MARKETING OF SWEET ORANGE (MALTA) IN KUMAON REGION OF UTTARAKHAND

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ABSTRACT

An attempt has been made to study the marketing of sweet orange in Almora district of Kumaon region (Uttarakhand). Primary data was collected from various stakeholders constituting forty growers and five intermediaries operating at each level of marketing channels. Six distribution channels were identified. More than 57 per cent of the produce was sold directly to the village trader. Marketing cost varied from `278 per quintal to `894.16 per quintal in channel I. A major component of the marketing cost of the producer was cost incurred on mules (`150 per quintal). The producers were earning 100 per cent margin in channel I and channel II. The producer's share in consumer's rupee was 9.38 per cent and 8.60 per cent in channel II and I respectively. Channel IV was the most efficient channel with efficiency of 1.27. Channel VI was least efficient (1.00). The producers are getting only 9 per cent of the consumer's price. The spatial price difference between the local market and distant market is very wide i.e. more than `2000 per quintal. The main component of cost of producers is the labor cost and transportation cost borne by producers. The farmers of the hilly areas must be properly linked to the market through proper roads and other infrastructure and through co-operative federation. There is a need to form the active marketing self- help groups which can take the advantage of the distant and competitive markets, benefiting the members by remunerative price. To reduce the spatial differences in the price of produce, better transport and storage facilities are also required.

KEY WORDS: *Marketing cost, Sweet orange, Margins, Market access*

INTRODUCTION

India has the unique distinction of being able to grow almost all the varieties of fruits and vegetables. India is second largest producer of fruits in the world (9 per cent) after China. Annual growth of fruit production is 37.4 per cent from 28.63 million tonnes is 1991-92 to 63.50 million tonnes in 2007-08. Within India West Bengal is the largest producer of horticultural crops accounting for 12.20 per cent of India's total horticultural crop production followed by Uttar Pradesh (11.10 per cent) and Bihar (9.53 per cent) in 2004-05. Major fruits cultivated in India are mango (38.28 per cent), banana (16.27 per cent), *Citrus* (13.39 per cent), apple (5.98 per cent) and guava (5.26 per cent). *Citrus* is the third most important tropical fruit crop of India after mango and banana with an area of 712.4 thousand hectares and 5996.9 thousand metric tonnes of production. The most important *Citrus* growing states in India are Andhra Pradesh, Maharashtra, Orissa, Gujarat and Uttarakhand.

In Uttarakhand, *Citrus spp.* occupies about 14.14 per cent (26410 ha) of total fruit area in the year 2006- 07. Kumaon region is one of the major *Citrus* growing regions of Uttarakhand with 49.90 per cent (13179 ha) of the total *Citrus* area in Uttarakhand in the year 2006-07 and has got the maximum production, which was around 51.37 per cent (64195 metric tonnes) of the total *Citrus* production in state in the year 2006-07. Kumaon region comprises of 6 districts and Almora districts marks itself distinctly in production of *Citrus* species, with a production of 59.03 per cent (33022) metric tonnes of the total *Citrus* production in Kumaon region from an area of 39.34 per cent (4236 ha) of total area under *Citrus* in Kumaon region in the year 2006-07. Sweet orange is the major *Citrus* species of this district comprising of 40 per cent of total *Citrus* species production in the district. So due to its high production in the district, it is necessary to tap the potential which this crop carries so the farmers can earn a high return and encash their high produce. It is important to have an efficient marketing system, so that the

producers get appropriate returns for their produce and consumers get them at reasonable price.

The production of sweet orange being seasonal and localized to favoured agro-climatic conditions coupled with the perishability of the produce pose several problems on marketing front. Seasonal gluts, distress sale and volatile behaviour of price are, therefore, common phenomenon in all assembling markets during normal production season. Then marketing and transportation of fruit crops are other hurdles in the way of fruit growers of hilly areas who are also exploited by middlemen resulting in the low share of farmer in the consumer's rupee. Further, the continued adoption of unorganized marketing practices also lead to high marketing costs, margins and price spread which all combine together to snatch away the economic attraction which the crop holds and the keenness in the producer farmers to invest in the improved technology and better inputs. Besides these factors the development in hilly areas is circumscribed by the specificities namely inaccessibility, marginality and fatality which contribute in physical isolation distance and high transportation cost.

In the backdrop of above situation, the regional studies can be very helpful in identifying alternative solutions that may be adopted by farmers, marketers and policy makers. Thus the overall objective of present paper is to examine the marketing of sweet orange (malta) in the hilly area of Uttarakhand and to develop proper marketing arrangement for fruit crops. The specific objectives are:

1. To identify the major distribution channels involved in the marketing of sweet orange
2. To compute marketing costs and margins, price spread and efficiency of different marketing channels.

METHODOLOGY
1 Sampling design and study area:
1.1 Selection of the study area

Multistage purposive and random sampling techniques were used to examine the marketing of sweet orange. In the first stage Almora district of Kumaon region was selected purposively based on the importance and contribution in terms of area and production of sweet orange in Uttarakhand. Tarikhet block of Almora district was selected as it had the highest area under sweet orange production. A sample size of around forty growers was selected randomly. To study the various aspects of marketing, five intermediaries operating at each level of marketing channel were identified and contacted.

The primary data were collected from the selected farmers, wholesalers, retailers, and various other agencies and people involved in the marketing with the help of a pre structured schedule by personal interview method.

2 Analytical framework
2.1 Marketing system
2.1.1 Marketing cost
$C = C_f + C_{m1} + C_{m2} + C_{m3} + \ldots\ldots\ldots\ldots + C_{mi}$
Where,
C= Total cost of marketing of the commodity.
C_f= Cost paid by the producer from the time the produce leaves the farm till he sells it.
C_{mi}= Cost incurred by the ith middleman in the process of buying and selling the product.

2.1.2 Marketing margins
Following marketing margins have been worked out in the study.

   I.   **Absolute margin**
$$A_{mi} = P_{Ri} - (P_{Pi} + C_{mi})$$

   II.   **Percentage margins**
It is the share of absolute margin in selling price.

$$P_{mi} = \frac{\left[P_{Ri} - \left(P_{Pi} + C_{mi}\right)\right]}{P_{Ri}} \times 100$$

   III.   **Mark-up**
It is the share of absolute margin in buying price.

$$M_i = \frac{\left[P_{Ri} - \left(P_{Pi} + C_{mi}\right)\right]}{P_{Pi}} \times 100$$

Where,
A_{mi} = Absolute margins of ith functionary
P_{mi} = Percentage margin of i_{th} functionary
M_i = Mark-up of ith functionary
P_{Ri} = Total value of receipts per unit (sale price)
P_{Pi} = Purchase value of goods per unit (purchase price)
C_{mi} = Cost incurred on marketing per unit

2.1.3 Price spread

$$P_S = \left(\frac{\text{Absolute margin}}{\text{Consumers price}} \right) \times 100$$

Where,
P_S=Producer's/intermediaries' share in consumer's rupee.

2.2 Marketing efficiency

Marketing efficiency was calculated using Shepherd's approach. It can be given as-

$$M.E. = C_P / (P_C + C + A_{mi})$$

Where,

M.E. = Market efficiency

C_P = Consumer's purchase price

P_C = Marketing cost of producer

C = Marketing cost of all the intermediaries involved in the channel

A_{mi} = Market margin of the intermediaries involved in the channel

RESULTS AND DISCUSSION

1 Marketing system and channels

Six channels for marketing of sweet orange were identified in the study area:

Channel I: [Producer- village trader- Primary wholesaler- Secondary wholesaler- retailer- consumer]

Channel II: [Producer- village trader- wholesaler- retailer - consumer]

Channel III: [Producer- WCR- retailer (local market) - consumer]

Channel IV: [Producer- WCR- consumer]

Channel V: [Producer- retailer (local market) - consumer].

Channel VI: [Producer-consumer]

The marketing of sweet orange is dominated by village traders. More than 57 per cent produce was marketed through channel I. In channel I as well as channel II producers sold their produce directly to village trader. These channels were preferred by producers because no marketing cost was born by producer. In channel III and channel IV, produce was brought to the market by producer and sold to wholesaler cum retailer and in channel V it was sold to retailer. Only in channel VI no intermediary was involved and the produce was sold directly to consumer. Although the highest price was realized by producer in channel VI, but his channel was least preferred by producers, because of three reasons, the first reason was high transportation cost ,the second reason was that farmer has to search customer for longer period and the third is risk of some unsold produce associated with this channel. In channel III and IV wholesaler cum retailer sold the produce either directly to consumer or retailer.

Marketing costs, margins and efficiency

The marketing cost incurred by producers found to be similar in four channels i.e. channel III, channel IV, channel V and channel VI (` 278 per quintal) and the producers incurred no marketing cost in channel I and channel II as they sold the produce directly to village trader (Table 1). The major component of the marketing cost of the producer was cost incurred on mules (`150 per quintal). Since hilly areas is circumcised by specificities especially inaccessibility due to poor road infrastructure and isolated farms, therefore the labor cost and transportation cost borne by producers (cost on mules and jeep) were very high. The marketing cost incurred by WCR of local by market was estimated to be `107.50 per quintal both in channel III and channel IV. Marketing cost incurred by village traders has been worked out to be `438.75 per quintal in both channel I and channel II. Producers' share in consumer rupee is as low as 8.6 per cent and 9.38 per cent in channel I and channel II when produce was sold in distant market. The difference between farm gate price and retail price is very high, except in local market. It is real concern to policy makers recently as honorable Prime Minister has expressed his views to reduce the price spread of agricultural commodities. In current budget (2010-11), specific strategies have been adopted to reduce the post harvest losses and price spread of agricultural commodities.

As revealed form the table 2 the absolute market margin of retailers of nearby market was `539.00 per quintal (`5.39 Kg.) in channel V. The absolute margin of wholesalers cum retailer of local market was found out to be ` 324.50 per quintal both in channel III and channel IV. The absolute margin of village trader was `178.25 per quintal in both channel II and channel I.

It is evident from table 1 that channel IV was the most efficient marketing channel with efficiency of 1.27 followed by channel V with efficiency of 1.23. The least efficient channel was channel VI with marketing efficiency of 1.00. Therefore it is concluded that wholesaler cum retailer and retailer are performing better than other intermediaries.

CONCLUSION AND POLICY IMPLICATIONS

Government's emphasis to bring down the considerable differences between farm gate prices, wholesale prices and retail prices, has been clearly reflected in the present budget (2010-11) where four pronged strategies have been formulated. The present study has clearly found that marketing problems of hilly areas is different from other regions of the country. Scattered farms, poor roads and terrains, contributed high labour and transportation cost, therefore, producers are reluctant to bring their produce themselves in the market and the marketing system is dominated by village traders. Producers are getting only 9 per cent of the consumer's price in case of sweet orange. Spatial price difference between local market and distant market is very wide i.e. more than ` 2000 per quintal.

TABLE 1: Marketing costs margins and efficieny in different channels

S.No.	Particulars	Channel I	Channel II	Channel III	Channel IV	Channel V	Channel VI
1.	Farmer's Price (`/qtl)	183	183	194	196	210	232
2. 2.1	**Marketing Cost (`/qtl)** *Producer's* Mules Jeep Packaging Labour cost	- - - -	- - - -	150 50 5 73	150 50 5 73	150 50 5 73	150 50 5 73
2.2	**Sub total**	-	-	**278**	**278**	**278**	**278**
2.3	*Village Trader* Transportation Packaging Labour cost Loading and unloading Commission	200 12.50 65.75 81.5 79	200 12.50 65.75 81.5 79	- - - - -	- - - - -	- - - - -	- - - - -
	Sub total	**438.75**	**438.75**				
2.4	*Primary Wholesaler* Grading & Packaging Loading charges Commission Charges Transportation Market fee	48.67 10.04 56.25 84.48 5.5	48.67 10.04 56.25 84.48 5.5	- - -	- - -	- - -	- - -
2.5	**Sub Total**	**204.94**	**204.94**				
	Secondary Wholesaler Weighing Charges Packing Market fee	34.44 57.78 6.0	- -	- -		- -	- -
2.6	**Sub total**	**98.22**	-				
2.7	*Retailer* Weighing Charges Packing Market fee	46.25 100 6.0	46.25 100 6.0				
		152.25	**152.25**				
	WCR of local market Labour cost Market fee	-	-	101.50 6.00	101.50 6.00	-	-
	Sub total	-	-	**107.50**	**107.50**		
	Retailer (local market) Labour cost Transport Packaging	- - -	- - -	50.75 50 25	- - -	73 - -	- - -
	Sub total	-	-	**125.75**	**107.50**	**73**	-
3.	**Grand total**	**894.16**	**795.94**	**511.25**	**379.50**	**351**	**278**
4.	**Consumer's Price**	2122.5	1950	1100	900	1100	510
5.	**Marketing Efficiency**	1.09	1.10	1.21	1.27	1.23	1.00

Table 2: Marketing Cost, marketing margin, price spread and marketing efficiency under different channels

Particulars	Channel-I	Channel-II	Channel-III	Channel-IV	Channel-V	Channel-VI
Price received by producer	**183**	**183**	**194**	**196**	**210**	**232**
Marketing Cost incurred by:						
Producer	Nil	Nil	278	278	278	278
Village trader	438.75	438.75	-	-	-	-
Primary wholesaler	204.94	204.94	-	-	-	-
Secondary wholesaler	98.22	-	-	-	-	-
Retailer	152.25	152.25	-	-	-	-
WCR	-	-	101.5	107.5	-	-
Retailer (local market)	-	-	125.75	-	73	-
Total	**894.16**	**795.94**	**505.25**	**385.5**	**351**	**278**
Marketing Margin of :						
Village trader	178.25	178.25	-	-	-	-
Primary wholesaler	195.06	595.06	-	-	-	-
Secondary wholesaler	201.78	-	-	-	-	-
Retailer	469.97	197.75				
WCR	-	-	324.5	324.5	-	-
Retailer (local market)	-	-	74.25	-	539	-
Total	**1045.06**	**971.06**	**398.75**	**324.5**	**539**	**-**
Price paid by consumers	**2122.5**	**1950**	**1100**	**900**	**1100**	**510**
Price Spread	**49.23**	**49.79**	**36.25**	**36.05**	**49.00**	**-**
Marketing Efficiency %	**1.09**	**1.10**	**1.21**	**1.26**	**1.23**	**1.00**

it will narrow down the spatial price differences and both consumers and producers will be benefitted.

In order to link the farmers of hilly areas to market for remunerative prices, proper road and other infrastructure should be developed. Keeping in view the very high price spread and low producers' share, there is need to form the active marketing self help groups, which can take the advantage of distant and competitive market and members will be benefited by remunerative price. The other way to link farmers with market is through co-operative federation. To reduce the spatial differences in the price of produce, better transport and storage facilities are also required. Besides realizing remunerative price to the producers, it will narrow down the spatial price differences and both consumers and producers will be benefitted.

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