Wheat Flour Marketing in Bangladesh: a case study on packaged Atta, Maida and Semolina in two major City Corporations of Bangladesh

Hasan Mahmud

MBA in marketing, University of Dhaka, Bangladesh

E-mail: hasanmahmudmbl@yahoo.com

This paper is dedicated to my lovely parents: Shelina Ferdous and Nur Mohammad

Abstract

Wheat flour is one of the most preferred cereal items of the world. This paper tries to identify demand supply gap of commonly consumed wheat flour like Atta, Maida and Semolina in two major city corporations of Bangladesh. The objectives of the research is to explore the demand supply gap, key players' performance, their pricing and distribution strategy, SKU wise contribution to sales as well as consumers' preferences to brands. This study is mostly in quantitative nature while some secondary information has also taken into consideration to estimate the market size. Study reveals that "Teer" brand is the market leader in Dhaka City Corporation (DCC) in all of the three flours whereas "Pusti" brand dominates Chittagong City Corporation (CCC) market in both Atta and Maida flour and brand "Horse" ahead in Semolina flour. Comparing with the sales performance of the most selling brand "Teer", study shows that there is an approximately 5300 Metric Tons monthly demand supply gap in the market for all these three products. Interestingly, study unveils that DCC market is based on 2 kg SKU while CCC market completely based on 1 kg SKU. In case of Atta and Maida, selling of 1 kg SKU is comparatively more profitable than selling of 2 kg SKU. Both in DCC and CCC, retailers mainly purchase from distributors but in CCC, some retailers purchase their stocks from whole sellers. Both in DCC and CCC "Teer" is the most preferred brand.

Keywords: Wheat flour marketing, demand-supply gap, brand performance, pricing, distribution, consumer preference, Bangladesh

1. Background of the study

Wheat is grown almost all over the world. Bangladesh is mainly an agricultural country. Wheat is the second most producing food crops of the country. Wheat flour is the second largest cereal item of Bangladesh. Among the various wheat flour Atta, Maida and Semolina are widely consumed. Atta is the mixture of Endosperm and Bran of wheat which is used to make most flatbreads, such as chapati, roti, naan and puri. Maida is made from the Endosperm (the starchy white part) of wheat which is used in making fast food, bakery products such as pastries and bread varieties of sweets and sometimes in making traditional breads such as paratha and naan. Semolina, locally known as 'sooji', is the coarse, purified wheat middlings used in making pasta, breakfast cereals, puddings, and couscous. Despite the multitude consumption of wheat flour, there is no available research regarding wheat flour marketing especially on Atta, Maida and Semolina in Bangladesh to provide insight to the manufacturer and marketer. Given this issue as priority, I with the help of my employer, have conducted a market research in 2007 on wheat flour marketing during my three months long internship in a market research division of a leading conglomerate of the country to fulfill my MBA requirement. The purpose of the study was to have an overall idea about the wheat flour marketing to suggest my company whether it would be feasible to manufacture and market the food items like Atta, Maida and Semolina.

2. Objectives

The objective of the study is to estimate the current and potential market size and existing supply of the Atta, Maida and Semolina mainly in Dhaka and Chittagong city corporation with a view to have a perception of the business eventuality for business development. Specifically the study has been conducted with the following objectives;

- To estimate current market size (Demand)
- To approximate the supply in the markets
- To identify the gap between demand and supply in the market
- To evaluate the key players' performance in terms of their market share
- To gain an insight about the price both retail and trade as well as the profit margin
- To have an idea about the competitors' distribution network coverage, distribution reach and out of stock
- To determine consumers' preference on the competitors' brand

3. Methodology

The study is basically in quantitative in nature. Both primary and secondary data are used in this study. Secondary information from the Bangladesh population census 2001, Bangladesh Bureau of Statistics – Statistical Year Book 2007 helped to estimate the market size of Dhaka City Corporation (DCC) and Chittagong City Corporation (CCC). Monthly sales of Teer brand's Atta, Maida and Semolina were collected to estimate the supply volume. Quantitative data was collected to estimate the demand by per household consumption and to conceptualize the existing key competitors' market share, distribution reach, out of stock, pricing, profit margin, distribution network and most preferred brand in the market using a prescribed questionnaire by face-to-face interview.

In order to fulfill the specific objectives, two separate studies were designed to launch. One research study named "Study on per household consumption of Atta, Maida, Semolina and other food items" was deployed targeting the housewife of DCC and CCC to estimate the 'market size' based on per household consumption and number of household. 300 respondents were selected following convenient sampling method out of which 150 respondents were from DCC and 150 respondents were from CCC to ensure geographical coverage. The other study titled "Survey on retailer to estimate the 'market share' of the key competitors in consumer goods like Atta, Maida and Semolina" has been conducted to have the key players' status in the market. Data has been collected from 42 markets out of which 22 from DCC and 20 from CCC. Some of these markets from DCC are Newmarket, Palashi, Hatirpul, Jatrabari, Chalkbazar, Dhupkhola market, Azampur, Ashkona, Khilkhet, Banani bazaar, Mohakhali, Gulshan-1, Zigatola, Mohammadpur, Mirpur-1, Mogbazar, Shukrabad, bowbazar, Indira Road, Malibag Railgate, Sheowrapara, Kazipara and markets from CCC are Fakirhat, Bohaddarhat, Chalk Bazar, Agrabad City Corporation Market, Colonel Hat, Chakty, 5 no Gate, Atura depot, Kemal Bazar, Riazuddin Bazar, Firingi Bazar etc. About 1223 retailers were randomly selected following five shops interval out of which 691 from Dhaka City Corporation and 532 from Chittagong City Corporation.

After collection of data, data are inputted in computer using a data entry program developed in Visual FoxPro Programming Language. Then a tabulation program was written in FoxPro to produce data in tabular form.

3.1 Limitation of the study

In Dhaka and Chittagong City Corporation there are some slam areas. fFod consumption pattern of the dwellers' of the slams might be different than others. In our study we couldn't include the respondents of slam areas and thus there might have possibility to over estimation of percentage buying and average consumption as well as market size. In addition to this, as there is no publicly available data regarding Teer's monthly sales volume and the percentage contribution of DCC and CCC in sales of Teer, in calculating the supply volume of the market the study relies on approximate value provided by one of the Assistant Brand Managers of City Group, the manufacturer of Teer brand.

4. Major findings of the study: The Key Findings are summarized below;

According to the study on household consumption, total consumption of packaged Atta , Maida and Semolina in DCC is 7169, 1191 and 580 metric tons respectively per month and in CCC is 2804, 1175 and 355 metric tons respectively per month. Comparing with the sales performance of Teer, in DCC market the approximate supply of Atta is 4404 Metric Tons (MT), Maida is 753 MT and Semolina is 192 MT and in CCC market the approximate supply of Atta is 1804 MT, Maida is 680 MT and Semolina is 103MT. Therefore, the approximate Gap in the existing market of DCC for Atta is 2765 MT, Maida is 438 MT and Semolina is 388 MT and in CCC for Atta is 1000 MT, Maida is 495 MT and Semolina is 252 MT.

Findings from the survey on retailer reveal that, Teer is the market leader in Dhaka City Corporation in all three wheat flour market while Chittagong City Corporation market is dominated by two different brands. Interestingly, study shows that DCC market is based on 2 kg SKU (83.9%), while CCC market is completely based on 1 kg SKU (100%). Both of DCC and CCC markets are mainly based on distributors but in CCC, some retailers purchase products from whole sellers.

The profit margin of almost all of the key competitors of Atta in DCC is around Tk 2.00 per kg SKU and Tk 2.70 per 2 kg SKU. In CCC the profit margin is around Tk 1.00 per kg SKU. The profit margin of almost all of the key competitors of Maida in DCC is around Tk 2.50 per kg SKU and Tk 4.10 per 2 kg SKU and profit margin in CCC is around Tk 1.00 per kg SKU. Both in DCC and CCC Semolina are packaged mainly in 500gms SKU. The profit margin of almost all of the key competitors of Semolina in DCC is around Tk 2.00 per 500gms SKU and in CCC is around Tk 1.00 per 500gms SKU.

Wheat is the only raw material of Atta, Maida and Semolina marketed in Bangladesh. Though wheat is widely produced in the country, the better part is imported from other countries. Domestic production isn't up to the mark to fulfill the needs of the market. Thus, foreign market policy has an important impact on the pricing of the

raw materials.

5. Details findings of the study

5.1 Market demand and supply Gap

Market demand for a product is the total volume that would be bought by a defined customer group in a defined geographical area in a defined time period in a defined marketing environment under a defined marketing program (Philip Kotler, 2004). Market supply is the total supply of every seller willing and able to sell a good. In economics, supply is the amount of some product producers are willing and able to sell at a given price all other factors being held constant (Wikipedia). According to Philip Kotler, "Marketers are responsible for demand management". To mange this demand prudently marketers need to identify the market demand and its underlying gap. If the supply of the products and the demand of the products does not match with each other then there a demand supply gap exists. To measure this gap marketer should estimate the actual market size and the total supply of the products in the market. In this study we have tried to find out the existing market gap.

Lack of sufficient empirical data on consumption pattern of these products caused it difficult to verify the estimation. From our primary data we found that the household size in Dhaka City Corporation (DCC) is 4.89 and in Chittagong City Corporation (CCC) is 5.49. Again, using growth factor to the population of National Population Census' 2001 data, we derived that total population of Dhaka City Corporation (DCC) is approximately 6 million and Chittagong City Corporation (CCC) is approximately 4 million. Using the household size we calculated the number of households in DCC and CCC. From our enumerated data, we got the percentage of households buying these products and applied it to calculate the estimated market size in metric tons (MT). According to the findings, total consumption of packaged Atta, Maida and Semolina in DCC is 7169, 1191 and 580 metric tons respectively per month and in CCC is 2804, 1175 and 355 metric tons respectively per month (Table: 1).

Besides estimating of a total available market size, it is imperative for a marketer to have an idea about the actual industry sales taking place in market. In this study, we calculate the market supply based on market player's sales volume. In order to do so, one of the Assistant Brand Managers of City Group of Industries was interviewed. According to his information the monthly sales volume of Atta, Maida and Semolina of Teer is 3500 MT approximately out of which 70% is Atta, 25% is Maida and 5% is Semolina. In this total sales volume, 75% of the sales is generated from DCC whereas sales contribution of CCC is 10% according to his estimation. However, DCC is the key consuming market of Atta, Maida and Semolina where contribution varies from 65% to 90% according to different large retailers and Teer official. Comparing with the sales performance of Teer, the approximate market supply of Atta is 4408 MT, Maida is 753 MT and Semolina is 192 MT in DCC and in CCC market supply of Atta is 1804 MT, Maida 680 MT and Semolina 102 MT (Table: 2). Henceforth, the approximate market gap in the existing market of DCC is Atta 2765 MT, Maida 438 MT and Semolina 388 MT and of CCC is Atta 1000 MT, Maida 495 MT and Semolina 252 MT (Table: 3).

5.2 Brand wise market share

American Marketing Association defined the term 'brand' as a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors. Some of the brand names selling Atta, Maida and Semolina in Bangladesh are Teer, Pusti, Fresh, Yusuf, Saad, Fowzi, Silver, Horse, Elders, Diamond, Keya, Ifad, Romoni, Maheen, etc. Market share refers competitors' relative share of percentage in the market. In this study report, the market share represents the consumer off take volume share covering two geographical areas: DCC and CCC.

Overall finding reveals that, in Atta market, Teer brand is the market leader in DCC with market share of 44.5%, followed by brands Pusti 15.6% and Fresh 13.9%. Brand Pusti is leading the CCC market with share of 19.4% followed by brands Fowzi 17.4% and Silver 15.6% (Chart 1). Moreover, in case of Maida, finding reveals that brand Teer is the market leader in DCC with market share of 60.4%, followed by brands Pusti 6.8% and Saad 7.2% while Pusti is the market leader in CCC with share of 19.3%, followed by brands Silver 17.1% and Fowzi 14.6% (Chart: 2). Furthermore, for Semolina, it is discovered that brand Teer is the market leader in DCC and in CCC Horse is the market leader. Market share of Teer is about 81.9% in DCC and in CCC 1.7% whereas Horse's market share in DCC is 0% and in CCC is 46.5% (Chart: 3).

5.3 Stock Keeping Unit (SKU) contribution

Stock keeping unit (SKU) is a store's or catalog's product and service identification code, often portrayed as a machine-readable bar code that helps the item to be tracked for inventory. SKUs are used by suppliers within their data management systems, to help track amounts of product in inventory, and/or units of billable entities sold (investopedia.com). SKU contribution to the total market volume means how proportions of SKUs are sold individually. According to our market study, we found that there are two SKUs of Atta and Maida and three SKUs of Semolina in the market. SKUs size of Atta and Maida are 1kg and 2kg and of Semolina are 250gm,

500gm and 1000gm. For Atta and Maida, measuring different SKU's contribution in the market we found opposite direction in DCC and CCC. In DCC, 2 kg SKU holds about 83% market share while in CCC 1 kg SKU dominates the market with approximately 100% contribution. For Semolina, in DCC 500gms SKU holds maximum share of 99.5% while 250gms SKU holds 0.2% share and 1000gms SKU holds 0.3% share. On the other hand, in CCC 500gms SKU holds maximum share of 79.1%, 250gms SKU holds 0.2% share and 1000gms holds 20.7% share(Chart: 4).

5.4 Brand wise distribution reach or penetration and out of stock

Brand wise distribution reach or penetration implies the percentage of the outlets selling / stocking the brand based on total market. We have calculated the distribution or penetration in terms of numeric distribution and net distribution. Numeric distribution reach means the percentage of outlets usually selling the brand while Net distribution means the percentage of outlets stocking the brand. Subtracting the net distribution from numeric distribution we get the out of stock in the market. The findings of study on distribution reach and out of stock of top five brands of Dhaka City Corporation and Chittagong City Corporation are summarized below;

By evaluating the distribution performance of top five brands, we found that, in case of Atta, in DCC the numeric distribution reach of Teer is 77.9%, net distribution is 76.9% and out of stock is 1%. Numeric distribution of Fresh is 26.6%, net distribution is 25.9% and out of stock is 0.7%. Numeric distribution of Pusti is 36.3%, net distribution is 35.3% and out of stock is 1%. Numeric distribution of Yosuf is 10.7%, net distribution is 10.7% and out of stock 0.0%. The numeric distribution of Saad is 15.9%, net distribution is 15.6% and out of stock is 0.3% (Table: 4). Again, in CCC the numeric distribution reach of Teer is 33.8%, net distribution is 32.9% and the out of stock is 0.9%. Numeric distribution of Fresh is 27.1%, net distribution is 27.1% and out of stock is 0. Numeric distribution of Pusti is 39.5 %, net distribution is 38.7% and out of stock is 0.8%. Numeric distribution of Fowzi is 28.2%, net distribution is 27.6% and the out of stock is 0.6%. The numeric distribution of Silver is 23.9%, net distribution is 23.3% and out of stock is 0.6% (Table: 4).

Moreover, in case of Maida, in DCC the numeric distribution reach of Teer is 53.7%, net distribution is 53.6% and out of stock is 0.1%. Numeric distribution of Fresh is 3.3%, net distribution is 3.2% and out of stock is 0.1%. Numeric distribution of Pusti is 7.7%, net distribution is 7.5% and out of stock is 0.2%. Numeric distribution of Eldars is 8.1%, net distribution is 8.0% and out of stock is 0.1%. The numeric distribution of Saad is 9.1%, net distribution is 9.0% and out of stock is 0.1% (Table: 5). Besides, in CCC the numeric distribution reach of Teer is 23.7%, net distribution reach is 22.56% and the out of stock is 1.14%. Numeric distribution of Fresh is 19.7%, net distribution is 19.36% and out of stock is 0.34%. Numeric distribution of Pusti is 30.3%, net distribution is 29.89% and out of stock is 0.41%. Numeric distribution of Fowzi is 21.8%, net distribution is 19.74% and the out of stock is 2.06%. The numeric distribution of Silver is 21.8%, net distribution is 20.49% and the out of stock is 1.31% (Table: 5).

Furthermore, in case of Semolina, in DCC the numeric distribution reach of Teer is 59.3%, net distribution is 58.8% and out of stock is 0.5%. Numeric distribution reach of Fresh is 0.9%, net distribution is 0.9% and out of stock is 0. Numeric distribution reach of Pusti is 1.0%, net distribution reach is 1.0% and out of stock is 0. Numeric distribution reach of Eldars is 4.5%, net distribution is 4.5% and out of stock is 0. The numeric distribution reach of Saad is 7.1%, net distribution is 7.0% and the out of stock is 0.1% (Table: 6). Asides from this, in CCC the numeric distribution reach of Teer is 3.0%, net distribution is 3.0% and the out of stock is 0. The numeric distribution reach of Fowzi is 13.9%, net distribution is 11.3% and out of stock is 2.6%. Numeric distribution reach of Horse is 41.2%, net distribution is 40.0% and out of stock is 1.2%. Numeric distribution reach of Diamond is 4.9%, net distribution is 4.9% and out of stock is 0. The numeric distribution reach of Keya is 12.8%, net distribution is 12.8% and the out of stock is 0 (Table: 6).

5.5 SKU wise Brand's average purchase price, selling price and profit margin

The following analysis shows the relative purchase and selling price of the brands in SKU wise. This study also depicts the competitors' average profit margin in SKU wise. To calculate this we have selected five top brands in Dhaka City Corporation and Chittagong City Corporation. Detail price scenario of whole sale, retail and profit margin of Atta, Maida and Semolina by different SKUs of top five brands according to market share in Dhaka City Corporation and Chittagong City Corporation has been explained below;

Though the market price of Atta is unstable, the average prices and profit margin has given us an innuendo for price estimation. It is noticeable that in DCC profit margin of almost all of the key competitors of Atta is around Tk 2.00 (Tk 1.84 to Tk 1.91) per kg SKU and Tk 2.70 (from Tk 2.39 to Tk 2.66) per 2 kg SKU. The average purchase price, selling price and profit margin of Teer 1kg SKU in DCC are Tk 29.62, Tk 31.46 and Tk 1.84

respectively and for 2kg SKU these values are Tk 59.1, Tk 61.66 and Tk 2.65 respectively. The average purchase price of 1kg SKU of Fresh, Pusti, Yusuf and Saad in DCC are Tk 29.89, Tk 29.71, Tk 29.72 and Tk 29.61 respectively and for 2kg SKU these brands cost Tk 58.94, Tk 59.18, Tk 58.82 and Tk 59.12 respectively. The average selling price of 1kg SKU of Fresh, Pusti, Yusuf and Saad in DCC are Tk 31.74, Tk 31.56, Tk 31.56 and Tk 31.52 respectively while in 2kg SKU these brands are sold at Tk 61.33, Tk 61.70, Tk 61.46 and Tk 61.78 respectively. The profit margin of 1kg SKU of Fresh, Pusti, Yusuf and Saad in DCC are Tk 1.85, Tk 1.85, Tk 1.84 and Tk 1.91 and for 2kg SKU the profit margins are Tk 2.39, Tk 2.52, Tk 2.64 and Tk 2.66 respectively (Table: 7).

Interestingly, the purchase price, selling price and profit margin in CCC varies with DCC. Profit margin of almost all of the key competitors is around Tk 1.00 (from Tk 1.05 to Tk 1.22) per kg SKU. Average purchase price of Teer 1kg SKU is Tk 30.84, sales price is Tk 31.91 and profit margin is Tk 1.07. The average purchase price of 1kg SKU of Fresh, Pusti, Fowzi and Silver are Tk 30.58, Tk 30.75, Tk 30.89 and Tk 29.05 respectively. The average sales price of 1kg SKU of Fresh, Pusti, Fowzi and Silver are Tk 31.64, Tk 31.80, Tk 31.97 and Tk 30.27 respectively. The profit margin of 1kg SKU of Fresh, Pusti, Fowzi and Silver are Tk 1.06, Tk 1.05, Tk 1.08 and Tk 1.22 respectively. (Table: 7).

In case of Maida market, the study found that profit margin of almost all of the key competitors in DCC is around Tk 2.50 (from Tk 2.00 to Tk 2.50) per kg SKU and Tk 4.10 (from Tk 3.34 to Tk 4.09) per 2 kg SKU. The average purchase price of Teer 1kg is Tk 31.88, sales price is Tk 34.19 and the average profit margin is Tk 2.31. Average purchase price of Teer 2kg is Tk 62.93, sales price is Tk 66.33 and average profit margin is Tk 3.40. There are some similarities among the purchase and selling price of top five brands. The trade prices of these brands' 1kg SKU ranged from Tk 31.50 to Tk 32.50 and 2kg SKU costs from Tk 62.56 to Tk 63.81.The retail prices of these brands' varied from Tk 34.19 to Tk 34.75 per kg SKU and from Tk 66.12 to Tk 67.37 per 2kg SKU. Profit margin ranged from Tk 2.00 to Tk 2.50 per kg SKU and from Tk 3.34 to Tk 4.00 per 2kg SKU (Table: 8).

On the other hand, in Chittagong City Corporation, the average purchase price of Teer 1kg Maida is Tk 32.49, sales price is Tk 33.62 and average profit margin is Tk 1.13. The trade prices of Maida of the top five brands ranged from Tk 31.72 to Tk 32.52 per kg SKU and Tk 34.00 per 2 kg SKU. The retail prices of these brands' 1 kg SKU are from Tk 32.52 to Tk 33.77 and 2 kg SKU are Tk 34.00. Profit margin of 1kg SKU is from Tk 1.1 to Tk 1.13 (Table: 8).

In case of Semolina, in DCC, average purchase price of Teer 500gms is Tk 18.41, sales price is Tk 20.21 and the average profit margin is Tk 1.8. All of the top five brands' purchase price, selling price and their profit margin are near similar except brand Romoni. The trade prices of these brands 500gms are Tk 18.41 to Tk 18.78 and 250gms is Tk 8.50. The retail prices of these brands' 500gms are Tk 20.21 to Tk 20.68 and 250gms is Tk 10.00. The average profit margins of 500gms varied from Tk 1.8 to Tk 2.09 and for 250gms it is sold at Tk 1.50 (Table: 9). In CCC, the average purchase price of Teer 500gms is Tk 18.03, sales price is Tk 19.34 and the average profit margin is Tk 1.31 .There are some similarities among the top five brands' purchase, selling price and their profit margins. The trade price of these brands' 500gms SKU ranged from Tk 18.03 to Tk 19.39 and 250gms is Tk 9.00. The retail prices of these brands 500gms are from Tk 19.34 to Tk 20.46 and 250gms is Tk 10. All of the brands' profit margins varied from Tk 1.00 to Tk 1.81 (Table: 9).

5.6 Consumers' preference to brand

Retailers were asked to rank among the brands those have high demand irrespective of presence of the brand at the outlet. According to preference we present here top six brands of DCC and CCC.

In case of Atta, both in Dhaka City Corporation and Chittagong City Corporation Teer and Pusti are the first and second preferred brands respectively. In DCC Fresh is the third preferred brand whereas in CCC, Fowzi is the third preferred brand (Table: 10).

Similarly, in case of Maida, in DCC Teer" is the 1st preferred brand and Pusti and Saad are the second and third preferred brands. In CCC market, though Teer is the 1st preferred brand, but comprising first, second and third rank Pusti is the highest preferred brand and then comes Teer and Fowzi (Table: 11).

Again, for Semolina, in DCC, Teer is the first preferred brand and Pusti and Saad are the 2nd and 3rd preferred brands respectively. In CCC market, Horse is the 1st preferred brand, Fowzi and Teer are the second and third preferred brands (Table: 12).

5.7 Marketing channel

Marketing channels are sets of interdependent organizations involved in the process of making a product or service available for use or consumption (Philip Kotler et al, 2005). Distribution channel is one of the key components of sales and marketing strategies. In order to have the overall distribution picture of Atta, Maida and

Semolina the retailers were asked to tell from whom they usually purchase the products. Study found that both in DCC and CCC markets retailers mainly purchase from distributors. In DCC, about 90% retailers purchase from distributor and in CCC this ratio is about to 80%. The percentage of purchasing from whole seller in DCC is much more less than that of CCC (Table: 13).

6. Conclusion

Greater consumer awareness of the dietary benefits of fiber, bran, and whole grains, increased use of bread (buns) in the fast food industry, expanded product choice (e.g., variety bread, cookies, snack foods, bagels, and pita bread) offered by manufacturers, changes in lifestyle and dining habit at restaurants and other outlets (James N. Barnes et al, 1998), growing trend in number of aging population who spend more on cereal and bakery products (Putnam, Judith et al, 1996) insinuate of increasing demand of wheat flour throughout the world. Bangladesh is the world's eighth most populous country, as well as one of the world's most densely populated countries. Bigger population is always a boon for an economy. Bigger population means more consumers, more demands. In Bangladesh, supply of wheat flour especially Atta, Maida and Semolina is scanty compare to total demand of the market. So, there are enormous opportunities in wheat flour marketing. Teer is strongly leading Dhaka City Corporation in all three flours but, it cannot maintain its leadership in Chittagong City Corporation. In Chittagong City Corporation, all brands' market shares are close to each other. In CCC, competition among the competitors is very intense than DCC. Therefore, if the cost of factory establishment, warehousing of raw and finished goods, distribution and overhead found feasible for manufacturing and marketing Atta, Maida and Semolina, new company may take initiative to launch wheat flour in the market.

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Charts and Tables
Chart: 1 Market Share of Atta by Brands in percentage

Market share of top 5 brands in Dhaka City Corporation

14.2 / 6.5 / 5.3 / 13.9 / 15.6 / 44.5

Teer Pusti Fresh Yusuf Saad Others

Market share of top 6 brands in Chittagong City Corporation

12.95 / 13.58 / 10.10 / 19.45 / 15.62 / 17.51 / 10.79

Teer Pusti Fresh Fowzi Silver Horse Others
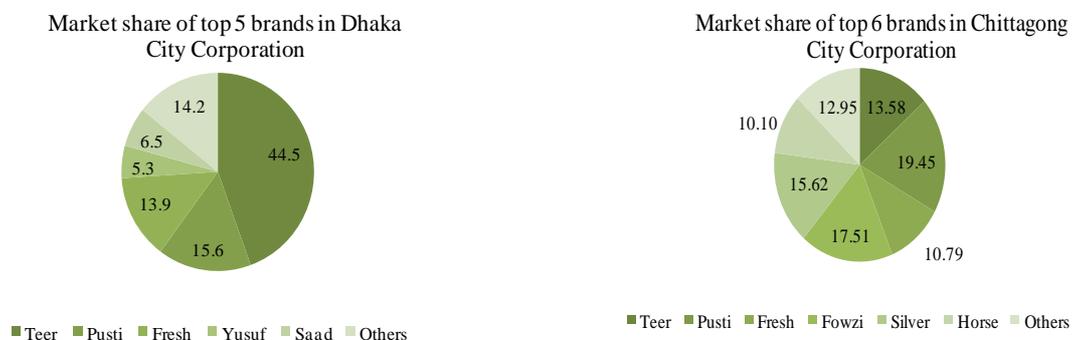
Chart: 2 Market Share of Maida by Brands in percentage

Market share of top 5 brands in Dhaka City Corporation

44.5 | 15.6 | 13.9 | 5.3 | 6.5 | 14.2

■ Teer ■ Pusti ■ Fresh ■ Yusuf ■ Saad ■ Others

Market share of top 6 brands in Chittagong City Corporation

13.58 | 19.45 | 10.79 | 17.51 | 15.62 | 10.10 | 12.95

■ Teer ■ Pusti ■ Fresh ■ Fowzi
■ Silver ■ Horse ■ Others
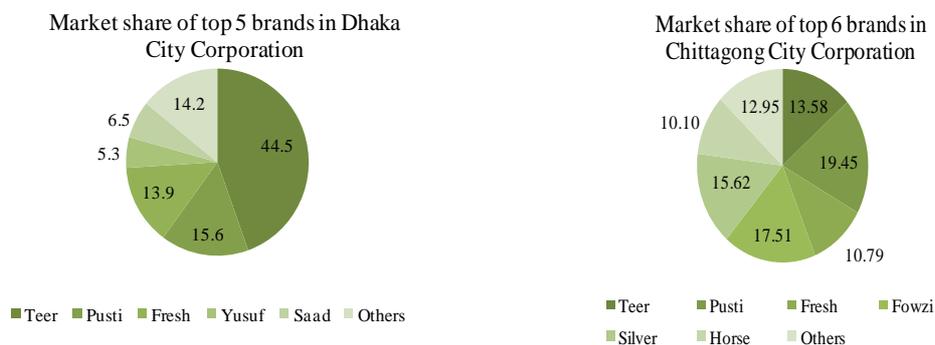
Chart: 3 Market Share of Semolina by Brands in percentage

Market share of top 5 brands in Dhaka City Corporation

81.9 | 6.3 | 0.9 | 4.1 | 5.4 | 1.4

■ Teer ■ Fresh ■ Saad ■ Elders ■ Romoni ■ Others

Market share of top 5 brands in Chittagong City Corporation

1.7 | 21.1 | 46.5 | 7.3 | 9.3 | 14.1

■ Teer ■ Fowzi ■ Horse ■ Diamond ■ Keya ■ Others
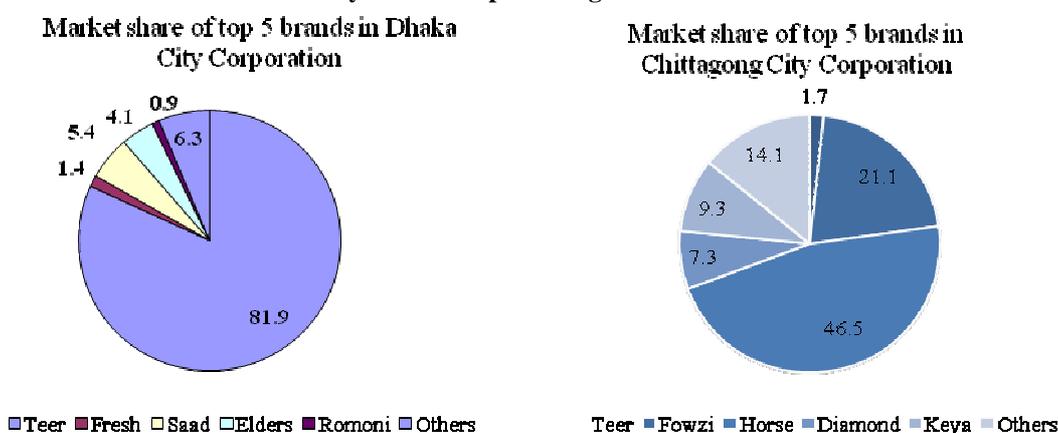
Chart: 4 SKU Contribution in Sales Volume (%)

Atta: SKU Contribution in Sales Volume (%)

DCC: 16.1, 83.9 | CCC: 100, 0

■ 1 kg ■ 2

Maida: SKU Contribution in Sales Volume (%)

DCC: 17.3, 82.7 | CCC: 99.8, 0.2

■ 1kg ■

Semolina: SKU Contribution in Sales Volume (%)

DCC: 99.5, 0.2, 0.3 | CCC: 79.1, 20.7, 0.2

■ 500gm ■ 250gm ■ 1000gr
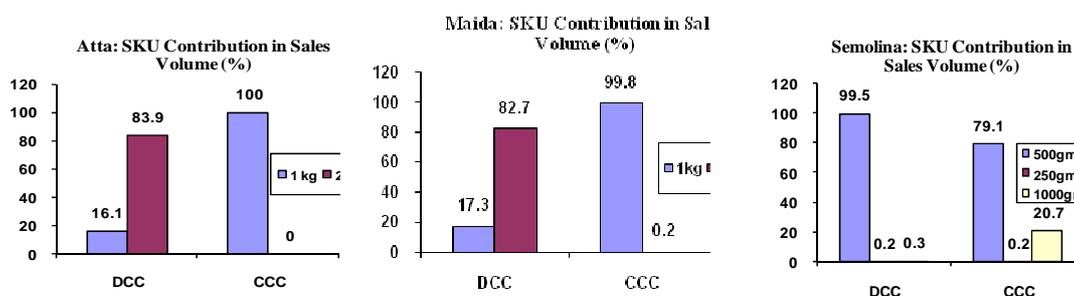
Table: 1 Estimation of Market Size or Demand per month

Products	City Corporation	% of House hold buying	Number of household buying	Average consumption per household in kg per month	Total consumption in kg per month	Total consumption in MT per month
Packaged Atta	DCC	95.00	1,165,644	6.15	7,168,711.66	7,168.71
	CCC	81.20	591,621	4.74	2,804,284.15	2,804.28
Packaged Maida	DCC	40.30	494,479	2.41	1,191,693.25	1,191.69
	CCC	61.10	445,173	2.64	1,175,256.83	1,175.26
Packaged Semolina	DCC	32.40	397,546	1.46	580,417.18	580.42
	CCC	25.80	187,978	1.89	355,278.69	355.28

Table: 2 Calculation of Market Supply based on Market leader's sales volume per month

Total Sales of Teer in MT	Products	Share of sales by Product	Product Contribution to sales in MT	City Corp.	Share of sales by City Corp.	Stake of City Cor. in MT	Market Share % of Teer	Total Supply in MT per month
3500	Atta	70	2450	DCC	80	1960	44.46	4408.46
				CCC	10	245	13.58	1804.12
	Maida	20	700	DCC	65	455	60.4	753.31
				CCC	10	70	10.3	679.61
	Semolina	5	175	DCC	90	157.5	81.9	192.31
				CCC	1	1.75	1.7	102.94

Table: 3 Market demand supply gap

In MT per month

Products	City Corporation	Total Demand	Total Supply	GAP
Atta	DCC	7,168.71	4408.46	2760.25
	CCC	2,804.28	1804.12	1000.16
Maida	DCC	1,191.69	753.31	438.38
	CCC	1,175.26	679.61	495.65
Semolina	DCC	580.42	192.31	388.11
	CCC	355.28	102.94	252.34

Table: 4 Brand wise distribution reach / penetration of Atta (Figures in percentage)

DCC				CCC			
Brand	Numeric distribution	Net distribution	Out of stock	Brand	Numeric distribution	Net distribution	Out of Stock
Teer	77.9	76.9	1	Teer	53.7	53.6	0.1
Fresh	26.6	25.9	0.7	Saad	9.1	9.0	0.1
Pusti	36.3	35.3	1	Eldars	8.1	8.0	0.1
Yusuf	10.7	10.7	0	Pusti	7.7	7.5	0.2
Saad	15.9	15.6	0.3	Fresh	3.3	3.2	0.1

Table: 5 Brand wise distribution reach / penetration of Maida (Figures in percentage)

DCC				CCC			
Brand	Numeric distribution	Net distribution	Out of Stock	Brand	Numeric distribution	Net distribution	Out of Stock
Teer	53.7	53.6	0.1	Teer	23.7	22.56	1.14
Saad	9.1	9.0	0.1	Fresh	19.7	19.36	0.34
Eldars	8.1	8.0	0.1	Pusti	30.3	29.89	0.41
Pusti	7.7	7.5	0.2	Fowzi	21.8	19.74	2.06
Fresh	3.3	3.2	0.1	Silver	21.8	20.49	1.31

Table: 6 Brand wise distribution reach / penetration of Semolina (Figures in percentage)

DCC				CCC			
Brand	Numeric distribution	Net distribution	Out of Stock	Brand	Numeric distribution	Net distribution	Out of Stock
Teer	59.3	58.8	0.5	Teer	3.0	3.0	0
Saad	7.1	7.0	0.1	Fowzi	13.9	11.3	2.6
Eldars	4.5	4.5	0	Horse	41.2	40.0	1.2
Pusti	1.0	1.0	0	Dimond	4.9	4.9	0
Fresh	0.9	0.9	0	Keya	12.8	12.8	0

Table: 7 SKU wise Brand's average purchase price, selling price and profit margin of Atta (Figures in BDT)

DCC					CCC				
Brand	SKU	Purchase price	Selling price	Profit margin	Brand	SKU	Purchase price	Selling price	Profit margin
Teer	1	29.62	31.46	1.84	Teer	1	30.84	31.91	1.07
	2	59.01	61.66	2.65	Fresh	1	30.58	31.64	1.06
Fresh	1	29.89	31.74	1.85	Pusti	1	30.75	31.80	1.05
	2	58.94	61.33	2.39	Fowzi	1	30.89	31.97	1.08
Pusti	1	29.71	31.56	1.85	Silver	1	29.05	30.27	1.22
	2	59.18	61.70	2.52					
Yusuf	1	29.72	31.56	1.84					
	2	58.82	61.46	2.64					
Saad	1	29.61	31.52	1.91					
	2	59.12	61.78	2.66					

Table: 8 SKU wise Brand's average purchase price, selling price and profit margin of Maida

(Figures in BDT)

DCC					CCC				
Brand	SKU	Purchase price	Selling price	Profit margin	Brand	SKU	Purchase price	Selling price	Profit margin
Teer	1	31.88	34.19	2.31	Teer	1	32.49	33.62	1.13
	2	62.93	66.33	3.40	Fresh	1	32.67	33.77	1.1
Fresh	1	32.50	34.75	2.25	Pusti	1	32.52	32.52	0
	2	62.70	66.17	3.47		2	34.00	34.00	0
Pusti	1	31.50	34.00	2.50	Fowzi	1	32.27	33.37	1.1
	2	62.56	66.12	3.56	Silver	1	31.72	32.85	1.13
Eldars	1	32.48	34.48	2.00					
	2	63.81	67.15	3.34					
Saad	1	32.00	34.36	2.36					
	2	63.28	67.37	4.09					

Table: 9 SKU wise Brand's average purchase price, selling price and profit margin of Semolina

(Figures in BDT)

DCC					CCC				
Brand	SKU (in gm)	Purchase price	Selling price	Profit margin	Brand	SKU (in gm)	Purchase price	Selling price	Profit margin
Teer	500	18.41	20.21	1.8	Teer	500	18.03	19.34	1.31
Fresh	500	18.58	20.67	2.09	Dimond	500	19.06	20.12	1.06
Romoni	500	20.67	24.00	3.33	Horse	500	18.37	19.45	1.08
Eldars	500	18.78	20.68	1.9		1000	35.38	36.75	1.37
Saad	500	18.65	20.54	1.89	Fowzi	500	19.39	20.46	1.07
	250	8.50	10.00	1.5		250	9.00	10.00	1.00
						1000	37.16	38.97	1.81
					Keya	500	18.17	19.5	1.33

Table: 10 Consumers' preference towards Brands of Atta (Figures in percentage)

Consumers' preferences to Brand in DCC					Consumers' preferences to Brand in CCC				
Brand/Rank	1st	2nd	3rd	All	Brand/Rank	1st	2nd	3rd	All
Teer	74.70	10.30	1.50	86.50	Teer	25.20	7.70	3.20	36.10
Fresh	5.20	15.30	5.60	26.10	Pusti	16.40	14.70	4.70	35.80
Pusti	5.40	27.20	6.70	39.30	Silver	9.80	5.80	0.80	16.40
Yusuf	1.60	5.20	3.90	10.70	Horse	10.70	4.10	0.90	15.70
Ifad	2.90	3.20	2.50	8.60	Fowzi	12.40	7.70	2.60	22.70
Saad	4.80	8.70	3.50	17.00	Fresh	10.90	12.20	2.40	25.50

Table: 11 Consumers' preference towards Brands of Maida (Figures in percentage)

Consumers' preferences to Brand in DCC					Consumers' preferences to Brand in CCC				
Brand/Rank	1st	2nd	3rd	All	Brand/Rank	1st	2nd	3rd	All
Teer	60.60	4.20	0.30	65.10	Teer	17.90	5.80	1.50	25.20
Fresh	1.30	3.90	2.90	8.10	Pusti	15.00	11.30	4.00	30.30
Pusti	2.20	14.30	3.30	19.80	Silver	7.50	6.20	0.40	14.10
Yusuf	0.70	1.20	1.60	3.50	Horse	10.70	3.80	0.80	15.30
Ifad	0.60	1.00	1.20	2.80	Fowzi	14.10	4.90	1.90	20.90
Saad	3.90	6.50	1.00	11.40	Fresh	8.30	10.50	1.50	20.30

Table: 12 Consumers' preference towards Brands of Semolina (Figures in percentage)

Consumers' preferences to Brand in DCC					Consumers' preferences to Brand in CCC				
Brand/Rank	1st	2nd	3rd	All	Brand/Rank	1st	2nd	3rd	All
Teer	66.70	4.20	0.30	71.20	Teer	3.80	0.40		4.20
Fresh	0.10	2.00	1.50	3.60	Pusti	1.30	0.60		1.90
Pusti	0.10	10.60	2.00	12.70	Silver	0.60	0.80	0.20	1.60
Eldars	3.00	2.20	1.00	6.20	Horse	33.30	3.40	0.60	37.30
Ifad	0.10	0.90	0.90	1.90	Fowzi	11.10	1.70	0.20	13.00
Saad	3.30	6.40	1.00	10.70	Fresh	0.90			0.90

Table: 13 Percentage of Brands' Distribution Channel

DCC					CCC				
Brand	Whole seller	Distributor	Both	No response	Brand	Whole seller	Distributor	Both	No response
Teer	0.2	96.5	0.6	2.7	Teer	15	80.5	1.5	3
Pusti	0.4	87.7	0.4	11.6	Pusti	14.1	78.9	3	4
Saad	0.8	95.3	0.8	3.1	Silver	3	80	2	5
Yusuf		79.5	1.3	19.2	Horse	16.2	79	0.9	3.9
Maheen		96.9	3.1		Fowzi	2.1	88.4	3.4	6.2
Fresh		79.3	0.5	20.2	Fresh	24.5	68.7	5.4	1.4

About the Author: The author is doing a post graduate diploma in research methodology at United International University, Bangladesh. Besides this he is working in a commercial bank for more than five years. Before joining the bank he did his Bachelor and Master in Business Administration from University of Dhaka, Bangladesh. He was born in 1981 in a panoramic village of Chandpur which is adjacent to Dhaka, capital of Bangladesh.

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