



A Study on Agri-Marketing Consolidation Mapping and Potential Identification of Major Vegetables in Tenkasi Taluk

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ABSTRACT

India is one of the largest producers of milk, fruits and vegetables in the world. Yet, the organized food retail business in the country is among the least developed. The irony is not so difficult to understand if one looks at the Indian food chain. From the farm to the store, the links are too many with more intermediaries and many problems. A large chunk of fresh fruits and vegetables is lost due to lack of post-harvest handling, proper storage and processing facilities and lack of information. Tonnes of grains are wasted due to improper handling and storage, pest infestation and poor logistics management. Intermediaries or 'middlemen' gobble up a large portion of the earnings that should go to the farmer. Not only has that, these middlemen caused delays which in a business of perishable goods can be lethal. The result is a chain stuffed with inefficiencies. For organized retail of food to be successful, it is important to get rid of these inadequacies so that costs are pruned and more importantly, the benefits of the gains are passed on to the producer and consumer.

Key words : Agriculture, Price Spread, Marketing Channels ,Whole Sellers ,Retailers

INTRODUCTION

In India, about sixty percent of food quality is lost in the Supply Chain from the farm to the final consumer. Consumers actually end up paying approximately about thirty five percent more than what they could be paying if the supply chain was improved, because of wastage as well as multiple margins in the current supply structure. The farmer in India gets around thirty percent of what the consumer pays at the retail store. This could be compared with the situation in the USA, where farmers can receive up to 70 percent of the final retail price, and wastage level are as low as 4-6 percent. One can easily imagine the benefits that could be generated from emulating those practices and tapping that expertise for the supply chain in India. These things can be reduced if the farmers have facilities and opportunities to sell their product directly to customer but it is not possible every where. And another way is that the farmer can sell the product to final retailer to reduce the intermediaries through which both the farmers and intermediaries can be benefited.

Agribusiness firms are responding to the emerging challenges in global economy by seeking the benefit of greater collaboration with both their suppliers and customers to ensure more sustainable and profitable trading arrangements. The consolidation and supply chain is the full range of activities from the earliest level of input, through processes along the chain, to delivery of the final product to the consumer. It includes input suppliers, producers, processors, transporters, packers, wholesalers, retailers, and export/import distributors. The procurement for agricultural commodities is quite long and unorganized causing losses to both farmers and processing industries. An efficient procurement and supply chain management system provides an incentive to farmers to produce more and convey changing needs of the economy to enable production planning based on market forces. Efficient marketing system needs vertical integration of production, post-harvest management, storage, processing and distribution to make an integrated consolidation management.

In this sense, the interaction and interrelationship between production and marketing of vegetables have acquired new dimensions, posing new challenges to management of horticultural production and organization of marketing support system for it. If the distribution network channel is not efficient enough to distribute the produce then production aspects losses its significance. Marketing of fresh vegetables owing to their perishable nature and lack of cold storage facilities poses problems.

The supply of most vegetables is seasonal and their production is concentrated in few pockets in favored situation of soil and climatic conditions. Because of long distances that often separate producing areas from consuming one, a large proportion of vegetables deteriorates in transit, the extent of spoilage being sometimes noticed as high as forty percent. It might be due to defective method of harvesting, packing, handling and ineffi-

cient way of transportation etc.. In the present scenario, aggressive marketing has become very essential for any retail industry to stay in the market because of higher competition.

REVIEW OF LITERATURE

Khols and Uhl (1980) defined marketing efficiency as the ratio of market output (satisfaction) to the marketing input (cost of resources). An increase in the ratio would represent improved efficiency and vice versa. A reduction in the cost for the same level of satisfaction or an increase in satisfaction at a given costs would result in an improvement of efficiency.

Nadwadkar (1991) in his analysis on marketing efficiency and price spread of vegetables in Maharashtra reported that marketing cost incurred were grading charges, packing charges, packing materials, transport, weighing, commission and miscellaneous expenses. They regarded higher proportion of intermediaries' profits as the indicator of inefficiency of the marketing system.

Deveraja (2000) in his study on channels and price spread in fruits and vegetables marketing in Mysore district, Karnataka identified five channels of marketing of horticultural produce. He found that commission charges dominated the marketing cost upto an extent of 65 percent followed by transportation cost. He also found that preharvest contractors prevail in fruit marketing and urgent steps are needed to stop this practice by improving the market conditions.

Marothia, et al., (2001) in their study reported that as the size of holdings increased small farmers preferred to sell their vegetables directly to consumers. Medium and large farmers sold their produce to retailers through commission agents.

Ramalinga Rajoo (2002) analysed the price spread in marketing of sapota from Chitradurga district of Karnataka. He used Acharya and Agarwal's formula and Calkin's index to evaluate the efficiency of marketing channels. He concluded that the marketing efficiency was very high in the case where farmers sold their produce directly to the Rallis Kisan Kendra.

Rajavel (2005) assessed the price spread in supply chain of carrot from Hoskote taluk of Bangalore district of Karnataka. He has concluded that the marketing efficiency was very high in the case where the farmers sold their produce directly to the consolidation centre at Hoskote.

In the present study marketing efficiency and price spread is considered as the effectiveness of the marketing system with which it operated.

Problem focus

Production of agricultural commodities especially fruits and

vegetables depends on the season, soil and agro climatic conditions and so the firm is not able to source all the fruits and vegetables from a single location.

Onion, tomato, chilli, bhendi, and beans are some of the important vegetables which have their presence in daily consumption and also a good turnover in the retail. All the above five major vegetables are currently procured through an intermediary known as sourcing agent who is a wholesaler in major markets viz., Surandai, Keza pavur, Kadayanallur and Tenkasi and wholesale vegetable market of Thirunelveli district.

For analysing producer’s opinion towards selling their products to retailers and constant delivery of onion, tomato, chilli, bhendi, and beans the case firm was interested in studying the marketing practices of farmers and different intermediaries of vegetable marketing in Tenkasi area. what kind of marketing costs incurred in vegetable marketing and farmers expectation if product supply is made to the firm hence an attempt has been made in the present study

Objectives of the study

to examine the marketing practices by farmers and wholesalers for major vegetables in Tenkasi area;

to study the marketing costs incurred in vegetable marketing and farmers expectation if product supply is made to the firm;

Scope of the study

The study aims to get a clear picture of the marketing practices of farmers and intermediaries in different channels of marketing of vegetables in Tenkasi area.

The findings of the study will help the case firm in formulating their strategies and designing effective sourcing programmes and to open a consolidation centre in Tenkasi taluk to favor both

farmers and consumers.

Research methodology

Descriptive research design is used in the study which is intended to cover Tenkasi taluk. Data for this study were collected from primary as well secondary sources

Selection of Farmers & wholesalers and vendor

In Tenkasi taluk there are four large size vegetable markets viz., Surandai, Tenkasi, Keeza pavur, and Kadayanallur. In Tenkasi taluk majority of the farmers sell their products in any one of these markets. 100 farmers selling vegetables in these markets were contacted using convenient sampling method and 20 intermediaries were selected at random from the four vegetable markets.

Secondary data for the study was collected from the office of the Assistant Director of Horticulture, Tenkasi.

Tools of analysis

Price spread analysis , Garret’s Ranking Technique and seasonal index

Price spread in the Identified Marketing Channels for Vegetables

Price spread in general, is referred to as the difference between price paid by the consumer and the price received by the farmers for an equivalent unit of the produce. This analysis involved computation of different marketing costs and profit margin at each stage and their expression as a percentage to the consumers’ price. Various costs incurred in the marketing process were considered for each of the identified channels and price spread was worked out. For price spread, data was taken from farmers, market intermediaries at Tenkasi markets. According to farmers, they fixed four labours for one acre of vegetables among those two male labours (Rs.150/day) and two female labours (Rs.70/day) to carry out work from cleaning to loading of vegetables.

Price Spread in the Identified Marketing Channels for Onion, tomato and chillies

Particulars	onion				Tomato				Chillies			
	Channel I		Channel II		Channel I		Channel II		Channel I		Channel II	
	Price/kg		Price/kg		Price/kg		Price/kg		Price/kg		Price/kg	
	Price	Percent-age	Price	Percent-age	Price	Percent-age	Price	Percent-age	Price	Percent-age	Price	Percent-age
Net price received by the producer	11	47.61	11.25	64	4.5	30.82	5.45	41.92	4.5	36.58	5.25	46.25
Marketing cost of producer												
Cleaning, grading, packaging and Loading	0.11	0.45	0.11	0.62	0.11	0.75	0.11	0.84	0.11	0.89	0.11	0.96
Packaging material cost	0.2	0.82	0.2	1.14	0.2	1.36	0.2	1.53	0.2	1.62	0.2	1.76
Transportation	0.2	0.82	0.2	1.14	0.15	1.02	0.15	1.15	0.2	1.62	0.2	1.76
Unloading & weighment	0.04	0.16	0.04	0.18	0.04	0.27	0.04	0.33	0.04	0.32	0.04	0.35
Commission agent (10%)	1.2	5.1	1.2	6.85	0.55	3.76	0.55	4.6	0.6	4.87	0.6	5.28
Sub total	1.75	7.26	1.75	9.15	1.05	7.19	1.05	8.75	1.15	9.34	1.15	10.13
Selling price of producer	12.75	52.9	13	59.2	5.55	38.01	6.5	50	5.65	45.93	6.4	56.38
Purchase price of wholesaler	12.75	52.9	13	59.2	5.55	38.01	6.5	50	5.65	45.93	6.4	56.38
Marketing cost of wholesaler												
Packing, loading and unloading, cleaning, grading, weighing & packaging	0.1	0.41	0.1	0.45	0.1	0.68	0.1	0.84	0.1	0.81	0.1	0.88
Transportation	1.12	4.64	1.12	5.11	0.2	1.35	0.2	9.38	1.12	9.1	1.12	9.86
Spoilage (5%)	0.65	2.69	0.65	2.95	1	6.84	1	7.68	0.12	0.97	0.12	1.05
Sub total	1.87	7.75	1.87	8.52	0.5	3.42	0.5	3.84	1.34	10.89	1.34	11.8
Margin of wholesaler	1.2	5.19	2.03	9.2	1.8	12.32	1.8	13.84	0.75	6.09	1.25	11.01
Selling price of wholesaler	15.8	65.56	16.9	76.9	1	6.84	1.5	11.53	7.74	62.92	9	79.29
Purchase price of secondary wholesaler	15.8	65.56	-	-	8.35	57.19	9.8	75.38	7.74	62.92	9	79.29
Marketing cost of secondary wholesaler					8.35	57.19						
Packing, cleaning, grading, weighing & packaging	-	-	-	-	0.5	3.42						

Transportation, loading and unloading	1.12	4.64		-	0.9	6.16			1.34	10.89		
Spoilage (5%)	0.5	2.07		-	0.3	2.05			0.5	4.06		
Sub total	1.62	6.72		-	1.7	11.64			1.84	14.95		
Margin of secondary wholesaler	1.5	6.22		-	1.2	8.21			0.5	4.06		
Selling price of secondary wholesaler	18.9	78.42			11.25	77.05			10.08	81.95		
Purchase price of retailer	18.9	78.42			11.25	77.05	9.8	75.38	10.08	81.95	9	79.29
Marketing cost of retailer												
Loading and unloading, cleaning, grading, weighing and packaging	0.4	1.65			0.4	2.76	0.4	0.33	0.1	0.81	0.1	0.88
Transportation	0.25	1.03	0.25	1.4	0.25	1.71	0.25	1.76	0.3	2.43	0.3	2.64
Spoilage in channel I (4%) and channel II (2%)	0.53	2.35	0.27	1.54	1.5	10.17	1.32	10.15	0.7	5.69	0.7	6.16
Sub total	1.18	5.24	1.71	9.78	2.15	14.72	1.97	15.15	1.1	8.94	1.1	9.69
Margin of retailer	3	14.52	3.29	18.8	1.2	8.21	1.21	9.3	1.1	8.94	1.25	11.01
Selling price of retailer	23.1	100	17.5	100	14.6	100	13	100	12.3	100	11.35	100

Expectation of Farmers on Supply to the Case Firm Directly

Market	Details	Loan Facility	Prompt Payment	Collection at farm gate itself	Low deductions	Acceptance of all grade	Fair price	Technology provision/supervision of cultivation	Supplying inputs
Surandai	Garrett score	61.08	58.92	52.92	57.28	57.04	49.56	30.24	29.12
	Rank	1	2	3	4	5	6	7	8
Keeza pavor	Garrett score	56	46.6	50.4	65.8	65.6	49.6	38.2	27.8
	Rank	3	6	4	1	2	5	7	8
Kadayanallur	Garrett score	62.56	58.6	56.16	55.2	47.68	47.2	37.56	35.04
	Rank	1	2	3	4	5	6	7	8
Tenkasi	Garrett score	62.4	54.8	49.48	53.88	60.64	57.12	30.44	31.36
	Rank	1	4	6	5	2	3	8	7

FINDINGS

Price spread for Onion

In the marketing channel I the marketing cost of producer was about 7.26 per cent of the retail price of onion and in the marketing channel II it was nine per cent. The producer who sold onion in channel II realized a maximum share 64.00 per cent of consumer's price with a net price of Rs.11.25 / kg of onion. The producers share in consumer's price in channel I was only 47.61 per cent. The margin of primary wholesalers was 5.19 per cent and 9.20 per cent in marketing channel I and II and for secondary wholesalers it was 6.22 per cent. The net margin of retailer was 14.52 per cent in marketing channel I and in the marketing channel II it was 18.8 per cent of the consumer's rupee of the onion.

Tomato

In the marketing channel I the marketing cost of producer was 7.19 per cent of the retail price of the tomato and in the marketing channel II it was 8.75 per cent. The producer who sold their tomato in channel II realized a maximum share 41.92 per cent in consumer price, with a net price of Rs.5.45/ kg of tomato. The producers share in consumer's price in channel I was only 30.82 per cent. The commission agents charged a commission of 10 per cent which accounted to 4.6 per cent to the consumer's price in marketing channel I. The margin of primary wholesalers was 6.84 per cent and 11.53 per cent in marketing channel I and II and for secondary wholesalers it was 8.21 per cent. The net margin of retailer was 8.21 per cent in marketing channel I and in the marketing channel II it was 9.3 per cent to the consumer's rupee of the tomato.

Chillies

In the marketing channel I the marketing cost of producer was about 9.34 per cent of the retail price of the chillies and in the marketing channel II it was 10.13 per cent. The producer who sold their chillies in channel II realized a maximum share 46.25 per cent in consumer price, with a net price of Rs.5.25/ kg of green chillies. The producers' share in consumer's price in channel I was only 36.58 per cent. The margin of primary wholesalers was 6.09 per cent and 11.01 per cent

in marketing channel I and II and for secondary wholesalers it was 4.06 per cent. The margin of retailer was 8.94 per cent in marketing channel I and in the marketing channel II it was 11.01 per cent of the consumers' price of chillies.

Seasonal Index of Prices of Vegetables

In case of onion the seasonal index was low during the months of October and November, and the prices of onion during the above months were about 75 per cent of those of average months. Similarly the seasonal influence during the months of February, March and April were maximum (108 per cent).

In case of tomato the price was considerably higher during March to July and very low during winter season, namely- November- February. In case of chillies two distinct periods of peaks and troughs in price could be observed. The prices were above average during January – March and July – September and it was less than average index during May – June and October – December. In case of beans the price was very high during July – September and it was very low during October – November.

Expectation of Farmers on Supply to the Case Firm Directly

Loan facility for raising vegetables was the major expectation of Surandai, Keeza Pavur and Tenkasi farmers while prompt payment was insisted by Surandai farmers. Collection at farm gate itself was the second major expectation by Keeza pavur farmers while fare price was the second major expectation of Tenkasi farmers. Thus the expectations of farmers in different areas were different.

Conclusions and Strategies Recommended

Agriculture was found to be the primary occupation of 96 percent of sample farmers in Tenkasi taluk. So there will be continuous supply of vegetables from farmers. Hence there exists a better opportunity for the case firm to establish Consolidation centre in Tenkasi taluk. Three marketing channels existed for vegetables in Tenkasi taluk. The establishment of consolidation centre by corporate retail chain and direct

procurement from the farmers would reduce the price spread and ensure higher producers' share in consumer rupee. Hence procuring the vegetables directly from farmers is recommended for adoption by the firm.

The seasonality index of prices of vegetables indicates the extent of fluctuation in prices of vegetables with in an year. The firm should take note of this pattern while fixing prices, while planning procurement and allocating budget for purchase of vegetables.

It could be concluded that a majority of farmers (70 per cent) sold their product through commission agents in local market. It was mainly due to advance payment (loan), and bulk sale.

The entire marketable surplus could not be sold in Farmers' shandies. Receipt of loan from commission agent was the major reason for sale through them. Hence it is recommended that the firm should consider providing loan facilities to farmers for continuous supply of vege-

tables or else arranging loan facilities in time could be an alternative.

Wide price fluctuation, high market commission and high transport cost were the major problems expressed by the farmers in marketing of vegetables. While formulating the system and procedures for operating the consolidation centre, efforts must be taken to minimize these problem faced by farmers.

Loan facility for raising vegetables was the major expectation of Surandai, Keeza Pavur and Tenkasi farmers while prompt payment was insisted by Surandai farmers. It was "acceptance of all grades" which ranked second at Kadayanallur. Collection at farm gate itself was the second major expectation by Keeza pavur farmers while fare price was the second major expectation of Tenkasi farmers. Thus the expectations of farmers in different areas were different. The case firm has to formulate strategies as per the different expectations of farmers in different market areas.

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