



Marketing Efficiency of Different Market Channels For Brinjal in Odisha

Chinmayee Nayak, D V S Rao, Y Radha, B Vijayabhinandana and V Srinivasa Rao
Department of Agricultural Economics, Agricultural College, Bapatla 522101
Andhra Pradesh

ABSTRACT

The study was undertaken with the main objectives to compare marketing efficiency of different market channels for brinjal in Odisha. Three market channels were identified in the study area viz., channel I: producers-commission agents-wholesalers-retailers-consumers, channel II: producers-wholesalers-retailers-consumers, Channel III: producers-corporate retailer's collection centre-corporate retail market's city processing centre- retail outlets-consumers. Channel III was found to be more efficient compared to other two market channels both by Acharya's method and Shepherd's method. In market channel III producer's share in consumer's rupee was 50.06 percent whereas for channel I and channel II it was 35.95 percent and 37.55 percent respectively.

Key words : Marketing efficiency, Market channels, Odisha.

The efficiency of marketing for fruits and vegetables in India has been of significant concern in the recent years. Poor efficiency in the marketing channels and inadequate marketing infrastructure are believed to be the cause of not only high and fluctuating consumer prices, but also to little of the consumer rupee reaching the farmer. Market plays an important role in determining the pattern as well as pace of diversification in favour of Vegetable crops. There are large variations in the share of vegetable producers in consumer's rupee as well as marketing margins across different marketing channels. As a result, market intermediaries tend to apportion greater margins on the pretext of sharing larger proportion of producer's risk (Radha and Prasad, 2001). Based on the past research the present study was carried out in Odisha to analyze the efficiency of different marketing channels and price spread for brinjal.

MATERIAL AND METHODS

The present investigation was conducted at Bhubaneswar, Odisha. Data were collected during January 2011 – April 2011 to analyze the marketing efficiency and price spread of brinjal for different market channels. Data were collected from 100 farmers. Out of these 100 farmers 40 farmers were supplying their produce to corporate retail outlet i.e. Reliance Fresh and other 60 farmers

were supplying their produce to local mandi. Farmers supplying their produce to corporate retail outlets were termed as corporate retail market farmers (CRM farmers) and farmers supplying their produce through traditional market channels were termed as traditional retail market farmers (TRM farmers). Data were collected through a well prepared pretested schedule. Cost of cultivation, incremental benefit cost ratio, marketing margin, producers share in consumer's rupee, marketing efficiency was calculated for each market channel.

RESULTS AND DISCUSSION

Existing Pattern of market channels in Selected Areas

In the area taken up for the study three channels were identified. They were as follows:

Channel-I

Producers → Commission agents →
Wholesalers → Retailers →
Consumers

Channel- II

Producers → Wholesalers →
Retailers → Consumers

Channel- III

Producers → Corporate Market Collection
Centre → Corporate Retail Market's City
Processing Centre → retail Outlet
→ Consumers

Cost of cultivation of brinjal and profit

The cost of cultivation of brinjal per hectare, for different farmers categorized by market channel that they prefer to sell was presented in Table 1. The cost of various agronomic practices for farmers supplying to commission agent (channel I) and wholesaler (Channel II) was not at par except marketing cost. Marketing cost (Rs. 24,605.79/ha) was highest for farmers whose first buyer was commission agent i.e channel I who has spent 35.38 percent to total cost of cultivation on marketing. Marketing cost incurred by collection centre farmers (channel III) was Rs. 8925.00/ha which was 11.38 percent of total cost of cultivation. For farmers supplying to wholesaler it was Rs. 12,384.00/ha i.e. 20.96 percent of total cost of cultivation. Producers selling their produce to collection centre have spent Rs.20,650.00/ha (26.26%) and Rs.11,306.00/ha (14.38%) on nursery and plant protection, respectively. In comparison to CRM producer TRM producers have spent less on nursery, intercultural

operation and plant protection. The total cost of cultivation was highest for CRM producers which was Rs.78,616.00/ha. The cost of cultivation of brinjal for producers supplying their produce to commission agents and wholesalers was Rs.69546.07/ha and Rs.59072.80/ha, respectively. The findings are in line with Ganesh *et al.* (2004), Alam and Verma, (2007), Mangala and Chengappa, (2008), Sidhu *et al.* (2010), Singh (2011) and Sulaiman *et al.* (2011).

The farmers using channel II have received less profit (Table 2) than other two market channels farmers. Profit for channel II was Rs.2.25/kg of the produce. Producers supplying their produce to corporate retail market's collection centre i.e. channel III made highest profit (Rs.3.32/kg) than other two market channels.

Market channel II was compared first with market channel I. Market channel I was preferred since incremental benefit-cost ratio was 1.46 i.e. greater than channel 1. Channel II was

Table 1. Cost of cultivation of brinjal (Rs/ha).

S. no	Agronomic practices	Channel I	Channel II	Channel III
1	Land preparation	10748.57(15.45)	10536.00(17.83)	14830.00(18.86)
2	Nursery	11147.41(16.02)	12078.00(20.44)	20650.00(26.26)
3	Transplanting	3925.71(5.64)	3504.00(5.93)	5310.00(6.75)
4	Irrigation	2254.28(3.24)	2910.00(4.92)	3428.75(4.36)
5	Intercultural operation	3925.71(5.64)	3648.00(6.17)	6270.00(7.97)
6	Plant protection	5601.71(8.05)	6812.80(11.53)	11306.00(14.38)
7	Harvesting	7336.89(10.55)	7200.00(12.18)	7896.25(10.04)
8	Marketing	24605.79(35.38)	12384(20.96)	8925.00(11.38)
9	Total	69546.07	59072.80	78616.00

Note: Figures in parentheses indicate percentage to the respective total cost

Table 2. Farmers profit for brinjal.

Market channels	Cost of cultivation (Rs/ha)	Average price received (Rs/q)	Average yield (q/ha)	Gross return (Rs/ha)	Net profit (Rs/ha)	Net Profit (Rs/kg)
I	69546.07	575.00	213.57	122802.75	53256.68	2.49
II	59072.80	500.00	215.00	107500.00	48427.20	2.25
III	78616.00	668.75	233.87	156400.00	77784.56	3.32

Table 3. Incremental Cost Benefit analysis for brinjal

Marketing channels	Benefit Rs/ha	Cost Rs/ha	Cost Benefit ratio	Comparison of Marketing channels	Incremental Benefit Rs/ha	Incremental Cost Rs/ha	Incremental Cost Benefit ratio
Channel II	107500.00	59072.80	1.81	Channel II and I	15302.75	10473.27	1.46
Channel I	122802.75	69546.07	1.76		Channel I and III	33597.81	9069.93
Channel III	156400.56	78616.00	1.98				

Table 4. Marketing efficiency of different market channels for brinjal.

S. No.	Particulars	Channel I	Channel II	Channel III	Channel I	Channel II
1.	Retailer's sale price/ Consumer's purchase price(Rs/quintal)	1250.00 (100.00)	1065.00 (100.00)	1100.00 (100.00)	-12.00	+3.28
2.	Total marketing cost(Rs/ quintal)	533.56 (42.68)	420.00 (39.43)	338.00 (30.72)	-36.65	-19.52
3.	Total net margins of intermediaries(Rs/quintal)	267.00 (21.36)	245.00 (23.00)	211.25 (19.20)	-20.88	-13.81
4.	Net price received by farmers(Rs/quintal)	449.44 (35.95)	400.00 (37.55)	550.75 (50.06)	+22.51	+37.68
5.	Index of marketing efficiency(Ratio)					
	a. Shepherd's method	2.34	2.53	3.25	-	-
	b. Acharya's method	0.56	0.60	1.00	-	-
6.	Producer's share in consumer's rupee (%)	35.95	37.55	50.06	-	-

Note: Figures in parentheses are percentage to consumers purchase price

excluded from further analysis. Channel I was compared with channel III. The incremental benefit-cost ratio was found to be 3.70. It was found that spending additional amount of Rs.9069.93/ha on market channel III do yield Rs. 33,597.81/ha of additional benefit (Table 3).

Marketing efficiency of different market channels under study

Net margins of intermediaries were highest in channel I, which was Rs.267.00 (21.36 % of consumer price) and it was less in market channel

III (19.20 % of consumer price) (Table 4). Net price received, was more for farmers linked with channel III over channel I and channel II. The increase in net price received was 22.51 percent more over channel I and for channel II it was 37.68. The reduction in total marketing cost and total net margin received by intermediaries was -36.65 and -20.88 percent over channel I. The percentage difference in total marketing cost and total net margin received by intermediaries between channel III and channel II were -19.52 and -13.81 percent respectively. Market channel III was found to be

more efficient both by Shepherd's method (3.25) and Acharya's method (1.00) followed by channel II. Channel I was the least efficient method. Index of marketing efficiency was 2.53 and 0.60 for market channel II by Shepherd's method and Acharya's method respectively and for channel I it was 2.34 and 0.56.

It was further found that producer's share in consumer's rupee was highest (50.06%) for farmers supplying their vegetables through channel III. Producers share in consumer's rupee for farmers having linkages with channel I, was 35.95 percent and for farmers linked with channel II was 37.55 percent. The findings are in line with Vagdevi (1991), Khunt (1997), Singh and Singh, (1999), Pandey *et al.* (2003).

CONCLUSIONS AND POLICY IMPLICATIONS

It may be concluded that among the three market channels identified in the study area, channel III was more efficient due to less number of intermediaries. The major advantage for producers associated with corporate retail market was in the form of reduction in marketing cost and higher productivity. Producer's share in consumer rupee was found to be more compared to producers supplying their vegetables through traditional supply chain.

Based on these findings the following policy implications are framed:

- i. Government should encourage direct marketing in the supply chain of vegetables to enhance producers' share of consumer rupee, quality assurance to consumers and a fair consumer price.
- ii. Vegetable growers should be encouraged to form their own associations and self help groups to market their produce in order to decrease their dependence on intermediaries.

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