

An Economic Analysis of Marketing of Tapioca in Namakkal District of Tamilnadu

G. Ragavi¹, Dr. Sanjay Kumar¹

¹Department of Agricultural Economics, Sam Higginbottom University of Agriculture, Technology and Sciences, Prayagraj-211007, Uttar Pradesh, India

Dr. A. K. Rai²

²Department of Agricultural Economics and Statistics, Kulbhaskar Ashram Post Graduate College Prayagraj- 211007, Uttar Pradesh, India

Abstract:- The study is an analysis of price spread, producer's share in consumer's rupee and marketing efficiency of tapioca in Tamilnadu state. The study was carried out in Namakkal district of the state. A multistage sampling technique was employed to select the market functionaries from whom information were collected and analyzed. The data were collected using well structured questionnaires from three different marketing channels **Channel-I: Producer- Consumer, Channel-II: Producer- Village merchant/Retailer-Consumer, Channel-III: Producer-Wholesaler/Commission agent-Retailer/Village merchant-Consumer. Then the data is analyzed using tabulation method along with statistical tool.**

Keywords: - Tapioca, Price spread, Producer's share in consumer's rupee, Marketing efficiency

I. INTRODUCTION

Tapioca (*Manihot esculenta* Crantz) is a dicotyledonous perennial woody shrub with an edible starchy root, belonging to the botanical family Euphorbiaceae. And it has many names, including cassava, bitter-cassava, manioc, "mandioca". It belongs to roots and tuber crops that stores edible material in tuber which belong to class of foods that basically provide energy in the human diet in the form of carbohydrates. Apart from its use as human food, tapioca products also are popular in international trade under different forms such as dried chips, pellets, flour and starch, thus contributing to the economy of exporting countries. Tapioca leaves can also be consumed and are rich in protein (14- 40% dry matter), minerals, Vitamin B1, B2, C and carotenoids. Due to this resilience to adverse environmental conditions, cassava has been named as an ideal climate change crop. Tapioca which is believed to be a crop of South American origin is presently cultivated in most countries of the tropical belt, ecologically most suited to its cultivation. Nigeria is the major growing country in world accounting for 50% of area and production. In India crop is cultivated in southern peninsular region, particularly Kerala, Tamil Nadu and Andhra Pradesh contributing 93% of area and 98% of production in the country. The main objective of this study is to work out price spread, producer's share in consumer's rupee and marketing efficiency in different existing marketing channels.

II. RESEARCH METHODOLOGY

The study was conducted in Namakkal district of Tamilnadu which is one of the 32 districts of Tamilnadu. Namakkal district comprises of 7 blocks among that 2 blocks i.e, Mohanur and Paramathi- Velur blocks were selected for this study. From that 2 blocks 5% villages viz., Anangur, Nanjai- Edayar, Nadandhai, Arasanatham, Rasipalyam, Andapuram, Oruvandur, Aniyapuram were selected. Out of these villages, Oruvandur was selected as primary market and Paramathi- Velur was selected as secondary market purposely for the present study. All market functionaries bring their commodity for sales from different part of Namakkal district. A list of all market functionaries of both primary and secondary market is prepared with the help of market head out of total market functionaries 10% market functionaries selected randomly from both market for present study this market functionaries will be considered for data collection regarding different marketing cost and other charges in different marketing channels. Price spread, producer's share in consumer's rupee and marketing efficiency were calculated using required formulae.

III. RESULTS AND DISCUSSION

The study was conducted in Namakkal district of Tamilnadu. The necessary data were collected from the market functionaries in above mentioned district. The present chapter is going to tell about the results and discussion for various objectives. The chapter is arranged in different sub-sections according to objectives of the study

➤ To work out price spread, producer's share in consumer's rupee and marketing efficiency in different existing marketing channels

❖ *Marketing Channels:*

There are three marketing channels for the tapioca marketing in Namakkal district given below

Channel-I: Producer- Consumer

Channel-II: Producer- Village merchant/Retailer-Consumer

Channel-III: Producer- Wholesaler/Commission agent-Retailer/Village merchant- Consumer

S.No	Particulars	Sample Average		
		Channel- I	Channel- II	Channel- III
1	Producer sale price to consumer	5000	5000	5000
2	Cost incurred by the producer			
I	Transportation cost	401.7 (8.03)	401.7 (5.16)	401.7 (4.84)
Ii	Packing cost	3 (0.64)	32 (0.41)	32 (0.38)
Iii	Packing material cost	52 (1.04)	52 (0.66)	52 (0.62)
Iv	Market fee	37 (0.74)	37 (0.47)	37 (0.44)
V	Loading and unloading charges	202.66 (4.05)	202.66 (2.60)	202.66 (2.44)
Vi	Weighing charges	203.33 (4.06)	203.33 (2.61)	203.33 (2.45)
3	Total cost(i-vi)	929.66 (18.59)	929.66 (11.95)	929.66 (11.21)
4	Net price received by the producer	4070.33	4070.33	4070.33
5	Producer share in consumer rupee (%)	81.41		
6	Price spread	929.66		
7	Consumers paid price	5000.00 (100)		
8	Marketing Efficiency	5.37		
9	Sale price of producer to village merchant/retailer		5929.66	
10	Cost incurred by the village merchant/Retailer			
I	Loading and unloading charges		209.33 (2.69)	
Ii	Carriage up to shop		323.33 (4.15)	
Iii	Weighing charges		206 (2.64)	
Iv	Town charges		204.33 (2.62)	
V	Transportation cost		406.66 (5.22)	
Vi	Miscellaneous charges		37.66 (0.48)	
Vii	Margin of village merchant/retailer		460 (5.91)	
11	Total cost(i-vii)		1847.33 (23.75)	
12	Sale price of village merchant/retailer		7777	
13	Price spread		2777	
14	Consumers paid price		7777 (100)	
15	Producer share in consumer rupee%		52.33	
16	Marketing efficiency		2.79	
17	Sale price of producer to wholesaler/commission agent			5929.66
18	Cost incurred by the wholesaler			
I	Loading and unloading charges			207.66 (2.50)
Ii	Packing cost			34.33 (0.41)
Iii	Market fee			38.33 (0.46)

Iv	Commission of wholesaler/commission agent			60.66 (0.73)
Vi	Miscellaneous charges			43 (0.51)
Vii	Margin of wholesaler/commission agent			459.66 (5.54)
19	Total cost(i-vii)			843.66 (10.17)
20	Sale price of wholesaler/commission agent to retailer/village merchant			7773.33
21	Cost incurred by the retailer/village merchant			
I	Weighing charges			205 (2.47)
Ii	Loading and unloading charges			209 (2.51)
Ii	Town charges			205 (2.47)
Iv	Carriage up to shop			307 (3.70)
V	Miscellaneous charges			45 (0.54)
Vi	Margin of retailer/village merchant			545 (6.57)
22	Total cost(i-vi)			1516 (18.28)
23	Sale price retailer/village merchant to consumers			8289.33
24	Price spread			3289.33
25	Consumers paid price			8289.33 (100)
26	Producer share in consumer rupee(%)			50.22
27	Marketing efficiency			2.51

Table 1:- Sample Average for Three Different Existing Marketing Channels

Table 1 reveals that in channel-I sample average marketing cost for small, medium and large size farm groups when producer sold their product directly to consumers in the local market was Rs.929.66/ton. Among these costs transportation cost was most important which accounts for Rs.401.7/ton, followed by packing cost Rs.32/ton, packing material cost Rs.52/ton, market fee Rs.37/ton, loading and unloading charges Rs.202.66/ton and weighing charges Rs.203.33/ton respectively.

In channel- II the sample average marketing cost for small, medium and large size farm groups when producer sold their product to village merchant/retailer was Rs.929.66/ton. Among these costs transportation was most important which accounts for Rs.401.7/ton, followed by packing cost Rs.32/ton, packing material cost Rs.52/ton, market fee Rs.37/ton, loading and unloading charges Rs.202.66/ton and weighing charges Rs.203.33/ton respectively. The sample average marketing cost for small, medium, and large size farm groups when village merchant/retailer sold their produce to consumer was Rs.1847.33/ton. Among these costs transportation was most important which accounts for Rs.406.66/ton, followed by loading and unloading charges Rs.209.33/ton, carriage up to shop Rs.323.33/ton, weighing charges Rs.206/ton, town charges Rs.206/ton, town charges Rs.204.33/ton and miscellaneous charges Rs.37.66/ton respectively.

In channel- III the sample average marketing cost for small, medium and large size farm groups when producer sold their products to wholesaler/commission agent was Rs.929.66/ton. Among these costs transportation cost was most important which accounts for Rs.401.7/ton, followed by packing cost Rs.32/ton, packing material cost Rs.52/ton, market fee Rs.37/ton, loading and unloading charges Rs.202.66/ton and weighing charges Rs.203.33/ton respectively. The sample average marketing cost for small, medium and large farm size groups when wholesaler/commission agent sold their products to retailer/village merchant was Rs.384/ton. Among these costs loading and unloading charges was most important which accounts for Rs.207.66/ton, followed by packing cost Rs.34.33/ton and market fee Rs.38.33/ton, commission of wholesaler/commission agent Rs.60.66/ton and miscellaneous charges Rs.43/ton respectively. The sample average marketing cost for small, medium and large farm size groups when retailer/village merchant sold their products to consumer was Rs.611/ton. Among these costs loading and unloading was most important which accounts for Rs.209/ton, followed by weighing charges Rs.205/ton, town charges Rs.205/ton, carriage up to shop Rs.307/ton and miscellaneous charges Rs.45/ton respectively.

S.No	Particulars	Channel-I	Channel-II	Channel-III
1	Total marketing cost	929.66	2317	2284.67
2	Total marketing margin	0	460	1004.66
3	Price spread	929.66	2777	3289.33
4	Producer's share in consumer's rupee(%)	81.41	52.33	50.22
5	Marketing efficiency	5.37	2.79	2.51

Table 2:- Comparison of Total Marketing Cost, Total Marketing Margin, Price Spread, Producer's Share in Consumer's Rupee(%) and Marketing Efficiency in Three Different Channels

Table 2 reveals that sample average total marketing cost for small, medium and large size farm groups in channel-I was Rs.929.66/ton, followed by price spread Rs.929.66/ton, producer's share in consumer's rupee 81.41 percentage, marketing efficiency 5.37 percentage and there is no total marketing margin respectively. The sample average total marketing cost for small, medium and large size farm groups in channel-II was Rs.2317/ton, followed by total marketing margin Rs.460/ton, price spread

Rs.2777/ton, producer's share in consumer's rupee 52.33 percentage and marketing efficiency 2.79 percentage. The sample average total marketing cost for small, medium and large size farm groups in channel-III was Rs.2284.67/ton, followed by total marketing margin Rs.1004.66/ton, price spread Rs.3289.33/ton, producer's share in consumer's rupee 50.22 percentage and marketing efficiency 2.51 percentage.

ANOVA:								
Source	d. f.	S.S.	M.S.S.	F. Cal.	F. Tab. 5%	Result	S. Ed. (±)	C.D. at 5%
Due to Channel	2	2427646.26	1213823.13	4.022892658	4.46	NS	448.500	925.705
Due to Particulars	4	13822230.35	3455557.59	11.45252296	3.84	S	347.407	717.048
Error	8	2413831.50	301728.94	-	-	-	-	-
TOTAL	14		-	-	-	-	-	-

Table 3

In the above anova table, in due to size group degrees of freedom is 2, sum of squares is 2427646.26, mean sum of squares is 1213823.13, F. Calculated value is 4.022892658, F. tabulated value @ 5% is 4.46, result is not significant, standard deviation is 448.500 and cumulative deviation is @ 5% is 925.705. In due to particulars, degrees of freedom is 4, sum of squares is 13822230.35, mean sum of squares is 3455557.59, F. Calculated value 4.022892658, F. tabulated value @ 5% is 3.84, result is significant, standard deviation is 448.500 and cumulative deviation is 925.705. In error, degrees of freedom is 8, sum of squares is 2413831.50 and mean sum of squares is 301728.94.

IV. CONCLUSION

Among the three marketing channels identified in Namakkal regulated market, the Channel-III, i.e. Producer-Wholesaler-Retailer-Consumer was found more popular in marketing of tapioca. The prices of tapioca have not influenced by the arrivals in Namakkal market. The maximum prices of tapioca were observed during the month of April. Thus, the sellers prefer these months for selling of tapioca in Namakkal market.

REFERENCES

- [1]. **Adelbert Kharlyndoh, M. Anantharaman, EvangelShanpru, Diego Naziri (2018)**. Cassava Production, Marketing and Utilization in Meghalaya, India: Results of a value chain assessment. Food Resilience through Root and Tuber Crops in Upland and Coastal Communities of the Asia Pacific (FoodSTART+).
- [2]. **Ahmad Roziq, Muhammad Saleh, Nur Hisamuddin (2016)**. Analysis of business feasibility of Cassava chips and Cassava tape, financing and marketing strategies entrepreneurial Cassava farmers in Jember Regency. Journal of Arts, Science & Commerce ■ E-ISSN 2229-4686 ■ ISSN 2231-4172 International Refereed Research Journal.
- [3]. **Akinpelu, A.O, Adekanye, J.O, Yusuf, S.A (2013)**. Producer Organization and Competitive Equilibrium Of Cassava Markets Journal of Sustainable Development Vol. 10. No.2.
- [4]. **Izekor, O. B., Alufohai, G. O. and Eronmwon (2016)**. Analysis of Market Integration and Price Variation in Garri Marketing in Edo State (Nigeria). NJAFE VOL. 12 No. 4, 123.
- [5]. **Oladejo, Joana Adefemi (2017)**. Marketing Efficiency Analysis Of Women Cassava Processors. App. Sci. Report.19 (2), 62-66.