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TEA INDUSTRY IN BANGLADESH: MARKETING SYSTEM AND PRICE BEHAVIOUR

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ABSTRACT

This study is an attempt to examine the existing processing, marketing system and price behaviour of tea in Bangladesh. It is mainly based on primary data collected from 10 estates and 46 traders. Price data were collected from secondary sources. Processing cost differs significantly among different types of estates. Tea is sold in two ways: direct sale from the estate and sale by auction. The participants involved in the tea marketing system are the tea estate, broker, bidder, exporter, manufacturer, blender, distributor, wholesaler and retailer. Marketing cost was the highest for bidders and the lowest for blenders. Net margin and return on investment was found highest for retailers. Profit from packet tea was greater than that from open tea. Price instability, inadequate storage facilities, strike, lack of market information, scarcity of plywood, shortage of capital, higher amount of charges and barriers created by law are the important problems faced by the tea producers and traders. Tea production increased mainly due to rise in yield and growth rate of former period was much higher than that of latter period. Although nominal price increased but real price remained more or less same during the study period. Nominal price rise in the first period was found higher than that of second period. Marketing margin in the first period remained static whereas it went up significantly in the latter period. Seasonal price and quantity variations were not related and variation in quantity was higher than that of price.

I. INTRODUCTION

Bangladesh is a small tea producing country with large potential. Tea is a major agro-based, labour intensive and export-oriented industry of Bangladesh. It plays a very vital role in the national economy through export earning, trade balancing and as well as in employment generation. It produces 2% of world production and exports 3% of world export. It is providing direct employment to about 0.11 million ethnic minority people, 50% of whom are women and their civic needs and amenities are provided by the industry free of cost along with about 0.4 million dependents of the permanent workers. Furthermore, another 0.6 million people are also dependent on tea in its export, packing, broking and local trade, supporting factories and workshops chest manufacturing and transport industry etc. It gives 200 million taka as interest against production and development loan from the tea industry (BTB, 1998). Tea is a very important cash crop of Bangladesh. A large number of tea estates have been established in Bangladesh depending on the tea as raw material. But processing and marketing system of tea are* subdued by manifold problems, which always hamper the interest of tea producers. A wide range of variations was observed in yield, costs and returns among

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different types of tea estates (Hossain, 1976). Furthermore, tea price is so volatile that it is very difficult to anticipate future price. It is a matter of fact that no study has yet identified the problems of tea processing and marketing. The present study is a modest attempt to examine the existing marketing system and price behaviour of tea in Bangladesh. The findings of the study and recommendations may be useful to the growers, policy makers and researchers for improving tea processing and marketing.

Following introduction, methodology is discussed in section II. Section III deals with growth rate of area, production and yield. Processing cost, marketing system and marketing cost and margin are presented in sections IV, V and VI respectively. Section VII discusses the problems of tea marketing. Section VIII and IX cover respectively trend in price and marketing margin and seasonal price and quantity variation. Finally, conclusion and recommendation are drawn in the last section.

II. METHODOLOGY

This study is based on primary data collected from 10 estates, one broker company, 8 bidders, 10 wholesalers, 12 retailers and 5 blenders. The information of the tea estate was collected from Habigonj and Moulavi Bazar districts. All types of tea estates were classified into four categories such as A (producing above 180000 kgs annually), B (producing more than 108000 to 180000 kgs), C (producing 27000 to 108000 kgs) and U (producing below 27000 kgs). Ten tea estates taking two each from Sterling company Ltd., Bangladesh Tea Board (BTB), National Tea Company (NTC), Private Limited Company, and Proprietary ownership were chosen purposively. Out of ten selected tea estates, eight were A category, one was B category and another was C category. Chittagong auction market was selected for this study. (Detailed methodology is shown in Hassan, 1999).

Secondary data were collected from various secondary sources. Data concerning processing cost, income etc, were collected for the year 1998. However, marketing data were collected from auction market in 1999.

III. GROWTH RATE OF AREA, PRODUCTION AND YIELD

Compound growth rates of area, production and yield of tea during 1973/74 to 1997/98 were estimated by fitting exponential function ($Y = ae^b$) and are presented in table 1. Total period has been divided into two sub-periods: i) during 1973/74 to 1982/83 (before structural adjustment) and ii) during 1983/84 to 1997/98 (after structural adjustment). Between 1973/74 and 1997/98, production of tea increased by 2.39% per annum whereas area and yield growth rate were estimated at 0.58% and 1.79% respectively. That means production increased mainly due to increase in yield. The growth rates of production, area and yield during first period were found double as much as the growth rates of those during second period. This

indicates that after adopting structural adjustment policies in Bangladesh the increase in production of tea has slowed down. As the area remained static in the first period, the production in this period was increased solely because of

Table 1. Compound growth rate of area, production and yield of tea during 1973/74 to 1997/98

Period	Area		Production		Yield	
	CGR	R ²	CGR	R ²	CGR	R ²
Whole Period (1973/74-1997/98)	0.58 ^a (12.39)	0.87	2.39 ^a (8.75)	0.77	1.79 ^a (6.30)	0.63
1st Period (1973/74-1982/83)	0.35 (1.41)	0.20	4.19 ^a (6.36)	0.84	3.83 ^a (4.72)	0.74
2nd Period (1983/84-1997/98)	0.64 ^a (8.88)	0.86	2.28 ^a (3.36)	0.47	1.62 ^b (2.42)	0.31

^a & ^b indicate significant at 1% & 5% levels respectively.

yield increase. In contrast, in the second period production increased due to both area expansion and yield increase. However, increase in yield was much higher than area increase.

IV. PROCESSING COST

In this study only processing items were included for cost estimation. Production cost was not included here. Most of the tea estates consider the processing cost as a manufacturing cost. Because, processing cost is one of the most important costs for tea production. The cost items included in processing cost are plucking cost, garden transport, manufacturing wages, power and fuel, repair and maintenance, depreciation etc. It is evident from table 2 that total processing cost per kg of tea was estimated at Tk.21.82, which was highest for Proprietary management estate and the lowest for Sterling Company. Plucking cost was the highest cost item covering 44% of total cost followed by power and fuel. Other cost items in descending order were repair and maintenance, transport, depreciation, and wages. Thus in terms of processing cost Sterling Company was found to be more efficient compared to other estates. Proprietary management seems to be most inefficient as all its cost items were inefficient higher than that of other estates.

Table 2. Processing cost of tea under different management in 1998

Cost item	(Tk./Kg.)						
	NTC	Private Company	BTB	Sterling Company	Proprietary management	Average Cost	% of total cost
Plucking cost	9.06	9.79	9.06	9.94	10.09	9.59	43.95
Garden Transport	1.49	1.25	1.20	0.96	3.59	1.70	7.79
Manufacturing Wages	1.16	1.20	1.23	1.00	2.95	1.51	6.92
Power & Fuel	5.19	5.12	5.53	4.89	6.70	5.49	25.16
Repair & Maintenance	1.67	1.16	1.32	1.71	3.92	1.96	8.98
Depreciation	1.81	1.17	1.80	1.06	2.00	1.57	7.20
Total	20.38	19.69	20.14	19.56	29.25	21.82	100.00

V. MARKETING SYSTEM

In the domestic market, tea is sold in two ways: direct sale from the estates and sale by auction.

Direct Sale from the Estate:

The tea estates can sell a limited quantity of tea in the local market as approved by the Bangladesh Tea Board. An estate can sell 15% to 20% of total production by this method. The sale prices are determined through bargaining between the estate and the seller. Before selling, the estate must take permission from BTB and VAT authority. They have to mention the quantity and grade of tea to be sold. After getting the permission the estate sells to the buyers after adding VAT to the price. In Bangladesh the standard tea chest is used to carry tea both in the domestic and international market.

Auction Market Sale:

Generally tea is sold in the only tea auction market in Chittagong on every Tuesday of a week. But in case of holiday the auctions takes place on the next working day. Tea sold through auction follows six steps:

Step-I: The particular estate sends the tea invoice to one of the 16 warehouses in Chittagong city. For sending invoice the information like number of tea chests, quality of tea, grade of tea, name of the tea estate, registration number of the truck by which the invoice is sent must be written in the estate invoice form.

Step-II: After receiving the invoice, the warehouse authority keeps the tea chests in their warehouse. The warehouse charge varies from warehouse to warehouse. But generally the charge is Tk. 9.50 per chest for two calendar months. If the estate keeps this tea chest over two calendar months, they have to pay extra Tk. 1.50 per chest.

Step-III: The estate has to select one of the six Broker's Company in Chittagong. The warehouse authority divides the tea, on the basis of quality, into three categories viz. a) good, b) fair and c) weak and then sends one copy of invoice form to the selected Broker Company. The Broker then goes to the warehouse and draws 3kg sample per lot for leaf grade and 1 kg sample per lot for dust grade tea.

Step-IV: After collecting samples, the broker company tastes the tea by palate in order to assess the expected sale price. The price of the tea is determined on the basis of quality, colour, appearance, market demand etc. The Broker Company then prints a catalog which contains name of the estate, lot number, quantity, expected sale price, warehouse address etc.

Step-V: Catalog and one ounce sample from each lot are then sent to each registered bidder before one week of the auction day. Each bidder determines the value of the tea after tasting by his own taster on the basis of the export requirement. Tea is sold to the bidder who offers the highest price. Tea sale is completed when the Auctioneer announces its completion by the fall of hammer. Any dispute between bidder and seller is settled by the auctioneer (broker) and their decision is final. All lots are subject to a reserved or upset price, unless expressly stated to the contrary or declared by the Auctioneer when the lot is first put up for the sale. If such price is not offered, the lot is withdrawn and is placed on a list of 'out lots' and the lots on such lists are available for disposed with Brokers and seller by bargaining according to bylaws of the 'Tea Traders Association of Bangladesh.'

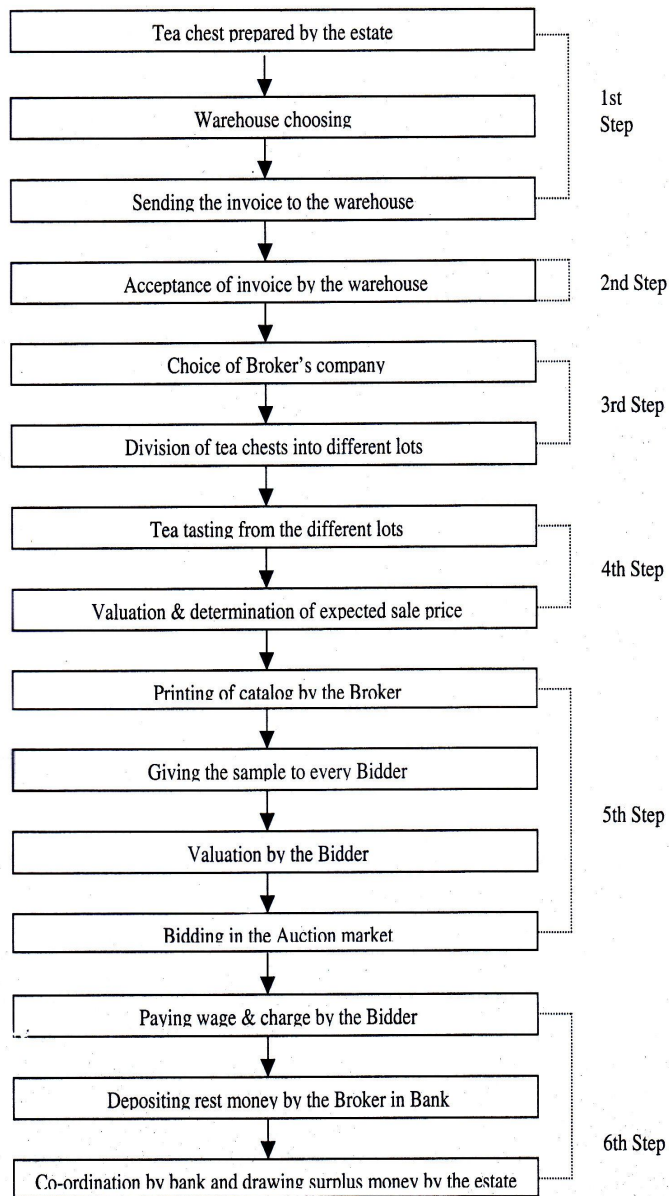


Fig. 1. Steps involved in the Auction Market

Step-VI: The buyer pays the price, less deposit paid and takes delivery of the lots purchased by him on or before the prompt day, which will be 13 days after the sale, unless otherwise advised by the Tea Traders Association of Bangladesh. If prompt date is a public holiday the buyer pays the price on the next working day. The buyer also pays 15% VAT with the tea price. The goods are to be at seller's risk till 4 p.m. on prompt date or till the date of removal by the buyer. If goods are not taken by 4 p. m. on the prompt date, the goods will thereafter be at the risk of buyers. Brokers get one percent of the values of tea as wage from the buyer. Also another one percent of total value is to be paid as 'BTB Cess' to the Bangladesh Tea Board. Additionally, Tk 0.50 per chest is to be paid as sample drawing and inspection charge. After paying the warehouse charge by the brokers, the remaining portion of money will be deposited to the contract bank. The brokers get only 15 days from prompt date to deposit this money. The bank coordinates the deposited money with the hypothecation loan. After completion of this coordination, the estate can draw the surplus money from the bank at the end of the year.

Tea is exported from Bangladesh to international market in three ways: i) sell the tea in the London Auction Market, ii) the foreign buyers purchase tea from the Chittagong auction market by their respective bidders, and iii) sale by the bilateral transaction contract. No party like Producers, Brokers, Bidders, Foreign buyers have to pay VAT for exporting tea. Figure 1 shows the whole process of selling tea through auction.

Market Participants:

The marketing system of tea is well organized and is different from that of other farm products. The parties involved in various stages of tea marketing must need some special qualification. The participants involved in the tea marketing system are the tea estates, brokers, bidders, blenders, wholesalers and retailers.

Tea estate: The estate produces tea and after processing it sells the tea by two different ways. The estate may send tea for sale to the auction market or it may directly sell tea to the manufacturers. The manufacturers directly sell tea to the consumers through their own distributors.

Broker: Brokers are the very respectable participants in the tea marketing system. There are six brokers in Bangladesh. In Chittagong auction market brokers control all types of buying and selling. They receive the tea chests from the estate after fulfilling some formalities. They arrange selling tea of an estate through open bidding at Chittagong auction market. The Brokers Company must need some qualification and must be registered by BTB. In the auction market tea is sold through brokers to three different parties. They are exporters, bidders or local buyers and packet tea manufacturer. The Broker Company must have ten million taka capital and one million paid up capital. It should have bank solvency certificate, trade license, tax identification number, certificate of in-corporation, and memorandum and

article of association. Finally, director's bio-data, staff & officers position, full list of office equipment and rent receipt and agreement with the land owner are required if a company wants to be a broker.

Bidder: Actually tea buying and selling starts from bidders. Only the bidders can participate in the auction market for buying. They must have valid license from BTB and other documents to be qualified as a bidder.

Exporter: Exporters can purchase tea from the auction market according to the foreign buyer choice. After buying tea, the exporter exports the tea to the particular foreign country by ship only from the Chittagong port. Neither exporters nor foreign buyers have to pay VAT for purchase of tea.

Manufacturer: Manufacturers also purchase tea from the auction market by bidding. They also have to pay VAT to the authority. After purchase of tea they pack it and assign a brand name. The manufacturers have their own distributors and they sell tea to the wholesalers through distributors.

Blender: Blenders purchase open tea from the bidders. The Blenders have their own machine and after purchase they mix the different types of tea that are purchased from different estates. They try to make a grade which might have the high market demand. The Blenders also pay VAT. They also need a valid license from BTB and must have the bidder license photocopy.

Wholesaler: The wholesalers purchase tea from Blenders and sell to the retailers. The «holesalers also purchase packet tea from distributors. They also need a valid license from BTB and have to pay VAT to the authority.

Retailers: Retailers purchase both open tea and packet tea from the wholesalers. They sell tea directly to the consumers according to their demand. They pay VAT for purchasing tea and also need some documents for participation in the marketing system. Retailers are the last participants in the tea marketing system.

VI. MARKETING COST AND MARGIN

Marketing cost was the highest of Tk 5.48 per kg. for manufacturer followed by retailer and the lowest of Tk. 2.92 for Blenders (Table 3). Manufacturer's cost was the highest because of their higher transportation and distribution cost which constituted two-fifth of total cost. Besides, they had to bear different costs like chest cost, advertisement etc. Blender did lesser number of marketing functions compared with other traders. That is why their marketing cost was the lowest. Among the different cost items higher cost was incurred for transportation constituting about 24% of total cost of marketing for all traders followed by labour cost and VAT. Moreover, storage cost accounted for significant portion of total cost of marketing. (Table 3).

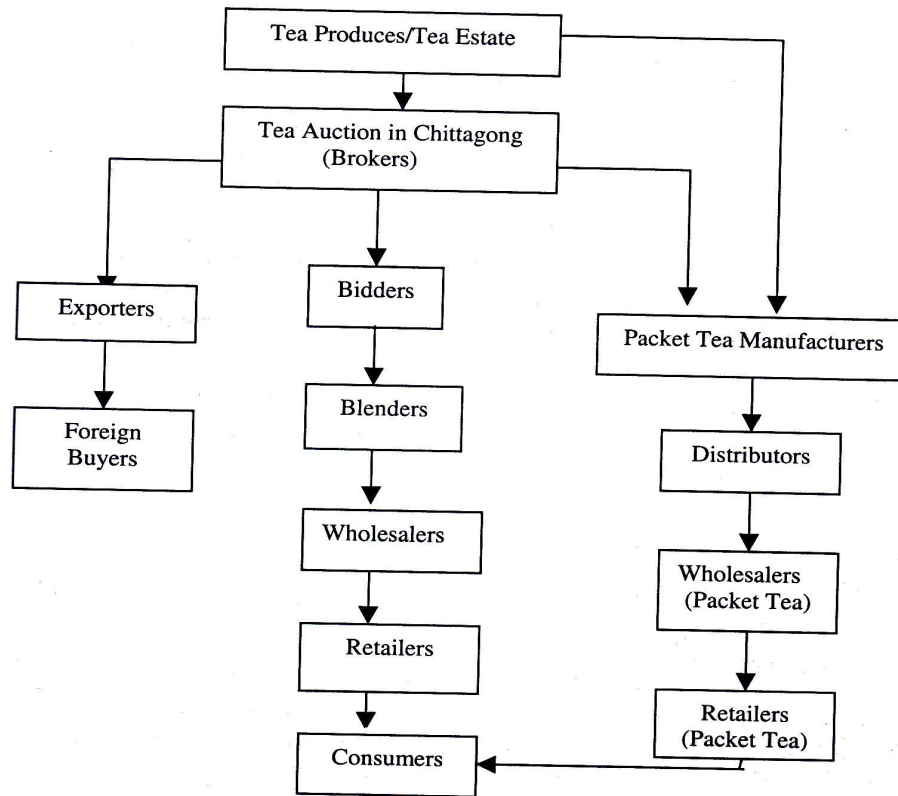


Fig. 2 Marketing Channel of Tea

Table 3. Marketing cost of tea for different traders.

Cost item	(Tk./Kg.)						% of total cost
	Bidder (Open tea)	Manufacturer (Packet tea)	Blender	Wholesaler	Retailer	All	
Transportation	0.99	0.99	0.52	0.98	1.15	4.63	23.92
Labour	0.73	0.73	0.70	0.78	0.84	3.78	19.53
VAT	0.15	0.15	0.50	0.75	1.00	2.55	13.17
Storage	0.41	0.41	0.37	0.30	0.53	2.02	10.44
Tea chest cost	-	0.15	-	-	-	0.15	0.77
Distribution charge	-	1.20	-	-	-	1.20	6.20
Brokerage	0.52	0.52	-	-	-	1.04	5.37
BTB cess	0.52	0.52	-	-	-	1.04	5.37
Machine charge	-	-	0.43	-	-	0.43	2.22
Advertisement	-	0.30	-	-	-	0.30	1.55
Sample Drawing & Inspection	0.01	0.01	-	-	-	0.02	0.10
Others	0.50	0.50	0.40	0.37	0.43	2.20	11.36
Total	3.83	5.48	2.92	3.18	3.95	19.36	100.00

Gross margin and net margin were found to be the highest for retailers. Although manufactures' gross margin was higher but their net margin was lower due to higher marketing cost. As the Blenders incurred less marketing cost, their net margin was comparatively large. Retailers' return on investment was also greater compared with other traders. On an average the traders earned higher profit by trading dust tea against leaf tea. Likewise, profit from packet tea was greater than that from open tea. (Table 4). Although Bidders and wholesalers earned lower profit per unit, their total profit would be higher because they marketed large volume of tea compared to other traders.

Table 4. Marketing margin of intermediaries

(Tk./Kg.)

Particular	Bidder		Manufacturer		Blender		Wholesaler				Retailer			
							Open tea		Packet tea		Open tea		Packet tea	
	Leaf	Dust	Leaf	Dust	Leaf	Dust	Leaf	Dust	Leaf	Dust	Leaf	Dust	Leaf	Dust
Sale price	58.83	69.54	62.66	72.79	68.95	79.26	77.33	86.84	72.24	82.97	91.68	102.59	88.39	100.02
Purchase price	50.80	60.81	50.80	60.81	58.83	69.54	68.95	79.26	62.66	72.79	77.33	86.84	72.24	82.97
Gross Margin	8.03	8.73	11.86	11.92	10.12	9.72	8.38	7.58	9.58	10.18	14.35	15.75	16.15	17.05
Marketing Cost	3.83	3.83	5.48	5.48	2.92	2.92	3.18	3.18	3.18	3.18	3.95	3.95	3.95	3.95
Net Margin	4.20	4.90	6.38	6.50	7.20	6.80	5.20	4.40	6.40	7.00	10.40	11.80	12.20	13.10
Return on Investment (%)	7.70	7.60	11.30	9.80	11.20	9.40	7.20	5.30	9.70	9.20	12.80	13.00	16.00	15.00

VII. PROBLEMS OF TEA MARKETING

The problems faced by the tea estates owners and traders in marketing tea are discussed below.

i) **Price instability:** All selected tea estate personnel reported that tea price and demand fluctuate frequently. This results in high price fluctuation of different grades of tea. For that reason, all estates remain worried about selling their tea in the auction market. Price instability is a major problem as mentioned by 85% of traders. In this situation the traders remain uncertain on profit they received and the possibility of loss is a common phenomena.

ii) **Inadequate storage facilities:** Every estate wanted to keep tea in the warehouses that are near to the auction market. For this competition, the estate had to pay higher rent to the warehouse owner, which increased their marketing cost. Sixty percent of estate personnel reported to have faced this problem. Some traders do not have adequate storage facilities, so they have to pay extra charge for storing tea.

iii) Strike and political unrest: All estate owners and traders complained on the strike and unstable political situation. They pointed out that transportation of tea was very much hampered by strike. In case of political unstable situation, the auction market cannot perform its function properly. About 90% intermediaries reported strike and political unrest as a problem to get higher profit.

iv) Lack of proper market information: Majority of the estate personnel reported that although they received market information from Broker companies but they did not get proper market information such as current market demand for every grade of tea, current price of tea, foreign countries' demand etc. One-half of the traders complained that they did not receive accurate and up to date information on demand, supply and price of tea.

v) Scarcity of plywood and paper sack: Most of the tea producers pointed out that sometimes they did not get required plywood for making tea chests and for packing tea. There is only one plywood factory in Kaptai. They felt that one factory was not enough to meet up the increasing demand for all estates. Besides they could not import paper sack and other packing materials in proper time due to import restriction.

vi) Shortage of capital: Sometimes the bidders and blenders could not purchase enough tea due to shortage of capital. Thus shortage of capital was a problem to the bidders and blenders.

vii) Higher amount of charges: Majority of traders reported that higher rate of tax and toll was a problem to run their business smoothly.

viii) BTB law and barriers: Mainly the wholesalers and retailers complained on the BTB laws and barriers in the study area because for these laws and barriers they could not participate directly in the auction market.

VIII. TREND IN PRICE AND MARKETING MARGIN

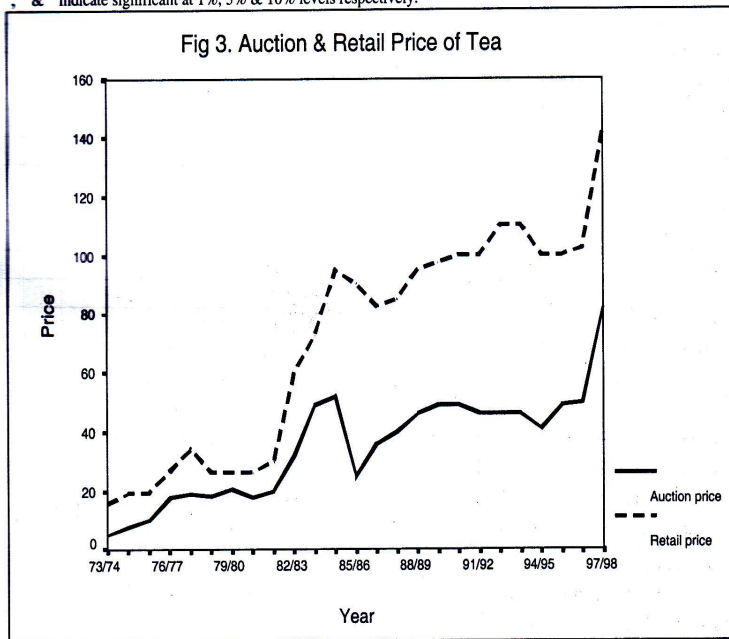
Compound growth rates of auction price, retail price and marketing margin (difference between retail price and auction price) were calculated for whole period and two sub-periods and are shown in table 5. Although nominal auction and retail prices increased during the study period but their real price remained same as their growth rates were negative and non-significant. Real prices were calculated after deflating nominal prices by consumers' price index (CPI). However, retail price increased at a faster rate than auction price. Both the prices were highly related as the correlation coefficient between two prices was estimated to be 0.93. Annual auction and retail prices move in sympathy with each other but the difference between auction and retail prices became wider since mid 1980s when Bangladesh started to adopt structural adjustment policies (Fig. 3). Nominal price rise in the first period was found much higher than that of second period. Though real prices in the first period did not change significantly, but in the second period they reduced at the rate of over 3% annually. Thus after adopting structural adjustment policies in Bangladesh the high rise of tea price has been

checked significantly. Not only that the prices in real term decreased in the latter period. Marketing margin in the first period remained more or less same whereas it went up significantly in the second period. This result revealed that absolute marketing margin prevailed in the former period and composite (both absolute and percentage margin) margin in the latter period. The producers received on average 52% of consumers' taka during the study period and this share decreased in the recent years (Appendix table 1).

Table 5. Compound growth rate (C.G.R.) of price and marketing margin of tea.

Particular	Whole Period 1973/74-97/98				1st Period 1973/74-82/83				2nd Period 1983/84-97/98			
	Nominal		Real		Nominal		Real		Nominal		Real	
	CGR (%)	R ²	CGR (%)	R ²	CGR (%)	R ²	CGR (%)	R ²	CGR (%)	R ²	CGR (%)	R ²
Auction price	8.43 ^a (8.56)	0.76	-0.67 (-0.84)	0.03	17.82 ^a (5.51)	0.79	5.36 (1.71)	0.27	2.76 ^c (2.07)	0.25	-3.57 ^b (-2.52)	0.33
Retail Price	9.10 ^a (11.20)	0.85	-0.06 (-0.09)	0.00	10.45 ^a (4.01)	0.67	-1.27 (-0.49)	0.03	2.74 ^a (4.80)	0.64	-3.58 ^a (-5.47)	0.70
Marketing Margin	10.39 ^a (8.18)	0.74	-	-	2.96 (0.60)	0.04	-	-	3.36 ^b (2.65)	0.35	-	-

^a, ^b & ^c indicate significant at 1%, 5% & 10% levels respectively.



IX. SEASONAL PRICE AND QUANTITY VARIATION

Table 6 and Fig. 4 exhibit the monthly price and quantity variation of tea at Chittagong auction market during 1994/95 to 1999/2000. Seasonal variation of price and quantity was calculated by ratio to moving average method. The price was the highest in the month of October and the lowest in July. The price remained above average during October to March and below the average during rest of the period. In contrast, the supply of tea at auction market was the highest in August and the lowest in May. Supply was very erratic, not systematic. The relation between price and quantity supplied was very weak as the correlation coefficient between monthly price and quantity during 1994/95 to 1999/2000 was estimated to be -0.14 . This implies that price depends on the factors other than supply of tea in the auction market. Domestic price of tea probably depends on the price and demand in the world market. The range and coefficient of variation of monthly price and quantity revealed that seasonal variation of quantity was much higher than that of price.

Table 6. Seasonal price and quantity variation of tea in Chittagong Auction Market during 1994/95 to 1999/2000

Months	Price	Quantity
January	101.05	85.52
February	100.1	82.97
March	101.48	85.97
April	99.54	95.94
May	98.23	80.36
June	96.98	96.89
July	93.04	114.69
August	96.23	120.86
September	98.6	118.51
October	110.02	97.55
November	101.13	105.84
December	103.6	114.9
Range	16.98	40.50
C.V.	4.21	14.66
Correlation Coefficient between price & quantity	-0.14	

X. CONCLUSION AND RECOMMENDATION

Processing cost differs significantly among different types of estates. Proprietary management estate's cost was found highest because of higher cost of transport, wages, power and fuel etc. The factor affecting the higher processing cost of an estate should be identified and steps may be taken to reduce the cost of processing.

Less competition prevails among the brokers, as there are only 6 brokers in Chittagong auction market. For that reason, there is possibility to earn abnormal profit by the brokers. To be a broker huge amount of capital is needed and numbers of formalities are required to be

fulfilled. Government can make the process easier and allow prospective persons to be broker in order to increase the competition at this stage.

Storage facility is not sufficient in Chittagong. As a result, higher rent is paid by the estate for keeping tea in the warehouse. More warehouses need to be constructed in Chittagong with the initiative of government. Most of the tea producers reported that they had to pay unnecessary extra warehouse charges. BTB and other associations can take effective steps to reduce warehouse charges.

The producers as well as the traders complained of getting no information on current demand, price etc. of tea in world and domestic markets. Bangladesh Tea Board can provide upto-date information on demand, supply, and price of tea to the producers and traders. The email and Internet facilities can improve the information problem of tea marketing in Bangladesh.

Marketing cost was found higher because of paying different legal and illegal charges by the traders and producers. Government can see the possibility of reducing different charges by evaluating the existing rate.

Bangladesh Tea Board's law may be modified so that more people, especially the wholesalers and retailers, can participate in auction for increasing the competition among the bidders.

Higher difference between auction price and retail price in the recent past resulted in lower share of consumers' taka to the producers. The producers' share decreased from 66% in early 80s to 46% in the 90s. This decrease is justified if more services are added to the consumers. This needs an evaluation of whether the traders are taking abnormal profit at any stage of marketing.

Price instability is an important problem as mentioned by majority of producers and traders. This study shows that price does not depend on the supply of tea in auction market. It depends mainly on the demand of the international buyers. Seasonal price variation shows that price changes about 20% within a year. Bangladesh Cha Sangsad (BCS), Tea Traders' Association of Bangladesh (TTAB) and Bangladesh Tea Board (BTB) can play a vital role for reducing price fluctuation by insisting and alluring foreign buyers to purchase tea from Bangladesh.

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APPENDIX

Appendix Table 1. Price, marketing margin, producers' share of tea in different years

(Tk./Kg.)

Year	Auction price	Retail Price	Marketing Margin	Producers' share of consumers' taka
1973/74	4.90	15.66	10.76	31.27
1974/75	7.54	19.29	11.75	39.09
1975/76	9.94	19.51	9.57	50.96
1976/77	17.73	26.86	9.13	66.01
1977/78	19.07	34.27	15.19	55.66
1978/79	18.35	26.46	8.11	69.33
1979/80	20.79	26.46	5.67	78.58
1980/81	17.99	26.46	8.47	68.00
1981/82	20.00	30.00	10.00	66.67
1982/83	32.00	60.00	28.00	53.33
1983/84	49.00	72.50	23.50	67.59
1984/85	52.00	95.00	43.00	54.74
1985/86	25.00	90.00	65.00	27.78
1986/87	36.00	82.50	46.50	43.64
1987/88	40.00	85.00	45.00	47.06
1988/89	46.00	95.00	49.00	48.42
1989/90	49.00	97.50	48.50	50.26
1990/91	49.00	100.00	51.00	49.00
1991/92	46.00	100.00	54.00	46.00
1992/93	46.00	110.00	64.00	41.82
1993/94	46.00	110.00	64.00	41.82
1994/95	41.00	100.00	59.00	41.00
1995/96	49.00	100.00	51.00	49.00
1996/97	50.00	102.50	52.50	48.78
1997/98	82.00	142.50	60.50	57.54
Average	34.97	70.70	35.73	51.73

Source: BBS (various issues)