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ABSTRACT

This study was performed to understand the general features of fluid milk marketing system in Chittagong region and explore some of the issues on milk production among dairy households and their conditions under various milk marketing channels. This study highlights the share of fluid milk marketing in urban and rural region, demand of milk and price variations under different stages of marketing and selling spots. On the basis of available information a total of 25 dairy farm owners were selected from Potiya upozilla and Chittagong metropolitan area (East Khulshi,West Khulshi, Chockbazar and New market area) . The study identified six different marketing channels available in study areas in present fluid milk marketing system. In case of indirect market the average price per liter of milk was TK 53.76 and in case of direct market the average price per liter of milk was TK 49.02 which was TK 4.74 higher than the direct market. The average cost of per litter milk was TK 5.32. The average marketing margin per litter milk was TK 6.72 and net marketing margin was TK 2.44 in which average producer share in consumer taka was 86.49% in the study area. This study also identifies some problems faced by farmers in milk marketing and their suggested probable solutions.

**Key Words: Channels, Marketing margin, Milk production, profit.**

**Chapter-1**

**INTRODUCTION**

**1.1 Background of the Study**: Bangladesh is an agricultural country and livestock is a part and parcel in this country. Livestock sector comprises an integral component of the country’s crucial and largely subsistence economy in which fluid milk and it’s product is one of the important subsector. Primary milk producers at Bangladesh through large number of traditional small scale private farming or backyard farming are still dominating the fluid milk distribution system. Beyond of storage, long way transportation, proper pricing ,grading and standardization—fluid milk is distributing and being operated by final consumers, Beparies, Ghosh and some other Dairy co-operative society and their agent(eg: BRAC, Milk vita, Aftab, Pran). High degree of competition exists among the private marketing agent, which operate their functions without any government regulation. In the study, it is examined that the current and potential market supply and demand, marketing opportunities and consumer preferences for milk in Bangladesh. Evidence showed that the highest number of livestock (cattle, buffalo, goat, sheep etc) population was found in Patuakhali, Comilla, Jessore, Dinajpur and Sylhet districts. Among the division, the highest number of livestock was found in Rajshahi division followed by Dhaka division. The prices of livestock and it’s products fluctuate by seasons and regions mainly due to the variation in demand and supply of those products **( Jahanggir A. & Md. Akteruzzaman,1999)**.

In 1994, the total milk production was 801000 metric tons from cattle and 2700 tons from buffalo in Bangladesh. Milk market in Bangladesh is mostly an unorganized sector. Milk consumption is centered on urban area **( Miah, M. A. M. 2002).**

Milk is an ideal food which may be defined as the entire lacteal secretion of mammary glands of the mammals obtained by the process of milking during the period of following at least 72 hours after calving or until the milk is free from colostrums **(G.C.Banerjee,2004 8th edition).**  Moreover milk is not only the most important foodstuff during early childhood but also continues in our normal diet throughout the life. Besides the mother milk, the main sources of milk for human consumption are cow, goat, buffalo & sheep milk. **Table-1: District wise price of milk in Chittagong division, Source: DAM (Directorate of Agricultural Marketing, 2002)**

|  |  |
| --- | --- |
| **District** | **Price(Tk/100Lit**) |
| Bandarban | 1700 |
| Brahmanbaria | 2000 |
| Chandpur | 1800 |
| Chittagong | - |
| Comilla | - |
| Cox's Bazar | 2400 |
| Feni | 2000 |
| Khagrachari | 2100 |
| Lakshmipur | - |
| Rangamati | 2200 |

Price of milk fluctuates by seasons and regions mainly due to the variation in demand & supply.  **Figure-1: Seasonal milk price** The highest milk price prevailed during October to December (Fig-1) and lowest during March to April. **Source: DAM, 2002 1.2 Justification of the study:** There was varioustypes of research has been performed about fluid milk but no research has yet been performed for fluid milk marketing system in the study area. So my study will be helpful for the dairy farmers, middlemen, consumer and policy maker to get appropriate market information. Consumer will be mostly beneficial to know about the actual price of fluid milk.

**1.3 The specific objectives of the study are:**

i. To find out the marketing channels of fluid milk. ii To estimate the marketing cost, marketing margin, producer share in consumer taka and net margin of the dairy farmers.

iii. To identify the problems faced by the dairy farmers and suggested probable solutions of fluid milk marketing in the study areas.

**Capter-2**

**REVIEW OF LITERATURE**

**Alam, et.al, 1995**.the study found that the total cost of indigenous and cross breed dairy cow were Tk.23.56/day/animal and TK.60.46/day/animal, respectively. The major cost item for both the indigenous and cross breed cows was feed cost. The highest return obtained from crossbreed cow was TK.80.88/day and the net return was TK.26.64/day.

**FAO, 2002** The main interest of the marketing intermediaries is to gain the highest profit possible from their particular business operation.

**Miah, M. A. M, 2002**.observed that the method of distribution of fluid milk is very complex, due to its higher perishability, compared to other agricultural commodities. Furthermore, the demand for milk and milk products by urban consumers increases secularly, whereas milk production fluctuates from season to season throughout the year. The milk marketing process starts with the producer and ends with the final consumers. It is found that milk marketing channels vary according to location of the farms. Two type of transactions such as direct and indirect channel are observed.

**Mujahid, A.A, 2011**.analysed the existing fluid milk marketing system to estimate marketing cost and marketing margin of farmer where this study indentified four different marketing channel in present marketing system. The average price per liter milk was TK 46.8.In case of indirect market and direct market the average price per liter of milk were TK 38.67. The average marketing cost of per liter milk was TK 5.10 and net marketing margin per liter milk production was TK 5.90.

**N. Morgan, Livestock Policy Officer, FAO Bangkok, 2007:** Thepro-poor social/business community dairying model(Bangladesh) adds livestock activities to ongoing community development programmers that provide training, vaccination, veterinary care and other support services to help poor women become dairy farmers and assist others to improve and expand dairy operations. In Bangladesh, project participants have become suppliers of milk to private dairies, including the Grameen DANONE yoghurt plant. Today, this programme and others are administered by a not-for-profit organization called the Grameen Motsho O Pashusampad (Fisheries and Livestock) Foundation.

**Sayeed, M. A. et al .1994**.observed in their study that aggregate consumption gains in regional dairy product consumption over the past decade mirror regional annual income gains of nearly 5%.Within a global context, the near doubling of regional milk consumption over the 25 years, to an estimated 247 million tons in 2008, has placed Asia as the strongest growing region for the milk and milk products consumption. In fact, Asian consumers have generated nearly half of the global dairy product demand over the past decade.

**Chapter-3 METHODOLOGY**

**3.1 Selection of the study area and period of study:** It was a bare necessity to select the area, which would provide maximum information regarding milk marketing. The selection of area depends on the objectives of the study. Potiya upozilla and Chittagong metropolitan area (East Khulshi, West Khulshi, Chockbazar and New market area) are selected on the basis of available information about the dairy farm owners. The study was conducted during the period of May, 2013 to December, 2013.

**3.2 Preparation of survey schedule**: Survey was followed to collect data for this study. Consulting on the available literature on milk marketing and keeping the objectives of the study with a view to obtaining the precise information from the farm owners where a perfect survey schedule is conducted through close-cum-open type interview. The interview schedules pretested and then prepared for the final survey.

**3.3 Selection of sample**: In total of 25 farms were selected conventionally from the selected study areas in which 12 from Patiya, 4 from east Khulshi, 5 from west Kulshi and 4 from Chockbazar and new market area.

**3.4 Analytical Techniques**: The data were put on the master sheet and were arranged in tabular form. Simple statistical measures (arithmetic mean, percentage etc) were used in this study Net profit = Marketing margin - Marketing cost Marketing margin = (Price paid by consume) - (Price received by farmer). Producer sharing Consumer Taka = (Farm price ÷ Consumer Price) × 100

**Chapter- 4**

**RESULTS & DISCUSSIONS**

**4.1 Marketing Channel**: Marketing channels are alternative routes of products flows from producers to consumers. It is made up by the middlemen/market participants who move the goods from producers to ultimate consumers. The series of changes of ownership and economics process by which products are transferred from the primary producer (the farmer) to the final consumer are thought of as marketing chains/channels.

Most of the farmers are interested to rear crossbred cattle in lieu of indigenous cattle with a view to getting economical support from their dairy farming. They sell milk directly and indirectly to the consumer. Someone follows direct marketing and another follows both direct and indirect marketing. Their profit somewhat higher than those who sell their milk to the middlemen (indirect marketing) as they save their marketing cost. Farmer/milk producer yard consumer. eg: neighbours. **Figure-2: Direct marketing channel** Many farmer sell their milk to the Beparies, Ghosh, Broker, Sweetmeat shop & restaurant etc. **Market participants**: **Beparies:** They usually purchase milk from farmer/milk producer yard or in local bazaar and sell either to big ghosh or to sweetmeat shops at semi urban, urban or big city. **Ghosh:** Theymay collect milk directly from farmers/milk producer yard by hand milking or from the beparies at their own establishment in rural areas. A very few of them produce ghee, butter, cream, rossgolla etc but mostly they supply to the big sweetmeat producer shops as well as sell directly to city dwellers. **Sweetmeat shop:** They collect milk from farmer, beparies or from ghosh and sell their product made by milk to final consumers. **Tea stall:** They collect fluid milk from farmer, beparies or from ghosh and mix milk into tea to sell directly to the final consumers. **Grocers:** They collect fluid milk from farmer, beparies or from ghosh and store milk for short time and sell it to the final consumers.

|  |
| --- |
| Farmer/ Milk production yard Beparies  Ghosh  Sweetmeat shop/tea stall/Groce Consumer |

**Figure-3: Indirect marketing channels.**

Channel 1: Farmer Milk processor /Sweetmeat trader / consumer

Channel 2: Famer Ghosh Tea stall consumer

Channel 3: Famer Ghosh/Milk processor consumer

Channel 4: Farmer Ghosh Sweetmeat trader consumer Channel 5: Farmer Grocery shop consumer (urban and pre-urban) Channel 6: Farmer/Commercial Farmer Urban consumer The following major marketing channels for rural, pre-urban, urban and outside areas were observed: In case of indirect market, the average price per liter of milk is Tk 53.74 and in case of direct market, the average price of milk is TK 49.02 Which is 4.74 higher than direct market. In indirect market the price includes in transportation, hamal, telephone charge, salary of milkman, electricity bill, consultancy charge, sweeper and night guard cost which arises the price of milk is somehow higher than direct market **(Table-2).**

**Table-2: Price difference between direct and indirect marketing channel**

|  |  |
| --- | --- |
| Marketing channel | Ave. price/lit milk |
| Direct | 49.02 |
| Indirect | 53.76 |
| **Difference** | **4.74** |

**Figure-4: Pie chart of marketing channel** The pie chart shows that 76% farmers in the study areas engaged with both direct and indirect marketing channel, only 16% farmers sell their fluid milk by indirect marketing channel and rest are engaged with direct channel. **4.2 Marketing cost of milk:**  Cost involves in the marketing system refers to the cost of various services performed by different middlemen in the process of movement of milk from farmers to the final consumers. In this study, following of the cost of farm owners are considered which has been shown in **table-3**

**Table-3: Cost item with average cost (TK/lit) of milk**

|  |  |  |
| --- | --- | --- |
| Cost item | Ave. Cost(TK/lit) | Percent |
| Transportation | 1.66 | 31.20 |
| Hamal | 1.18 | 22.18 |
| Telephone | 0.16 | 3.01 |
| Milkman | 0.48 | 9.02 |
| Electricity | 0.21 | 3.95 |
| Consultant | 0.54 | 10.15 |
| Sweeper | 0.17 | 3.20 |
| Night guard | 0.92 | 17.29 |
| **Total** | **5.32** | **100** |

**Transportation cost:** Transportation cost involved the cost of transporting milk from farms to consumers. The average transportation cost was TK 1.66/lit which represented 31.20% of total marketing cost. It was the major cost of marketing of fluid milk **(Table-3).**

**Wages of Hamal:** Hamal is the middlemen who carry fluid milk from farm to destination and take salary from farm owner or from the any other middlemen. The average hamal cost was TK 1.18/lit which represented 22.18% of the total marketing cost. It was the significant cost of fluid milk marketing.  **Telephone bill:** It is an important instrument of business to keep pace with market demand and supply. The average telephone bill was TK 0.16/lit which represented 3.01% of total cost of fluid milk marketing. **Salary of Milkman:** Milkman is a person who collects milk from the cattle by milking. The average milkmen cost was TK 0.48/lit which represented 9.02% of total cost of fluid milk marketing.

**Figure-5: Percentage of marketing cost in various sectors**

**Electricity bill:** Electricity is an integral part of dairy farm for lighting, washing with motor pump and electric fan. The average electricity bill was TK 0.21/lit which represented 3.95% of total cost of fluid milk marketing. **Consultancy charge**: Doctor acts as consultant which is an important part of a farm who visits the farm twice in every month. The average consultancy charge was TK 0.54/lit which represented 10.15% of total cost of fluid milk marketing.

**Wage of sweeper:** Sweeper sweeps the farm regularly and keeps it neat & clean. The average wage of sweeper was TK 0.17/lit which represented 3.20% of total cost of fluid milk marketing. **Salary of Night guard**: Night guard protects the cattle from thief and lost. The average salary of night guard was TK 0.92/lit which represented 17.29% of total cost of fluid milk marketing. **4.3 Marketing margin of per farm per litre of fluid milk in direct marketing system Tabte-4: Marketing margin in the indirect market**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Sl.No** | **Name of the farm(Direct market)** | **Farm price/lit milk** | **Consumer price/lit milk** | **Marketing margin** |
| 01. | Saifuddin dairy | 32 | 32 | 0 |
| 02. | Khaleth dairy | 32.5 | 32.2 | 0 |
| 03. | Rahaman dairy | 35 | 35 | 0 |
| 04. | Moniruddin dairy | 50 | 50 | 0 |
| 05. | Musa dairy | 40 | 40 | 0 |
| 06. | Jamil dairy | 35 | 35 | 0 |
| 07. | Alamgir dairy | 38 | 38 | 0 |
| 08. | Salam dairy | 55 | 55 | 0 |
| 09. | Azad dairy | 52 | 52 | 0 |
| 10. | Sohidulla dairy | 55 | 55 | 0 |
| 11. | Ripon dairy | 60 | 60 | 0 |
| 12. | Rahaman-2 dairy | 52 | 52 | 0 |
| 13. | S.A.Rahul dairy | 55 | 55 | 0 |
| 14. | Khaleq dairy | 53 | 53 | 0 |
| 15. | Mohiddin dairy | 55 | 55 | 0 |
| 16. | Musin Uddin dairy | 50 | 50 | 0 |
| 17. | Numan dairy | 52 | 52 | 0 |
| 18. | Haque Bandri dairy  55 | 55 | 55 | 0 |
| 19. | Feroz dairy | 53 | 53 | 0 |
| 20. | Jerif dairy | 60 | 60 | 0 |
| 21. | CVASU dairy | 60 | 60 | 0 |
|  | **Average** | **49.02** | **49.02** | **0** |

In the direct market,farmer sell their milk directly to the final consumers avoiding of all kind of middlemen where marketing cost is zero.So here marketing margin is zero. **4.4 Marketing cost per farm including various cost items:** In the indirect market, some of Patiya and another of Chittagong metropolitan area (eg. East khulshi, West khulshi, Chockbazar and New market area) from where the farmers send their fluid milk to the final consumer/market considering the variable costs which are different from each farm due to variable distance from Patiya to Chittagong city including other marketing costs.

**Table-5: Marketing cost per farm of indirect fluid milk marketing:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **SL.No** | **Name of the farm** | **Transportation(Tk/Lit)** | **Hamal**  **(Tk/Lit)** | **Telephone**  **(Tk/Lit)** | **Milkman(Tk/Lit)** | **Eletricity(Tk/Lit)** | **Consultant(Tk/Lit)** | **Sweeper(Tk/Lit)** | **Nightguard(Tk/Lit)** | **Total cost(Tk/Lit)** |
| 01. | Saifuddin dairy | 1.5 |  | 0.1 | 0.41 | 0.25 | 0.41 |  | 2.08 | **4.75** |
| 02. | Mostofa dairy | 2.00 | 1.25 | 0.17 | 0.33 | 0.21 | 0.42 |  | 1.25 | **5.63** |
| 03. | Nazrul dairy | 2.89 | 1.42 | 0.07 | 0.15 | 0.10 | 0.24 |  |  | **4.87** |
| 04. | Khaleth dairy | 2.33 | 1.67 | 0.04 | 0.67 | 0.20 |  |  |  | **4.91** |
| 05. | Rahaman dairy | 2.50 | 2.91 | 0.20 | 0.41 | 0.25 | 0.21 |  |  | **6.48** |
| 06. | Monirdin dairy | 3.00 |  | 0.17 | 1.00 | 0.28 | 0.44 |  |  | **4.89** |
| 07. | Musa dairy | 2.50 | 3.13 | 0.21 | 0.63 | 0.21 | 0.21 |  |  | **6.89** |
| 08. | Mamon dairy | 1.60 | 4.00 | 0.13 | 0.27 | 0.17 |  |  |  | **6.07** |
| 09. | Alamgir dairy | 0.67 | 1.5 | 0.25 | 1.00 | 0.42 |  |  |  | **3.84** |
| 10. | Salam dairy | 0.67 | 0.20 | 0.11 | 0.27 | 0.22 | 0.22 | 0.27 | 0.56 | **2.52** |
| 11. | Azad dairy | 1.11 | 0.50 | 0.13 | 0.30 | 0.19 | 0.19 | 0.15 | 0.93 | **3.50** |
| 12. | Sohidulla dairy | 0.75 | 0.25 | 0.25 | 0.33 | 0.10 | 0.16 | 0.08 | 0.50 | **2.72** |
| 13. | Khaleq dairy | 0.80 | 0.20 | 0.16 | 0.40 | 0.20 | 0.17 | 0.17 | 0.83 | **2.93** |
| 14. | Ripon dairy | 0.67 |  | 0.11 | 0.22 | 0.16 | 0.22 | 0.11 | 0.44 | **1.93** |
| 15. | Rahaman-2 dairy | 0.80 | 0.33 | 0.11 | 0.33 | 0.18 | 0.22 | 0.11 | 0.78 | **2.86** |
| 16. | S.A.Rahul dairy | 0.80 | 0.50 | 0.16 | 0.26 | 0.10 | 0.26 | 0.16 | 0.66 | **2.91** |
| 17. | Mohiddin dairy | 0.83 |  | 0.11 | 0.44 | 0.17 | 0.28 | 0.28 | 0.83 | **2.94** |
| 18. | Musin Uddin dairy | 0.83 | 0.33 | 0.11 | 0.55 | 0.13 | 0.22 | 0.11 | 0.55 | **2.84** |
| 19. | Numan dairy | 1.70 | 0.72 | 0.17 | 0.71 | 0.24 | 0.24 | 0.24 | 1.19 | **5.21** |
| 20. | HaqueBandri | 1.67 | 0.42 | 0.13 | 0.50 | 0.28 | 0.28 | 0.14 | 1.39 | **4.81** |
| 21. | Feroz dairy | 1.33 | 0.83 | 0.28 | 0.66 | 0.33 | 0.28 | 0.22 | 1.11 | **5.04** |
| 22. | Super dairy | 2.07 | 1.60 | 0.14 | 0.56 | 0.22 | 0.28 | 0.14 | 0.83 | **5.84** |
| 23. | Jerif | 1.56 | 0.63 | 0.10 | 0.31 | 0.19 | 0.23 | 0.13 | 0.78 | **3.93** |
|  | **Average** | **1.66** | **1.18** | **0.16** | **0.48** | **0.21** | **0.54** | **0.17** | **0.92** |  |

Marketing cost per farms which are different from each farm that was used to calculate the producer share in consumer taka, marketing margin and profit of farmer.

**4.4 Net Marketing margin of per farm per litre of fluid milk:**

**Table-6: Marketing margin, Net marketing margin and producer sharing consumer Taka**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Sl.No** | **Name of the farm(Direct market)** | **Farm price/lit milk** | **Consumer price/lit milk** | **Producer**  **Share in Consumer Taka(%)** | **Marketing margin(Tk/Lit)** | **marketing Cost per farm(Tk/Lit)** | **Net market margin(Tk/lit)** |
| 01. | Saifuddin dairy | 32 | 40 | 80 | 8 | 4.75 | 3.25 |
| 02. | Mostofa dairy | 31 | 42 | 73.81 | 11 | 5.63 | 5.37 |
| 03. | Nazrul dairy | 35 | 43 | 81.40 | 8 | 6.48 | 1.52 |
| 04. | Khaleth dairy | 32.5 | 40 | 81.25 | 7.50 | 4.91 | 2.59 |
| 05. | Rahaman dairy | 31.5 | 42 | 75 | 10.50 | 4.87 | 5.63 |
| 06. | Moniruddin dairy | 44 | 50 | 88 | 6 | 4.89 | 1.11 |
| 07. | Musa dairy | 40 | 54 | 74.04 | 14 | 6.89 | 7.11 |
| 08. | Mamon dair | 37 | 45 | 82.22 | 8 | 6.07 | 1.93 |
| 09. | Alamgir dairy | 38 | 46 | 82.61 | 8 | 3.84 | 4.16 |
| 10. | Salam dairy | 5o | 54 | 92.59 | 4 | 2.52 | 1.48 |
| 11. | Azad dairy | 52 | 60 | 86.67 | 8 | 3.50 | 4.50 |
| 12. | Sohidulla dairy | 55 | 59 | 93.22 | 4 | 2.72 | 1.28 |
| 13. | Ripon dairy | 58 | 61 | 95.08 | 3 | 1.93 | 1.07 |
| 14. | Rahaman-2 dairy | 50 | 53.5 | 93.45 | 3.50 | 2.86 | 0.64 |
| 15. | S.A.Rahul dairy | 55 | 60 | 91.67 | 5 | 2.91 | 2.09 |
| 16. | Khaleq dairy | 53 | 58 | 91.38 | 5 | 2.93 | 2.07 |
| 17. | Mohiddin dairy | 55 | 6o | 91.67 | 5 | 2.94 | 2.06 |
| 18. | Musin Uddin dairy | 50 | 54 | 92.59 | 4 | 2.84 | 1.16 |
| 19. | Numan dairy | 52 | 60 | 86.67 | 8 | 5.21 | 2.79 |
| 20. | Haque Bandri dairy | 55 | 60 | 91.67 | 5 | 4.41 | 0.19 |
| 21. | Feroz dairy | 53 | 60 | 88.33 | 7 | 5.04 | 1.96 |
| 22. | Super dairy | 65 | 70 | 92.86 | 7 | 5.84 | 1.16 |
| 23 | Jerif dairy | 60 | 65 | 92.31 | 5 | 3.93 | 1.07 |
|  | **Average** | **47.13** | **53.76** | **86.89** | **6.72** | **4.28** | **2.44** |

The marketing margin ranges from TK 4 to 14.The average marketing margin was TK6.72/lit of milk in the indirect market and average profit was TK 2.44/lit in the indirect market. Finally the average producer share in consumer TK 86.89% of per litre milk in the indirect market. The highest producer share in consumer taka is about 95.08% in Ripon dairy and lowest is about 73.81% of per litre milk in Mostofa dairy. The highest marketing margin is about TK 14 /lit of milk in Musa dairy and lowest is about TK 3/lit of milk in Ripon dairy. The highest marketing cost is about Tk 6.89/lit of milk in Musa dairy and lowest is about TK 1.93/lit of milk in Ripon dairy. The highest marketing cost is about Tk 7.11/lit of milk in Musa dairy and lowest is about TK 0.19/lit of milk in Haque Bandri dairy.

**Chapter-5**

**PROBLEMS AND SUGGESTED PROBABLE SOLUTIONS**

**5.1 Problems associated with farm:** In the existingsocio-economic condition of Bangladesh where there are many marketing problems for fluid milk farmers. From the field survey in the study area it was known from the dairy farmers which they are faced at the time of marketing of fluid milk. **Table -7 : Problems faced by farm owners.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Problems** | **Extend of Problems faced by the Respondent** | | |  | **Percent (%)of total farm(25)** |
| **Low** | **Medium** | **High** | **Total** |
| High feed price | 1 | 3 | 18 | 22 | 88 |
| High Demand of deshi Cow milk | 0 | 4 | 8 | 12 | 48 |
| Fluctuation of Price | 8 | 5 | 12 | 25 | 100 |
| High transportation cost | 2 | 7 | 13 | 22 | 88 |
| Hartal, Strike, Flood and Natural Calamities | 2 | 4 | 15 | 20 | 84 |
| High cost of storage | 3 | 0 | 0 | 3 | 12 |
| Ignorancy of the knowledge of marketing | 5 | 8 | 11 | 24 | 96 |

**Source: Field survey at study areas, 2013.**

**Figure-6: Problem faced by dairy farmers.**

**High feed price:** Animal feed price is increasing day by day. It is becoming very difficult for small scale farm owners to adjust their cost due to increasing feed price. They are forced to change feed ration in quick successions and thus hampers milk production. About 88 percent farm owners thought that it is the main constraint for smooth milk production and marketing (Table-7)

**High Demand of deshi Cow milk:** About 48 percent dairy farmers claim the problem that demand of deshi cow milk is higher than the cross-bred dairy cow milk (Table-7). About 8 of them thought that it is the main problem for their milk marketing (Figure-6). But most of the farmer’s rare cross-bred dairy cow for higher milk production.

**Price fluctuation:**

Price fluctuation is another major problem. About 100 percent of farmers told that when the price of milk increases, customers are less interested in consuming milk in high price (Table-7). About 12 of them gave it highest priority (Figure-6).

**High transportation cost:**

It is another big problem in milk marketing. Because when middlemen buy milk or when farmer have to sell milk to sweetmeat shop, they have to transport milk to the destination. So that transportation cost have to be added with the net cost. About 88 percent farmers claim it (Table-7). About 13 of them thought that high transportation cost is the main constraint to their smooth marketing operation (Figure-6).

**Hartal, Strike, Flood and Natural Calamities:**

Hartal, Strike, Flood and Natural Calamities hampers the smooth transportation of milk to its destination thus deteriorates the quality of milk and farmers have to face loss. 84 percent farmers faced with this problem. About 15 of them claim it is the major problem now-a-days.

**High cost of storage:**

In case of over production or lower demand, farmers have to store milk for a while. For this reason storage cost increases the marketing cost of milk. About 12 percent farmer responded in favor of that problem (Table-7).

**Ignorancy of knowledge of marketing system:** About96 percent farmers are ignorant about marketing system and 11 of them is major problems**. 5.2 Measures suggested by Farm Owners:**

* Animal feed price have to be controlled.
* Regularity in Electricity supply should be ensured.
* Increase government support to the farmers.
* Increased transportation facilities will help the farmer to transport their milk to consumers in time without adding any kind of preservatives.
* Proper storage facilities will avoid any tendency of adding harmful preservatives (formalin, hydrogen per-oxide etc).
* Loan facilities by government should be increased.
* Legal price of milk should be ensured.
* Proper market information has to be supplied.

**Chapter-6**

**Conclusion**

Milk is one of the best foods containing all kinds of essential nutrients for body. It is the world widely granted infant supplimentary food. But it was observed that most of the dairy farmers were small in size, their milk production low and they market the surplus milk after consumption in the village level farm and not scientifically established in the urban area.. From the above study we found that farmers were following dominant marketing channels for selling major portion of their milk according to the locations. Price fluctuation, transportation, hartal and high feed cost in marketing are major constraints for the small dairy farmers. The seasonal price fluctuation was higher for village as well as at urban markets. The average price of milk received by the dairy farmers was higher for the chittagong metropolitan area (eg. east khulshi,west khulshi and new market area) than Patiya. The average price of milk was TK 49.02/lit in case of direct market and TK 53.76/lit in case of indirect market where average marketing cost was TK 5.32/lit of milk (combining of village and urban area). The market margin was TK 6.72/lit of milk and net marketing margin was TK 2.44/lit of milk as well as producer share in consumer TK 86.89% per litre of milk.

Milk producers frequently suffer from low price, seasonal price fluctuation and irregular payments. Middlemen on the other hand, appropriate larger margins from milk market often mixing fresh milk with water and powder milk. The milk quality supplied to urban markets through middlemen was not of good standard and price of milk varied according to different types of consumers even at the same market. Generally, the infrastructures for fluid milk marketing are not available in the markets. Lack of infrastructure also damages the quality of milk. But the cooperative provides all modern marketing facilities to their members for marketing their milk. Therefore further development of dairy farming depends upon the organized marketing channel to reduce hankering of middlemen in which farmer can get fair price from their fluid milk. Then milk will be available to the general consumer at reasonable price.

**Chapter-7**

**Bibliography**

**Alam, J. 1995.** *Livestock Resources in Bangladesh-Present Status and Future Potentiial* University Press Limited, Dhaka.

**Ashrafuzzaman, M. 1993**. An Economic Analysis of Milk Production in Some Selected Areas of Sirajgonj District,Un-published Master’s thesis, Department of Agricultural Economics, Bangladesh Agricultural University, Mymensingh.

**BBS.2002**. Statistical Year Book of Bangladesh. Bureau of Statistics, Statistical Division, Ministry of Planning, Government of the People’s Republic of Bangladesh, Dhaka.

**Directorate of Agricultural Marketing(DAM),2002**. Khamarbari, Dhaka.

**FAO.1990.**  *Dairy Cooperatives: Successful Experiences of Selected Asian Countries* Regional Office for Asia and the Pacific. Bangkok.

**FAO.2002 .** Milk Processing Guide Series. Volume-6. http//www.fao.org. 2002/01/07.

**G.C.Banerjee, 2004**. A text book of Animal Husbandry-8th edition, page No:352-353

**Jahangir Alam & Md.Akteruzzuaman.1999.** Technical Report on Current and Potential Market Supply and Demand, Marketing Opportunities and Consumer Preferences for Indigenous Breed Animals/Products.

**Mujahid, A. A. 2011.** A report on fluid milk marketing system in some selected area in Chittagong district.

**Miah, M. A .M. 2002** Production and Marketing of Livestock and Livestock Produc Selected Peri-Urban Areas of Bangladesh. Un-published Ph. D. thesis, Department of Agricultural Economics, Bangladesh Agricultural University, Mymensingh .

S**ayeed, M. A., Rahman, A., Alam, J. and Begum, J. 1994**. Economics of Milk Production in Dhaka District- A Case for Savar Thana. Asia-Aus.J. Anim . Sci.,7(1):49-55.