

<http://www.pjbs.org>

**PJBS**

ISSN 1028-8880

**Pakistan  
Journal of Biological Sciences**

**ANSI***net*

Asian Network for Scientific Information  
308 Lasani Town, Sargodha Road, Faisalabad - Pakistan

## Marketing System of Broiler in Gazipur District: The Intermediaries and Their Costs, Margins and Profits

<sup>1</sup>M. Kamruzzaman, <sup>2</sup>M.A.A. Begum, <sup>3</sup>S.M.F. Islam, <sup>1</sup>M.K.I. Khan and <sup>1</sup>M.J. Khatun

<sup>1</sup>Bangladesh Livestock Research Institute, Saver, Dhaka-1341

<sup>2</sup>Bangladesh-Canada Farm to Market Enterprise Development Project, Khamarbari, Farmgate, Dhaka,

<sup>3</sup>Department of Agricultural Economics,

Bangabandhu Sheikh Muzibur Rahman Agricultural university, Salna, Gazipur, Bangladesh

**Abstract:** Present study examined the marketing system's of broiler farming in Gazipur district and analyzed marketing costs, margin and profits of retailers. It may be concluded from the study that the producers sold broilers to the retailer at farm level. The retailers sold 80 percent of their live broiler to consumers and 20 percent to the institutional buyers in the market. All of the selected sample producers sold live broiler to retailers at the farm level in the study area, because they are: too far from retailers/consumers, are not able to do what is required and are too small as regards output.

Respondent producers and retailers viewed that fluctuation in supply and demand and also in price are major problems for marketing on broiler. Retailers were not affected by the price fluctuation but broiler producers were severely affected by the downward swing of price fluctuation. Proper measures for solutions of the problems will help to develop broiler farming which intern will increase family income and also creation of employment opportunities in the country. More detailed study is required about the marketing system of broiler intermediaries and their costs, margin and profits before making final recommendation.

**Key words:** Marketing system, Broiler, Costs, Margins, Profits

### Introduction

In Bangladesh there is no proper organized marketing systems of livestock products and by-products and the livestock market places are under-development and unhygienic. As marketing network of livestock products and by-products is not properly maintained, the producers are being deprived of their benefits. During the Fifth Plan, programs will be taken up for improving marketing channel to ensure quality and equitable distribution of benefits at different stages of production process.

There are many problems of poultry industry in Bangladesh but the frequent price fluctuation of broiler and eggs is one of the serious problems, which affect all producers, particularly small producers. There is a general complain that this instability of market is caused by the recollected influx of broiler and eggs from across if the product price index variation is too much in there neighboring countries. The only permanent solution is to lower the cost of production in all possible ways and increase the production efficiency in order to be competitive with others.

The broiler industry has been one of the growing industries in Bangladesh. The poultry marketing have taken a shape of industry in recent years. A considerable time would be required before the products are transferred from the hands of the producers to the consumers. This force has to find out or involve improved methods of production, processing, preservation and distribution. Generally poultry products are highly perishable in nature and are also of high biological value. It has special role to play in lightly against malnutrition, which is mid spread in Bangladesh.

Marketing of broiler is the main problem to the poultry

farmers. Therefore the stress has to be paid on developing the infrastructures for marketing. The price of broiler is not fixed depending o the demand and supply, which has no relevance to the production cost. Specially small rural producer's find it difficult to get reasonable returns from their products because price offered to them is not remunerative. A homogeneous poultry marketing system is prevailing in, the developed areas of the country. However, country has to pass certain stage when spectacular change is observed and the cause of such charge to be found out by studying this in the context of the Gazipur district. The objectives of this study is to study the marketing systems of broiler farming in Gazipur district and analyzed marketing cost, margin and profit of retailers.

### Materials and Methods

**Selection of the Study Area:** It is a bare necessity to select the areas that would provide maximum information regarding broiler marketing. The broiler producers and market intermediaries/participants were the population for this study. On the basis of available information three broilers producing areas viz., Gazipur sadar, Sreepur and Kapasia thanas and five marketing area viz. Joydebpur, Tongi, Chowrasta (Chandona), Sreepur and Kapasia markets were chosen for the selection of broiler producers and retailers as respondents.

**Sampling Technique and Selection of Respondents:** A sample of relevant population should be selected in such a way that the data from them fulfill the objectives of the study. Larger the sample size, greater is likely to be the

extent of accuracy and usefulness of the results. But in reality inclusion of the entire broiler producers and retailers was not possible due to time and resource constraints. A sample of representative farms and intermediaries should therefore be chosen which could represent a reasonable true picture of the entire region. In a sample survey, subset of population was first of all selected and required information was collected from these selected elements only. Because, it has some basic advantages over complete enumeration in the form of cost, time and labour. In this study, purposive and random sampling techniques were adopted. The broiler farmers of the selected areas and broiler traders in the selected markets were considered as the population of this study. In this study 30 producer and 20 retailers were selected randomly for interview and thus the total sample size became 50. The broiler producers were selected purposively. Out of 30 broiler producers 10 farms each from Sreepur, Kapasia and Gazipur seder thanes were selected.

There are different sizes of markets for broiler in Gazipur district. Out of 21 markets 4 markets were selected randomly. These were chowrasta (Chandona), Joydebpur, Tongi and Sreepur Bazar. In case of broiler marketing only retailers were found in these markets. There were many established retailers of broiler in those markets. Out of 20 retailers 8 retailers from Joydebpur market, 6 retailers from Tongi market, 3 retailers from both Chowrasta (Chandona) and Sreepur market, respectively, were selected purposively.

**Data Collection:** The data for the present study were collected from both the primary and secondary sources.

**Primary data:** The researcher has collected primary data through face to face interview with the selected respondents in the study areas. The objectives of the study were clearly explained to the respondents at the outset of data collection, so that they could respond freely. The farmers were interviewed at their farms while the intermediaries were interviewed at marked places.

At the time of collection of data, some retailers often provided dubious figures and doubtful answers to some questions. These were verified, corrected and rationalized on the basis of asking repeating questions, cross-checked with neighboring broiler producers and traders. The collected data were checked and cross checked for ensuring their reliability, accuracy, adequacy and thereby meaningful for the study. The survey schedule was designed to collect information in local units. However, local units were converted later on into standard units.

**Secondary data:** Secondary data like year-wise production, number of poultry farms in private and public sector, contribution of livestock sub-sector in national income etc. were collected from various sources viz., books, journals, reports, official records, document of Fifth Five Year Plan

and statistical year books of Bangladesh.

**Period of the Study:** For the present study the primary data were collected for the period of January 1997 to December 1997.

**Seasonal index:** The Simple Average Method (SAM) was used to compute monthly indices of supply, purchases and prices in the following manner.

$$I_n = \frac{\text{The quantity (or price) of in n month}}{\text{Average quantity (or price) of the 12 months}} \times 100$$

Where,  $I_n$  = Seasonal index of nth month. For estimating supply and purchases indices quantity or broiler was measured in kg. For estimating price indices price was measured in terms of Tk. per kg of broiler.

## Results and Discussion

**Marketing System of Broiler:** Marketing system may be thought of as the connecting link the bridge between specialized producers and consumers (Kohls and Uhl, 1980). The different components of marketing system of broiler were dealt in this section.

**Description of Gazipur Markets:** In Gazipur district, Joydebpur Tongi Chowrasta (Chandona), Sreepur and Kapasia bazar were the important market centers. Besides these, Joydebpur market was the biggest market place where there were specialized areas for marketing of each of the major commodities. Largest amount of broilers was assembled here from different villages for sale. Joydebpur, Tongi and Chowrasta markets that starts from the morning and continues up to 7.00 p.m, daily but rest of the market were held twice in a week.

**Marketing Channel in Gazipur:** The broiler marketing channels in the study area is two stages in the movement of broiler from the producers to the consumers.

- (i) From the producers to retailers and
- (ii) From the retailers to consumers.

### Market Participants

**Producers:** The marketing channel of broilers starts from the producers to retailers. All of the broiler producers sold their broiler to the retailers at farm level due to: (1) they are too far from retailers/consumer, (ii) they are not able to do what is required and (iii) they are too small as regard output.

**Retailers:** Retailers were the professional broiler traders who operated in possessed fixed shop at local markets Gazipur district and they had vast experience in the business. They bough broiler from producers and sold about 80 percent to the ultimate consumers and the rest 20 percent to

institutional buyers.

**Consumer:** Consumers were those who purchased live broiler from retailers only for family consumption not for sale. So, consumers were the last phase in the marketing channel of broiler.

**Institutional buyers:** The institutional buyers refer to hotel, educational institutions e.g. IPSA, BIT, research institution e.g. BARI, BRRI, CERDI, etc. These institutional buyers consume about 20 percent of the total marketable broiler in the study area.

**Marketing Functions of Broiler Retailers:** A marketing function is a fundamental or basic physical process or service required to give a product the form; time, place and possession utility consumer's desire (Branson and Norvell, 1983). In this study, the functions of broiler marketing performed by the producers and retailers were broken down into buying and selling, place of sale, mode of sale, storage, transportation, method of price fixation, market information and risk-bearing.

**Buying and selling:** Buying and selling were the functions of exchange. Both had their primary objects of negotiating favourable terms of exchange. In the study areas, producers sold broilers to "Retailers" as well as directly to consumers through own sale centers. The retailers sold most of their live broiler (80%) directly to the consumers and 20 percent to the institutional buyers.

**Place of sale:** All of the selected sample producers sold live broiler to retailers at the farm level in the study areas.

**Mode of sale:** The respondent-broiler producers and retailers sold their live broilers mainly in three forms i.e. cash, credit and both in cash and credit. About 23.33 percent of broiler producers sold broiler in cash, 16.67 percent of them sold on credit while cash and credit sale was made by 60 percent of the broiler producers (Table 1). On the other hand, about 70 percent of the broiler retailers sold their broiler in cash, 10 percent on credit and 20 percent of the sample retailers sold both in cash and credit. Thus it appears that large number of producers sold their live broiler both in cash and credit but the large number of retailers sold their broiler in cash. Cash and credit sale by the producers may be a strategy of ensures the market of their product.

**Storage:** Table 2 shows that 20 percent of the respondent-broiler retailers stored live broiler for only one day, about 55 percent of retailers stored broiler only 1 to 2 days, 15 percent of retailer's 2 to 3 days and 10 percent of retailers stored broilers 3 to 5 days.

**Transportation:** Different methods of transportation were used for carrying chicks and live broiler from one place to

another. Live broiler was assembled from distant rural areas by truck, tempo, van and rickshaws. Use of the particular kind of transportation mainly depends on the location of the supply areas and availability of types of vehicles, In the study area, 43.33 percent of the respondent-producers used hired tempo to carry chicks from different hatcheries, 10 percent used hired truck, 30 percent producers used hired van and 16.67 percent of the producers used hired rickshaws. On the other hand, 50 percent of the sample retailers used hired tempo, 5 percent used hired truck, 35 percent used hired van and 10 percent of the retailers used rickshaw to bring broilers from the farm to the market places. Table 3 also reveals that most of the respondent-producers and retailers used tempo. The higher use of tempo might be due to low cost, availability, easy movement and quick transfer from one place to another in the study area.

Table 1: Distribution of producers and retailers

Method of sale	Producers		Retailers	
	No.	%	No.	%
Cash	7	23.33	14	70.00
Credit	5	16.67	2	10.00
Cash + Credit	18	60.00	20	20.00
Total	30	100.00	20	100.00

**Methods of price fixation:** Demand and supply of broiler influenced the price. It was revealed from the field survey that the producers and retailers mainly on the basis of three types of market price viz. bargaining, prevailing market price and both bargaining and prevailing market price set the broiler price. About 66.67 percent of the respondent-producers adopted the method of prevailing market price to fix up the price of broiler, 13.33 percent of the producers used to bargain to fix up the price and 20 percent of the sample producers fixed up the price on the basis using of both bargaining and prevailing market price whenever they sold to retailers (Table 4). On the other hand, 15, 60 and 25 percent of the retailers fix up the selling price of broiler on the basis of bargaining, prevailing market price and both bargaining and prevailing market price to fix up the price of broiler, as the price of broiler was determined by the interaction of the forces of demand and supply.

Table 2: Distribution of broiler retailers by periods of storage

Periods	No. of retailers	Percent
1 day	4	20.00
1 to 2 day	11	55.00
2 to 3 day	3	15.00
3 to 5 day	2	10.00
Total	20	100.00

**Risk-bearing:** In case of broiler production and marketing, physical risk occurred from theft, death and deterioration of quality and shrinkage. Market risk arises from the changes in market price, consumer taste and operation of

consumption. There was no institution to bear the risk of the producers and retailers in relation to broiler production and marketing.

Table 3: Mode of transportation used by producers and retailers

Methods	Producers		Retailers	
	No.	%	No.	%
Truck	3	10.00	1	5.00
Tempo	13	43.33	10	50.00
Van	9	30.00	7	35.00
Rickshaw	5	16.67	2	10.00
Total	30	100.00	20	100.00

Table 4: Methods of price fixation at the time of purchase and sale

Methods	Producers		Retailers	
	No.	%	No.	%
Bargaining	4	13.33	3	15.00
Prevailing market price	20	66.67	12	60.00
Both Bargaining and prevailing market price	6	20.00	5	25.00
Total	30	100.00	20	100.00

**Market information:** Market information influences the producers and retailers in making their decisions regarding the volume of production purchase, sales and the price of product. In this case individual producers and retailers collected their information by personal contact and from fellow producers and retailers.

**Marketing Costs of Retailer:** The total cost incurred by the broiler retailers of Gazipur district 100 birds were calculated. The marketing cost items were transportation, storage, wages and salaries, night guard, sweeper, shop rent, market toll, death and loss, electricity and personal expenses.

Table 6: Seasonal variability in sale price (Tk./kg) by producers and retailers in different periods

Months	Average sale price of producers (Tk./kg)	Seasonal index	Average sale price of retailers (Tk./kg)	Seasonal index
January	61.58	110.68	70.69	107.50
February	61.30	110.18	71.00	107.97
March	56.05	100.74	72.11	109.65
April	54.34	97.67	69.10	105.08
May	53.16	95.55	62.00	94.28
June	52.10	93.64	59.89	91.07
July	51.40	92.38	59.50	90.48
August	51.17	91.97	59.40	90.33
September	50.93	91.54	60.68	92.27
October	54.25	97.50	64.43	97.98
November	60.35	108.47	70.40	107.05
December	61.03	109.69	69.93	106.34
Total	667.66	1200.00	789.13	1200.00
Average	55.64	100.00	65.76	100.00

Retailers usually purchased broiler from producers and sold to ultimate consumers and institutional buyers, so there is no marketing cost of broiler producers. The retailers carried broiler from the producers to their shops by truck, tempo, van and rickshaw. transportation cost incurred by them was Tk. 8575 per 100 birds which accounts of 17.41 percent of total marketing cost of broiler followed by wages and salaries (19.36 %), death and loss (18.71 %), personal expenses (13.29 %), house rent (9.63 %) and others. (Table 5).

**Seasonal Variation in Price of Broiler:** It was observed from the Table 6 that the average sale prices of both producers and retailers were higher (above average) in the month of November to March and low price (below average) in the month of April to October. High prices of broiler in the month of October to March may happen because of high demand for broiler in these months.

Table 5: Marketing cost of retailers (Taka per 100 birds)

Items	Cost	Percent
a. Transportation	95.35	19.36
b. Storage	9.75	1.98
c. Wages and salaries	85.75	17.41
d. Night guard	24.00	4.87
e. Sweeper	20.25	4.11
f. Shop rent	47.45	9.63
g. Market toll	27.00	5.48
h. Death and loss	92.15	18.71
i. Electricity	25.35	5.14
j. Personal expenses	65.45	13.29
Total	492.50	100.00

**Marketing Margin and Profit:** Marketing margin is the difference in value of equivalent physical quantities of a given commodity between different level of marketing. In other words, it is the difference between the price received by producers and price paid by the consumers (Kohls and Uhl, 1980).

**Kamruzzaman *et al.*: Marketing system of Broiler**

Table 7: Broiler marketing margin and profit of retailer in different months (Take per 100 birds)

Months	Purchase Price	Sale Price	Marketing	Marketing	Profit
January	8005.40	9189.70	1184.30	492.50	691.80
February	7969.00	9230.00	1261.00	492.50	768.50
March	7286.50	9374.30	2087.80	492.50	1595.30
April	7064.20	8983.00	1918.80	492.50	1426.30
May	6910.80	8060.00	1149.20	492.50	656.70
June	6773.00	7785.70	1012.70	492.50	520.20
July	6682.00	7735.00	1053.00	492.50	560.50
August	6652.10	7722.00	1069.90	492.50	577.40
September	6620.90	7888.40	1267.50	492.50	775.00
October	7247.50	8375.90	1128.40	492.50	635.90
November	7845.50	9152.00	1306.50	492.50	814.00
December	7933.90	9090.90	1157.00	492.50	664.50
Total	86990.80	102586.90	15596.10	5910.00	9686.10
Average	7249.23	8548.91	1299.68	492.50	807.18

The average marketing margin of retailers for 100 birds was worked out to be Tk. 1299.68. The highest marketing margin of retailers was Tk, 2087.80 that was obtained in the month of March. The lowest margin was Tk. 1012,70 in the month of June. Table 7 shows that the highest profit (Tk. 1595.30) was earned in the month of March. The variation in marketing margins and profits over the months was due to the variation in purchases and sales prices of broiler as the marketing cost was constant over the time. It may be concluded from the study that the producers sold broilers to the retailer at farm level. The retailers sold 80 percent of their live broiler to consumers and 20 percent to the institutional buyers in the market. All of the selected sample producers sold live broiler to retailers at the farm level in the study area, because they are: too far from retailers/consumers, are not able to do what is required and are too small as regards output.

Respondent producers and retailers viewed that fluctuation in supply and demand and also in price are major problems for marketing on broiler. Retailers were not affected by the price fluctuation but broiler producers were severely affected by the downward swing of price fluctuation.

Proper measures for solutions of the problems will help to develop broiler farming which intern will increase family income and also creation of employment opportunities in the country. More detailed study is required about the marketing system of broiler intermediaries and their costs, margin and profits before making final recommendation.

#### References

- Branson, R.E. and D.G. Norvell, 1983. Introduction to Agricultural Marketing. McGraw Hill Book Companies, New York.
- Kohls, R.L. and J.N. Uhl, 1980. Marketing of Agricultural Products. 5th Edn., Macmillan Publishing Co. Inc., New Delhi, India,.