AN ECONOMIC STUDY ON SUGARCANE PRICING AND ITS IMPACT ON SUGAR PRODUCTION IN BANGLADESH

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ABSTRACT

The study was conducted to determine the pricing system of sugarcane and sugar and its impact on sugar production of Bangladesh. Data were collected from secondary sources for the period of 1971-72 to 2008-09. Descriptive analysis, log linear model and Nerlovian partial adjustment model were used to analysis the data. It is found from the study that the growth rate of area and production of sugarcane, sugar, recovery of sugar and price were 1.3, 3.1, 3.0, 0.00 and 5.60 percent respectively. Study revealed that sugarcane production depends on the sugarcane area of current year and sugarcane price of previous year. The coefficients of sugarcane area and previous year price were 1.27 and 0.25 and significant at 1% level. It is also found that the price of other agricultural crops increased faster rate than sugarcane and sugar price. Procurement price of sugarcane should remunerative to keep the farmers in sugarcane production. Domestic sugar price should be reviewed compared to production cost and market price of others essential commodities.

Key words: Domestic market, growth rate, impact, jaggary price, sugarcane, sugar

INTRODUCTION

Sugarcane is the most important cash cum industrial crop in Bangladesh. It occupies forth position among the field crops and second position among the cash crops and it covers 2.05 percent of the total cultivable land. More than 0.60 million farm families are dependent on sugar industries for their subsistence. At present, 15 sugar mills are in operation under Bangladesh Sugar and Food Industries Corporation (BSFIC) with a capacity of 0.21 million tons of sugar production per year (BSFIC, 2008). These industries are providing employment for nearly 16000 persons (BSFIC, 2005). Furthermore, sugar industry plays an important role to develop infrastructure in rural areas, rural employment, income of the farm families, contribute to national exchequer, foreign exchange savings, poverty reduction and value addition to the sugar as well as by product industries (Alam *et al.*, 2005). Sugarcane is the raw material of sugar industry and the main source of white sugar and jaggary (locally called 'gur'). Currently, on an average sugarcane is grown in 0.18 million hectare of land of which almost 50% is located in the sugar mills zone, where sugarcane is mostly used for jaggary and juice production (Anon. 1996).

Price policy is a major lever for influencing the growth of the agriculture sector. The generation of invisible surplus and its allocation and the level of agricultural income and its distribution can be influenced by agricultural price policy (Rahman, 1986). Sugarcane price is also an important factor to the farmers to allocate their land for sugarcane cultivation. In mill zone area the farmers supplied cane to the sugar mills and price of sugarcane has been fixed by the government arbitrarily and purely on the basis of weight irrespective of its quality. The success of sugar production on the part of sugarcane is depends on successful procurement programme. In non- mill zone area, the price of sugarcane is depends on the market price of sugar and jaggary and normally it is higher than the mill zone price. Farmers are now diverting their land for other crops cultivation due to law procurement price of sugarcane in the mill zone. Hence, there is a shortage of sugarcane for cursing in the sugar mills and causing losses of the mills.

Considering these aspects, the study was conducted to analyze the pricing system of sugarcane and to find out the impact of sugarcane price on sugarcane production and sugarcane supply to the mills for sugar production.

MATERIALS AND METHODS

The study was carried out all over the Bangladesh. Data were collected from secondary sources like annual reports/ MIS reports of Bangladesh Sugar and Food Industries Corporation (BSFIC), Bangladesh Sugarcane Research Institute (BSRI), Department of Marketing (DAM), Department of Extension (DAE), different issues of Bangladesh Bureau of Statistics (BBS), USDA reports and also from internet. Data were collected during the period of 1971-72 to 2008-09 on area, production and price of sugarcane, sugar and jaggary and market price of other agricultural crops and other agro processing crops/ commodities. Descriptive statistics was used for the analysis of the data. For econometric analysis growth rate model and Nerlovian partial adjustment model were used for this study.

Analytical techniques

For growth rate analysis log linear model was used. The model was:

 $\ln Y = a + \ln bt$

Where, Y = Sugarcane area, production, sugarcane supplied to the mill, sugar production, recovery and sugarcane price.

b = growth rate

t = time.

Nerlovian partial adjustment model was used for response analysis. The empirical models are: Producers' output response model:

 $Q_t = a_0 + bA_t + U_t$

Growers' sugarcane supply to the mills response model: $S_t = a_0 + bPs_t + RPSC_t + U_t$

Sugar production response model $Sp_t = a_0 + b_1 SP_{s_{t-1}} + b_2 SP_{g_t} + U_t$

Where,

 $\begin{array}{l} Q_t = Producers' \mbox{ output} \\ A_t = Area \mbox{ of sugarcane (ha)} \\ St = Supply \mbox{ of cane to sugar mills for the period t} \\ Ps_t = Price \mbox{ of sugarcane for sugar production for the period t} \\ RPSCG_t = Relative \mbox{ price of sugarcane for jaggary and sugar production for the period t} \\ Sp_t = Sugar \mbox{ production response for the period t} \\ SPs_{t-1} = Previous \mbox{ year price of sugarcane for sugar production} \\ SPg_t = Sugarcane \mbox{ price of fered by jaggary producers for the period t} \\ U_t = Error \mbox{ term} \end{array}$

RESULTS AND DISCUSSION

Growth Trend of Sugarcane Area, Production, Factory Supplied Sugarcane, Sugar Production, Recovery and Sugarcane Price

At present, sugarcane is grown in 153.74 thousand hectares of land producing 7098.00 and 80.00 thousand ton of sugarcane and sugar (Table-1). It is found from the table 1 that the sugarcane area and production is decreasing in different years. Sugarcane is a long durable crop and it cannot compete with other short duration high valued crops. It requires large amount of fertilizers and other inputs. Increase of fertilizer price is another reason for declining sugarcane area and production. The price of other agricultural crops increases at a faster rate than sugarcane procurement price. Moreover, the price of sugarcane and sugar becomes stagnant. These are the main reasons for declining the area and production of sugarcane. It is also observed that the growth rate of sugarcane area, production, factory supplied sugarcane, sugar production, recovery and sugarcane price were 1.3, 3.1, 2.9, 3.0, 0.0, 5.6 percent (Table-1) which is lower than other agricultural crops, the R² value was 0.39, 0.60, 0.29, 0.26, 0.001 and 0.86 percent respectively.

Crushing season	Sugarcane cultivation ('000 ha)	Production ('000 ton)	Factory supplied Sugarcane ('000 ton)	Sugar Production ('000 ton)	Recovery (%)	Sugarcane price (Taka/ton)
1971-72	55.11	1139.79	409.16	24.20	5.92	268
1972-73	47.66	1103.55	274.31	19.60	7.14	268
1973-74	56.85	2104.24	1187.20	89.81	7.56	268
1974-75	70.97	2206.10	1422.18	100.04	7.02	268
1975-76	50.54	1668.52	1100.95	88.18	8.1	268
1976-77	65.87	2389.20	1706.37	140.93	8.26	322
1977-78	96.02	3271.95	2309.65	178.07	7.72	322
1978-79	75.98	2573.83	1715.51	132.81	7.74	322
1979-80	62.97	2203.11	1272.09	94.71	7.46	322
1980-81	77.37	2833.32	1826.73	145.21	7.93	402
1981-82	94.97	3748.43	2473.30	202.16	8.17	402
1982-83	99.28	3925.14	2216.94	181.36	8.18	402
1983-84	95.90	3388.80	1899.83	151.35	7.97	455
1984-85	94.03	3136.85	1176.60	87.85	7.48	509
1985-86	73.79	2998.80	1018.20	82.50	8.11	616
1986-87	85.92	4132.37	2286.65	181.93	7.95	643
1987-88	94.30	4329.24	2199.39	178.26	8.1	643
1988-89	91.87	3767.60	1330.32	110.00	8.27	723
1989-90	85.48	4019.57	2096.20	183.86	8.77	991
1990-91	95.46	4695.51	3105.92	246.49	7.93	991
1991-92	95.50	4491.12	2390.25	195.59	8.18	991
1992-93	87.97	4246.61	2233.11	187.48	8.4	991
1993-94	92.25	4576.39	2699.90	221.55	8.21	991
1994-95	99.00	5030.45	3482.74	270.20	7.76	991

Table-1Growth trend in sugarcane area, production, factory supply, sugar production,
recovery and price of sugarcane

Crushing	Sugarcane	Production	Factory supplied	Sugar	Recovery	Sugarcane
season	cultivation ('000 ha)	('000 ton)	Sugarcane ('000 ton)	('000 ton)	(%)	price (Taka/ton)
1995-96	95.94	4340.89	2383.48	183.93	7.71	991
1996-97	86.58	4097.85	1763.15	135.32	7.67	991
1997-98	88.13	4191.15	2121.85	166.46	7.84	991
1998-99	94.35	4123.74	2313.81	152.98	6.61	991
1999-00	86.40	3526.50	1612.32	123.50	7.66	991
2000-01	74.87	3361.87	1369.03	98.36	7.18	1098
2001-02	88.27	4475.99	2811.12	204.33	7.27	1098
2002-03	105.42	4595.27	2633.43	177.40	6.73	1098
2003-04	84.87	3948.24	1642.51	119.15	7.26	1098
2004-05	78.18	3516.97	1414.49	106.65	7.53	1179
2005-06	75.43	3717.30	1853.18	133.28	7.19	1286
2006-07	83.60	4112.66	2335.04	165.00	7.07	1394
2007-08	130.00	4984.00	2287.53	164.00	7.16	1420
2008-09	153.74	7098.00	1883.12	80.00	6.75	1608
Growth rate (%)	1.3	3.1	2.9	3.0	.00	5.6
\mathbb{R}^2	0.39	0.60	0.29	0.26	0.001	0.86

Source: BSFIC, 2009.

Price is an important factor for allocating land for any crop cultivation. It is revealed from the table 2 that producer's output depends on sugarcane area and previous year sugarcane price. The coefficients of sugarcane area and previous year price were 1.27 and 0.25 and highly significant at 1% level. It indicates that if the area and sugarcane price of previous year increased 1% the output would increase by 1.27 and 0.25 percent respectively. In mill zone area normally the farmers supply their cane to the mills. But a few farmers sold their cane to the jaggary maker as they got higher prices than the sugar mills offered. Due to this reason, sugar mills became in shortage of cane crushing which resulted the lower amount of sugar production. The growers' supply of sugarcane to the mill depends on not only sugarcane price for sugar production but also the relative price of sugarcane for jaggary production. Table 2 also shows that the coefficient of sugarcane price for sugar production is positive at 5% level of significance (0.32). It indicates that holding other things remain constant, if the sugarcane price for sugar production increased 1% then cane supply to the mill would increase by 0.32 percent. On the other hand, the coefficient of relative price of jaggary and sugar production ($RPSCG_t$) is negative at 10 percent level of significance. It indicates that the ratio of sugarcane price for jaggary (PSCgt/ PSCst) and sugar production increased 1 percent then the cane supply to the sugar mill would decreased 1.12 percent. It is concluded that sugar production depends on sugarcane price for sugar production and the price offered by jaggary maker. The coefficient of sugarcane price of previous years is 1.93 and positively significant at 1 % level. It indicates that if the previous year sugarcane price increased 1 percent then the sugar production would increase 1.93 percent. On the other hand, the coefficient of sugarcane price for jaggary production is 1.68 and negative at 5 percent level of significance. It indicates that if the sugarcane price of jaggary maker in the current year increased then the sugar production would decrease by 1.68 percent.

Particulars	Estimated equation	Coefficients	\mathbf{R}^2
Producers' Output	$Q_t = -0.93 + 1.27A_t + 0.25Ps_{t-1}$	$A_t = 1.27*$	0.91
		$Ps_{t-1} = 0.25*$	
Grower's sugarcane supply to mills	$S_t = 12.52 + 0.32 Ps_t - 1.12 RPSC_t$	$Ps_t = 0.32^{**}$	0.34
		RPSCG _t = -1.12***	
Sugar production	$Sp_t = 10.59 + 1.93 SPs_{t-1} - 1.68 SPg_t$	$SPs_{t-1} = 1.93*$	0.35
		$SPg_t = -1.68 * *$	

Table-2Producer's output and grower's supply response sugarcane to sugar mill

Note: *, **, and *** indicates 1%, 5% and 10% significant respectively.

Comparison to Sugarcane and Sugar Price with Other Agricultural Crop and Agro Processing Crops

Price is an important factor of any agricultural product. In Bangladesh, agricultural prices, are increasing day by day but the deflated price of all agricultural products are being decreased. Table 3 indicates that sugarcane price was lower than other agricultural crops. From the table it also indicates that the market price of all agricultural crops during the period of 1990-91 to 2006-07 was increased but deflated price was decreased. In case of price change from the base year the price change of sugarcane was the highest negative (-53.87 %) followed by paddy (-43.78%), lentil (-38.81) and wheat (-35.01).

	Sugar	rcane	Pad	ldy	Lei	ntil	WI	neat
Year	Market	Deflated	Market	Deflated	Market	Deflated	Market	Deflated
	price	price	price	price	price	price	price	price
1990-91	0.99	3.01	9.00	27.39	24.43	74.36	9.10	27.70
1991-92	0.99	2.75	9.51	26.37	25.52	70.77	10.00	27.73
1992-93	0.99	2.51	8.62	21.83	25.41	64.34	8.90	22.54
1993-94	0.99	2.25	8.81	20.06	24.66	56.15	9.25	21.06
1994-95	0.99	2.05	10.71	22.21	26.23	54.39	10.71	22.21
1995-96	0.99	1.86	10.62	19.96	32.91	61.85	10.62	19.96
1996-97	0.99	1.67	9.11	15.36	36.72	61.93	9.11	15.36
1997-98	0.99	1.55	10.35	16.16	30.90	48.24	10.35	16.16
1998-99	0.99	1.41	12.40	17.71	32.64	46.61	12.40	17.71
1999-00	0.99	1.30	11.51	15.10	32.98	43.27	12.50	16.40
2000-01	1.10	1.37	11.10	13.86	32.56	40.66	12.10	15.11
2001-02	1.10	1.35	11.16	13.74	32.86	40.47	11.78	14.51
2002-03	1.10	1.33	11.94	14.45	34.42	41.65	11.94	14.45
2003-04	1.10	1.27	12.38	14.24	36.75	42.27	12.76	14.68
2004-05	1.18	1.30	12.60	13.92	38.50	42.55	12.90	14.26
2005-06	1.29	1.37	13.30	14.14	42.00	44.67	13.70	14.57
2006-07	1.39	1.39	15.40	15.40	45.50	45.50	18.00	18.00
% change from	40.40	-53.87	71.11	-43.78	86.25	-38.81	97.80	-35.01
the base year								

Table-3Market price of sugarcane and other agricultural crops (Tk/kg)

Source : Annual Report, BSFIC 2008.

It is observed from the table 4 that the market price of sugar, rice, edible oil and beef were increased by 35.48, 71.21, 41.74 and 206.12 percent respectively from the period of 1990-91 to 2006-07. On the other hand, it is also revealed that the deflated price of those agro- processing crops was decreased except beef. The deflated price change of sugar, rice, edible oil and beef were (-) 55.49, (-) 43.75, (-) 53.43 and 0.58 percent respectively. Among that agro- processing commodity price decreasing rate was highest in sugar followed by edible oil. It is concluded that over all price of all agricultural and agro-processing crops decreased.

	Su	gar	Ri	ce	Edib	le oil	Be	ef
Year	Market	Deflated	Market	Deflated	Market	Deflated	Market	Deflated
	price	price	price	price	price	price	price	price
1990-91	31.00	94.36	12.85	39.11	53.62	163.21	49.00	149.14
1991-92	27.00	74.87	13.59	37.69	58.66	162.66	57.00	158.06
1992-93	29.00	73.43	12.31	31.17	61.62	156.03	59.00	149.40
1993-94	28.00	63.76	12.58	28.65	60.87	138.61	60.00	136.62
1994-95	29.00	60.13	15.30	31.72	65.39	135.58	60.00	124.40
1995-96	29.00	54.50	15.17	28.51	60.50	113.70	60.00	112.77
1996-97	29.00	48.91	13.02	21.96	60.41	101.89	65.00	109.63
1997-98	29.47	46.01	14.78	23.08	59.84	93.43	75.00	117.10
1998-99	29.47	42.09	17.71	25.29	64.22	91.71	80.00	114.25
1999-00	29.47	38.67	16.44	21.57	60.83	79.81	80.00	104.96
2000-01	29.47	36.80	15.86	19.80	56.84	70.97	82.00	102.39
2001-02	29.47	36.30	15.94	19.63	56.13	69.13	95.00	117.00
2002-03	28.50	34.49	17.05	20.63	63.30	76.60	100.00	121.02
2003-04	34.00	39.10	17.69	20.35	70.20	80.74	110.00	126.51
2004-05	36.00	39.78	18.00	19.89	72.00	79.57	120.00	132.62
2005-06	60.00	63.81	19.00	20.21	74.00	78.70	130.00	138.26
2006-07	42.00	42.00	22.00	22.00	76.00	76.00	150.00	150.00
% Change from the base year	35.48	-55.49	71.21	-43.75	41.74	-53.43	206.12	0.58

Table-4	Market price of sugar and	other agro- processing	commodities (Tk/kg)
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Source : Annual Report, BSFIC 2008.

Demand of Sugarcane, Sugar and Jaggary and its Shortage in Bangladesh

Sugarcane is an important food and industrial crop and the only raw material for sugar and main raw material for Jaggary industries of Bangladesh. Sugar is an important constituent of human diet. It is an indispensable item for proper activities of brain. For each person, 77 mg glucose (simple form of sugar) is required in every minute for perfect function of brain (Anon., 1957). Sugarcane is the main source of white sugar and jaggary. According to Alam, 2009 per capita availability of sugar and gur in Bangladesh were 5.8 kg and 3.0 kg as against demand of 10 kg sugar and 3 kg gur respectively. However, in India, Pakistan and Srilanka per head consumption is 20.50 kg, 19.30 kg and 12.50 kg respectively. Food and Agricultural Organization (FAO) recommends that per head annual requirement of sugar was 13 kg and accordingly for 145.91 million people annual requirement is 1.89 (2008-09) million ton. But domestic

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production of sugar and jaggary was 0.080 and 0.324 million tons (2008-09) respectively and imported sugar was 1.30 million ton. At present, total supply of sugar/ jaggary is 1.62 million ton and the deficit is 0.27 million ton. As a result, the people consumed less amounts of sugar and jaggary than FAO recommendation (13 kg per person per annum). The present per capita low consumption of sugar would indicate our poor profile economic status. Hence, it is necessary to produce more domestic sugar and jaggary to maintain our minimum health standard.

Crushing	Population	Demand of sugar	Sugar	Sugar	Jaggary	SS of sugar	Shortage
Season	(million)	& jaggary ('000 ton)	production	import	Pdn	& jaggary	('000 ton)
		(per capita 13 kg)	('000 ton)	('000 ton)	('000 ton)	('000 ton)	
1990-91	109.60	1425.00	246.00	138.00	432.00	816.00	609.00
1991-92	111.40	1448.00	195.00	5.00	482.00	628.00	820.00
1992-93	113.20	1472.00	187.00	64.00	415.00	666.00	806.00
1993-94	117.70	1530.00	221.00	86.00	334.00	641.00	889.00
1994-95	119.90	1559.00	270.00	156.00	285.00	711.00	848.00
1995-96	122.10	1587.00	184.00	28.00	371.00	583.00	1004.00
1996-97	124.38	1617.00	135.00	207.00	463.00	805.00	812.00
1997-98	126.71	1647.00	166.00	160.00	415.00	741.00	906.00
1998-99	129.08	1678.00	153.00	191.00	359.00	703.00	975.00
1999-00	131.49	1709.00	123.00	115.00	427.00	665.00	1044.00
2000-01	132.00	1716.00	98.00	328.00	436.00	862.00	854.00
2001-02	133.00	1729.00	205.00	210.00	306.00	721.00	1008.00
2002-03	134.00	1742.00	177.00	600.00	322.00	1099.00	643.00
2003-04	135.20	1757.60	119.00	440.00	371.00	930.00	827.60
2004-05	137.00	1781.00	107.00	687.00	462.00	1256.00	525.00
2005-06	138.80	1804.40	133.00	625.00	333.00	1091.00	713.40
2006-07	140.60	1827.80	162.00	594.00	310.00	1066.00	761.80
2007-08	143.91	1870.83	164.00	1200.00	299.00	1499.00	371.83
2008-09	145.91	1896.83	80.00	1300.00	324.00	1624.00	272.83

Table-5Demand, supply and gap analysis of sugar and Jaggary in Bangladesh

Source ; BBS 1996-2008

Determination of Effective Support Price of Sugarcane

The effective support price of sugarcane for the crushing season of 2007-08 was Tk. 70.00 per mound and was determined by the total desired quantity of sugarcane in the crushing in the period 2008-09, actual supply in the period 2008-09 and price announced by the government in the period 2007-08.

Global Sugar Price and Bangladesh Sugar Industry

World sugar production for the 2009/10 marketing year is forecasted at 159.9 million tons, raw value up 11.2 million from the revised 2008/09 estimate. Consumption is forecasted at 159 million tons, up 1.5 million from a year earlier. Exports are forecasted at 51.3 million tons, up 3 million and ending stocks are forecast at 31.2 million tons, down 800,000 tons (USDA, May 2009). At present, sugar price increases sharply and becomes 580-600 dollar per ton. As a result, price of sugar per kilogram in Bangladesh increases by Taka 50-56.

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Figure-1 Domestic Retail Price of Sugar of the world (Taka/kg)

Domestic retail price of sugar in Bangladesh was lower than other countries (Figure 1). The highest price per kilogram (2008-09) obtained in Japan (Taka 152.46) followed by USA (Taka 127.82) and France (Taka 126.28). During 2008-09, the retail price of sugar per kilogram in Bangladesh currency was Taka 98.00, 80.08, 60.00, 66.00, 54.00 and 42.70 respectively in UK, Australia, India, Pakistan Bangladesh and the world. The domestic price of sugar in Bangladesh was the lowest in comparison to the production cost of the domestic sugar except in the 2005-06 crushing year, which causes losses in the industry (Table 6). On the other hand, the cheap subsidized world market sugar could also incur huge losses to the industries. Further more, the preferential market price of sugar is also supported some of the ACP countries to support their industry. EU countries imported sugar with more than double price of world market from their former colony of ACP countries to develop their socio-economic condition, democracy and to establish good governess of those countries. EU-ACP signed a 'Sugar Protocol Agreement'; in Loome Convention in the year 1984, under the privileged accord the 71 ACP countries exported their fixed sugar quota to the EU preferential market with price ranging \$575-600 per ton. Though EU is surplus in sugar production but sugar is imported with more than double price of the world market from these countries to help their economy. In natural disaster when sugar production has disrupts which forced the one of member of these countries unable to fill up export of sugar quota to EU, then the quota may redistribute among the member of the ACP countries or either there is a provision for shortfall country may import cheap world sugar market and it was again export EU preferential market. Bangladesh has no any sugar quota for exporting sugar in the preferential market at a higher price than world market.

Year	Production Cost (Taka/ton)	Domestic Price (Taka/ton)	World Market Price (CIF) (Taka/ton)	Import price (CIF) + Duties (Taka/ton)	Preferential Price (ACP) (Taka/ton)
2001-02	34290	29470	14700	24482	39200
2002-03	32920	28500	15400	25858	39550
2003-04	37320	34000	21700	31792	39900
2004-05	37000	36000	24500	36382	40250
2005-06	32000	60000	33880	52175	40600
2006-07	36000	26000	21350	24000	40950
2007-08	45000	32000	22400	29400	44660
2008-09	63000	56000	42000	45700	38500

1 able-6 Price of Sugar in Domestic Market, world Market and Preferential Market (2001-200	Table-6	Price of Sugar in Domestic Market.	World Market and Preferential Market (2001-2009
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Source: BSFIC Report (2001-2008), BBS (2006-2008), BSRI &USDA, 2009.

* 1 US\$ = Bangladesh Currency Taka 70.00

In November 2009, the price of sugar in international market was US\$ 610 and govt. reduces import tax on refined sugar from Taka 7,000 to Taka 3,000 per ton. In the year, 2009 the retail price of sugar was Taka 56,000 per ton but production cost of sugar was Taka 63,000 per ton. The sugar industry of Bangladesh made profit in the crushing season 2005-06 due to high price of sugar in international (US\$ 484) and domestic market comparison to the production cost. During 2005-06 year, sugar sold in the open market at Taka. 60,000 per ton and the production cost of sugar of BSFIC was Taka. 32,000 per ton. It indicates, only the increased sugar price in domestic market could make the industry viable.

CONCLUSION

Sugarcane is a cost intensive and long durable crop. Due to low price of sugarcane, the farmers allocated their land to other short duration crops instead of sugarcane. Price is an important factor for the farmers to produce sugarcane supply to sugar mills. In these circumstances, to make sugar industry viable / profitable government should pay a significant attention for the development of sugar industries, research and extension. Procurement price of sugarcane should remunerative to keep the farmers in sugarcane production. Domestic sugar price should be reviewed compared to production cost and market price of others essential commodities. Bangladesh Sugar and Food Industries Corporation should get responsibility to control not only importation of sugar but also fixing price of imported sugar. As a result, they will decide how much vat / tariff to be imposed on imported sugar considering the cost of domestic production. It will make the domestic sugar market more competitive. However, proper attention should be given to improve overall management efficiency for running the sugar industry in a viable condition.

REFFERENCES

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