

An Economic Analysis of Marketing Cost, Marketing Margin, Marketing Channel and Price Spread of Banana in Tuticorin District of Tamil Nadu

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Abstract – In view of the economic importance of banana in both national and farm economy and the problems faced by farmers in production and marketing of banana the present study was taken up with the specific objective of an economic analysis of marketing cost, marketing margin, marketing channel and price spread in Tuticorin district of Tamil Nadu. The present study was conducted in two taluks namely Srivaikundam and Alwarthirunagari were selected and 90 banana farmers [45 banana farmers of each block] and 60 intermediaries. Lowest marketing cost per bunch was noticed in channel III with the value of Rs.25. Whereas, it was Rs.36.50 and Rs.27.00 in marketing channel I and marketing channel II respectively. In channel III, transport charges, loading and unloading charges contributed major proportion. Transport charges, loading and unloading charges were the major items of the marketing cost. Channel III was efficient channel than channel I and channel II. It is due to low marketing cost. Marketing margin channel I was Rs. 41.5 followed by marketing channel II and III with the value of Rs. 35.50 and Rs. 23.50. In channel I, pre harvest contractor obtain maximum per cent in the total marketing margin and marketing channel III has least amount of marketing margin when compared to other channels. Channel I have highest price spread Rs. 76.50 because the pre harvest contractor bears the entire cost of harvesting of banana. Channel III has the lowest price spread Rs. 42.50. Since there is a smaller number of market intermediaries. The most important constraint faced by the growers is high commission charge @ Rs. 10 percent charged by the commission agent and it was reported by 57 percent of the banana growers. The second major constraint ranked by the sample farmers is high cost of transportation. 54 percent of the banana producers were facing this problem. Lack of cold storage facilities for banana was the third constraint [46 per cent]. Fluctuation in market price of the banana was the fourth constraint [34 per cent] identified by sample farmers. There are no scientific storage facilities in the study area, the farmers have been compelled to sell their produce immediately after harvest. Hence, there is need to establish these facilities so that farmers can get reasonable price for banana. Though India is largest producer of banana in the World, only one percent of production is exported to Arab countries. Tuticorin district has a natural advantage of locating near harbour; government can make policies at suitable marketing facilities for the farmers for exporting banana to other countries. Further marketing information about price and opportunities for efficient marketing of banana can be provided to the farmers.

Keywords – Marketing Cost, Marketing Margin, Marketing Channel, Price Spread.

I. INTRODUCTION

Banana is the fourth important food crop in terms of gross value in the world and the most important fruit crop in India, playing a significant role in socio-economic status across the globe. It contributes more than 2.8 percent to agriculture GDP in India provides livelihood security to millions of people. Hence, banana is considered as “poor man apple” in the country. Tamil Nadu stood first in banana production with annual production of 6,213,000 MT occupying an area of 1,23,000 hectares in 2013-2014. Tamil Nadu is a dominant

player in the area, production and productivity as far as banana is concerned. In view of the economic importance of banana in both national and farm economy and the problems faced by farmers in production and marketing of banana the present study was taken up with the following specific objectives.

- i. To identify the existing marketing channels in banana marketing in Tuticorin district;
- ii. To analyse the marketing cost and marketing margin of banana;
- iii. To assess the price spread in banana marketing; and
- iv. To identify constraints in banana marketing and evolve suitable policy measures.

Banana is grown in 9256 hectares in Tuticorin district, which occupies the major position in both area and production in Tamil Nadu.

Sampling and Methodology

The present study is on marketing of banana, two taluks namely Srivaikundam and Alwarthirunagari were selected for the study. We have interviewed 90 farmers [45 farmers of each block] and 600 intermediaries.

Price Spread Analysis

Price spread analysis will be used for analysing the marketing margin of various market functionaries.

Sum of Average Gross Margin Method

The average Gross Margin of all the intermediaries is added to obtain the total marketing margin as well as the break-up of the consumer's rupee.

$$MT = \sum_{i=1}^n \frac{Si - Pi}{Qi}$$

Where,

MT = Total Marketing Margin.

Si = Sale value of a product for ith intermediary.

Pi = Purchase value paid by the ith intermediary.

Qi = Quantity of the product handled by the ith intermediary.

i = 1, 2, 3,..... N [number of intermediaries involved in the supply chain].

Price spread is being worked out as the difference between the price paid by the consumer and price received by the farmers expressed in terms of percentage in consumer rupee.

$$\text{Price spread} = C_p - F_p / C_p * 100$$

Farmer's Share in Consumer Rupee

Further, the farmer's share in rupee will be calculated with the help of the following formula.

$$F_s = [F_p / C_p] * 100$$

Where,

F_s = Farmer's share in consumer rupee.

F_p = Farmer's net selling price for kg.

C_p = Price paid by the consumer for kg.

Garrett's Ranking Technique

In the Garrett's Ranking Technique, the respondents will be asked to rank the factors or problems and these ranks will be converted into percent position by using the following formula.

$$\text{Percent position} = 100 * [R_{ij} - 0.5] / N_j.$$

Where,

R_{ij} = Ranking given to the i_{th} attribute by the j_{th} individual.

N_j = Number of attributes ranked by the j_{th} individual.

II. RESULTS AND DISCUSSION

Marketing of Banana

Majority of the farmers market their produce in Srivaikundam and Alwarthirunagari market and only a merge amount of production utilized for own consumption by the sample farmers in the study area. Further, there seems to be no differences in the method of marketing was the harvested bunches over the years and so method of marketing, cost of marketing and margins received by each of the intermediaries' functionaries.

Marketing Channel

There were three marketing channels through which banana was marketed in the study area. Hence, the price spread of different marketing channel was worked out and the results are presented. Banana is harvested and marketed throughout the year in the region. The banana producers can sell their produce either through pre harvest contract or commission agents and wholesaler. The retailers buy the banana from the above intermediaries. The following three marketing channels were identified in the study area: Marketing channel is defined as path traced in the movement of banana from the primary producer to the ultimate consumer/user.

Channel 1

Producer $\longrightarrow$ Pre harvest contractor $\longrightarrow$ Wholesaler $\longrightarrow$ Retailer $\longrightarrow$ Consumer

Channel 2:

Producer $\longrightarrow$ Commission agent $\longrightarrow$ Wholesaler $\longrightarrow$ Retailer $\longrightarrow$ Consumer

Channel 3

Producer $\longrightarrow$ Wholesaler $\longrightarrow$ Retailer $\longrightarrow$ Consumer

III. MARKETING COST FOR BANANA

The marketing cost of banana incurred by different intermediaries in different marketing channels It could be observed from the table1 that the lowest marketing cost per bunch was noticed in channel III with the value of Rs.25. Whereas, it was Rs.36.50 and Rs.27.00 in marketing channel I and marketing channel II respectively. In

channel III, transport charges, loading and unloading charges contributed major proportion. It could be concluded from the above results that the transport charges, loading and unloading charges were the major items of the marketing cost. It is also found that channel III was efficient channel than channel I and channel II. It is due to low marketing cost.

Marketing Margin

Marketing margin is conceptualized as the profit margins of various agencies involved in the marketing channel of banana. Table 1.

Table 1. Marketing of Banana.

S. No	Particulars	Market channel 1	Market channel 2	Market channel 3
1	Pre harvest contractor's margin	Rs.20.00	-	-
2	Commission agent	-	Rs.15.00	-
3	Wholesaler's margin	Rs.12.00	Rs.11.50	Rs.13.00
4	Retailer's margin	Rs.9.50	Rs.9.50	Rs.10.50
	Total marketing margin	Rs.41.50	Rs.35.50	Rs.23.50

Channel wise Marketing Margin of Banana

From the table 2, it is found that marketing margin channel I was Rs. 41.5 followed by marketing Channel II and III with the value of Rs.35.50 and Rs.23.50. In channel I, pre harvest contractor obtain maximum percent in the total marketing margin. It is concluded that marketing channel III has least amount of marketing margin when compared to other channels.

Table 2. Channel wise Marketing Cost for Banana.

S. No	Particulars	Channel 1	Channel 2	Channel 3
1	Harvest cost/bunch	Rs.4.00	Rs.4.00	Rs.4.00
2	Loading and unloading charge/bunch	Rs.8.00	Rs.7.00	Rs.6.00
3	Transport/bunch	Rs.22.00	Rs.15.00	Rs.15.00
4	Toll charge/bunch	Rs.1.00	-	-
5	Weighing/ bunch	Rs.1.50	Rs.1.00	-
	Total marketing cost/bunch	Rs.36.50	Rs.27.00	Rs.25.00

Price Spread Analysis

Evident from the tables 3, 4, and 5, The information on price spread in the banana marketing channel are provided in the tables through for all the three marketing channels through which banana was marketed.

Table 3. Channel wise Marketing Margin of Banana.

S. No	Particulars	Price/Bunch	Percentage
Farmer			
1	Gross price received	130.00	62.95

S. No	Particulars	Price/Bunch	Percentage
2	Harvest cost	-	
	Total marketing cost	-	
Pre-harvest Contractor			
1	Purchase price	130.00	62.95
2	Harvest cost	4.00	1.93
3	Loading and unloading	4.00	1.93
4	Transport charge	17.00	8.23
5	Weighing	1.50	0.72
6	Toll charges	1.00	0.48
7	Total marketing cost	27.50	13.31
8	Marketing margin	20.00	9.68
9	Sale price	177.50	85.95
Wholesaler			
1	Purchase price	177.50	85.95
2	Loading and unloading	3.50	1.69
3	Transport charge	2.00	0.96
4	Total marketing cost	5.50	2.66
5	Marketing margin	12.00	5.81
6	Sale price	195.00	94.43
Retailer			
1	Purchase price	195.00	94.43
2	Transport charge	2.00	0.96
3	Total Marketing cost	2.00	0.96
4	Marketing margin	9.50	4.60
5	Sale price	206.50	100
	Price paid by the Consumer	206.50	100
	Price Spread	76.50	37.04

Table 4. Price spread of banana in Market Channel I.

S. No	Particulars	Price/Bunch	Percentage
Farmer			
1	Gross price received	150.00	77.31
2	Harvest cost	4.00	2.06
3	Loading and unloading	4.00	2.06

4	Transport charge	10.00	5.15
5	Weighing	-	-
6	Total marketing cost	18.00	9.27
7	Net price received	132.00	68.04
Commission agent			
1	Commission charge	15 [10 %]	7.73
Wholesaler			
1	Purchase price	165.00	85.05
2	Loading and unloading	3.00	1.54
3	Transport charge	3.50	1.80
4	Marketing cost	6.50	3.35
5	Marketing margin	11.50	5.92
6	Sale price	183.00	94.32
Retailer			
1	Purchase price	183.00	94.32
2	Loading and unloading	-	-
3	Transport charge	1.50	0.77
4	Marketing cost	1.50	0.77
5	Marketing margin	9.50	4.89
6	Sale price	194.00	100
	Price paid by the Consumer	194.00	100
	Price Spread	44.00	22.68

Table 5. Price spread of banana in Market Channel II.

S. No	Particulars	Price/bunch	Percentage
Farmer			
1	Gross price received	160.00	79.01
2	Harvest cost	4.00	1.97
3	Loading and unloading	4.00	1.97
4	Transport charge	10.00	4.93
5	Weighing	-	-
6	Total marketing cost	18.00	8.88
7	Net price received	142.00	70.12
Wholesaler			
1	Purchase price	170.00	83.95

2	Loading and unloading	4.00	1.97
3	Transport charge	3.00	1.48
4	Marketing cost	7.00	3.45
5	Marketing margin	13.00	6.41
6	Sale price	190.00	93.82
Retailer			
1	Purchase price	190.00	93.82
2	Loading and unloading	-	-
3	Transport charge	2.00	0.98
4	Marketing cost	2.00	0.98
5	Marketing margin	10.50	5.18
6	Sale price	202.50	100
	Price paid by the Consumer	202.50	100
	Price Spread	42.50	20.98

Table 6. Constrains faced by the Banana Growers.

S. No	Particulars	Mean Score	Rank
1	High commission charge	68.50 [57.08]	I
2	High cost of transportation	65.70 [54.75]	II
3	Lack of cold storage facilities	56.20 [46.83]	III
4	Fluctuation in market price	41.30 [34.41]	IV
5	Seasonal glut	35.20 [29.33]	V
6	Lack of marketing information	33.50 [27.91]	VI

Constrains Faced by the Banana Growers

From the Table 6, the most important constraint faced by the growers is high commission charge @ Rs. 10 per cent charged by the commission agent and it was reported by 57 percent of the banana growers. The second major constraint ranked by the sample farmers is high cost of transportation. 54 per cent of the banana producers were facing this problem. Lack of cold storage facilities for banana was the third constraint [46 per cent]. Fluctuation in market price of the banana was the fourth constraint [34 per cent] identified by sample farmers. The price during harvesting period was found to be un-remunerative to the growers. So, the farmers, who are forced to sell immediately, were at loss. The other constraints were glut [29 per cent] and lack of market information [27 per cent] faced by the banana producers.

IV. CONCLUSIONS

Lowest marketing cost per bunch was noticed in channel III with the value of Rs. 25. Whereas, it was Rs. 36.50 and Rs. 27.00 in marketing channel I and marketing channel II respectively. In channel III, transport charges, loading and unloading charges contributed major proportion. Transport charges, loading and unloading

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Policy Suggestions

- ✓ There is no scientific storage facilities in the study area, the farmers have been compelled to sell their produce immediately after harvest. Hence, there is need to establish these facilities so that farmers can get reasonable price for banana.
- ✓ Though India is largest producer of banana in the World, only one percent of production is exported to Arab countries. Tuticorin district has a natural advantage of locating near harbour; government can make policies at suitable marketing facilities for the farmers for exporting banana to other countries.
- ✓ Further marketing information about price and opportunities for efficient marketing of banana can be provided to the farmers.

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