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## ABSTRACT

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The study on modern retail marketing of high-value agricultural commodities is of inevitable importance in the developing countries like Bangladesh. The supply of poultry meat and egg by farmers to modern retail outlets has brought in a new form of organized marketing based on consumer demand. The study has assessed the efficiency of supply chain of super shops and regular shops by marketing margin in super shops and regular shops chains in Chittagong Metropolitan area. It has been revealed that supply chain-I (Poultry farm→ Super shop) was efficient chain in case of poultry meat marketing systems, which was regular a shop chain. In case of egg marketing system chain-I (Poultry farm→ Super shop) was more efficient this was also a regular shop chain. The super shops chain has been found more efficient than the regular shops chains in case of both poultry meat and poultry egg marketing system. The study identified some problems such as high transportation cost, price fluctuation, quality degradation, unnecessary middleman intervention etc and also suggested measures for these problems.

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**Keywords:** Super shop, Regular shop, Supply chain, Efficiency, Marketing Margin

## **CHAPTER-I: INTRODUCTION**

Bangladesh is witnessing expansion in organized retailing through the involvement of large corporate houses. This trend is closely associated with expanding urbanization, growing consumerism and increasing number of middleclass and high-income households. The rise in income levels and health consciousness has led to increase in demand for high-value agricultural commodities, especially poultry meat and eggs.

These organized food retail ventures are involved in procurement arrangements without any contract or commitment, apart from paying a better price to the farmers (Sulaiman et al., 2011). However, some retail initiatives are backed by extension services and other marketing services. Several studies on poultry retail chains in Bangladesh have confirmed the relative advantages to farmers connected with organized retail chains. The farmers contracted by retail chains receive higher prices (Dhananjaya and Rao, 2010); (Alam and Verma, 2008), higher net profits (Mangala and Chengappa, 2008); (Birthal et al., 2005) and incur lower transaction costs (Joseph et al., 2008). The poultry sub-sector is considered an important avenue to reduce poverty and malnutrition as well as unemployment problems of Bangladesh. Although commercial poultry started in 1980, until now only 14% of the meat comes from commercial farming systems (Alam 1995). The major portion of total poultry meat supply comes from traditional farming. Through contractual arrangements, agro-industry can assist farmers in developing countries to shift from subsistence or traditional agriculture to commercial or modern agriculture. Contract farming has recently been introduced in Bangladesh in 1994 by a big company, named ABFL (Aftab Bahumukhi Farm Ltd). Commercial egg production has become a specialized and speedy business at present time for the people of Bangladesh. Now-a-day's layer farming is being accepted as a profitable business. As a result a good number of small, medium and large farms have already been established all over the country.

Livestock is an integral component of the agricultural economy of Bangladesh performing a central role in the livelihoods of poor people more than 75% rely on livestock to some degree for their livelihood. An efficient marketing system can play an important role in improving poultry industry in our Bangladesh. At the same time, the market and production context of poultry production has been changing rapidly over the last two decades. Rapid economic growth and urbanization in developing countries has resulted in fast expansion of industrial large scale, vertically integrated, poultry production units, especially in Asia. Opportunities have also expanded for small scale

poultry enterprises due to improved market access infrastructure and a preference structure that might still favor free range birds and eggs (Conroy et al., 2005). As a result, there has been increased market orientation even among small scale poultry enterprises. These changes have brought large and small production systems in overlapping competitive space which has created both challenges and opportunities.

As a source of income, from the economic point of view poultry is very significant with a view to popularizing poultry farming on commercial basis and to meet the increasing demand for eggs & meat a good no of educated unemployed youth have already come toward to initiate poultry production & marketing. The participants who are involved in agribusiness sector of poultry & poultry meat products are poultry hatchery, poultry farm owner, poultry traders, hotel & restaurant owner & fast food traders. So numbers of people are employed in this sector as a source of food. Poultry meat especially chicken meat is the most desirable animal protein & accepted to most of the people of Bangladesh. The amount of protein energy & fat in chicken meat are 23.4 gm, 117.00 kcal, and 1.90 gm respectively.

The present study will be helpful for the poultry farmers, middleman, consumer and policy maker to get appropriate market information timely. It is a matter of fact that marketing is vital for supplying poultry & poultry meat products to consumer in good condition and right time. Consumer will also be mostly benefited.

The overall objective of this research was to investigate various aspects of poultry & poultry meat marketing in selected areas. The following are the specific objectives of the study:

- To identify the supply chain of poultry products in Super Shops and Regular Shops.
- To analyze the economic efficiency of supply chain of poultry products in Super Shops and Regular Shops in Chittagong Metro by using the concept of Marketing Margin.
- To pin point the problems faced by Super Shops and Regular Shops in the study area.
- To provide recommendations to improve the current situation.

## **CHAPTER-II: MATERIALS AND METHODS**

### **2.1. Processes of data collection**

#### ***2.1.1. Selection of the study area***

For the study conducted in the Chittagong district, metropolitan areas were purposively selected as they are involved in supplying of poultry products to regular markets (Jawtala bazaar and Kornophuli bazaar) as well as modern super shop like Khulsi Mart, Agora, Grocers, and Basket.

#### ***2.1.2. Selection of sample***

The total sample size was 16 in which 6 whole sellers cum retailer, 6 retailers were selected to collect data for regular shop marketing chains. Data for super shop marketing chain were collected from 4 operation officers of 4 selected super shops.

#### ***2.1.3. Period of Data collection***

For the present study, data were collected during the period of 10 August 2017 to 27 August 2017.

#### ***2.1.4. Collections of Data***

Data were collected through face to face interview with the selected respondents in the study area. Before the actual interview, respondents were given a brief introduction about the nature and purpose of the study. At the time of interview questions were asked systematically and explained the questions whenever it was found necessary. The layer farm owners were interviewed at their farms while the traders were interviewed at market place.

#### ***2.1.5. Processing and Tabulation of Data***

After collection of data from the field, all the collected data for the present study were tabulated, summarized and processed for analysis. The first step was taken to scrutinize the data of each and every schedule to find out any inconsistency or omission in the data collection and to avoid irrelevant information. The data were then transferred from survey schedule to tabular forms for systematic study. Then these were analyzed to achieve the desired objective of the study.

## 2.2. Analytical Technique

Lists of tables were prepared on the basis of findings of the analysis to achieve the objectives of the study. Data were presented mostly in the tabular form. Statistical methods such as mean, percentage etc. were applied for analyzed the data.

## 2.3. Methodology for determining economic efficiency of supply chains of super shops and regular shops

Economic efficiency of supply chain of poultry products in super shop and regular shops were adopted by comparing the super shops margin and regular shops margin. This is the differences between total cost (which equals purchase price plus additional costs) and selling price of the super shops and regular shops.



**Figure 1.a: Egg collection for selling**



**Figure 1.b: Packaged egg**



**Figure 1.c: Skin on and skin less broiler**

Figure 1: Figures of data collection



### CHAPTER-III: RESULTS AND DISCUSSION

Marketing chains are the alternative routes of product flow from producers to consumers (Kohls & Ukl, 1980). It involves a number of important activities at different stages by a series of intermediaries linking the producers with the consumers. Other farm owners sell their poultry to the wholesaler cum retailer or retailer.

#### 3.1. Supply chain identification

The existing standard marketing chain for poultry meat is as follows:

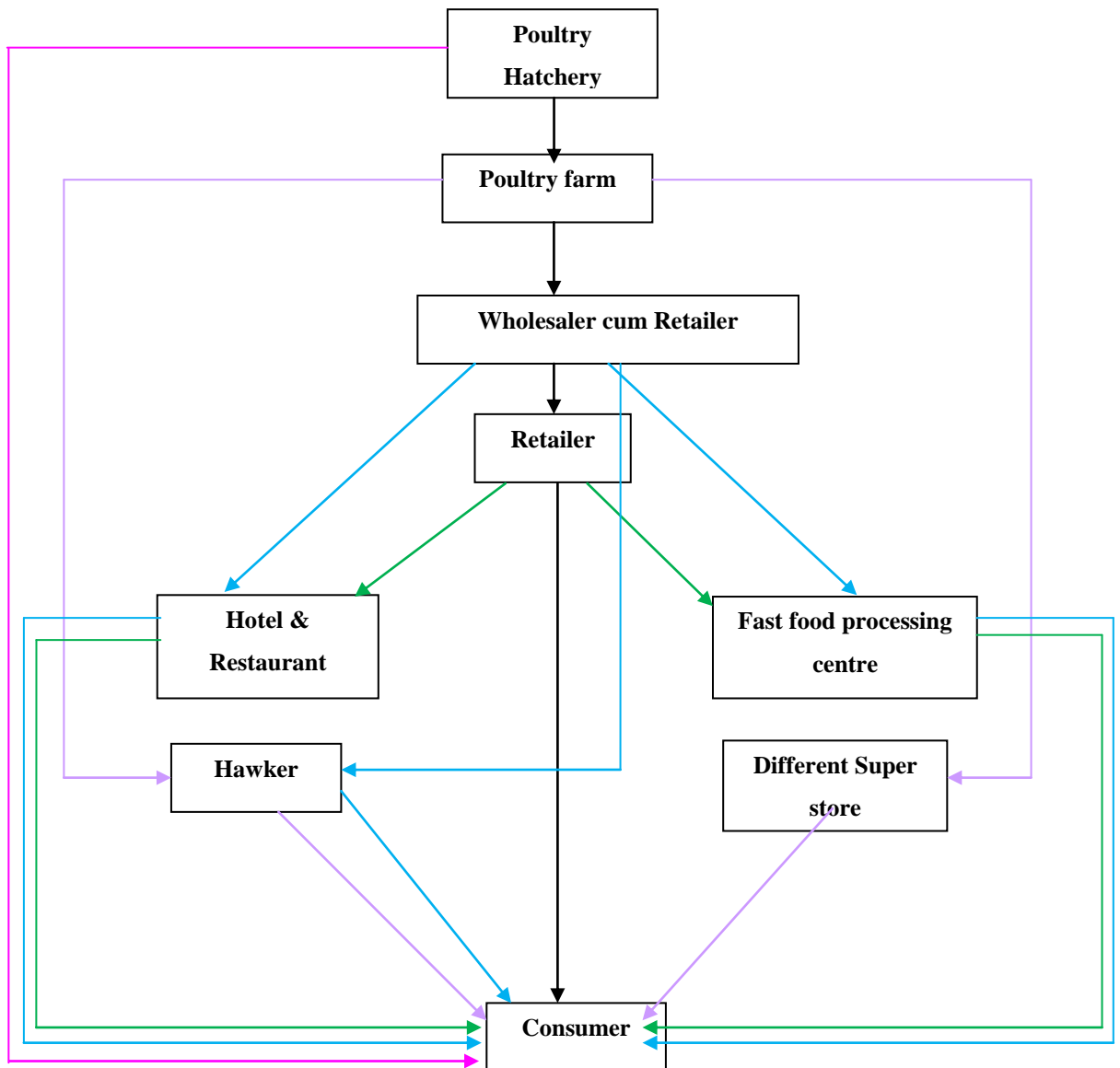


Figure 2: Standard marketing chains of poultry meat

In the study area, the found supply chains for regular shops and super shops for poultry meat are as follows:

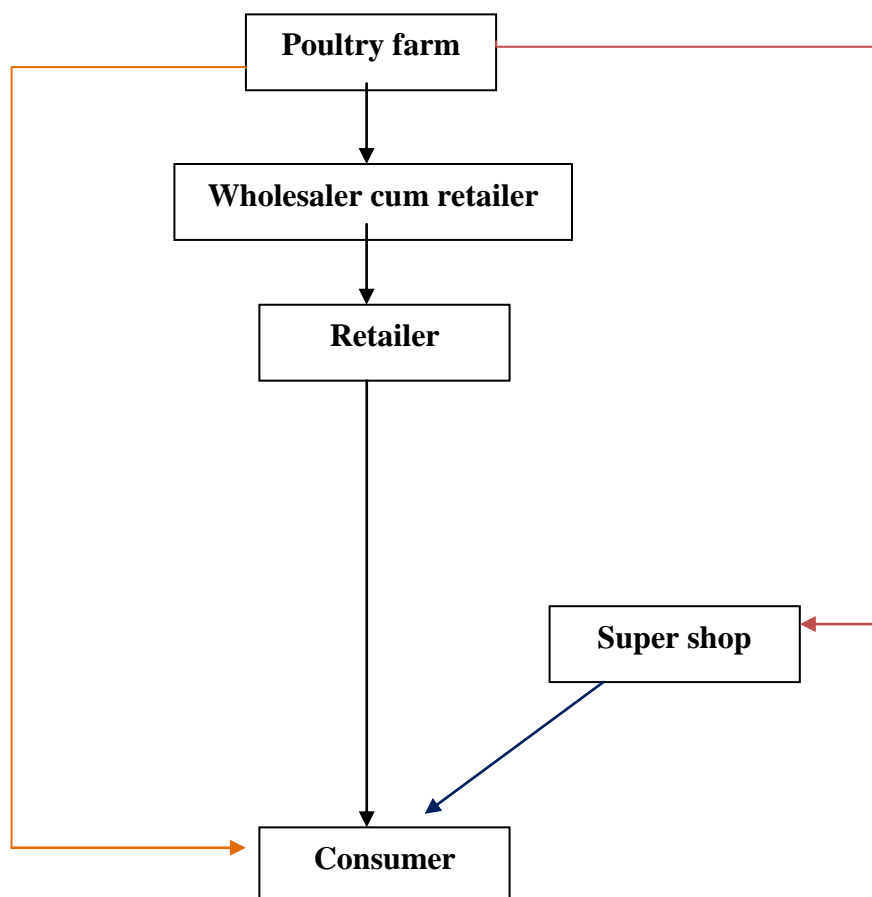


Figure -3: Supply chains for regular shops and super shops for poultry meat

On the basis of Figure the following chain can be identified for super shops and regular shops:

- Supply Chain I (super shops) : Poultry farm → Super shop
- Supply Chain II (Regular Shop) : Poultry farm → Wholesaler Cum Retailer
- Supply Chain III (Regular Shop) : Wholesaler-Cum-Retailer → Retailer

The existing standard marketing chain for eggs is as follows is as follows:

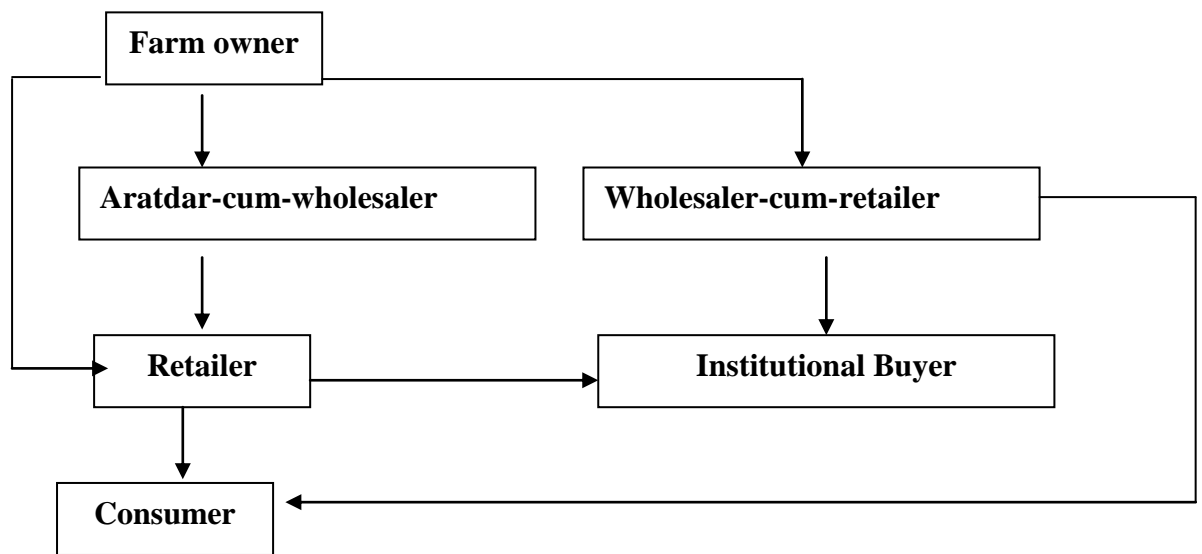


Figure 4: Standard marketing chain of poultry eggs

In the study area, the found supply chains for regular shops and super shops for poultry eggs are as follows:

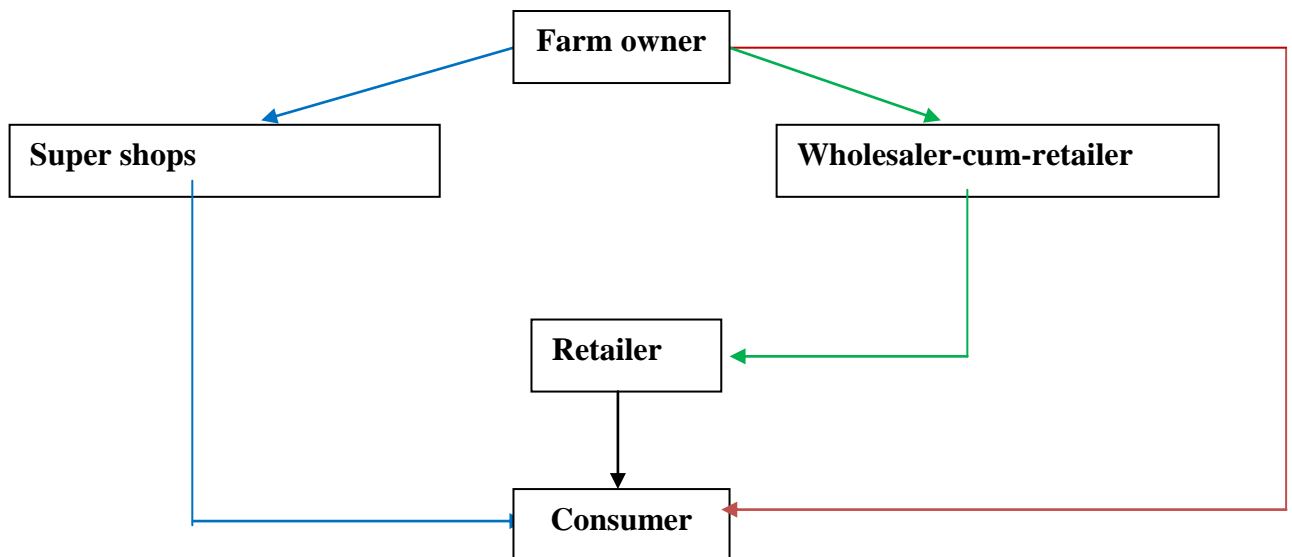


Figure- 5: Supply chains for regular shops and super shops for poultry egg

On the basis of Figure the following chains can be identified for super shop and regular shops:

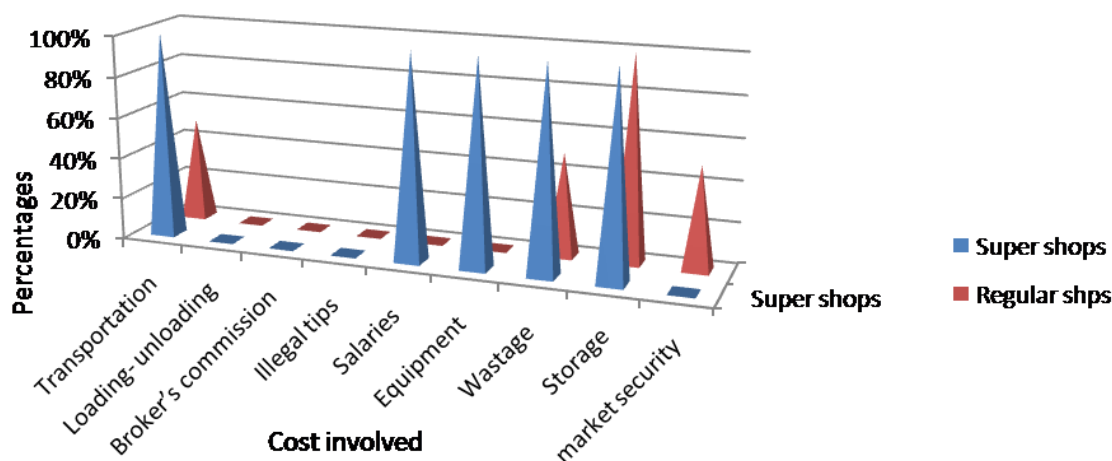
- Supply Chain I (Super Shop) : Poultry farm → Super shop  
 Supply Chain II (Regular Shop) : Poultry farm → Wholesaler Cum Retailer  
 Supply Chain III (Regular Shop) : Wholesaler-Cum-Retailer → Retailer

### 3.2. Cost head identification:

#### 3.2.1. Cost head involved in the procurement by both super shops and regular shops for poultry meat marketing chains

Table 1: Cost head involved in the procurement of poultry meat in super shops and regular shops

Costs involved	Super Shop	Regular Shop		Total Regular Shop
	%	WCR %	R %	%
Transportation	100%	0%	100%	50%
Loading- unloading	0%	0%	0%	0%
Broker's commission	0%	0%	0%	0%
Illegal tips	0%	0%	0%	0%
Salaries	100%	0%	0%	0%
Equipment	100%	0%	0%	0%
Wastage	100%	100%	0%	50%
Storage	100%	100%	100%	100%
market security	0%	100%	0%	50%



Graph-1: Cost head involved in the procurement by both super shops and regular shops for poultry meat

According to Table-1 transportation cost, wastage cost and storage costs were involved in both super shops and regular shops. Transportation cost and cost due to wastage were involved in 100% super shops and 50% regular shops. Storage cost was present in 100% super shops and regular shops. Cost due to salaries and equipment were only present in super shops.

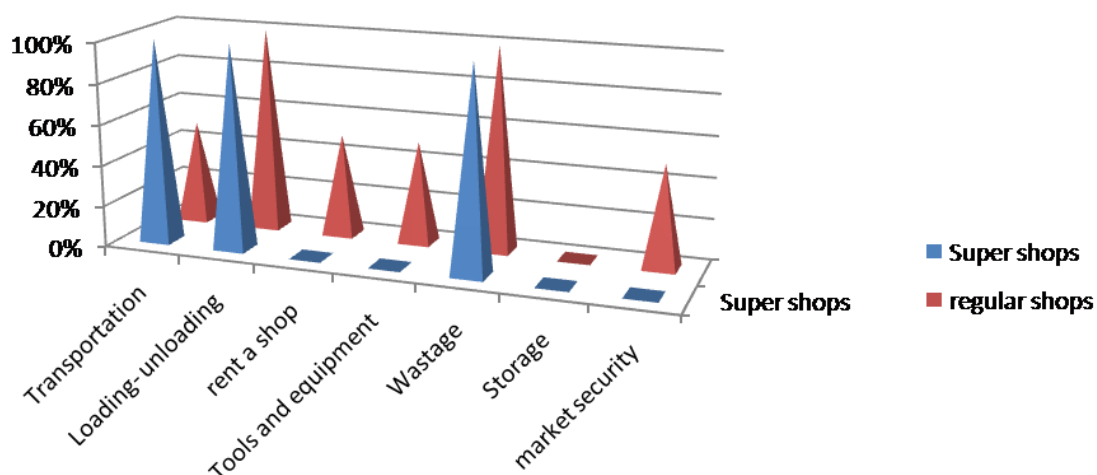
This study shows that transportation cost, salaries cost, equipment cost, wastage cost, storage cost were present in 100% super shops. On the other hand transportation cost, wastage cost, storage cost, market security cost were present in 50%, 50%, 100% and 50% regular shops respectively.

### 3.2.2. Cost head involved in the procurement by both super shops and regular shops for poultry egg marketing chains.

Table 2: Cost head involved in the procurement of poultry egg in super shops and regular shops

Costs involved	Super Shops	Regular Shops		Total Regular Shop
	%	WCR %	R %	%
Transportation	100%	0%	100%	50%
Loading- unloading	100%	100%	100%	100%
rent a shop	0%	100%	0%	50%

Tools and equipment	0%	0%	100%	50%
Wastage	100%	100%	100%	100%
Storage	0%	0%	0%	0%
market security	0%	100%	0%	50%



Graph-2: Cost head involved in the procurement by both super shops and regular shops for poultry egg

According to table-3 transportation cost (100% super shops and 50% regular shops), loading-unloading cost (100% super shops and regular shops), wastage cost (100% super shops and regular shops) were involved in both super shops and regular shops.

This study shows that transportation cost, loading-unloading cost and wastage cost were present in 100% super shops. On the other hand transportation cost, loading-unloading cost, rent a shop cost, equipment cost, wastage cost and market security cost were present in 50%, 100%, 50%, 50%, 100%, 100% and 50% regular shops respectively

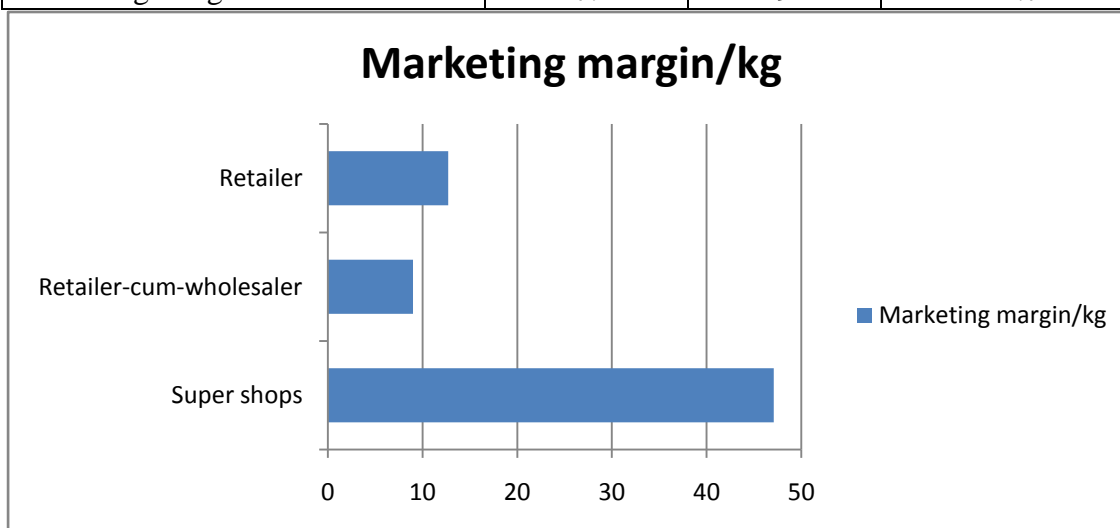
### 3.3. Economic efficiency of poultry meat supply chains

#### 3.3.1. Marketing margin for poultry meat supply chains in super shops and regular shops

Generally marketing margin is the difference between the price paid by consumer and price received by the producer. Besides, in a particular stage of marketing, the difference between purchased price and selling price is called marketing margin at that stage. Average purchase price for different chains were 219.2 Tk/kg, 111 Tk/kg, and 110 Tk/kg. The selling prices were 236.3 Tk/kg for super shop and 120 TK/kg, 122.7 Tk/kg.

Table-3: Marketing margin for poultry meat marketing system in super shops and regular shops

	Chains in Super shop	Chains in regular shops	
	I	II	III
Purchase price of the super shops/regular shops	219.2	111	110
Selling price of super shop/ regular shops	266.3	120	122.7
Marketing margin	47.1	9	12.7



Graph- 3: Marketing margin for poultry meat in super shops and regular shops

Here chain-I (Poultry farm→ Super shop) shows the higher marketing margin (47.1) than chain-II (9) and chain-III (12.7).

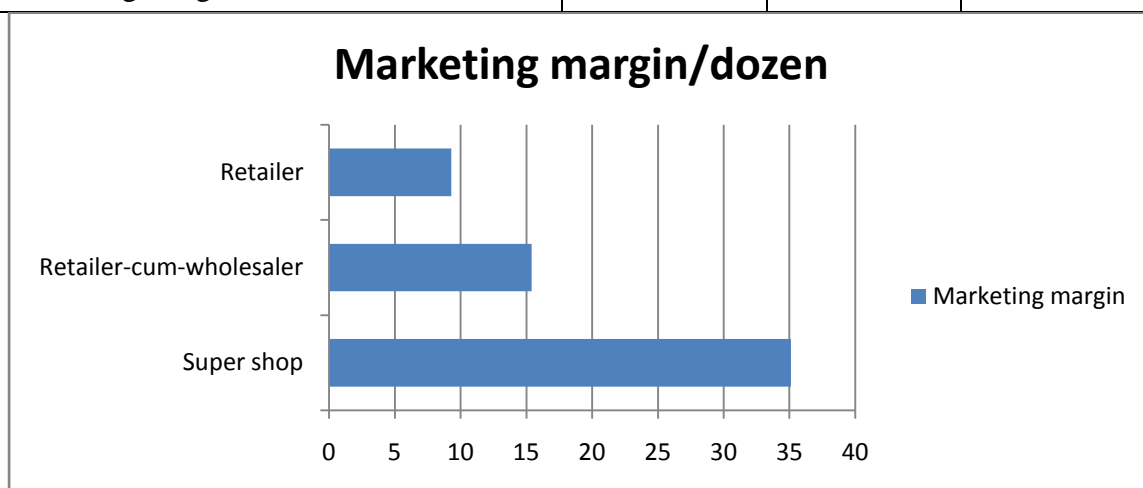
### 3.4. Economic efficiency of poultry egg supply chains

#### 3.4.1. Marketing margin for poultry egg supply chains in super shops and regular shops

Average purchase price were 84.9 Tk/dozen, 82.6 Tk/dozen, 82.7 Tk/dozen and 83.8 Tk/dozen from different chains. Selling price were 120 Tk/dozen, 98 Tk/ dozen, 92 Tk/dozen and 84 Tk/dozen.

Table-4: Marketing margin poultry egg marketing system in super shops and regular shops

Supply chains	Supply chains in Super shop	Supply chains in regular shops	
	I	II	III
Purchase price of the super shop/regular shop	84.9	82.6	82.7
Selling price of the super shops/regular shop	120	98	92
Marketing margin	35.1	15.4	9.3



Graph-4: Marketing margin for poultry egg in super shops and regular shops

Here chain-I (Poultry farm→ Super shop) shows the higher marketing margin (35.1) than chain-II (15.4) and chain-III (9.3)



### 3.5. Determination of economic efficiency of supply chain

#### 3.5.1. Poultry meat supply chain

Economic efficiency was measured by marketing margin. The results showed that chain-I (Poultry farm →super shop) shows the highest economic efficiency than chain-III (Wholesaler-Cum-Retailer →Retailer) and chain II (Poultry farm →Wholesaler Cum Retailer).

Table-5: Determination of economic efficiency in poultry meat supply chain

Performance indicators	Super shops	Regular shops	
	I	II	III
Marketing margin	47.1	9	12.7
Ranking	1	3	2

#### 3.5.2. Poultry egg supply chain

The results showed that chain-I (poultry farm→ super shop) showed the highest economic efficiency followed by chain-II (Farm owner →Wholesaler cum retailer) and chain-III (Wholesaler cum retailer → retailer).

Table- 6: Determination of marketing efficiency in poultry egg marketing chain

Performance indicators	Super shops	Regular shops	
Supply chains	I	II	III
Marketing margin	35.1	15.4	9.3
Ranking	1	2	3

According to this study, in poultry meat marketing chain and egg marketing system supply chains in the regular shops were more efficient than super shop.

## CHAPTER-IV: PROBLEMS & RECOMMENDATIONS

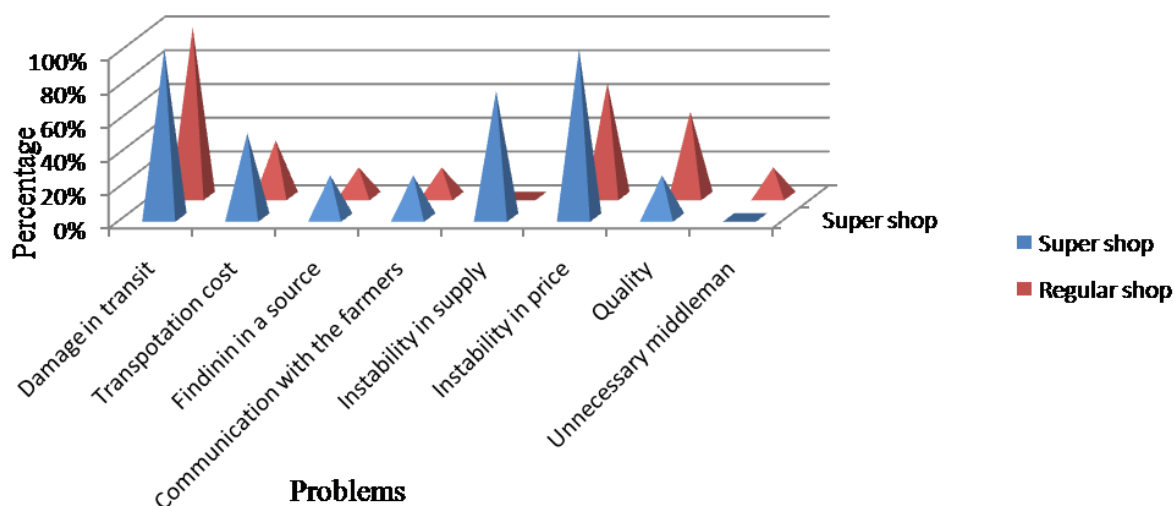
### 4.1. Problem faced by super shops and regular shops in poultry meat marketing

The one of the main objectives of this study is to identify the major problems faced by the selected super shops and regular shop and to recommend measures for these problems so that they can get better economic return from poultry meat and egg trading.

In the existing socio-economic condition of Bangladesh, there are so many marketing problems for super shops and regular shops. From the field survey, it was known that poultry farm owner face some problems at the time of poultry marketing are presented in table -9.

Table -7: Problems faced by super shops and regular shops in poultry meat marketing

Super shop/regular shop	Super Shop	Regular Shop		Total Regular Shop
	%	WCR %	R %	%
Damage in transit	100%	100%	100%	100%
Transportation cost	50%	33%	33%	33%
Finding a source	25%	33%	0%	17%
Communication with the farmers	25%	33%	0%	17%
Instability in supply	75%	0%	0%	0%
Instability in price	100%	100%	33%	67%
Quality	25%	100%	0%	50%
Unnecessary middleman	0%	0%	33%	17%



Graph-5: Problems faced by super shops and regular shop in poultry meat procurement

In this study, both super shops and regular shop were faced by the problems of damage in transit, transportation cost, finding in sources, communication with the farmers, instability in price etc in poultry meat marketing system. Instability in supply only noticed in case of super shops. Unnecessary middleman only noticed in case of regular shops. Problem related to transportation cost was higher in super shops (100%) than regular shops (33%). Communication problem and instability in supply was higher in super shops than regular shops. Problems related to quality of products were higher in regular shops (50%) than regular shops (25%).

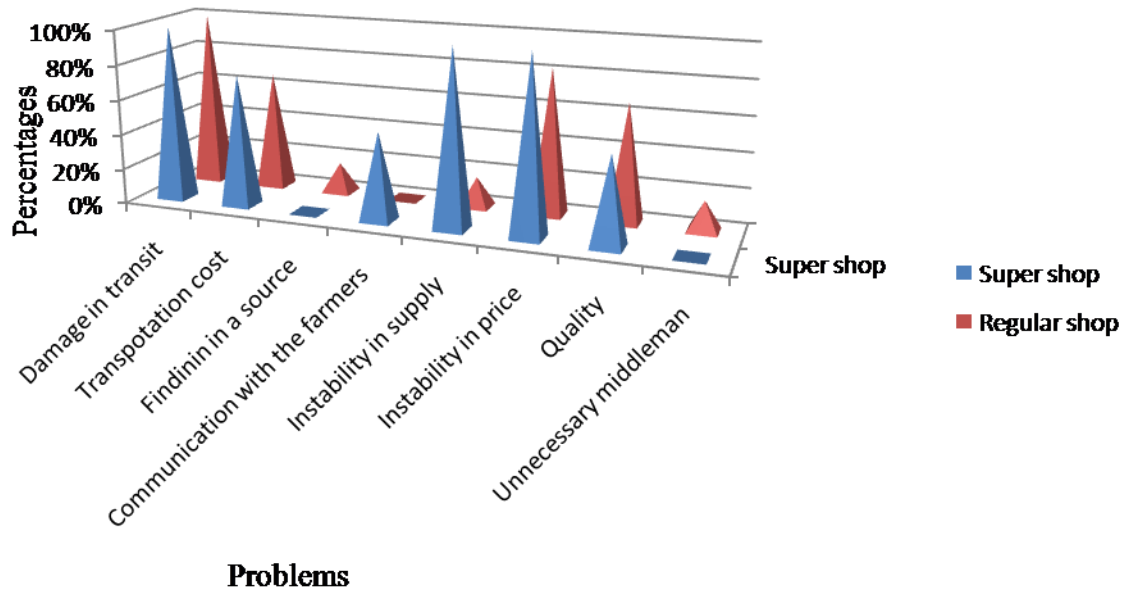
#### 4.2. Problem faced by super shops and regular shops in poultry egg marketing

Problem faced by super shops and regular shops in poultry egg marketing system is given in table-8

Table- 8: Problems faced by super shops and regular shops in poultry egg marketing system

	Super Shop	Regular Shops		Total Regular Shops
		WCR %	R %	
<b>Super shop/regular shop</b>	<b>%</b>	<b>WCR %</b>	<b>R %</b>	<b>%</b>
Damage in transit	100%	100%	100%	100%
Transportation cost	75%	33%	100%	67%
Finding a source	0%	33%	0%	17%
Communication with the farmers	50%	0%	0%	0%
Instability in supply	100%	33%	0%	17%

Instability in price	100%	100%	67%	83%
Quality	50%	100%	33%	67%
Unnecessary middleman	0%	0%	33%	17%



Graph-6: Problems faced by super shops and regular shops in poultry egg procurement

According to this study, problems like damage in transit, transportation, instability in supply, quality were noticed in both super shops and regular shops in case of egg marketing system. Problem in finding source (17%) and unnecessary middle (17%) man only noticed in regular shops. Problem related to communication with farmers (50%) was only present in the super shops.

### **4.3. Recommendations**

On the basis of the findings of this study the following recommendations are made for improvement of the existing production and marketing system of poultry meat and egg.

Recommendations for poultry meat marketing system:

- Improvement of communication system.
- Dissemination of market information.
- Stability should be established in market price.
- Reduction of damages during transportation.
- Reduction of unnecessary middleman.

Recommendations for poultry egg marketing system:

- Communication and transportation system must be developed to increase the efficiency of egg marketing system. Adequate transportation facilities should be made available for carrying egg from farm yard to market for reducing wastage of egg.
- Reduction of price fluctuation
- Reduction of damage during transportation
- Reduction of transportation cost

## **LIMITATION**

There was limitation of the time and because this reason data and other necessary information had to be collected within the shortest period of time. Respondents did not cooperate willingly because of any direct benefit from supplying information. Most of the respondents hesitated to give their actual information about production, income and profit.

## **CONCLUSION**

The study revealed that supply chain-I (poultry farm →super shop) was efficient chain in case of poultry meat marketing systems, which was regular shop chain. In case egg marketing system chain-I (poultry farm →super shop) was more efficient this was also a regular shop chain. So supply chains in the super shops were more efficient then regular shops. It would be better for the farmers in the area if they organize a body and perform group marketing. As an organized body they would also acquire bargaining power for their products over the powerful middleman that manipulate and control the price of poultry meat and egg in marketing system. These will increase farmers' profit considerably. Development of market infrastructure like road communication and transportation media will be helpful to decrease marketing cost, thus marketing efficiency will increase.

## REFERENCES

- Alam, G. & Verma, D. 2008. Connecting small-scale farmers with dynamic markets: A case study of a successful supply chain in Uttarakhand, India. Regoverning Markets Innovative Practice series, IIED, London.
- Birthal, P., K. Joshi, P. & Gulati, A. 2005. Vertical Coordination in High-Value Commodities: Implications for Smallholders.
- Conroy, C., Sparks, N., Chandrasekaran, D., Sharma, A., Shindey, D., Singh, L., Natarjan, A. & Anitha, K. 2005. Improving backyard poultry-keeping: a case study from India, Overseas development institute (ODI). Agricultural research & extension network (AgREN).
- Dhananjaya, B. & Rao, A. U. 2010. Namdhari Fresh Limited. Inclusive Value Chains: A Pathway Out of Poverty, 4, 31.
- Joseph, M., Soundararajan, N., Gupta, M. & Sahu, S. 2008. report on " Impact of Organised Retailing on the Unorganised Sector. Indian Council for Research on International Economic Relations.
- Mangala, K. & Chengappa, P. 2008. A novel agribusiness model for backward linkages with farmers: a case of food retail chain. Agricultural Economics Research Review, 21.
- Sulaiman, R., J Kalaivani, N., Handoo, J., S Vamsidhar Reddy, T., Dorai, K., Hall, A. & April 2011. Organised Retailing Of Fresh Fruit And Vegetables: Opportunities For Putting Research Into Use.



## **ACKNOWLEDGEMENTS**

All praises for the Almighty Allah, whose blessings have been enabled me to accomplish this work. I expresses my wholehearted senses of exhilaration, a sincere appreciation to my respected teacher and supervisor S. M. Mokaddes Ahmed Dipu, Department of Agricultural Economics and Social Sciences, Chittagong Veterinary and Animal Sciences University, whose talented and scholastic advice, prudent recommendations, constructive animadversion, continuous encouragement and assiduous assistance have guided me from the commencement of intern studies until to the completion of this report.

Author

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## **BIOGRAPHY**

I am Md. Badiul Alam, son of Md. Abdullah and Nasima Begum. I passed my Secondary School Certificate (SSC) examination in 2008 and Higher Secondary Certificate (HSC) in 2010. I am pursuing Doctor of Veterinary Medicine (DVM) degree in Chittagong Veterinary and Animal Sciences University (CVASU), Bangladesh.