

Analysis of Marketing Efficiency of Litchi Producer and its Various Channels – A Case Study of Sonitpur District of Assam

By

ARABINDA MEDHI

Ad-hoc Assistant Professor, Department of Economics
Khagorijan College, Nagaon, Assam

Abstract:

A large number of varieties are grown in different parts of India. India ranks second as the largest global fruit producer after China. In North East India, Sonitpur is very popular for litchi production specially in Assam. Sonitpur produced 9610 metric tons litchi in 2015-16 under area 673 hectare (DI Annual Report 2015-16). The variety suitable for Sonitpur is Bombaya, Bilaity, Shahi, Elaichi, Locar Var etc. The most important sub-tropical evergreen fruit tree is Litchi (Litchi Chinensis). Litchi is basically known for its flavor, juicy pulp with attractive red color. The fruit covers 60% juice, 8% rag 19% seed and 13% skin varying upon variety and climate (Sonitpur District, Govt. of Assam). Litchi is also a source of vitamin C but it contains very small amount of protein 0.8 to 0.9%, fat 0.3%, pectin 0.49% and minerals specially calcium, phosphorus and iron 0.9%. The litchi produced in Sonitpur is very popular in all districts of Assam. There are so many researches on horticultural crops all over India as well as in North East but very few research have been conducted on litchi production and its marketing efficiency in Assam. This paper makes an attempt to analyze the marketing efficiency of litchi producer of Sonitpur district of Assam.

Keywords: Litchi, Production, Efficiency, Mineral, Assam

1. Introduction:

Analysis of marketing efficiency is of foremost important for profitable production of any crop. Efficient marketing system ensures remunerative prices to the farmers and motivates them to go for higher investment and production. It includes the consumer services, profitability of sellers, volume of sales, volume of supply, middleman cost etc. But in this study, the word efficiency is used in order to find the profitability of the litchi producer of Sonitpur district. The efficiency is measured taking into consideration the production cost, marketing cost and marketing margin. These costs are analyzed independently using appropriate statistical tools.

2. Objective of the Study:

The main objective of the study is to find out the marketing efficiency of litchi producer and the producer's share in the consumer's price.

3. Methodology of the Study:

The study is basically empirical in nature based on primary data. This study is based on both primary and secondary data. There are numbers of villages in Tezpur, among them only four litchi growing villages namely Parmai Gaudi Gaon, Puniani Gaon, Amola Pam Gaon and Jahajduba Gaon were selected randomly. Finally data are collected from 10 farmers from each selected village by using simple random sampling.

4. Findings:

Production Cost:

An attempt is made to analyze the costs structure of litchi supplied to the markets by the selected farmers. For this the average cost of cultivation is taken into account. The study finds that majority of small and marginal farmers do not maintain any record, data regarding previous years. However, most of the sample farmers (10 from each village) were able to recollect the data for the current year 2019-2010 and the same have been analyzed for cost per box of litchi (per box contains 15kg of litchi) as below-

Average Cost of Cultivation of Litchi during 2019-2020

SL No	Particulars	Charge in Per Box (Rs.)	Percentage
1	Seed	4	0.72
2	Inorganic Fertilizer	118	21.26
3	Organic Manures	138	24.86
4	Pesticides	48	8.65
5	Fungicides	30	5.41
6	Mechanical	52	9.37
7	Labour Force	150	27.03
8	Electricity	15	2.70
	Total	555	100

Source: Calculated from field survey 2019-2020

From the above table it is seen that the cost of production of litchi per box is Rs. 555 which means the producer has to incur Rs. 37 to produce per Kg of litchi. Producers spend more on materials to grow litchi than on power.

Marketing Channels of Litchi in the District:

This study found that there are two marketing channels of Litchi operational in the market. They are-

Channels1. Producer – Consumer

Channels2. Producer – Retailer – Consumer

Marketing Cost and Marketing Margins of litchi in Channels 1 are shown in the following table-
Price Spread and Marketing Margins in Channels 1

SL No	Particulars	Charge In Per Box (Rs.)	% of the Consumers Price
1	At Producer Level		
	a) Cost of Production	555	49.33
	b) Cost of marketing (i+ii+iii+iv)	25	2.22
	i) Cost of Paper Cartoon	10	0.89
	ii) Cost of Packaging	2	0.18
	iii) loading	1	0.09
	iv) Freight Charge to the Market (Avg.)	12	1.07
	Total Cost (a+b)	580	51.56
2	Price Received by the Producer i.e consumer price	1125	100
3	Profits Received by the Producer	545	48.44
4	Producer's share in the Consumer's Price (%)	100	-

Source: calculated from Field Survey 2019-20

This channel includes the production of small and marginal farmers whose production was actually low. In this channel, producers themselves sold their products at the nearest market where there is no involvement of any middlemen or retailers. Here all the profits are enjoyed by the producers themselves. The total marketing cost borne by the producer was calculated to be 38.66 per 15 kg packed litchi cartoon. The producers marketing costs included the cost of paper cartoon, cost of packaging, loading and freight charges. The grower had to incur the highest expenditure of Rs 12 per box as the freight charge to the nearest market. The grower had also to spend Rs 10 per paper cartoon for packaging which contains 15 kg of litchi. The producer received a sum of Rs 1125 per box (Rs. 75 per Kg) which contains 15kg of litchi. Thus the producer reaped a profit of Rs. 545 per 15kg paper

cartoon which was found to be 48.44 of the consumer's price. In this channel, the producers share in the consumer's price was found to be 100% indicating this marketing channel as very efficient.

Marketing Cost and Marketing Margins of Litchi in Channel 2 are shown in the following table-

Price Spread and Marketing Margins in Channels 2:

SL NO	Particulars	Charge in Per Box (Rs.)	% of the Consumers Price
1	At Producer Level (a+b)	568	50.49
	a) Cost of Production	555	49.33
	b) Cost of Marketing (i+ii+iii)	13	1.16
	i) Cost of Paper Cartoon	10	0.89
	ii) Cost of Packaging	2	0.18
	iii) Loading	1	0.09
	c) Price Received by the Producer	945 (75-12=63*15=945)	84
	d) Profits to Producer	377	33.51
2	At Retailers Level		
	a) Cost of Marketing		
	i) Freight Charge	15	1.33
	b) Price Received by the Retailer	1125	-
	c) Profits to Retailer	165	14.67
3	Producers Share in the Consumer's Price	84.00	

Source: Calculated from Field Survey 2019-2020

In this channel, the retailer purchases litchi from the producer and sells it at their retail shops. The marketing cost incurred by the producer was calculated to be Rs. 13 per box which was 1.16 percent of the consumer price. Here the producer had to incur the highest expenditure i.e. Rs. 10 per paper cartoon followed by the cost packaging, assembling and loading charges. After selling their products to retailers, producers receive a sum of Rs. 945 which contains 84 percent of the consumer's price. Then the producers earn a profit of Rs. 377 per box which is 33.71 percent of the consumer's price.

At the retailer's level, the retailer incurs a cost of marketing of Rs. 15 which includes the freight charges to the retail market. Transportation costs contain 1.33 percent of the consumer's price. The retailer then sells it at Rs. 1125 per box and earns a profit of Rs. 165 per box which is 14.67 percent of the consumer's price. The producer's share in the consumer's price was found to be 84.00 percent of the consumer's price indicating 16.00 percent of the consumer's price was going to the pocket of intermediaries.

5. MARKETING EFFICIENCY:

Marketing is said to be efficient if the total marketing margin is high for a given marketing cost (*S SOLANKE, M. KRISHNAN, C. SARADA*). In this study, the marketing efficiency is measured by using Shepherd' Method as below:

Marketing Efficiency by Shepherd Method:

The marketing efficiency is measured with the help of the following formula given by Shepherd-

$$ME = V/I - 1$$

ME= Index of marketing efficiency

V= value of goods sold of consumer price

I= total marketing cost.

Particulars	Channel 1	Channel 2
Shepherd Marketing Efficiency Index	0.94	0.66

The value of Shepherd Marketing Efficiency was found at 0.94 for channel 1 and 0.66 for channel 2. Thus channel 1 has the highest marketing efficiency value followed by channel 2. Thus channel 1 was the most efficient one with the highest efficiency value where there is no involvement of intermediaries.

6. Conclusion:

The analysis of the present study showed that the channel 1 is the most efficient marketing channel. The marketing channel with least number of intermediaries was found to be more efficient. The producers share in the consumer's price was also found to be highest in this channel. Thus the producers who sold their produces directly by themselves earned highest returns.

References:

- Sangey Tsomu, (2016), "An Economic Analysis of Apple Production in Arunachal Pradesh- A Case Study of West Kameng District."pp. 95-114
- Ahmed T.el. All (2015),"Economic Efficiency and Determinants of Gherkin Production in Karnataka," International Journal of Tropical Agriculture. Vol.33,No. 2, pp. 1359-1365
- Goswami, S.N. and Challa, O. (2007): "Economic Analysis of Smallholder Rubber Plantation in West Garo Hills District of Meghalaya", India Journal of Agricultural Economics, vol.62. No 4, pp 653-659
- Malik Z.A and Choure, T. (2014):"Economics of Apple Cultivation with Special Reference to South Kashmir-India", Journal of Economics and Sustainable Development, Vol.5, no 9, pp 124-128
- Kathirvel, N. (2007), "Cost and Returns of Banana Cultivation in Tamil Nadu with Special Reference to Karur District", Journal of Contemporary Research in Management, July-December, pp 10-20.
- S. Solanke, M. Krishnan, C. Sarada*, B. Nightingale Devi, I. Sivaraman and B. Debnath (2013), "Production, price spread and marketing efficiency of farmed shrimp inThane District of Maharashtra", Indian J. Fish., 60(3): 47-53, 2013