 1065/100 kg. As far as percent margin of wholesalers was concerned, he was getting 18.95% of the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 14.95%. The wholesaler had to pay Rs 285 as a cost and got net profit as percentage of margin 78.88%.

Average purchase price (Rs/100 kg) = 5775Average sale price (Rs/100 kg) =7125Gross marketing margin = 1350Percent marketing margin = 1350/7125*100 = 18.95 Average marketing cost (Rs/100 kg) = 285Net profit (Rs/100 kg) = 1350-285 = 1065Profit as percentage of margin = 1065/1350*100 = 78.88Profit as percentage of sale price = 1065/7125*100 =14.95

Table 4 - Marketing margin of wholesalers for hydrated dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	7125	5775	1350	285	1065	
Percent			18.95	21.15	78.88	14.95

Source: author's own calculation

5) Retailers margin for fresh dates (Dera Ghazi Khan)

Retailers were selling three forms of dates fresh, dehydrated and hydrated, so marketing margins for each form was calculated. Retailers were purchasing fresh dates on an average price of Rs 5115/100 kg and selling further to other stakeholders on an average price Rs 6245/100 kg, so the gross margin of retailer was Rs 1130/100 kg.

retailers was Rs 1130/100 kg out of this marketing cost was Rs 264/100 kg and the net margin was Rs 865/100 kg. As far as a percent margin retailer was concerned, he was getting 18.09% of the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 6.17%. The retailer had to pay Rs 264 as a cost and got net profit as percentage of margin 76.54%.

The gross marketing margin of

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg) Profit as percentage of margin

Profit as percentage of sale price

= 5115= 6245= 1130= 1130/6245*100 = 18.09 = 264= 1130-264 = 865 = 865/1130*100 = 76.54

= 865/6245*100 = 13.91

Table 5 - Marketing margin of retailers for fresh dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	6245	5115	1130	264	865	
Percent			18.09	23.36	76.54	13.91

Source: author's own calculation

6) Retailers margin for dehydrated dates (Dera Ghazi Khan)

Retailers were purchasing dehydrated dates on an average price of Rs 7715/100 kg and selling further to other stakeholders on an average price Rs 9475/100 kg, so the gross margin of retailer was Rs 1760/100 kg.

The gross marketing margin of retailers was Rs 1760/100 kg out of this marketing cost was Rs 276/100 kg and the net margin was Rs 1484/100 kg. As far as a percent margin retailer was concerned, he was getting 18.57% of the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 15.66%. The retailer had to pay Rs 276 as a cost and got net profit as percentage of margin 84.31%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg)

Profit as percentage of margin

Profit as percentage of sale price

= 7715= 9475

= 1760= 1760/9475*100 = 18.57

= 276

= 1760-276 = 1484= 1484/ 1760*100 = 84.31

= 1484 / 9475*100 = 15.66

Table 6 - Marketing Margin of Retailers for Dehydrated Dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	9475	7715	1760	276	1484	
Percent			18.57	15.68	84.31	15.66

Source: author's own calculation

7) Retailers margin for hydrated dates (Dera Ghazi Khan)

Retailers were purchasing hydrated dates on an average price of Rs 7125/100 kg and selling further to other stakeholders on an average price Rs 8775/100 kg, so the gross margin of retailer was Rs 1650/100 kg.

The gross marketing margin of retailers was Rs 1650/100 kg out of this marketing cost was Rs 276/100 kg and the net margin was Rs 1374/100 kg. As far as a percent margin retailer was concerned, he was getting 18.80% of

the total margin of marketing chain in district Dera Ghazi Khan. Profit as percentage of sale price was 15.65%. The retailer had to pay Rs 276 as a cost and got net profit as percentage of margin 83.27%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg) Profit as percentage of margin

Profit as percentage of sale price

= 7125 = 8775 = 1650

= 1650/8775*100 = 18.80

= 276

= 1650-276 = 1374 = 1374/1650*100 = 83.27

= 1374/8775*100 = 15.65

Table 7 - Marketing margin of retailers for hydrated dates (Rs/100 kg) in Dera Ghazi Khan

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	8775	7125	1650	276	1374	
Percent			18.80	16.72	83.27	15.65

Source: Author's own calculation

8) Marketing margins of commission agents for fresh dates (Muzaffar Garh)

Commission agents were purchasing dates on an average price of Rs 3950/100 kg and selling further to other stakeholders on an average price Rs 4600/100 kg, so the gross margin of commission agents was Rs 650/100 kg.

The gross marketing margin of commission agents was Rs 650/100 kg

out of this marketing cost was Rs 250/100 kg and the net margin was Rs 400/100 kg. As far as percent margin of commission agent was concerned, he was getting 14.13% of the total margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 8.69%. The commission had to pay Rs 250 as a cost and got net profit as percentage of margin 61.53%. It was observed that marketing cost was 40%.

A. ADEEL, M. ASLAM, H.K. ULLAH, Y.M. KHAN, M.A. AYUB

Average purchase price (Rs/100 kg) = 3950Average sale price (Rs/100 kg) = 4600Gross marketing margin = 650 Percent marketing margin = 650/4600*100 = 14.13Average marketing cost (Rs/100 kg) = 250Net profit (Rs/100 kg) = 650-250 = 400Profit as percentage of margin = 400/650*100 = 61.53Profit as percentage of sale price = 400 / 4600*100 = 8.69

Table 8 - Marketing margin of commission agents for fresh dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	4600	3950	650	250	400	
Percent	•	•	14.13	38.46	61.53	8.69

Source: author's own calculation

9) Wholesalers margin for fresh dates (Muzaffar Garh)

Wholesalers were selling three forms of dates fresh, dehydrated and hydrated, so marketing margins for each form was calculated. Wholesalers were purchasing fresh dates on an average price of Rs 4600/100 kg and selling further to other stakeholders on an average price Rs 5150/100 kg, so the gross margin of wholesaler was Rs 550/100 kg.

The gross marketing margin of wholesalers was Rs 550/100 kg out of this marketing cost was Rs 275/100 kg and the net margin was Rs 275/100 kg. As far as percent margin of wholesalers was concerned, he was getting 10.67% of the total margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 5.33%. The wholesaler had to pay Rs 275 as a cost and got net profit as percentage of margin 50%.

Average purchase price (Rs/100 kg)
Average sale price (Rs/100 kg)
Gross marketing margin
Percent marketing margin
Average marketing cost (Rs/100 kg)
Net profit (Rs/100 kg)
Profit as percentage of margin
Profit as percentage of sale price

= 4600 = 5150 = 550 = 550/5150*100 = 10.67 = 275 = 550-275= 275 = 275/550*100 = 50

= 275 / 5150*100 = 5.33

Table 9 - Marketing margin of wholesalers for fresh dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	5150	4600	550	275	275	
Percent			10.67	50	50	5.33

Source: author's own calculation

10) Wholesalers margin for dehydrated dates (Muzaffar Garh)

Wholesalers were purchasing dehydrated dates on an average price of Rs 7150/100 kg and selling further to other stakeholders on an average price Rs 7700/100 kg, so the gross margin of wholesaler was Rs 550/100 kg.

The gross marketing margin of wholesalers was Rs 550/100 kg out of

this marketing cost was Rs 315/100 kg and the net margin was Rs 235/100 kg. As far as percent margin of wholesalers was concerned, he was getting 7.14% of the total margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 3.05%. The wholesaler had to pay Rs 315 as a cost and got net profit as percentage of margin 57.27%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg)

Profit as percentage of margin

Profit as percentage of sale price

= 7150 = 7700 = 550

= 550/7700*100 = 7.14

= 315

= 550-315= 235

= 235/550*100 = 42.73

= 235 / 7700*100 = 3.05

Table 10 - Marketing margin of wholesalers for dehydrated dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	7700	7150	550	315	235	
Percent			7.14	57.27	42.73	3.05

Source: author's own calculation

11) Wholesalers margin for hydrated dates (Muzaffar Garh)

Wholesalers were purchasing hydrated dates on an average price of

Rs 5850/100 kg and selling further to other stakeholders on an average price Rs 7150/100 kg, so the gross margin of wholesaler was Rs 1300/100 kg.

A. ADEEL, M. ASLAM, H.K. ULLAH, Y.M. KHAN, M.A. AYUB

The gross marketing margin of wholesalers was Rs 1300/100 kg out of this marketing cost was Rs 315/100 kg and the net margin was Rs 985/100 kg. As far as percent margin of wholesalers was concerned, he was getting 18.18% of the total

margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 13.77%. The wholesaler had to pay Rs 315 as a cost and got net profit as percentage of margin 75.76%.

Average purchase price (Rs/100 kg)
Average sale price (Rs/100 kg)
Gross marketing margin
Percent marketing margin
Average marketing cost (Rs/100 kg)
Net profit (Rs/100 kg)
Profit as percentage of margin

Profit as percentage of sale price

= 1300 = 1300/7150

= 1300/7150*100 = 18.18

= 315

= 5850

= 7150

= 1300-315= 985

= 985/1300*100 = 75.76= 985/7150*100 = 13.77

Table 11 - Marketing margin of wholesalers for hydrated dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	7150	5850	1300	315	985	
Percent			18.18	24.23	75.76	13.77

Source: author's own calculation

12) Retailers margin for fresh dates (Muzaffar Garh)

Retailers were selling three forms of dates fresh, dehydrated and hydrated, so marketing margins for each form was calculated. Retailers were purchasing fresh dates on an average price of Rs 5175/100 kg and selling further to other stakeholders on an average price Rs 6250/100 kg so the gross margin of retailer was Rs 1075/100 kg.

The gross marketing margin of retailers was Rs 1075/100 kg out marketing of this cost was Rs 275/100 kg and the net margin was Rs 800/100 kg. As far as a percent margin retailer was concerned, he was getting 17.2 % of the total margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 12.8%. The retailer had to pay Rs 275 as a cost and got net profit as percentage of margin 74.42%.

Average purchase price (Rs/100 kg) = 5175Average sale price (Rs/100 kg) =6250Gross marketing margin = 1075= 1075/6250*100 = 17.2Percent marketing margin Average marketing cost (Rs/100 kg) = 275Net profit (Rs/100 kg) = 1075-275= 800 Profit as percentage of margin = 800/ 1075*100 = 74.42 Profit as percentage of sale price = 800 / 6250*100 = 12.8

Table 12 - Marketing margin of retailers for fresh dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	6250	5175	1075	275	800	
Percent			17.2	25.58	74.42	12.8

Source: author's own calculations

13) Retailers margin for dehydrated dates (Muzzafar Garh)

Retailers purchasing were dehydrated dates on an average price of Rs 7750/100 kg and selling further to other stakeholders on an average price Rs 9550/100 kg. so the gross margin of retailer was Rs 1800/100 kg.

The gross marketing margin of retailers was Rs 1800/100 kg out of this marketing cost was Rs 285/100 kg and the net margin was Rs 1515/100 kg. As far as a percent margin retailer was concerned, he was getting 18.84% of the total margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 15.86%. The retailer had to pay Rs 285 as a cost and got net profit as percentage of margin 84.16%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) = 9550Gross marketing margin = 1800Percent marketing margin = 1800/9550*100 = 18.84Average marketing cost (Rs/100 kg) = 285Net profit (Rs/100 kg) = 1800-285 = 1515Profit as percentage of margin = 1515/ 1800*100 = 84.16 Profit as percentage of sale price = 1515 / 9475*100 = 15.86

= 7750

A. ADEEL, M. ASLAM, H.K. ULLAH, Y.M. KHAN, M.A. AYUB

Table 13 - Marketing margin of retailers for dehydrated dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit as % of sale price
Dates	9550	7750	1800	285	1515	
Percent	•		18.84	15.83	84.16	15.86

Source: author's own calculation

14) Retailers margin for hydrated dates (Muzaffar Garh)

Retailers were purchasing hydrated dates on an average price of Rs 7150/100 kg and selling further to other stakeholders on an average price Rs 9025/100 kg so the gross margin of retailer was Rs 1875/100 kg.

The gross marketing margin of retailers was Rs 1875/100 kg out

of this marketing cost was Rs 285/100 kg and the net margin was Rs 1590/100 kg. As far as a percent margin retailer was concerned, he was getting 20.7% of the total margin of marketing chain in district Muzaffar Garh. Profit as percentage of sale price was 17.61%. The retailer had to pay Rs 285 as a cost and got net profit as percentage of margin 84.8%.

Average purchase price (Rs/100 kg) Average sale price (Rs/100 kg) Gross marketing margin Percent marketing margin Average marketing cost (Rs/100 kg) Net profit (Rs/100 kg)

Profit as percentage of margin
Profit as percentage of sale price

= 7150 = 9025 = 1875

= 1875/9025*100 = 20.7

= 285

= 1875-285 = 1590

= 1590/ 1875*100 = 84.8 = 1590 /9025*100 = 17.61

Table 14 - Marketing margin of retailers for hydrated dates (Rs/100 kg) in Muzaffar Garh

Item	Average sale price (Rs/100 kg)	Average purchase price (Rs/100 kg)	Gross margin	Marketing cost (Rs/100 kg)	Profit margin	Profit ss % of sale price
Dates	9025	7150	1875	285	1590	
Percent			20.7	15.2	84.8	17.61

Source: author's own calculation

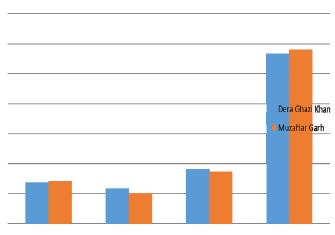


Figure 1 - Share of different stakeholders in the consumer price of fresh dates

Different intermediaries were taking different margins according to form of dates and locality. In Dera Ghazi, khan commission agent was taking 13.55%, wholesaler, 11.71% and retailer, 18.09% margin of marketing chain for fresh date and share of growers in consumer price was 56.09%. Commission agent was taking 14.13%, wholesaler, 10.67% and retailer, 17.2% margin of marketing chain for fresh date and share of growers in consumer price was 58% in Muzaffar Garh (*Fig. 1*).

CONCLUSIONS AND RECOMMENDATIONS

The present study was conducted to explore the current marketing margins of various stakeholders in existing marketing system of dates. Margins represent the price charged by marketing agencies for all services provided, including buying, packing, transportation, storage and processing. Private sector is dominant in all major

marketing activities. The market intermediaries in date marketing system involve commission agent, wholesaler and retailer. Different intermediaries were taking different margins according to form of dates and locality. In Dera Ghazi khan, commission agent was taking 13.55%, wholesaler. 11.71% and retailer. 18.09% margin of marketing chain for fresh date and share of growers in price consumer was 56.09%. Commission taking agent was 14.13%, wholesaler, 10.67% retailer, 17.2% margin of marketing chain for fresh date and share of growers in consumer price was 58% in Muzaffar Garh.

Date is a very profitable commodity, but growers were not getting their suitable share of their produce due to poor marketing system. It seems difficult for the growers to sale their own produce in a good market due to lack of enough resources and marketing facilities. Government should provide credit

facilities to the growers and reduce the number of intermediaries between producer and consumers in these areas. Considering the facts that with marketing present system, commission agents, wholesalers, as well as retailers were taking a good share of profit and small was going to the date growers' part. The price of date is much high due to long chain of marketing system. In order to reduce wholesale and retail prices, government should take measures to establish date marketing centers and supply chain management training programs for the date growers.

REFERENCES

- Abbott, J.C. & Makeham, J.P. (1990).

 Agricultural economics and marketing in the tropics (2nd edition).

 Intermediate Tropical Agricultural Series, Longman, Group Ltd, London, UK.
- Abassian, M., Koshteh, K., Esmaeili, M. & Ebrahimzadeh, H. (2012). The economic analysis of marketing margin of Mazafati date: a case study of Sistan and Blouchestan, Iran. Int.J.Agric.Crop Sci., 4(7): 390-397.
- Ahmed, Q.B. (2000). Date palm production and marketing constraints in Balochistan (Pakistan). Balochistan Journal of Agricultural Sciences, 1(1): 22-26.
- Aslam, M., Ghafoor, A., Hashmi, A.H., Raza, M.A. & S. Rasool, S. (2013). Marketing margins analysis of seed cotton in district Khanewal, Pakistan. *Pak.J.Sci.*, 65(2):224-227.
- Aujla, K.M., Shah, N.A., Ishaq, M. & Farooq, A. (2011). Post-harvest losses and marketing of grapes in Pakistan. Sarhad J.Agric., 27(3): 485-490.

- Baba, S.H., Wani, M.H., Wani, S.A. & Yousuf, S. (2010). Marketed surplus and price spread of vegetables in Kashmir valley. *Agric. Econ. Res. Review*, 23: 115-127.
- Bashir, A., Abbas, M., Sheikh, A.D. & Mahmood, K. (2006). Citrus marketing system in the Punjab. *PJLSS*, 4(1-2): 27-33.
- Chauhan, S. K & Chhabra, A. (2005).

 Marketable surplus and price-spread for maize in Hamirpur district of Himachal Pradesh. *Agric. Econ. Rev.* 18: 39-49.
- Government of Pakistan (2013).

 Pakistan economic survey, 20122013. Economic Advisor's Wing,
 Finance Division, Islamabad.
- **Joshi, G. (2012).** An analysis of marketed surplus and price spread of okra in Western Uttar Pradesh. *IJMT*, 2(5): 174-185.
- Khair, S.M., Ahmad, M. & Ehsanullah (2008). Margins and channels for shin kulu (*Golden delicious*) apple produced in Pishin: a case study. *Sarhad J.Agric.*, 24(4): 755-761.
- Khushk, A.M., Memon, A. & Aujla, K.M. (2009). Marketing channels and margins of dates in Sindh, Pakistan. *J.Agric.Res.*, 47(3): 293-308.
- Liu, P. (2003). The marketing potential of date palm fruits in the European market. Raw Materials, Tropical and Horticultural Products Service Commodities and Trade Division. FAO Commodity and Trade Policy Research Working Paper, No. 6.
- Maske, M., Jain, B.C. & Pramod Parwate (2012). An analysis of marketable surplus and price spread of papaya in Raipur district of Chhattisgarh. *Intl.J.Agron. Plant Prod.*, 3(3): 89-93.
- Rasool, S., Ghafoor, A. & Aslam, M. (2013). An estimation of marketing margins of inland fish in district Faisalabad, Pakistan. Paper Presented in International Divine Economics Conference at University of Azad Jammu and Kashmir, Pakistan.