**CHAPTER-I**

**INTRODUCTION**

Eggs are very excellent sources of protein and nutrients which are essential for growth of the body. Eggs are also a delicious food item and are frequently served as the main dish in the meal **(DLS; 2009**). It comes from poultry birds like hen, duck, geese, quail, pigeon etc. Buts eggs for the purpose of this study include only hen eggs.

Poultry farming in Bangladesh was largely a background venture. The villagers have been keeping indigenous for centuries under semi natural conditions mainly for their domestic consumption with little commercial motive. They keep poultry of indigenous type and practically nothing is spent for such backyard farms. It is being carried without sound technical knowledge and management practice. Specialized poultry breeding has started with invention incubators and adoption of artificial methods of raising chickens of hybrid. Poultry farming on commercial and scientific line was started in 1970 in Bangladesh. It was known from the record of Directorate of Livestock Service (DLS) that 49825 commercial poultry farms **(BBS, July-august of 2008**) were established in Bangladesh from 1955 to 2008 in private sector.

**1.1 Production and consumption of eggs:**

According to Directorate of Livestock Service (DLS) the eggs production of Bangladesh in 1995-96 fiscal year was 28,39696 thousand which was about 20 percent of requirement. So the total deficit of eggs was 16960304 thousand. DLS also claimed that in Bangladesh the percent per capita intake of eggs was 20 per year, but per capita requirement was 180 eggs per year **(DLS,1997)**.

**Table1.1: Projected Supply and demand Gap of Egg production in Bangladesh.**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Products** | **Growth** | Benchmark (base year) | **2011** | **2012** | **2013** | **2014** | **2015** | **Total** |
| Eggs(Million no.) | High | -485 | -819 | -1199 | -1628 | -2112 | -2655 | -8898 |
| Medium | -485 | -773 | -1099 | -1463 | -1872 | -2324 | -8020 |
|  | Low | -0.33 | -0.62 | -0.97 | -1.4 | -1.91 | -2.51 | -7.74 |

**Source : Planning Commission, 2009.**

**1.2 Importance of eggs from Economic point of view**

From the economic point of view the Importance of eggs is very significant. In fact layer has a shorter life cycle and production of eggs requires relatively less capital and land compared to other meat- producing animals such a cow, sheep and goats. Therefore it can be raised round the year in Bangladesh. With a view to popularizing the layer farm on commercial line and to meet the increasing demand for eggs a good number of young educated underplayed persons have already come forward to accept layer farming and egg trading as occupation. Livestock sub- sector provides job opportunity for 30 percent of the total population in full- time basis and 50 percent of the population per time basis **(DLS, 1997).**

The eggs have also industrial use. Eggs used in the preparation of culture media for the growth of some species of bacteria. Fertile eggs are used in the preparation of vaccines. Inedible eggs are used in the preparation of animal’s feeds and fertilizers. Eggs white are used in the manufacture of pharmaceutical paints, varnishes, adhesive and printers’ ink. They are also used in photograph, bookbinding, wine purification, tanning leather and in textile dying. Eggs yolk are used in the manufacture of soap, paints; shampoos **(Winter and Funk, 1986, pp.4-5).**

The poultry industry plays a crucial role in subsistence economy like Bangladesh. Eggs are the important products of poultry industry. Eggs not only supply food nutrients but also provide job opportunities for a considerable number of people. Livestock sub-sector provide job opportunities for 20 percent in full time basis and 50 percent in part-time basis of the total population and the contribution of livestock sub-sector was 2.50 percent to the gross domestic product (GDP) of Bangladesh (**DLS, 2012**). In spite of these contributions on effective steps have yet been taken for its development .Without having appropriate measures for the improvement of poultry industry in the country, the potential contribution of this industry for national economy could not the achieved.

Baseline information about poultry industry is essential for taking proper decision about the measures for the development of poultry industry in Bangladesh. There are many studies on marketing of different agricultural commodities in Bangladesh. But of the best of the researcher’s knowledge the study on marketing of commercially produced eggs are few in spite of the great necessity. The marketing department, Universities and other research organizations and institutions have not shown enough interest in undertaking meaningful research works on this commercially important product. A few studies have been undertaken to determine the problems of commercial egg production and its marketing. But some studies on eggs have been done in the country and the world that is related with the present study is given below.

**Islam (1976)** studied egg marketing in Mymensingh town and identified the marketing system of eggs, estimated the marketing cost and margin of eggs and studied the marketing efficiency of eggs. Total sample size was 12 in study. The growers share in consumer price (77 percent) and the net margin (Tk. 7.50 for 100 eggs) of traders were considered reasonable by the author.

**Rahman (1983**) conducted a study on marketing of egg in Bangladesh and villages of Mymensingh and Tangail districts were selected as supplying or producing centers and Dhaka city was selected as consuming centre. One hundred and thirty two trader- respondents including 61 Paikers, 19 Beparies, 5 Aratdars and 47 retailers were selected from the market of Dhaka city. The marketing pattern and functions of eggs in Bangladesh were examined in this study. The researcher also identified the problems of egg marketing and provided the measures of solution as suggested by egg traders.

**Ali (1993)** carried out an economic analysis of poultry farming in Dhaka city with particular emphasis on small scale commercial egg producing farms on the roofs of dwelling houses. The researcher found that both small and medium poultry farms were highly profitable. He also identified the problems of farmers such as acute shortage of money and/ or credit, chicks, medicine, volatile prices of both inputs and outputs and lack of technical know-how.

**1.3 Objectives of the study:**

The overall objective of this research programme was to investigate various aspects of eggs marketing in the selected areas. The following are the specific objectives of the study.

1. To analyze the existing marketing system of commercially produced eggs.

2. To estimate the marketing costs and margins of different market participants.

3. To identify the problems of marketing of commercially produced eggs and to suggest some measures for their improvements.

**CHAPTER –II**

**MATERIALS AND METHOD**

**3.1 Selection of the study area:**

The layer farm owners and market intermediaries/ participants of eggs were the population for this study. On the basis of available information, egg producing areas viz. Rangunia, Raozan and Hathazari of Chittagong district was chosen for the selection of layer farm owners. These three Unions have the maximum potentiality for egg production. The various sizes (small, medium and large) of layer and boiler cum layer farms have developed in these areas. The highest numbers of eggs in the upazila are supplied from these areas.

Chittagong city for having the maximum potential in egg marketing was selected as the study area for collecting information on the marketing aspect of eggs. Because there are a number of institutional buyers such as hotels and restaurants, hospitals, bakeries, students, hostel, cantonments and ultimate consumers in Chittagong city hence selected as consuming centre of marketing.

**3.2 Sampling techniques:**

A sample of representative farms and intermediaries should were chosen which has represented a reasonably true picture of the entire region. In a sample survey a subset of all population was first of all selected and required information was collected from these selected elements only. Simple random sampling method was taken for this study.

**3.3 Selection of Sample :**

The layer farms of the selected areas and egg traders and in the selected markets were considered as the population of this study. The total sample size was 70 in which 22 farms, 17 Aratdar- cum- wholesaler, 24 retailers and 07 suppliers of the institutional buyers were selected for interview.

**3.4 Selection of Aratdar- cum-wholesalers :**

The 'Arats' of eggs are situated in Rangunia Upazila at three important marketplaces namely ' Roajarhat, Ranirhat and Dovashi Bazar, in Raozan from Fokirhat, Gohira, Pahartali, and Potherhat, in Hathazari from Nozumeah Hat, Modunaghat and Mohra. Eggs from selected producing areas are accumulated here and then equalized and disposed to the different retail markets and institutional buyers of the city. The Aratdars of these places were also involved in wholesaling of eggs.

**3.5 Selection of retailers:**

There are different sizes of retail markets for eggs in these three upazilas. Out of them 8 markets were selected purposively and three retailers from each market were selected randomly.

**3.6 Selection of suppliers of institutional buyers:**

There are many institutional buyers like hospitals, hotels, cantonment, restaurants, hostels bakeries etc .Situated in Upazila the suppliers known as contractors are involved in supplying eggs to these institutional buyers. Out of them 7 supplier's were selected purposively.

**3.7 Preparation of interview schedule:**

After consulting the available literature on egg marketing and keeping the objectives of the study in view two sets of close-cum-open type interview schedules we prepared and pre-tested as well as made correction.

**3.8 Method of Data collection:**

The researcher himself conducted the whole survey. The data were collected from both primary and secondary sources for the study.

**3.9 Period of study:**

For the present study the primary data were collected during the month of January and July of 2016. The secondary data covered the period from 1992 to 2016.

**3.10 Editing and tabulation of data:**

The filled up interview schedules were scrutinized and collected data were carefully edited in order to remove ambiguities and internal inconsistency. Then the collected data were transferred to master sheets from the interview schedules and finally prepare a report finding.

**3.11: Analytical technique:**

Data were analyzed through simple statistical analysis such as Percentages, mean and variance etc.

**CHAPTER–III**

**RESULTS**

**3.0: MARKETING SYSTEM OF EGGS IN SELECTED AREAS**

**3.1: Marketing channel of eggs:** Marketing channel is the alternative routes of product flows from producers to consumers **(Kohls and Uhls, 1980).**

The channel of marketing of eggs as found in the study areas are shown in the figure 4.1.

The participants in the marketing channels of eggs in the study areas are described briefly below:

Farm owner

Aratdar- cum-wholesaler

Retailer

Supplier

Consumer

Institutional Buyer

**Fig: 3.1 Marketing Channels of Eggs in the study area**

On the basis of Fig. 3.1 the following channels is identified for egg marketing system in the study areas:

Channel -1: Farm Owner → Aratdar- cum- wholesaler→ Retailer → Consumer.

Channel -2: Farm Owner→Aratdar - cum- wholesaler → Supplier→Institutional Buyer.

Channel - 3: Farm Owner → Aratdar - cum - wholesaler → Institutional Buyer.

Channel -4: From Owner →Aratdar-cum- wholesaler → Retailer → Institutional Buyer.

Channel -5: L Farm Owners → Institutional Buyer.

**3.2: Marketing Functions**

***3.2.1: Marketing functions performed by layer farm owners:***

In this section the functions of egg marketing performed by the farm owners are taken into grading, storage, advertisement, collecting market information, determination of price, transportation and selling.

***3.2.1.1: Grading:***

The study reveals that 4(18.18 % of) sample farm owners graded eggs on the basis of big and small size, 6(27.27% of) them graded on the basis of white and brown color eggs and 12(54.55 % of) them graded eggs on the basis of both size and color.

***3.2.1.2 Storage:***

The study said 9(about 64%) and 5(36%of) farm owners used to store eggs for one to three days and four to seven days respectively.

***3.2.1.3 Advertisement:***

For the layer farm owners advertisement has not yet received any significant recognition as 6 out of 22 farm owners used to advertise their products by establishing temporary stall at local exhibition occasionally.

***3.2.1.4 Market intelligence:***

The study revealed that fellow farm owners, traders and visit to marketplace were the sources of information for layer farm owners and 4(18 percent) farm owners collected market information from traders. About 12 (55 percent) of the farm owners reported that they receive market information through visit to marketplaces and personal observation.

***3.2.1.5:Method of price determination:***

The prices of eggs of study areas were determined by the interaction of the forces of demand and supply in a more or less competitive market situation. The cost of production is also a main factor.

***3.2.1.6: Transportation:***

In the study area own pick-up, hired truck and rickshaw-van are used as transporters. It reveals that about 8 (18% of)sample farm owners used own pick-up, 10(36.5%) of farm owners used hired truck and rickshaw-van were used by 14(45.5 %) of farm owners.

***3.2.1.7 Selling:***

The eggs are sold from the farm gates or from the arats.

***3.2.1.8:Place of sale :***

The study shows that the majority 18(81.82%) of sample farm owners sold eggs to Arats and 4(18.18% of) them brought eggs at own sale centers for sale which situated in the Upazila

centers. On an average 70 and 30 percent of eggs were purchased by the institutional buyers and ultimate consumers from those sale centers respectively.

***3.2.1.9 Mode of sale*:**

From the study we can know that about 9(41% of) sample farm owners sold eggs in cash, 2(9%) on credit and 11(50%) on farm owners sold their eggs both in cash and on credit.

***3.2.1.10 Interval of sale:***

It is observed that about 36 percent of selected farm owners(8 farm owners) sold eggs daily, 41 percent(9 farm owners) of them sold within one to three days and the rest 22.73 percent(5 farms) of sample farm owners sold eggs within four to seven days.

***3.2.1.11 Volume of sale:***

It has seen that the average sale of eggs fluctuates from month to month. There was large difference between the highest and lowest sale indicating high sale differential between peak season and lean season. Table 3.1 indicates that sale of eggs is the highest I the month of November and lowest in the month of June. The volume of sale of eggs varied over months because of the variation in production. The production decreased in May and June which is the rainy season and cause natural calamities and diseases of the layers.

***3.2.2 Marketing function performed by the egg traders:***

***3.2.2.1 Mode of payment and purchase:***

The egg traders in these three upazilas use three forms of payment of buying eggs i.e. 100 percent in cash and 100 percent on credit and partly in cash and partly on credit it appeared from the available data that about 24, 33 and 14% of Aratdar- cum-wholesalers, retailers and suppliers respectively but the majority of Aratdar-cum- wholesalers (about 59%), retailers (50%) and suppliers (57 %) used to purchase eggs partly in cash and partly on credit.

***3.2.2.2: Quality determination at the time of purchase:***

The study reveals that eye estimation against the light was used to determine the condition of yolks of eggs by about 10(58.50%) and 2(28.57%) of Aratdar-cum-wholesalers and suppliers respectively. 7(about 41%) of Aratdar-cum-wholesalers and 7(29%) of retailers applied the method of shaking to determine the quality of eggs. If any sound of movement felt from inside the eggs by shaking the the quality of egg is considered lower. Perhaps this method is unscientific because it affects good eggs to become rotten. 5(about 21%) of retailers and 5(71%) of suppliers determined the quality of eggs on the basis of cleanness of the shell of eggs.

***3.2.2.3: Method of price fixation at the time of purchase:***

It was revealed from the field survey that 5(about 29% of) Aratdar-cum-wholesalers and 7(29%) of retailers adopted the method of bargaining of fix up the price of eggs whenever they purchased. 5(about 21% ) retailers and 3(18%) Aratdar-cum - wholesalers fixed up the price of eggs on the basis of prevailing market price while 9(about 53%) of Aratdar-cum-wholesalers,12 (50%) retailers and 7(100%) suppliers settled the purchase price of eggs by using the combination of bargaining and prevailing market price.

***3.2.2.4: Selling of eggs:***

The Aratdar-cum-wholesalers in these upazilas sell a major portion of their eggs (60%) to the retailers, 25% to the suppliers of institutional buyers and 15% directly to the institutional buyers. The retailers sold most of their eggs (75%) directly to the consumers and 25% to the institutional buyers. On the other hand, suppliers delivered predetermined volume of eggs to their selected institutional buyers.

***3.2.2.5 Mode of sale:***

It was observed from study that 5(29% of)aratdar- cum- wholesalers and 8(33% of) retailers sold eggs in cash. Eggs were sold on credit by 3(18%), 6(21%) and 7(100%) of Aratdar- cum- wholesalers, retailers and suppliers respectively. About 9(53% of)Aratdar- cum wholesalers and 11(46% of) retailers sold eggs partly in cash and partly on credit.

***3.2.2.6: Method of price fixation at the time of sell:***

From the available data of field survey it was known that the traders of Chittagong District fix up their selling price mainly in five ways viz. i) Bargaining, ii) Accepting prevailing market price, iii) Both bargaining and prevailing market price, iv) a mark up on purchase price and v) on the basis of tender.

It is revealed from **table 3.2** that about 12% of Aratdar- cum- wholesalers and 8% of retailers used bargaining to set the selling price. About 21% of retailers and 18% of Aratdar-cum-wholesalers considered prevailing market price as the basis of setting the selling price while the combination of bargaining and prevailing market price was used by 53% of Aratdar- cum- wholesalers and 29% of retailers in deciding their selling price. A Mark up method was used by the large portion (about 42%) of retailers and 12% of Aratdar- cum- wholesalers. In the Mark- up method certain amount of profit was added to the purchase price to find out the selling price. Table 3.2 also indicates that all of the suppliers fixed up their selling price of eggs to the institutional buyers on the basis of tender. It is in fact a close competition through which price is settled.

***3.2.2.7 Transportation:***

The study reveals that 10(59%) of Aratdar- cum- wholesalers used truck for the transportation of eggs. 7(about 41%) of Aratdar- cum- wholesalers, 13(about 57.17%) of retailers and 5(71%) of suppliers used pick- up for transportation of eggs. Rickshaws were used as mode of transportation and 11(about 46%) of retailers and 2(29%) of suppliers used rickshaw-van to carry eggs.

***3.2.2.8. Storage:***

It was found from the field survey that none of the suppliers stored eggs. It was seen that 9 (53%) of Aratdar-cum- wholesalers and 13(54%) of retailers stored eggs for four to seven days at shop in plastic cage. Eggs were stored at shop in bamboo made basket by about 5 (29%) of Aratdar- cum- wholesalers and by 7(29%) of retailers for one to that days but only about 3(18% )of Aratdar- cum- wholesalers and 4 (17%) of retailers stored eggs in cold storage for one month and above to reap the benefit of price fluctuation.

***3.2.2.9: Market information:***

The study indicates that 7(41%) of Aratder-cum-wholeselars and 15 (62.50%) of retailers received market information from fellow traders. About 10(59%) of Aratdar-cum- whole sellers, 9 (27.5%) of retailers and 7(100%) of suppliers reported that they had collected market information by market visit and personal observation.

**3.3:Marketing Cost:**In this study the researcher considered the cost of Aratdar-cum-wholesalers, retailers and suppliers of eggs in Rangunia, Raozan and Hathazari of Chittagong District.

***3.3.1: Marketing Costs of Aratdar- cum- wholesalers:***

In Chittagong District Aratdar- cum- wholesalers of eggs act as commission agents and the total cost incurred by sample Aratdar- cum- wholesalers was Taka 9.41 for 100 eggs **(Table 3.3).**

***3.3.2: Marketing Cost of Retailer:***

Total cost incurred by the retailers for 100 eggs were calculated at Tk. 7.51 **(Table 3.4).**

 ***3.3.3. Marketing cost of Supplier:***

The total marketing cost of Tk. 10.74 for 100 egg incurred by suppliers in shown in (**Table 3.5).**

**3.4 Marketing margin:**

***3.4.1: Marketing Margin of Aratdar-cum- wholesaler:***

The marketing margin of Aratdar-cum-wholesalers are presented in **Table 3.6**.

 The highest margin (Tk. 50) was observed during the month of January and December. The lowest margin (Tk. 35) was in the month May. The average profit earned by the Aratdar-cum- wholesalers was Tk. 33.09. Table 3.6 shows that marketing cost did not vary over the months of the year with the variation of purchase and sale price of eggs.

***3.4.2: Marketing Margin of Retailer :***

The average marketing margin of retailers per 100 eggs worked out to be Tk. 42.50**.** The highest marketing margin of retailers was Tk. 55 which was obtained in the month of February. The lowest margin was Tk. 35 in the month of April. The highest profit (Tk. 47.49) was earned in the month of January **(Table 3.7)**

***3.4.3: Marketing Margin of Supplier:***

The study depicts the suppliers' marketing margin of eggs. The average marketing margin of suppliers per 100 eggs was calculated at Tk. 43.75. The highest margin of Tk. 60 was observed during the month of January and February which the lowest margin (Tk. 30) was found in the months of June and July. The highest and the lowest profit was Tk. 49.29 and Tk. 19.26 respectively of the suppliers. The selling price (Tk. 848.33) per 100 of suppliers was unchanged during the stipulated period of time. The marketing margin and profit varied over the months because of the variation of purchase price **(Table 3.8)**

**3.5: Price Spread and producer's Share in Retail/ Consumer Price:**

Price spread refers to the difference between the price paid by the consumers and the price received by the producer for an equivalent quantity of farm product.

That mean,

 **Net amount received by the producer**

**Producer's share = --------------------------------------------------------- × 100**

 **Total amount received by the retailer**

In the present study, the channels selected for calculating price spreads and producer's share are as follows.

**Channel - I**

i)Farm owner ------> Aratdar- cum -wholesaler ---------> Retailer ---------> Consumer.

**Channel II**

ii)Farm owner ---------> Aratdar- cum - wholesaler ------> Supplier ---------> Institutional buyer/ consumer.

Price spreads and producer's share in the channel I and channel II was presented in **Table 3.9**. Under channel I the retail price and producer's net price per 100 eggs were Tk. 847.5 and Tk 762.5 respectively. The price spread was Tk. 85.00 per 100 eggs while the producer's net share in retail price/ consumer price was 89.97%. Similarly the price spread was Tk. 85.33 per 100 eggs while the producer's net share was 89.88% of the consumer's take under the channel II.

The study showed the producer’s net share (percent of the retail price) under the marketing channels I and II is 89.97 and 89.88 respectively.

**3.5.1: Comparison of the Price Spread and Share of Producer’s between two channels of the egg traders:**

**Fig-3.2: Channel wise Price Spread and Share of Producer’s**

The Channel wise Price Spread and Share of Producer’s are indicated in the **fig-3.2**. It is concluded that, the Price Spread and Share of Producer’s of both channels are almost same in the marketing system of Eggs in Bangladesh.

**LIST OF TABLES CITED IN THE RESULT SECTION**

**Table:3.1 Average volume of sale in different periods of the studied farms(n=22)**

|  |  |  |  |
| --- | --- | --- | --- |
| **Months** | **Number of eggs** | **Percent** | **Seasonal indices** |
| December | 170778 | 9.41 | 109.72 |
| January | 159383 | 8.53 | 102.40 |
| February | 155480 | 8.32 | 99.40 |
| March | 139456 | 8.00 | 96.89 |
| April | 135272 | 7.25 | 86.91 |
| May | 118108 | 6.32 | 75.88 |
| June | 116448 | 6.23 | 74.81 |
| July | 139180 | 7.45 | 89.42 |
| August | 155217 | 8.31 | 99.76 |
| September | 178510 | 9.57 | 114.68 |
| October | 190502 | 10.20 | 122.39 |
| November  | 199452 | 10.68 | 128.14 |
| Total | 1867847 | 100.00 |  |
| **Average** | **155653.91** |  |  |

**Table 3.2 : Method of price fixation at the time of sell.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Method** | **Aratdar-cum-wholesaler** | **Retailer** | **Supplier** |
| **Number** | **Percent** | **Number** | **Percent** | **Number** | **Percent** |
| Bargaining  | 2 | 11.76 | 2 | 8.33 | -- | -- |
| Prevailing market price  | 3 | 17.64 | 5 | 20.83 | -- | -- |
| Both bargaining and prevailing market price  | 9 | 52.94 | 7 | 29.17 | -- | -- |
| A '' Mark-up'' on purchase price  | 2 | 11.76 | 10 | 41.67 | 7 | 100.00 |
| On the basis of tender  | -- | -- | -- | -- | 7 | 100.00 |
| Total | 17 | 100.00 | 24 | 100.00 | 7 | 100.00 |

**Source: Field Survey, 2015-16.**

**Table 3.3 Marketing Cost Aratdar- com- wholesaler (Table for 100 eggs)**

|  |  |  |
| --- | --- | --- |
| **Cost items** | **Cost** | **Percent** |
| Transportation | 2.36 | 25.08 |
| Wages and Salaries | 1.33 | 14.13 |
| Collie | 0.33 | 3.51 |
| Night guard | 0.17 | 1.81 |
| Sweeper | 0.17 | 1.59 |
| Shop rent | 0.74 | 7.86 |
| Electricity charge | 0.17 | 1.81 |
| Telephone bills | 0.33 | 3.51 |
| Cage | 0.11 | 1.17 |
| Storage | 0.43 | 4.57 |
| Damage(Breakage)and spoilage | 2.60 | 27.63 |
| Entertainment | 0.20 | 2.13 |
| Tips and donation | 0.07 | 0.74 |
| Personal expenses | 0.42 | 4.46 |
| Total | 9.41 | 100 |

 **Source: Field Survey, 2015-16**

**Table 3.4 Marketing Cost of Retailer (Taka for 100 eggs.)**

|  |  |  |
| --- | --- | --- |
| **Cost items** | **Cost** | **Percent** |
| Transportation | 1.94 | 25.83 |
| Wages and Salaries | 0.46 | 6.13 |
| Collie | 0.16 | 2.13 |
| Night guard | 0.12 | 1.60 |
| Sweeper | 0.11 | 1.46 |
| Shop rent | 0.42 | 5.59 |
| Electricity charge | 0.30 | 4.00 |
| Telephone bills | 0.11 | 1.46 |
| Cage | 0.07 | 0.93 |
| Storage | 0.37 | 4.93 |
| Damage (Breakage) and spoilage | 3.00 | 39.95 |
| Entertainment | 0.11 | 1.46 |
| Tips and donation | 0.04 | 0.53 |
| Personal expenses | 0.30 | 4.00 |
| Total | 7.51 | 100 |

**Source: Field Survey, 2015-16**

**Table 3.5 Marketing Cost of suppliers. (Taka for 100 eggs)**

|  |  |  |
| --- | --- | --- |
| **Cost items** | **Cost** | **Percent** |
| Transportation | 3.33 | 31.01 |
| Wages and Salaries | 2.50 | 23.28 |
| Collie | 0.33 | 3.07 |
| Telephone bills | 0.50 | 4.66 |
| Interest on security money | 0.42 | 3.91 |
| Damage (Breakage) | 3.00 | 27.93 |
| Tips and donation | 0.33 | 3.07 |
| Personal expenses | 0.33 | 3.07 |
| Total | 10.74 | 100 |

 **Source: Field Survey, 2015-16**

**Table 3.6:Marketing Margin and Profit of Aratdar- cum- wholesaler (Taka per 100 eggs).**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Months** | **Purchase** | **Sale price** | **Marketing Margin** | **Marketing cost** | **Net margin (Profit)** |
| December | 740 | 790 | 50 | 9.41 | 40.59 |
| January | 740 | 785 | 45 | 9.41 | 35.59 |
| February | 745 | 785 | 40 | 9.41 | 30.59 |
| March | 750 | 790 | 40 | 9.41 | 30.59 |
| April | 760 | 805 | 45 | 9.41 | 35.59 |
| May | 770 | 805 | 35 | 9.41 | 25.59 |
| June | 775 | 815 | 40 | 9.41 | 30.59 |
| July | 775 | 815 | 40 | 9.41 | 30.59 |
| August | 770 | 810 | 40 | 9.41 | 30.59 |
| September | 765 | 810 | 45 | 9.41 | 35.59 |
| October | 775 | 815 | 40 | 9.41 | 30.59 |
| November | 785 | 835 | 50 | 9.41 | 40.59 |
| Average | 762.5 | 805 | 42.5 | 9.41 | 33.09 |

**Source: Field Survey, 2015-16**

**Table 3.7. Marketing Margin and Profit of Retailer (Taka per 100 eggs) .**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Months** | **Purchase** | **Sale price** | **Marketing Margin** | **Marketing cost** | **Net margin (Profit)** |
| December | 790 | 830 | 40 | 7.51 | 32.49 |
| January | 785 | 840 | 55 | 7.51 | 47.49 |
| February | 785 | 830 | 45 | 7.51 | 37.49 |
| March | 790 | 830 | 40 | 7.51 | 35.49 |
| April | 805 | 840 | 35 | 7.51 | 26.49 |
| May | 805 | 845 | 40 | 7.51 | 32.49 |
| June | 815 | 860 | 45 | 7.51 | 36.49 |
| July | 815 | 860 | 45 | 7.51 | 36.49 |
| August | 810 | 855 | 45 | 7.51 | 36.49 |
| September | 810 | 850 | 40 | 7.51 | 32.49 |
| October | 815 | 855 | 40 | 7.51 | 32.49 |
| November | 835 | 875 | 40 | 7.51 | 32.49 |
| Average | 805 | 847.5 | 42.5 | 7.51 | 34.90 |

**Source: Field Survey, 2015-16**

**Table 3.8 Marketing Margin and Profit of Supplier. (Taka Per 100 eggs)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Months** | **Purchase** | **Sale price** | **Marketing Margin** | **Marketing cost** | **Net margin (Profit)** |
| December | 790 | 845 | 55 | 10.74 | 44.26 |
| January | 785 | 845 | 60 | 10.74 | 49.26 |
| February | 780 | 840 | 60 | 10.74 | 49.29 |
| March | 790 | 845 | 55 | 10.74 | 44.26 |
| April | 805 | 845 | 40 | 10.74 | 29.26 |
| May | 805 | 845 | 40 | 10.74 | 26.26 |
| June | 815 | 845 | 30 | 10.74 | 19.26 |
| July | 815 | 845 | 30 | 10.74 | 19.26 |
| August | 810 | 845 | 35 | 10.74 | 24.26 |
| September | 810 | 845 | 35 | 10.74 | 24.26 |
| October | 810 | 850 | 40 | 10.74 | 29.26 |
| November | 840 | 885 | 45 | 10.74 | 44.26 |
| Average | 804.58 | 848.33 | 43.75 | 10.74 | 33.01 |

**Source: Field Survey, 2015-16**

**Table 3.9 : Price spreads and producer's share in consumer's price under the marketing channels.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Marketing channel** | **Retail price Tk. per 100 eggs (Average)** | **Producer's net price Tk. per 100 eggs** | **Price spread Tk. per 100 eggs (Average)** | **Producer's net share (percent of retail price)** |
| I | 847.5 | 762.5 | 85.00 | 89.97 |
| II | 848.33 | 762.5 | 85.33 | 89.88 |

**Source: Field Survey, 2015-16**

**CHAPTER IV**

**DISCUSSION**

**4.1: Marketing Cost**

***4.1.1: Marketing Costs of Aratdar- cum- wholesalers:***

In the study areas of Chittagong District Aratdar- cum- wholesalers of eggs act as commission agents as well as Wholesalers. The total cost incurred by sample Aratdar- cum- wholesalers was Taka 9.41 for 100 eggs. **Das(1995)** reported on marketing cost on Wholesaler was TK. 8.78 which is somewhat smaller than our report due to the increased major components cost.

***4.1.2: Marketing Cost of Retailer:***

Total cost incurred by the retailers for 100 eggs were calculated at Tk. 7.51 But **Das(1995)** estimated the marketing cost of Retailer is TK 4.40. Our results show higher value due to the major components of cost was transportation, wages and salaries, damage and spoilage of eggs, rent etc were increased.

**4.2 Marketing margin:**

***4.2.1: Marketing Margin of Aratdar-cum- wholesaler:***

The marketing margin per 100 eggs of Aratdar-cum- wholesalers varied over the months of the year. The margin ranged from Tk. 35 to Tk 50 with an average being tick. Tk.42.50 per 100 eggs whereas **Das (1995)** reported on average margin per 100 eggs was Tk. 58.33. It occurs due to the variation in purchases and sales price of eggs by the egg traders but the marketing cost was constant over the time. Our study shows that marketing cost did not vary over the months of the year with the variation of purchase and sale price of eggs.

***4.2.2: Marketing Margin of Retailer :***

The average marketing margin of retailers per 100 eggs worked out to be Tk. 42.50**.Das (1995)** carried out average margin per 100 eggs were TK.44.16 which is almost similar to our result.

***4.2.3: Marketing Margin of Supplier:***

The study depicts the suppliers' marketing margin of eggs. The average marketing margin of suppliers per 100 eggs was calculated at Tk. 43.75. The highest margin was Tk. And lowest margin was Tk. 30.The highest and the lowest profit was Tk. 49.29 and Tk. 19.26 respectively of the suppliers. The selling price (Tk. 848.33) per 100 of suppliers was unchanged during the stipulated period of time. The marketing margin and profit varied over the months because of the variation of purchase price.

**Islam (1976)** studied egg marketing in Mymensingh town reveals he growers share in consumer price (77 percent) and the net margin (Tk. 7.50 for 100 eggs) of traders were considered reasonable by the author whereas the estimated net profit of wholesalers, retailers and suppliers are found taka 33.09, taka 34.90, taka 33.01 respectively under the study. The estimated marketing margin in our study is higher due market participants selling eggs in the market at higher price during last one without disrupting prices that’s why they earn more benefits whereas the egg consumers deprive form actual price and satisfaction. They face lots of problems from the egg trader and market participants.

**4.3: Price Spread and producer's Share in Retail/ Consumer Price:**

Under channel I the retail price and producer's net price per 100 eggs were Tk. 847.5 and Tk 762.5 respectively. The price spread was Tk. 85.00 per 100 eggs while the producer's net share in retail price/ consumer price was 89.97 percent. Similarly the price spread was Tk. 85.33 per 100 eggs while the producer's net share was 89.88 percent of the consumer's take under the channel II. It is evident that the producer's share in the channel I is higher than channel II.

The study reveals the producer’s net share (percent of the retail price) under the marketing channels I and II is 89.97 and 89.88 respectively. **Islam (1976)** reported that growers share in consumer price (77 percent). Our results show higher producer’s net share which is indicated that Farmers got the best price as they are very conscious of marketing of eggs.

The Channel wise Price Spread and Share of Producer’s are indicated in the fig-3.2. It is concluded that, the Price Spread and Share of Producer’s of both channels are almost same in the marketing system of Eggs in Bangladesh.

**CHAPTER V
LIMITATION**

A few limitations are to be note while drawing conclusions based on the findings of the study. There was a major limitation of time and resources. All the data and other necessary information were collected within a very short period of time and the study was based on only few nos. of sample from a few farmers and traders.

**CHAPTER - VI**

**CONCLUSION**

The result emerged from the study clearly indicated that Egg marketing system is a profitable business. The above study identified five different channels in present egg marketing system. The average gross return of Aratdars-cum-wholesaler, retailers and suppliers for 100 eggs are found TK. 42.50, TK.42.50 and TK.43.75respectively. The average cost of Aratders-cum-wholesaler, retailers and suppliers for 100 eggs were found TK.9.41, TK.7.51 and TK.10.74 respectively. The net margin of 100 eggs were calculated and found tk. 33.09, tk. 34.99 and tk. 33.01, respectively for Aratdars-cum-wholesaler, retailers and suppliers.

**CHAPTER-VII**

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