IOSR Journal Of Humanities And Social Science (IOSR-JHSS)
Volume 20, Issue 8, Ver. IV (Aug 2015), PP 99-108
e-ISSN: 2279-0837, p-ISSN: 2279-0845.
www.iosrjournals.org

Economics of Agricultural Marketing in South-west Region of Bangladesh

Sanjit Karmokar[1], Apurba Roy[2], Dr. Shahnewaz Nazimuddin Ahmed[3]
1(Honors Student, Economics Discipline, Khulna University, Khulna-9208, Bangladesh)
2(Masters Graduate, Economics Discipline, Khulna University, Khulna-9208, Bangladesh)
3(Professor, Economics Discipline, Khulna University, Khulna-9208, Bangladesh)

Abstract : *This study observes the structure of marketing channel of agro-product produced in the Dumuria Upazila and sold in the areas like Sonadanga Bazar and Gollamari Bazar of Khulna District in the south-west region of Bangladesh. A total of 30 farmers and 30 intermediaries are selected randomly to trace the structure of marketing channel and existing problems in marketing of agro-products in the study area. Farmers market their product in Sonadanga Bazar and Gollamari Bazar through various intermediaries like faria, bepari, aratdar etc. Nasimon (locally made engine run three wheeler without roof) is the most common transport used by the farmers. In the study area, 63% farmers sell their products immediately after harvesting due to instant need for cash. Among the total farmers, 23% sell their products hurriedly after harvesting due to lack of storage facility. There are significant difference between producer price and intermediaries' price, such as, for the product cauliflower, 25% price difference exists between producers and bepari, 55.56% price difference between producer to aratdar and 87.50% price difference between producers to retailer. Similar price differences have been found for other products like potato, chili and brinjal. Main conflicting issue between the farmers and the intermediaries include handling of the service. Lack of sales efforts by distributors is the second conflicting issue. Farmers are neutral in terms of satisfaction in case of government purchase, whereas, intermediaries are dissatisfied for the same. However, economic aspect, that is, getting product price immediately after sale is the main issue to sell their product. In case of farmers, inadequate storage facilities are the main marketing problem whereas lack of capital is the main marketing problem for the intermediaries. Farmers could get actual price of their product if government agencies play active role and direct marketing channel is established in the study area.*

Key words: *Agriculture, Marketing Channel, Price Difference, Marketing Problem*

I. Introduction

1.1 Background of the Study

Agriculture is one of the significant contributing sectors to gross domestic product (GDP) of Bangladesh. Most of the people of the country are involved in agriculture directly or indirectly. In this sector, about 15,089,000 families out of a total of 17,600,804 families are occupied for their livelihood [1]. More specifically, in the agriculture sector of Bangladesh, 47.5% of the labor force is engaged [2]. Growth of the agro based economy of Bangladesh mainly depends on the development of agricultural sector [3]. In fiscal year 2012-13, agriculture sector contributes 13.09% to the total GDP of the country [2]. Although overall contribution of agriculture in GDP decreases over the last decades, the absolute contribution is still rising. Major crops produced by the agriculture sector of Bangladesh are rice, jute, wheat, tea, potato, brinjal, chili, cauliflower, tomato and pumpkin. In case of selling of agro-products, most of the farmers consider themselves as price taker as they have no control over the price. Moreover, they are incapable of finding new buyers and market for their product. In addition, they do not know how to improve the product quality and profitability of their production [4]. The large portion of food supply of the country comes from agriculture sector and the supply of agricultural products reaches to market by different marketing channels. In this marketing channel, different parties perform the activities of transferring food products and services from producer to consumer [5]. Besides, agricultural marketing channel contributes to add additional prices, products and values for the final consumers [3].

1.2 Statement of the Problem

In Bangladesh, the total production of agriculture sector is 372.66 metric ton in the fiscal year 2012-13 [2]. Although total crop production exceeds the total national demand, farmers are not in a good condition from economic perspective as they are not getting fair price for the products. Due to lack of proper marketing channel, they are deprived of getting proper price for their products. Even, they do not get minimum price of their product most of the time [1]. Lack of information and remote physical distance of market place and poor

communication system bound them to accept the price charged by the agricultural traders [6]. Sometimes, when there is an absolute lack of buyers, the traders force the farmers to sell on credit and make unusual delays in payment of price. Rural farmers having limited resource and little access to market cannot store their products and sell their crops at low price [7].

1.3 Objective of the Study

To investigate the structure and existing problems of agro-based marketing channel in the south-west region of Bangladesh

1.4 Literature Review

Markets play an important role in the life of rural population by providing formal and informal income-generating activities for the unemployed people [8]. American Marketing Association defines 'Marketing is the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and services to create exchange and satisfy individual and organizational objectives.' Marketing deals with identifying and meeting human and social needs. On the other hand, Kotler states that 'Marketing is a societal process by which individuals and groups obtain what they need and want through creating, offering, and exchanging products and services of value freely with others' [9]. Marketing involves finding out what your customers want and supplying it to them at a profit [4].

Marketing channel is defined as a set of entities (organizations or individuals) directly involved in the upstream and downstream flows of products, services, finances, and/or information from a source to a customer [10]. Marketing channel also play an important role in production and shifting of product to the market [11]. Agricultural marketing refers to all activities related to production of agro-products to supply of that product to ultimate consumers. Hence, marketing channel in agriculture comprises a set of actors who conduct a linked sequence of value-adding activities involved in bringing a product from its initial stage to the final consumer. Marketing of ago-products has potentialities to increase income level of the people who are engaged in different segments of the marketing channel, such as, supplying, selling, and buying agro-products [12]. In this way agricultural marketing plays a crucial role in supplying of food products to ultimate consumers as well as creating employment opportunities for a group of people engaged in the marketing activities. Agricultural marketing channel also helps in accelerating other associated activities such as building capacity and linkages, facilitating access to information, inputs and production process [6].

In Bangladesh, farmers, farias, beparies, aratdars and the retailers are generally involved in agricultural product marketing channel. Among the channel agents, farmers and intermediaries face the problems of capital shortage, poor communication and transportation facilities, inadequate storage facilities, insufficient market information, higher market tolls, inadequate market facilities etc. In this context, government can take necessary steps to solve these problems for increasing the efficiency of the marketing activities [13]. Producers are needed to choose direct marketing channel that match both their personal strengths and their farm production experience. They should consider their customers, products, resources and the opportunities and threats affiliated with using a certain marketing channel [14].

1.5 Research Gap

From the available literature, it has been seen that most of the research works discuss about price of the agro-products, market infrastructure, market agency, and deprivation of getting actual price of crop by farmers, market development process, and marketing management. This study is intended to analyze the structure and existing problems of agro-based marketing channel in the south-west region of Bangladesh.

II. Research Methodology

2.1 Study Area Selection

Multistage sampling technique has been applied to select the study area. In the first stage, Khulna District has been selected from the total 64 Districts in Bangladesh. In the next stage, Dumuria upazila has been randomly selected from the total 9 upazila in Khulna District. This upazila has 14 unions namely Atalia, Bhabdarpara, Dhamalia, Dumuria, Gutudia, Kharnia, Magurkhali, Maguraghona, Raghunathpur, Rangpur, Rudaghora, Shahosh, Shrafpur and Shobhona. In the last stage, Gutudia union has been purposively selected as study area to collect data from producers associated in agricultural marketing. The village namely, Gutudia has been randomly chosen for the study from the union. On the other side, two commercial bazars namely, Sonadanga Bazar and Gollamari Bazar have been selected from Khulna City Corporation to collect data from the intermediaries involved in agricultural marketing channel.

2.2 Sampling

In the study area, there are about 150 farmers engaged in crop production. Around 70 are engaged in subsistence production for their family consumption. On the other hand, about 80 farmers are engaged in production for commercial purpose. In the study area, farmers occupied in commercial farming have been considered as population for the study. Among the population, 30 farmers have been selected randomly as sample. On the other side, 30 intermediaries (bepari and aratdar) have been chosen from Sonadanga Bazar and Gollamari Bazar using convenient sampling method.

Data required for research have been collected from primary sources as well as secondary sources. Semi-structured interview and direct observation methods were employed for collecting primary data. Pretested questionnaire from pilot survey in the study area has been used to collect data from the respondents at the time of field survey from January-February, 2015. Besides, secondary data have been collected from different documents of Government and Non-government Organizations, assessment reports, scholarly articles and books.

2.3 Production Season and Crop Selection

In Bangladesh, mainly there are three cropping seasons. These are Kharif-I, Kharif-II and Rabi. Kharif-I starts from March to June, Kharif-II covers July to October and the last one Rabi starts from November to February. For the study, Rabi season has been selected; and, vegetables like potato, chili, brinjal and cauliflower have been selected as these are the main crops in the study area.

2.4 Data Analysis Techniques

All collected data have been analyzed to fulfill the objective of the study. Qualitative and quantitative analyses are used in this context. Numerical data have been analyzed using quantitative statistical tools and perception data have been analyzed through applying qualitative analysis tools. In the next subsections, details of the data analysis techniques have been discussed. Software's such as STATA 12, SPSS 20 and MS Excel 2010 have been used to perform statistical analysis in the study. MS Word 2010 has been used to present this research work.

Descriptive Statistics

Descriptive statistics have been applied to understand the socioeconomic variables more clearly. In the study, a set of descriptive statistics namely, mean, standard deviation, minimum and maximum values of variables have been used to summarize the data collected from the respondents.

Weighted Mean Index

Weighted Mean Index (WMI) has been used for measuring the degree of satisfaction level on government purchase, government subsidies, financial subsidies, and marketing channel of farmer using five point scales. We know, the formula to compute WMI is:

$WMI = w_1f_1 + w_2f_2 + w_3f_3 + \ldots\ldots\ldots\ldots w_nf_n/f_1 + f_2 + f_3 + \ldots\ldots\ldots\ldots\ldots + f_n$

Or, $WMI = \sum w_if_i / \sum f_i$ ……. (1)

Where,

w_i = Assigned weight

f_i = Frequency of observation

Table 1: Five Point Scale Used in WMI

Scale				
1 = Strongly Satisfied	2 = Satisfied	3 = Moderately Satisfied	4 = Dissatisfied	5 = Strongly Dissatisfied
≤1	1.01-2	2.01-3	3.01-4	4.01-5

Source: Authors' compilation, 2015

If the value of WMI is less than or equal 1 then it can be said that, the farmers are strongly satisfied, if the value is in between 1.01-2 the farmers are satisfied. If the value is 2.01 to 3 the farmers are moderately dissatisfied. In this way, if the value is 3.01-4 and 4.01 to 5, the farmers are dissatisfied and strongly dissatisfied respectively.

Priority Index (P.I)

Priority Index has been used in this research to figure out the nature of problems faced by the respondents. The respondents have been asked to prioritize the problems regarding handling of service issues, lack of sales efforts, improper communication, channel members cash shortage, delayed payments, economic

aspect that is, getting product price immediately after sale, city / town dwellers, location of store, experience of the trade, dealers network, market infrastructure, capital, intermediaries, transportation facilities, storage facilities, market information and market plan they faced in marketing their crop with five point scale.

The mathematical form of Priority Index (P.I) is given below:

$P.I = \sum s_i f_i / n, \quad (0 \leq P.I \leq 1)$……...…….(2)

Where,

P.I = Priority Index

S_i = Scale value of i^{th} priority

F_i = Frequency of i^{th} priority

N = Total number of observations

In Table 2, scale value used in constructing priority index is mentioned. It can be seen that the scale value ranges from 1 to 0 with priority 1^{st} to 5^{th} correspondingly.

Table 2: Scale Value of Priority Index

Priority by Type	Scale Value
1^{st}	S=1.00
2^{nd}	S=0.75
3^{rd}	S=0.50
4^{th}	S=0.25
5^{th}	S=0.00

Source: Authors' compilation, 2015

III. Results and Discussion

3.1 Socioeconomic Characteristics of the Respondents

Socioeconomic characteristics of the respondents give an idea regarding the people in the study area as well as their demographic pattern in general. From the survey data mentioned in Table 3, it is found that the average age of the respondent farmers in the study area is around 40 years. It is also seen from Table 3 that most of the farmers have completed their schooling life on an average up to class seven. Table 3 also describes that farmers per month earn on an average BDT 9,283.33 and expenditure is on an average BDT 8,771 as well as their average saving is BDT 1,857.

Table 3: Socioeconomic Characteristics of the Respondents in the Study Area

Farmers						
Socioeconomic Variables	**Measurement Unit**	**Obs.**	**Mean**	**Standard Deviation**	**Minimum**	**Maximum**
Age	In year	30	39.5	8.65	25	60
Level of Education	In year of schooling	30	6.83	3.28	0	12
Income	BDT (monthly)	30	9,283.33	3,448.346	1,000	20,000
Expenditure	BDT (monthly)	30	8771	3,750.77	5,500	22,400
Savings	BDT (monthly)	30	1,856.67	1,054.93	0	5000
Intermediaries						
Age	In year	30	41.16	9.50	25	67
Level of Education	In year of schooling	30	5.60	4.14	0	13
Income	BDT (monthly)	30	16,833.33	5,795.86	8,000	30,000
Expenditure	BDT (monthly)	30	11,816.67	4,252.86	6,200	27,500
Savings	BDT (monthly)	30	4,113.33	1,942.93	0	10,000

Source: Authors' compilation based on filed survey, 2015

From the survey data mentioned in Table 3, it is seen that the average age of the intermediaries is around 41 years. Also, it is seen from the Table, that most of the intermediaries have completed their school life on an average class six. The table also describes that intermediaries earn per month on an average BDT 16,833 as well as their expenditure on an average is BDT 11,816. However, their monthly average saving is BDT 4, 113.

3.2 Existing Marketing Channel in the Study Area

From the field survey, it has been found that there are different channels for marketing the product. Sometimes, the farmers themselves sell the product. Sometimes, other channel members such as faria, bepari, and aratdar help marketing the products. The existing marketing channel can be shown by using the following flow chart.

Chart 1: Existing Marketing Channel in the Study Area

Producer → Final Consumer
Producer → Bepari → Retailer → Final Consumer
Producer → Aratdar → Retailer → Final Consumer
Producer → Faria → Aratdar → Retailer → Final Consumer
Producer → Bepari → Aratdar → Retailer → Final Consumer
Producer → Faria → Bepari → Aratdar → Retailer → Final Consumer

Source: Authors' compilation based on filed survey, 2015

3.3 Reason behind Sale Immediately after Harvesting

The farmers who sell their product instantly after harvesting have been asked to cite the reasons behind such action. From the study, it has been found that, some specific reasons are responsible in this regard and the farmers are bound to do this. For this reason, they suffer much but the intermediaries are benefited. The intermediaries can get the crop at a lower price when the farmers sell their crop immediately after harvesting, because, farmers need to sell their product within a short period. The following Table 4 shows some of these reasons.

Table 4: Reason for Sale Immediately after Harvesting by Farmers

Reasons	Frequency	Percentage
Lack of storage facility	7	23.33
Immediate need for cash	19	63.34
Others (Family pressure)	4	13.33
Total	30	100

Source: Authors' compilation based on filed survey, 2015

From the above Table 4, it is found that, among the farmers 23.33% sell their crop for lack of storage facility, 63.34% sell for instant need of cash because they are poor and helpless; beside 13.33% farmers sell for other reasons.

3.4 Mode of Transport Used for Marketing

Transport and handling cost are important elements of marketing system. Different types of vehicles are used in the study area for transporting crop from farm to market. In the study area, nasimon is the popular vehicle. The following Table 5 also depicts different mode of transports that are used for marketing of agro-products in the study area. Table 5 shows that among the 30 farmers, 3.33% use pick-up as transport to shift their product, 43.33% use nasimon, van is used by 6.67% as a means of transport, 3.33% use others vehicle as transport for shifting their product. On the other hand, 43.33% don't use any vehicle as they sell their product from their residence.

Table 5: Mode of Transport Used for Marketing

	Farmers		Intermediaries	
Medium	**Frequency**	**Percentage**	**Frequency**	**Percentage**
Pick-up	1	3.33	1	3.33
Nasimon	13	43.33	12	40
Van	2	6.67	2	6.67
Others (bi-cycle)	1	3.33	1	3.33
No vehicle	13	43.33	14	46.67
Total	30	100	30	100

Source: Authors' compilation based on filed survey, 2015

The above Table 5 shows that among the 30 intermediaries, 3.33% use pick-up as transport to shift their product, 40% use nasimon, van is used by 6.67% as a means of transport, 6.25% use other vehicles as transport for shifting their product. On the other hand, 46.67% don't use any vehicle since producers bring their products to them for selling purpose.

3.5 Medium of Selling

Farmers of the study area sell their crop through several media. In the study area most of the farmers sell their product through bepari and some of them sell directly to the aratder. The following Table 6 exhibits the media used by the farmers for sale of their product.

Table 6: Medium of Selling

Medium of Selling		Place of Selling	Frequency	Percentage
Farmer →	Faria	Gutudia Village	1	3.33
Farmer →	Bepari	Gutudia Village	15	50.00
Farmer →	Arotder	Sonadanga and Gollamari Bazar	13	43.33
Farmer →	Government Agency	Gutudia Village	1	3.33
Total			30	100

Source: Author's compilation based on filed survey, 2015

The above Table 6 indicates 3.33% of the farmers sell to faria, most of the farmers sell to the bepari because they buy from home and there are 50.00% farmers who sell to bapari, whereas, 43.33% farmers sell to aratder, and there are only 3.33% farmers who sell to government agency.

3.6 Price Differential among Market Participants

The price differences among different market participants on different crops are given through the following Table 7. It is seen that in case of potato, 25% price difference exists between producers and bepari, 50% price difference is seen between producers and aratdar and there exists 75% price difference between producers and retailer.

In case of product chili, 20% price difference is observed from producer to bepari. Whereas, 36% price difference between producers to aratdar and there exists 60% price difference between producers and retailer.

Table 7: Price Difference among Market Participants in the Study Area (BDT per kg)

Products	Farmer	Bepari			Aratdar			Retailer		
	Selling Price	Purchase Price	Selling Price	Difference (Percent)	Purchase Price	Selling Price	Difference (Percent)	Purchase Price	Selling Price	Difference (Percent)
Potato	8	8	10	25	10	12	50	12	14	75
Chili	25	25	30	20	30	34	36	34	40	60
Brinjal	18	18	23	27.77	23	28	55.56	28	36	100
Cauliflower	8	8	10	25	10	13	62.50	13	15	87.50

Source: Authors' compilation based on filed survey, 2015

Table 7 also shows in case of brinjal, price difference between producers to bepari is 27.77%. On the other hand, 55.56% price difference from producer to aratdar and there is 100% price difference between producers to retailer. The price difference between producers to bepari for the product cauliflower is 25%. Whereas, 62.50% between producers to aratdar. Also, in case of cauliflower, 87.50% price difference exists between producers to retailer.

3.7 Priority Index of Conflict among Channel Members

There are various conflicts among the channel member with farmers on various issues. Several problems are faced by farmers and that create the conflict among the channel members with the farmers. Those problems are identified and ranked chronologically in the Table 8 below;

Table 8: Priority Index of Conflict among Channel Members

Particular	1^{st} (S=1.0)	2^{nd} (S=0.75)	3^{rd} (S=0.50)	4^{th}(S=0.25)	5^{th}(S=0.00)	∑fi	P.I	Rank
Handling of service issues	22	4	2	2	-	30	0.88	1
Lack of sales efforts by distributors	5	18	7	-	-	30	0.73	2
Improper communication	7	5	18	-	-	30	0.66	3
Channel members' cash shortage	-	4	22	2	2	30	0.49	4
Delayed payments	-	3	2	23	2	30	0.30	5

Source: Authors' compilation based on filed survey, 2015

According to the Table 8, handling of service issues is the main conflict between farmers and other channel members and its priority index is 0.88. Lack of sales efforts by distributors is another vital conflict matter between farmers and other channel members and its priority index value is 0.73. There is some other conflicting mater such as improper communication, channel members' cash shortage and delayed payments and their priority index values are 0.66, 0.49 and 0.30 respectively.

3.8 Satisfaction Level of Respondents

In the study area, Government has taken some programs for collection of potato and other products as well as they collected products from the selected market. The following Table 9 shows degree of satisfaction regarding different programs undertaken by the government among the marketing channel members. The details are given in annex.

Table 9: Satisfaction Level of Marketing Channel Actors

Particulars	Strongly Dissatisfied (5)	Dissatisfied (4)	Neutral (3)	Satisfied (2)	Strongly Satisfied (1)	WMI
Farmers						
Government purchase	11	6	6	7	-	2.02
Government subsidies	9	10	3	6	2	3.06
Financial facilities	8	9	8	4	1	3.63
Marketing channel	16	4	5	4	1	4.00
Intermediaries						
Financial facilities	7	10	8	4	1	3.60
Government purchase	9	8	7	6	-	3.67

Source: Authors' compilation based on filed survey, 2015

The above Table 9 shows the farmers are neutral with Government purchase. Its WMI is 2.02. Farmers are dissatisfied with other three activities government subsidies, financial facilities and marketing channel activities and respectively their WMI are 3.06, 3.63 and 4.00. On the other hand, Table 8 also shows that intermediaries are dissatisfied with the activities of financial facilities and government purchase. Its WMI are respectively 3.60 and 3.67.

3.9 Priority Index of Factors Associated with Agro-product Marketing

Both farmers and intermediaries, when shift their product in the market, they give emphasis on some issues. Those issues are identified and ranked chronologically.

Table 10: Priority Index of Distributor Selection

Farmers								
Indicator	**1st (S=1.0)**	**2nd (S=0.75)**	**3rd (S=0.50)**	**4th (S=0.25)**	**5th (S=0.00)**	**∑fi**	**P.I**	**Rank**
Economic aspect	20	8	2	-	-	30	0.90	1
City / town dwellers	9	17	5	-	-	30	0.81	2
Location of store	4	16	9	-	1	30	0.68	3
Experience of the trade	3	9	10	8	-	30	0.56	4
Dealers network	-	13	9	7	1	30	0.54	5
Market infrastructure	2	11	6	7	4	30	0.50	6
Intermediaries								
Economic aspect	18	7	5	-	-	30	0.86	1
City / town dwellers	16	8	6	-	-	30	0.83	2
Location of store	6	17	4	2	1	30	0.71	3
Market infrastructure	5	9	5	8	3	30	0.53	4

Source: Author's compilation based on filed survey, 2015

From the Table 10, it is seen that, both farmers and intermediaries give emphasis on economic aspect when they distribute their product and identified priority index by the farmer and intermediaries are 0.90 and 0.86 respectively. The Table 10 also shows other issues that influence the selection factors affecting decision of marketing of agro-product. City or town dwellers are the issues that came in second position whose priority index is 0.81 for farmers and 0.83 for intermediaries. Location of store and experience of the trade influence product distribution of farmers and its identified priority index is 0.68 and 0.56 ranking as 3 and 4. Also, location of the store and market infrastructure influence product distribution and according to the intermediary's priority index, it is 0.71 and 0.53 ranking 3 and 4 respectively. Dealer's network as well as market infrastructure influence product distribution and according to the farmer's priority index, it is 0.54 and 0.50 ranking 5 and 6 respectively.

3.10 Marketing Problem with Priority Index

Farmers and intermediaries face various marketing problem. Those problems are identified and ranked chronologically in the Table 11 as given below. From the Table 11, it has been seen that, while the farmers are marketing their product they usually face several marketing related problems and inadequate storage facilities and its priority index is 0.60.

Form the Table 11, it can be seen that transportation facilities are also a vital factor in marketing. Transportation problem are identified by the farmer and its priority index is 0.59. Capital is also vital factor for

marketing product. Due to lack of capital farmers can't shift their product timely and its priority index is 0.51. Also, there are several other problems such as lack of market information and lack of marketing plan where is identified by the farmers and their priority indexes are 0.47 and 0.43 respectively.

Table 11: Priority Index of Marketing Problem

Farmer								
Problems	**1st (S=1.0)**	**2nd (S=0.75)**	**3rd (S=0.50)**	**4th (S=0.25)**	**5th(S=0.00)**	**∑fi**	**P.I**	**Rank**
Inadequate storage facilities	3	11	12	3	1	30	0.60	1
Transportation facilities	4	11	9	4	2	30	0.59	2
Lack of capital	5	2	15	5	3	30	0.51	3
Lack of market information	3	5	10	9	3	30	0.47	4
Lack of marketing plan	2	8	5	9	6	30	0.43	5
Intermediaries								
Lack of capital	9	3	10	2	6	30	0.56	1
Competition	6	5	11	3	4	30	0.53	2
Lack of marketing plan	2	10	8	8	2	30	0.52	3
Transportation facilities	1	8	13	6	2	30	0.50	4
Inadequate storage facilities	-	13	4	10	3	30	0.48	5
Lack of market information	-	9	7	9	5	30	0.40	6

Source: Authors' compilation based on filed survey, 2015

For the intermediaries' side, the most vital marketing problem is lack of capital. According to the intermediaries priority index its value is 0.56. Competition among the intermediaries is also a vital issue. And intermediaries give more emphasis on it and are the second problem for them and the priority index is 0.53. Lack of marketing plan is identified as third problem for the intermediaries and priority index is 0.52. Transportation facilities are also a vital factor in marketing. Transportation problem is identified as fourth ranking problem by the intermediaries as the village road is not well and its priority index is 0.50. Another vital problem for the intermediaries is inadequate storage facilities. Its priority index is 0.48. Also, there are several problems such as lack of market information which is identified by the intermediaries and its priority index is 0.40.

IV. Conclusion

This study aims to find out the structure and existing problems of agro-product marketing channel in the south-west region of Bangladesh. Also, this study tries to measure efficiency of marketing channel in Dumuria Upazila. This study observes that several marketing channels exist in the study region and show how they shift agro-product from producers to final consumers. Farmers produce several products and due to presence of intermediaries, they do not get the fair price of their product. Most of the time they sell products at lower price to the intermediaries and intermediaries sell it at double price to the final consumers. Other problems exist such as immediate sale after harvesting (priority index being 0.63); inadequate storage facilities; (priority index being 0.60), lack of government purchase etc. Satisfaction level of farmers on government purchase is moderate and its WMI is 2.02. Farmers are dissatisfied with the performance of marketing channel members' activities and its WMI is 3.06. Similarly, intermediaries face some problems in marketing product, among which lack of capital is their main problem and its priority index is 0.56. Transportation is a vital problem of marketing and its priority index is 0.52. Handling of service issues is a main concern to create conflict among the channel members and its priority index is 0.89. When farmers as well as intermediaries select the distributors they give emphasis on economic aspect that is, getting product price immediately after sale and its priority indexes are respectively 0.90 and 0.86. So, government initiatives can play crucial role in ensuring the fair price to the producers.

Acknowledgements

At first researchers express their gratitude and thankfulness to Almighty God for giving the ability to conduct the study. Later, authors express thanks to the respondents of Gutudia village, Sonadanga Bazar and Gollamari Bazar for giving their time to provide necessary information. Special gratefulness goes to Dr. Fauzia Hamid, Professor, Economics Discipline, Khulna University, Khulna for her valuable suggestions. Lastly, cordial thanks go to parents, teachers, friends, and others for their kind encouragement, co-operation and suggestion regarding completion of the research work.

References

[1]. M. Abdullah, and M.R. Hossain, A New Cooperative Marketing Strategy for Agricultural Products in Bangladesh, World Review of Business Research, 3(3), 2013, 130-144.
[2]. BBS, Bangladesh Economic Review 2014 (Bangladesh Bureau of Statistics (BBS), Ministry of Planning, Government of the People's Republic of Bangladesh, Dhaka, 2014).
[3]. T. Jahan, Agricultural Marketing Management of Bangladesh, World Review of Business Research, 1(4), 2011, 53-65.
[4]. G. Dixie, Horticultural Marketing (Rome, Italy: Food and Agricultural Organization, 2005).
[5]. K.K. Islam, F. Takahiro, T. Masakazu, and S. Noriko, Marketing of Agroforestry Products in Bangladesh: A Value Chain Analysis, American Journal of Agriculture and Forestry, 2(4), 2014, 135-45.
[6]. H. Kindness, and A. Gordon, Agricultural marketing in developing countries: The role of NGOs and CBOs (University of Greenwich: Natural Resources Institute, 2001)
[7]. A. Lothoré, D. Patrick, J.T. David, C. Karthikeyan, J.H. Estrada, G. Estefanel, and P. Mateu, Market Access and Agricultural Product Marketing: Promoting Farmer Inititives (Paris: AFD CTA Inter-réseaux, 2009).
[8]. C. Marocchino, A Guide to Upgrading Rural Agricultural Retail Markets (Rome: Food and Agriculture Organization of the United Nations, 2009).
[9]. P. Kotler, Marketing Management (Upper Saddle River, New Jersey: Prentice-Hall, Inc., 2012).
[10]. J.T. Mentzer, W. DeWitt, J.S. Keebler, S. Min, N.W. Nix, C.D. Smith, and Z.G. Zacharia, Defining supply chain management, Journal of Business logistics, 22(2), 2001, 1-25.
[11]. A. Dorward, J. Kydd, C. Poulton, Traditional Domestic Markets and Marketing Systems for Agricultural Products (Washington, DC: World Bank, 2008).
[12]. I. Crawford, Agricultural and food marketing management (Rome, Italy: FAO, 1997).
[13]. S. Tasnoova, and I. Iwamoto, Kataribhog Rice Marketing System in Dinajpur District, Bangladesh, Memoirs of the Faculty of Agriculture Kagoshima University, 41, 2006, 19-50.
[14]. M. Bruch, and M. Ernst, Choosing direct marketing channels for agricultural products, The University of Tennessee Institute of Agriculture, 2010.

Annex

The satisfaction level has been calculate by putting values in the above equation (1), placed in the Table 8, we get,

Satisfaction Level of Farmers

WMI of 'Govt. purchase' for farmers = {1(0) +2(7) +3(6) +4(6) +5(11)}/30
= (0+14+18+24+55)/30
= 2.02

We already know that if the mean value of the five point scale is 2.01 to 3, then it can be said that the scale is moderately satisfied level. From the above Table, it is found that WMI = 2.02. So, the farmers of the study area are moderately satisfied with the existing government's purchase programs.

WMI of 'Govt. subsidies' for farmers = {1(2) +2(6) +3(3) +4(10) +5(9)}/30
= (2+12+9+40+45)/30
= 3.06

It is stated that if the value of the five points scale is 3.01 to 4, then it can be said that the scale is dissatisfied level. From the above Table 8, it is found that WMI = 3.06. So, the farmers of the study area are dissatisfied with the existing government's subsidies programs.

WMI of 'Marketing channel' for farmers = {1(1) +2(4) +3(5) +4(4) +5(16)}/30
= (1+8+15+16+80)/30
= 4

From the above Table 8, it is found that WMI = 4. Accordingly five points scale of 3.01 to 4 refer dissatisfied level. So, the farmers of the study area are dissatisfied with the existing marketing channel programs.

WMI of Financial facilities for farmers = {1(1) +2(4) +3(8) +4(9) +5(8)}/30
= (1+8+24+36+40)/30
= 3.63

If the value of the five points scale is 3.01 to 4, then it can be said that the scale is dissatisfied level. From the above Table 8, it is found that WMI = 3.06. So, the farmers of the study area are dissatisfied with the existing financial facilities programs.

Satisfaction Level of Intermediaries

WMI of 'Govt. purchase' for intermediaries = {1(0) +2(6) +3(7) +4(8) +5(9)}/30
= (0+12+21+32+45)/30
= 3.67

If the value of the five point scale is 3.01 to 4, then it can be said that the scale is moderately satisfied level. From the above Table 8, it is found that WMI = 3.67. So, the intermediaries are moderately satisfied with the existing government's purchase programs.

WMI of 'Financial facilities' for intermediaries = {1(1) +2(4) +3(8) +4(10) +5(7)}/30
= (1+8+24+40+35)/30
= 3.60

If the value of the five points scale is 3.01 to 4, then it can be said that the scale is dissatisfied level. From the above Table 8, it is found that WMI = 3.06. So, the intermediaries are dissatisfied with the existing financial facilities programs.