



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

PRICE SPREADS IN CUT-FLOWER MARKETING: SOME EVIDENCE FROM BANGLADESH

**S. K. Raha
Masuma Siddika**

ABSTRACT

Flower marketing has been expanding rapidly but in an unorganized way. The present study has examined the existing marketing system, estimated marketing cost, margins of different flowers of different marketing channels. Flower growers received 30.75% to 60.42% of the consumer's taka while 24.71% to 58.5% were spent as the marketing cost. The net marketing margin varied from 3.0% to 37.83% of consumer's taka. Growers used channel I most though it involved highest cost of all the channels. Adoption of proper measures for the solution of the current problems would improve the efficiency of the marketing system which will in turn increase grower's share in consumer's taka.

I. INTRODUCTION

In Bangladesh small -scale flower production has initially started in late seventies by some innovative growers with the production of tuberose but large- scale commercial production was started from mid-eighties in Jhikargacha Upazila of Jessore district. Now around 10000 hectares of land is under flower cultivation (Siddika 2004). The major flower growing districts are Jessore, Savar, Chuadanga, Mymensingh and Gazipur . Tuberose, rose, gladiolus and marigold are the major commercial flowers grown in Bangladesh. It is assumed that Jessore accounted for 60 % of production area and 80% of the area is occupied by only tuberose. At present flowers are being produced per year on about 500 hectares of land in Jhikargachha and Sharsha Upazilas of Jessore district. The growth which has been witnessed recently in this sector is solely due to the efforts of growers and their confidence in flower production that it yields higher income and profitability per unit area as compared to other crops grown by them earlier. Cultivation of flowers is reported to give 3-5 times the returns obtained from growing paddy and 1.5-2.0 times that from vegetables (Dadlani, 2003).

Marketing of flowers in Bangladesh is at present much unorganized. Major trade is in the Shahbag market in Dhaka city, followed by the Gadkhali market near Jessore. There is substantial trade also in Chittagong and other district towns. Of the total flower shops, 40 % are located in Dhaka while Chittagong and Sylhet shared 25% each and the rest 10% are located in other places. Flower trade estimated at wholesale level ranged from Tk. 500 to 1000 million. The retail prices generally have a mark- up of 200-400%. Increasing demand for floriculture products is also throwing up new market opportunities. Considering the importance of marketing for the emerging flower enterprise the study has been undertaken

The authors are Professor and Ex-graduate student, Department of Cooperation and Marketing, Bangladesh Agricultural University Mymensingh -2202.

with the following objectives: (i) to identify various channels of flower marketing, (ii) to estimate marketing cost, price spread and grower's share in consumer's price (iii) to identify the prevailing problems of market participants of flower and (iv) finally to spell out policy implication for improvement of flower marketing.

II. METADOLOGY

Existing Literature and Database

There are a few studies on flower marketing in Bangladesh. Hossain and Rahman(1994) analysed the marketing system of flowers in Dhaka city. The study showed an increasing trends in production of flowers like tuberose, rose, Gendha and dalia, number of flower shops and capital investment. Merchandising patterns were also changing. In 1995 Sultana conducted a study on flower marketing in Dhaka city. She has estimated marketing cost and margins of flower shops, identified their major problems. Shopkeepers' opinion about the probable solutions was also included in this study. Hasan (1996) has addressed the production and marketing of tuberose only. All the above studies were concentrated mainly in Dhaka city. Marketing cost, margins etc. were estimated on average basis. But the present study considered selected three flowers (tuberose, rose and gladiolus) separately and also examined the whole marketing channels from the flower growers to ultimate flower consumers.

Study area and database

Considering the concentration of flower cultivation Jessore district was selected as the supply hinterland. Then, two unions namely Gadkhali and Panisara of Jhikargachha Upazila were selected. As a consuming centre Dhaka city was also included as a study area. Twenty flower growers from selected area, 15 traders from Gadkhali Bazar in Jessore district, while 5 wholesaler-cum-retailers and 20 retailers from Dhaka city were selected randomly. Thus the sample size was 60. Data were collected in March 2004. Primary data were collected from the selected sample by using two sets of pre tested interview schedules. Some additional information was also collected from flower market in Dhaka city in November 2004. Secondary data were gathered from different Government documents, offices and other published and unpublished records.

Estimation procedure

Grower's net share in consumer's taka is calculated in the following way:

$$Gs=(Pf \div Pr) \times 100,$$

$$Pf=Pa - Cp$$

Where,

Gs = Grower's net share in consumer's taka

Pf = Grower's net price

Pr = Retail price i.e. price paid by the consumer

Pa = Price received by producer at production area

Cp = Marketing cost incurred by the grower

Measures of marketing efficiency

There are two approaches to measure marketing efficiency. The first one refers to the analysis of marketing margins and the second one to the analysis of market structure, conduct and performance. The first approach is used alone. Different marketing channels have been identified and the marketing efficiency in the alternative marketing channels is computed by ranking different performance indicators. The indicators included are grower's share in the consumer's taka, marketing cost of the intermediaries, marketing margins of intermediaries and returns per taka of investment. Ranks were attached to each performance indicator. By pooling all the indicators, the marketing efficiency is calculated (Ramakumar, 2001). The pooled indicators are expressed as:

$$R = R_i / N_i$$

R_i = Sum of ranks in each channel

N_i = Number of performance indicators.

The channel with the lowest composite index is the most efficient channel. There are limitations in the use of such a composite index as equal weights have been assigned to all the selected indicators. Hence, the composite index should be interpreted as a pointer to the efficiency of the channel and not as an index that comprehensively covers the embodied elements.

III. INTERMEDIARIES INVOLVED IN FLOWER MARKETING

The flower marketing channels in Bangladesh are long and somewhat complex which may be seen in Siddika (2004). The field study reveals that the participants in different marketing channels were grower, local trader, wholesaler-cum-retailer, retailer and consumer. Following four channels were identified:

Channel I: Flower grower → Local trader → Wholesaler -cum retailer → retailer → Consumer

Channel II: Flower grower → Local trader → Retailer → Consumer

Channel III: Flower grower → Local trader → Wholesaler -cum retailer → Consumer

Channel IV: Flower grower → Wholesaler -cum retailer → Retailer → Consumer.

Flower grower: Primarily the flower- growers sell flowers to the local traders at the local market (Gadkhali market). They also sell flowers to the wholesaler-cum-retailers in Dhaka city. A small portion of the total production of flowers is sold to users in producing area.

Local trader: In flower business local traders are those professional traders who purchase flowers from the growers at local market and sell to wholesaler-cum-retailer and retailer in

Dhaka city. They also sell flowers to retailers in Jessore or other districts. None of them had any permanent shop. They are also experienced traders.

Wholesaler-cum-retailer: Wholesaler-cum-retailers are big, experienced and licensed traders having fixed business premises and godowns. They purchased flowers from local traders or growers and sold those mainly to retailers. Sometimes they use to sell flowers to users.

Retailer: The retailers are small traders. They buy flowers from the local traders and wholesaler-cum-retailers. There are some retailers who usually use open marketplace for selling flowers. In Dhaka city 75% of retailers have permanent shop and 25% own temporary shops. They are professional traders. The retailers used additional staff in operating the business.

IV. PRICE SPREADS FOR SELECTED FLOWERS

Price spread for tuberose flower

The price spreads for different marketing channels of tuberose flowers are presented in Table 1. Price spreads are calculated by following concurrent margin approach. An examination of the marketing costs and margins in the channels would help understand the extent of profit and loss of the channel participants.

Channel 1: Table 1 shows that the gross and net prices received by the flower grower were Tk. 58 and Tk. 53.1 per 100 flowers i.e. 39.73 % and 36.37% of the consumer's price.. The highest marketing cost was incurred by the retailer (Tk. 30.85). Total marketing cost was estimated at Tk. 58.5 per 100 flowers i.e 40.07% of the consumer's taka while the total price spread was Tk. 88 i.e. 60.27% of the consumer's taka.

Channel II: Here, wholesaler-cum-retailers were by passed by both the local traders and the retailers. The grower's share in consumer's taka was the same as in Channel I i.e. 39.73 %. Marketing costs incurred by the grower and the local traders were also the same as in Channel I. But the retailer's marketing cost increased from Tk. 30.85 in Channel I to Tk. 31 in channel II. Here the consumer's price was unchanged, total marketing cost decreased by Tk. 6.1 but the total marketing margin was Tk. 88 as in Channel I Marketing margin of the local trader increased by Tk. 8 in this channel compared to that of channel I though the marketing cost was unchanged. Similarly, the marketing margins of retailer increased in this channel compared to channel I

Table 1 Price spread for tuberose flower in different marketing channels in study areas (Tk. Per 100 flowers)

Item	Channel I	Channel II	Channel III	Channel IV
Price received by grower	58.0 (39.73)	58 (39.73)	58 (41.43)	78 (53.42)
Marketing cost of grower	4.9	4.9	4.9	23(15.75)
Actual (net)realization of grower	53.1 (36.37)	53.1 (36.37)	53.1 (37.93)	55 (37.67)
Marketing cost of local trader	16.5 (11.30)	16.5 (11.30)	16.5 (11.79)	-
Marketing margin of local trader	20.0 (13.69)	28 (19.18)	20 (14.29)	-
Realisation of local trader	78.0 (53.42)	86 (58.90)	78 (55.71)	-
Marketing cost of wholesaler-cum- retailer	6.25 (4.28)	-	17.0 (12.14)	14.0 (9.59)
Marketing margin of wholesaler-cum- retailer	13 (8.90)	-	62 (44.29)	30.0 (20.55)
Realisation of wholesaler-cum- retailer	91 (62.33)	-	140 (100.00)	108 (73.97)
Marketing cost of retailer	30.85 (21.13)	31 (21.23)	-	19.0 (13.01)
Marketing margin of retailer	55 (37.67)	60 (41.09)	-	38.0 (26.03)
Consumer's price	146 (100.00)	146 (100.00)	140 (100.00)	146 (100.00)
Total marketing cost	58.5 (40.07)	52.4 (35.89)	38.4 (27.43)	56.0 (38.36)
Total marketing margin	88 (60.27)	88 (60.27)	82 (58.57)	68 (46.58)

Source :Field survey, 2004.

Note: Figures in parentheses denote percentages to the consumer's price

Channel III: Table 1 indicates that retailers are bypassed by the wholesaler-cum-retailer. Price received by the flower grower was same as in channels I to III along with same costs of marketing but the share in consumer's price increased to 41.43% as the consumer's price reduced from Tk. 146 in channels I and II to Tk. 140 in channel III. Total marketing cost was about 27 % while total marketing margin was about 59% of the consumer's price. Wholesaler-cum-retailer incurred marketing cost about three times higher compared to channel I while the margin was about five times higher.

Channel IV: It is seen from Table I that the local traders and retailers are absent here. The growers brought flowers directly to wholesaler-cum-retailers who sold either to retailers or to consumers. Growers captured highest price (Tk. 78 / 100 flowers). Grower's net share in

consumer's price was 37.67% which was the second highest share. But the growers incurred higher marketing cost.

Price spread for rose flower

Channel 1: It is the longest channel of the five channels. The grower's gross share of the consumer's price was calculated at 50% . But net share came to 47.04% . Total marketing cost (Tk.90.20) was 32.21 % of consumer's price. Of the total marketing cost the share of grower, local trader, wholesaler-cum-retailer and retailer were 9.20 %, 12.20%, 9.87% and 68.74% respectively.

Table 2. Price spread for rose flower in different marketing channels in the study areas (Tk. Per 100 flowers)

Item	Channel I	Channel II	Channel III	Channel IV
Price of flower received by grower	140 (50.00)	140 (50.36)	140 (57.61)	170 (60.71)
Marketing cost of grower	8.30 (2.96)	8.30 (2.99)	8.30 (3.42)	20 (8.33)
Actual (net) realization of grower	131.70 (47.04)	131.70 (47.37)	131.70 (54.20)	150 (53.57)
Marketing cost of local trader	11.00 (3.93)	11.00 (3.96)	11.00 (4.53)	-
Marketing margin of local trader	21.00 (7.5)	20.00 (7.19)	21.00 (8.64)	-
Realisation of local trader	161 (57.5)	161 (57.91)	161 (62.26)	-
Marketing cost of wholesaler-cum- retailer	8.90 (3.18)	-	40 (12.76)	11 (3.93)
Marketing margin of wholesaler-cum- retailer	18 (6.43)	-	82 (33.74)	60 (21.43)
Realisation of wholesaler-cum- retailer	179 (63.93)	-	243	230
Marketing cost of retailer	62 (22.14)	71.5 (25.72)	-	64.0
Marketing margin of retailer	101 (36.07)	117 (42.09)	-	50.0 (17.86)
Consumer's price	280	278	243	280
Total marketing cost	90.20 (32.21)	90.80 (32.66)	59.30 (24.40)	95 (33.93)
Total marketing margin	140.00 (50.00)	138 (49.64)	100 (41.15)	110 (39.29)

Source: Computed from survey data

Note: Figures in parentheses denote percentages to the consumer's price

Channel II & III: Table 2 shows that the grower's price per 100 rose was Tk 140 in Channels I to III. The growers' marketing costs in all these channels were also same i.e.

Tk.8.30 while that of local traders were Tk. 11 in all the three channels. But the total marketing cost was higher (Tk. 95) in Channel IV followed by Channel II (Tk. 90.80), channel I(Tk. 90.20) and lowest (Tk. 59.30) in channel III where retailer was absent. Total marketing margin was the highest in channel I (Tk. 140) followed by Channel II (Tk.138) and Channel IV (Tk. 110) and channel III (Tk. 100). Consumer's price varied from Tk. 243 in Channel III to Tk. 278 in Channel II and Tk. 280 in Channels I and IV. In channel IV total marketing margin was 39.29% of the consumer's price while the total cost comprised 33.93 % of the consumer's price.

Channel IV: The local traders was absent in this channel. The growers received Tk. 170 for 100 roses which was higher than those of other channels but the consumers paid the highest (Tk. 280) price as in channel L. Grower's gross as well as net shares of the consumer's price were 60.71% and 53.57 % respectively.

spread for Gladiolus flower

Table 3 presents that the grower's price was same in Channels I-III though there was minor variation in terms of consumer's price. Marketing cost incurred by the growers was Tk. 7.29 for 100 flowers in Channels I-III and Tk. 28 for channels IV. Similarly the marketing cost incurred by the local traders did not vary for the first three channels. Wholesaler-cumretailer's marketing cost varied from channel to channel. It is interesting to note that the cost is not related with the length of the channels but on the volume of activities performed by the intermediaries. Of the four channels highest marketing cost was found in channel I(Tk. 84.42) followed by Channel IV(Tk. 78), Channel II (Tk.75.79) and channel III (Tk. 42.37).

The marketing margin as share of consumer's price was the highest in channel I(53.36%) followed by channel II (51.38%), and Channel III (46.52%) The highest net profit earned by Channel III (Tk. 64.63) followed by Channel; II (Tk. 54.21) and channel I (Tk. 50.58) and lowest net profit was IV (Tk. 25).

Table 3. Price spread for Gladiolus flower in different marketing channels in the study areas (Tk. per 100 flowers)

Item	Channel I	Channel II	Channel III	Channel IV
Price received by grower	123 (48.62)	123 (48.62)	123 (53.48)	150 (59.29)
Marketing cost of grower	7.29 (2.88)	7.29 (2.88)	7.29 (3.17)	28 (11.07)
Actual (net) realization of grower	115.71 (45.74)	115.71 (45.74)	115.71 (50.09)	122 (48.22)
Marketing cost of local trader	19.5 (7.71)	19.5 (7.71)	19.5 (8.47)	-
Marketing margin of local trader	25 (9.88)	30 (11.86)	30 (13.04)	-
Realization of local trader	148	153	153	-

Table 3. Contd.

Item	Channel I	Channel II	Channel III	Channel IV
Marketing cost of wholesaler-cum-retailer	8.58 (3.39)	-	15.58 (14.17)	10.50 (13.04)
Marketing margin of wholesaler-cum-retailer	22 (8.69)	-	77 (33.48)	50 (19.76)
Realisation of wholesaler-cum-retailer	170 (6.72)	-	230	-
Marketing cost of retailer	49.05	49(19.37)	-	39.50
Marketing margin of retailer	83 (32.81)	100 (39.53)	-	53.0
Consumer's price	253(100)	253(100)	230 (100)	253 (100)
Total marketing cost	84.42 (33.37)	75.79 (29.96)	42.37 (18.42)	78 (30.83)
Total marketing margin	135 (53.36)	130 (51.38)	107 (46.52)	103 (40.71)

Source: Computed from survey data

Note: Figures in parentheses denote percentages to the consumer's price

Marketing efficiency in the channels

Table 4 shows the results of the analysis of tuberose marketing efficiency in the channels. According to grower's share in consumer's taka and marketing cost in channel III is the most efficient; which could provide the grower with 37.93 % of consumer's price. And only Tk. 38.40 was spent in this channel. The higher cost in channel IV compared to channels II and III attributed to the absence of local traders but it was less than that of channel I. Growers incurred more cost in channel IV to perform additional marketing activities which were performed more efficiently by the local traders in other channels. Regarding the marketing margin channel IV is the most efficient as it provided with lowest amount i.e. Tk 63.00. On the bases of composite index Channel IV is the most efficient followed by Channel III, channel II and Channel I.

Table 4. Estimates of marketing efficiency in the marketing channels of flowers in the study areas (Tuberose)

Components of composite index	Channel I	Channel II	Channel III	Channel IV
Grower's net share in consumer's price (%)	36.37	36.37	37.93	37.67
Rank	3.5	3.5	1	2
Marketing cost (Tk. per 100 flowers)	58.50	52.40	38.40	56.00
Rank	4	2	1	3
Marketing margin (Tk. . per 100 flowers)	88.00	88.00	82.00	68.00
Rank	3.5	3.5	2	1
Rate of return (Marketing				

Table 4. Contd.

Components of composite index	Channel I	Channel II	Channel III	Channel IV
margin / marketing cost)	1.50	1.68	2.14	1.21
Rank	2	3	4	1
Total score	13	12	8	7
Mean score	3.25	3.00	2	1.75

Source: Source: Computed from Table 1

Table 5 presents the results of the analysis of marketing efficiency in the channels. According to grower's share in consumer's taka, marketing margin and marketing cost, channel III is the most efficient; which could provide the grower with 54.20 % of consumer's price. The higher cost in channel IV compared to channel III attributed to the absence of local traders. Growers incurred more cost in channel IV to perform additional marketing activities which were performed more efficiently by the local traders in channel III. Channel IV is the most efficient as it provided with lowest amount of return.

However, on the basis of composite index channel III ranked first followed by channels IV, II and I.

Table 5. Estimates of marketing efficiency in the marketing channels of flowers in the study areas (Rose)

Components of composite index	Channel I	Channel II	Channel III	Channel IV
Grower's share in consumer's price (%) Rank	47.04 3.5	47.37 3.5	54.20 1	53.57 2
Marketing cost (Tk. per 100 flowers) Rank	90.20 3	82.5 2	59.30 1	95 4
Marketing margin (Tk. . per 100 flowers) Rank	140.00 4	138 3	100 1	110 2
Rate of return (Marketing margin / marketing cost) Rank	1.55 3	1.52 2	1.69 4	1.19 1
Total score	13.5	10.5	7	9
Mean score	3.37	2.63	1.75	2.25

Source: Computed from Table 2

Table 6 Estimates of marketing efficiency in the marketing channels of flowers in the study areas (Gladiolus)

Components of composite index	Channel I	Channel II	Channel III	Channel IV
Grower's share in consumer's price (%) Rank	45.74 3.5	45.74 3.5	50.09 1	48.22 2
Marketing cost (Tk. per 100 flowers) Rank	84.42 4	75.79 2	59.37 1	78.00 3
Marketing margin (Tk. . per 100 flowers) Rank	130 3.5	130 3.5	107 2	80 1
Rate of return (Marketing margin / marketing cost) Rank	1.59 2	1.72 3	1.80 4	1.32 1
Total score	13.0	12.0	8	7
Mean score	3.25	3.00	2.00	1.75

Source: Computed from Table 3

Table 6 presents the results of the analysis of marketing efficiency in the channel for gladiolus. Channel IV is considered as the most efficient according to two criteria (marketing margin and rate of return) and ranked third position by the criterion of marketing cost. This channel provided the grower with the second highest share of consumer's taka. Regarding the grower's share in consumer's taka and amount of marketing cost, channel III is the most efficient. The results of the composite index method indicated that Channel IV (Flower grower → Wholesaler –cum retailer → Retailer → Consumer) was the most efficient channel. The lowest composite score reveals the comparative efficiency over other channels. But it was the Channel III which provided the grower with highest share in consumer's taka.

V. MARKETING PROBLEMS FACED BY THE FLOWER GROWERS AND MARKETERS

The flower growers in the study area faced both production and marketing problems. Here only marketing problems are dealt with (Table 8). In the study area transportation network between the flower field and local markets was not developed. This problem was mentioned by 65 % of the growers. The flower price at local market was considered low. Seventy per cent of the growers expressed that the market facilities were almost absent. Sixty five per cent of the flower growers reported that the local market was dominated by the flower buyers as they were small in size and organized. In fact prices at local market were set by them. Although the market facilities were not available but the market toll was high as there was none to control the toll. This statement was supported by 70 % of the flower growers. Market information on flower was not available as mentioned by 60 % of the flower growers. Seventy percent of flower growers considered mishandling and absence of storage facilities as reasons for spoilage of a considerable portion of flowers.

The problems faced by the different traders were almost same but differed in degree. On the whole lack of storage facilities and price instability were faced by 85 % of traders, followed by fluctuation in demand (83%), lack of adequate market information (78%), strike / Hartal (70%), inadequate capital (58%), unsold flower (56%) and inadequate space in the store (28%).

Table 8 Problems of flower traders

Reported problems	Flower traders (%)			
	Local trader	Wholesaler-cum-retailer	Retailer	All trader
Price instability	80	80	90	85
Lack of storage facilities	93	80	80	85
Fluctuation in demand	87	80	80	83
Lack of market information	87	60	75	78
Strike / Hartal	73	60	70	70
Inadequate capital	60	60	55	58
Unsold flower	-	60	90	56
Inadequate space in the store	-	-	55	28

Source : Field survey,2004

Lack of storage facility and price instability was the most serious problems faced by all the three groups of traders. Due to lack of storage facility 90 % of retailers faced problem with unsold flowers. Relatively the local traders faced tougher condition compared to wholesaler-cum-retailer and retailer. Fluctuation in demand for flowers in the country was very practical and logical as there were some special days for the people of Bangladesh. The fluctuation in prices over time introduced an element of uncertainty and affected both growers and consumers in terms of low prices received by the grower and high price paid by the latter.

VI. CONCLUSIONS AND POLICY IMPLICATIONS

On the basis of the findings of the study it can be concluded that there is variation in grower's net share in consumer's taka, marketing cost and net marketing margins of different flowers and also among different channels of the individual flowers. The net share of the flower growers in consumer's taka varied from 36.37% to 54.20% and total marketing cost accounted for 18.42% to 40.07%. But net marketing margin varied from 5.32% to 24.43%. It appears that grower's share is small while the marketing cost is high. So attempt should be made to find out the scope and explore the possibility of reducing marketing cost. Growers are selling their flowers individually and generally Channel I is used which involved the highest marketing cost. Marketing cost is found lowest in channel III i.e. Grower → Local trader → Wholesaler –cum retailer → Consumer. Formation of grower's group would help reduce marketing cost through adoption of better technology and use of more profitable channels. An assurance of remunerative prices to the grower is a prerequisite for increasing flower production and this assurance can be given to the growers by developing an efficient marketing system.

REFERENCES

- Dadlani, N.K. (2003). Global Positioning of Bangladesh Floriculture, paper presented in the International Floriculture Conference, November 6, 2003, Dhaka.
- Hasan, M. (1996). A Study on Production and Marketing of Tuberose in Some Selected Areas of Bangladesh. M.S. Thesis, Department of Cooperation and Marketing, Bangladesh Agricultural University, Mymensingh.
- Hossain, M.B. and M.M. Rahman (1994). The Potential of Flower Marketing in Dhaka City. Bureau of Business Research, University of Dhaka, Bangladesh.
- Siddika, M. (2004). Marketing of Commercial Cut-flower in Bangladesh. M.S. Thesis, Department of Cooperation and Marketing, Bangladesh Agricultural University, Mymensingh.
- Ramakumar, R. (2001) Costs and Margins in Coconut Marketing: Some Evidence From Kerala, *Indian Journal of Agricultural Economics*, Vo. 56, No.4, 665-682.
- Sultana, N. (1995). A Study on Flower Marketing in Dhaka City. M.S. Thesis, Department of Cooperation and Marketing, Bangladesh Agricultural University, Mymensingh.