

Marketing of Sweet Orange (Malta) in India

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Abstract:

The present study has been conducted in order to access the marketing of sweet orange in the state of Uttarakhand, India. Primary data was collected from various stakeholders constitute forty growers and two and three mediators operating at each level of marketing channels. Three distribution channels were identified. More than 68 per cent of the produce was sold directly to the village commission agent/contractor. Marketing cost varied from 0.20 per kg to 0.50 per kg in channel III. A component of the marketing cost of the producer was cost incurred on sorting and grading. The producers were earning 8.64 per kg marketing margin in channel I followed 6.64, 4.64, in channel II and channel III respectively. The producer's share in consumer's rupee was highest 70.29 per cent in channel III while 54.93 and 42.45 per cent in channel II and I respectively. Channel III was the most efficient channel with efficiency of 1.72. Channel I was least efficient 0.69. The spatial price difference between the local market and distant market is very wide i.e. more than Rs. 700 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 Farmer Producer groups / Farmer co-operative 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 sweet orange, better transport, storage and processing facilities are also required.

Keywords: District horticulture office (DHO), Marketing efficiency, Marketing margins

1. Introduction

India has the unique distinction 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. India is the second largest producer of fruits and vegetables in the world with 74.877 million metric tonnes production of fruits and 146.554 million metric tonnes production of vegetables for the year 2010-11. Within India Tamilnadu is the largest producer of fruits accounting for 13.30 per cent of India's total fruits production followed by Andhra Pradesh (12.6 per cent), Maharashtra (12.2 per cent), Gujrat (9.7 per cent) and Karnataka (8.4 per cent) in 2010-11. Major fruits cultivated in India are banana (39.9 per cent), mango (20.3 per cent), *Citrus* (10 per cent), papaya (5.6 per cent), apple (3.9 per cent) and guava (3.3 per cent). *Citrus* is the third most important tropical fruit crop of India after mango and banana with an area of 846 thousand hectares and 7464 thousand metric tonnes of production (8.8 Mt/ha productivity). The most important *Citrus* growing states in India are Andhra Pradesh, Maharashtra, Orissa, Gujarat and Uttarakhand.

In Uttarakhand, *Citrus spp.* occupies about 13.90 per cent (27400 ha) of total fruit area in the year 2010-11. Gharwal region is the major *Citrus* growing regions of Uttarakhand with 50.20 per cent (13755 ha) of the total *Citrus* area in Uttarakhand in the year 2010-11 and has got the maximum production, which was around 51.1 per cent (67729 metric tonnes) of the total *Citrus* production in state in the year 2010-11. Gharwal region comprises of 7 districts and Rudrapryag districts marks itself distinctly in production of *Citrus* species, with a production of 45.03 per cent (30938) metric tonnes of the total *Citrus* production in Gharwal region from an area of 34.2 per cent (4704 ha) of total area under *Citrus* in Gharwal region in the year 2010-11. Sweet orange is the major *Citrus* species of this district comprising of 35 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 of citrus crop so that farmers can earn a high return and encash their high produce. It is important to have an efficient marketing system, so that producer gets appropriate returns for their produce and consumers get them at reasonable price.

The production of sweet orange (malta) 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 trend 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.

2. Review of Literatures

Sharma et al. (2006) emphasized on improving the availability of quality fruits and vegetables to markets and processing units. Strategies to be adopted at production, harvesting and post harvest levels appropriate to Indian scenario are suggested in the study. Mechanical injury, infestation and poor handling of fruits and vegetables reduce the market price drastically as also processed product quality. It is thus imperative to develop and follow certain strategies to minimize these injuries to fruits and vegetables for supply to markets and processing units. Horticultural produce needs special attention on two accounts i.e. protection from sunlight and hygiene in the compound and the need of terminal markets is therefore highly necessary.

Suryavanshi et al. (2006) conducted a study to identify marketing channels, to estimate marketing cost, marketing margin and price elasticity. The study revealed that 80% of the tomato was sold through channel (producer-commission agent cum wholesaler-retailer-consumer). The cost of marketing incurred was the highest (Rs. 187.45) in channel-I, where as it was the lowest (Rs. 55.40) in channel (producer-consumer). And retailers enjoyed higher net proportion of margin as compared to commission agent cum wholesaler. Marketing efficiency was observed to be the highest (9.70%) in channel (producer-consumer) for achieving maximum profit and to reduce intermediary charges in trade, when the produce is in small quantity and if the produce is in large quantity channel-II should be selected to safeguard the interest of tomato growers.

Mohammed Jaffar and Namasivayam (2005) conducted marketing cost of banana in Theni district of Tamilnadu. For the study banana growers of Theni district was selected and also the different functionaries which the farmers followed. The study concluded that cutting, loading and unloading commission, transportation and the like were the marketing costs of the banana growers, which amounted to Rs 805, Rs 760 and Rs 734 in the case of small, medium and large growers, respectively. The pre-harvest contractors incurred a marketing cost of Rs 775 per tonne. Transport cost dominated other costs. The marketing cost, excluding interest on working capital was less to pre-harvest contractors than to the growers. Commission agents had to pay Rs 116.67 per tonne towards the marketing cost. The wholesalers incurred a marketing cost of Rs 417.09 per acre. More than 60 per cent of the marketing cost of the retailers was due to wastage. The total marketing cost of retailers was worked out to be Rs 336.67 per tonne.

3. Objectives

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 Rudraprayag district of Uttarakhand and to develop proper marketing arrangement for fruit crops. The specific objectives are:

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

4. Methodology

4.1 Selection of the study area

Multistage purposive and random sampling techniques were used to examine the marketing of sweet orange. In the first stage Rudraprayag district of Gharwal region was selected purposively based on the importance and contribution in terms of area and production of sweet orange in Uttarakhand. Five villages (Gadgu, Gaid, Burva, Giriya and Fapanj) form Ukhimath block of Rudrapryag district were 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, 2 and 3 intermediaries are operating at each level

of marketing channel were identified and contacted.

4.2 Data Collection

The primary data were collected from the selected farmers, village level agents, wholesalers, retailers and various other agencies and people involved in the marketing with the help of a pre structured schedule by personal interview method. Secondary data was collected from various concerned district horticulture office (DHO) and organizations.

4.3 Analytical frameworks

4.3.1 Marketing cost

$$Tc = Cp + Mci$$

Where,

Tc : Total cost of Malta fruit marketing

Cp : Cost incurred by producer

Mci : Marketing cost increased by i^{th} middleman

4.3.2 Marketing margins

Following marketing margins have been worked out in the study.

$$Ami = Pmi - (Pp + Mci)$$

Where,

Ami : The absolute margin of the i^{th} middleman

Pmi : The selling price of the i^{th} middleman

Pp : Producer's price for his Malta produce

Mci : Marketing cost of the i^{th} middleman

4.3.3 Price spread

$$\text{Price spread} = \text{Consumer price} - \text{Producer price}$$

4.3.4 Marketing efficiency

Marketing efficiency was calculated using Acharya and Agarwal (1998). It can be given as-

$$ME = FP / (MC + MM)$$

Where,

ME : Marketing efficiency

FP : Net price received by the producer-seller

MC : Total marketing cost

MM : Net marketing margin

4.3.5 Price spread

$$Ps = Pp / Pc \times 100$$

Where,

Ps : Producer's share in consumer's rupee

Pp : Producer's price for his vegetables produce

Pc : Price paid by consumer

5. Results And Discussion

5.1 Marketing system and channels

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

Channel I: [Producer- Village level commission/contractor-Retailer -Consumer]

Channel II: [Producer- Local retailer - Consumer]

Channel III: [Producer- Cooperative – Retailer- Consumer]

The marketing of sweet orange is dominated by village level commission/contractor. More than 68 per cent produce was marketed through channel I. In channel II 25 per cent producers sold their produce directly to nearby local market retailer. These channels were preferred by producers because no marketing cost was born by producer. In channel III, cooperative was involved (rare cases) and the produce was directly purchased by the producers then goes to retailers to consumer. Although the highest price was realized by producer in channel III, but this channel was least preferred by producers, because of three reasons, the first reason is heterogeneity in group formation, the second reason is that farmers do not know how to retain customers for longer period (Value addition) and the third is risk mitigation on unsold produce associated with this channel. In channel III cooperatives sold the produce either directly to consumer or retailer.

Table 1- Marketing Cost, marketing margin, price spread and marketing efficiency under different channels

SN	Particulars	Rudraprayag		
		C-I	C-II	C-III
1	Gross price received by farmer (Rs. Per Kg)	6.00	7.00	8.00
2	Cost incurred by farmers (Rs. Per Kg)	0.80	0.82	0.62
3	Producers net price (Rs. Per Kg) (Item No.1 - Item No.2)	5.20	6.18	7.38
4	Marketing cost incurred by Farmers (Rs. Per Kg)	0.20	0.20	0.50
5	Consumers price (Rs. Per Kg)	12.25	11.25	10.50
6	Price Spread in different format (Rs. Per Kg)	7.05	5.07	3.12
7	Total gross marketing margin (Rs. Per Kg) (Item No.2 + No.4 + No.6)	8.05	6.09	4.24
8	Marketing Margin as % of consumers price (Item No.5 over Item No.7)	1.52	1.85	2.48
9	Producer's share in consumers rupee (% of producer net price to consumer price) $P_s=(P_p/P_c) \times 100$	42.45	54.93	70.29
10	Marketing efficiency (Item No.1 over Item No.7)	0.75	1.15	1.89

5.2 Marketing costs, margins and efficiency

The marketing cost incurred by producers found to be Rs. 0.50 per kg in channel III followed by channel I and II are similar Rs. 0.20 per kg. The major component of the marketing cost of the producer was cost incurred on mules to bring fruit produce up to the road head. Since hilly areas is circumscribed 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. Producers' share in consumer rupee is high 70.29 per cent in channel III while it was 54.93 per cent and 42.45 per cent in channel I and channels II respectively, when produce was sold in distant market. The difference between farm gate price and retail price is very high, except in channel III of cooperative market. The price spread was found minimum Rs. 3.12 per kg in channel III which is very good for produces while it was found high Rs. 7.05 per kg in channel I followed by Rs. 5.07 per kg in channel II. 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 last budget (2010-11), specific strategies have been adopted to reduce the post harvest losses and price spread of agricultural commodities.

As revealed from the table 1 the market margin of consumer's price was found to be higher with the margin Rs. 8.05 (1.82%) per kg in channel I followed by channel II Rs 6.09 (1.52%) per kg and Rs. 4.24 (2.48%) per kg in channel III. Hence, channel III is the more admirable in terms of consumer and producers both. It is evident from table 1 that channel III was the most efficient marketing channel with efficiency of 1.89 followed by channel II with efficiency of 1.15. The least efficient channel was channel I with marketing efficiency of 0.75. Therefore it is concluded that cooperative cum retailer (channel III) is performing better than other intermediaries.

6. Conclusion And Policy Implications

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/contractor. Producers are getting very low price 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 Rs. 7.00 per kg.

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/farmers producers group (FPOs), which can take the advantage of distant and competitive market and members will be benefited by remunerative price. The other way to link more farmers with market is through co-operative federation. To reduce the spatial differences in the price of produce, better transport, storage and village level processing unit 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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Conflict of Interest Statement

The authors declare that are no conflict of interest.