Marketing margin of mandarin: case study of Sargodha region Pakistan

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ABSTRACT

Pakistan is among the top ten countries in the world with large area under citrus orchards. Punjab province is endowed with one of the best Kinnow varieties of the world and Sargodha district has largest share in area and production. The primary data was collected from two tehsils (revenue units) of Sargodha district, namely Sargodha and Bhalwal. The Value Chain Analysis was performed to investigate the marketing inefficiency of Mandarin trade. The study concluded that by decreasing the number of the intermediaries in both form i.e. open and packed, not only the purchased price of the consumer decreased but also producer received high profit.

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Introduction

Pakistan is among the top ten countries in the world with large area under citrus orchards. Among the citrus, mandarin (loose skin variety with easy peel off character) also known as kinnow, contributed 60 percent share in the area and more than 90 percent in foreign exchange earnings in Pakistan (Sharif and Ahmed 2005). Pakistan stood at 8th and 38th position in area and production wise among all the citrus producing countries in the world FAO (2008).

Punjab province is the major contributor of the mandarin production in Pakistan. Nearly 182,000 hectares are located in Punjab province with 2.3 million tons production. Sargodha district ranked 1st in area and production (46 percent and 54 percent respectively) GOP (2006).The review of literature showed that with the rapid increase in the citrus area in Pakistan, several productions and marketing problems emerged, which needed carefully investigation. Pakistan inefficient marketing structure is the main reason for low yield that leads to inappropriate price signals. Mushroom growth of intermediaries in marketing chain and inadequate marketing arrangements spoiled the fruit before reaching the end consumer. The out dated and traditional production practices, poor cold storage facilities and poor packing were the reasons for low export and marketing margin. The high cost of transportation facilities for haulage for the fruit and non availability of credit on easy terms increased the prices at the altar of quality deterioration. Despite high profitability, availability of irrigation water and varied climatic conditions, production and marketing of the mandarin varied due to lack of proper research in developing locally high quality seed, incidence of high pest and disease and lack of access to credit GOP (2006).

The Value Chain Analysis is the sequence of activities in which products, passing through all activities of the chain, for each activity gains some value.

This study aimed to calculate the marketing cost and margin of various channels and suggest policy parameters for the improvement in the existing marketing system.

Related studies

The studies related directly or indirectly with the present study were: Richards, *et.al*(1996), Prakash and Singh (2002), Gadre *at.el*(2002), Ali, (2004), Sharif *et.al* (2005), Haleem *et.al* (2005), Van, *et.al* (2006), Mukhtar and Javed (2008)

Prakash and Singh (2002) found that by measuring marketing cost and margin producer's share may be increased by decreasing intermediaries. Regulated market was observed in Sri Ganganagar district in Rajasthan state being the largest kinnow growing area in India during 1996-97. based upon cumulative total method. Benefit-cost analysis indicated that without bearing immense cost and proper marketing, appropriate cultivation, scientific picking and packing, sufficient prices and modern means of communication can not be attained Ali (2004). Pakistan had to face both supply and demand management problems due to inefficient marketing system.

The authors suggested that by the removal of unnecessary market intermediaries and proper direction, situation can be improved especially in case of picking, packing, storage and handling of kinnow Haleem *et.al.* (2005) estimated that 90 percent citrus grower sold their orchard to contractor in Pakistan. Estimation of marketing margins exposed that retailer received three times high prices than producer while the absolute cash margin analysis showed that contractor received 89 percent of margin and faced the highest marketing cost while commission agent the lowest.

The author used deconstructing marketing margin analysis to show that retailer received the highest gross return and rate of return than any other functionary. Through market integration analysis of the weekly price data for last two decade, Sargodha market was found better integrated than Faisalabad.

Mukhtar and Javed, (2008) following two step procedure introduced by price pairs of four regional markets of Pakistan estimated the market integration.

The monthly wholesale price data of maize for four regional markets from 1995 to 2005 was used. All the price series were integrated of order one.

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Data and Methodology

The primary data and explanatory description was collected through the well designed questioners after pre-testing. The sample was comprised of two Tehsils (revenue units) of Sargodha. For the Value Chain Analysis (VCA), the market intermediaries were interviewed such as producer; (130), pre-harvest contractors; (10), wholesalers ;(10), retailers; (30), consumers; (30), factory owners; (08). The number of respondents was given in brackets.

Data was analyzed for the value chain by using marketing cost, marketing margin under two categories, open citrus (Mandarin) and packed citrus (Mandarin).

Marketing Cost

The amount required to spend for a buying the product called price or cost .The expenditure of marketing activities, such as time, labor and money necessary for the attainment of the good was called cost of that good.

Marketing Margin

Marketing margin was computed as difference between the payment received by seller, the prices paid by the buyer for a finished product and for equivalent quantities of the product.

Marketing Margin = Payment Received by Seller– Price Paid by Buyer

The variables used in measuring marketing cost and margin were discussed in the Annex.

Mandarin in Open Form

Channel I

The pre-harvest contractor openly carried the fruit to the local market and sold to wholesaler through commission agent (Fig I). The wholesaler further sold the fruit to retailer and then end consumer. At each step the value of the Kinnow increased because each intermediary included marketing cost in the value of the Kinnow. The marketing cost, marketing margin and profit of each intermediary and value of citrus at the start and end of the chain was obtained in Table 1.The results revealed that the starting value of citrus changed at various steps depending upon the number of intermediaries involved in the price spread . In the production process, producer contracted with per harvest contractor to sell the fruit. The result revealed that producer sold the fruit at Rupees (Rs). 75.98/40kg. The selling price of producer became purchased price of pre-harvest contractor. Later on, contractor started picking, packing, watch and ward of the orchard. The contractor endured the field level cost of Rs. 11.12 /40kg. The total marketing cost of the contactor to carry the citrus from orchard to local market in open form was Rs. 113.93 /40kg. The marketing cost includes transportation, loading, unloading, losses at market level, commission charges (@ rate of 4 percent) and storage cost. The contractor sold the fruit in local market at Rs. 460/40kg that became the purchased price of the wholesaler. The marketing margin and profit of the contractor was Rs. 384.02/40Kg and Rs. 270.09/40Kg respectively.

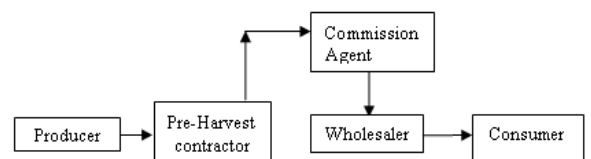**Fig I: Marketing of Mandarin in Channel I, Citrus in Open Form**

The wholesaler purchased fruit from pre-harvest contractor through commission agent. The total marketing cost of the

wholesaler was Rs. 68.84/40Kg including labor, *paladari(loader)*, meal, loading, unloading, share to commission agent (@ rate of 4 percent), market fee, own management cost moreover in miscellaneous cost, rent of the shop, telephone bill, *munshi* (assistant) fee, stationery fee, electric bill also included. The marketing margin and profit of the wholesaler was Rs..326/40Kg and Rs. 257.16/40Kg respectively. The selling price of the wholesaler and purchased price of the retailer was Rs. 786/40Kg. The analysis showed that from producer to retailer, value of the citrus increased from Rs. 75.98/40Kg to Rs. 786/40Kg. The total marketing cost of the retailer was Rs. 29.40/40Kg. The share of mandarin in total marketing cost was Rs. 13.99/40Kg. The marketing margin and profit of the retailer was Rs. 114/40Kg and Rs. 100/40Kg respectively. The retailer sold mandarin to the end consumer at Rs. 900/40Kg. The whole investigation illustrated that each intermediary included his marketing cost into value of the mandarin and sold to the next person at higher price as compared to purchased price. It was clear from the discussion that when mandarin was purchased by consumer, the value of the Kinnow increased 12 times and each intermediary sold fruit after having margin and profit and included marketing cost into selling price.

Channel II

In second channel, pre-harvest contractor disposed the fruit to the wholesaler and wholesaler sold to direct consumer instead of retailer (fig II). In this case, the wholesaler sold fruit directly to the consumer that's why consumer did not pay the marketing cost of the retailer which was invisible in the value of the mandarin. The purchased price, marketing cost, margin, profit and selling price of the pre-harvest contractor remained the same but marketing cost, margin and profit of the wholesaler was different as compared to previous channel. The consumer purchased mandarin at Rs. 850/ 40 Kg, shown in table 2.

Fig II: Marketing of Mandarin in Channel II, Citrus in Open Form

Channel III

Third channel was discussed on the basis of missing pre-harvest contractor (Fig III). The deal between wholesaler and producer through commission agent increased not only the margin of producer but also decreased the purchased price of consumer.

**Fig III: Marketing of Mandarin in Channel III, Citrus in Open Form**
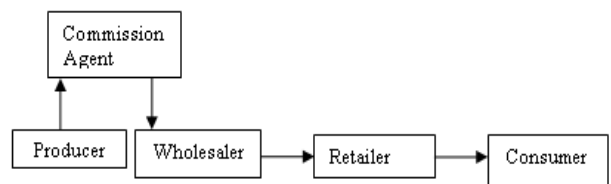
The Table 3 showed that selling price of producer was different from pre-harvest contractor (Rs. 100/40Kg). The producer charged high price due to small quantity demanded by wholesaler, to keep his margin maintained producer demanded high price from the wholesaler. The wholesaler remained at an

advantage by purchasing directly from producer because he purchased mandarin at low price as compared to pre-harvest contractor. The marketing cost, margin and profit of each functionary varied from channel one and two. The purchased price of the retailer was also low as compared to other two channels. The marketing cost, margin and profit of the retailer was Rs 16.66/40Kg, Rs 200/40Kg and Rs. 191/40Kg respectively. In this channel, consumer purchased mandarin at Rs. 650/40Kg which was less than the other two channels drawn earlier.

Channel IV

The marketing margin of the wholesaler was more than 50 percent when he purchased through commission agent and sold to the direct consumer. In this channel, only two intermediaries i.e. wholesaler and commission agent found between producer and consumer portrayed in fig IV.

Fig IV: Marketing of Mandarin in Channel IV, Citrus in Open Form
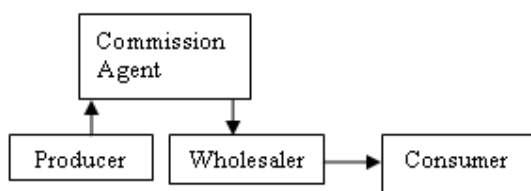
The wholesaler purchased through commission agent and sold directly to consumer, and all the three intermediaries remained at an advantage. Table 4 revealed that producer's selling price was higher as compared to pre-harvest contractor as revealed in earlier three channels. However, purchased price of the wholesaler remained low as compared to channel one. The marketing cost, margin and profit of the wholesaler was Rs. 55.04/40Kg, Rs. 500/40Kg and Rs. 444.96/40Kg respectively. The purchased price of the end consumer was lowest as compared to other channels i.e. the purchased price was Rs. 600/40Kg.

Channel V

The marketing cost, margin and profit of the retailer and purchased price of the consumer tend to be low, if direct transaction occurred between producer and retailer without other market functionaries (fig V).

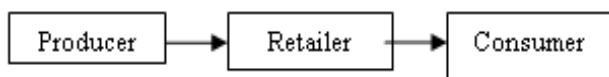**Fig V: Marketing of Mandarin in Channel V, Citrus in Open Form**

Table 5 revealed that consumer purchased mandarin from the retailer at the lowest value i.e. Rs. 550/40 Kg as compared to all above mentioned channels. Outside the market, retailer did not bear marketing cost except labor, transportation and losses, that's why his marketing cost was also very low as compared to all other channels. The marketing cost was Rs. 14.59 /40Kg and share of Kinnow in total marketing cost was Rs. 11.82/40Kg.
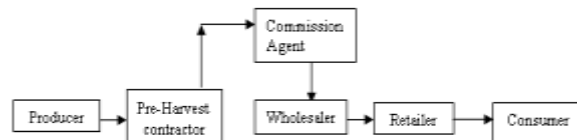
Mandarin in Packed Form

In second category, pre-harvest contractor packed the fruit and charged high prices. The cost of the packing material was also included in the field cost. Due to the packing material each intermediary charged high prices as compared to open fruit. The limited packed fruit came in the market because of low demand of the packed fruit by consumer moreover intermediaries especially retailers purchased in packed form and sold openly to

the end consumer. In packed form the marketing structure was as under:

Channel VI

The Table 6 along with fig VI showed high marketing cost and selling price of pre-harvest contractor due to packing material that was also included in field cost. The total marketing cost of the pre-harvest contractor was Rs. 134.21/40Kg included field cost, transportation, loading, unloading, losses, commission charges and storage cost. The selling price of the pre-harvest contractor and purchased price of the wholesaler was Rs. 526.50/40Kg while marketing margin and profit of the pre-harvest contractor was Rs. 450.52 /40Kg and Rs. 316.31/40Kg respectively. The results in Table 6 revealed that pre harvest contractor fetched higher margin and profit in packed form as compared to channel one in open form Similarly each functionary of the supply chain charged high price of the packed fruit due to high purchased price and marketing cost. The purchased price of the end consumer was Rs. 915/40Kg which was also high as compared to channel one in open form. In conclusion the packing cost of the contractor and limited demand of packed fruit by consumer increased the price of the packed fruit at every step as compared to fruit in open form.

Fig VI: Marketing of Mandarin in Channel VI, Citrus in Packed Form

Channel VII

The retailer purchased mandarin from pre- harvest contractor instead of wholesaler in packed form and sold to the consumer (Fig VI). In packed form, pre-harvest contractor charged high prices because of packing cost involved in marketing cost of the contractor. The consumer eventually paid high prices. The data was obtained in Table 7. The field and marketing cost of the pre-harvest contractor remained the same but he sold the fruit to retailer instead of wholesaler. The retailer purchased mandarin from pre-harvest contractor at low price i.e. Rs. 526.50/40Kg as compared to the wholesaler. The marketing cost and marketing margin of the contractor was Rs. 134.21/40Kg and Rs. 450.52/40Kg respectively. The retailer received marketing margin and profit Rs. 123.50/40Kg and Rs. 99.80/40Kg respectively while the share of Kinnow in retailer's marketing cost was Rs. 11.85/Kg.

Fig VII: Marketing of Mandarin in Channel VII, Citrus in Packed Form
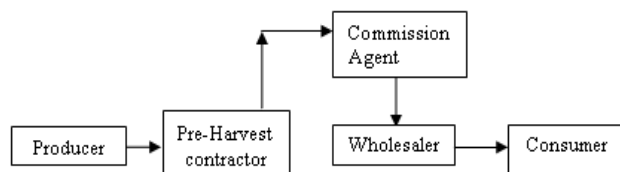
Channel VIII

The pre-harvest contractor fetched higher margin when produce was sold to the outside buyer (Fig VII). The buyer may be commission agent of the market outside of the Sargodha region. The pre-harvest contractor preferred to sell fruit outside the local market to fetch high profit. The outside buyer came to the local market of the Sargodha and made a contract with the pre-harvest contractor. Outside buyer preferred Kinnow of the

Sargodha due to specialty. The Sargodha region has greater supply of mandarin from all over the Pakistan. The contractor remained in profit during transaction of mandarin outside the Sargodha market. The marketing cost of the contractor was Rs. 134.21/40Kg and marketing margin was Rs. 590.02/40Kg. The selling price of the contractor was Rs. 666/40Kg coupled with Rs. 455.81/40 Kg profits, shown in table 8. This was high as compared to channel one in open form as well as in packed form.

Fig VIII: Marketing of Mandarin in Channel VIII, Citrus in Packed Form
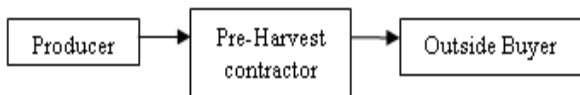
Channel IX

The pre harvest contractor even got higher margin in case of dealing with factory owner due to lack of marketing cost and marketing losses. Moreover, factory also get high margin as compared to other channels in case of selling out of the Sargodha region. This channel was shown in fig IX. No marketing cost was incurred by pre-harvest contractor while selling the fruit to the factory owner and earned high profit and margin i.e. Rs. 609.02/40Kg and Rs .510.48/40Kg as compared to other channels. Moreover, table 9 reveled that total cost incurred by factory owner was Rs. 65.98/40Kg with Rs. 1260/40Kg selling price during sale outside the Sargodha region. Marketing margin and profit of the factory was Rs 575/40Kg and Rs. 509.02/40Kg respectively.

Fig IX: Marketing of Mandarin in Channel IX, Citrus in Packed Form

Channel X

The marketing channel, in which factory owner purchased mandarin from pre harvest contractor and then exported, was explained in fig X. Table 10 showed high profit and margin received from export of the mandarin by factory owner. The marketing cost, margin and profit of the factory owner were Rs. 64.38/40Kg, Rs. 1340/40Kg and Rs. 1275.62/40Kg respectively.

Fig X: Marketing of Mandarin in Channel X, Citrus in Packed Form
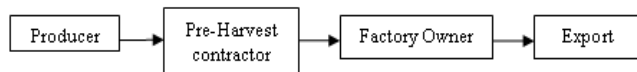
Conclusion and Policy Recommendations

In the local market when mandarin was sold in open form, each intermediary received profit and margin while adding marketing cost into selling price. With the elimination of the intermediaries marketing cost decreased and marketing margin and profit increased of the remaining functionaries. Moreover, if consumer purchased Kinnow directly from producer both sides gained high profit. In case of packed fruit, market became limited because of less packed fruit was demanded by consumer. The contractor received high profit and margin during sale of the Kinnow outside the Sargodha region as compared to the local market. No marketing cost was incurred by contractor when he sold fruit to the factory in packed form, and thus, received high profit as compared to other two cases. The factory owner earned profit through export and selling outside the Sargodha market. In case of export, factory owner got more than double profit.

Following policy recommendations were suggested to remove the inefficiency of marketing system

➢Government should promote private sector initiative for investment in establishing fruit markets duly regulated by the government

➢Market fee should be utilized to establish well organized fruit marketing system to reap the benefits of value addition.

➢Fruit, picking, packing, processing and transportation facilities should be improved to avoid the losses in order to meet global requirements

➢The Government should consider establish farmers market to minimize the role of intermediaries. The government should provide space and infrastructure to establish such markets as private sector initiative.

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Table 1: Marketing Cost, Margin and Profit of Mandarin in Channel One in Sargodha District, 2009

S.No	Item	Rs./40Kg
1	Selling Price of Producer/Purchased Price of Pre- Harvest Contractor	75.98
2	Total Marketing Cost Incurred by Pre-Harvest Contractor	113.93
i	Field Level Cost	11.12
ii	Transportation Cost	2.43
iii	cost of loading and unloading	3.28
iv	Losses at market level	9.20
v	Commission charges @ 4 percent	18.40
vi	Storage Cost	69.50
	Selling Price of Pre-Harvest Contractor/Purchased Price of Wholesaler actor	460.00
	Marketing Margin of Pre-Harvest Contractor	384.02
	Profit of Pre-Harvest Contractor	270.09
3	Total Marketing Cost Incurred by Wholesaler	68.84
i	Labor Cost	1.85
ii	"Pladari" Cost	2.22
iii	Market Fee	0.34
iv	Meal Cost	2.50
v	Loading and Handling Loss	7.86
vi	Commission charges	30.94
vii	Own Management	2.29
viii	Misc. Cost	20.84
	Selling Price of Wholesaler/Purchased Price of Retailer	786.00
	Marketing Margin of Wholesaler	326
	Profit of Wholesaler	257.16
4	Total Marketing Cost Incurred by Retailer	29.40
i	Labor Cost	0.85
ii	Transportation Cost	0.18
iii	Pladari Cost	0.33
iv	Own Management	0.06
v	Loading and Handling Loss	26.74
vi	Miscellaneous Cost	1.23
	Selling Price of Retailer/Purchased Price of Consumer	900
	Share of Kinnow in Marketing Cost of Retailer	13.99
	Marketing Margin of Retailer	114
	Profit of Retailer	100

Table 2: Marketing Cost, Margin and Profit of Mandarin in Channel II in Sargodha District, 2009

S.No	Item	Rs./40Kg
1	Selling Price of Producer/Purchased Price of Pre -Harvest Contractor	75.98
2	Total Marketing Cost Of Pre- Harvest Contractor	113.93
i	Field Level Cost	11.12
ii	Transportation Cost	2.43
iii	Loading unloading cost	3.28
iv	Losses at market level	9.20
v	Commission charges @ 4 percent	18.40
vi	Storage Cost	69.50
	Selling Price of Pre-Harvest Contractor	460
	Marketing Margin Of Pre- Harvest Contractor	384.02
	Profit Of Pre- Harvest Contractor	270.09
3	Selling Price of Pre- Harvest Contractor /Purchased Price of Wholesaler	460
4	Total Marketing Cost Of Wholesaler	68.64
i	Labor Cost	1.85
ii	Pladari Cost	2.22
iii	Market Fee	0.34
iv	Meal Cost	2.5
v	Loading and Handling Loss	7.86
vi	Commission charges	30.94
vii	Own Management	2.29
viii	Miscellaneous Cost	20.84
	Selling Price Of Wholesaler/Purchased Price of Consumer	850
	Marketing Margin Of Wholesaler	390
	Profit Of Wholesaler	321.16

Table 3: Marketing Cost, Margin and Profit of Mandarin in Channel III in Sargodha District, 2009

S.No	Item	Rs./40Kg
1	Selling Price of Producer/Purchased Price of Wholesaler	100
2	Total Marketing Cost of Wholesaler	55.04
i	Labor Cost	1.75
ii	Pladari Cost	2.22
iii	Market Fee	0.11
iv	Meal Cost	1.65
v	Loading and Handling Loss	6.02
vi	Commission charges @ 4 percent	24.08
vii	Own Management	1.77
viii	Misc. Cost	10
	Selling Price of Wholesaler	500
	Marketing Margin of Wholesaler	350
	Profit of Wholesaler	294.96
3	Selling Price of Wholesaler/Purchased Price of Retailer	450
	Total Marketing Cost of Retailer	16.66
i	Labor Cost	1.00
ii	Transportation Cost	0.08
iii	Pladari Cost	0.30
iv	Own Management	0.05
v	Loading and Handling Loss	14.24
vi	Miscellaneous Cost	0.99
	Selling Price of Retailer/Purchased Price of Consumer	650
	Share of Kinnow in Marketing Cost of Retailer	8.41
	Marketing Margin of Retailer	200
	Profit of Retailer	191

Table 4: Marketing Cost, Margin and Profit of Mandarin in Channel IV in Sargodha District, 2009

S. NO	Item	Rs./40Kg
1	Selling Price of Producer/Purchased Price Wholesaler	100
	Total Marketing Cost of Wholesaler	55.04
i	Labor Cost	1.75
ii	Pladari Cost	2.22
iii	Market Fee	0.11
iv	Meal Cost	1.65
v	Loading and Handling Loss	6.02
vi	Commission charges @ 4 percent	24.08
vii	Own Management	1.77
viii	Misc. Cost	17.44
	Selling Price of Wholesaler/Purchased Price Consumer	600
	Marketing Margin of Wholesaler	500
	Profit of Wholesaler	444.96

Table 5: Marketing Cost, Margin and Profit of Mandarin in Channel V in Sargodha District, 2009

S. NO	Item	Rs./40Kg
1	Selling Price of Producer/Purchased Price of Retailer	125
2	Total Marketing Cost of Retailer	14.59
i)	Labor Cost	6.95
ii)	Transportation Cost	2.6
iii)	Loading and Handling Loss	5.04
	Selling Price of Retailer/Purchased price of the consumer	550
	Share of Kinnow in Marketing Cost of Retailer	11.82
	Marketing Margin Of Retailer	425
	Profit Of Retailer	413.18

Table 6: Marketing Cost, Margin and Profit of mandarin in Channel VI in Sargodha District, 2009

S. NO	Item	Rs./40Kg
1	Selling Price of Producer/Purchased Price of Pre-Harvest Contractor	75.98
2	Total Marketing Cost of Pre-Harvest Contractor	134.21
	Field Level Cost	25.32
	Transportation Cost	2.50
	Loading unloading cost	0.03
	Losses at market level	15.80
	Commission charges @ 4 percent	21.06
	Storage Cost	69.50
	Marketing Margin of Pre-Harvest Contractor	450.52
	Profit of Pre-Harvest Contractor	316.31
	Selling Price of Pre-Harvest Contractor/Purchased Price of Wholesaler	526.50
3	Total Marketing Cost of Wholesaler	67.02
i	Labor Cost	2.00
ii	Pladari Cost	2.30
iii	Market Fee	0.14
iv	Meal Cost	2.50
v	Loading and Handling Loss	5.32
vi	Commission charges @ 4 percent	31.57
vii	Own Management	2.29
viii	Misc. Cost	20.90
	Marketing Margin of Wholesaler	273.50
	Profit of Wholesaler	206.48
	Selling Price of Wholesaler/Purchased Price of Retailer	800.00
4	Total Marketing Cost of Retailer	23.29
i	Labor Cost	0.9
ii	Transportation Cost	0.2
iii	Pladari Cost	0.35
iv	Own Management	0.08
v	Loading and Handling Loss	20.36
vi	Miscellaneous Cost	1.4
	Selling Price of Retailer/Purchased Price of Consumer	915
	Share of Kinnow in Marketing Cost of Retailer	11.645
	Marketing Margin of Retailer	115.00
	Profit of Retailer	91.71

Table 7: Marketing Cost, Margin and Profit of Mandarin in Channel VII in Sargodha District, 2009

S. NO	Item	Rs/40Kg
1	Selling Price of Producer/Purchased Price of Pre-Harvest Contractor	75.98
2	Marketing Cost of Pre-Harvest Contractor	134.21
	Field Level Cost	25.32
i	Transportation Cost	2.50
ii	Loading unloading cost	0.03
iii	Losses at market level	15.80
iv	Commission charges @ 4 percent	21.06
v	Storage Cost	69.50
	Selling Price of Pre-Harvest Contractor	526.50
	Marketing Margin of Pre-Harvest Contractor	450.52
	Profit of Pre-Harvest Contractor	316.31
	Selling Price of Pre-Harvest Contractor/Purchased Price of Retailer	526.50
3	Total Marketing Cost of Retailer	23.7
i	Labor Cost	0.12
ii	Transportation Cost	0.5
iii	Pladari Cost	0.53
iv	Own Management	0.1
v	Loading and Handling Loss	20.45
vi	Miscellaneous .Cost	2
	Selling Price of Retailer/Purchased Price of Consumer	650
	Share of Kinnow in marketing cost	11.85
	Marketing Margin of Retailer	123.50
	Profit of Retailer	99.80

Table 8: Marketing Cost, Margin and Profit of mandarin in Channel VIII in Sargodha District, 2009

S. NO	Item	Rs/40Kg
1	Selling Price of Producer/Purchased Price of Pre-Harvest Contractor	75.984
2	Total Marketing Cost of Pre-Harvest Contractor	134.21
	Field Level Cost	25.32
i	Transportation Cost	2.5
ii	Loading unloading cost	0.03
iii	Losses at market level	15.8
iv	Commission charges @ 4 percent	21.06
v	Storage Cost	69.5
	Selling Price of Pre-Harvest Contractor, Out side of the Sargodha Market	666
	Marketing Margin of Pre-Harvest Contractor	590.02
	Profit of Pre-Harvest Contractor	455.81

Table 9: Marketing Cost, Margin and Profit of Mandarin in Packed Form (Channel IV) in Sargodha District, 2009

S. NO	Item	Rs/40Kg
1	Selling Price of Producer/Purchased Price of Pre-Harvest Contractor	75.98
2	Total Marketing Cost of Pre-Harvest Contractor	98.54
	Field Level Cost	25.32
	Transportation Cost	3.72
	Storage Cost	69.5
	Marketing Margin Of Pre-Harvest Contractor	609.02
	Profit Of Pre-Harvest Contractor	510.48
	Selling Price of Pre-Harvest Contractor/Purchased Price of Factory owner	685
3	Total Marketing Cost of Factory owner, Outside Local Market	65.98
i	Storage Cost	1.52
ii	Field Level Cost	7.24
iii	Process Losses	53.63
iv	Labor Cost	1.41
v	Electricity & Phone Cost	1.05
vi	Polishing Cost	0.07
vii	Fungicide Cost	0.94
viii	Transport Cost	0.12
	Selling Price of Factory owner, Outside Local Market	1260
	Marketing Margin Of Factory owner, Outside Local Market	575
	Profit Of Factory owner, Outside Local Market	509.02

Table 10: Marketing Cost, Margin and Profit of Mandarin in Channel X in Sargodha District, 2009

Sr. NO	Item	Rs/40Kg
1	Selling Price of Producer/Purchased Price of Pre-Harvest Contractor	75.98
2	Total Marketing Cost of Pre-Harvest Contractor	98.54
	Field Level Cost	25.32
	Transportation Cost	3.72
	Storage Cost	69.5
	Selling Price of Pre-Harvest Contractor	685
	Marketing Margin Of Pre-Harvest Contractor	609.02
	Profit Of Pre-Harvest Contractor	510.48
	Selling Price of Pre-Harvest Contractor/Purchased Price of Factory owner	685
3	Total Marketing Cost of Factory owner	64.38
i	Storage Cost	1.52
ii	Field Level Cost	7.24
iii	Process Losses	40.5
iv	Labor Cost	3.21
v	Electricity Cost	1.33
vi	Polishing Cost	3.94
vii	Fungicide Cost	3.69
viii	Transport Cost	0.78
ix	Phone Cost	2.17
	Export Price of Factory owner	2025
	Marketing Margin Of Factory owner, When Export	1340
	Profit Of Factory owner, When Export	1275.62

Note: The prices and costs were obtained from the market through survey methods