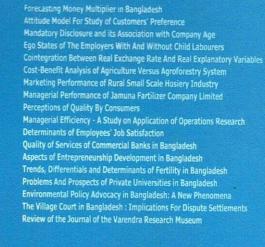
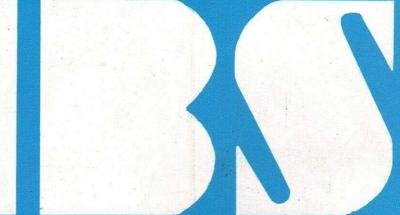
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The Institute of Bangladesh Studies welcomes research articles on the history, geography, economics, politics, sociology, law, language, literature and culture of Bangladesh and such other subjects as are significantly related to the life and society of Bangladesh for publication in the Journal of the Institute of Bangladesh Studies (JIBS). The article may be written either in English or in Bengali.

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FORECASTING MONEY MULTIPLIER IN BANGLADESH: AN APPLICATION OF BOX-JENKINS (BJ) METHODOLOGY

A.F.M. Kamrul Hassan*

ABSTRACT: A forecasting model for Broad Money Multiplier (M2M) is developed in this paper using Box-Jenkins (BJ) methodology, which is popularly known as Auto Regressive Integrated Moving Average (ARIMA) methodology. Money multiplier is calculated from various components of money multiplier using quarterly data from 1977:3 – 1999:4. M2M series is found level stationary. From the model developed it is found that the multiplier at time t is determined by it value at time [t-1] and [t-2]. Estimation and validation period forecasts shows that the model can predict future value of M2M with considerable amount of accuracy. Finding of this paper also reject the 'endogeneity' or 'new view' of multiplier and supports the exogeneity view that monetary authority of Bangladesh is able to control the money stock.

INTRODUCTION

The multiplier model of the money supply, originally developed by Brunner (1961) and Brunner and Meltzer (1964), has become the standard paradigm in macroeconomics and money and banking textbooks to explain how the policy actions of central banks influence the money stock. It also has been used in empirical analysis of money stock control and the impact of monetary actions on other economic variables. In a monetary targeting regime of monetary policy the role of money multiplier is of crucial importance. The multiplier determines the stock of money supply in an economy from a given level of monetary base or high-powered money. In order to control monetary aggregate effectively, the monetary authority should be able to predict the movement of money multiplier accurately. If the multiplier can't be predicted with significant accuracy, targeted money supply in the economy can't be guaranteed. Unpredictable movement of money supply can even create dis-equilibrium in the money market and cause an inflationary or deflationary problem (Hossain 1993). Therefore, predicting multiplier is of paramount importance for the monetary authority in order to control monetary aggregate(s) in the economy.

The strategy of monetary targeting relies upon two basic assumptions. One, the targeted monetary aggregate is a stable function of few macroeconomic indicators (GDP, interest rates etc.). This is commonly referred to as the necessary stability of money demand function. Two, money supply has to be controllable by the monetary

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authority, which means monetary authority should be able to forecast money multiplier with significant accuracy. Therefore, for the successful implementation of monetary policy these two assumptions should be supported by empirical studies. So far as money demand function is concerned, its stability has been found valid in most developing countries (Hossain 1994, Hassan and Chowdhury 1995, Tseng and Corker 1991) and also in some developed countries (Polster and Gottschling 1999). Controllability of money stock, in other words predictability of money multiplier, assumption has also been found valid in many developing (Zaki 1995, Arby 2002) and developed countries (Bomhoff's 1977, Johannes and Rasche 1979, Hafer and Hein However, in the context of Bangladesh the existence of a stable money demand function has been empirically confirmed (Hossain 1988, Hassan 1992). With regard to the issue of controllability of money stock, research studies is almost nonexistent. Hossain (1993) examined the behavior of each of the components of the money multiplier in a simple money multiplier model for Bangladesh and found that both the narrow and broad money multiplier equations were unstable. The paper did not attempt to forecast the money multiplier itself. Sarker (1997) discussed how Bangladesh Bank (central bank of Bangladesh) controls money supply through reserve money assuming a accurately predictable money supply. Thus it is seen that the issue of predicting money multiplier itself remains an issue untouched by the existing studies. In this backdrop present paper attempts to develop a model for money multiplier using its past values and examines its predictability.

The present study differs from the multiplier related existing literature in the following ways- First, this paper uses the most recent data set (1977:3-2003:2) than the existing studies. Second, this paper develops a model of money multiplier using a different econometric forecasting technique-Box-Jenkins (BJ) methodology, popularly known as "Autoregressive Integrated Moving Average" (ARIMA)- that has not been experimented before in Bangladesh to forecast multiplier. The objective of this paper is to develop a model for broad money (M2) multiplier in Bangladesh using Autoregressive Integrated Moving Average (ARIMA) technique and to examine whether the model could be used to forecast M2 multiplier (M2M) in Bangladesh. As application of ARIMA needs the underlying series to be stationary, the specific

objectives of this paper may be stated as under:

(i) To test the stationarity property of M2 series;

(ii) To develop an ARIMA model for broad money multiplier in Bangladesh;

(iii) To test whether the model developed fits the data reasonably well, in other words, residual diagnostic tests will be performed to confirm the validity of the model;

(iv) To make estimation period (in-sample) and validation period (outsample) forecasts;

(v) To test whether actual and forecasted values pertain to the same population.

BRIEF REVIEW OF RELATED LITERATURE

The literature on money multiplier forecasting is quite rich in international perspective. There are two standard approaches to forecast money multiplier: 'aggregate' and 'component'. Under aggregate approach the multiplier forecasting is done directly, on the other hand, under component approach multiplier is not forecasted directly, rathe'r it is forecasted on the basis of the forecasts of its components like currency-deposit ratio, deposit-reserve ratio etc. Bomhoff's (1977)

first developed a Box-Jenkins type model for the U.S. multiplier using monthly data and compared both the methodology and results with the regression of the Federal Reserve Bank of St. Louis. He considered the aggregate approach and finds that his model performs 30% better than those produced by St. Louis.

In contrast to Bomhoff's, Johannes and Rasche (1979) followed component approach of forecasting. They developed an ARIMA model for the various components of multiplier for the US using monthly data and find that time series models of the individual money multiplier component yield more accurate forecast of the multiplier than those by other regression method.

Hafer and Hein (1984) investigate the relative forecasting capabilities of aggregate and component time series model of money multiplier using monthly U.S. data and find that the aggregate approach does equally well as the component method.

Hossain (1993) developed a money multiplier model for Bangladesh using quarterly data from 1972-1993. He followed component approach and finds that only deposit-currency ratio equation is stable, but the narrow and broad money multiplier equations are found to be unstable. The author argues that the instability in the components of money multipliers makes it difficult for the monetary authority to effectively conduct monetary policy through monetary targeting.

Recently Zaki (1995) used Egyptian monetary data and finds that aggregate forecasting approach of the money multiplier provided satisfactory result while the components approach did not. More recently Arby (2002) developed time series models for forecasting multiplier in Pakistan using aggregate and component approach and finds that the aggregate approach is superior to the component method and produces better projected values.

From the above review it is empirically established that the aggregate approach is superior to the components approach of forecasting money multiplier. The only study on multiplier forecast in Bangladesh (Hossain 1993) employed component approach. Therefore, there is scope for further research to develop a univariate time series forecasting model in the tradition of aggregate approach and the present study is an attempt to fill this research gap.

THEORETICAL FRAMEWORK

Money multiplier is defined as the ratio of the stock of money to the stock of reserve or high-powered money. In other words, at time t stock of money (M) is equal to the product of money multiplier (MM) and reserve money (RM)-

$$M_{t} = MM_{t} \times RM_{t}$$
 [3.1]

Therefore, money multiplier is the determining variable to achieve a targeted growth of monetary aggregate. In Bangladesh monetary policy objectives are tried to be achieved through controlled variation of broad money (M2) and total domestic credit within the framework of monetary program, where reserve money is the operating target (Sarker 1997). The demand for reserve money is estimated on the basis of the targeted expansion of broad money assuming a fairly stable money multiplier. Many versions of multiplier models are in use. The model used in this study is due to Hossain (1993)

Money supply in Bangladesh is defined in terms of narrow money (M1) and broad money (M2). M1 and M2 are defined as under-

$$M1_t = C_t + D_t ag{3.2}$$

$$M2_t = C_t + D_t + T_t$$
 [3.3]

Where C_t = Currency held by public D_t = Demand deposit T_t = Time deposit

Reserve money (RM) is defined as under:

$$RM_t = C_t + RR_t + ER_t$$
 [3.4]
Where $RR_t = Required reserve$

ER_t = Excess reserve

RRt is again defined as

$$RR_t = r(D + T)_t$$
 [3.5]

where r is the required reserve ratio set by the monetary authority. From the above identities M1 and M2 equations derived are as under-M1_t = $[\{drr(1 + dcr)\}/\{drr + dcr(1 + tdr)\}] \times RM_t$ Or, M1_t = M1M \times RM_t and

$$\label{eq:m2t} \begin{split} \text{M2}_t = & \left[\left\{ \text{drr} (1 + \text{dcr} (1 + \text{tdr})) \right\} / \left\{ \text{drr} + \text{dcr} (1 + \text{tdr}) \right\} \right] \times \text{RM}_t \\ \text{Or M2}_t = & \text{M2M} \times \text{RM}_t \end{split}$$

Where, M1M = Narrow money multiplier

M2M = Broad money multiplier

dcr = D/Ctdr = T/D

drr = (D + T)/(RR = ER)

From the above derivation of multiplier formula it is clear that multipliers (both M1M and M2M) are the ultimate results of the interplay of actions of three separate economic agents-central bank, commercial banks and public- central bank through its setting of required reserve ratio and creation of monetary base; the public through their portfolio decisions which determine the deposit/currency and time deposit/demand deposit ratios and the commercial banks through their decisions on holding of excess reserves which determine the excess reserve/deposit ratio (Mishkin, 1992).

METHODOLOGY

Description of Data

One unique feature of ARIMA is that it does not require any other data except the time series to be forecasted. The philosophy underlying this methodology is that 'data speak for themselves'. Therefore if the data is available in desired frequency and quality one data source is sufficient to meet the requirements. All data (currency held by public, demand deposit, time deposit, required reserve and excess reserve) are taken from various issues of Economic Trend, a monthly monetary survey published by Bangladesh Bank and Broad Money Multiplier (M2M) is calculated from those data.

M2M is selected because Bangladesh Bank uses M2 as monetary target in its monetary programming exercise (Taslim 2001). Quarterly observations from 1977:3 to 2003:2 are used in the analysis. Out of these data from 1977:3 – 1999:4 are used for estimation purpose and 2000:1 - 2003:2 are used to test the validity of the model.

Development of the Model

Application of ARIMA needs the underlying series to be stationary. Therefore, first the data is checked for stationarity. Plotted M2m in Figure-1 gives the impression that the M2M series is stationary at level. Three statistical tests- Dickey-Fuller (DF), Augmented Dickey-Fuller (ADF) and Phillips-Peron (PP) tests- are performed to confirm the stationarity. To conduct DF test following regressions are estimated:

DF test without trend-
$$\Delta M2M_t = \beta_1 + \delta M2M_{t-1} + \mu_t$$
 [4.1]
DF test with trend-
$$\Delta M2M_t = \beta_1 + \beta_2 t + \delta M2M_{t-1} + \mu_t$$
 [4.2]

Following regression is estimated for ADF test:

$$\Delta M2M_t = \beta_1 + \beta_2 t + \delta M2M_{t-1} + \alpha_i \sum_{t=1}^{m} \Delta M2M_{t-i} + \mu_t$$
 [4.3]

where,
$$M2M_t = Broad$$
 Money Multiplier at time t $\Delta M2M_t = M2M_t - M2M_{t-1}$ $\mu_t = White noise error.$

The null hypothesis of DF and ADF tests is that δ =0. If the computed τ statistic (which is conventionally known as t statistic) in absolute term exceeds the critical value, the null hypothesis is rejected which implies that the series is stationary and no differencing is needed to make the series stationary.

Finally Phillips-Peron (PP) test is performed. In order to test the stationarity of M2M using Phillips-Peron (1988) the regression is estimated in the following form

$$\Delta M2M_t = (p-1) M2M_{t-1} + \Box = \theta M2M_{t-1} + \Box$$
 [4.4]

In this regression model the null hypothesis $H_o:\theta=0$ is tested against the alternative hypothesis $H_1:\theta<0$. In this test residuals are corrected for potential autocorrelation and heteroscedasticity using the Newey-West (1987) error variance correction as under-

$$1/N \sum_{l=1}^{N} \dot{\epsilon}_{t}^{2} + 2/N \sum_{s=1}^{l} \omega(s_{r}l) \sum_{l=s+1}^{N} \dot{\epsilon}_{t} \dot{\epsilon}_{t-s}$$

The unit root hypothesis can be rejected if the calculated t value is smaller than

the asymptotic critical value.

These tests, along with the sample Auto Correlation Function (ACF) and Partial Auto Correlation Function (PACF), provide evidence that the M2M series is level stationary. Then from ACF and PACF of the M2M series the following model is identified:

$$M2M_t$$
 = $\delta + a_1 M2M_{t-1} + a_2 M2M_{t-2}$ [4.5]

Next residual diagnostic test is conducted to see whether the model developed fits the data reasonably well. ACF and PACF of the residuals and Modified Box-Pierce (Ljung-Box-Pierce) Q statistics provide evidence that the residuals are purely random, which means, the model is correctly identified. Finally estimation and validation period forecasts are done and statistical tests are conducted to ascertain their reliability.

Econometric computer program SHAZAM, version 7.0 and Microsoft Excel are used for all econometric estimation, calculation and derivation of figures.

ANALYSIS OF RESULTS

Test of Stationarity: Unit root test results are presented in Table-1. According to DF test with and without trend unit root hypothesis is rejected at 1%, 5% and 10% significance level. According to ADF test unit root hypothesis is rejected at 10% significance level but cannot be rejected at 1 % and 5% significance level. According to Phillips-Peron test, with and without trend, unit root hypothesis is rejected at 1%, 5% and 10% significance level. As Phillips-Peron is the most powerful test out of the three, its result is accepted and it is concluded that the M2M series does not have unit root that is the series is stationary. Next the Auto Correlation Function (ACF) and Partial Auto Correlation Function (PACF) presented in Figure-2 & 3 are examined. Although there are tests about the maximum length of lags to be used in calculation, in practice lags up to one-third of the sample size are generally used (Gujarati, 1998, pp.716). Accordingly correlogram up to 30 lags are shown. In Figure-2 it is seen that the ACF plot decays rapidly to zero (at lag 11). Therefore on the basis of Phillips-Peron unit root tests and ACF and PACF it is finally concluded that the M2M series is level stationary and no differencing is needed to advance for developing a forecasting model for M2M with ARIMA methodology.

Identification of the ARIMA model: From Figure-2 & 3 it is seen that PACF displays sharp cutoff than ACF, from 0.61 at lag one to 0.30 at lag 2 and the autocorrelation at lag one is positive. Moreover PACF has two significant spikes, while ACF has four that is the series displays an AR(2) signature. Therefore, ARIMA (2,0,0) seems to be the right model for forecasting M2M. Regression equation [4.5] represents this model.

Estimation: The estimation result of the model (regression equation-4.5) is presented in Table-2. t values show that all the coefficients are statistically highly significant.

Diagnostic Checking: After identification and estimation of the ARIMA model for M2M series, it is time to check whether the model selected is the correct one. In doing so residual from regression [4.5] is obtained and ACF and PACF of the residuals are plotted in Figure-4 and Figure-5 respectively. These figures show that all autocorrelations and partial autocorrelations fall within 95% confidence interval [i.e. within \pm 1.96(1/ $\sqrt{90}$) or \pm 0.206602], that is, none of the autocorrelations and partial autocorrelations is individually statistically significant. This finding is also confirmed by the Modified Box-Pierce (Ljung-Box-Pierce) Q statistic (see Table-3). Critical Q value from Chi-square table at 1%, 5% and 10% significance level and 30 degrees of freedom are 50.8922, 43.7729 and 40.2560 respectively. From table-3 it is seen that the sum of 30 squared autocorrelations is 12.41 which does not exceed the critical Q

value from Chi-square table at 1%, 5% or 10% significance level, so the residuals are purely random. Therefore the ARIMA model identified in equation [4.5] appears to be the correct one.

Forecasting: Both estimation and validation period forecasting are done using the model specified in regression equation [4.5]. For example, to forecast M2M for the 4th quarter of 1995, the equation is written as under:

 $M2M_{1995:4} = \delta + a_1 M2M_{1995:3} + a_2 M2M_{1995:2}$

Estimation period or in-sample forecasting is done over 88 observations, from 1978:1 to 1999:4 and the forecast estimates are presented in Table-4. Next statistical test for difference between population means is performed to examine whether the differences between actual and forecasted M2M are statistically significant. The Null Hypothesis that there is no difference between the population means of actual and forecasted M2M is not rejected at 5% significance level as the standardized difference between means of actual and forecasted figures 1.07976 lies between \pm 1.96 at 5% level of significance, that is, actual and forecasted M2M are not statistically significantly different. In other words, actual and forecasted figures belong to the same population. This statistical inference, along with graphical representation of actual and forecasted M2 figures in Figure-6, leads to the conclusion that the forecasted values can be taken as fairly reliable.

Out-sample forecast is done over 14 observations, from 2000:1 to 2003:2 and the result is presented in Table-5. As the observation is less than 30, statistical test for difference between population means (small sample size) is performed for this validation period forecast to see how well the model could predict future M2M. Like estimation period forecast the Null Hypothesis of no difference between the population means of actual and forecasted M2M is also not rejected at 5% significance level as the standardized difference between means of actual and forecasted figures 0.90300 lies between ± 1.96 at 5% significance level, that is, the population means of actual and forecasted M2M values do not differ, they belong to the same population, which is also evidenced in Figure-6. So, like estimation period forecast, this validation period forecast also performs fairly well.

CONCLUSION

This paper develops an ARIMA model for forecasting broad money multiplier in Bangladesh using quarterly data from 1977:3 to 1999:4. Broad money multiplier is selected for analysis because of its practical importance in the monetary programming in Bangladesh. The M2M series is found to be level stationary that is it is an I(0) process. An ARIMA model for M2M in Bangladesh is developed and it is found that the current value of M2M determined by its 1 and 2 lag values. ACF and PACF plots of the residuals of the model and modified Box-Pierce (Ljung-Box-Pierce) Q statistic show that the model is correctly identified. Estimation and validation period forecasts show that the model can predict future broad money multiplier with considerable degree of accuracy. Finding of this study supports previous studies outside Bangladesh (Zaki 1995; Arby 2002; Bomhoff's 1977) that the aggregate approach yields better results than component approach in predicting multiplier and contradicts with the findings of Hossain (1993) which employed component approach in the analysis of the behavior of different components of money multiplier in

Bangladesh. Finding of this study also rejects the endogeneity or new view of money stock, which postulates that central bank can't control money stock. Predictability of money multiplier in the context of Bangladesh implies that money stock is exogenous, that is, Bangladesh Bank has the ability to control the money stock in the economy. Therefore, in the light of the predictive ability of the model developed in this study it can be concluded that monetary authority of Bangladesh can think of using this model with considerable amount of reliability.

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APPENDIX

Table-1 Unit Root Test (1977:3-1999:4)

Variable□ / Computed t statistic□	DF without trend	DF with trend	ADF	Phillips- Peron without trend	Phillips- Peron with trend		
M2M _{t-1}	-4.798	-5.521	-3.361	-4.0267	-5.001		
Types of test□ / Critical Values □	1%	5%	10%				
DF without trend	-3.5073	-2.8951	-2.5844				
DF with trend & ADF	-4.0673	-3.4620	-3.1570				
Phillips-Peron asymptotic, without trend					s save i j		
Phillips-Peron asymptotic, with trend	-3.96	-3.41		-3.13	1 550 F		

Table-2 $M2M_t = \delta + a_1 M2M_{t-1} + a_2 M2M_{t-2}$

Variables	Estimated coefficient	Standard error	t statistic
M2M _{t-1}	0.43590	0.1021	4.269
M2M _{t-2}	0.32888	0.1022	3.217
δ	0.93650	0.3443	2.720
R ²		0.4538	

Table-3 MODIFIED BOX-PIERCE (LJUNG-BOX-PIERCE) STATISTICS (CHI-SQUARE)

LAG	Q	DF*	P-VALUE LAG	Q	DF	P-VALUE
1	0.38	1	.538	16	6.25	16
2	.985 1.49	2	.476	17	6.39	17
3	.990 3.27	3	.351	18	6.54	18
	.993		416	19	7.27	19
4	3.93 .993	4	.416			
5	3.95 .996	5	.556	20	7.32	20
6	4.07	6	.668	21	8.3	21
7	.994 4.53	7	.717	22	8.57	22
	.995 5.17	8	.740	23	11.29	23
8	.980					
9 .986	5.19	9	.817	24	11.33	24
10	5.42 .990	10	.861	25	11.57	25
11	5.44	11	.908	26	11.87	26
12	.992 5.44	12	.942	27	11.93	27
13	.995 5.55	13	.961	28	12.14	28
	.996	14	.974	29	12.40	29
14	5.67 .997	14	.3/4			
15	6.08 .998	15	.978	30	12.41	30

^{*} DF stands for Degrees of Freedom (Lag Length)

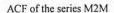
Table-4 Actual and Forecasted M2M (Estimation Period)

1978-2 3 1978-3 3 1978-4 3 1979-1 3 1979-2 3 1979-3 3 1979-4 3 1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1983-4 4 1983-4 4 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4 1986-1 4	3.26 3.52 3.32 3.32 3.34 3.49 3.57 3.60 3.62 3.59 3.49 3.63 3.66 3.84 3.66 3.84 3.66 3.84 3.60 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	3.63 3.52 3.55 3.49 3.44 3.48 3.56 3.64 3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	Error in% -11.17 0.15 -10.46 -5.29 -2.93 0.20 0.39 -1.24 -1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09 0.92	1989-1 1989-2 1989-3 1989-4 1990-1 1990-2 1990-3 1990-4 1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3 1993-4	3.99 4.07 4.11 4.25 4.36 4.12 4.17 4.32 4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	M2M 3.96 3.98 4.03 4.07 4.14 4.23 4.16 4.11 4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27 3.96	0.78 2.25 2.02 4.27 4.99 -2.85 0.15 4.89 2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1978-2 3 1978-3 3 1978-4 3 1979-1 3 1979-2 3 1979-3 3 1979-4 3 1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1983-4 4 1983-4 4 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4 1986-1 4	3.52 3.21 3.32 3.34 3.49 3.57 3.60 3.62 3.59 3.73 3.59 3.49 3.63 3.63 3.66 3.84 3.49 3.57 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.73 3.60 3.60 3.73 3.60 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00 3.00	3.52 3.55 3.49 3.44 3.48 3.56 3.64 3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	0.15 -10.46 -5.29 -2.93 0.20 0.39 -1.24 -1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1989-2 1989-3 1989-4 1990-1 1990-2 1990-3 1990-4 1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.07 4.11 4.25 4.36 4.12 4.17 4.32 4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	3.98 4.03 4.07 4.14 4.23 4.16 4.11 4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	2.25 2.02 4.27 4.99 -2.85 0.15 4.89 2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1978-3 3 1978-4 3 1978-4 3 1979-1 3 1979-2 3 1979-3 3 1979-4 3 1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-3 4 1983-3 4 1984-4 4 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-4 4 1985-3 4	3.21 3.32 3.34 3.49 3.57 3.60 3.62 3.59 3.73 3.59 3.49 3.63 3.63 3.66 3.84 3.74 3.96 3.80 3.10	3.55 3.49 3.44 3.48 3.56 3.64 3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-10.46 -5.29 -2.93 0.20 0.39 -1.24 -1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1989-3 1989-4 1990-1 1990-2 1990-3 1990-4 1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.11 4.25 4.36 4.12 4.17 4.32 4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.03 4.07 4.14 4.23 4.16 4.11 4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	2.02 4.27 4.99 -2.85 0.15 4.89 2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
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1979-2 3 1979-3 3 1979-4 3 1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-2 4 1983-3 4 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4	3.49 3.57 3.60 3.62 3.59 3.73 3.59 3.49 3.63 3.66 3.84 3.74 3.96 3.00	3.48 3.56 3.64 3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90	0.20 0.39 -1.24 -1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1990-2 1990-3 1990-4 1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.12 4.17 4.32 4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.23 4.16 4.11 4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	-2.85 0.15 4.89 2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1979-3 3 1979-4 3 1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1984-4 4 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-3 4 1985-3 4 1985-4 4 1985-4 4 1986-1 4	3.57 3.60 3.62 3.59 3.73 3.59 3.49 3.63 3.66 3.84 3.74 3.96 3.80 3.10 3.01	3.56 3.64 3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90	0.39 -1.24 -1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1990-3 1990-4 1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.17 4.32 4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.16 4.11 4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	0.15 4.89 2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1979-4 3 1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-3 4 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1985-1 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4	3.60 3.62 3.59 3.73 3.59 3.49 3.63 3.66 3.84 3.74 3.96 3.80 3.10 3.01	3.64 3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-1.24 -1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1990-4 1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.32 4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.11 4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	4.89 2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1980-1 3 1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 4 1982-3 4 1983-1 4 1983-2 4 1983-3 3 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4	3.62 3.59 3.73 3.59 3.49 3.63 3.66 3.84 4.74 4.96 .80 .10	3.68 3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-1.62 -3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1991-1 1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.29 4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.19 4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	2.43 -0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1980-2 3 1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-3 4 1983-1 4 1983-2 4 1983-3 3 1984-1 4 1984-1 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4	3.59 3.73 3.59 3.63 3.63 3.66 3.86 3.86 3.86 3.86 3.86	3.70 3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-3.08 0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1991-2 1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.23 4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.23 4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	-0.02 11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1980-3 3 1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1983-1 4 1983-2 4 1983-3 3 1984-4 4 1984-2 4 1984-3 4 1985-1 4 1985-2 4 1985-3 4 1985-4 4 1986-1 4	3.73 3.59 3.49 3.63 3.66 3.84 3.74 3.96 3.80 3.10	3.69 3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	0.98 -4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1991-3 1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.75 5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.19 4.40 4.72 4.58 4.47 4.52 4.48 4.27	11.70 13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1980-4 3 1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1983-4 4 1984-1 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4	3.59 3.49 3.63 3.66 3.86 3.86 3.86 3.86 3.86 3.86	3.74 3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-4.33 -6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1991-4 1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	5.09 4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.40 4.72 4.58 4.47 4.52 4.48 4.27	13.58 -4.47 2.80 4.07 2.01 -7.49 -12.39
1981-1 3 1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-3 3 1984-4 4 1984-2 4 1984-3 4 1985-1 4 1985-2 4 1985-3 4 1985-4 4 1986-1 4	3.49 3.63 3.66 3.84 3.74 3.96 3.80 3.10	3.73 3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-6.68 -0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1992-1 1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.51 4.71 4.66 4.61 4.17 3.80 4.17	4.72 4.58 4.47 4.52 4.48 4.27	-4.47 2.80 4.07 2.01 -7.49 -12.39
1981-2 3 1981-3 3 1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1984-4 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-2 4 1985-3 4 1985-3 4 1985-4 4 1986-1 4	3.63 3.66 3.84 3.74 3.96 3.80 3.10	3.64 3.67 3.73 3.82 3.83 3.89 3.90 3.98	-0.18 -0.09 3.00 -2.05 3.33 -2.50 5.09	1992-2 1992-3 1992-4 1993-1 1993-2 1993-3	4.71 4.66 4.61 4.17 3.80 4.17	4.58 4.47 4.52 4.48 4.27	2.80 4.07 2.01 -7.49 -12.39
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1981-4 3 1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1983-4 4 1984-1 4 1984-2 4 1984-3 4 1984-4 4 1985-1 4 1985-2 4 1985-3 4 1985-4 4 1986-1 4	.84 .74 .96 .80 .10	3.73 3.82 3.83 3.89 3.90 3.98	3.00 -2.05 3.33 -2.50 5.09	1992-4 1993-1 1993-2 1993-3	4.61 4.17 3.80 4.17	4.52 4.48 4.27	2.01 -7.49 -12.39
1982-1 3 1982-2 3 1982-3 3 1982-4 4 1983-1 4 1983-2 4 1983-3 3 1984-1 4 1984-2 4 1984-3 4 1985-1 4 1985-2 4 1985-3 4 1985-4 4 1986-1 4	.74 .96 .80 .10	3.82 3.83 3.89 3.90 3.98	-2.05 3.33 -2.50 5.09	1993-1 1993-2 1993-3	4.17 3.80 4.17	4.48 4.27	-7.49 -12.39
1982-2 3. 1982-3 3. 1982-4 4. 1983-1 4. 1983-2 4. 1983-3 3. 1983-4 4. 1984-1 4. 1984-2 4. 1984-3 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.96 .80 .10	3.83 3.89 3.90 3.98	3.33 -2.50 5.09	1993-2 1993-3	3.80 4.17	4.27	-12.39
1982-3 3. 1982-4 4. 1983-1 4. 1983-2 4. 1983-3 3. 1983-4 4. 1984-1 4. 1984-2 4. 1984-3 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.10	3.89 3.90 3.98	-2.50 5.09	1993-3	4.17		
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1983-3 3. 1983-4 4. 1984-1 4. 1984-2 4. 1984-3 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.			3.07	1994-2	3.55	3.81	-7.39
1983-4 4. 1984-1 4. 1984-2 4. 1984-3 4. 1984-4 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.67	4.07	-10.85	1994-3	4.05	3.66	9.64
1984-2 4. 1984-3 4. 1984-4 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.33	3.91	9.73	1994-4	3.87	3.87	0.06
1984-2 4. 1984-3 4. 1984-4 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.10	4.03	1.75	1995-1	4.42	3.96	10.53
1984-3 4. 1984-4 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.17	4.15	0.56	1995-2	4.41	4.14	6.10
1984-4 4. 1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.24	4.10	3.28	1995-3	4.81	4.31	10.32
1985-1 4. 1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.62	4.16	9.97	1995-4	4.70	4.48	4.67
1985-2 4. 1985-3 4. 1985-4 4. 1986-1 4.	.62	4.35	5.85	1996-1	4.74	4.57	3.60
1985-3 4. 1985-4 4. 1986-1 4.	.65	4.47	3.92	1996-2	4.75	4.55	4.19
1985-4 4.1 1986-1 4.4	.35	4.48	-2.96	1996-3	4.73	4.56	3.60
1986-1 4.4	.82	4.36	9.46	1996-4	4.89	4.56	6.82
	47	4.47	-0.02	1997-1	4.94	4.63	6.38
1986-2 4.0	69	4.47	4.79	1997-2	4.70	4.70	-0.03
	67	4.45	4.75	1997-3	5.00	4.61	7.73
	25	4.52	14.00	1997-4	5.02	4.66	7.21
1987-1 4.7		4.76	-0.98	1998-1	4.74	4.77	-0.57
1987-2 4.7		4.72	-0.21	1998-2	4.68	4.66	0.61
	68	4.54		1998-3	4.60	4.54	1.30
1987-4 3.9		4.53		1998-4	4.73	4.48	5.25
1988-1 3.7		4.20		1999-1	7.07	4.51	36.19
1988-2 3.8		3.89		1999-2	4.82	5.57	-15.50
1988-3 3.9		3.85		1999-3	5.06	5.36	-5.93
1988-4 3.9		3.91		1999-4	5.35	4.73	11.66
		Average error in %	2.00	976	3.33	1.73	1.42

Table-5 Actual and Forecasted M2M (Validation Period)

Quarter	Actual M2M	Forecasted M2M	Error in %
2000-1	4.94	4.94	-0.03
2000-2	5.22	4.85	-7.65
2000-3	4.88	4.84	-0.95
2000-4	4.86	4.78	-1.73
2001-1	4.88	4.66	-4.59
2001-2	4.81	4.66	-3.09
2001-3	4.93	4.64	-6.43
2001-4	4.46	4.67	4.44
2002-1	4.37	4.50	3.05
2002-2	4.42	4.31	-2.54
2002-3	4.86	4.30	-13.16
2002-4	4.98	4.51	-10.56
2003-1	4.85	4.71	-2.99
2003-2	4.77	4.69	-1.71
verage error in %			-3.42

Figure-2



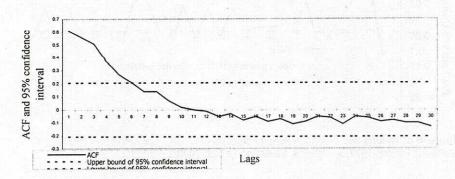


Figure-3

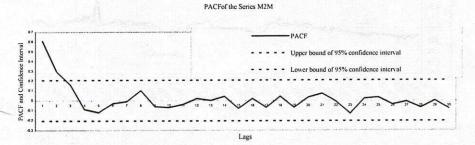


Figure-4



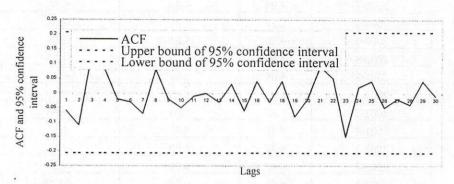
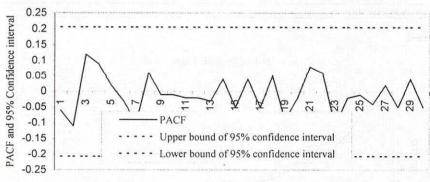


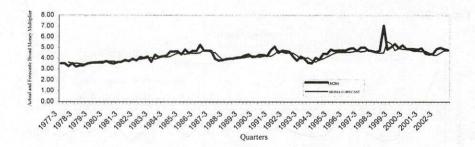
Figure 5

PACF of Residuals



Lags

Figure-6 Estimation and Validation Period Forecasts of Broad Money Multiplier (M2M), Estimation Period: 1977:3 – 1999:4, Validation Period: 2000:1 – 2003:2



ATTITUDE MODEL FOR STUDY OF CUSTOMERS'PREFERENCE : LOOKING AT BANGLADESH'S LIFE INSURANCE

Md. Shah Azam*

ABSTRACT: Insurance has proved to be an effective means of capital formation besides creating new avenues for employment. The insurance industry in Bangladesh has witnessed rapid growth with denationalization and privatization. This paper looks at the customers' attitudes towards private and public owned life insurance organizations. Exploring 8 salient beliefs the study utilizes Fishbein's multi-attribute attitude-object model to measure customers' overall attitude. The result reveals customers' favourable perceptions on financial strength and goodwill of JBC while client services, risk underwriting and premium payment formalities are favourable for private insurance company indicating overall customers' attitude infavour of state owned life insurance corporation in Bangladesh.

INTRODUCTION

The insurance industry in Bangladesh has witnessed a rapid growth during last two decades. Privatisation policy of Bangladesh Government has opened up a new arena for the development of this sector. Insurance acts as an effective economic tool for capital formation by accumulating scarce funds from different corners and also provides the opportunity for employment. Insurance has been proven its utility as an essential mechanism for providing social security in the developed world as well as in the developing country. Particularly Life insurance has ample opportunity to accelerate the economic growth accumulating nation's scattered capital. Increasing nature of country's population, more than thirteen crore at present, implies the potentials of life insurance market in Bangladesh. The growth and development of insurance industry is very imperative where loss of lives and properties are common due to causalities in many kinds. The increasingly growing trends of population widen the scope of domestic life insurance market.

Though life insurance is a social service, it fails to provide social security and also fails to achieve people's credibility due to many reasons. Lack of Insurance education, lack of people's awareness and interest on insurance, weak financial condition, religious constraints in undertaking life insurance, lack of honesty and competency of the insurance personnel as well as the agent, incompetent personnel hinder the development of this industry. At present, 17 private insurance companies with one foreign company carrying out their businesses in competition with the only state owned organization, Jiban Bima Corporation (JBC).

JBC enjoyed monopoly in transacting life insurance business in Bangladesh until 1984 while the companies under private ownership are encouraged in the liberalized

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market economy. The government of Bangladesh opens new room for private insurance companies by promulgating the Insurance (Amendment) Act 1984 (Hossain, 1994 and Mando, 1998). Performance of public insurance corporation are not observed as satisfactory in the present increasingly globalised competitive business environment, its market share has been declining. Inefficiency of personnel, rampant corruption and shortage of qualified manpower put the corporation at a very vulnerable condition. The industry is growing due to the growth of private companies (Ahmed, Hossain and Ullah, 2004). In life insurance sector, private companies are engaged to provide expertise supports and initiatives in competition with state owned Jiban Bima Corporation (JBC), to capture customers" favourable attitude towards their service which would lead to customers" purchasing decision. Jiban Bima Corporation is not positioned far backward in this era of competition. Facing various problems Jiban Bima Corporation is stepping forward to cope with the competitive environment.

Favorable attitude can be the cause of favorable buying decision. It is related with the intention to buy a product or service. The attitude of customer towards any product or service is the vital influencer in buying behavior. The target of a company in attracting its customers' is to create customers" favorable attitude. Like many other businesses insurance companies are trying to capture high market share by creating favourable customers' attitude. Amid many constraints the life insurance industry in Bangladesh is gradually developing. It earns increasing amount of premium each year. After independence the premium income of life insurance sector of this country was 5 to 7 crores taka which stands at 1253 crore in the year 2003. The premium income of life insurance in the year 2003 was 24.5% higher than previous year, where the contribution of private companies 1059 crore and state run Jiban Bima Corporation 194 crore taka. In the year 2002, seventeen private companies earned premium worth taka 827 crore while Jiban Bima earned Taka 179 crore (Jahangir, 2004). Although Bangladesh's life insurance is facing some problem and challenges, the statistics on country's life insurance premium income show a distinct growth. The growths exist separately in public and private sectors.

Though the increase in the premium earnings by private companies is apparently very high than that of JBC, but in fact, premium income of a single private company doesn't express such big gap. Increasing trend of premium income indicates that both public and private insurance companies under life insurance have achieved customers" credibility. In this context it may be questioned whether any differences exists on customers' preference in adopting life insurance products from JBC and Private insurance company and what are the main attributes that affect customers" attitudes. Thus, exploring various salient beliefs and customers" respective evaluations this paper examines customers" attitude towards life insurance services in between public and private insurance companies in Bangladesh.

MODEL SPECIFICATION AND HYPOTHESES

A number of different multi attribute models have been adopted in order to predict a consumer's attitude towards an object. Fisahbein's model receives the most attention from consumer and marketing researchers (Mowen, 1993), thus, the model has been undertaken as the theoretical framework for the study.

¹ According to International Insurance Fact Book (2004) direct written premium in life insurance was 194 Dollars in 2003.

Fishbeins multi attribute attitude model can be expressed in equation as:

$$A_0 = \sum_{i=1}^n biei$$

Where. A_0 = the persons overall attitude towards the object.

bi = The strength of his belief that the object is related to attribute.

ei = his evaluation or integrity of feeling of the goodness or badness of attribute

n = the number of relevant beliefs for that person.

The model explicitly incorporates the cognitive (belief) and affective (evaluation) components of attitudes. It also accounts for the strength or intensity of these elements. The model states that to determine a persons overall attitude toward some object, it is first necessary to determine those beliefs that have the most influence on her attitude. Those most relevant beliefs, called salient beliefs, frequently don't exceed nine in number (Ajzen and Fishbein, 1980). The overall attitude toward an object can be obtained by multiplying the belief score by the evaluation score for each attribute and then summing across all relevant beliefs to obtain the value A₀ (Laudon and Bitta, 1988).

Salient Beliefs

Eight salient beliefs have been anticipated to study customers" attitude towards public and private life insurance organistaion in Bangladesh. It is predicted that the following beliefs have the influence in customers" attitude formation:

Financial strength (Whether the service organization has sound financial strength), Goodwill (Whether the service organization has goodwill), Claim settlement (Whether the organization settles their claims rapidly), Risk Underwriting (Whether the formalities in risk underwriting of the company is to complicated), Diversified policy (Whether the organization has diversified policies), Employee Status (Whether the employees of the organization have expertise and experience), Client Service (Whether the organization provides excellent client service) and Premium Payment (Whether the organization provides easier option in premium payment).

Hypotheses

On the basis of the problem and the variables used in the model following eight null and alternative hypotheses are assumed to be tested:

H ₀₁ :	$\overline{X}_{FS} = \overline{Y}_{FS}$	H _{a1} :	$\overline{X}_{FS} \neq \overline{Y}_{FS}$
H ₀₂ :	$\overline{X}_{GW} = \overline{Y}_{GW}$	H _{a2} :	$\overline{X}_{GW} \neq \overline{Y}_{GW}$
H ₀₃ :	$\overline{X}_{CLAIM} = \overline{Y}_{CLAIM}$	H _{a3} :	$\overline{X}_{CLAIM} \neq \overline{Y}_{CLAIM}$
H ₀₄ :	$\overline{X}_{RISK} = \overline{Y}_{RISK}$	H _{a4} :	$\overline{X}_{RISK} \neq Y_{RISK}$
H ₀₅ :	$\overline{X}_{POLICY} = \overline{Y}_{POLICY}$	Has:	$\overline{X}_{POLICY} \neq \overline{Y}_{POLICY}$
H ₀₆ :	$\overline{X}_{ES} = \overline{Y}_{ES}$	H _{a6} :	$\overline{X}_{ES} \neq \overline{Y}_{ES}$
H ₀₇ :	$\overline{X}_{CS} = \overline{Y}_{CS}$	H _{a7} :	$\overline{X}_{CS} \neq \overline{Y}_{CS}$
H ₀₈ :	$\overline{X}_{PP} = \overline{Y}_{PP}$	H .	$\overline{X}_{PP} \neq \overline{Y}_{PP}$

Where X and Y denote the customers" perceptions on public and private insurance companies respectively, and

FS=Financial Strength of the organisation, GW=Goodwill of the organisation, CLAIM=Claims Settlement, RISK=Risk underwriting, POLICY=Diversified policy, ES=Employees status, CS=Client service, PP=Premium payment

METHODOLOGY

An exploratory and empirical research approach has been applied to select the salient beliefs and to understand customers" evaluations as well as measuring the overall attitude towards government owned and private life insurance organisation.

Identification of salient beliefs

The attitude towards object model identifies three major factors that are used to predict attitudes. First, the salient beliefs² that people have about an object are identified. The second component of the Fishbein attitude-towards-object model is the strength of the belief that an object has a particular attribute under question. The strength of the object-attribute linkage is usually assessed by asking a person how likely it is that object x processes attribute y (Mowen, 1990).

Eight salient beliefs were borrowed from the study undertaken to examine customers" attitude towards general insurance service in Bangladesh (Azam, 2005). Besides, an exploratory research was administered to explore additional attributes and to justify major attributes that affect to form customers" attitude towards life insurance services in Bangladesh. A series of pre-testing was carried out to select the attributes.

The exploratory study justifies 8 attributes to be considered as major variables in the customers" attitude survey on life insurance services. It is predicted that financial strength, Good will, claims settlement performance, risk underwriting procedure, diversified policy, employee status, client service and premium payment policy have the direct influence on customers' attitude towards life insurance product in Bangladesh.

Measurment of the strength of beliefs and evaluations

Question like "A service organization with sound Financial Strength is good or bad" has been used separately on various salient beliefs to asses their evaluation, keeping in mind the fact that in evaluating insurance service some consumers' may evaluate one attribute of the organization positively, and some may evaluate it negatively. Ratings of the attribute are obtained by asking consumers how good or bad the attributes are. 7 point scale, ranging from -3 to +3, type questions have also been used to quantify customers' evaluations on various attributes where -3 indicates very bad and +3 indicates very good.

² Salient beliefs are those attribute-object beliefs activated when a person evaluates an attitudinal object. From an information processing perspective, these are the beliefs that are activated in memory when attention is focused upon an object. They will tend to concern the attributes that are important to the consumer (Engel, Blackwll and Miniard, 1989, Sciffman and Kanuk, 1994 and Mowen 1993).

Again, Customers' have been asked how likely they belief that the organization have above attributes. 7 point scale ranging from -3 to +3 has also been used to collect data where -3 indicate extremely unlikely and +3 indicate extremely likely.

Sampling and Data analysis

A survey instrument was formulated to obtain responses from the actual and potential customers" of life insurance service products in Bangladesh. A structured questionnaire was used gaining the respondents feelings on different statements in relation to their beliefs and respective evaluations on different attributes of life insurance services in Bangladesh. Direct interview approach was administered in view of collecting accurate data. Questions have been designed as to get responses specific to hypothesises that are proposed to test. Paired sample t-test is performed to hypotheses testing. 243 respondents of various status and positions from both Rajshahi and Dhaka cities were interviewed. Random sampling technique was used to select the sample units.

CUSTOMERS' BELIEFS AND EVALUATIONS PROFILE

Customers' of life insurance service products respond differently on various features or attributes associated with the service. Customers" financial status, education, nature of their job, awareness, expertise as well as the performance of the service organizations, particularly, life insurance marketing are the cause of different customers' responses on various dimensional stimulus that would help to form customers" attitude towards the object, such as service, idea, product etc. Finally it would affect the formation of purchasing intention that lead to purchasing decision.

Table 1: Sound Financial Strength

										Special Control		
		-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
JBC	Frequency	1	1	16	36	86	70	22	232	1.1681	1.093951	.19673
	Percentage	.4	.4	6.9	15.5	37.1	30.2	9.5	100.0			
PVT	Frequency	4	3	31	73	66	36	19	232	.6293	1.262381	.59360
	Percentage	1.7	1.3	13.4	31.5	28.4	15.5	8.2	100.0			

⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Financial Strength

Table-1 shows 76.8% customers' favorably perceive the financial strength of Jiban Bima Corporation. Of whom 9.5 % customers' are extremely likely, 30.2% very likely and 37.1% are likely to opine that JBC has sound financial strength. Another 15.5% express their neutrality and 6.9% customers' unlikely perceive the attribute. In opposite, 52.1% customers' have favorably perceived the financial strength of private insurance organization. Of whom 8.2 % customers' are extremely likely, 15.5% very likely and 28.4% are likely to opine that private company has sound financial strength, while 31.5% express their neutrality and 13.4 customers' are unlikely to perceive the attribute. Mean values of the customers" responses towards financial

24

strengthen of JBC is 1.17, which lies in above the satisfactory level, while mean value of private life insurance company appears as .63, which lies in average category.

Table: 2 Goodwill

		-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
JBC	Frequency	1	3	17	36	81	70	24	232	1.1509	1.15418	1.33212
	Percentage	.4	1.3	7.3	15.5	34.9	30.2	10.3	100.0			
PVT	Frequency	5	3	31	77	50	49	17	232	.6336	1.30576	1.70501
	Percentage	2.2	1.3	13.4	33.2	21.6	21.1	7.3	100.0			

⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Goodwill

75.4% customers' express favourable responses on the goodwill of Jiban Bima Corporation. Of whom 10.3% customers' are extremely likely, 30.2% very likely and 34.9% are likely to opine that JBC has goodwill. Another 15.5% show their neutrality and 7.3% customers' are unlikely to perceive the attribute while, 50% customers' favourably perceive the goodwill of private insurance organization. Of whom 7.3 % customers' are extremely likely, 21.1% very likely and 21.6% are likely to opine that private company has goodwill. 33.2% express their neutrality and 13.4% customers' unlikely perceive the attribute (Table-2). Mean values of the responses on goodwill of JBC is 1.15, which lies in satisfactory level, while private life insurance Company, appears as .63%, in average category.

Table 3 : Satisfactory Claim Settlement

		-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
JBC	Frequency	-							232	.5216	1.0607 0	1.12507
	Percentage	.9	2.2	6.9	45.3	27.6	13.4	3.9	100.0			
PVT	Frequency	5	6	18	123	39	32	9	232	.3664	1.1469	1.31540
	Percentage	2.2	2.6	7.8	53.0	16.8	13.8	3.9	100.0			

⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Claim Settlement

44.9% customers' favourably perceive the Claims Settlement of Jiban Bima Corporation. Of whom 3.9% customers' are extremely likely, 13.4% very likely and 27.6% are likely to opine that JBC has satisfactory Claims Settlement. 45.3% show their neutrality and 6.9% customers' unlikely perceive the attribute while 34.5% customers' favourably perceive the claims settlement performance of private insurance organization. Of whom 3.9% customers' are extremely likely, 13.8% very likely and 16.8% are likely to opine that private company has satisfactory claims settlement. 53% express their neutrality and 7.8% customers' are unlikely to perceive the attribute. Besides, It is shown in the

table-3 that the mean values of the customers' responses towards claims settlement of JBC is .52, which lies in average category, while mean value of private life insurance company appears as .37, which lies in average category below the level of JBC.

Table 4: Risk underwriting

	difference	-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
100	Frequency	2	9	37	49	66	60	9	232	.6552	1.2799 0	1.63815
JBC	Percentage	.9	3.9	15.9	21.1	28.4	25.9	3.9	100.0			
D) C	Frequency	4	1	18	57	73	53	26	232	.9698	1.2462 7	1.55320
PVT	Percentage	1.7	.4	7.8	24.6	31.5	22.8	11.2	100.0			

⁻⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Risk underwriting

Table-4 shows 58.2% customers' favourably perceive the performance regarding risk underwriting of Jiban Bima Corporation. Of whom 3.9% customers' are extremely likely, 25.9% very likely and 28.4% are likely to opine that JBC has satisfactory performance in policy documents issuance and risk underwriting. Another 21.1% prove their neutrality and 15.9% customers' unlikely perceive the attribute. In opposite, 65.5% customers' favourably perceive the policy issuance performance and risk underwriting formalities of private insurance organization. Of whom 11.2% customers' are extremely likely, 22.8% are very likely and 31.5% are likely to opine that private company has Satisfactory risk underwriting performance. 24.8% state their neutrality and 7.8% customers' unlikely perceive the attribute. Average customers" responses towards risk underwriting of JBC are calculated as .66 in average category, at the same time customers' responses towards private organisation appears as .97 in almost satisfactory category, which is favourable than JBC.

Table 5 : Employee Status

		-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
IDC.	Frequency			34	56	69	44	15	232	.5819	1.34268	1.80279
JBC	Percentage		3.9	14.7	24.1	29.7	19.0	6.5	100.0			
DVT	Frequency	8	7	30	67	62	40	18	232	.5517	1.38542	1.91939
PVI	Percentage		3.0	12.9	28.9	26.7	17.2	7.8	100.0			

⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Employees Status

Table-5 shows 55.2% customers' favourably perceive the employee experience and status of Jibann Bima Corporation. Of whom 6.5% customers' are extremely likely, 19% very likely and 29.7% are likely to opine that JBC has experienced employee. Another 24.1% express their neutrality and 14.7% customers' unlikely perceive the attribute. On the other, 51.7% customers' favourably perceive the employee's status of private insurance organization. Of whom 7.8% customers' are extremely likely, 17.2% very likely and 26.7% are likely to opine that private company has experienced employee. 28.9% show their neutrality and 12.9% customers' are unlikely to perceive the attribute. Average scores of customers' responses towards employee status of JBC stands at .58 in average category, while the score of private life insurance company also appears, at .55, in average category.

Table 6: Diversified Policy

		-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
JBC	Frequency	1	3	19	75	- 77	43	14	232	.7629	1.10089	1,21195
	Percentage	.4							100.0		4. 17.	1.21100
PVT	Frequency	2	4	9	85	78	42	12	232	7543	1.07106	1.14717
	Percentage	.9							100.0			1.147.17

⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Diversified Policy

57.7% customers' favourably perceive the diversified policy of Jiban Bima Corporation. Of whom 6% customers' are extremely likely, 18.5% very likely and 33.2% are likely to opine that JBC has Diversified policy. Another 32.3% express their neutrality and 8.3% customers' unlikely perceive the attribute. In opposite, 56.9% customers' favourably perceive the diversified policy of private insurance organization. Of whom 5.2% customers' are extremely likely, 18.1% very likely and 33.6% are likely to opine that private company has diversified policy. 36.6% expressed their neutrality and 3.9% customers' are unlikely to perceive the attribute (table-6). Again, mean values of customers' responses towards diversified policy of JBC is .76, which lies in average category, while mean value of private general insurance company appears as .75, which lies also in average category.

Table 7: Excellent Client Service

		-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
JBC	Frequency	2	7	49	35	78	47	14	232	.6250	1.30993	1.71591
	Percentage	.9	3.0	21.1	15.1	33.6	20.3	6.0	100.0	r ve		
PVT	Frequency	2	4	14	55	65	65	27	232	1.0690	1.23249	1.51903
	Percentage	.9	1.7	6.0	23.7	28.0	28.0	11.6	100.0			

⁻³⁼ Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Client Service

59.9% customers' favourably perceive the excellent client service of Jiban Bima Corporation. Of whom 6% customers' are extremely likely, 20.3% very likely and 33.6% are likely to opine that JBC has excellent client service. 15.1% show their neutrality and 21.1% customers' unlikely perceive the attribute. At the same time, 67.6% customers' favourably perceive the excellent client service of private insurance

organization. Of whom 11.6% customers' extremely likely, 28% very likely and 28% are likely to opine that private company has excellent client service. 23.7% state their neutrality and 6% customers' unlikely perceive the attribute. In addition to above statistics table-7 shows, mean values of the customers" responses towards excellent client service of JBC are calculated as .63, in average category, while mean value of private life insurance company appears as 1.07, which lies in satisfactory category.

Table 8: Premium Payment

16/16	The second	-3.00	-2.00	-1.00	0.00	1.00	2.00	3.00	Total	Mean	SD	Var
)BC	Frequency	5	8	28	59	73		-	The particular	.6250	1.29664	1.68128
JBC	Percentage	2.2	3.4	12.1	25.4	31.5	19.8	5.6	100.0			
DVT	Frequency	3	0	12	51	71	50	45	232	1.2284	1.25683	1.57962
PVI	Percentage	1.3	0	5.2	22.0		21.6	_	100.0		a 18 -t.	

-3= Extremely unlikely, -2 = Very unlikely, -1 = Unlikely, 0 = Neither likely nor unlikely, 1 = Likely, 2 = Very likely and 3 = Extremely likely

Premium Payment

Table-8 shows 56.9% customers' of life insurance products favourably perceive the premium payment of Jiban Bima Corporation. Of whom 5.6 % customers' extremely likely, 19.8% very likely and 31.5% are likely to opine that JBC has nice premium payment facility.

Table 9: Measurement of Attitude

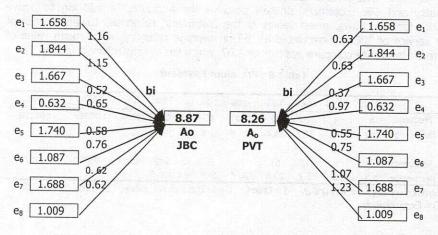
Service and REAL ORY to	ei	bi (Govt.)	bi (Pvt.)	biei(Govt.)	biei (Pvt.)
Financial Strength of the Organization	1.658	1.168	0.629	1.937	1.043
Good will of the Organization	1.844	1.151	0.634	2.122	1.168
Claims Settlement	1.667	0.522	0.366	0.869	0.611
Risk underwriting	0.632	0.655	0.970	0.414	0.613
Experienced Employee	1.740	0.582	0.552	1.013	0.960
Diversified policy	1.087	0.763	0.754	0.829	0.820
Client Services	1.688	0.625	1.069	1.005	1.805
Premium payment	1.009	0.625	1.228	0.630	1.239
F 1 200512 VON				8.87	8.26

Attitude towards Jiban Bima Corporation, A_{0} = 8.87 and Attitude towards Private insurance company, A_{0} = 8.26

Another 25.4% express their neutrality and 12.1% customers' unlikely perceive the attribute. On the other end, 71.6% customers' favourably perceive the premium payment of private insurance organization. Of who n 19.4% customers' are extremely likely, 21.6% very likely and 30.6% are likely to opine that private company has nice premium payment facility. 22% sate their neutrality and 5.2% customers' are unlikely to perceive the attribute. Mean values of the customers" responses towards premium payment facility of JBC stands at .63 in average category, while mean value of private life insurance company appears as 1.23, which lies in satisfactory category.

MEASUREMENT OF OVERALL CUSTOMERS' ATTITUDE

Figure 1: Attitude model anticipating customers preference on life insurance services



Customers" evaluation on how good or bad an organisation with sound financial strength is 1.66, good will 1.84, satisfactory claim settlement 1.67, formalities in risk underwriting .63, employee status 1.74 and diversified policy 1.09 while client service 1.69 and premium payment stands at 1.01 (Table-9).

The strengths of customers" beliefs on various attributes are also stated in the column 3 and 4 of the table. Customers' perceptions on financial strength of JBC stands at 1.17 and private organisation .63; good will of JBC 1.15 and private life insurance organisation .63; claims settlement performance of JBC stands at .52 and private organisation .37. Customers' perceived score of Risk underwriting of JBC is .66 while private organisations risk underwriting performances are perceived as .97. Employees' status of JBC stands at .58 and private organisation at .58. Customers" opinion on diversified policy of JBC is .76 and private organisation .75; while customers' opine client service of JBC as .63 and private organisation as 1.07. Beside the above responses the customer perceives premium payment procedure of JBC as .63 and the premium payment procedure of private life insurance organisation 1.23.

Figure-1 shows the summary of the fishbein multi-attribute attitude model. Customers' overall attitude towards Jiban Bima Corporation stands at 8.87 while customers' attitudes towards private insurance company stands at 8.26, which indicates that customers' attitude towards JBC is favourable than that of private insurance company engaged in life insurance business in Bangladesh.

The study further reports that Jiban Bima Corporation stands ahead in achieving customers' favourable opinion on Sound financial status, good will, claim settlement, experienced employee and diversified policy while Formalities in risk underwriting, excellent client service and premium payment facility are favourable for private insurance company.

TEST OF HYPOTHESES

Customers" beliefs on various attributes show different values, some of the beliefs favourably contribute to form customers" attitude towards JBC and some are in favour of private organization. Customers' perceptions on financial strength of the organization, goodwill, client services and premium payment in between private and government owned insurance organization are statistically different at .001 level of significance and Formalities in risk underwriting is statistically different at .05 level of significance while no significant difference have been found out in remaining other attributes. The paired sample test statistics conclude hypothesis testing as: H_{01} rejected, H_{a1} accepted** (t=5.591, p<.01); H_{02} rejected, H_{a2} accepted** (t=4.964, p<.01); H_{03} accepted, H_{a3} rejected (t=1.852, p<.05); H_{o4} rejected, H_{a4} accepted* (t=-2.954, p<.05), H_{05} accepted, H_{a5} rejected (t=.279, p>.05); H_{06}

accepted, H_{a6} rejected (t=.104, p>.05), H₀₇ rejected, H_{a7} accepted** (t=-4.178, p<.01); and H_{08} rejected, H_{a8} accepted** (t=-6.048, p<.01).3

ANALYSIS AND INTERPRETATION OF THE RESULTS

The study results show that customers' have different attitudes towards government owned and private owned life insurance organizations in Bangladesh. The measurement of attitude reveals that the customers' have favourable attitude towards Jiban Bima Corporation than private owned insurance organization. Customers' beliefs on different features or attributes of the services are key to the differences in customers' attitudes. Calculated mean of customers' belief on various selected attributes of the service have different scores. Estimation of those different values using the Fishbein's multi-attribute attitude model shows the overall attitude towards the service. T-test result shows customers' beliefs on financial strength of the organization, good will, risk underwriting, client service and premium payment of government and private owned insurance organization are statistically different at .05 level of significance.

Customers" perceptions on financial strength of the organization and good will are favourable for JIban Bima Corporation while risk underwriting formalities, client services and premium payment procedure are in favour of private owned insurance organization. These five attributes influence in the formation of different attitudes towards Jiban Bima Corporation and private insurance organization. Though there is a difference in customers' attitude towards JBC and private insurance organization, the mean score is very close. It indicates that after observing almost 20 years of operation, the private owned life insurance companies are growing achieving public acceptance. At the same time Jiban Bima Corporation is gradually declining its position of market leader and superiority as only quality service provider with highly experienced and professional officer and employees.

Although the result indicates a very closest customers' attitude towards JBC and private insurance company but it is a good indication for JBC that they have sound financial strength and good will that is actually the part of core service product. It is

³ The test statistic and level of significance are expressed in the parenthesis. Further more (*) indicates .05 level of significance and (**) indicates.01 level of significance.

not possible to earn financial strength as well as good will over the night. Financial strength and good will of an organisation make the corporate image. Corporate image of an organization have the positive influence in quality perception of a product (Chowdhury, Mondal and Parvin, 2004). Customers' favourable perceptions on good will and financial strength of Jiban Bims Corporation have the association with quality judgment of the organization's service. Thus, customers' of life insurance product perceive Jiban Bima Corporations product as a quality product, it forms a positive customers' attitude towards the corporation.

On the other hand, customers' have favourable beliefs on the risk underwriting, client services and premium payment formalities of private insurance organizations. These three attributes are associated with client services functions on different aspects as augmented service. Better client service can be the key to achieve customers" satisfaction in terms of marketing any service product as the product is invisible in nature. The private insurance organizations in Bangladesh have already developed a good organizational cultural with highly professional client services. Enjoying the client service facility, satisfied customers' act as a major promotional tool of the private insurance companies fostering the pace of development in facing the competition in a liberalised environment.

Since 1984 private companies are providing their specialised professional services with highly qualified motivated personnel ensuring customers' satisfaction. Although, customers' have some confusion on the performance in regard to compensation by the private companies, new policies, easier risk underwriting facility as well favourable premium payment provisions attract customers' to buy life insurance product. It increases the volume of businesses under private ownership in life insurance service in Bangladesh.

LIMITATIONS AND FUTURE RESEARCH SCOPE

The study explains various aspects and issues in relation to attitude formation and various attributes of insurance service products. The study reveals that customers' have favourable attitude towards JBC than private insurance organization though the score is very close. The study, again, shows that customers' belief on financial strength, good will, risk underwriting, client services and premium payment of JBC and private insurance organization are significantly different. It indicates that this five attributes form the attitude. The vital limitation of the study is that though the test result ensures the involvement of the attributes to form customers' attitude, it does not explain the degree of their involvement or in other wards their contribution. It is considered as the limitation of the study. Further study should be undertaken with higher statistical tools to find out the degree of involvement of the factors in forming the attitude towards insurance organizations. It is logical to be considered as future research opportunity.

Secondly, the study concentrates on analysing the factors related only to the object. Though many other factors both internal and external can influence customers" attitude, but are excluded from the study due to the scope of the model used. This is another limitation of the study. Further research should be undertaken in future to study the influence of many other internal and external factors with this object related variables.

CONCLUSION CONTROL OF A CONTROL OF THE PROPERTY OF THE PROPERT

Economic development of a country is partly a function of the stage of the development of insurance industry. In modern liberalised economic environment, insurance has become very closer to people of every walk. The degrees and frequencies of the contingencies foster the development of life insurance services and make its market imperative in Bangladesh. Open competition in life insurance sector provide an opportunity of its growth. Increasing population in Bangladesh is also a factor that helps widening the scope of the market potentials of life insurance product, thus, positive initiatives are due to develop insurance industry in Bangladesh.

The implications of the study would help developing marketing strategies as well as corporate strategic planning for the insurance companies in Bangladesh both under public and private ownership. The academics and researchers in the field of consumer behaviour and service marketing are believed to have been benefited of the study.

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MANDATORY DISCLOSURE AND ITS ASSOCIATION WITH COMPANY AGE: A STUDY OF LISTED COMPANIES IN BANGLADESH

M. Akhtaruddin*

ABSTRACT: The study reveals the results of an empirical investigation of the extent of mandatory disclosure of 94 listed companies in Bangladesh. Using a disclosure index of 160 mandatory information items, the disclosure levels by age of the companies are examined. The mean disclosure of the study is only 44%, which indicates that the mandatory disclosure compliance is poorly maintained. Many information items are seen left out. The study did not support the hypothesis that old companies will provide more information than the new companies. The company age has no impact on the level of disclosure particularly with respect to balance sheet, director' report, and historical summary. However, a little association is found between age and income statement and between age and accounting policies.

INTRODUCTION

The general tendency of a company is to provide information in line with the legislative frameworks. Specifically, a company provides information to discharge its some specific obligations: the obligation to the investors, the suppliers, the creditors, the society, and the legal authorities (Choi, 1998). Agency theory implies that companies increase disclosure in order to avoid potential pressure from the regulatory agencies (Wallace, 1988). More importantly, disclosure practices are influenced considerably by the laws and regulations (Lobo and Zhou, 2001). Disclosures that are required by laws are mandatory disclosures while disclosures that are neither required nor suggested are voluntary (Muller et. al. 1997). Adequate disclosure is, therefore, operationalised as the number of mandatory information items that a listed company provides in its annual report. Adequate disclosure does not mean providing information in great detail rather it does mean that no important thing be left out (Benjamin and Stanga, 1977). Furthermore, Disclosure of adequate information provides a better understanding about the company to the investors and enables them to make better investment decisions. Brownlee et al. (1990) suggest that regulatory agencies should be more concerned with the full and fair disclosure of information than with the specific accounting methods used to measure or report the economic transactions.

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Generally, disclosure in company annual reports is done by parts either through the statements or notes accompanying the statements. It is commonly agreed that different parts of the annual report are not equally important to all users. Income statement is the most preferred section to the investors while cash flow statement and balance sheet are most useful sections to the bankers and the creditors (Eccles and Mavrinac, 1995; Ho and Wang, 2001). Likewise, the users of accounting information conceive audit report, directors' report, accounting policies and historical summary differently. It is noted that information items contained either on the face of the statements or in the notes should meet the needs of the users failing of which may lead to faulty decision and result in misutilization of scarce resources in the economy (Firth, 1979) Several previous studies have addressed the impact of various corporate characteristics on overall disclosure (Benjamin and Stanga, 1971; Ingram & Frazier,1980; Wallace,1988, Wallace & Naser,1995; Cooke, 1989; Forker,1992; Carol and Pownall, 1994; Karim, 1996; Owusu-Ansah, 1998) These characteristics include size, age of the company, listing status, leverage, profitability, industry type, and audit firm. Moreover, these studies are mostly done in developed countries. No single study is found to investigate the impact of single company attribute on specific disclosure practices in the Asian region particularly in Bangladesh where the accounting and disclosure environment is relatively unregulated compared to most developed countries. Further, the research on disclosure in regard to nature and type of information in the corporate report is very significant (Cooke, 1998). This study aims to investigate the extent of specific disclosures with particular emphasis on the age of the company.

The study contributes to the literature on the association between company age and mandatory disclosure in three ways. First, the corporate excellence in regard to minimum disclosure is unrelated to company age. Second, the results suggest that merely adoption of disclosure rules and standards are not considered enough for disclosure of minimum amount of information. Third, the findings are of special interest of those in setting standards for corporate disclosure. Again, it provides a test of the theory in an economy where comprehensive disclosure frameworks are provided in order to ensure fulfillment of minimum information requirements of various interested parties.

The remainder of this paper is organized as follows. Section 2 shed some lights on the accounting and disclosure environment in Bangladesh. Theoretical framework and hypothesis development is presented in section 3. Section 4 discusses research methodology. Results are discussed in section 5 and finally conclusion and research limitation is made in section 6.

COMPANIES ACT, SECURITIES MARKET AND ACCOUNTING STANDARDS - A SNAPSHOT

Companies Act

Financial reporting and disclosure system in Bangladesh is largely influenced by British accounting practices. This is because of her long political links with the UK. The Companies Act 1913 was in force in Bangladesh before the promulgation of Companies Act in 1994. Companies in Bangladesh generally are guided by the Companies Act and require public listed companies to maintain high standard of disclosure. In Bangladesh, the mandatory disclosure requirements are explicitly stipulated by Companies Act, Securities and Exchanges Rules, 1987 and the

Accounting Standards adopted by the Institute of Chartered Accountants of Bangladesh. Before 1994, the Companies Act 1913 required public limited companies to submit a annual balance sheet containing a summary of their capital, liabilities and assets. But no specific formats were prescribed. Profit and loss accounts were prepared without mentioning the nature of activities in details. These two statements need to be audited and were to present to the annual general meeting for approval before their publication. The primary weakness of the regulation is that it did not provide any guidelines about the contents to be followed and how the values of the respective items have been arrived at. The Companies Act 1994 is passed making major alternations to the financial reporting practices and disclosures of limited liabilities companies, which is now in force. Under the new law both the statements have also to be audited and reported before the annual meeting.

However, the statements can be prepared either horizontally or vertically. The fixed assets are to be shown either at cost or valuation. The provisions for depreciation are to be disclosed in more details and separately. The disclosure requirements are classified and specified in far more details and have included reserves and the changes occurred during the year, director's remuneration, commission, tax provision and the flow of foreign currency. The Act also has provided some mandatory items to be disclosed in both the balance sheet and the income statement. Legislative requirements prior to 1994, however, failed to indicate the actual level of corporate disclosure. No particular formats were prescribed and even the necessary contents of the accounting reports were not specified in any detail. The Companies Act, 1994 included many provisions which are mandatory as well as required by the adopted IASs (Hossain & Tayler,1998).

History of security markets

In addition to companies Act, stock exchange governs disclosure in company reports as a part of listing requirements. For example, a company wishes to be quoted on the stock exchange must adhere to the requirements of the stock exchange. At present Bangladesh has two stock exchanges. It inherited only one stock exchange named Dhaka Stock Exchange (DSE) at the time of her independence in 1971. DSC was formed in 1954 and was registered as a limited liability. Another new stock exchange, Chittagong Stock Exchange (CSE) was set up in 1999 and is functioning in Chittagong. Both the stock exchanges are regulated under securities and Exchange Rules, 1987 and Companies Act. The initial imputes for the setting up of the stock exchange was to provide government-owned enterprises an opportunities to raise funds. Later on, with the advent of free market economy several government-owned companies were transformed to limited liability companies and listed on the stock exchanges. The year 1987 is the landmark in the history of securities market. The Securities Exchange Commission was set up in this year to provide a mechanism to regulate the securities market. Listed companies have to comply with the provisions of securities and exchange rules in preparing the financial statements. The stock exchange, thus, places a continuing disclosure and reporting obligation on listed companies. Security exchange authority, therefore, plays a active role in mainting the level of disclosure in company reports (Wallace & Naser, 1995)).

Accounting bodies and the development of accounting standards

The accounting practices in Bangladesh are guided by the two professional institutes namely the Institute of Chartered Accountants of Bangladesh (ICAB) and the Institute of Cost and Management Accountants of Bangladesh (ICMAB). The financial audit is done by the members of ICAB while the members of ICMAB do the cost audit. However, both are under control of Ministry of Commerce, Bangladesh. The two institutes are run and managed by the council members who are elected from among the members, in addition to the representatives from the government. The council is responsible for the development of accounting profession in Bangladesh. Moreover, the ICAB has given the sole authority to develop and issue accounting and reporting standards and to monitor their application throughout the country.

Accounting system in Bangladesh is gradually moving towards international accounting practice. International accounting standards developed and issued by International Accounting Standards Committee (IASC) have received much importance because of their contribution towards harmonization in the accounting and reporting practices of individual countries. The IASC, however, cannot directly influence the accounting practices of its member countries. The implementation of accounting standards is left to the members of accountancy bodies. In countries where professional accounting institutions are not strong, the implementation of accounting standards would not be effective. The professional bodies may persuade the government to amend the law so that the standards issued by the IASC can be adopted. The institute of Chartered Accountants of Bangladesh as a member of this body (ICAB) is entrusted with the task of adoption and enforcement of standards in Bangladesh. The technical and Research Committee of ICAB selects, reviews and modifies the standards, where necessary, to conform to the local requirements. The ICAB through its members used to comply with accounting standards adopted along with the disclosure provisions of the Companies Act, and the disclosure requirements of the stock exchanges.

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Age of the company as a factor of influence on disclosure

The age of the company is considered as a vital factor for determing the level of corporate disclosure. The old companies are more experienced and try to accommodate more information in their annual reports in order to enhance their reputation and image in the market. Long & Lundholom (1993.) demonstrate that the older and well-established companies may tend to disclose more information in their annual reports because of their competitive cost advantage. The general view is that old companies are more sincere to adhere to the rules and regulations. On the other hand, new and younger companies may face competitive disadvantage when they disclose certain information specifically on product development, research and capital expenditure (Owusu-Ansah, 1998) The new companies may, therefore, have less incentive to disclose more information. It is, thus, inferred that there is a positive association between the age of the company and the level of disclosure. That is the old companies disclose information to a greater extent than that of new companies. Therefore, the following is proposed: H1: There is a significant association between company age and the extent of disclosure.

The companies are classified into three categories under this variable. Firstly, companies registered prior to 1st January 1972 are grouped in the category of very old companies. The companies registered after 1st January 1972 but before 1st January 1986 are referred to as old companies. The companies registered after 31st December 1985 are regarded as new companies.

DISCLOSURES IN COMPANY ANNUAL REPORTS

Balance sheet disclosures

The companies Act, 1994 contains a disclosure provision, which requires a company to disclose certain balance sheet and profit and loss account items for external users. Every company incorporated under the Act is required to comply with the disclosure requirements. Balance sheet, a major statement of the corporate report, provides information in respect of assets and liabilities. The difference between assets and liabilities is the owners' equity. All information should be disclosed that is necessary to make the balance sheet clear and understandable. A balance sheet of a company can be presented either in horizontal form or vertical form. Whichever method of presentation is used, a company should disclose amounts for assets and liabilities expected to be recovered or settled before or after the balance date. As per section 185 of the companies Act, the items of information required to be disclosed in the balance sheet are: current assets including cash, receivables, advances, inventories and other current assets; non-current assets such as building, land, plant and machinery, furniture, vehicles, investment, intangibles assets etc.; current liabilities - sundry creditors, unclaimed dividends, unpaid dividends, short-term bank loan, provisions and others; non-Current liabilities - loans from banks, loan from directors, interest during construction period, debentures etc.; shareholders' equity - share capital number of shares hold by Directors, various reserves, retained earnings and particulars of different classes of ordinary and preference shares.

It is to be noted that if a company provides total amounts on the face of the balance sheet, sub-classifications of the each items presented in respect of assets, liabilities and equity need to be provided in the notes to the balance sheet.

Income statement disclosures

Income statement of a company is to be drawn up to give true profit or loss of the company for the financial year. The profit and loss account focuses on the ongoing operations over a period of time, highlighting the flow of revenues and expenses during the period. The various items relating to the income and expenditure of a company are to be arranged under most convenient heads. The items of information in respect of twelve months period presented in the income statement should cover: the turnover, aggregate amount of sales, commissions, brokerage and discount on sales other than usual trade discounts; the value of raw materials consumed; opening and closing stock of goods produced and giving the quantities thereof; amount of work in progress at the beginning and end of the year for companies having work in progress; incase of trading companies, amount of quantity of purchases, opening and closing stock for each classes of goods traded; income from investment distinguished between trade investment and other investments; profit or loss on sale of investments; profits

and losses on income from exceptional items; operating expenses such as depreciation, salaries and wages, fuel and power, rent, rates, taxes, insurance, repairs and maintenance directors, remuneration, patents, trade mark, copyright etc. written off, auditors' remuneration etc.; non-operating income and expenses; expenditures and earnings in foreign currencies; information regarding the licensed capacity, installed capacity and the actual production, value of percentage of all imported and local raw materials, spare parts and components consumed. Likewise balance sheet, a break up picture of income statement items is essential as notes to the statement for clear understanding.

Disclosures of accounting policies

The Institute of Chartered Accountants of Bangladesh has issued the accounting standard on disclosure of accounting policies. This standard deals with the disclosure of significant accounting policies followed in the preparation of the financial statements. The following are the provisions of the standards.

- 1. All significant accounting policies adopted in the preparation and presentation of financial statement should be disclosed.
- Any change in the accounting policies which has a material effect in the current period or which may have a material effect in later period should be disclosed.
- Policies adopted for depreciation, goodwill, research and development expenditure, deferred revenue expenditure, foreign currency translation, preliminary expenses, deferred taxation, warranties and claims, purchase, sales etc.
- 4. Valuation of investment, fixed assets, inventories and treatment of contingent liabilities.

Disclosure should also include those events occurring subsequent balance sheet date.

Directors' Report

Section 184 of the companies Act makes it obligatory on the part of the directors to submit a report along with the balance sheet in the general meeting which is know as 'Directors Report'. The report is required to state :(a) The state of the company's affairs; (b) the amount, if any proposed by the Board to carry to any reserves; (c) the amount if any, recommended for dividends (d) material changes and commitments, if any, affecting the financial position of the company which have occurred between the date of the balance sheet and date of report (e) any changes which have occurred during the financial year in the nature of the company's business, in the company's subsidiary and generally in the classes of business in which the company has an interest.

Previous research indicates management's comments in annual reports to be informative in respect of companies' future performance (Bryan, 1997; Boo & Simnett, 2002). The support for the inclusion of prospective information in annual reports is growing (Collins et al. 1993; Clarkson et al 1992). Companies in Australia are required by Laws to provide in the directors' report any post balance sheet events. They may significantly affect future results (boo & Simnet, 2002).

Historical Summary disclosures include the brief summary of the company such as name of the company, country of incorporation and description of the nature and activities of the company. The company shall disclosure the financial results of the past five years, various ratios, comparative balance sheet for two years, list of directors, name of the top employees & their remuneration. Some other statements i.e. value added statement, sources and application of funds statement and report of the chairman shall also be included in the company's reports.

In fact, corporate annual report covers a variety of information for various stakeholders in statement form for balance sheet, income statement, cash flow statement, and historical summary. Directors' report gives a brief description of immediate past activities and highlight on the future. Information relating to accounting policy is provided in the notes. In the present study an individual disclosure index was constructed and then compared to the age of the company. It was hypothesized that there is a significant association between age of the company and the level of disclosure.

A number of sub-hypotheses were formulated to test the calculated individual indexes for five categories as above. The null forms of the sub-hypotheses are as follows:

- H/1: There is no significant association between the age and the level of disclosure of balance sheet items.
- H/2: There is no significant association between the age and the level of income statement items.
- H/3: There is no significant association between the age and the level of disclosure of accounting policies items.
- H/4: There is no significant association between the age and the level of disclosure of information on directors' report.
- H/5: There is no significant association between the age and the disclosure of information on historical data.
- H/6: There is no significant association between the age and the disclosure of other financial statements.
- H/7: There is no significant association between the age and the disclosure of valuation methods.

METHODOLOGY AND RESEARCH DESIGN

Selection of sample

The sample of the study is drawn from the two stock markets namely Dhaka Stock Exchange (DSE) and Chittagong Stock Exchange (CSE). Enlisted companies on the Stock Exchanges at the end of 1999 were 212. Out of these companies, 38 companies under the categories of banks, insurance, service & real estes were excluded as the study is confined to only non-financial manufacturing companies. The number of companies, thus, arrived at 174. These companies were then contacted by post for a copy of their audited annual reports for the financial year ended in 1999. But responses from the company offices were very poor. Only 7 annual reports were available by post. Decision was then taken to visit the company head offices in order to collect reports as far as possible. In this way another 87 annual reports of non-financial companies could be

collected. These 94 (7 + 87) companies whose annual reports were collected constitute the sample of the study. Hence, the actual sample represents about 54 percent of population of the non-financial manufacturing companies listed on the Stock Exchanges. Of the sample, 24(25.5 percent) are from textile sector, 19 (20.2percent) are from engineering sector and 16 (17percent) companies each from pharmaceutical and food & allied sectors. Only 2 companies are from fuel and power sector (see Table-4-1)

Table 4.1: Sample of the study by industry type

Industry type	Popul	lation	Sample				
	Number	%	Number	%			
Engineering	22	12.6	19	20.2			
Food & Allied Product	33	19.0	16	17.0			
Fuel & Power	4	2.3	2	2.1			
Jute	7	4.0	0	0.0			
Textile	42	24.1	24	25.5			
Pharmaceutical & Chemicals	25	14.4	16	17.0			
Paper & Printing	8	4.6	1	1.1			
Cement	5	2.9	4	4.3			
Miscellaneous	28	16.1	12	12.8			
	174	100.0	94	100.0			

Disclosure index

The disclosure index used in this study is based on the disclosure framework provided in the Companies Act, 1994. Also, relevant research studies and the accounting standards adopted in Bangladesh are taken into account while developing the disclosure index. The list of items in the disclosure index was finalized on consultation with the experts in this line. The items of information are categories into five information types viz. (i) Balance sheet items, (ii) Income statement items, (iii) Accounting policies items, (iv) Directors' reports items and (v) Historical summary items. Distribution of 160 items of information to different parts of the annual report can be seen in Table 4-2.

Table 4.2: Distribution of Information Items

se Part Christian (September 1987) and the Christian Christian (Septemb	No. of Items	%
Balance Sheet Items	66	41
Income Statement Items	44	28
Accounting Policies Items	23	14
Directors' Report Items	08	05
Historical Summary Items	19	12
Total	160	100

The approach that has been adopted in the present study to measure the level of corporate disclosure is the unweighted approach. Several previous researchers use this approach in their studies (Cook, Wallace, Hossain and Karim). This approach is based on the assumption that each item of disclosure is equally important (Wallace, 1988). Attention is not given on one particular group but rather all users of annual reports. The only consideration here is whether or not a company discloses an item of information anywhere in the annual reports. Assign score one if a company discloses an item of information and in the case of non-disclosure assign score zero. The total disclosure (TD) score, thus, arrives at for a company is additive as follows:

Where, d=1 if the item d_1 is disclosed 0 if the item d_1 is not disclosed n= number of items.

$$TD = \sum_{i=1}^{n} di$$

The problem of weighted approach is that if the different user groups are asked to weigh the importance of different items they may give different weights to the same items of information. That is why the present study considered unweighted index approach in measuring the level of corporate disclosures.

The statistical tools used are chi-square, contingency-coefficient and Lamda. The inferences are drawn on the basis of the results obtained. The contingency coefficient of correlation along with chi-square is useful to find out the measure of association as both indicate similar directions of association. Chi-square test is usually used on the assumption that none of the cells of the table has low frequency. When the expected value of one or more cells is less than five the use of chi-square in measuring the association would not be useful. In that situation, an alternative measure, Lamda, overcomes the limitation of expecting frequencing (Cooke, 1989, P. 201) Lamda varies between zero to one where zero indicates no association and one indicates that the variables are perfectly associated.

EMPIRICAL RESULTS AND DISCUSSION

Level of disclosure by age of the sample companies

The disclosure scores of the samples companies provide a better insights of the disclosure levels. The companies on an average disclose 43.53 per cent of the items selected. The minimum score is only 17.5 per cent and the maximum is 72.5 per cent. Table 5-1 shows that 36.17 per cent of the companies disclosed items of information in the range of 31-40 per cent, 22.34 per cent companies in between 41-50 per cent and 20.21 per cent in 51-60 per cent. It shows the decreasing trend in the level of corporate disclosure with the increase of disclosure index. Again, analysis of level of disclosure by age of the company indicates that there is no association between age of the company and disclosure level. It is inconsistent with the result of Owusu-Ansah (1998) where company age has significant positive effect on mandatory disclosure.

Table 5.1: Disclosure of Information by Age

Disclosure Index	Ag	Total		
201 sh	Very old Company	Old Company	New Company	\$4016 OLD 1
Upto 20		Harris Policial India	reneral come	1 1 1
21 - 30	1	3	4	8
31 - 40	4	14	16	34
41 - 50	rode o jetov s	8	12	21
51 - 60	4	10	5	19
61 - 70	2	7	1	10
71 and above		1	and the same of	1 1
Total	12	43	39	94

Chi-square 12.213 Significance 429 Contingency Coefficient

Lamda .000

Disclosure of balance sheet information

The range of scores of balance sheet disclosure index varied from 19.70 per cent to 74.24 per cent compared to a range from 17.50 per cent to 72. 50 per cent for the overall disclosure index. Analysis of balance items of information reveals that out 66 items ten items were not disclosed by any of the sampled Companies. These are :

- 1. Interest Accrued on Investment
- 2. Bills of exchange
- 3. Amount of goodwill
- 4. Unsecured loans from promoters contingent liability
- 5. Excise duty matters in dispute or under appeal
- 6. Customs duty matters in dispute or under appeal
- 7. Uncalled liability on partly paid up shares.
- 8. Income tax and sales tax matters under appeal
- 9. Guarantees given to banks in respect of third parties.
- 10. Industrial relations matters such as bonus in appeals.

Table 5.2: Disclosure of Balance sheet Information

Disclosure	Age	of the Comp	pany	Total
Index	Very old Company	Old Compan y	New Company	367 (8 - 10 f.) 367 (8 - 10 f.)
Upto 20			1	1
21 - 30	2	3	3	8
31 - 40	3	16	22	41
41 - 50	3	9	9	21
51 - 60	2	10	3	15
61 - 70	2	4		6
71and above		1	1	2
Total	12	43	39	94
Chi-square	Significance	Contingen	cy Coefficient	Lamda

<u>Chi-square Significance Contingency Coefficient</u> 13.864 .309 .359

sheet disclosure. It is also evident from the analysis of Lamda test.

Table 5.2 shows that 53 per cent of the companies surveyed have a score of less than 41 per cent. The number of companies is declining thereafter with the increase of index score. Again, 66 per cent of the old and very old companies have a score of 50 per cent and below whereas 33 per cent of the new companies have a score in excess of 50 per cent. This analysis thus reveals that there is no association between the age of the companies and level of balance

.000

Disclosure of income statement information

Profitability information of a company can be obtained from the income statement. This study has selected 44 items of information to be disclosed in the income statement. The disclosure index calculated on 94 companies is presented in table 5-3. The table shows that the highest score is 81.82 and the lowest is 11.36. The disclosure level in income statement showed slightly better than that of Balance sheet. The disclosure of information, however, in the following areas was found to be absent:

1. Amount and quantities of sales in respect of each class of goods

- 2. The amount reserved for repayment of share capital.
- Disclosure of pension costs.
 - 4. Other income by way of interest specifying the nature of income.
 - 5. Profit and losses on income from exceptional items.
 - 6. Any item in the profit and loss account affected by any change in the basis of accounting.
 - 7. Commission or other remuneration payable separately to a managing agent or his associate.

Table 5.3: Disclosure of Income Statement Information

Disclosure	Age	Total		
Index	Very old Company	Old Company	New Company	
Upto 20			2	2
21 – 30		5	9	14
31 - 40	5	8	10	23
41 - 50	1	9	7	17
51 - 60		7	8	15
61 – 70	2	3	2	7
71 and above	4	11	1	16
Total	12	43	39	94

Chi-square	Significance	Contingency Coefficient	Lamda
22 175	036	.437	.042

It is interesting to note that 67 per cent of the old companies as a whole occupies scores of 41 per cent and above level. It can also be seen from the table that out of 55 old companies 27 per cent have a score of 71 per cent and above level. As against this 54 per cent of the new companies have a score of less than 40 per cent.

Chi-square, contingent coefficient and Lamda all suggest that there is an association between the age and the disclosure of income statement information.

Disclosure of accounting policies information

Information relating to accounting policies of a company is disclosed in the annual report mostly as notes.

The study observed that the following items of information in respect of accounting policies were not disclosed any one of the surveyed companies.

- 1. Change in the method of accounting
- 2. Treatment of goodwill
- 3. Treatment of research and development expenditure.
- 4. Disclosure of events subsequent to the balance sheet.
- 5. Treatment of preliminary expenses.
- 6. Treatment of contingent liabilities.
- 7. Policy of warranties & claims.
- 8. Methods of advance payments.
- 9. Purchase and sales policies.

As can be seen from the Table 5-4 that 73 per cent of companies have disclosed 40° per cent and below of the items selected. The number of companies is

declining with the increase of disclosure index. Analysis of the age of the company and disclosure index shows that majority of the companies in the category of old and new company has showed score of less than 41 per cent. It indicates that the age of the companies is unrelated to the level of disclosure index. Lamda also reveals the same observation.

Table 5.4. Disclosure of Accounting Policies

Disclosure	Age of the Company				
Index	Very old Company	Old Company	New Company		
Upto 20	2	and religious	5	7	
21 – 30	2	14	9	25	
31 – 40	4	15	18	37	
41 – 50	2	7	5	14	
51 - 60	1	5	2	8	
61 – 70	1	1		2	
71 and above		1		1	
Total	12	43	39	94	
Ch:	C::C	Casting and Casting at the			

Chi-square Significance Contingency Coefficient Lamda 13.477 .335 .354 .000

Disclosure in directors' report

Company information can also be obtained from the directors' report. The study observed that majority of the companies under study have disclosed a very low level of information in the directors' report.

Table 5.5: Disclosure in Directors' Report

Disclosure		Total		
Index	Very old Company	Old Company	New Company	
Upto 20	1	5	9	15
21 - 30	. 3	13	16	32
31 - 40	7	15	9	31
41 - 50		9	esic 10 5 minute	14
51 - 60	48.030000	6 10 - 0.00	colora-la er e	tidlet te
61-70	1	1	- Income	2
71 and above		20 at 1 100 mil	et est fest seven	1
Total	12	43	39	94

Chi-square Significance Contingency Coefficient Lamda 12.719 .122 .345 .007

Table 5.5 reveals that 80 per cent of the old companies and 87 per cent of the new companies have disclosure index of 40 per cent and below of it Lamda suggests no association between the age of the company and the disclosure in directors' report.

Disclosure of historical summary

Information presented in the annual report is somewhat historical in nature. This information is very useful to the decision makers. In this section an attempt is made to know whether there is any association between the age and the disclosure of historical information.

Table 5.6: Disclosure of Historical Summary

Disclosure	and of the	Age of the Compa	ny	Total
	Very old	Old Company	New Company	na maniferance. But maniferance
21 - 30	Company	2	3	5
31 - 40	3	4	6	13
41 - 50	2	12	16	30
51 - 60	3	8	7 made	18
61 - 70	2	11	3	16
71 and above	2	6	4	12
Total	12	43	39	94
Chi-square 9.460	Significance .489	Continge .30	ncy Coefficient)2	<u>Lamda</u> .016

Table 5.6 shows that 75% of very old companies and 86% of old companies have score 41 per cent and above level. It is interesting to note that 58% per cent of old and very old companies have a score in excess of 51 per cent. While the same percentage was scored by 36 per cent of the new companies. Lamda reveals little association between the age of the company and the disclosure of historical summary.

Other disclosures

12..374

Statement of Changes in financial position

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Companies are required to prepare statement of changes in financial position. This statement, essentially, provides an analysis of changes in financial position for a particular year. There are two viewpoints of a statement of changes in financial position such as changes in working capital and changes in cash. IAS-7 provides a guideline for the preparation and presentation of cash flow statement.

Table 5.7: Title Used in Statement of Changes in Financial Position

Title of the Statement	Age	Age of the Company			
Title of the Statement	Very old Company	Old Company	New Company		
Not disclosed Cash Flow Statement Statement of Sources and	1 27	22 2	1 30 3	79 5	
Application Fund Statement of Cash Flow	3	1	3	7	
Funds Flow Statement Total	32	25	37	94	
Chi-square Significance	<u>Cor</u>	tingency Coet	ficient	<u>Lamda</u> .000	

Table 5-7 shows the number and categories of companies used the concepts. Out of 94 companies 86 companies used cash flow statement. Again, of the 86 companies 79 companies have used cash flow statement as the title while the remainder as statement of cash flow . Funds flow statement is found used by a very negligible number of companies. Lamda suggests that there is no association between the age and the title used by the companies under study.

.212

Method of depreciation used

Table 5.8 shows the methods of depreciation used by the companies under study. Reducing balance method was used by the majority companies while straight line method by 22 per cent of companies only, and 12 per cent did not disclose any information. Of the companies using reducing balance method 58 per cent are old companies and 42 per cent are new companies. Analysis shows that there is no significant difference between one group of companies and another. Lamda suggests that there is no association between the age and the methods of depreciation adopted.

Table 5.8: Method of Depreciation

Method of	Α	Total		
Depreciation	Very old Company	Old Company	New Company	
Not Disclosed Reducing Balance Method	2 5	3 31	6 26	11 62
Straight Line Method Total	5 12	9 43	7 39	21 94

Chi-square	Significance	Contingency Coefficient	Lamda
5.228	.265	.167	.000

Valuation of inventories

The general rule for current assets provides that current assets should be valued at the lower of cost or current market value. Inventories may be valued at lower of cost and net realizable value. Procurement cost may also be used as a basis of valuation of inventories.

Table 5 9. Rasis of Valuation of Invon

Valuation of Inventories	Ag	e of the Comp	any	Total
ger in Final claf Position	Very old Company	Old Company	New Company	Mar.
Not disclosed	3	6	3	12
Lower of Cost and Net Realisable Value	3	16	18	37
At Cost Which is Lower than Market Price		4	4	8
At Moving Average Cost			1	1
Lower of Weighted Average Cost and Net Realisable Value	1	1		3
Lower of Average Cost and Net Realisable Value	2	8	6	16
At Procurement Cost		1	1	2
At Weighted Average Cost	1	4		5
At Average Cost	2	3	5	10
Total	12	43	39	94

Chi-square	
12.236	

Signi	ficance
	ricarice
770	

Table 5-9 shows that 39 per cent of companies surveyed considered lower of cost and net realizable value as the basis for valuing inventories. While only 9 per cent of companies considered cost which is lower than market price. Thirteen per cent of companies included in the survey did not disclose it. Lamda reveals that there is no association between the age of the companies and basis of valuation of inventories.

CONCLUSION AND RESEARCH LIMITATIONS

The study empirically tested the disclosure performance of the sample companies listed in Bangladesh. The study reveals that the listed companies poorly maintain disclosure compliance. They disclosed, on an average, 43.53 per cent of the items of information selected. The minimum score as found in the study is 17.3 per cent and the maximum is 72.50 per cent. It shows the decreasing trend in the level of corporate disclosure with the increase of disclosure score. Specific and individual assessments have been made in this paper to examine the extent of disclosure level by the selected companies. This paper did not support the hypothesis that old companies will provide more information than that of new companies. The conclusion can be drawn from the analysis that there is no association between the age and the specific disclosures made in balance sheet, directions' report, and historical summary.. However, a little association can be seen between the age and the income statement and between the age and the accounting policies.

The study saw that company disclosed more information on cost of sales related information, details of expenses but less compliance with disclosure regulations. . Additionally, legislative steps cannot bring about improvement in the mandatory disclosures. The legislations can serve a good purpose for monitoring the corporate disclosure performance but that cannot be effective unless backed by laws. Under the Companies Act, 1994 no companies require to prepare either a funds flow statement or a cash flow statement. However, IAS-7 requires the presentation of cash flow statement and Bangladesh Accounting Standards accept this standard. IAS-7 stated that a cash flow statement can be prepared in two ways viz, direct method and indirect method. Although the Companies Act has not included the provision of cash flow statement, majority of the companies (around 92 percent) under study provides cash flow statement in the reports voluntarily. Companies Act should include the provision of preparing cash flow statement.

Conclusions drawn from the findings cannot be generalized as it represents only 54 percent of the companies listed on stock exchanges. Future research should investigate disclosure performance taking into account the whole listed companies. Use of multivariate regression model would be more effective to test the hypothesis where mandatory disclosure will be a function of age while controlling for other confounding factors. Moreover, results of this type of research depend largely on the development of disclosure index. Utmost care, therefore, should be taken while selecting the information items.

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EGO STATES OF THE EMPLOYERS WITH AND WITHOUT CHILD LABOURERS IN RAJSHAHI CITY

Here . . . arby (1941) American on incurrence and incurrence and incurrence and Child Cod Murshida Ferdous Binte Habib* BURNET TO THE BURNET BURNET BURNET STREET OF THE BURNET OF THE BURNET OF THE BURNET OF THE BURNET.

ABSTRACT: The present study was designed to measure different types of Ego-states of the employers who employed child labourers and those who did not. The Bengali version of the Ego State Inventory was applied on a sample of 545 employers of child labourers in and around Rajshahi city. Among them 322 employers were with child labourers and 223 were without child labourers. It was found that there were significant differences in Adult, Punitive Parent and Rebellious Child ego states between these two groups of employers. The study also revealed that the employers with higher Adult ego state did not employ children as labourers.

INTRODUCTION PROTECTION OF US A MISSISSIPPLY OF STATE OF THE LETTER OF T Like other developing countries, child labour is a serious problem in Bangladesh. Along with signing of CRC some other steps have also been taken to eliminate child labour from the country. The mass media in Bangladesh are promoting awareness among the common people not to employ children as labourers and strictly not in hazardous jobs. Parallel to the work of the Government Agencies, many Non Government Organizations also launched some programmes for the child labourers in Bangladesh. Among the International agencies UNICEF and ILO came forward with new programmes that were implemented by the local NGOs. It is assumed that more than six million children are still working in hazardous or non-hazardous jobs, in formal or non-formal sectors, in rural and urban areas in Bangladesh. However, when children are seen engaged in different works and in risky jobs as well, employed by adult and literate people, automatically the question comes whether these employers possess sound personality. Though many research works were done on child labour, the issue has not got much importance from psychological perspective.

There are two types of employers in Bangladesh. One type never employs children and the other type employs children as labourers. The study of Habib and Sufi (2003) revealed that a large majority of employers like to engage children than adults for work in almost every sector (whether in formal, informal or in domestic sectors) because they are in abundance at cheaper wages. On the other hand, some employers do not like to employ children as labourers. Those who do not employ children could take the opportunity to get their works done by the children at lower

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cost. But they avoid employment of children and taking their services, these employers are not necessarily the educated persons or persons concerned of the labour laws. It was found many of them are not well educated but conscious not to employ children. Their ego leads them not to appoint the child labourers. Thus the researcher attempted to study the Ego States of the employers.

Ego State, developed by Eric Berne (1961), is the strongest determinant of Personality and Attitude. An ego state is a system of feeling and related behaviour patterns. At any moment an individual behaves or "comes on" from any one of these principal Ego States, the Parent, the Adult or the Child. Based on the theory of Eric Berne, McCarley (1971) distinguished two subdivisions in the Parent and Child Ego-States that makes five Ego-States in all. Berne (1961) stated that 'parent' is the 'Taught' concept of life, 'adult' is the 'Thought' concept of life and 'child' is the 'Felt' concept of life. Where the parental part can be supportive or critical, adult part is rational and the child part is free and natural and adapted to parental influences. However, these three parts of personality give direction to behaviour by indicating which signals to send, and where to send them. Understanding an individual's ego states enables others to expect and predict certain behaviours, especially on the intrapersonal and interpersonal level. Thus it enables human beings to communicate to others and, therefore, to create, develop and maintain better interpersonal relationships.

It is assumed that by measuring ego states the innate behaviour of the employer can be explored. By asking questions directly to the employers regarding the reasons behind employing child labour the actual facts are not found most of the time. But if the ego states of the employers, who employ child labourers and who do not, can be measured and compared the type of personality can be determined. It will help to understand whether there is any relation between the types of the employers' ego states and their willingness or unwillingness to engage children as employees and their treatment pattern to children. Because in a recent study it was also found that child labourers possessed positive attitudes toward those employers who scored high on adult ego state (Habib and Sufi, 2004). Thus the researcher planned to carry on a comparative study on Ego States between the employers who engage child labourers and the employers who do not engage the children as labourers.

METHODS Sample

A total of 545 employers were included in this study who were divided into two broad categories of employers with and without child labourers. There were 322 employers who employed child labourers and in the other group there were 223 employers who did not employ child labourers. They are the owners of various business set up like husking or rice mill, tea stall and restaurant, grocery shop, metal furniture workshop, light engineering and auto mobile workshop, vulcanizing workshop, local garments and textiles etc. Some of these employers employ children as lobourers along with adults. Women who engaged children or adults as domestic workers were also considered as employers. Moreover, some are the owners of agricultural field where they engaged children and adults as well as labourers. Their age ranged from 20 to 50 years. Most of them belonged to middle class and their educational qualification varied from primary to post graduation.

The employers were selected at random from Rajshahi City. In this study the ego states of those employers were measured who directly supervise the employees. In

household sectors, the ego states of the housewives were measured, in agricultural sectors- the ego states of the particular men or women were measured who supervise and pay the wages. In industrial sectors, the persons who supervise or give direct decisions were considered as employers.

Study area

The study was conducted in Rajshahi City. The city is 10 kilometer long and 3 kilometer wide along with the Padma. It is the dwelling place for about 600,000 people. Most of the people here belong to middle class with few exceptions. They are involved in different jobs and business. It is mostly a city of educational institutions and there is no heavy industry. Therefore, people of Rajshahi are not too rich or too poor. The life and livelihood is homogeneous here.

Instrument used

The Bengali version of the Ego State Inventory (ESI), developed by McCarley (1971) of Alberta University and published by Stoelting Company, was used to measure the ego states of the employers who employed children and who did not. The original scale was adapted in Bengali by Nazneen (1994) at Rajshahi University Institute of Bangladesh Studies. The Ego State Inventory measures five ego states that are:

1. The Punitive Parent (PP) is a subdivision of the Parent Ego state and contains a huge collection of "no's", "don'ts" and admonitions. This is the center of the rigidly internalized data which comes from authority. This kind of Parent is seen as non- rational, prejudiced, arbitrary and usually prohibitive.

2. The Nurturing Parent (NP) which has sometimes been equated with the

"Good Parent" is often seen in supportive or sympathizing behaviour.

3. The Adult (A) is a data processing computer in the individual that estimates probabilities about reality which are essential for him to interact effectively with his environment. Old data is checked out in the light of new information and then updated or discarded. It is that part of the individual which calculates solutions to problems.

The Rebellious Child (RC) is the impulsive, assertive and self- indulgent part of the personality. It is expressed as a resentment of authority and a lack of

concern for the rights of others.

5. The Adaptive Child (AC) is formed by the influence of parental demands. Compliant and withdrawal behaviours are common.

The inventory contains 52 items which consists of cartoon drawings of two or more people in social situations. In each cartoon the first person makes a statement or asks a question. The second person in the cartoon is provided with five choices of response that he could make. The subject is asked to choose one of the statements he imagines the second person would make and mark his answer on a separate answer sheet. The ESI yields five scores, one for each of the ego states: Punitive Parent (PP), Nurturing parent (NP), Adult (A), Rebellious Child (RC) and Adaptive Child (AC). The inventory is administered without time limit, but subjects were encouraged to "work as quickly as possible". Standard scoring procedure was used to get the scores.

PROCEDURE

To collect data for this study the researcher met many employers of different sectors in Rajshahi city. When the researcher met the employers she first talked to them to build rapport. Then she requested them to answer the Ego-State inventory and to fill up a personal data sheet. In most of the cases the respondents asked the researcher to come at some other time when they were relatively at leisure. When the employers agreed to answer, the researcher gave them answer sheet and Ego State booklet along with a personal data sheet. When the employers completed answering she took back the ESI booklet, the answer sheet and the personal data sheet. The researcher also visited many families who governed their child employees. Then she requested them to give the answers. When the respondents agreed she gave them the materials and took back when they finished answering.

RESULTS

To find out whether there were any significant difference in Ego States of the employers with and without child labourers t-test was used. The results are presented in the following tables.

Table 1: Adaptive Child (AC) Ego States of employers with and without child labourers

Groups	N	M	SE _D	df	t	level of significance
Employers with child labourers	322	12.72	11.35	10.68	Tringer Salah	The state of
Employers without child labourers	223	12.19	0.37	543	1.45	NS

Table 2: Rebellious Child (RC) Ego States of employers with and without child labourers

Groups	N	М	SE _D	df	t	level of significance
Employers with child labourers	322	7.13	FICKS B	Cities of the Ci	r Kritikasi Kritikasi	
Employers without child labourers	223	5.42	0.34	543	5.06	.001*

Table 3: Adult Child (A) Ego States of employers with and without child labourers

Groups	N	M	SE _D	df	i läi t ua viil yiloi	level of significance
Employers with child labourers	322	12.63	n elle ny so	.0 AF 12		Agrij Darker. Dagrija ar is
Employers without child labourers	223	16.28	0.26	543	13.94	.001*

Table 4: Nurturing Parent (NP) Ego States of employers with and without child labourers

Groups	Ņ.	л.М	SE _D	df	n t	level of significance
Employers with child labourers	322	11.48			3 3 H X	de ar er er merse silving
Employers without child labourers	223	12.20	0.32	543	2.27	NS

Table 5: Punitive Parent (PP) Ego States of employers with and without child labourers

Groups	N	М	SE _D	df	t Marketu	level of significance
Employers with child labourers	322	8.05				reserved Auto offs (chartes 10
Employers without child labourers	223	5.93	0.35	543	6.07	.001*

The above tables showed that there were significant mean differences in Rebellious Child (RC), Adult (A), and Punitive Parent (PP) Ego States between the employers with and without child labourers but the differences between Adaptive Child (AC) and Nurturing Parent (NP) of these two groups were not significant.

DISCUSSION

Child labour is a sheer reality of the present century. Although various steps have been taken world wide to combat child labour children are found working ubiquitously. Therefore, the present researcher tried to investigate the phenomenon from psychological viewpoint. She tried to deal the issue by studying the employers who employed the children as labourers. In the present study the researcher attempted to find out an underlying trait of personality- Ego State- that gives direction to behaviours and attitudes. Thus the researcher designed to carry on a comparative study on ego states between employers who employed children and those who did not.

However, the results showed that there were differences in all types of ego states between these two employer groups. But applying t-test significant differences were found between them in three types of ego states, Rebellious Chid (RC), Adult (A), and Punitive Parent (PP) ego states. The results also indicated that employers with higher Adult (A) ego state did not employ children as labourers.

The results of the study, however, can be interpreted in the light of ego state theory of Berne (1961). The theory states that Rebellious Child (RC) ego state is the impulsive, assertive, and self-indulgent part of the personality. It is expressed as a resentment of authority and a lack of concern for the rights of others. However, employers who appoint child labourers had higher RC ego states than employers who did not appoint them. Therefore, it can be said that as the RC ego state dominant among them these employers act suddenly without thinking carefully what may happen because of their activities. They are impulsive and do not find anything wrong in employing children as labourers.

Similarly, Punitive Parent (PP) ego state is higher among employers with child labourers than their counterparts. The theory of Berne denotes that this kind of ego state is seen as non-rational, prejudiced, arbitrary, and usually prohibitive. This is the center of rigidity internalized data which comes from authority. Therefore, it can be assumed that the employers with high Punitive Parent (PP) ego state who employed children as labourers can project their admonitions and arbitrary attitude more easily to child labourers than adult labourers.

It is interesting to note that although there are differences in Adaptive Child (AC) and Nurturing Parent (NP) ego states between these two groups the difference is not significant. As Adaptive Child (AC) is compliant and Nurturing Parent (NP) is supportive or sympathizing in behavour perhaps both types of employers with AC and NP ego states think and behave in the same way. Thus the difference between them is not significant.

The result also indicated that there was significant difference in Adult (A) ego state between these two groups of employers. It was found that employers who did not employ children had higher Adult ego state than employers with child labourers. According to the theory of ego states as Adult ego state is dominant in them these types of employers try to behave effectively with their environment. Their data processing system motivates them not to employ children as labourers to avoid many hazards and not to go against the current labour laws of the country. Because of this type of ego state they do not like to employ child labourers though the supply is plenty at lower cost.

Finally it can be said that the present study shows that ego states, particularly Adult ego state, play a determining role in taking decision whether an employer engages a child as labourer or not. Therefore, enhancement of adult ego states of the employers through education, awareness development, and exposure to media can help the elimination of child labour practice from the country to some extent. However, as the present study is a pioneer one, further research in this area is recommended.

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COINTEGRATION BETWEEN REAL EXCHANGE RATE AND REAL EXPLANATORY VARIABLES IN SOME SOUTH ASIAN COUNTRIES

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ABSTRACT: Using yearly data for the South Asian countries Bangladesh, India and Pakistan, this paper demonstrates that all bilateral exchange rates for these countries have unit roots and, hence, are nonstationary. Consequently, it rejects the simple purchasing power parity (PPP) hypothesis as a long-run relationship. Use of Johansen's multivariate cointegration technique shows that real exhange rate is cointegrated with all other real variables. In particular, relative labour productivity is statistically significant with the correct sign for more than half of the country pairs for which cointegration is confirmed. This finding lends support to the Balassa-Samuelson (B-S) productivity bias hypothesis. These results also imply that nonstationary of real exchange rates and the consequent rejection of simple PPP can be consistent with the notion that real exchange rates revert to equilibrium in the long-run without deviating arbitrarily far from this equilibrium position.

INTRODUCTION

An important issue in international finance is the movement of real exchange rate and the variables which can affect it. In this paper, empirical results on this issue are presented for three south Asian countries – Bangladesh, India and Pakistan – all of which are developing economies. In addition, empirical tests are done on the acceptability of the purchasing power parity (PPP) hypothesis and the Balassa-Samuelson (B-S) productivity bias hypothesis which implies negative relationship between real exchange rate and real labour productivity.

This paper also analyzes nonstationarity of real exchange rates in three countries mentioned above. In particular, it deals with the question of whether or not real exchange rates are cointegrated with real variables, such as, terms of trade ratios, real trade balance ratios and relative labour productivity. Although the main concern of this paper is to examine the movement of real exchange rates, we first deal with the question of nonstationarity of the relevant variables. We then move on to the empirical results on the PPP and the B-S hypotheses.

There are several studies along this line. Kawai and Ohara (1997) examine nonstationarity of real exchange rates in G7 countries. Others include those by Baillie and Selover (1987), Edison (1987), Taylor (1988), McNown and Wallace (1990),

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Crowder (1996) Frootand Rogoff (1995) and Lothian and Taylor (1996). These works are mostly on the developed economies. Our study may add to the knowledge of this literature by bringing in empirical results on three important developing economies and thus may encourage further work in this direction.

Data for this study are taken from The World Table 1995 and World Development Indicators 2004 published by The World Bank. The study covers a

period of 32 years from 1973 to 2004.

The remainder of this paper is organised as follows: Section 2 explains unit root test and its results; Section 3 discusses the cointegration technique; Section 4 describes the results of cointegration study and Section 5 concludes the paper.

UNIT ROOT TEST

Theoretical Framework

Time series properties of real exchange rates and other real variables are to be checked before proceeding to test for long-run relationships to provide valid empirical evidence. Valid inferences from any empirical analysis must ensure all time series to be integrated of the same order to avoid spurious relationships and misleading conclusions. Regression results with nonstationary series differ from the conventional theory of regression of stationary series, that is, nonstationary series lead to spurious and misleading results. To test for unit roots, we apply the augmented Dickey-Fuller test which is generated from the regression of the form:

$$\Delta x_{t} = \mu + \gamma t + \alpha x_{t-1} + \sum_{j=1}^{k} \delta_{j} \Delta x_{t-j} + \varepsilon_{It}$$

$$(1)$$

$$\Delta^{2} x_{t} = \mu + \gamma t + \alpha x_{t-1} + \beta \Delta x_{t-1} + \sum_{j=1}^{k} \delta_{j} \Delta^{2} x_{t-j} + \varepsilon_{2t}$$

$$(2)$$

where x_t is any variable used in this paper, that is, real exchange rate, ratio of real trade balance, ratio of terms of trade, and ratio of labour productivity of Bangladesh, India and Pakistan, Δ indicates first difference operator, e.g., $\Delta x_t = x_t - x_{t-1}$ and k is the length of lag which ensures residuals to have white noise empirically. Equation (1) tests whether the variable x_t has a unit root while equation (2) ensures if the variable is integrated of order one. In (1) the null hypothesis is that x_t has a unit root, that is, H_{0I} : $\alpha=I$ and is rejected if the estimated value of α is less than the critical value. Rejection of the null hypothesis of a unit root shows the variable x_t to be stationary, that is, x_t is integrated of order zero $x_t \sim I(0)$. In (2) the null hypothesis is H_{02} : $\alpha=\beta=1$ which is rejected supporting the alternative hypothesis. Rejection of $\,H_{\it 02}\,$ with acceptance of $\,H_{\it 01}\,$ implies that the variable is nonstationary with the integration of order one.

Results of Unit Root Test

The results of unit root tests for both levels and first differences for real exchange rates are reported in Table 1. The results for levels show that the estimates are all less than the critical values. This implies that the null hypothesis of the presence of unit root can not be rejected which means that all three bilateral real exchange rates are nonstationary. If we move on to the first differences we find that the estimates are greater than the critical values for Bangladesh-India and Bangladesh-Pakistan implying that these are integrated of order one. But this does not hold good for the India-Pakistan case.

Table 1a: Results of Unit Root Test for Real Exchange Rate

Levels			First differences		
viola 1 alget	Without a trend	With a trend	Without a trend	With a trend	
Bangladeshi-	-1.2499	-2.2131	-4.2416	-3.9991	
India Bangladesh-	-1.3836	-1.9755	-4.4520	-4.3314	
Pakistan India-Pakistan	-1.4781	-1.6779	-2.9723	-2.9032	

Note: The critical value at 5 per cent level of significance for levels without a trend is -3.0115, with a trend is -3.6454 and that is -3.0119 is for levels without a trend and -3.6592 for first differences of the variables with a trend.

The nonstationarity of the real exchange rate observed for all three countries under study rejected the simple PPP hypothesis. Such rejection, however, does not mean that real exchange rate never reverts to an equilibrium relationship. Even nonstationary real exchange rate can be cointegrated with other real variables and be consistent with long-run equilibrium relationships.

The results of unit root for ratio of the real trade balance are given in Table 2 and show that the problem of nonstationarity exists for Bangladesh-Pakistan and India-Pakistan pairs. This first difference results show that both the variable for Bangladesh-Pakistan pair and India-Pakistan pair is integrated of order one.

Table 2: Results of Unit Root Test for Ratio of Real Trade Balance

	Le	vels	First differences		
	Without a trend	With a trend	Without a trend	With a trend	
Bangladeshi-India	-4.4558	-4.3756	-7.7745	-7.8240	
Bangladesh-	-2.9782	-2.9516	-4.4644	-4.3345	
Pakistan India-Pakistan	-2.5791	-2.8123	-3.5495	-3.4335	

Note: The critical value at 5 per cent level of significance for levels without a trend is -3.0119, with a trend is -3.6592 and that is -3.1004 is for levels without a trend and -3.7921 with a trend for first differences.

The results of unit root on ratio of terms of trade are shown in Table 3 and they are all found to be nonstationary for levels. Studying first differences it is found that the variable is integrated of order one for Bangladesh-Pakistan and India-Pakistan pairs.

Table 3: Results of Unit Root Test for R

CONTRACTOR OF STREET	Levels		First differences		
he ma assent	Without a trend	With a trend	Without a trend	With a trend	
Bangladeshi- India	-1.5206	-2.1062	-2.9682	-3.0969	
Bangladesh- Pakistan	-2.8458	-3.4587	-4.0388	-3.9018	
India-Pakistan	-2.8546	-3.3450	-4.0213	-3.8734	

Note: The critical value at 5 per cent level of significance for levels without a trend is – 3.0119, with a trend is -3.6592 and that is -3.1004 is for levels without a trend and -3.7921 with a trend for first differences.

The results of unit root for ratio of labour productivity, reported in Table 4, show that the variable is nonstationary for Bangladesh-India and India-Pakistan pairs for levels. For first differences, Bangladesh-India and Bangladesh-Pakistan pairs show that the variable to be integrated of order one.

Table 4: Results of Unit Root Test for Labour Productivity Ratio

	Le	Levels		ferences
- tax books tho	Without a trend	With a trend	Without a trend	With a trend
Bangladeshi-India Bangladesh- Pakistan	-1.4234 -4.7213	-1.3148 -3.6026	-3.3249 -4.2214	-3.2951 -4.6661
India-Pakistani	-1.5446	-3.7747	-2.5960	-2.1594

Note: The critical value at 5 per cent level of significance for levels without a trend is — 3.0199, with a trend is -3.6592 and that is -3.0294 without a trend and -3.6746 with a trend for first differences.

EMPIRICAL FRAMEWORK: THE COINTEGRATION APPROACH

Cointegration refers to the existence of long-run relationship (equilibrium) among economic variables. Cointegration ensures that the variables will revert to equilibrium in the long-run in spite of some short-run deviations. The cointegration testing procedure has been developed by Engle and Granger (1987), Juselius and Johansen (1990), Johansen (1988, 1991, 1995), and Johansen and Juselius (1992).

In this study, first Engle-Granger cointegration test are used to evaluate the long-run equilibrium relationship between real exchange rate and a set of real economic variables of three South Asian countries, Bangladesh, India and Pakistan. The test for the existence of cointegrating relationships between the nonstationary series of real exchange rate and that of ratio of real trade balance, ratio of terms of trade and ratio of labour productivity may ensure that real exchange rate does not deviate far apart from other variables and eventually reverts to long-run equilibrium.

The maximum likelihood cointegration technique developed by Johansen (1988, 1991 and 1995), Juselius and Johansen (1990) and Johansen and Juselius (1992) is then applied in this study. A set of variables x_t is said to be cointegrated of order (a, b) - denoted by $extit{CI(a, b)}$ if x_t is integrated of order a and there exists a vector etasuch that $eta'x_t$ is integrated of order (a, b). The merit of Johansen approach over the Engle-Granger method is that it controls for endogeneity and complicated shortrun dynamics, focusses on long-run relationships and stationary variables, and detects the existence of cointegrating vectors. In this approach, the evaluation of cointegration relationships among variables requires the use of test statistics which have a limiting distribution to be a function of single parameter. Generally this approach is applied I(1) variables, but presence of some I(0) variables is not a serious problem. Thus this approach will find cointegrating relationship between real exchange rate and other real economic variables of the South Asian countries which we studied. A vector autoregression of order k, Var (k) with Gaussian errors, of the cointegrating relationship among the p variables in x_t is expressed as:

$$x_t = \tau + \Pi_1 x_{t-1} + \dots + \Pi_k x_{t-k} + \varepsilon_t$$

$$(3) \quad \text{(3)} \quad \text{(3)}$$

where x_t is a $p \times T$ matrix of RER, RTB, RTT and LPR [here RER, RTB, RTT and LPR represent respectively real exchange rate, ratio of real trade balance, ratio of terms of trade and labour productivity ratio], T is the sample size and $\varepsilon_t = \varepsilon_1, \varepsilon_2, ..., \varepsilon_t$ are innovations of this process and assumed to be drawn from a p-dimentional i.i.d. Gaussian distribution with covariance arOmega . Subtracting x_{t-1} from both sides and rearranging yield the model in error correction form as:

$$\Delta x_t = \tau + \Gamma_I \Delta x_{t-1} + \dots + \Gamma_{k-1} \Delta x_{t-k+1} + \Pi x_{t-k} + \varepsilon_t \tag{4}$$

where
$$\Gamma_i = \sum_{i=1}^i \Pi_j - I$$
 for $i=1,2,...,k-1$; $\Pi = \sum_{j=1}^k \Pi_j + I$ and Δ stands for

first difference operator. In our study, the variables for x_t is four, that is, p=4 and the autoregressive order is to be four, that is, k-1=4.

The rank r of the long-run coefficient matrix Π yields the number of c ointegrating vectors/relationships in data, $\emph{r}<\emph{p}$. The matrix \varPi , when $\emph{0}<$ rank (\varPi) = r-p, can be expressed as $\Pi = \alpha \beta'$ where β is $p \times r$ matrix of cointegrating vectors and α is $p \times r$ matrix of error correcting parameters or adjustment coefficients. This indicates that x_t is nonstationary, Δx_t is stationary and $\beta' x_t$ is stationary. Thus the linear combinations, $eta'x_t$, can be explained as relationships among real exchange rate and other real economic variables, and this constitutes the cointegrating relationships.

The cointegrating vector, eta , is derived by solving for eigenvalues of $\left|\lambda M_{kk} - M_{k0} M_{00}^{-l} M_{0k} \right| = 0$ where M_{00} represents the moment matrix of residuals from ordinary least squares regression of Δx_t on Δx_{t-1} , Δx_{t-2} , ..., $\Delta\!x_{t-k+l}$; $\,M_{kk}\,$ denotes the residual moment matrix of $\,\Delta\!x_{t-k}\,$ on $\,\Delta\!x_{t-k+l}\,$ and

 $M_{\it 0k}$ is the cross-product moment matrix (Juselius and Johansen, 1990). We obtain the cointegrating vector β as the eigenvectors associated with the r largest statistically significant eigenvalues using two test statistics, the maximum likelihood test statistics and the trace test statistics. The maximum eigenvalue statistic evaluates the null hypothesis that there are exactly r cointegrating vectors in x_t against the alternative hypothesis of r+1 cointegrating vectors. The maximum eigenvalue statistic, $LR_{\it max}$, is expressed as:

$$LR_{max} = -T \ln(1 - \lambda_{r+1})$$
(5)

where λ_{r+1} represents an estimated eigenvalue. The trace test evaluates the null hypothesis that there exists at most r cointegrating vectors against the alternative hypothesis that there are more than r cointegrating vectors. The trace test, denoted by LR_{trace} , is given by:

$$LR_{trace} = -T \sum_{i=r+1}^{p} ln(1 - \lambda_r)$$
(6)

where $\lambda_{r+1},...,\lambda_p$ represent the estimated p-r smallest eigenvalues. The distribution of these test statistics depends only on the number of degree of freedom p-r and is tabulated in Osterwald-Lenum (1992).

RESULTS OF THE COINTEGRATION STUDY

Engle-Granger Method

For Engle-Granger method of cointegration study, those real variables which are integrated of the same order are considered. As a result, cointegration is studied between real exchange rate and real trade balance for the Bangladesh-Pakistan pair. Cointegration between real exchange rate and ratio of terms of trade is only studied for the Bangladesh-Pakistan case. Cointegration between real exchange rate and ratio of labour productivity is studied for Bangladesh-India and Bangladesh-Pakistan cases. Results are shown in Table 5-7.

Table 5: Results of Cointegration Tests between RER and LPR for

Null Alternative	Maximum Eigenvalue Statistics			Trace Statistics			
lo a	salavinoji a i i	Statistics	95% CV	90% CV	Statistics	95% CV	90% CV
r=0	r=1	20.8442	15.87	13.81	26.2841	20.18	17.88
r,=1 🗵	r=2	5.4399	9.16	7.53	5.4399	9.16	7.53

The real exchange rate and ratio of labour productivity between Bangladesh-India pair are found to be cointegrated implying long-run stability with one cointegrating vector (Table 5). Real trade balance and real exchange rate are

cointegrated for the Bangladesh-Pakistan pair (Table 6). The same result holds for terms of trade and real exchange rate for the Bangladesh-Pakistan pair (Table 7).

Table 6: Results of Cointegration Tests between RER and LPR for Bangladesh-Pakistan Pair

Null Alternativ		Maximum Eigenvalue Statistics			Trace Statistics		
	е	Statistics	95% CV	90% CV	Statistics	95% CV	90% CV
r=0	r=1	18.0664	15.87	13.81	22.6656	20.18	17.88
r,=1	r=2	4.5992	9.16	7.53	4.5992	9.16	7.53

The results show that long-run stability prevails between these variables. Empirical results of this paper have not followed a stereo-typed pattern but have generated diverse secnarios. All the real exchange rates are found to be nonstationary for all three countries, only two of these - Bangladesh-India, and Bangladesh-Pakistan pairs – are found to be integrated of order one which is also the order of integration for most of the real variables. We therefore dealt with the compatible cases for cointegration study.

Table 7: Results of Cointegration Tests between RER and RTT for Bangladesh-Pakistan Pair

Null Alternativ		Maximum Eigenvalue Statistics			Trace Statistics		
	e	Statistics	95CV	90CV	Statistics	95CV	90CV
r=0	r=1	16.932	15.87	13.81	21.9953	20.18	17.88
r,=1	r=2	5.0633	9.16	7.53	5.0633	9.16	7.53

The results show that the main variables under consideration, real exchange rate and the real variables are not all integrated of the same order. As a result cointegration study reduces to a smaller subset of the original variables which are integrated of the same order. Such diverse results are also obtained by Kawai and Ohara (1997). It is difficult to offer an explanation of the results obtained, but this call for further empirical research to resolve this issue.

Multivariate Cointegration Approach

A broader approach is the multivariate cointegration technique by Johansen. According approach, the dependent variable (the real exchange rate) is posited against all three variables (ratio of real trade balance, ratio of terms of trade and ratio of labour productivity). Such an approach enables the researcher to make use of all explanatory variables even if some of them do not suffer from the problem of nonstationary. Our results, given in Table 8-10, show that the respective real exchange rate and other real explanatory variables are all cointegrated for all three countries.

Results of the estimated cointegrating vectors are given in Table 8. In case of Bangladesh-India and India-Pakistan pairs, there is only one cointegrating vector for each pair. For the Bangladesh-Pakistan case, more than one cointegrating vector is found according to the trace test. However, the eigenvalue test shows only one cointegrating vector. So we leave the matter at that. It may be mentioned that according Johansen and Juselius (1990), the eigenvalue test is more powerful than the trace test.

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Table 8: Multivariate Cointegration Results for Bangladesh-India Pair

Null Alternative				Trace Statistics			
	Statistics	95% CV	90% CV	Statistics	95% CV	90% CV	
r=0	r=1	37.5171	28.27	25.8	54.017	53.48	49.95
r,=1	r=2	9.583	22.04	19.86	16.4966	34.87	31.93
r,=2	r=3	4.2722	15.87	13.81	6.9136	20.18	17.88
r,=3	r=4	2.6414	9.16	7.53	2.6414	9.16	7.53

Table 9: Multivariate Cointegration Results for Bangladesh-Pakistan Pair

Null	Alternative	Maximum Eigenvalue Statistics			Trace Statistics		
on July cholising bo Light powers was	Statistics	95% CV	90% CV	Statistics	95% CV	90% CV	
r=0	r=1	29.2125	28.27	25.8	68.5761	53.48	49.95
r,=1	r=2	17.3334	22.04	19.86	39.3635	34.87	31.93
r,=2	r=3	13.5006	15.87	13.81	22.0301	20.18	17.88
r,=3	r=4	8.5295	9.16	7.53	8.52295	9.16	7.53

Table 10: Multivariate Cointegration Results for India-Pakistan Pair

Null Alternative		Maximum Eigenvalue Statistics			Trace Statistics		
	Statistics	95% CV	90% CV	Statistics	95% CV	90% CV	
r=0	r=1	30.6822	28.27	25.8	71.0901	53.48	49.95
r,=1	r=2	20.9274	22.04	19.86	40.4079	34.87	31.93
r,=2	r=3	12.4554	15.87	13.81	19.4805	20.18	17.88
r,=3	r=4	7.0251	9.16	7.53	7.0251	9.16	7.53

Test of the Balassa-Samuelson (B-S) hypothesis

In order to judge whether or not the (B-S) productivity bias hypothesis holds, we examine the relevant element of the cointegrating vectors and find that the real exchange rate is negatively related with the ratio of labour productivity for Bangladesh-Pakistan and India-Pakistan pair. These results support the Balassa-Samuelson hypothesis. However the hypothesis is rejected for Bangladesh-India pair indicating the positive sign of the element.

Table 11: Estimated Cointegrating Vectors: Real Exchange Rate

Country Pair	Real Exchange Rate	Real Trade Balance	Terms of Trade	Labour Productivity
Bangladesh-India	1	1.9736	-4.8699	0.83093
Bangladesh- Pakistan		0.22983	0.10751	-0.41702
India-Pakistan	00,000 Vi 1 0 cms	-0.15461	-0.00465	-0.01963

CONCLUSIONS

This paper examines nonstationarity of real exchange rates and other real economic variables which could affect real exchange rate for the South Asian Countries -

Bangladesh, India and Pakistan. We apply augmented Dickey-Fuller test to check the nonstationarity properties of data. Engle-Granger cointegration method is studied between variables which are integrated of the same order. The purchasing power parity hypothesis stands rejected. Cointegrating relationship between real exchange rate and real economic variables is found for Bangladesh-India and Bangladesh-Pakistan pairs.

We also use Johansen's multivariate cointegration technique. Long-run cointegration relation prevails in all cases. It is found that long-run stability exists though short-run instability is also observed. The Balassa-Samuelson productivity bias hypothesis showing negative relationship between real exchange rate and ratio of

labour productivity is accepted Bangladesh-Pakistan and India-Pakistan pair.

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COST-BENEFIT ANALYSIS OF AGRICULTURE VERSUS AGROFORESTRY SYSTEM IN THE HIGH BARIND TRACT OF NORTHERN BANGLADESH

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ABSTRACT: A relatively large percentage of the population in Bangladesh lives under the poverty line and is affected by the country's degrading natural resources. Agriculture is claimed as the major cause of drastic deforestation, which is also closely linked to poverty, high fertility and high population growth. Agroforestry is considered as one of the few options to lift people out of the poverty trap and protects the existing forest as well as improving biodiversity. This paper indicates agroforestry not only an optimal solution for poor farmers, species diversity conservation and environmental sustainability but have a good economic return. The agroforestry system gives positive and much higher net present value (NPV) than that of agriculture. The financial analysis also indicates that agroforestry system is more profitable and less risky compared to many agricultural projects.

INTRODUCTION

The alarming poverty situation and steady population growth in Bangladesh have raised the pressure on natural resources throughout the country¹. By the year 2003, only 10.2 percent of the country's surface area was left under forest that, in turn, is being depleted at a rate of 3.1 percent per annum. Forests are depleted by commercial timber exploitation and gradually converted into pastures, plantations and cultivated fields. The major cause of drastic deforestation is mainly agriculture, which is closely linked to poverty and environmental problems. In poor rural areas, for example, there is a close link among poverty, high fertility, high population growth and extensive deforestation, as peasants fell tropical forests for firewood and new farmland. At the same time, many environmental problems stem from poverty- often contributing to a downward spiral in which poverty exacerbates environmental degradation and environmental degradation exacerbates poverty. In this way, with increasing aridity and recurrent drought, the 74,200-sq km Barind Tract area in the north region of the country is heading towards serious desertification problems (Hossain, 1995). Moreover, due to the loss of firewood resources, rural communities turn to alternative fuels such as cow dung and crop residues that previously served as organic manure on agricultural fields. The shorter fallow periods, reduced organic inputs and repeated removal of nutrients with harvested crops have contributed to

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¹ The most recent estimates of extreme poverty according to the UNDP report 2004, 36.0 percent of the country's population lives under the extreme poverty line, compared to 6.6, 13.4 and 34.7 percent for Sri Lanka, Pakistan and India respectively (UNDP, 2004). Moreover, with an annual growth rate of 1.9 percent, the total population of Bangladesh may increase from 137,480 thousands in mid 2004 to 192,218 thousands in 2025 (ESCAP, 2004).

soil degradation and, consequently, lowered crop yields and farmers' returns leading

to more poverty.

Analysing this situation, in vast rural areas, agroforestry is seen as one of the major strategies for poverty reduction in Bangladesh, where there is little scope of developing pure forest due to obvious priority for food crop production. Because, agroforestry project is not only helps to increase food and fodder but also protects the existing forest as well as improving biodiversity where unemployed and poor people rush to earn their livelihood. In Bangladesh, agroforestry has been practicing in different areas for a long time but got official recognition in1977-78 with the initiation of projects on agroforestry at Betagi and Pomra in Chittagong (Rahman and Islam, 1997). Crop species cultivates with tree species under agroforestry projects were found successful in various parts of Bangladesh. However, the rates of return of agroforestry is positively significant and much higher compared to many agricultural projects.

Materials and Methods

The objective of this research is to assess the benefit-cost of agroforestry and traditional agriculture. This research focused on four different areas of high Barind Tract i.e., Niamatpur, Godagari, Tanore and Nachole under three different districts i.e., Rajshahi, Nawgoan and Chapai Nawabgong in Northern Bangladesh. Research methods were used (1) a census and Rapid Rural Appraisal (RRA) for the basic social circumstances of the areas; (2) short structured interviews with a purposive sample of 200 households focused especially towards experiences and actual and envisaged costs and benefits of agriculture and agroforestry, (3) Participatory Rural Appraisal (PRA) and field-based surveys implemented by the 60 interviewees. Other data was gathered by way of interviews with key informants (GO, NGO, firms and PO) and market prospecting. Moreover, secondary data was gathered and in the form of the CBAs poverty reduction assessment. Research data was collected from the period of January to November, 2004.

Both quantitative and qualitative method were used for analyze data. Costbenefit analysis is applied to assess the quantitative data. The *net present value* (NPV), *internal rate of return* (IRR), *benefit-cost ratio* (B/C) and *pay back period* of agroforestry and agriculture were calculated and compared. The NPV determines the present value of net benefits by discounting the streams of benefits and costs back to the beginning of the base year. The NPV is calculated by the following formula:

$$NPV = \sum_{i=1}^{n} \frac{\left(B_{i} - C_{i}\right)}{\left(1 + r\right)^{i}}$$

where B_t - the benefits of production by a cultivation practice.

 C_t - the costs of production by a cultivation practice.

t - the year time.

r - the discount rate.

The IRR is defined as the rate of return on an investment, which will equate the present value of benefits and costs. The project will be financially attractive if the IRR is greater than the opportunity cost of project finance. The IRR can be obtained by solving the following equation:

$$IRR = \sum_{r=0}^{\infty} \frac{B_r - C_r}{\left(1 + r\right)^r}$$
 where $\frac{B_r}{B_r} = \frac{B_r}{B_r} = \frac{B$

The B/C compares the discounted benefits to discounted costs. A B/C of greater than 1 means the project is profitable and vise versa, a B/C of less than 1 means the project generates losses. The B/C is calculated as follows:

$$\frac{B}{C} = \frac{\sum_{r=0}^{r} \frac{D_B}{Q_r + r}}{\sum_{r=0}^{r} \frac{C_r}{Q_r + r}} \text{ within it. It yields often of the other states of t$$

The pay back period measures the number of years it will take for the undiscounted net benefits to repay the investment. An investment can be acceptable only if its benefits can offset all investment costs within a limited arbitrary period.

COST-BENEFIT ANALYSIS OF AGRICULTURE VERSUS AGROFORESTRY SYSTEM

The analysis of collected data is to estimate the costs and returns from agroforestry and agriculture. The actual estimation of agroforestry and agriculture are very widely, and depend upon site conditions as well as on many factors such as tree spacing, maintenance techniques, and the rate of growth of trees. For the analysis, all values are based on January 2005 price, which is held constant throughout the tern of the analysis. Analysis should be given consistently on a \$/ acre basis.

Selection of models for analysis

The alley cropping model of agroforestry in the high Barind Tract area is chosen since it is the important agroforestry model applied in this region that is appropriate for the cultivation fields. Furthermore, this model can be expanded to the surrounding villages. The mango (Mangifera indica) trees are planted as a multipurpose tree species in this project. Crop species, i.e., paddy (Oryza sativa), wheat (Triticum aestivum), ginger (Zingiber officinale) and turmeric (Curcuma domestica) are intercropped with mango trees for the purpose of income rising. Paddy and wheat are intercropped in the beginning years (first 12 years). After that time the shadetolerant ginger and turmeric are commonly planted under mango trees with the purpose of income raising and rational utilization of sunlight and improvement of soil protection and erosion control. For the analysis of agriculture project, the monoculture of rice and wheat are considered because these are the most valuable and popular species in this cultivation practice.

The average temperature in this area is 37.8°c for summer and 9.2°c for winter. The average rainfall is over 1300 millimeters per year. Topography is undulating and

elevation is 40m from sea level (Table 1).

Table1: Site characteristics

Characteristics	Description
Climate Topography Slop Elevation Rainfall Average temperature Dry season Soil condition Water resources for irrigation	Tropical Undulating 5 – 20% 40 m. Over 1300 millimeters per year Summer 37.8°c, Winter 9.2°c (average) December- march Silt loam to clay loam Mainly ground water, Ponds and natural rainfall

Assumptions

Establishment cost

Establishment cost involves land preparation, seedling, planting etc. Costs for preparation are very greatly depending on the condition of the site. The farmers of study area were purchased seedling from private or state sources, and range in price depending on species and quantity grown. The average establishment cost is tk.

36,500.00 for agroforestry and tk. 30,000.00 for agriculture per acre (Table 2). Usually land costs are not included in the projected costs as it is assumed that landowner already owns land for this purpose. However, as mentioned in MacDicken (1990), there is no need to value the land if farmers want to change existing land use to an agroforestry or agriculture land use because it would be canceled out in a "with" and "without" comparison.

Yields

For calculation of yields, two common and most popular cash earning crops i.e., rice, and wheat are considered for agriculture. And for agroforestriproject rice, wheat, ginger, turmeric and mango are considered. Rice and wheat are considered only for first twelve years after that time ginger and turmeric are measured, because shed tolerate ginger and turmeric are intercropped with mango trees in this time. Mango is calculated under three categories i.e., 1) seventh to eleventh year low yields, 2) twelfth to eighteenth year medium yields and 3) nineteenth to thirteenth year high yields.

Labors

Mainly family labors in the study site are used for farm works. A cultivation practice that requires hired labors is not likely to be accepted in the area. Meanwhile, family labors are not cash expenditure in farmers' perspective. Therefore, all calculations will be carried out for two variants: with and without inclusion of family labor in the production costs. The scenarios with the exclusion of family labor costs seem more meaningful for poor farmers. The opportunity costs of labor used in the case of family labor costs included is tk. 50/workday, which is the common price of hired labor in this region.

Pest and fertilizer

Pest and fertilizer are often used for enhance the trees and crops. The average cost of pest and fertilizer of agriculture is same from beginning to last year. But, for agroforestry project the fertilizer is less use since tenth year, because in this time tree species can provide nutrients for understory crops. On the other hand the pest demand of agroforestry is increased form that time when trees provide fruits.

Irrigation

Irrigation is needed only for dry season in both of agriculture and agroforestry project. During the dry season in the study area the main source of irrigation is ground water. The average yearly irrigation cost is tk. 1000.00 for both agriculture and agroforestry project.

Discount rate

The analysis is carried out for farmers' perspective, thus the discount rate applied here is not social, but individual. It can be referred to as the opportunity cost of capital for farmers, which is closely related to the financial interest rate. Therefore, the real discount rate of 10% can be obtained by deducting the inflation rate of 4% from the average nominal interest rate of the loans for agricultural production (14%) in the banking system. However, to have a better look at the problem, the sensitivity analysis will be carried out for a range of different discount rates.

Table 2: Assumptions of agriculture and agroforestry project

Operation	Year	Approximate costs Agroforestry Agriculture		Comments
00.000				
Establishm ent cost		36,500.00	30,000.00	Mary St. Horsey (2) Co.
Fertilizer	1-9	3,000.00	3,000.00	Year 10 to 30-fertilizer cost (per year) of agroforestry is low than agriculture
Toda yind	10-30	2,500.00	3,000.00	because in this period tree species provide nutrients.
Pest	1-15	300.00	300.00	Year 16 to 30 pest cost (per year) of agroforestry is higher because large
	16-30	600.00	300.00	amount of pest is used for fruits protection.
Irrigation	Annual	3000.00	3000.00	in collibrations of 1985 and a
Labor cost	1-15	32,00.00	32,00.00	Cost included wedding, thinning, pruning, harvesting, protection etc. In agroforestry,
	16-30	2,500.00	32,00.00	year 16 to 30 shed tolerate ginger and turmeric are intercropped, that required relatively less amount of labor.

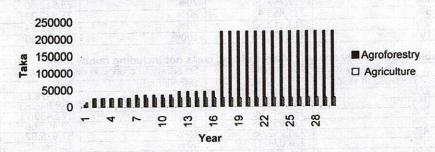
Note: time horizon for analysis is 30 years. USD 1= Taka 62 as of January 2005.

Financial results

Research data indicates agroforestry is more benefited than normal agricultural system. The financial picture of two options such as agroforestry and agriculture show that, in the initial year the net return of agriculture is higher than agroforestry. Because establishment cost of agriculture is comparatively low. But from second to last year the average return of agriculture is constant². Hence, the return of agroforestry is gradually higher because from seventh years the tree species also start to give yields (Figure 1).

The statistical indicators show that the average yearly income of agroforestry is tk. 1,21,680.00 that is higher than agriculture (Table 3). The minimum income of agroforestry is tk. 7,400.00 and maximum is tk. 2,22,000.00. On the other hand the minimum income of agriculture is tk. 14,000.00 and maximum is tk. 26,000.00. The income range of agroforestry is higher than agriculture.

Figure 1: Net returns of agriculture versus agroforestry project



² Some risk factors such as floods, droughts, and insects are excluded.

Table 3: Statistical indicators of agriculture and agroforestry project

Indicators	Agroforestry	Agriculture
Mean	1,21,680.00	25,600.00
Median	45,700.00	26,000.00
Std. Deviation	95,755.25	2,190.89
Minimum	7,400.00	14,000.00
Maximum	2,22,000.00	. 26,000.00
Range	2,14,600.00	12,000.00

Table 4: Financial results of agroforestry versus agriculture

	Costs including family labor		Costs not include	
	Agroforestry	Agriculture	Agroforestry	Agriculture
NPV (at 10%) (taka)	559,953.89	204,024.56	596,977.75	239,846.83
IRR (at 10%)	46%	56%	58%	73%
B/C	3.55	1.99	4.25	2.37
Payback period	2 years	1 year	2 years	1 year

The calculations of NPV, IRR, B/C and payback period of agriculture and agroforestry model are illustrated in Table 4. In both scenarios with and without the inclusion of family labor costs, the agroforestry system gives positive and much higher NPV than agriculture. The B/C of agroforestry is nearly about twice than agriculture. But the IRR of agriculture is higher than agroforestry because in the beginning years the net return of agriculture is high. The calculation clearly makes that the agroforestry is more attractive, which gives yearly higher positive net cash flow than agriculture.

Sensitivity analysis

The prices can fluctuate significantly over long time period, especially if overall output increases due to increase in agriculture or agroforestry system adoption, thus reduce the farmers' benefits. Farmers' benefits are also declined if the opportunity costs of

Table 5: Sensitivity analysis of agriculture, costs including family labor

Sensitivity to de	crease in yields	Sensitivity to change in discount rate	
Decrease in yields	NPV	Discount rate	I NPV
0%	234,190.69	5%	339,063.31
1%	231,848.78	10%	204,024.56
2%	229,506.87	20%	103,519.75
3%	227,164.96	30%	66,740.22
4%	224,823.06	40%	48,426.22
5%	222,481.15	50%	37,599.76
6%	220,139.24	60%	30,499.97
7%	217,797.34	70%	25,512.60
8%	215,455.43	80%	21,833.33
9%	213,113.52	90%	19,017.54
10%	210,771.62	100%	16,800.00

Table 6: Sensitivity analysis of agriculture, costs not including family labor

Sensitivity to de	crease in yields	Sensitivity to change in discount rate	
Decrease in yields	NPV	Discount rate	I NPV
0%	239,846.83	5%	397,478.63
1%	237,448.37	10%	239,846.83
2%	235,049.90	20%	122,439.71
3%	232,651.43	30%	79,402.06
4%	230,252.96	40%	57,925.82
5%	228,074.33	50%	45,199.72
6%	225,456.02	60%	36,833.30
7%	223,057.56	70%	30,941.17
8%	220,659.09	80%	26,583.33
9%	218,260.62	90%	23,239.77
10%	215,862.15	100%	20,600.00

Table 7: Sensitivity analysis of agroforestry, costs including family labor

Sensitivity to de	crease in yields	Sensitivity to change in discount rate	
Decrease in yields	NPV	Discount rate	NPV
0%	588,493.53	5%	1,305,673.80
1%	582,608.59	10%	559,953.89
2%	576,723.66	20%	164,453.47
3%	570,838.72	30%	78,678.46
4%	564,953.79	40%	49,467.23
5%	559,068.85	50%	35,615.11
6%	553,183.92	60%	27,559.00
7%	547,298.98	70%	22,276.75
8%	541,414.05	80%	18,547.24
9%	535,529.11	90%	15,780.40
10%	529,644.18	100%	13,653.17

Table 8: Sensitivity analysis of agroforestry, costs not including family labor

Sensitivity to de	ecrease in yields	Sensitivity to change	je in discount rate
Decrease in yields	NPV	Discount rate	NPV
0%	596,977.75	5%	1,364,515.63
1%	591,007.97	10%	596,977.75
2%	585,038.20	20%	184,554.73
3%	579,068.42	30%	92,263.76
4%	573,098.64	40%	59,694.83
5%	567,128.86	50%	43,807.88
6%	561,159.09	60%	34,389.74
7%	555,337.79	70%	28,132.88
8%	549,219.53	80%	23,671.82
9%	543,249.75	90%	20,335.77
10%	537,279.98	100%	17,753.08

resource use increases. Therefore, sensitivity analysis is considered for the reduction of yields and increase in discount rate. All sensitivity analysis is shown up in Tables 5 to 8 (Appendixes).

In the relation to discount rate, NPV of agroforestry system is positive and higher than NPV of agriculture with the rate up to 40% for both scenarios with and without the inclusion of family labor costs . Normally, the discount rate is not likely to go up to this high and hence, so agroforestry system is generally more profitable than agriculture. In the case of decrease in yields of annual crops, NPV of agroforestry system is always positive and double than agriculture. The diversification of planted species contributes to the reduction of the risk of output losses for agroforestry system.

Research (Rahman and Islam, 1997) conducted in Dinajpur, Bangladesh indicates the NPV is positive under all three situations i.e., forest department situation, participant situation and whole agroforestry system situation. The B/C ratios stand at 1.43, 2.21 and 1.95 respectively in all situations. The IRR under the above three situations are 21%, 250% and 42% respectively. The rates of return are significant and much high compared to many agricultural projects. The IRR of Eucalyptus camaldulensis under agroforestry project in seven different areas of Bangladesh i.e., Dinajpur (rural Charkai), Dinajpur (urban Charkai), Sylhet (Chawtali), Sylhet (Lawachara), Tangail (Charaljani), Mymensingh (Santoshpur) and Cox's Bazar (Chainda) were fund 22.87%, 20.66%, 20.57%, 39.13%, 27.58%, 12.67% and 59.81% respectively. For Dinajpur the corresponding B/C ratios were 2.49, 2.48, 2.37 and 2.21 at tree rotation ages of 10, 12, 14 and 16 years respectively. Similar results were found for plantation of Sylhet, Tangail, Mymensingh and Cox's Bazar (Kibria et al., 1999). Cashew plantations established at central Tamil Nadu, India under agroforestry conditions also showed comparable financial results giving B/C ratio of

1.65 and IRR of 40.83% (Sekar and Karunacharan, 1994). Research also indicates the cost and benefit of agroforestry system in Hawaii is financially viable and less risky than agriculture and forestry (Elevitch and Wilkinson, 2000).

Unquantifiable costs and benefits

Due to the lack of systematical technical documentation, some costs and benefits of agroforestry system cannot be quantified and included in the cost-benefit analysis. The intangible costs and benefits from farmers' perspective are mainly environmental effects on farm households' agricultural production.

Soil erosion control

The agroforestry system can bring more benefit to farmers over agriculture due to better soil protection. Soil erosion declines with the increase in vegetative cover. In the early year of the agroforestry system, the intercrop of annual crops helps to raise the cover over land. Tree species are very effective protective barriers against soil erosion. Since fifth year the trees will be closed and play critical role in soil conservation. These soil erosion control measures will increase land productivity through maintaining soil depth and quality (Hien, 1998). If there is available data on the amount of reduction in soil loss by agroforestry cultivation and on nutrient composition of the soil, the increase in nutrient amount due to this reduction can be calculated. The benefit from soil protection then can be estimated by the value of equivalent inorganic fertilizer required for obtaining this increase in nutrient. This approach is called replacement cost technique and has been used in Norse and Saigal (1993).

Effects on soil fertility

The agroforestry system can improve the soil fertility by the restriction of soil erosion and the presence of the nitrogen fixing species. Hence, they can improve the land productivity and the crop yields. The estimation of benefits from nitrogen fixation could be made by replacement cost method if rates of nitrogen fixation by species were known. However, these data are not available since there have been few direct measurements of nitrogen fixation by trees due to the shortcomings of nitrogen-fixation measurement methods (Nair, 1990).

Water retention

The tree species in the agroforestry system play an important role in water conservation. The water retention capability of trees can maintain soil moisture; therefore raise productivity of the land.

The 'Win-Win' effect

Agroforestry has 'Win-Win' effect and agriculture has 'Win-lose' effect if we apply "Four-fold classification model" (Figure 2). Because several researches indicate agroforestry is considering as one of the major strategies for poverty reduction as well as protects the environment through increase the existing forest. Where unemployed and poor people can protect watershed services through agroforestry based solutions that enable the poor to be rewarded for their provision of livelihood; assist them to better adapt to change, and to benefit from emerging carbon markets, through tree cultivation. The whole agroforestry system is financially viable and contributes significantly towards land use efficiency, employment generation, environmental stability and social equity.

The following model, applied to the case of forest dwellers and forests, assumes the following definitions:

• "Win-win" means poverty alleviation and environmental protection are assumed to go hand-in-hand.

• "Win-lose" means poverty alleviation happen at the expense of forests and biodiversity.

 "Lose-win" outcomes occur when livelihood security is undermined by excluding local people from forests.

• "Lose-lose" outcomes mean that both local people and the environment lose out.

Figure 2: Four-fold classification model of human well-being and forest cover.

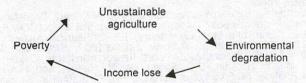
Quality of Forest Cover

uman		Win-win	Win-lose
ell-being	+		
		Lose-win	Lose-lose

Unsustainable traditional agriculture is the main cause of forest loss and degradation, decrease in soil fertility due to soil erosion and lower productivity. The current trend of drought and desertification problem in high Barind Tract is the results of extend agricultural land, which results in negative impacts on the environment. Poverty is the main motive for unsustainable agriculture and puts into a

vicious circle of poverty as shown in Figure 3.

Figure 3: Unsustainable agriculture is the cause of 'vicious circle' of poverty



However, for farmers' subsistence the agriculture still has its advantages over agroforestry system:

 First of all, in the short term when the effects of shortened fallow and land degradation are not yet exposed, agriculture can always give positive and relatively stable net cash flow each year. Meanwhile, agroforestry system causes low returns in beginning years.

Secondly, the establishment cost of agroforestry is high, and so, agriculture
is particularly attractive for poor farmers who are always lack of cash and
whose family labors are main and almost the only input for agricultural
production.

production

CONCLUSION

Some farmers of High Barind Tract in northern Bangladesh are practiced agroforestry that is well organized, ecological sound, and could provide high yields. On the other hand, agriculture becomes increasingly unsustainable due to the shortening of fallow periods and the loss of environmental conservation methods. That drives farmers into a vicious circle of poverty and may deteriorate the social and economical life as well. In farmers' perspective, the financial analysis shows that agroforestry system is more

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profitable and less risky than agriculture. The NPV of agroforestry system is positive and higher than NPV of agriculture with the rate up to 40% for both scenarios with and without the inclusion of family labor costs. However agroforestry system requires higher investment, generates low returns in the beginning years. The cost and benefit of agroforestry system are underestimated since some of them are not quantifiable due to the lack of available technical data.

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MARKETING PERFORMANCE OF RURAL SMALL SCALE HOSIERY INDUSTRY IN BANGLADESH

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ABSTRACT: This paper is on marketing performance of the small-scale hosiery industry of Kochasahar in the Gobindhogonj upazilla in Gaibandha district. Various aspects of this emerging industry are discussed and results on difficulties of marketing are presented. The main findings are that the producers who suffer from lack of fund cannot directly sell to the genuine customers at the best possible price and at the right time but have to sell their products through the middlemen. Also, their lack of market information keeps them busy in undesirable competition leading to under pricing of their products. Recommendation are made to the government and other agencies for giving necessary support so that this industry which has prospects both at home and abroad can realise its full potential.

INTRODUCTION

Marketing is a management function it must be secured and integrated with production. The fate of any business enterprise whether industrial or commercial, is determined by it's successful marketing function. Marketing is the process concerned with pricing, promotion, distribution of the products, maintenance of raw materials and choice of production method etc.

The useful or important definitions of marketing are as follows:

Marketing aims at discovering the consumer's need. It also attempts to create new needs for them. It endeavours to arouse, among the potential customers, the prospective demand, last but not the least, it strives consciously and continuously to satisfy the needs and demand of the customers. Thus it earns their confidence and good wills.¹

Confidence in the product and the service is essentially a matter of technological and professional competence. A competent product has to be carried to the customers basically through competitive marketing. Thus, two factors that help to achieve success are the quality of the product and ability of marketing. The consciousness and the care that the small entrepreneur and his manager exhibits in these two respects will determine the prospects of a product in the market. So, the market is the determinant of testing the performance of the business activities.

Due to the growing competitiveness, the small-scale industries in Bangladesh face increasing difficulties among themselves while marketing their products. Besides, the existence of large-scale industries in the same sector with their own marketing networks and sophisticated technologies increase the competition in the market. In

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addition to that, costly raw materials from inside and outside the country increase the cost of production and arouse the difficulties in adhering to the schedules of production, which ultimately create severe problem in the marketing of the products of small industries. The attitude of the small entrepreneurs towards marketing of their own products is a crucial factor in the success and growth of their enterprises. Therefore, the correct understanding of the market forces, immediate policy decisions and appropriate prompt actions in pursuance of those decisions to match those forces, are the essential elements of market management.²

A BRIEF HISTORY OF RURAL SMALL SCALE HOSIERY INDUSTRY OF KOCHASHAHAR UNION

The small Scale Hosiery Industry (SSHI) of Kochashahar Union is considered as the rural SSHI for the purpose of this study. It is started in this area in the early 1990s though in an old form it existed here from 1947 after the partition of India. The role of rural SSHI of Kochashahar union of Gobindhogonj upazila under Gaibandha district is very encouraging in the industrialization process of our rural economy. In 1947 this industry was founded in this area for the first time. At that time cotton sweaters for the children, muffler and socks for the young and old people were the main products of this industry. The machines were operated and maintained by the manual labour. The essential machinery was brought from layalpur in Pakistan. However, with the change of time, this rural industry has taken a new shape and got a new life in 1990's.

In the 1990's modern hand conducting machines were imported from India, Japan, and Thailand to knit sweaters, cardigan, and three pieces. At the same time wool as raw materials, were imported from India. This brought a stimulating change in the field of hosiery industry of that locality. Socks, muffler, sweater, cardigan, gloves etc, were produced by these industries. These products are almost of international standard, although these are made in a homely environment with little capital and light labour. There is a great demand for these products at home and abroad.

The SSHI of Kochashahar union is promising sub-sector of our industry sector is flourishing and expanding and contributing a lot in our economy. Considering the significance of this sub-sector this study aims at analysing and identifying the marketing practices or activities and problems of marketing of SSHI of Bangladesh. This paper will also suggests some solutions for resolving the problems in the light of the findings of the study.

Objectives of the Study

The main objective of the study is to analyse the marketing prospects of the products of rural SSHI in Bangladesh.

To achieve the main objective, the study covers the following specific objectives :

- i. To examine the marketing performance of the products of rural SSHI.
- To identify the factors responsible for the fixation of the price of the products of rural SSHI.
 - iii. To analyse the distribution channels of the products of SSHI.
- iv. To identify the problems of the marketing process of SSHI and to suggests some solutions to solve those problems.

Importance of the Study

The SSHI is meeting the domestic demand of warm cloth of our common people especially in winter. It is playing as the import substitute industry in our economy and capable of employing thousands of peoples and also generating income of the people in the locality in many ways. It is mentionable that without sophisticated machineries and large amount of capital resource, which are scarce in our economy, this industry developed in the rural area with minimum capital and manually operated machinery.

It created better investment opportunities, attracting rural savings. This industry generate self confidence among the people by creating independent entrepreneurs who can utilize their efficiency to support their living. It brought positive change in the life of the rural people in the study area which ultimately played a vital role in the income generating activities. Through this barriers of inequalities are also minimized

without any institutional support of the state.

The products of the industry have local and international demand. Marketing is one of the important aspects of economic activities of this industry. So there is a great significance of the present study, the finding of which may help the planner, policy maker and concerned govt. agencies in making their decisions for resolving the problem of market management system as well as the progress of the industry. Beside this, no in-depth study has yet been done on the subject specially in the study area. In such a context, there is a great need of doing research on the present topic and that was felt by the researcher.

Statement of the Problem

Small Scale Hosiery Industry has grown in different parts of the country; both in rural and urban areas. In urban areas it is mainly developed in Dhaka and Narayangonj. But in the case of rural area, it is specially developed in kochashahar union of Gabindhaogonj upazilla under the district of Gaibandha. It is revealed from the recent history of development of this industry in the rural area that the performance of this industry in the rural area is far better than the urban area. Now it is working not only in the kochashahar union but also flourishing and expanding in the surrounding union and upazila. However, this industry is decaying in the urban area and progressing in the rural area. The govt. and local financial institution nourished this industry in the urban area. But the background is quite different in the case of this industry of the rural area. Neither the govt. nor the financial institutions paid any attention to them.

In the context of the above situation the development of the rural SSHI in the locality is a very interesting and hopeful phenomena in the industrialization process of our rural economy. The products of this industry have great demand in the market. It is also meeting the major part of the domestic demand of warm cloth and playing a miraculous role as import substitute industry in the competitive and globalise market.

In spite of this, there exists some barriers to marketing process of SSHI. This study also intends to identify the problems by analysing the marketing practices of this industry and also suggest some measure for the solution of those problems. This paper may supply information to the concern authority in formulating proper policies and programmes for the improvement of marketing aspects as well as the growth and progress of the industry.

Methodology of the Study

Small Scale Hosiery Industry is a newly developed sub-sector of our industry sector. Any govt, and non-govt, organization did not pay attention to this sector. So, there is

minimum scope for collecting data from secondary sources excepting newspaper, journals. So, for the purpose of the present study we are mainly dependent on primary sources.

Small scale hosiery units of Kocashar union of Gobindhogonj Upazilla under the District of Gaibandha were also selected for the purpose of the present study. In total more than 500 small scale enterprises are functioning in this area of Gobindognonj Upazilla of Gaibandha district. For this study the Researcher randomly selected 14% of the units from the study area.

In order to collect substantial and reliable information from the primary sources two sets of structured questionnaire have been prepared for interviewing the owners of SSH units and the persons who are related to the marketing activities. Before finalization of the questionnaire it was pre-tested through a pilot survey. Interviewing is the main tool of data collection. The data and information were collected by the researcher personally. Open discussions were also held with the respondents. The discussions were recorded in a notebook.

The data and information thus collected were processed and analysed for the purpose of writing this report. Tabular analysis was made and statistical tools namely averages, percentages were used in the study.

FINDINGS AND ANALYSIS

Quantity of Products Sold, Average Unit Price and Total Income from Sales in 1998-99, 1999-2000, 2000-2001, 2001-2002 and 2002-2003.

It is revealed from the table given below that the main products of SSH units are Muffler, Design Muffler, Socks, Sweater etc.

Table 1 shows the quantity of the products, average unit price and the income earned from the sales of the products. In 1998-99, 72,520 dozens of muffler, 12150 dozens of D. Muffler, 163100 dozens of socks, 7000 dozens of p. socks, and 10000 pieces of sweater were sold by the rural sample units. Tk 606.81, TK.648.02, Tk. 120.32, Tk.180.00 and Tk. 234.50 are the average unit (dozen) prices of the muffler, D. Muffler, socks, p. socks, and sweater (1 piece) respectively of the sample units. In the same way the quantity and average unit prices and income earned from the products of the sample units for the years 1999-2000, 2000-2001, 2001-2002 and 2002-2003 were also shown in the table.

It is observed from the table the quantity sold of muffler, D. muffler, socks and P. socks is decreasing during the study period. But only the increasing trend of quantity sold of sweater is found abnormally which is the indication of the growth and progress of SSH units based on the production of sweater. During the field survey, it is known by the researcher that increasing trend of unit price of those products was found in early nineties in the initial stage of establishment of SSH units. It may also be pointed out that the average unit price of all the products are also decreasing which is the cause of increase in demand of the products. It also indicates that SSH units are selling their products at lower profit margin.

The sales revenue analyses of SSH units shows that the revenue of selling has gone up by more than 1.5 times over last couple of years.

Market Area

It is seen from the table that 100% of SSH units were selling their products in local and regional markets in the initial stage of establishment of the units. The rural SSH units are situated in the remote corner of northern region of Bangladesh, so they

could only enjoy the local and regional market in the initial stage. But with the passage of time and increasing trend of demand of their products, the area of the market is dispersing throughout the whole country.

Table 1: Area of the Market

Area of the Market	In the Initial Stage		At Pre	esent
150 000 100 100 100 100 100 100 100 100	No. of Units	Percentage	No. of Unit	At Present
Local / Regional	70	100%	0	0
National	0	0	70	100%

During the period of field survey, the researcher comes to know that the products of the SSH units are distributed in the national market through various distribution channels and buyers from the various corners of the country are purchasing the products from the SSH units especially in the winter season. However, this industry is meeting the domestic demand of the products and as an import substitute industry it is playing a vital role in our country.

Table 2: Yearly Sale Position of the SSH Units

% Sale	No. of units	%
70%-75%	2	3
75%-80%	13	19
80%-85%	20	29
85%-90%	23	33
90%-95%	7	10
95%-100%	DAR NO 15 150 VIDE	7 7 7 6
Total	70	100

Source : Field Survey.

It is seen from the Table-2 that yearly percentage sales of the sample units varies from 70% to 100%, 3% of SSH units sell 70% to 75% of their products per year. 19%, 29%, 33%, 10% and 7% of SSH units are capable of selling 75% to 80%, 80% to 85%, 85% to 90%, 90% to 95%, 95% to 100% of their products in a year. According to cent percent of the SSH units, the unsold products are usually disposed of in the next year.

From the analysis of the data it may be argued that the higher percentage sale of the products of SSH units is possible due to the low cost of production, low price,

lower profit margin and high demand.

Pricing of the Products of SSH Units

Pricing is one of the vital factor in the marketing process of any business enterprises because it is only element which fetches revenue. The market of the product of SSH units is perfectly competitive. More than three hundreds of small units are working in the locality. Majority of the respondents (82.85%) are of the opinion that the demand of the products is increasing. Only 17.15 % think that demand is decreasing.

Growth in Demand of the Products

It is observed from the Table-3 that lower cost, improved quality of products, low profit margin, low price and other are the causes of increase in demand of the products of SSH units. According to 100% of sample SSH units, low cost, low profit and low prices are the causes of growth in demand of the products. According to 71% of and 43% of the respondents improved quality of the products and other are the causes of growth in demand of the products. It is important note that multiple responses are recorded in the table. The responses are not mutually exclusive and hence percentages add up to more than 100. And it is the common picture of all most all the tables.

Table 3: Causes of Growth in Demand of Products of the Sample Units

	o oumpie onics	
Causes	No. of unit	%
Low cost	70	100
Quality P.	50	71
Low Profit	70	100
Low price	70	100
Other	30	43

Source: Field Survey.

Causes of Low Production Cost

It is observed from the Table 6.5 that availability of cheap labour, rent free accommodation, owner cum-manager ship, use of grade II raw materials, availability of old and new machine of cheaper cost as well as locally produced machineries and spare parts are the major causes of low cost of production of the sample units. The manufacturing activities are running in the residence of owners of the units and owner himself working as the manager which decreases the cost of production.

According to 100% of the sample units, cheap labour and rent free accommodation for the units and 'owner-cum-managership' are the causes of low cost of production. Another 77% of sample units report that the use of grade-II raw materials and wastage of large-scale industries is the cause of low cost of production. According to 100% units, availability of locally produced machineries and spare parts are meeting major demands of SSH units which is one of the important causes of low cost of production.

Table 4: Causes of Low Production Cost of the Sample Units

Causes	No. of unit	%
Cheap Labour	70	100
Rent free. Acom.	70 oz to essañ	100
Manager owner	Code from Self70 Terran lens	100
Grade_II	54	77
A.V. of Machines	70.	100
Others	70	100

Source: Field Survey.

Determinants of the Prices of the Products

The Table 5 shows that low cost of production, minimum profit margin, growth in demand of the products. Price charged by other firms, price and existence of substitute goods and some other factors are the important determinants in the fixation of the prices of their products. According to cent percent units, cost of production, profit margin and price charged by other firms are the main determinants in the fixation of the price of the products. About 31% of the rural units report that the demand of the products is a determinant factor in fixing up the prices of the products. Again 36% of the sample units report that price of substitute goods is also a determinant factor for price fixation. Besides, this lack of information about market demand, undesirable competition among the owners are the determinant for fixation of price of their products.

Table 5: Determinant of the Price of the Product of the Sample Units

Determinants	No. of unit	%
Cost of Production	70 HOLD HOLD THE	100
Profit	70	100
Demand	22	31
Price charged	70	100
Supply of goods	25	36
Price of substitute goods	10	7

Source: Field Survey.

It is revealed from the analysis of the data that as little amount of capital is needed to enter into the market of SSHI, the new people and the workers are soon becoming the owners of SSH units. However, analyses of fixation of price shows that low cost of production, growth in demand of the products, undesirable competition among the owners, lower profit motive attitude of the owners and lack of available fund motivated the SSH units in fixing up the lower price of their products.

Distribution Channels of the Products of SSH Units

There is a arrangement for distribution of the products to the consumers in the case of any manufacturing concern. For this purpose it needs middleman or media through which products are distributed to the ultimate buyers. The Wholesalers, Mahajon's, Farias and retailers are working as the agent for distribution of products of SSH units.

Wholesalers: Knowing the demand of the products, the wholesalers from the various cities of our country procured the products from the SSH units during off season at a cheaper rate. During winter season or pick period they used to sell the products to the retailers at a higher rate and in this way they are maximising their profit.

Mahajons: Observing the variation of price of the products in season and off season some of the local moneyed men are buying and storing the products during off seasons. The have shop in the local market places of the study area. Sometime especially during the peak period they are buying and selling the products like the traders of a hat or bazaar.

Farias: Some local people of the study area are engaged as farias for the distribution of the products in the various commercially important place during the off season and in the season also. They can easily procure the products on good faith as they are the local people. They used to procure the products from the SSH units and sale it to the wholesalers and retailers of the various business centre of the country. After selling the product the farias use to make the payment to the owner of the SSH units. Sale in credit is one of the important impediment on the way of marketing process of the farias.

Retailers : Some retailer procured the products from the units before and during peak period. Generally the retailers are buying the products from the units from October to January.

Distribution System

There are four types of distribution channel of SSH units by which the products were reached in the hand of the ultimate consumers. They are wholesalers, Mahajons (local stockists), Faria and retailers. The distribution channels are reflected in the Figure and Table given below.

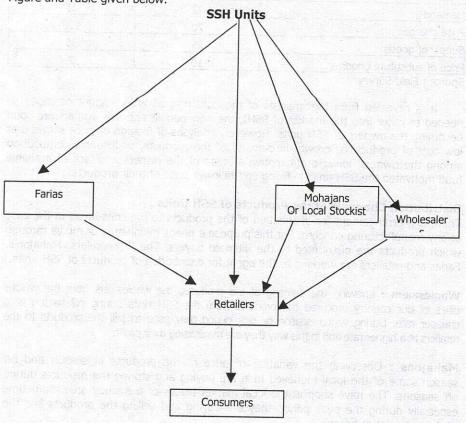


Table 6 shows the buyers of products of the sample hosiery units. It is observed from the table wholesalers are the buyers of 49%, Mahajons are the buyers of 11%, Farias are the buyers of 40% and retailers are the buyers of 100% of sample hosiery units. It is important to note that multiple responses are also recorded in the table. Analyses of data indicates that Mahajons, Farias, Wholesalers, retailers are working as the middlemen in the marketing process of SSH units. The SSH units are unable to sale their products to the best and genuine customers at the best possible price. Perhaps it is due to the non-availability of working capital of the SSH units for storing their products in the off seasons as the products are seasonal and consumed in winter. So, the SSH units are compelled to sell their products at a cheaper rate to the Mahajons, Wholesalers, Farias and sometimes to the retailers.

From the analysis of the data it may possibly be stated that the above mentioned middlemen enjoyed lion share of the profit margin of the products due to the financial inability of the SSH units. The unit do not get the increased price. The consumer cannot purchase the products at the selling price of the unit. However price

of the product has gone up through the exploitation of the middlemen.

Table 6: Buyers of Products of the Sample Units in Rural and Urban Areas

Buyers of products	No. of units	%
Wholesaler	34	49
Mahajans	8	11
Faria to modesintsbasit itaninas	tovbs 28 28 2 Million e	icanica40a sati
Retailers 1901501 Judgun 1955	nkeb 18 170 nevereni 10	ta hala 1002 Tubora

Source : Field Survey.

Problems of selling of the Products of SSHI

Table 7 shows problems of selling the products of the SSH units. These are scarcity of working capital, sale in credit, undesirable competition and illogical fixation of price, workers becoming owners, Inefficiency, absence of marketing association and others. According to 100%, 79%, 100%, 100%, 60%, 100% and 50% of the sample hosiery units, in availability of working capital, sale in credit, undesirable competition, workers becoming soon owners, Inefficiency of the owner, absences of marketing association and others are the major problems of selling their products respectively.

It is revealed from the analysis of data that due to scarcity of working capital SSH units are incapable of storing their product during off season for selling at the genuine price to the genuine customers. They are not getting the proper share of profit. Sale in credit is also a common phenomenon in the marketing process of SSH units. Sometime the small units are bound to sale their products in credit, But the SSH unit can not get back payment from the buyers in all the cases.

The most of the owners of SSH units are not highly educated. In addition to that the illiterate workers are soon becoming the owners of small hosiery units and easily entering into the market. They have no knowledge about the market condition and demand of the products also. So there is undesirable competition among them and they are selling their products at a cheaper rate and they are fixing up the price of the products illogically. Absence of any cooperative association for ensuring the better marketing process is another vital problem of selling the products properly.

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Competition from foreign goods and wastage of the large scale Industry by some units are also the problem of selling their products.

Table 7: Problems of selling the products

Nature Problems	No. of unit	Percentage of the unit
Scarcity of working capital	70	100
Sale in credit	- 55	79
Undesirable competition	70	100
Workers beco.ming owners	70	100
In efficiency	40	60
Absences of marketing association	70	100
Others	35	50

Promotional Activities

Marketing Communication information can ensure the exchange of views and ideas between the buyers and sellers. Now a days information about the market demand from the buyer to seller is one of the important element for in the progress of market mechanism of an business enterprise. The observation reveals that more then 80% of the SSH units had no knowledge or information about the market demand or about the competitive goods domestic or foreign. Just they are running their manufacturing activities depending upon the demand of their products in the last year and on the wish of almighty Allah.

The promotional programs such as advertisement, standardization of the product, sale production, improvement of design and quality, market research, collective efforts for marketing etc. are almost absent in the SSHI. Any Govt or non Governmental agency don't have any initiative regarding the promotional program for ensuring the marketing services for the development of this rural SSHI of Bangladesh.

Marketing Association

A marketing or sales society may serve simply as sales agency, selling on the members' accounts, but usually it operates by pooling the output of a number of small producers.

This kind of society provides a number of advantages for its members. Economies of scale in selling are frequently important. A sales man can book a large order just as cheaply as a small one. Besides, incurring lower selling cost per unit by making fuller use of salesmen and sales facilities, co-operative marketing societies may be able to make contact with larger numbers of potential customers, perhaps providing a means of escape from the dominance of local middleman and thus obtaining higher returns. They may undertake market promotion in distant parts of the country or abroad. Being in constant touch with markets, they may advise members on market trend and alternative production line.³

So, co-operative association for marketing of the products of small scale industries is functioning in many countries including Sweden, Greece, India and in many other Asian Countries. In Sweden, there are about 40 local handicraft societies which operate independently, but which are associated together in a national promotional body. These societies service their member craftsmen by providing pattern, models and sometimes materials as well as by arranging for the sale of the finished products. Similar pattern of

organization in the co-operative marketing societies in the small scale textile and handicrafts industries are found in many Asian countries.

The capability of bargaining with buyers of the finished products of the sample hosiery units is to be strengthened by the co-operative societies and they can also pool and grade the products of the individual producers and encourage them for standardization of their products. They can take initiative for market survey and market research of sample hosiery units which is impossible on the part of an individual unit. These societies can also provide valuable information about market trend and development and opportunities for expanding new markets at home and abroad. For advertising the quality of the products, they can provide showrooms and make contacts with procurement services and with buyers at home and abroad. So the co-operative societies can play effective role in marketing of the products of small scale hosiery units for their smooth operation and progress. The activities of marketing association is totally absent in the marketing process of SSHI.

Subcontracting Arrangements

Now a days, industrial subcontracting is a popular concept prevailing in the industrially developed countries like Japan, India, etc. The UNIDO group of experts have given a definition of subcontracting as:

A subcontracting relationship exists when a firm (The Principal) places an order with another firm (subcontractor) for the manufacture of parts, components, sub-assemblies to be incorporated into a product, which the principal will sell. Such order may include the treatment, processing or finishing of materials or parts by the subcontractor at the principal's request⁴

From the experiences of some developed or developing industrialized countries, subcontracting may simply be defined as such system where the larger industries place orders to the small industries to manufacture essential parts and components which would be incorporated into final products produced by the large industries.

In South Korea, Philippines, Thailand, China, India, Mexico and Brazil, the subcontracting system gained momentum because of the rapid growth of their economies and the impetus derived from the success of the Japanese subcontracting system. Industrial subcontracting is now recognized in most of these countries as an effective institution for promoting industrialization. A number of countries in South-East and South Asian region have commitments to develop subcontracting in their industrial sector.

Following the experiences of the above countries, the application of subcontracting system may be taken into account for the progress and development of small business enterprises in Bangladesh. This subcontracting system may be effective for the survival and development of poor small units and cottage units of the study area. In collaboration with larger units, the government may take necessary steps for the implementation of the subcontracting system in the sample area. For proper marketing of the products this system can create a desirable business atmosphere for the SSHI.

Under the leadership of the larger units, the sample units can implement the subcontracting system with the co-operation of the government and promotional agencies like BSCIC. For the collection of raw materials from home and abroad, financing, marketing, for supplying technical assistance and management training,

using modern machineries, the role of subcontracting system would be more effective for the growth and progress of rural hosiery units.

SUMMARY AND CONCLUSION

The various key aspects of this marketing process of rural SSHI have already discussed where the major aspects of market mechanism of this industry have been focussed. To summarise the forgoing discussion the problems can be identified as follows:

a) Problem in pricing

- 1) Easy entrance into the market as worker were becoming the owners SSH unit.
- 2) Undesirable competition among them due to lower profit motive attitude and illogical fixation of price.
- Scarcity of working capital and incapability of storing the products up to the pick period of for selling.
- b) Problems of distribution of the products
- 1) Existence of middle man in the distributional channel
- 2) Sale in credit and some time unable to realise the value of the product from the buyers.
- Incapable of selling the products at the right price at the right time to the genuine customer. So exploitation by the middle man is very common.
- Ignorance of the owner about the market demand and absence of research activities.
- d) Absence of promotional activities by the concerned agencies.
- e) Absence of any marketing association of the producers
- f) The Substitute Products of this industry are oftenly imported by the businessmen. So the products of this industry are facing competition with the foreign goods.

Recommendations

The owners of SSH units should be more conscious and trained up about the proper marketing activities so that they will be able to sell their product to the genuine customer at the best possible price. Proper steps should be taken by them for stopping/ avoiding illogical fixation of price and undesirable competition among them. In this context SSH units should be encouraged to form their own cooperatives or association, which can serve the purpose of marketing of their products. Through this illogical fixation for price, undesirable competition and distribution of income may be reduced. Exploitation by the middleman and the problem of sale in credit may also be minimised through this type of association. Information about the market may be collected and the association for the improvement of marketing activities can conduct market research. In advertising or in providing samples displays showroom and in establishing contact with the potential customer in national and international market this association may play an effective role.

Govt. agencies should physically investigate the manufacturing and marketing activities of SSH units. Arrangement should be made by the relevant agencies in the public and private sectors for financing SSHI. BSCIC, BOI, NASCIB, the commercial banks and even NGOs can serve the purpose and find the viable investment opportunities in SSHI.

The financial institutional assistance with minimum rate of interest should be made available to them. As a result, small units will be capable of solving major Problem of their market process specially the exploitation of the middle man. Through this, SSH units will also be capable of storing their products during off season and selling it to the genuine customer at the genuine price in the right time.

As this industry is situated in the backward region of Bangladesh, so duty free imported raw materials and machineries should be made available to this industry which may help to some extent in reducing regional disparity between the east and

northern region of Bangladesh.

Now a days the application of subcontracting system in the progress of small scale industry is widely discussed. Following the experiences of those countries stated above the subcontracting system may be introduced in SSH units for proper marketing of their products as well as for the development of the industry also.

Under the leadership of the large units, the SSH units can implement the subcontracting system with the co-operation of the government and promotional agencies like BSCIC. For the collection of raw materials from home and abroad, financing, marketing, for supplying technical assistance, and management training, using modern machineries and even for exporting the product of this industry in abroad, the role of subcontracting system would be more effective for the growth and progress of the SSHI. Government may initiate a project for the implementation of subcontracting system for the growth and progress of SSHI in the study area.

References

¹ S.P. Methur, *Economics of Small-Scale Industries* (Delhi : Sundeep Prokashan, 1979), p. 168.

² S.P. Methur, *op.cit.*, pp. 169-170.

³ ILO, "Services for Small Scale Industries", Studies and Report, New Series, No. 61, Geneva: ILO Publication, 1961, p. 147.

⁴ Mohummad Rawshon Kamal, *Problems of Small Scale and Cottage Industries in Bangladesh* (Japan : The University of Nagoya Press, 1985), p. 141.

Appendix

Table 6.1: (A) Quantity of the Products, Average Unit (dozen) Price and Total Income of the Sample Units in 1998-`99 to

	The state of the s	1998-99	St. Carl		1999-2000			2000-2001	3 36 286		כחחר וחחר			2000 0000	
			Income			Income			-		7007-1007			2002-2003	
	Quantity	Average unit price	(in 00000	Quantity	Average unit price	(in ()00000	Quantity	Average unit price	(in	Quantity	Quantity Average	Income (in	Quantity	Average unit price	Income (in
Muffler (dozen)	72520	18.909	440	74900	543.364	407	56500	454.513	257	45000	400	180	40000	380	(00000,
).			R R		ST. L. SCREEN									200	701
Muffler (dozen)	12150	648.02	79	33800	457.667	155	24100	400.539	76	20000	380	92	20000	360	72
Socks (dozen)	163100	120.32	961	171100	121.952	209	163400	120.973	861	80000	110	80	\$0000	110	33
P. Socks (dozen)	7000	180	13	13000	175	23	20000	2.771	36	15000	091	24	15000	091	24
Sweater (piece)	10000	234.5	23	30800	727.222	69	120600	212.811	257	240000	180	432	450000	170	391
Total		The state of the s	751			862			643	1000			2000	2	COV

MANAGERIAL PERFORMANCE OF JAMUNA FERTILIZER COMPANY LIMITED: A STATISTICAL APPROACH

Subrata Kumar Dey*

ABSTRACT: Managerial Performance acts as a yardstock pf omcessamt production process of an industry. It measures which may be in the form of quantative, qualitative or financial measures including measures based on profitability and conparison with budgets and standard-cost-based measures as well as tje fiqures for previous period. This study is followed by an explanation of achievements of production and sales, conventional break-even and volume-profit analysis, profitability, cost of production breakdown and their manegerial applications. Particular attention is given to the effects of vaviable costs, fixed costs, compound growth rate, ROCE, and effects of production breakdown of Jamuna Fertilizer Compay Limited.

INTRODUCTION

Bangladesh is a country of agro-based economy and agricultural sector plays a titanic role in the national economy of Bangladesh and is considered as the backboe of our national economy. But now-a-days, agricultural production depends on chemical fertilizerall the the country. For the bumper production in agricultural sector, we cab't thinkwithout fertilizer. On the other hand, the economic growth if developing country depends, to great extent on the sustainable development of industrial and agricultural sectors. In the developing country like Bangladesh, both the sectors are interdependent. So, fertilizer factory has a dual role in the context of economic development of Bangladesh. This industry can enhance the industrial growth and on thne other hand, by using fertilizer, Bangladesh can enjoy the boost of agricultural production. So, it is beyiond question of debate that fertilizer industry can play a pioneering role for the economic growth abd development of Bangladesh.

Jamuna Fertilizer Company Limited (JFCL), Tarakandi, Sarishabari, Jamalpur is an enterprise of Bangladesh Chemical Industrires Corporation (BCIC). JFCL is a symbol of friendship between Japan and Bangladesh. This pioneer factory of Banfgladesh was installed in 1988 and the construction work was completed in 1991 with a rated capacity of 5,61,000 metric tons of urea and started commercial production on 01 July 1992. The actual cost of the project was Tk. 1,26,254.55 lac of which 93,551.88 lac was foreign currency supplied by OECF Japan and the rest of the amount was local currency i.e., Tk. 32,702.67 lac. The authorized capital of JFCL is Tk. 420.00 crore and paid-up capital is Tk. 5.00 lac only. It has been mainly producing urea fertilizer based on natural gas as the principal raw material. JFCL has been playing a significant role in the economy of the country byaugmenting the agricultural output leading to the self-sufficiency of food in Bangladesh.

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Statement of the problem

Jamuna Fertilizer Company Limited (JFCL) is a late starter factory of BCIC. But from the very beginning of srarting stage the factory is facing numerous problems due to mechanical and technical troubles, production breakdown, and shortage of nautral gas, annual overhauling, frequent power failure of PDB and natural calamities of the country. in the financial year (FY) 1991-1992 the production breakdown was 57 days due to mechanical troubles and annual overhauling. The figure of production breakdown in the FY 192-193 was 55 day due to some avoidable and unavoidable causes and in 1999 and 2000 the firm suspended its production for 95 and 91 days respectively due to mechanical disruption and annual ovehauling. A a result, the factory could not achieve the full plant capacity. In the 1991-92 and 1992-93 the achievement of plant capacity was 62% and 45% respectively. But the factory had incurred about 58% of total cost as fixed cost. Due to production breakdown, the factory os supposed to incur the large amount of fixed cost without having any benefit. Therefore, the cost of procuction adversely affects the trend of achievement and profitability of the unit. On the other hand, the Ministry of Industry determines the selling price without considering the cost of production. The type of sales policy initiated by the Government also hampered profitability trend of the factory. So, the factors which affect the production volume, cost of production, cost behavior, selling price, profitability, performance of the human resources should be analyzed by using recent statistical data for the better management of the plant.

Methodology

The researcher has highlighted the business growth and the determinants of the of JFCL. In this venture, the researcher covers 10(ten) years' statistical data ranges from 1991-1992 to 2000-2001. Both primary and secondary sources of data are used for statistical and econometric analysis.

Primary data have been collected from mill executives through personal visit with the help of a questionaire. The executives of accounts and costs, audit and budget, procurement, personnel, production, sales, MIS, technical and operation were the respondents of questionaire.

Secondary data have been collected from the Annual Reports, MIS resports, Budgets of JFCL and the publication of BCIC, Special Bulletin of BCIC, Bangladesh Bureau of Statistics, The Fourth Five Year Planm The Fifth Five year Plan, Monitoring Cell of Ministry of Finance, etc.

The collected data and information are arranged and analuzed by using various statistical tools like, Standard Deviation, CV, CGR and Correlation Matrix.

Objectives

The present study is prepared in the view of the fol; lowing objectives:

- To explore the trend of target production, target sales, actual production, actual sales, variable cost, fixed cost, BEP (in unit) and profit;
- To find out production breaidown cost incurred by the plant during the study; and
- To forecast the distressing problems of JFCL during the study period and render constructive recommendations for better management of the Unit.

Justification of the study

In the context of growth and development of agricultural sector, fertilizer shows a consequential role in Bangladesh. It is clearly revealed from the Fifth Five-Year Plan that the demand of fertilizer has been incre3asing gradually. As a result, there is a posotive correlation between utilization of fertilizer and productivity of the agricultural commodities, the demand of Urea is rising by 10%. In the 1996-97 the Government took action to import 200 thousand metric tons of urea to meet the local demand.¹

STATISTICAL ESTIMATES OF PRODUCTION AND COST FUNCTIONS

Production Performance

Production performance of JFCL is shown through actual and budgeted production volume. When actual Production volume is higher that budgeted production volume then it is assumed that the production performance is satisfactory. Therefore, the production performance of JFCL is state below:

Table 1: Production Performance During 1992-2001

(Amount in MT)

Year	Actual Production	Budgeted Production	Achievement (%)
1992	1,73,058	1,70,000	102
1993	4,77,782	4,75,000	101
1994	5,66,836	5,05,000	112
1995	4,20.024	4,20,000	100
1996	5,56,715	5,50,000	101
1997	5,26,742	5,15,000	102
1998	4,96,621	4,90,000	101
1999	3,80,295	3,76,800	101
2000	3,78,355	3,75,000	101
2001	4,93,065	4,75,000	104
Total	44,69,493	43,51,800	1025
Average	4,46,949	4,35,180	103
SD	1,17,010	1,09,639	eta (4 et l
CV (%)	26	25	1 0 0 2

Source: Data are arranged from the Annual Reports and MIS Reporst of JFCL

From the above table 1, it is revealed that average production performanc3 is 103% and the varations of actual production and target production are 26% and 25% respectively. As a matter of act, is could be assumed that the budget is effective and production achievement is satisfactory.

Sales Performance

Sales performance is an indicator of measuring the performance of sales division. In this study, sales performance is done through actual volume of sales and budgeted volume sales. The relation between budget and actual sales volume is focused through achievement percentage. which is highlighted below:

Table 2: Sales Performance during 1992-2001

(Amount in MT)

Year	Actual Sales	Budgeted Sales	Achievement (%)
1992	1,13,254	1,70,000	67
1993	4,68,366	4,75,000	99
1994	5,37,342	5,05,000	106
1995	4,95,529	4,60,000	108
1996	5,05,751	4,62,000	109
1997	5,41,389	5,15,000	105
1998	4,48,111	4,48,111	100

¹ GOB, *The Fifth Five Year Plan 1997-2002,*(Dhaka: Planning Commission, 1997), pp.319-320.

1999	4,59,018	4,59,018	100
2000	3,87,349	3,75,000	103
2001	4,38,907	4,38,907	100
Total	43,95,016	43,08,036	100
Average	4,39,502	4,30,804	100
SD	1,23,795	99,257	12
CV (%)	28	23	12

Source: Data are arranged from the Annual Reports and MIS Reporst of JFCL

It is seen in the table 2 that average sales achievement is 100%; and the deviation of sales achievement is 12%. CV highlighted the variation of achivement, which is 12%. The variations of actual sales and budgeted sales are 28% and 23% respectively. As a result, it is found that the sales budget is effective and sales achivement is not unsatisfactory.

Break-Even Point

The break-even point is the ;eve; or volume of output at which the total costs will be exactly equal to total sales revenue i.e., Sales value = Fixed costs + Variable costs. This indicates that the break-even point is the minimum ;eve; of production at which total cost is recovered and no profit or loss is earned or incurred. Anu production level carried out beyond that level for effecting sales will fetch profit to the business. The break-even point of JFCL is shown in the following table:

Table 3: Break-Even point During 1992-2001

(Amount in Lac Taka) Year Total Variable Contributio Fixed costs EBIT BEP revenue costs n Margin In Units) 1992 14,450.01 9,430.00 5,020.01 12,765.21 -7,745.204,40,063 1993 21,714.77 8,548.59 13,166.18 13,136.73 29.45 4,76,713 1994 21,891.20 9,633.75 12,257.45 12,848.68 -591.23 5,94,177 1995 20,447.69 9,458.97 10,988.72 12,708.20 -1,719.48 4,85,748 1996 19,649.23 12,693.55 6,955.68 13,327.13 -6,371.45 10,66,670 1997 20,895.73 10,013.26 10,442.47 11,908.73 -1,895.47 6,26,452 1998 22,236.85 10,765.38 11,471.47 12,379.62 5,35,936 -908.15 1999 23,556.51 9,370.64 14,185.87 11,870.71 2,315.16 3,18,230 2000 19,782.62 9,560.27 10,222.35 13,560.90 -3,338.55 5,01,923 2001 21,921.10 12,424.10 9,497.00 11,962.79 -2,465.79 6,21,084 Total 2,6,545.7 1,02,767.7 1,03,777.9 1,26,468.7 -22,690.7 56,66,997 Avrg. 20,654.57 10.276.77 10,377.80 12,646.87 -2,269.07 5,66,700 SD 2,484.41 1,381.54 2,763.42 604.00 2,970.36 1,98,556 CV (%) 12.03 13.44 26,63 4.78 -130.91 35.04

Source: Data are arranged from the Annual Reports and MIS Reporst of JFCL

From the abive table 3, it is observed that the variation of total revenue, variable co0st and contribution margin is 12,03%, 13.44% and 26.63% respectively. Contribution margin varies due to the variation of sales volume. On the other hand, the variation of fixed costs, EBIT and BEP (unit) are 4.78%, 130.91% and 35.04% respectively.EBIT varies from time to time tremendously due to changing sales volume and total fixed costs. In addition to that the Firm is dincurring a huge amount of loss due to high amount of depreciation and interest charges. BEP (unit) varies due to change of per unit variable cost for some unavoidable circumstances such as production breakdown, annual overhauling, mechanical troubles, rising trend of

material costs, static selling price etc. As a matter of consequences, the trend of production cost takes a shape of upward slopping when the selling price is static.

Retun on Capital Employed

Teh term means the profit available. Thus, the percentage points out the relation between the volume of capital invested and the amount of profits earned on such capital. The return on capital employed of JFCL is explored in the following table:

From the table 4, it is shown that the percentage of average EBIT is negative (i.e. -1.71) and CV analysis depicts the huge variation (1037.01%). The fluctuation of EBIT is exposed due to static selling price, rising cost of production, frequent production breakdown andd so many avoidable and unavoidable causes.

Table 4: Return of Capital Employed During 1992-2001

	and the second s		(In Lac Tak
Year	Capital Employed	EBIT	ROCE (%)
1992	1,42,670	-7,745.20	-5.43
1993	1,47,069	29.45	0.02
1994	1,43,488	-591.23	-0.41
1995	1,39,645	-1,719.48	-1.23
1996	1,14,425	-6,371.45	-5.57
1997	1,13,914	-1,895.47	-1.66
1998	1,00,125	-908.15	-0.91
1999	1,41,649	2,315.16	1.63
2000	1,46,319	-3,338.55	-2.28
2001	1,39,742	-2,465.79	-1.76
Total	13,29,046	-22,690.71	-1.71
Average	1,32,905	-2,269.07	-1.71
SD	16,777	2,970.36	17.70
CV (%)	12.62	-130.91	-1037.01

Source: Data are arranged from the Annual Reports and MIS Reporst of JFCL

Breakdown Costs

The cost, which is incurred by business concern for its idle time, is known as breakdown cost. JFCL has incurred a huge amount of fixed cost for its idle time due to some avoidable and unvaidable causes. The breakdown cost to the urea fertilizer Unit is stated below:

Table 5: Analysis of Breakdown Cost During 1992-2001

(In Lac Taka)

Year	Fixed Costs	Days Available	Per day fixed Costs	Working Days	Effective Fixed Costs	Idle Days	Breakdown Costs
1	2	3	4=(2÷3)	5	6=(4x5)	7=(3-5)	8=(2-6)
1992	12765	366	34.88	125	4360	2241	8406
1993	13137	365	35.99	310	11157	55	1980
1994	12849	365	35.20	352	12391	13	458
1995	12708	365	34.82	287	9992	78	2716
1996	13327	366	36.41	353	12854	13	473
1997	11909	365	32.63	330	10767	35	1142
1998	12380	365	33.92	323	10955	42	1425
1999	11471	365	32.52	270	8781	95	3090
2000	13561	366	37.05	275	10149	91	3372
2001	11963	365	32.77	323	1086	42	1377
Total	126469	3653	346.19	2948	102033	705	24436
Average	12647	365.30	34.62	294.80	10203	70.50	2444
SD	604	0.48	1.62	66.35	23.56	66.57	2329
CV (%)	4.78	0.13	4.69	22.51	23.09	94.43	95.30

Source: Data are arranged from the Annual Reports and MIS Reporst of JFCL

It is highlighted in the table 5 that total breakdown cost during the study period is Tk. 24,436 lac and annual average figure of that period is Tk. 2,444 lac. Total working days during the study period is 2948 days and the idle days of that period are 705 days. As a result, the firm has incurred a loss of The. 24,436 lac during the last decade. The main causes of production breakdown costs are shortage of natural gas supply, crisis of electricity, mechanical troubles, annual overhaouling etc.

It is revealed from that the variation of actual production, actual sales, value of production and capacity utilization is 26.18%, 28.17%, 2410% and 26.18% respectively. All the variables of the above table are highlighted the potive compound growth rate and the highest growth arate (6.14%) is shoen in case of actual sales. The lowest growth rate (3.85%) is observed in the case of actual procuction and capacity utilization. CV highlights the variation within the variables and probably it is happened due to the large variation in 1992. Here it is also added that 1991 was the commencement year of JFCL and experimental production was started on 31 December, 1991.² As a matter of consequence, the production capacity utilization in the commissioning year was 30.85%.

Test of Hypothesis

Ho: A - There is a positive relation among the variables like actual production, actual sales, value of production and capacity unilization.

Variables	AP	AS	VP	CU
AP	1.00	0.91**	0.91**	1.00**
		0.00	0.00	0.00
AS		1.00	0.82**	0.91**
100			0.004	0.00
VP			1.00	0.91**
				0.00

Source: Data are arranged from the Annual Reports and MIS Reporst of JFCL Note: **Correlation is significant at the 0.01 or 1% LS (2-tailed).

The actual production is highly correlated with actual sales, value of production and capacity utilization. Moreover, actual sales are significantly correlated with the value of production and capacity at 1% LS and value of production is significantly correlated with capacity utilization 1% LS also. As a result, it is found that the variables of the toable are highly correlated with each other at 1% LS. Probably it has happened due to the monopolistic right of production and sales of fertilizer. In fine, it is clearly proved that the alternative hypothesis is accepted.

CONCLUSION

On the basis of the above analysis, it is found that the growth tends is production, sales volume, break-even point (in volume) ROI and above all capacity utilization are not satisfactory. JFCL has failed to desire ROI due to high coxt of production. The main causes of high cost of production are:

Mechanical troubles, shortage of natural gas and increase of gas price, maintainance problems, frequent power crisis, implimentation of wages commission, devaluation of Taka with foreign currency loans causing increasing in interest and

depreciation changes etc. and unrepresentative pricing policy.

JFCL should have a prudent integrated costing system along with budget and budgetary control devices. Management should have to the careful regarding responsibility centers of the Unit. Efficiency, Effectiveness and productivity of the Firm should be measured to identify the liable causes. Financial planning and control should be monitored from time to time. As a whole, cost control mechanism and cost reduction devices should be implemented.

² GOB, Annual Report 1991-1992, (Jamalpur: JFCL, 1992), p.14.

PERCEPTIONS OF QUALITY BY CONSUMERS: A COMPARISON BETWEEN THE PRODUCTS OF MULTINATIONAL BEVERAGES COMPANYS' IN BANGLADESH

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ABSTRACT: This study is an attempt to find out the consumers' quality perceptions regarding the quality of two multinational beverages companies product such as Coca-Cola and Pepsi-Cola beverages in Bangladesh. In this study, some key terms (Perceived Quality, Consumers Attitudes, Opinions and Beliefs) have been discussed. A few literatures on this issue have been reviewed in details in this paper. This study has been operated on the basis of a set of questionnaires. The research has drawn hypothesis (H_0 : $H_P > H_C$, H_a : $H_P < H_C$) based on the perceived quality of Coca-Cola will be higher than Pepsi-Cola beverages from the view point of consumers' perceptions. Relationship between salient beliefs about an object and attitude toward the object in the sphere of Coca-Cola and Pepsi-Cola beverages has been discussed also. The multi attribute attitude model has been used to measure overall attitude towards Coca-Cola and Pepsi-Cola beverages. Some limitations have been mentioned in this study. For the future study, a set of recommendations has been provided here which will be helpful for the companies and the consumers to take better decisions in future.

INTRODUCTION

Bangladesh is the country, consisting of near about fourteen core people, of six seasons (natural division of the year on account of temperature, weather etc). Though Bangladesh is to be considered as a country of six seasons but the two seasons (summer and winter) are main. Depending on the summer various domestic and foreign beverages companies such as Partex Beverages Limited franchised by bottler of Royal Crown Cola International, Florida, USA; Global Beverages Company Limited, Dhaka, Bangladesh; Globe Soft Drinks Limited, Dhaka, Bangladesh; AMCL Bangladesh; Transcom Beverages Company Limited, Motijheel, Dhaka which is franchised by Pepsi-Cola International Company, USA; Monarch International, USA, bottled by NBIL and Tabani Beverages Company Limited, Mirpur, Dhaka which is franchised by Coca-Cola® International Company, USA have been incorporated in Bangladesh with using own technology and under the franchising contract with foreign franchiser companies. The researcher thinks with his intuition that both companies Transcom Beverages Company Ltd. and Tabani Beverages Company Ltd. should consider the quality of their product and try to know the consumers' perception regarding the perceived quality of products of the companies for performing better in future. In this paper, the researcher will be engaged to measure the perceived quality of Coca-Cola¹ and Pepsi-Cola² beverages from the viewpoint of the consumers' perceptions.

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RELATED VARIABLES OF THE STUDY

Perceived Quality

Quality can be defined as "freedom from defects" (Kotler and Armstrong, 1997). But most customer-centered go beyond this narrow definition of quality. Instead, Marketing Scholars define quality in terms of customer satisfaction. For example, the vice president of quality at Motorola, a Company that pioneered total quality efforts in the United States, says "Quality has to do something for the customer.... Our definition of a defect" is if the customer doesn't like it, it's a defect" (Therrien Lois, 1991). Similarly, the American Society for Quality control defines "quality as the totality of features and characteristics of a product or service that bare on its ability to satisfy customer needs" (Kotler and Armstrong, 1997).

Quality, as an elusive construct like beauty, is a key competitive weapon in the global marketplace. Quality cannot be defined precisely; rather it is a simple, unanalyzable property that we learn to recognize only through experience (Garvin, 1984; Zeithaml, Berry and parasuraman, 1986). Most of the previous researchers agree with the argument that the high quality perception often depends on certain assumptions about consumer behavior. These are (1) Consumers hold some uniqueness beliefs in memory toward the product under evaluation; (2) Consumers possess a positive impression toward the manufacturer that produces the product; (3) Consumers hold a positive impression toward the country from which the product was originated; and, (4) the price of the product conveys some favorable information, i.e., the probability to gain benefits from the product will surpass the present and future costs Chowdhury, 2001).

The concept becomes indistinct when scholars in different disciplines tend to view quality from different standpoints. However, we should not forget that consumers serve the ultimate judge of quality in the marketplace. Even well designed, defect-free products can fail if they do not fit consumers' perceptions of high quality (Chowdhury, 2001). Thus, Monroe and Krishnan (1985) defined perceived quality as, "the perceived

ability of a product to provide satisfaction relative to available alternatives".

Steenkamp (1990) defined perceived quality as, "an idiosyncratic value judgment with respect to fitness for consumption, which is based upon the conscious and/or unconscious processing of quality cues in relation to relevant quality attributes within the context of significant personal situational variables". Steenkamp focuses on three points to explain this definition of perceived quality. First, perceived quality should be studied under the broader topic of values. Because perceived quality involves preference, it is neither completely objective nor wholly subjective, and does not reside in purchasing itself, but rather in the product's consumption. Second, perceived quality is an evaluative judgment. In other words, perceived quality is a consumer's overall evaluative judgment and a higher-level abstraction based on the perception of the product on quality attributes. Third, perceived quality is formed through subject-object interaction. Perceived quality is an evaluation resulting from a contextual setting consisting of comparative, personal, and situational factors, which do not allow complete subjectivity or objectivity.

Perception of quality is based on subjective perceptions of intrinsic attributes (Garvin, 1984); and /or extrinsic cues like manufacturer's image, price and country of origin among others (Dodds et al., 1991; lee, 1994; Teas and Agarwal, 2000; Zeithaml, 1988). Intrinsic cues refer to attributes that cannot be changed without changing the physical Characteristics of the product. Extrinsic cues are attributes that are not part of

the physical product (Olson and Jacoby, 1972; Szylillo and Jacoby, 1974). However, it may also contain affect that is not reflected in the measured attributes, even when a large set of attributes is included. Thus, lee's (1994) definition to overcome the previous controversies deserves special attention because of its all inclusiveness characteristics. He defined perceived quality as, "consumer's evaluative and affective judgments concerning the overall excellence of a brand based on intrinsic as well as extrinsic attributes which are directly related to his or her satisfaction with that brand".

Consumers' Attitudes, Opinions and Beliefs

Attitude is a person's overall evaluation of a concept (Russel, 1986). Evaluations are affective responses at relatively low levels of intensity and arousal. These evaluations can be created by both the affective and the cognitive systems (Fishbein and Ajzen, 1981). The affective system automatically produces affective responses including emotions, feelings, moods and evaluations or attitudes as immediate, direct responses to certain stimuli. These favorable or unfavorable affective responses are generated without conscious, cognitive processing of information about the product. Then through classical conditioning processes, these evaluations may become associated with a product or brands, thus creating an attitude (Elenora, Shimp and Engle, 1987). Attitude means "the most distinctive and indispensable concept in contemporary American social psychology". And it is one of the most important concepts used by marketers to understand consumers (.Martin Fishbein, 1980). Lutz J. Richard Triandis, H.H. Kassarjian and T.S. Robertson, 1981) combined three response types (thoughts, feelings and actions) into the tripartite model of attitude. In this scheme, attitude was seen as comprising three related components - cognition (knowledge about the object), affect (positive or negative evaluations of the object), and conation (intentions or actual behavior toward the object). Later, Fishbein, like Thurstone, argued that it is most useful to consider attitude as a simple, undimensional concept-the amount of affect a person feels for an object. Attitudes are learned predispositions to respond to an object or class of objects in a consistently favorable or unfavorable way (Gordon, 1935). This definition taps three important dimensions of attitudes. First of all, they are learned, not innate. They are learned through socialization and experience. Second, attitudes represent a predisposition to response. When we say that an individual has an attitude toward some object (a product), then we are making an implicit prediction about that individual behavior (purchase). Finally, Allport's definition points to the fact that attitudes are consistent and quite stable over time. Thus attempting to change attitudes can be a difficult task. In this paper, consumer attitude is related with the cognition, affect conation, predisposition, socialization and experience of consumers' on Coca-Cola and Pepsi-Cola beverages.

Consumers' opinions are highly related with attitude. Opinion means a belief or judgment or views of people about some body or some thing (Hornby, 2000). Opinion is the expression of attitudes relevant to some body or some thing. Sometimes it is used to refer the judgment, belief and views of people on issues. In this paper, consumers' opinions are related with the viewpoint, or belief or judgment of consumer's

on Coca-Cola and Pepsi-Cola beverages.

Belief is a feeling of man that some body or some things is real and true (Hornby, 2000). It makes trust or confidence in some things or some body. One can accept a

thing as true or real on the basis of his beliefs.

In this paper, consumers' beliefs are related with the direct cognitive structure of the produced products of Coca-Cola and Pepsi-Cola beverages in which consumers' have the full trust and confidence on those products.

LITERATURE REVIEW

There is no available literature on perceived quality measures on Coca-Cola and Pepsi-Cola beverages. Some researchers and authors have discussed regarding perceived quality measures theoretically. Chowdhury (1999) discussed the perceived quality in his MBA thesis. He explained this issue theoretically. In an article Chowdhury (2001) discussed Generalization of Perceived Quality Measures: An Evaluation. Consumers' attitudes towards marketing activities are important from both a theoretical and a managerial standpoint (Gaski and Etzel, 1986). Garvin (1984b) a proposed five approaches in defining quality (See Table–1). Among these five approaches, user-based definitions are generally equated with "Perceived quality" (Zeithaml, 1988). The major focus of perceived quality is the consumers' satisfaction and related subjective perceptions of the product's (Garvin, 1984).

Table 1: Approaches in Defining Quality (By Garvin, 1984b)

Definitions	Specific Examples
Transcendent Approach: Product-based Approach:	Quality, like beauty, can only be understood after one is successively exposed to the characteristics of an object. This approach views quality as a measurable variable. It assumes that if a product possesses more desired attributes than other
User-based Approach:	products, the product is considered as a higher quality. Product that better satisfy consumers is high quality product. If a product does not satisfy consumers, the product cannot be a higher
Manufacturing- based Approach:	quality product even though it has objectively better characteristics. The essence of this approach concerned with engineering and manufacturing practice. The primary emphasis is production
Value-based Approach:	control to reduce overall costs of producing a product. This approach suggests that the quality product is one that performs satisfactorily at a reasonable cost.

Based on the five approaches in defining quality, Gervin (1984a, 1984b, 1987) mentioned eight dimensions of quality for various product categories: Performance, features, reliability, conformance, durability, serviceability aesthetics and perceived quality (see Table–2). With respect to consumer, durables, Brucks and Zeithaml, (1991) identified six dimensions of perceived quality: ease of use, functionality, serviceability durability, performance and prestige. Table -2 presents representative of each dimension.

Table -2: Dimensions of Perceived Product Quality

Examples
The brand has clear instructions on how it should be used. The
brand is easy to start and operate.
The brand has unique functions that cannot be found in other brands.
Parts for the brand are easily obtainable and service warranty of the brand is well honored.
The brand has a longer product life than most other brands and requires less service.
The brand does the basic job very consistently.
The brand reflects a high degree of social status.

Based on Brucks and Zeithaml's (1991) six dimensions, Lee (1994) primarily generated 59 perceived quality measure items and validated these measures in two pretests. The first pretest was performed with a total of 113 student subjects. TVs, food processors, cameras, and Hi-Fi stereos were chosen as stimuli. Four separate versions of the questionnaire were developed for each of four product categories. A principal component factor analysis using varimax rotation extracted 28 items. The second pretest was performed with one additional item that measured overall quality, and arbitrarily 10 items out of 28 were negatively transformed. The purpose was to confirm the content and predictive validity of the item scales. A total of 114 student subjects and seven product categories, CD players, VCRs, hand calculators, snow ski sets, personal computers, camcorders, and microwave ovens were used for this measurement. Several iterative calculations were performed, dropping poor items with each iteration. The final iteration generated 16 items with six distinct dimensions. It does not fulfill the gap on the perceived quality measures on Coca-Cola and Pepsi-Cola beverages. So, it is necessary to justify the perceived quality measures on Coca-Cola and Pepsi-Cola beverages from the viewpoint of consumers' perceptions.

RESEARCH QUESTIONS

Problem is an obstacle that hinders the progress or development or stands on the way of innovating the unknown. A problem is essentially that aspect of a problematic situation, which is modified will correct the difficulties (Parsons, 1949). John Dewey (1938) "A problem represented the partial transformation by inquiry of a problematic situation to a determinate situation". In the opinion of Gibson "A problem is really a springboard for a leap into the unknown". A problem is a doubtful case or question difficult of solution or settlement; it is necessary to understand the relevant facts in order to solve the problem. Research problem involves starting the general problems and identifying the specific components. When research problems are clearly defined the research can be designed and conducted properly. In this research work three types of problems have been found. The problems in the shape of questions are as follows:

Q1. What types of intrinsic and extrinsic cues play the exact role on perceived quality of Coca-Cola and Pepsi-Cola beverages?

Q2. What are the differences between Coca-Cola and Pepsi-Cola beverages in

terms of perceived quality?

Q3. What are the consumers' attitude and opinions regarding the perceived quality of Coca-Cola and Pepsi-Cola beverages?

STUDY PURPOSE

Based on research questions, the purpose of this study is to clarify and define. Any task, whatsoever, should be performed depending on any specific objective. The main objective of this study is to explore the perceptions of quality by consumers on Coca-Cola and Pepsi-Cola beverages. The specific objectives depending on which the research study is performed. The first objective is to find out intrinsic and extrinsic cues, which played exact role on the perceived quality of Coca-Cola and Pepsi-Cola beverages. The second objective is to find out the differences between Coca-Cola and Pepsi-Cola beverages in terms of perceived quality. The third objective is to know consumers' attitudes and opinions about the perceived quality of Coca-Cola and Pepsi-Cola beverages. The fourth objective is to provide some recommendations on the basis of this research's findings, which will help the company to solve those problems.

HYPOTHESIS OF THE STUDY

A hypothesis is placed under known facts of the problem to explain relationship between them. It is a statement subject to verification. It is a guess but experienced guess based on some facts. G.A. Lundbers (1926), "A hypothesis is a tentative generalization the validity of which remains to be tasted. In its most elementary stages, the hypothesis may be any hunch, guess, imagination idea or intuition whatsoever which becomes the basis for action or investigation". In the words of Richard D. Crisp (1957) "A hypothesis may be defined as a tentative theory or supposition set up and adopted provisionally as a basis of explaining certain facts or relationships and as a guide in the further investigation of other facts or relationship". From the above-mentioned discussion we can get some attributive of a good hypothesis. A good hypothesis contain the following attributes: (I) It can be compared with the results of observations; (2) It does not conflict with established lows of nature; (3) The consequences inferred agree with he facts of observation (W. J. Jevons, 1877); (4) it should be simple and testable; (5) it should be a clear and relevant prediction about the problems (S.P. Dhondyal, n.d).

The researcher has drawn hypothesis. The hypothesis which is taken in the research work is based on the perceived quality of Coca-Cola will be higher than Pepsi-Cola from the viewpoint of consumers' perceptions. The mathematical analysis of this

hypothesis is as follows:

Hose
$$H_0$$
: miles $H_p > H_c$ such a sectional value value to H_a : from $H_p < H_c$ when H_c and H_c is the H_c

RESEARCH METHODOLOGY

Pretests make the problem of the experience of

Three pretests are required for performing this research work.

Pretest-1:

At first, the researcher took decision for conducting a study on beverages products. The first pre-test was conducted in order to find the propensity of the consumers to what type of beverages products and what beverages products are very much popular among the consumers. This pre-test was conducted based on the following questionnaire:

A study is being conducted on perceived quality measures of beverages products from the viewpoint of consumers' perceptions in Faculty of Business Studies. The findings of the study would help the researcher to understand about beverages products.

Question: Please mention different brands of beverages product in the following spaces that you kept in mind. 1...... 2....... 3....... 4....... etc.

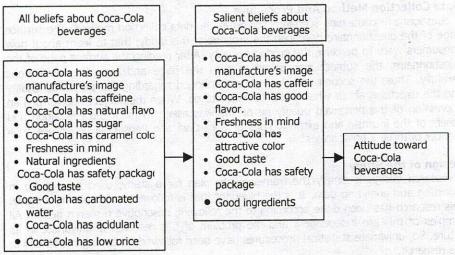
The researcher collected necessary data from the Rajshahi University area. The data has been collected from 1 May to 10 May in 2003. All the respondents were the students of Faculty of Business Studies. Questionnaires were supplied among the respondents on the basis of purposive sampling. The total respondents were 45. The respondents mentioned the name of the various beverages products, but all the respondents (45 respondents out of 45) mentioned the name of Pepsi-Cola as well as Coca-Cola beverages and 43, 40, 38, 35 and 35 respondents out of 45 respondents mentioned the name of the RC Cola, URO Cola, Sun Crest Cola, Virgin Cola and Pran Cola respectively. On the basis of respondents' choice, the researcher decided to conduct his research work.

Pretest-2:

The purpose of conducting this pretest was to obtain a list of intrinsic and extrinsic cues which is associated with the quality of Coca-Cola and Pepsi-Cola beverages. List of Intrinsic and extrinsic cues have been obtained by the distribution of questionnaire among the respondents in accordance with the free recall protocols. People cognitive capacity is limited. So, only a few of respondents beliefs can be activated beliefs (Figure-1) and consciously to once. The activated beliefs are called salient beliefs. Only the salient beliefs about on object (those are activated at a particular time in a specific context) cause or create a person's attitude toward that object (Fishbein and Ajzen, 1981). Thus, one key to understanding consumers' attitude is the identify and understand the underlying set of salient beliefs (Peter and Olson, 1993).

Fivety respondents participated in this test. Respondents mentioned several intrinsic and extrinsic cues about the quality of Coca-Cola and Pepsi-Cola beverages depending on which a final questionnaire was prepared for the research work.

Figure-1. Relationship between Salient Beliefs about an Object and Attitude toward the Object (Peter and Olson, 1993).



Pretest-3:

The purpose of pretest -3 was to obtain relevant data about the quality of Coca-Cola and Pepsi-Cola beverages which data would fulfill our research objective. For achieving above purpose, researcher distributed 15 questionnaires among respondents of Faculty of Business Studies before distributing all questionnaires. After collecting data, researcher analyzed the collected data and obtained results, which was similar with our research objective. The result of pretest was to be optimal. For this reason, all questionnaires of study were delivered into the respondents in the Faculty of Business Studies.

Sample

The primary goal of this research was to develop theories that provide a general understanding of how consumers perceive the quality of Coca-Cola and Pepsi-Cola beverages. Students have been used as the sample in this study. There are many arguments in favor of and against the convenient samples containing students. Several authors have enumerated the dangers of using student sample in research (Beltramini, 1983; Oakes, 1972). These authors have generally cited threats to external validity as their primary concern, arguing that students are a typical of the "general population" and that any findings based on students samples may therefore not be generalizable to other populations (Cunningham, Anderson and Murphy, 1974). However, some scholars disagree on this issue. Oakes (1972) contends that such arguments are specious because, regardless of what population is sampled, generalization can be made only with caution to other populations.

Thus the major part of the data was collect from four different business classes. A convenient sample has been used and a total of 100 responses were collected. Standard demographic measures were included in order to characterize the sample. Briefly, the male-female ratio in the field of Coca-Cola beverages is 67% and 33% and in the sphere of Pepsi-Cola beverages is 77% and 23% respectively.

Data Collection Method And Procedure

A questionnaire containing scenarios served as the data collection method. The surface page of the questionnaire described the propose of this study, that to learn about how consumers were to perceive the products quality. After reading the surface page of the questionnaire, the subject was asked to turn the page and read the instructions carefully. Thus, the second and third page mentioned regarding the perceived quality and the directions about what would be asked to do. When the subject had formed an impression of the perceived quality he or she was asked to mark the evaluation and beliefs of the intrinsic and extrinsic cues of Coca-Cola and Pepsi-Cola beverages on a number of three 7-point scales³.

Design of the Study

A research design is simply the framework or plan for a study, used as a guide in collecting and analyzing data. It is the blueprint that is followed in completing a study. This research has been done according to the following descriptive research design. All samples of this are independent and the problem of this research is univariate in its nature. So, univariate statistical procedures have been followed for testing hypothesis in this research.

RESULTS

Overall Attitude Measurement

In this research, overall tasks (data collection, presentation, tabulation and calculation) have been done by following the Fishbein multi attribute attitude model. The key proposition in Fishbein's theory is that the evaluations of salient beliefs cause overall attitude (Peter and Olson, 1993). In Fishbein's multi attribute attitude model, overall attribute toward an object is a function of two factors: which are 1) the strengths of the salient beliefs associated with the object. 2) the evaluations of those beliefs (Fishbein and Ajzen). Formally, the model proposes that:

$$A_0 = \sum_{i=1}^n b_i e_i$$

Where,

 A_0 = Attitude toward the object

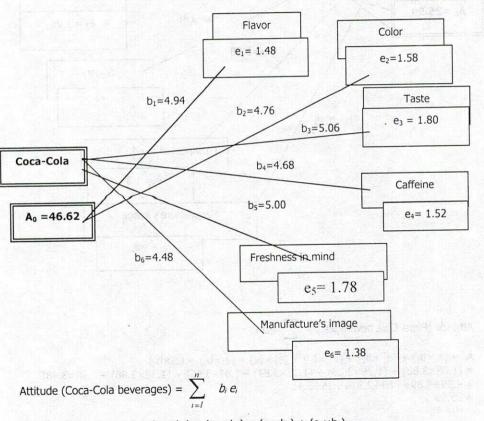
 b_i = The strength of the belief that the object has attribute i

 e_i = The evaluation of attribute i

n = The number of salient beliefs about the object

This multi attribute attitude model accounts for the integration process by which product knowledge (the evaluations and strengths of salient beliefs) are combined to form an overall evaluation or attitude.

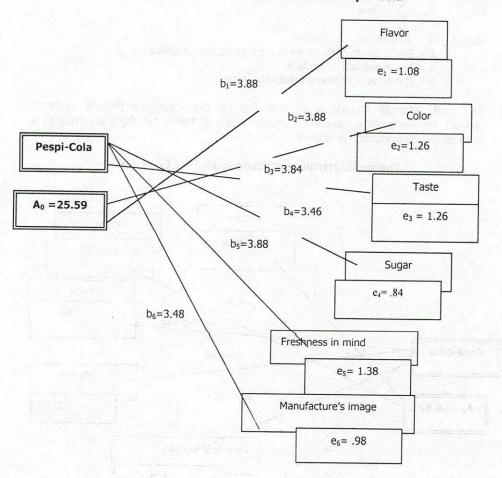
The multi attribute attitude model for Coca-Cola



$$\begin{split} &A_0 = (e_1 \times b_1) + (e_2 \times b_2) + (e_3 \times b_3) + (e_4 \times b_4) + (e_5 \times b_5) + (e_6 \times b_6) \\ &= (1.48 \times 4.94) + (1.58 \times 4.76) + (1.80 \times 5.06) + (1.52 \times 4.68) + (1.78 \times 5.00) + (1.38 \times 4.84). \\ &= 7.31 + 7.52 + 9.10 + 7.11 + 8.9 + 6.68 \end{split}$$

= 46.62.

The multi attribute attitude model for Pepsi-Cola



Attitude (Pepsi-Cola beverages) =
$$\sum_{i=l}^{n} b_i e_i$$

 $A_0 = (e_1 \times b_1) + (e_2 \times b_2) + (e_3 \times b_3) + (e_4 \times b_4) + (e_5 \times b_5) + (e_6 \times b_6)$
= $(1.08 \times 3.88) + (1.26 \times 3.88) + (1.26 \times 3.84) + (.84 \times 3.46) + (1.38 \times 3.88) + (.98 \times 3.48)$
= $4.19 + 4.89 + 4.84 + 2.91 + 5.35 + 3.41$
= 25.59 .

We can easily understand by showing above figures the overall attitude of consumers about the quality of Coca-Cola is quite different from Pepsi Cola. The overall attitude of consumers' on Coca-Cola ($A_o=46.62$) is higher than the overall attitudes of Pepsi-Cola beverages ($A_o=25.59$). So, the consumers' overall attitude on Coca-Cola beverages is comparatively better than that of Pepsi-Cola beverages.

Tests of Hypothesis

The hypothesis testing approach involves the formulation of both a null and an alternative hypothesis. Besides, the tests of hypothesis involved planned comparisons with the relevant product attribute involved.

Flavor Evaluation of Coca-Cola and Pepsi-Cola Beverages

 ${
m H_a}$ predicts that the perceived quality of Coca-Cola will be higher than Pepsi-Cola beverages from the viewpoint of consumers' perceptions. But from the evaluation of flavor it is proved that there are no significant difference between the Coca-Cola ($\overline{X_I}$) and Pepsi-Cola ($\overline{X_I}$) beverages according to the perceptions of consumers.

$$\overline{X_1} = 1.480 \text{ Vs. } \overline{X_2} = 1.080; \text{ t (1,98)} = 1.555, P > .123$$

By realizing above equation, the null hypothesis may be accepted and alternative hypothesis may be rejected even at 0.10 probability level.

Color Evaluation of Coca-Cola and Pepsi-Cola Beverages.

 H_a assumes that the perceived quality of Coca-Cola will be higher than Pepsi-Cola from the viewpoint of consumers' perceptions. But from the evaluation of color it is proved that there are no significant difference between Coca-Cola $(\overline{X_I})$ and Pepsi-Cola $(\overline{X_I})$ form the viewpoint of consumers' perceptions.

$$\overline{X_1}$$
 = 1.580 Vs. $\overline{X_2}$ =1.260; t (1, 98) = 1.286, P >.202

Through showing above equation, the null hypothesis may be accepted and alternative hypothesis may be rejected even at 0.10 probability level.

Taste Evaluation of Coca-Cola and Pepsi-Cola Beverages.

 ${
m H_a}$ predicts that the perceived quality of Coca-Cola will be higher than Pepsi-Cola from the viewpoint of consumers' Perceptions. From the evaluation of taste it is proved that there are significant difference between Coca-Cola (\overline{X}_I) and Pepsi-Cola (\overline{X}_2) in accordance with the consumers' perceptions.

$$\overline{X_1}$$
 =1.800 Vs. $\overline{X_2}$ = 1.260; t (1, 98) = 2.029, P <. 045

In this situation, the null hypothesis may be rejected and alternative hypothesis may be accepted.

Evaluation of Freshness in Mind of Coca-Cola and Pepsi-Cola Beverages.

 $\mathsf{H_a}$ predicts that Coca-Cola ($\overline{X_I}$) is well than Pepsi-Cola ($\overline{X_2}$) in the viewpoint of perceived quality. But, according to the evaluation of freshness in mind it is proved that there are no significant differences between above-mentioned two beverages.

$$\overline{X}_1 = 1.780 \text{ Vs. } \overline{X}_2 = 1.380; \text{ t (1, 98)} = 1.517, P > .133$$

In this situation, the null hypothesis may be accepted and alternative hypotheses may be rejected even at 0.10 probability level.

Evaluation of Manufacturer's Image of Coca-Cola and Pepsi-Cola Beverages.

 $\rm H_a$ assumes that the perceived quality of Coca-Cola will be higher than Pepsi-Cola from the viewpoint of consumers' perceptions. But, after testing hypothesis there are no significant differences between Coca-Cola and Pepsi-Cola beverages in terms of attribute manufacturer's image by the perceptions of consumers.

$$\overline{X_1}$$
 = 1.380 Vs. $\overline{X_2}$ = .980; t (1, 98) = 1.481, P > .142

By realizing above equation, the null hypothesis may be accepted and alternative hypothesis may be rejected even at 0.10 probability level.

DISCUSSION AND CONCLUSION

General Discussion

There are no significant difference between Coca-Cola and Pepsi-Cola beverages in terms of the evaluation of flavor, color, freshness in mind, and manufacture's image according to the findings of hypothesis. In fact, it is proved that Pepsi-Cola and Coca-Cola beverages are all but same in their composition on according to the viewpoint of flavor, color, freshness in mind and manufacturer's image. Only, on the basis of the taste, a significant difference has been found between Coca-Cola and Pepsi-Cola beverages. The taste of Coca-Cola beverages is better than Pepsi-Cola beverages according to the findings of hypothesis.

The overall attitudes of consumers' on Coca-Cola is better than the overall attitudes of consumers' on Pepsi-Cola according to the judgment of overall attitudes measurement. That means, the attitude of consumer is much more better regarding the various attributes of Coca-Cola such as caffeine, good flavor, good taste, freshness in mind and manufacturer's image.

Limitations and Future Research

Research is an unending process. It is also complicated. In this process each and every researcher faces a lot of problems. The present researcher of this study is not exceptional. In this research work he faced some problems and tried to solve the problems. Although the researcher made an effort to solve the problems, a number of limitations have been arisen in this research work. The first limitation lies on the student sample that has been used in this study. There are many arguments in favor and against the convenience sample-containing student. Various problems and lacks have been arisen in the time of collecting primary data such as unconsciousness of the respondents, in associated with attitude, careless expression etc. It is not a comprehensive study because it was limited only in the student community. The second limitation of this study lies on that most of the students do not know the perceived quality of beverages products in proper way. That is why, students as respondents gave answer of questionnaire hypothetically. For this reason, in some spheres of this study researcher has got some unnecessary data from the respondents. This problem affected on the research results in little some. The third limitation of this study is the data gathering that have been gathered from 100 students. This is really a guite few. For the scientific and comprehensive Study the number of respondents should increased into a large number.

In future research, the next researcher can search for collecting data in mass people or in the various sections of mass people. He should also consider the consciousness of the respondents their attitudes and expression etc. He should also

operate the research program for collecting data by the trained data collector. The future researcher should take the number of respondents from the various corner or section of the consumers of beverages products, in a large way. Although there are some limitations in this study nevertheless it can help the top management and others for making good policies and formulation strategies regarding the perceived quality of beverages products.

Recommendations

Actually, the fourth objective of our research was to provide some recommendations, which will help to solve those problems faced by both Transcom Beverages Company Ltd. and Tabani Beverages Company Ltd. in their product marketing. On the basis of findings, some necessary recommendations are provided. These recommendations will help to reduce or solve the problems of existing quality of beverages products of both Tabani Beverages Company Ltd. and Transcom Beverages Company Ltd. in the changing and competitive market situation. The recommendations are as follows.

- Overall attitude of consumers' regarding the perceived quality of Coca-Cola is better than Pepsi-Cola beverages. For this reason, Transcom Beverages Company Ltd. should take necessary steps for increasing consumers' satisfaction and their attitude about their products. For the betterment of the Pepsi Cola and for the consumer's satisfactorily attitude the Transcom Beverages Company Ltd. can accept the following steps:
 - They should develop the quality of products.
 - -Expand brand image.
 - -Use effective promotional tools and so on.
- In spite of the better position of Coca-Cola than that of Pepsi-Cola, Tabani Beverages Company Ltd. should take the initiative for "Continuous Developing Quality Program" to develop consumers' overall attitudes on their products in the changing and competitive market situation.
- The authority of Transcom Beverages Company Ltd. should develop the quality of taste of their products.
- Both Tabani Beverages Company Ltd. and Transcom Beverages Company Ltd. should remember it, quality, as an elusive construct like beauty, is a key competitive weapon in the global market place. So, quality should be the concerned matter of both companies.
- Consumer's needs, wants and demands are so much changeable. So, by gathering information both companies should provide qualified products in accordance with the needs, wants and demands of consumer's in this market situation.

Conclusion

Now-a-days, business atmosphere is very much faster and wider. Because of these causes needs, wants and demands of people are so much changeable. At present, the consumers expect qualified products with low price. So, perceived quality measures by considering consumers' are really acceptable and reasonable task.

From the viewpoint of perceived quality there are no significant differences between Coca-Cola and Pepsi-Cola beverages. Only, according to one dimension, taste of quality of Coca-Cola is better than that of Pepsi-Cola beverages. It is obvious that each company tries to conduct their business successfully by a side differentiation of quality from competitors. From this viewpoint, Coca-Cola beverages might be so much benefited by highlighting taste to present and potential consumers.

By considering and analyzing the research findings, some necessary recommendations have been provided. If the authority of Tabani Beverages Company Ltd. and Transcorn Beverages Company Ltd. consider the available provided recommendations and be able to implement these efficiently and effectively it will be better for the consumers as well as the companies.

NOTES

- 1. Coca-Cola is a product of Tabani Beverage Company Ltd. Tabani Beverages Company Ltd. Mirpur, Dhaka, is another leading franchisee company in Bangladesh which is franchised by Coca-Cola_® International Company U.S.A and engaged to manufacture and distribute Coke, Fanta and Sprite.
- 2. Pepsi-Cola is a product of Transcom Beverage Company Limited. Transcom Beverages Company Ltd. Motizheel, Dhaka, is one of the leading franchisee company, USA and engaged to manufacture and distribute Pepsi, 7up, Miranda, slice and Mountain Dew.
- 3. A 7 point scale questionnaires has been used in this study which has two parts such as evaluation and believe ranging from "Strongly favorable" (+3) to "Strongly unfavorable" (-3) and "Strongly believe" (7) to "Strongly disbelieve" (1) respectively.

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MANAGERIAL EFFICIENCY - A STUDY ON APPLICATION OF OPERATIONS RESEARCH IN BANGLADESH

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ABSTRACT: The paper studied micro-level efficiency in Bangladesh as a case study. The study found that management of different large organizations of national economic interest in Bangladesh predominantly seems to be not aware of the importance of modern managerial techniques in decision-making and, therefore, depends much on conventional way of decision making. Macro-economic crisis which is strongly correlated with micro-economic inefficiencies being the cause of distortion in the structure of incentives to producers, as argued by Bhagwati, the underdeveloped countries will loose its relative bargaining strength in bilateral trade under open economy and will make the general economic situation further worse off if they do not take care of the inefficiencies revealed in our present study.

INTRODUCTION

Development compulsions of Bangladesh are, at present, identified as (i) ensuring higher economic growth with increase in productivity and income, (ii) introduction of new technology required, (iii) tapping all existing potentiality to economies the consumption of rapidly depleting resources. Under this backdrop of economic compulsions, perspective of planning and its aims and objectives laid down by the Bangladesh planning commission at the beginning of the 5th plan period have been considered as to be conducive to free market economy.

'The Fifth Five Year Plan aims to put Bangladesh on a path of self-sustaining growth for the improvement of socio-economic condition of the people. Acceleration of GDP growth will allow the economy to break through the continuing poverty syndrome. While there has been substantial improvement in recent years in macroeconomic management, the Plan recognizes the need for massive investment, with private sector playing the major role for rapid growth and efficiency.'

'Private sector will be the main agent of growth during the Fifth Plan. Commitment to a free market economy, privatization of public enterprises, deregulation and liberalization of public control, reforms and structural adjustments will create an enabling environment for expansion of the private sector. Private sector will be encouraged through proper incentives and facilities to establish an export-led

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industrial base. For this, foreign direct investment (FDI) will act as the lever for inflow

of new technology, management skill and market promotion.'

Integration of the domestic market of any underdeveloped country, which has been following the import substitution as a strategy for development, with that of the global economy and opening the market by removing all tariff and non-tariff barriers, in effect, implies a policy shift from 'inward looking' to 'outward looking'. Everyone says, and says presumably correctly, that it would enhance competitiveness. This, however, is not a conflicting situation of non-cooperative nature. The position of any participating country in this global competitive market resembles a player in a game like Prisoners' Dilemma could be understood in the perspective of cooperative environment. This cooperative environment, however, does not exclude bargaining element. The presence of this bargaining element in global cooperation necessitates the development of efficient and effective system in decision making process, which has long been neglected in underdeveloped countries and has been pointed out by Myrdal (1968), Chenery & Strout (1966), Sen (1990) and others.

In the game of 'Prisoners Dilemma' (Luce and Raiffa, 1957: 115) each player has a 'strictly dominant' individual strategy, by following which, each player's own objective can be better served without any pre-play agreement with the other (Sen, 1990: 82). However, at the same time, everyone's objective would have been better served had they followed a course of actions mutually agreed upon prior to play i.e.; cooperative strategy (not confess, not confess). Non-recognition of mutual interdependence and pursuit of 'self-goal-choice' implies that each player follows the non-cooperative strategy, and thereby, each player 'will end up in a situation inferior to following cooperative strategy' (Sen, 1990: 80). Hence, co-operation is the prerequisite of making benefit out of this globalization of economy. But the important fact which we can understand from the prisoners' dilemma situation is that bargaining capacity of each player determines the relative position on the co-operative solution, known as negotiation set represented by the line AB of the joint maximal set $\,R^{\,\prime}\,$ in Figure-1 (Luce and Raiffa, 1957: 118). Since bargaining cannot be excluded even in a co-operative situation and relative gain depends much on it, the managerial efficiency may provide an edge in this bargaining situation.

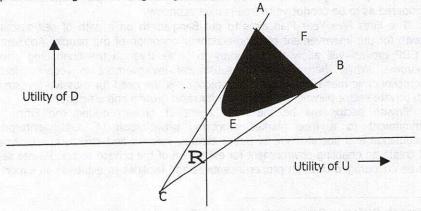


Figure-1

It is, therefore, said that one of the major aspects of this sector level or micro level efficiency relies on the improvement in decision-making ability of managerial force. A proper measure in this direction may proved to be relatively beneficial for any under-developed or developing country in the milieu of openness of the economy through the integration with the fiercely competitive global market.

Thus the planning commission of Bangladesh accepts strategic importance of efficiency for higher rate of economic growth and expects that the efficiency would be increased by 'new technology' and 'managerial skill' that would be supplied by the developed countries. At this point, perhaps, we fail to notice a set of simple questions: do we have already exhausted all the means and scopes of improvement of managerial skill that can be achieved without any foreign help? Or, do we have exhausted all our already existing resources those are needed to improve the quality of management? How much the managers of large organizations and govt. policymaking bodies in Bangladesh are motivated towards achieving efficiency?

International experience shows that by applying simple optimizing techniques, wastages of resources worth million of dollars can be avoided, additional revenue of million dollars can be generated. We presume that there are so many areas in the economic front of Bangladesh where we can improve much with regard to managerial efficiency without any foreign help. With this backdrop this paper attempts to assess general condition of application of optimization techniques (OR techniques) in Bangladesh.

SAMPLE & METHODOLOGY OF THE STUDY

Our sample is selected on the basis of non-probability sampling, which is a procedure of selecting a sample without the use of probability or randomization. We will keep in mind the obvious limitation that it is possible to estimate the sampling variability in the case of probability sampling while it is not possible to estimate the same in the non-probability sampling. Our sample procedure, based on judgment, is specified below.

The application of OR-techniques in decision-making process requires an infrastructural support. Collection of data and its purification, classification, standardization and feeding requires time as well as trained manpower. It needs a highly trained person having experience in handling real-life optimization problem in industries or any other organizations, who will monitor the whole process, analyze the result and interpret the optimum solution. This entire system also involves cost. For this cost implication, it is not always feasible for small organizations to go for a permanent system of adopting OR-techniques. We, therefore, decided to go for large organization of Bangladesh on the assumption that they are likely to represent situation in Bangladesh regarding utilization and application of OR-techniques.

We have initially identified, by subjective judgment, those fields of activity for which standard OR-techniques are available and applied routinely with successful results in many organizations elsewhere in the world. Number of organizations having similar fields of activity with large dimension in Bangladesh is very few and the 11 such large organizations have been deliberately selected for our study. The complete list of selected sample of organizations which includes Govt. organization (63.63%), Non-Govt. multinationals (27.27%) and others (9.09%) is given below:

- i) Bangladesh Planning Commission, ii) Bangladesh Railway
- iii) Glaxo Wellcome Bangladesh Ltd., iv) Eastern Refinery Ltd.
- v) Biman Bangladesh Airlines, vi) Reckitt-Benckiser (Bangladesh) Ltd.

- vii) Berger Paints Bangladesh Ltd. viii) Chittagong WASA
- ix) The Ibn Sina Pharmaceutical Industry Ltd. x) Chittagong Port Authority
- xi) Marine Fisheries Survey Management Unit.

We have thus three different categories of organizations with respect to their nature of work (Table-1), such as, manufacturing (45.45%), Service organizations (36.36%) and Planning and Policy making (18.18%).

Table-1:Type of Organization and Nature of Business

Type of Organization		% in sample	Nature of Business	% in sample	
Government	an area w	63.63	Manufacturing	45.45	
Private Multinationals	Marin :	27.27	Service	36.36	
Private other Multinationals	than	09.09	Planning & Policy Making	18.18	

Source: Calculated by the authors from primary data.

The present study is an empirical and inductive research one. The study is based on primary data only. Primary data relating to the application of OR techniques under the study have been collected for the study purpose. The nature of primary data depends on the objectives of the study. Firstly, the data relates to research and development (R & D) and training facilities a railability in the organizations. Secondly, the environment and motivation whether favorable or not in the organizations have also been enquired into. Then OR application, the techniques of OR, the reasons for not using OR techniques in the organizations have also been collected from the respondents. Finally, the methods like conventional, intuition, past experience, judgment and optimization techniques as followed in the organizations have also been enquired about. The questionnaire consists with 43 questions in three different sections. First section includes 11 questions related to organization and the respondent profile, second includes 27 objective questions regarding application of OR-techniques in the respective organization as a decision-making tool and third includes only five all of which are open-ended.

We then administered and pursued the questionnaire. The collected data and information have been processed manually and analyzed critically by the use of simple mathematical and statistical tools like ratio, average and percentage in order to make the study more useful, informative and meaningful. The existing published textbooks, related journals and research works have been consulted to prepare the theoretical framework of the study. The limitations of number of samples to 11 have been due to time and financial constraints at the disposal of the researchers. The selected samples do also vary in their size, activities, infrastructure and investment. However, it is assumed that they would present the over all scenario of the level of application of OR techniques in Bangladesh.

RESULTS AND ANALYSIS

Every respondent was asked to response the questions related to the existence of R&D cell, OR-team and conducive environment for applying OR, the investment made (i.e. non-recurring expenditure for R&D cells) for last five years, availability of computer facility and installation of OR-software, arrangement of OR-training for existing personnel. Results shown in Table-2. It reveals that more than two-third of total companies do have their R&D cell, but almost 73 % not having been made any

long-term capital expenditure (non-recurring expenditure) over the last five years. Companies do the routine job in R&D cell. The another important revelation of the survey is that all organizations reported that no significant contribution has been made during the last five years in the area of product innovation, product planning, product controls, quality improvement, cost control, cost reduction, process innovation, facility location, facility layout, material handling, and waste management. Since, R&D does not get appropriate priority, this finding is not very surprising.

We also find in Table-2 that while the cent percent of these organizations have the facility of computer system, only 09.09% has installed the software related to OR application. It therefore, signifies the absence of modern approach that could be used in managerial decision-making process in different areas of management. This fact is substantiated by the findings of the extent of use of scientific methods specific question of using OR and other related techniques of decision-making. 81.82 percent organizations do not use any OR techniques while only 18.18 percent confirmed the application. But the application does not cover multi-dimensional complex area of management and is restricted to certain routine affairs. Table-3 shows the relative position of different independent methods. The result shown in Table-3 reveals that only three techniques namely, Regression Analysis, Forecasting, and Games & Decision Theory are being used. Moreover, only 18.18 percent organization used Regression Analysis and 9.09 percent used other two. All remaining techniques are not being used by any organization. It is amazing to note that even the LPP (Linear Programming Problem), which is now very popular and can be used in variety of managerial problems, is not used by any organization. Non-linear Programming including Non-linear Dynamics, Integer Programming including Zero-One Programming, Network Analysis, Goal Programming, Computer Simulation, Replacement Analysis, Inventory Analysis (Stochastic) etc. are not used by any of our respondent organizations in Bangladesh.

Table-2: R&D, Training, OR-application and Environment & Motivation

	Responses (%)		
Queries	Yes	No	
R&D Cell Exists?	63.63	36.36	
Investment made in R&D?	27.27	72.72	
Computer system installed?	100	0	
Operations Research-technique used?	18.18	81.82	
Operations Research -team exists?	18.18	81.82	
Operations Research-software installed?	09.09	90.91	
Environment conducive to and	18.18	81.82	
management motivated for OR application? Arranged training for Operations	18.18	81.82	
Research application?	ar An training		

Source: Calculated by the authors from primary data.

Top management of these organizations do not aware of the potentiality of the application of OR is amply exhibited by the number of employees with proper training in OR and mathematical modeling. Out of the 13 large organizations of our study, only two, namely, Bangladesh Biman and Marine Fisheries Survey Management Unit, gave employment of such people, though the number may seem to be inadequate. Number of such employees in latter one gradually reduced to four only in the year 1999-2000 from 8 in 1995-1996. In case of other one, the number is only 3 in 1999-2000 by increasing one from the previous year. None other organizations employed any such specialized people. Thus in terms of percentage, we find that only 18.18 percent of respondents reported to have OR cells with personnel specialized in OR techniques, and remaining 81.82 percent organizations neither have special cell nor any trained personnel.

Table-3: Percentage of Organizations Using OR techniques

Name of OR-Techniques	% use
Linear Programming	rasmethalam O leaseasan
Non-linear Programming including Non-linear dynamics	0 - 10 - 10 - 10 - 10 - 10 - 10 - 10 -
Integer Programming including Zero-One Programming	0
Goal Programming	Talifornique 0-cu de emis
Computer Simulation	0 0
Forecasting	09.09
Games and Decision Theory	09.09
Queuing Theory	To security of the second of
Information Theory	nicani na e o O
Network Analysis	etr weiter the Owner searcher
Regression Analysis	18.18
System Analysis	0 10 10 10 10
Value Analysis	and partial of the research
Replacement Analysis	anti di mara 0 yang pang da
Markov Analysis	0
Assignment Model	ri zakistan Oraz mehmara
Sequencing Model	0
Inventory Model (Stochastic)	Table 1 CANO Seside
Input-Output Model	0
Transportation Model	0

Source: Calculated by the authors from primary data.

This survey tries to understand the reasons behind this apathetical attitude towards modern optimization techniques, which could improve the micro-level efficiency substantially. 81.82 percent of respondents denied that the organization did not have proper environment and motivation with regard to application of OR techniques. Thus, if the lack of environment and motivation is not the reason, the lack of skilled personnel is found distinctively to be one of the most important reasons of not taking resort to the help of OR techniques (Table-4). We find cent percent of organizations do feel it one of the important reasons. The finding indicates any of the two situations: i) in spite of motivation, conducive environment and management's desire the application is almost absent due to lack of skilled and trained personnel in the organizations; ii) as there is no initiative on the part of the top management in implementing non-conventional method of managerial decision making, no personnel having required knowledge on the subject is being recruited in the organization. Other related observations to be mentioned below will show that (ii) is true for Bangladesh.

Table - 4: Responses Identifying Reasons for not using OR-Techniques

Reasons	%
referent sine extrem militare, in equalities in masse death	com to paradion
Lack of skilled personnel	100
Problems are complicated	09.09
Financial support is inadequate	18.18
Relevant data are not available	09.09
Equipment's are inadequate	and the Olion
Satisfied with present system	90.91
Top management is unaware of OR	90.91
Top management is aware but reluctant to initiate	09.09
Top management is interested to follow conventional (non- quantitative) way only	100
OR application is costly	0
Lack of proper software	0
Edek of proper sorting o	

Note: Calculated by the authors from primary data. Figures here are percentages based on number of responses. Again percentages do not seem to 100% because of multiple use of the process.

Secondly, we find that the lack of awareness regarding the use of OR-technique as modern scientific management tool in decision making process in order to minimize the wastages of scarce resources may be one of the major reasons of dismissal situation in Bangladesh. In case of 90.91 percent organizations the top management is found unaware of OR-techniques.

The third reason is possibly psychological. This survey investigates different independent options followed by the management in decision making and finds that intuition, conventional practices, past experience, judgement gets priority over the use of technique (Table-5). It reflects the philosophy and attitude of the people involved in policy-making bodies of these organizations. If the top management and policy-making bodies do feel the necessity of upgrading the present level of managerial skill and efficiency, then they will search for options for satisfying the felt necessity. But the survey finds that 90.91 percent of respondent are satisfied with the present system i.e., the level of managerial skill and efficiency, which is based on intuition, judgment and past experience. Cent percent of respondents are found interested to follow the conventional way of management.

Table _5 · Methods followed in the Process of Decision Making

Table -5 : Methous followed	
Process	%
Conventionally	45.45
Intuition	27.27
Past Experience	54.54
Judgment	72.72
Optimization Technique	18.18

Note: Calculated by the authors from primary data. Figures here are percentages based on number of responses. Again percentages do not seem to 100% because of multiple use of the process.

CONCLUDING REMARKS

The study seems to reveal that management of different large organizations of national economic interest in Bangladesh predominantly seems to be not aware of the importance of modern managerial techniques in decision-making and, therefore, depends much on conventional way of decision-making. This seems to imply the suboptimal level of operation at different stages of micro-level activities and, thereby, wastage of scarce national resources. Macro-economic crisis which is strongly correlated with micro-economic inefficiencies being the cause of distortion in the structure of incentives to producers, as argued by Bhagwati & Srinivasan (1993), the underdeveloped countries will loose its relative bargaining strength in bilateral trade under open economy and will make the general economic situation further worse off if they do not take care of the inefficiencies revealed in our present study.

Secondly, `... any choice theorist knows that characterizing the constraints faced by the chooser is the first step in understanding any choice that is being made. The point at issue is whether choices exist at all, and to what extent they are substantial.'(Sen, 1999: 18). Management of majority of Bangladesh's large organizations displays the miserable condition that neither they know that choices exist nor they know that those are substantial. We find that if there is any constraint adopting modern view of resource management it is on the part of the top management's unawareness and traditional attitude. Without any additional resources, except trained manpower, all these organizations can improve their microlevel efficiency and contribute positively to national endeavor of making economy open. Then how these old practices are spared from intelligent scrutiny of planners? The best explanation can be given, we think, by the following passage from Prof. Sen under the sub-title 'Responsibility and Herd Behavior'.

'If choices do exist and yet it is assumed that they are not there, the use of reasoning may well be replaced by uncritical acceptance of conformist behavior, no matter how rejectable they may be. Typically, such conformism may have conservative implications, protecting old customs and practices from intelligent scrutiny.' (Sen, 1999: 19). Though it was said in a different perspective, we feel that the micro-level managerial situations in Least Developed Countries (LDCs) can be explained by this herd behavior and may proved to be disastrous for any underdeveloped country having decided to open the economy without taking proper note of this aspect.

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DETERMINANTS OF EMPLOYEES' JOB SATISFACTION: A STUDY ON BRITISH AMERICAN TOBACCO BANGLADESH LTD.

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ABSTRACT: The study has been designed to measure the overall job satisfaction of the tobacco employees and see satisfaction and dissatisfaction with different aspect of job and also see by variate corelations among some selected variables. The studies disclose that significantly higher percentage of the respondents were satisfied with their present job than of those who were not satisfied with it. The study further discloses that salary, job security, promotional opportunity, proper supervision and working environment were more important than recognition for good work, autonomy of the work, fringe benefit, job status, open communication, overtime, working hours for their over all job satisfaction. The study also revealed the positive regression between age and job satisfaction. The important causes of the job dissatisfaction as perceived by the respondents were poor salary, lack of promotional opportunity, lack of job security, lack of working condition, lack of fringe benefit, lack of working hour, lack of job status, lack of recognition for good work, lack of autonomy in work and lack of recreational facilities.

INTRODUCTION

Job satisfaction is a very widely studied phenomenon. Various researchers disclose that it plays an important role to an employee in terms of health and well being (Kornhauser 1965;Khaleq 1981, Shilpy 1979, Haque 1991, Gardell 1971) and to an organization in terms of productivity, efficiency, employees' relations, absenteeism and turnover (Locke 1976. Khaleq 1979, Vroom 1981).

According to an estimate of Locke (1976) about 4000 articles have been published on the topic. But there is a lot of confusion about the concept of job satisfaction. For the first time in 1935 hoppock in his monograph has defined job satisfaction as any combination by psychological, physiological and environmental and environmental circumstances that cause a person truthfully to say, "I am satisfied with my job". On the other hand Borrow (1964) defined job satisfaction as "the verbal expression of an incumbents evaluation of his job". Smith (1955) for example, "refers to job satisfaction as the employees judgement of how well his job on the whole is satisfying his various needs".

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Locke (1976) defined job satisfaction as a pleasurable emotional state resulting from the perception of one's job as fulfilling one's important job values, providing these values are compatible with one's need. Communication on Lock's definition of job satisfaction, Verhaegen (1979) states that "It seems to be impossible to arrive at any better definition because of the very nature of the subject". But this definition is nonoperational. So, an operational might be given in terms of the measuring instrument (Brayfield-Rothe Scale) used in the present study. Job satisfaction was sum of the scores obtained by Brayfield-Rothe Scale (Brayfield-Rothje, 1951).

Literature Review

A lot of studies has been conducted by the researchers on job satisfaction (e.g. Vroom, 1964; Herzberg et. At, 1951; Locke, 1976) since the monograph on job satisfaction published by Hoppock (1935). There are variations in findings of job satisfaction on different aspects of job behavior. Rothlishbergr and Diekson (1939) found no clear relationship between job satisfaction and performance. Vrom (1964) in his studies found that there exist very weak positive correlation between the two. On the other hand, various researchers (e.g. Khaleque, 1970; Haque, 1992; Hossain, 1992; Hossain and Rahman, 1995) found a significant positive correlation between satisfaction and performance.

Khaleque (1979) and Hossain (1992) found a negative correlation between job satisfaction and absenteeism. Vroom (1964) found a negative correlation between job satisfaction and accident. The relation between job satisfaction and turnover is quite clear. Many researchers found a negative correlation between job satisfaction and turnover (Vroom)

Another study conducted by Haque and Hossain (1992) on industrial workers and found that personal factors such as age, experience, education, mental health and skill had significant influence on the over all job satisfaction. The study also revealed that job security, supervision, recognition for good work and good environment ware more important than promotional opportunity, wage and participation in decision making. The important causes of job satisfaction as perceived by the respondents were poor wage, poor working condition and unfavorable nature of work and poor supervision. Another study conducted by Alam (1985) on garment workers job satisfaction and found that significant higher percentage of respondents were dissatisfied with their job than that of those who were satisfied with it. The study further revealed that major causes behind taking garment job were the economic reason, lack of alternative job opportunity, work itself etc. The study also suggested that job insecurity, unfavorable company policy and administration, lack of promotional opportunity, absence of recognition etc. were the major causes of dissatisfaction among the respondents.

Objectives

The study is designed to achieve the following objectives: (a) measure the over all job satisfaction of the tobacco company employees; (b) see the relative importance of different job related factors on the over all job satisfaction; (c) examine the satisfaction and dissatisfaction with different aspect of job; (d) examine the influence of personal factors on the over all job satisfaction; (e) examine how job attitudes react by job satisfaction and dissatisfaction; (f) examine the correlation between job satisfaction and some personal factors; and (g) identify the important cause of job satisfaction.

Methodology

Sample

The study was conducted on a sample of 60 employees (supervisors and workers) who were selected from British American Tobacco Bangladesh Company Ltd. on a random basis. Their age ranged from 32-55, experience ranged from 12 to 25 years and income ranged from tk 6000 to 22000. Their educational qualification varied from illiterate to masters level.

Measuring Instrument

The Bryfield- Rothe Scale

This is a widely used scale for measuring over all Job satisfaction. This scale consisted of 18 items in relation to Job satisfaction. Each item could be replied by checking any of the five answers. "Strongly agree", "agree", "not sure", "disagree" and "Strongly Disagree." This items were in such a way that satisfaction end to the scale was indicated by "Strongly agree", and "agree", for one half of items and "disagree" and "Strongly Disagree." for the other half. The scoring weight for each item ranged from 1 to 5 and the possible total scores varied from 18 to 90 with the undecided or neutral point at 54. A total score on or above neutral point represents " job satisfaction" and a score falling below this point represents "job dissatisfaction".

The scale for Perceived Importance of Job Facts

To measure the relative importance of the specific job factors as perceived by the British American Tobacco Bangladesh workers and supervisors a five-point scale was used. The scale consisted of 14-item conceding the 14 specific aspects of the job The respondents would indicate the importance of a job facts to over all job satisfaction on a five point scale ranging from least important 0 to most important 4. The rating scale was developed partially on the basis of items taken from the relevant literature of job satisfaction (Herzberg e.t al, 1957) and partially on the basis of a pilot survey of opinion of the industrial supervisors concerning the importance of different aspects of the job to over all job satisfaction.

The questionnaire for measuring job facts and life satisfaction

A questionnaire was constructed to measure satisfactions with some job-related factors and personal factors. The questionnaire consisted of 12 items concerning the satisfaction with the 12 specific aspects other job (job security, promotional opportunities, job status, wage, working environment, relation with co-workers, recognition for good performance, management policy, autonomy in job, job content, participation in management, open communication). These items were included in the questionnaire for convering different but representative areas, which have been found by several investigators to effect employee attitudes (Herzberg et al, 1957; Vroom, 1964; locke, 1976). The respondents would indicate their satisfaction or dissatisfaction with each of these specific aspects by checking either "yes" or "no" response. The second part of the questionnaire consisted of 2-structured question. The structured questions were related so satisfaction with family and social likes. These questions were dichotomous which could be replied by checking either, "yes" or "no" response to indicate satisfaction or dissatisfaction.

RESULT AND DICISION

The result of the present study are presented in the following tables

Table 1: Satisfaction and dissatisfaction of the subjects.

Sbbject	Number	Percentage	χ^2	I P P
Satisfied	56	93.330293	45.067	-0.01
Dissatisfied	4	6.670217	45.067	<0.01

Table 1 shows that a significantly higher percentage of the respondents where satisfied with their present job than of these who were not satisfied with it.

Table 2: The mean ranks & rank orders of the respondents rating of perceived

importanance of the specific aspects of job

The specification aspects of the job	Mean Ranks	Rank order
Salary	3.71	1
Security	3.45	2
Promotion	3.28	3
Proper supervision	3.21	4
Working environment	3.20	5
Recognition for good work	3.15	6
Autonomy in the work	2.88	7
Fringe benefit	2.65	8
Participation in decision	2.55	9
Job status	2.50	10
Relation with colleagues	2.30	11
Open communucation	2.16	12
Management policies	2.05	13
Job content	1.91	14
Over time	1.73	15
Working hours	1.28	16

Table 2 shows that salary in job has been considered by the employees as the most important factor for their job satisfaction. Onthr other hand, working hours has been rated as the least important factor for job satisfaction. The other 14 aspects have been assigned different ranks between these two positions.

Table3: Mean differences in job satisfaction according to personal factors.

Group	Mean	SD	T	Df	P
Age up to 43 years	62.81	6.49	0.65	58	Significant
Age above 43 years	61.59	8.10		THE THE	1 30 T 6 Aug
Exprrience up to 19 years	60.97	5.76	-1.34	58	NS
Experience above 19 years	63.47	8.45			
Education below HSC	63.05	7.92	1.34	58	NS
Education HSC & above	60.42	5.42			
Income below 14000	62.67	5.40	0.53	3 58	NS
Income above1400	61.67	9.14			
Worker	63.65	7.53	2.23	58	Significant
Supervisors	59.35	5.94			DESTRUCTION OF

Table 3 shows that there is no significant influence of personal factor on the overall job satisfaction expect of age, worker and supervisor job satisfaction also significant.

Table 4: Satisfaction and dissatisfaction with different aspects of job

The specific aspects of job	%of satisfied workers	% of dissatisfied workers	χ²	6 P
Job security	55	45	0.6000	0.4386-NS
Promotional opportunity	17	83	26.66	<000-S
Job status	12	88	35.26	<000-S
Salary	47	53	0.2667	0.6056-NS
Working condition	58	42	1.6667	0.1956-NS
Reconition for good work	55	45	0.6000	0.4386-S
Relation with colleagues	92	08	41.667	<000-S
Management policy	48	52	0.0667	0.7963-NS
Autonomy in work	37	63	4.2667	0.389-NS
Present job	53	47	0.2667	0.6056-NS
Participation in management	72	28	11.2667	<.0008-S
Open communication	57	43	1.0667	0.3017-NS

Table 4 shows that significantly higher percentage of the respondents was dissatisfied with their promotional opportunity and job status. On the other hand significantly higher percentage of respondents were satisfied with their relation with colleagues and participation in factory management.

Table 5: Satisfaction and dissatisfaction with family and social life

Specific factors	% of satisfied	% of dissatisfied	χ²	Р
Family life	88	12	35.2667	< 0.01
Social life	50	50	0.0169	NS

Table 5 shows that a significantly higher percentage at the respondents was satisfied with their family life.

Table 6: By variate correlation among some selected variables (N=60)

Variable	V-1	V-2	V-3	V-4	V-5	V-6	V-7
	Dept.	Age	Income	Experience	Educati on	Designa tion	job satisfa ction
V-1 Dept	1.00						
V-2 Age	-0.012 NS	1.00		Comments	The state of		
V-3 Income	-0.384 S	0.2185 NS	1.00				
V-4 Experience	0.5341 S	0.0119 NS	-0.1583 NS	1.00	April 18		
V-5 Education	-0.634 S	0.0195 NS	0.7124 S	-0.5656 S	1.00		
V-6 Designation	-0.597 S	0.1844 NS	0.6849 S	-0.4881 S	0.7554 S	1.00	
V-7 Job satisfaction	0.147 NS	-0.3062 S	-0.6556 NS	0.3009 NS	-0.1180 NS	-0.2808 S	1.00

[#] Correlation is significant at the 0.05 level (2-tailed)

[#] Correlation is significant at the 0.01 level (2-tailed)

[#] V denotes for variable

Table 7: Stepwise multiple regression

Variable	Multiple R	R ²	Beta	F1	Significant
Age	0.3062	0.0937	-0.3062	0.17	< 0.17
Experience	0.4575	0.2093	0.3434	0.001	< 0.001

Table 7 shows that positive regression between age and job satisfaction; experience and job satisfaction.

Table 8: Important causes of Job satisfaction as perceived by the subjects

Perceived causes of Job satisfaction	% of subject holding the views
Poor salary	69%
Lack of promotional opportunity	65%
Lack of job security	35%
Lack of working condition	28%
Lack of fringe benefit	21%
Lack of working hour	22%
Lack of job status	18%
Lack of recognition for good work	14%
Lack of autonomy in work	13%
Lack of recreational facility	13%

Table 8 shows workers have mentioned 10 different factirs as rthe important causes of job satisfactiopn. However, the highest number of the respondents(69%) has considered poor salary as the most important cause of job satisfactiopn.

DISCUSSION

The result of the present study that 93% of the subjects are "satisfied" with their job and 7 % of them are "dissatisfied" and their differences is significant (P<0.01, see table 1). The results confirms the trend of occupational satisfaction found in several other studies. For example, Rpbinson and Hoppock (1952) collected data from 191 studies reporting percentage of job satisfaction and dissatisfaction among occupational groups, which revealed surprisingly higher percentage of job satisfaction than dissatisfaction (the median figures, 82% satisfied and 18% dissatisfied). Similiartrend in occupational satisfaction has been found in several other studies (Taylor 1997; Khaleq and choudhry, 1983; Khaleq and Wadud, 1984; Hossain and Miah 1992; Mosharraf Hossain and Alinoor Rashman, 1988).

The results of the emoloyes ratings about the perceived importance of soecific aspects of job suggested that salary had been rated as the most important factor for over all job satisfactiopn (see table 2) which was inconsistent with many other studies (Helson, 1947; Vroom, 1964; Hossain, 1991; Khaleq and Wadud, 1984; Hossain and Rahman, 1988).

Job security has been assigned as the 2nd important factor for their overall job satisfactiopn. Job security has been found by a large number of investigators as the most important sources of satisfaction of employees (Herzberg et al, 1957). It was found that concern job security occurred disproportionately among those employees who were dissatisfied (Gurin et al, 1960). Several researchers have shown that in comparision with the higher level employees. The blue color workers consider job security more important for their satisfaction (Centers and Bugenthal, 1966; Locker and Whiting, 1974) Job

security was more important at the bottom level than top level.

The promotional opportunity was rated by the subjects as the 3rd most important factor for overall job satisfactionn. The results of several other studies confirm the importance of the opportunity for promotion to job satisfactiopn. For instance, in a review of 16 stadies involbing over 11000 employees: Herzberg et al (1957) showed that opportunity for promotion is perceived as the 3 rd most important factor for job satisfactiopn. Several investigators have reported a positive correlation between promotional opportunities and over all job satisfaction (Sirota, 1959; Wanous and Lawler, 1972; Kair and Van memnen, 1976; Khaleque, 1979). Several other studies reveal that promotional opportunities was more important at the high level than at the loweer level (Habibullah, 1975; Khaleg ana Chowdhury, 1983; Hossain, 1991).

The respondents have assigned supervision as the 4th important factor for job satisfaction.. Putnam (1930), stressing the importence of supervision in influencing workers attitudes observers "The relationship between the frist line supervisors and individual workman is of more importence indeterminate the attitude, moral, general

happiness, efficiency of that employees than any other single factor.."

Similarity, the results of anumber of other studies showed that supervision is considered by the workers as the most important single factor in determine their job attitudes (e.g. Kornhauser and sharp, 1932; Hartman and Newcomb, 1940). Concerning the influence of supervisors behavior on the job attitudes of the subordinates a number of studies have been carried out (e.g.Kart et al. 1950; Halpin and winer, 1957; Khan and kart, 1960; fleisman and Harris, 1962).

Recently, a number of investigators have indicates that as an occupational group, the industrial supervisors play an important role in industrial harmony, productivity, efficiency and workers satisfaction (e.g. Hoans 1961; job satisfaction

Vroom, 1964; Locke, 1975; Khalegue, 1979; Hague and Hossain, 1992).

Working environment has been assigned as the 5th important factor for their overall job satisfaction. Recognition for good work has been rated as the 6th important factor for job satisfaction.by the respondents. Herzberg, Mausner, Peterson and Capwell (1957) compiled data from several studies which showed that appreciation or recognition for good work is perceived by the workers as the 4 th important factor for their job satisfaction. Several other studies showed that recognition for good work is one of the important factors in influencing job satisfaction of the workers (e.g. khaleque and Wadud, 1984; Hossain, 1991; Hoque and Hossain, 1992). Desired job has been assigned as the 5th important factor for their overall job satisfaction.

Autonomy in the work is the 7th important factor of this research. The perceived importance of autonomy to job satisfaction is also reported in a number of recent studies (e.g. Porter and Lawer, 1968; Locke and Whiting, 1977; Focken, 1979). Other aspects say fringe benefit, participation in decision making, job status, relation with colleagues, open communication, job content, over time and working hours. It is say that the lowest rank (e.g. 16th rank) is working hours.

The study showed that there was significant influences of age on the overall job satisfaction of the respondents (see table 3). Low age employees have high job satisfaction than high age employees. The study suggested that there was no significant influence of experience, education and income (see table 3) on the overall job satisfaction of the workers. The employees of longer experience more satisfied than the employees of shorter experience. Khaleque and Rahman (1987) and Hossain ana Alinoor (1998) also found that the employees with longer experience were more satisfied than the employees with shorter experience. The employees of low educated

more satisfied than the employees of high educated. Here also show an interesting result that low income holder are high satisfied than high income holder. The study also shows that there was a significant relation of workers and and supervisors. The workers are more satisfied than supervisors.

The results in table 4 show that in each of the 12 job components, percentage of satisfied workers who are satisfied of these aspects of job security, working condition, recognition for good work, relation with colleagues, present job, participation in factory management and open communication, percentage of dissatisfied workers, who are dissatisfied of these aspects of job promotional opportunity, job status, salary, factory management policy and autonomy in work. The result in table 4 also showing that significantly higher percentage of the respondents were dissatisfied with their promotional opportunity and job status. On the other hand, significantly higher percentage of the respondents were satisfied with their relation with colleagues and participation in factory management.

The finding of the present study also show that satisfaction with family and social live have positive influence on the overall job satisfaction of the subjects. Significantly greater number of the subjects who are satisfied with these two aspects. The present study (see table 5) show that a significantly higher percentage of the respondents were satisfied with their family life. Several investigatiors have suggested that job satisfaction is related to life satisfaction and dissatisfaction (Kornhauser and Sharp, 1932; Hoppock, 1935; hergberg e.t. al, 1957; Hulin, 1969; Anderson and Withey, 1976)

By using by varite correlation and sum variable (see table 6) the results shows that variable age and dept has negative correlation and this relation is rot significant. Income and dept had negative and significant relation, income and age had positive relation but not significant. Experience and dept had positive and significant relation, experience and age had positive relation but not significant. Experience and income had negative relation but not significant. Education with dept and experience had negative relation and this relation is significant, Education and income had positive and significant relation. Education and age had positive relation but not significant. Designation with dept and experience had negative relation, designation with income and education had positive relation and those relations were significant. Positive with income and education had positive relation and those relations were significant. Positive and not significant relation between job satisfaction with age and designation. Negative and not significant relation between job satisfaction score with income and education.

The study also revealed that (see table 7) positive regression between age and job satisfaction, experience and job satisfaction and this relation were significant. Age had negative beta number and expression had positive beta.

The results in the table 8 show that 10 different factors have been considered by the subject as the most important causes of job satisfaction. However, the most frequently mentioned causes of job satisfaction are poor salary, lack of promotional opportunity, lack of job security, lack of working condition, lack of fringe benefit, lack of working hours, lack of job status, lack of recognition for good work, lack of autonomy in work and recreational facilities. The results of the present study, like that of several other studies (e.g. Friedlander, 1964; Ewen et. al, 1966; Wernimot, 1966; Green and Hulin, 1968; Konings, 1974; Warr and Wall, 1975; Taels, 1978)

contradict the view of Hergberg et. al 1959) that factors leading to satisfaction are different form those leading to dissatisfaction.

Thus the results indicated that the satisfaction variables are not unidirectional in their effects. Job facts can be sources of both satisfaction and dissatisfaction. The overall job satisfaction of the British American Tobacco Bangladesh workers and supervisors seems to be influenced by the satisfaction with job facts and personal life and the degree of satisfaction appears to depend on the satisfaction with the specific aspects of the job as well as their perceived importance.

CONCLUSION AND IMPLICATION

On the basis of the findings of the study present investigation, the following conclusion may be drawn:

- Satisfaction variables are not unidirectional in their effects. Job facts can be sources of both satisfaction and dissatisfaction.
- The degree of job satisfaction of the employees increased with the satisfaction of the increasing number as well as importance of job facts.
- The intrinsic aspects of a job seems to be more important for satisfaction of the suresvisors and extrinsic aspects of a job seems to be more important for satisfaction of the workers.
- Wages seems to be the main source of job satisfaction and stronger sources of job dissatisfaction for all the two groups of employees.
- Social relationship at work is a great source of job satisfaction for the employees' different occupational level.
- Personal and social factors are important determinants of job satisfaction for the employees of various types of occupations.
- Significantly higher percentage of the respondents was satisfied with their present job than of those who were not satisfied with it in British American Tobacco Bangladesh.
- Mean satisfaction of less age employees higher than old age emploees and this
 are significant.
- High rxperienced employees have more satisfaction than less experienced employees.
- Below educated employees were more satisfied than high educated employees.
- Workers are more satisfied than the supervisors.
- This study also show that a significantly higher percentage at therespondents were satisfiedwiththeir in family life.
- Positive regression between age and job satisfaction experiences and job satisfaction.
- Any particular aspect of a job may have more influence on job satisfaction but less influence on job dissatisfaction.
- The degree of influence of different job facts on satisfaction and dissatisfaction varies with the occupational levels of the employees.

Finally, British American Tobacco Bangladesh can immensely get benefits by adopting approprite measures, in the light of present finding for removing job dissatisfaction and enhancing job satisfaction of its employees with are extremely important for promoting industrial relations, efficiency, emotion and productivity.

Attention should be given on the behavioral aspects of the employees through providing both financial and non-financial incentives. Good governance, total quality management, knowledge management participating management would be helpful for the same.

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QUALITY OF SERVICES OF COMMERCIAL BANKS IN BANGLADESH: A CASE STUDY IN KHULNA CITY

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ABSTRACT: As service organizations banks need to assess quality of their services. In this study the researcher tried to assess customers' satisfaction of commercial banks in Bangladesh. The researcher also tried to identify expected services and productivity of those services as a measure of quality. Results of the analysis of data revealed that satisfaction level of customers of the Private Commercial Banks and Foreign Commercial Banks were very close to each other. On the other hand this was not satisfactory for Nationalized Commercial Banks. Productivity measure of the study also provided the same result. An encouraging finding of the study is that one of the private commercial banks outshines the Foreign Commercial Bank of the study in terms of both satisfaction of customers and productivity of services.

INTRODUCTION

With the adoption of 'Socialism' by the Government of The Peoples Republic of Bangladesh after the independence in 1971 and then once again replacement of the state principle by 'Social welfare' in 1975 resulted into nationalization and then once again denationalization respectively of the commercial banks of the country (Selimuddin, et al, 1998). The change in the state principle not only encouraged establishment of Private Commercial Banks (PCBs) but also invited more Foreign Commercial Banks (FCBs) in the market. During 1975 the number of Nationalized Commercial Banks (NCBs) and FCBs were 6 and 4 respectively and there was no PCB in Bangladesh. While upto December 31, 2002 out of 45 scheduled commercial banks operating in Bangladesh, 4 were NCBs, 30 were PCBs and 11 were FCBs (Scheduled Banks Statistics, Oct.- Dec. 2002). The list of the PCBs includes 4 Islamic banks and 2 Commercial banks under joint collaboration of local and foreign investment. In a research Azad (2000) shows poor level of competition and efficiency in the banking system as the NCBs are holding 60% and 51% of the country's total deposits and advances respectively. And he suggests intensified competition. On the other hand Raihan et al (2000) reveals that foreign banks penetration will affect the market share of NCBs and PCBs because FCBs have competitive advantages. In other researches it was found that NCBs are losing market share to PCBs because of the same reason (Ahmed, et al, 1996; Khan, 1989; Ahmed, 2000)

Therefore, for a sound banking system competition should be intensified. But that should not be achieved at the cost of survival of the NCBs and PCBs. Survival of banks much depends upon customers' satisfaction because customers' satisfaction is

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a key term for any service organization. To produce high level of customers' loyalty customers' satisfaction of service organizations is a must (Roland, et al, 1999). Bank is not an exception. Roland (1999) also shows that this customer's satisfaction is strongly influenced by customers' expectations. For this, customers' will is getting upper hand over the marketers' choice (McKenna, 1997). Again, their satisfaction depends upon not only on 'what' but also on 'how' services are delivered (Ahmed, 2000).

So, it is the high time to find out strategic advantages of FCBs and tracing out weaknesses of NCBs and PCBs (if any) to give them suggestions, which is important for encouraging competition in the bank sector. A comprehensive study covering every facet of each bank is essential in this respect. And the first facet should be quality of services provided by them. We can measure it by concentrating into customers' satisfaction, customers' expectations and productivity of services. Present study endeavors to investigate the expectation and level of satisfaction of customers of commercial banks, and also the productivity of services of commercial banks in Bangladesh.

This study has been conducted with a broad objective of exploring the satisfaction level of savings account holders of NCBs, PCBs and FCBs in Khulna city. Based on this broad objective the following specific objectives have been developed to: (a) identify various services expected by the customers; (b) group the expected services of the commercial banks into three factors; (c) find out different services provided by the commercial banks and satisfaction level of each service; (d) determine productivity of services of commercial banks; (e) critically explore weaknesses in the way of providing services; and (f) suggest NCBs, PCBs and FCBs, based on the study findings, some relevant measures to improve their quality of services.

For the purpose of the study both primary and secondary data have been collected and analyzed. 9 commercial banks have been selected for this study. All of the 4 NCBs (Sonali Bank Ltd., Agrani Bank Ltd., Janata Bank Ltd. and Rupali Bank Ltd.), the maiden FCB (Standard Chartered Bank Ltd.) and 4 PCBs (Prime Bank Ltd., AB Bank Ltd., Islami Bank Ltd. and City Bank Ltd.) were selected. Top 4 PCBs were selected from those, which are working in Khulna city in terms of volume of deposits collected on a particular date during the study. Data regarding deposits of PCBs were collected from official papers and documents of Bangladesh Bank, Khulna Branch. 10 respondents were randomly selected from each bank. Therefore, 90 respondents, in total, were interviewed for this study during the second half of the year 2003.

Primary data have been collected through field visits. Face to face interviews with structured written questionnaire were conducted for collecting primary data from the respondents. The questionnaire has been developed using 5 point Likert scale to determine satisfaction level of customers and expectations of customers from commercial banks. Weights have been assigned as 1 for highly satisfied and extremely important, 2 for satisfied and important, 3 for indifferent, 4 for dissatisfied and not important and 5 for highly dissatisfied and not important at all. The respondents were asked to rank their answers accordingly. Results of the responses are shown in mean values. Therefore, lesser mean value of analysis represents higher satisfaction and expectation and vice-versa. 30 items have been used for evaluation of satisfaction and customers expectation from commercial banks. Ahmed F (2000) used these 30 items for the first time. Some of the items have been used in this study with making some changes.

DEMOGRAPHIC FEATURES OF THE RESPONDENTS

The sample size of the study is 90. Out of these 90 respondents 60 are male and 30 are female. Respondents of the study have been classified by Level of education, Occupation, Age, Gender and Income. Respondents are grouped into five classes in terms of age. 3 of them are in the 50 and above age group, 23 in 40-49 age group, 43 in 30-39 age group, 19 in 20-29 age group and 2 in below 20 age group. Occupation of the respondents has been classified into six. 27 of the respondents are businessmen. 8 of them are in teaching, 18 in government job, 24 in private job, 11 are students and 2 of them are in other occupations. Five education levels have been identified for grouping of the respondents. 23 of the 90 respondents are master degree holders while 39 are graduates. 24 have completed Higher Secondary Degree, 3 have completed Secondary Degree and 1 has completed primary education. Among the five income groups, the lowest one, i.e., below Tk. 5000 income group has 11 respondents, Tk. 5000- 10000 income group has 19 respondents, Tk. 10000-15000 income group has 38 respondents, Tk. 15000-20000 income group has 18 respondents and above Tk. 20000 income group contains 4 respondents.

Expectations of customers

30 items have been tested to find out the expectations of customers of commercial banks of Bangladesh. Findings about expectations of customers have been presented in table 03 and 04. Table 04 shows that among the 30 items mean value of expectation for suitable location was the least in case of FCB, PCBs and NCBs (1.4, 1.25 and 1.13 respectively). Prompt services from the bankers and suitability of bank ownership were equally important for the customers of FCB (Mean=1.4) though prompt services was the second important expected item to the customers of PCBs (Mean=1.47) and NCBs (Mean=1.38). Least expectation was found on interior decoration (Mean=2.30) from the customers of NCBs and on getting advice on deposits from the customers of FCB (Mean=2.20) and PCBs (Mean=2.17).

Table 03 shows that result of expectations of customers by groups of banks don't always match with the result of expectations of customers of different banks in the study. For example, though location was the most important item for customers of most of the commercial banks, an exception is found in case of AB Bank Ltd. For customers of AB Bank Ltd. prompt services was more important than location. Such difference in expectations was found in almost every item among customers of banks

of the study.

SATISFACTION LEVEL OF CUSTOMERS

The same 30 items, which have been used to examine the expectations of the customers of the commercial banks of Bangladesh, have been tested to examine the satisfaction level of the customers. For the purpose of establishing a ranking of the commercial banks of the study in terms of customers' satisfaction total mean values of satisfaction from the 30 variables of the study for each bank have been determined. Table: 05 shows that, Prime Bank Ltd. has achieved the top rank with the least total mean value of 45.91 and Agrani Bank Ltd. has secured the last position with the highest total mean value of 93.82. Standard Chartered Bank Ltd. ranks second (Σ Mean=52.2) and City Bank Ltd. ranks third (Σ Mean=52.5). Table 05 also shows that average mean value of 30 items for PCBs and FCB ranges between 1.53 to 1.85 which means that on average customers of these banks are between the range of highly satisfied to satisfied condition. While the figure for NCBs ranges

between 2.86 to 3.13 which means that customers of NCBs either indifferent or dissatisfied with the existing services of their banks.

Again table 06 shows that satisfaction of customers of FCB and PCBs as groups is almost identical as the total mean arrives at 52.2 and 52.29 for FCB and PCBs respectively. While the satisfaction of customers of NCBs is far below as the total mean is 88.36.

The study also shows that customers of FCBs are most satisfied with location and modern equipment (Mean=1.1) and least satisfied with interest rate on deposit (Mean=2.3). In case of PCBs highest satisfaction is achieved in location (Mean=1.13) and the least in commitment for new facilities (Mean=2.05). Customers of NCBs are most satisfied with location (Mean=2.17) and least satisfied with sitting arrangement for customers (Mean=3.4).

PRODUCTIVITY OF SERVICES

Productivity is the ratio of output to input (Weihrich H *et al*, 1994). Measurement of productivity in service organizations like banks is relatively difficult than manufacturing industries or agricultural firms because of controversies among the scholars about the identification of inputs and outputs (Chowdhury F, 2000). In this study customers' expectations have been considered as input and their satisfaction level as output to determine productivity of services. Thus productivity of services would be the ratio of customers' satisfaction to their expectations. Productivity of services can be presented as follows:

 $P = \frac{S}{E}$

Where,

P= Productivity

S= Satisfaction

E= Expectation

Table 07 presents productivity of services of 9 Commercial banks of the study on 30 items, which are used for measuring expectations and satisfactions of customers. Since one point is assigned for highest expectations and satisfactions and five point for lowest expectations and satisfactions, lower the score in table 07, higher is the productivity of services of commercial banks and vice versa. Best productivity of services is achieved by Prime Bank Ltd. (Score=24.35) followed by Standard Chartered Bank Ltd. (Score=29.17) and Islami Bank Ltd. (Score=29.86). Other two PCBs, i.e., AB Bank Ltd. and City Bank Ltd. followed them with very narrow difference (Score is 30.34 and 30.45 respectively). Productivity of NCBs is not satisfactory. Sonali Bank manages the best productivity among the NCBs with a score of 42.75 followed by Janata Bank (Score=45.32) and Rupali Bank (Score=47.20). Agrani Bank scoring 48.79 secures the last position.

FACTOR ANALYSIS ON EXPECTATIONS OF CUSTOMERS

An explanatory factor analysis has been conducted to help the policy makers of commercial banks of Bangladesh in finding out set of policies that should be implemented for ensuring better satisfaction of customers from services of the banks. Table 1 shows that the sample achieves a Kaiser-Meyer-Olkin (KMO) of 0.567, which is an acceptable score for factor analysis. Three factors have been extracted (table 2) using Principal Component Analysis after rotation of the factor loading using Varimax with Kaiser Normalization technique. A loading value of at least 0.40 has been used as cut off point to select the variables under the factors. Table 02 shows that variables relating to advanced services have been concentrated on Factor-1 which

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achieves the highest eigen value of 4.029. Variables of Factor-1, which has been termed as advanced services, also explain 13.431% of the total variables about the

expectations of the customers. Eigen value of Factor-1 is the highest one.

Variables, which concentrate under Factor-2 (table 2) are mainly related to basic services or fundamental services that customers expect from commercial banks. These variables are mainly related with services directly provided by the employees of corresponding banks. Factor-2 carries an eigen value of 3.195 and explains 10.649% about the expectations of the customers. Variables, which relate mainly with cost and prestige, have fallen under Factor-3. It posses eigen value of 2.925 and explains 9.751% of the total variance of the respondents' expectatios. The loading value of Location, Prompt service, Getting help in collection of checks, Ease of transaction, Suitable bank ownership, Expertise of personnel, Modern equipment and sitting arrangement for customer fail to reach the cut-off point of 0.40. So, they are not falling under any of the three factors. On the other hand variable 'availability of complaint box' belongs to both Factor-1 and Factor-3.

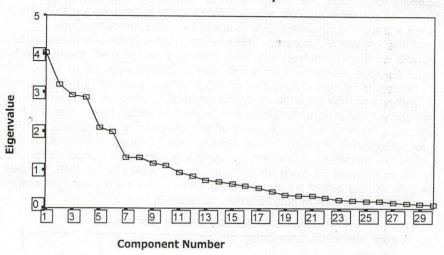
Table 1: KMO and Bartlett's test result

Kaiser-Meyer-Olkin Measure Adequacy.	of Sampling	.567
Bartlett's Test of	Approx. Chi-Square	1231.004
Sphericity	df	435
7. F. C. P. P. C. P. P. C. P. C. P. P. P. P. C. P.	Sig.	.000

Table 2: Three factors of expectations of customers

	Variables		Component	
		Factor 1	Factor 2	Factor 3
100	Security of the deposit	.670		SHARE
	Parking facility	.658		
Ses	Commitment for new facilities	.611		
Ž	Availability of complaint box	.591		
Se	Interior decoration	.567		ill Press
Advanced Services	Cleanliness	.550	PASSESS FOR	Total Service
ou c	Free from Nepotism	.542		100
dva	Security from hijackers in bank premises	.533		
A	Over time banking services	.516	Par Berry	
	Confidentiality of the deposit	.401	Display Shirt	arrivate, ser
	Getting advice on deposits		.717	
es	Suitability of time of operation		.712	
N.	Getting advice on withdrawal		.702	
Basic Services	Good internal physical environment		.645	G-2411
<u></u>	Friendly attitude of the personnel		.624	
Sas	Availability of service provider		.453	
	Getting helps in opening account	THE WAY	.441	R3.57 (-)
The state of	Availability of complaint box			.404
	Suitability of other customer of the bank			.784
36	Attractive interest rate on deposit			.779
Cost & Prestige	Positive mentality of friends and relatives			.744
4	about the bank			.581
	Friends or relatives as employees in bank Convenient Service charges			.401

Chart 1: Scree Plot of Factor Analysis



RECOMMENDATIONS AND CONCLUSION

This study shows a close performance of the FCB and PCBs in achieving customers' satisfaction and productivity of services. In some cases one or two PCBs are doing better than the FCB. This competitive condition between PCBs and the FCB is good for sound banking system of the country. But the other group, i.e, the NCBs are really out of the competition.

It is clearly evident in this study that NCBs of Bangladesh are currently not in a position in claiming that they are giving satisfactory services to their customers. As a consequence customers are not satisfied. Frustrating productivity of services of NCBs resulted from high expectation and poor satisfaction. But authorities of NCBs did not take any note worthy measure for improving the quality of services. Despite of it, market share of NCBs is still very large. They hold the largest portion of deposits of the country. One reason for large volume of deposits of NCBs is the large number of branches of NCBs throughout the country. Another reason is that customers are historically habituated in dealing with NCBs and they are still reluctant to switch towards PCBs or FCBs. Researches should be conducted to find out the reasons for such attitude of customers of commercial banks in Bangladesh. Because this is simply a barrier to the improvement of quality of services for NCBs.

This condition has been started to be changed in recent days. NCBs are losing market shares. This means that it is the time for NCBs to rethink about their services. For achieving higher productivity of services NCBs should start with those elements where customers' expectations are higher and then gradually move to those elements where expectations are lower. For this purpose Bank authorities should concentrate first on the variables listed under Factor-1 in this study and then on variables of Factor-2 and then finally on the variables of Factor-3. This may help them enhancing customers' satisfaction as well as the productivity of services.

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Table 03: Expectations of customers of different banks

Banks	Agran	Bank	Agrani Bank Sonali Bank		Janata Bank Rupali Bank	Bank	Rupali		City Bank	¥	Prime Bank	Bank	Islami Bank	Bank	AB Bank	포	StanChart	hart	Total	2,4
ables	Mean	SD	Mean	SD	Mean		Mean	SD	Mean	SD	Mean	dS	Mean	S	Mean	5	Moon	00	Moon	0
	1.10	.32	1.10	.32	1.20	.63	1.10	.32	1.00	00.	1.30	48	1.30	67	1 40	2 5	1 40	2 2	1 21	2
Prompt service 1.40	1.40	.70	1.30	.48	1.50	.71	1.30	.48	1.40	.52	1.50	53	1.70	83	1 30	48	1 40	200	1 43	7. 0
Availability of service provider	1.80	.92	1.70	.67	1.80	I Rith	1.80	.79	1.70	.82	2.20	.92	2.00	.82	1.70	.82	1.50	17.	1.80	.81
Friendly attitude of the 1.80 personnel	1.80	.92	1.70	.82	1.70	.82	2.00	.94	1.70	.48	2.00	1.00	2.00	.47	1.80	.79	1.50	.53	1.80	.76
y of time n	of2.00	.82	2.10	66.	1.70	1.06	2.20	.79	1.80	.63	1.70	.82	2.00	.67	2.00	.94	2.00	96.	1.94	.84
advice	on2.00	.82	2.00	.82	2.00	1.25	1.90	.88	2.30	.67	2.00	.67	2.40	.84	2.00	.67	2.20	.79	2.09	.82
Getting advice on withdrawal	on1.90	88.	1.90	.74	2.40	1.17	2.10	88.	2.00	.82	1.60	.70	2.10	88.	2.20	.79	2.10	. 66.	2.03	.87
Good internal physical 1.80 environment	1.80	.63	1.90	.57	2.10	1.29	1.90	.57	1.70	.82	1.80	.79	1.70	.82	2.30	.82	2.10	74	1.92	.80
helps account	in2.20	.63	1.80	.63	2.00	.94	1.90	.74	1.70	.82	1.40	.70	1.50	.71	2.10	88	1.70	.48	1.81	.75
Getting helps in collection of checks deposited	in1.90 ks	.57	1.90	4.	2.00	.82	1.80	.79	1.70	.67	2.00	.67	1.80	.79	1.80	.63	1.60	02:	1.83	69.
of transac	2.00	.67	1.80	2	2.20	.92	1.60	.70	1.80	.63	2.10	.74	1.80	.79	1.70	67	1 90	74	1 88	76
Over time banking1.90 services	1.90	.74	2.10	88.	2.10	.74	1.60	.52	1.80	.79	2.00	.82	2.10	.74	2.00	19.	1.80	.79	1.93	.73
Parking Facilities	1.90	88.	2.60	.84	2.30	.48	1.70	.67	1.60	.84	1.90	74	1.80	79	1 80	00	1 70	63	1 00	0
Security of the deposit 1.60	1.60	.84	2.30		1.80	.63	.50	.71	1.40	.70	2.20	65	1 70	82	1 40	70	1 00	70.	76.1	10.
Security from hijackers1.50 in bank premises	1.50		2.30	.67	1.90	.57	1.80	.92	1.50	.53	2.00	.67	1.70	.82	1.50	17.	2.00	.94	1.80	.74
ity of	the2.00	.47	2.30	.82	1.80	79 2	2.40	1.07	1.90	.74	2.00	.82	2.00	.82	1.60	.70	2.10	.74	2.01	.79
Convenient Service 2.20 charges	2.20	.42	2.30	.82	1.80	63 1	1.80	.79	2.10	.74	2.30	29.	2.10	88.	1.90	66:	1.80	.79	2.03	.76
Attractive interest rate 1.80 on deposit	1.80	.92	2.00	.82	1.40	52 1	1.90	.74	1.80	.79	2.10	.88	1.90	.57	2.00	.67	1.80	.92	1.86	.76
Positive mentality of	of2.10	88	2.50	1 76.	1.30	48 2	2.20	.92	2.00	.82	1.90	74	2.00	94	2.00	82	0000	20	00 0	86

friends and relatives about the bank																				
Suitability of other 2.00 customer of the bank	79. 0		2.40	1.17	1.40	.70	1.90	.88	2.00	.82	2.10	.74	2.20	.79	1.90	74	1.70	.67	1.96	.82
Friends or relative 2.20 employee in bank	0 .42		2.10	.88	1.80	.79	2.10	.74	1.70	.67	2.00	96.	2.20	.63	2.00	8.	1.60	۶.	1.97	9/.
Suitability of bank2.10 ownership	0 .74		2.40	.97	2.00	.67	2.00	.82	1.70	.67	1.80	.79	1.90	.57	2.00	.82	1.40	.52	1.92	.75
Expertise of the 2.00 personnel	.82		2.40	.70	2.30	.67	2.30	.82	1.70	.67	2.00	.94	1.60	2.	1.90	88.	1.90	88.	2.01	.80
Modern equipment 2.10		18	.80	111/2/201	2.50	76.	2.10	.57	1.70	.67	1.80	.63	1.50	.71	1.90	.74	1.80	.79	1.91	77.
Cleanliness 2.30	Color	.82 2	2.30		2.30	.95	1.90	.74	1.40	.52	2.00	.94	1.80	.63	1.70	.48	1.80	.92	1.94	.87
Commitment for new2.10 facilities			2.50	1.08	2.20	1.03	2.20	.63	1.50	.53	1.70	.48	1.90	.74	1.90	.57	2.00	.82	2.00	.78
Interior decoration 2.00	00 .82		.10		2.70	.82	2.40	.70	1.80	.79	1.80	.79	1.70	.82	1.90	.88	1.90	.88	2.03	.89
Availability of complaint2.00 box	481		2.50	1.08	2.40	1.26	1.90	.88	2.20	.79	2.00	.67	1.80	.79	1.90	88.	1.80	.79	2.06	6.
Free from Nepotism 2.30	79. 08		2.00		2.30	1.06	1.60	.70	2.10	.88	1.90	.88	1.90	88.	2.00	.67	1.90	.74	2.00	.87
Sitting arrangement for 2.40 customers			2.10	1.20	1.90	66.	1.80	.79	2.20	.63	2.20	.79	2.10	.88	1.80	.92	2.00	96.	5.06	.87

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Groups of Banks	FCB		NCBs		PCBs		Total	
Variables	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Location	1.40	.70	1.13	.40	1.25	.54	1.21	.51
Prompt service	1.40	.70	1.38	.59	1.47	.60	1.42	09.
Availability of service provider	1.50	.71	1.77	.80	1.90	.84	1.80	.81
Friendly attitude of the personnel	1.50	.53	1.80	.85	1.87	.70	1.80	.76
Suitability of time of operation	2.00	.94	2.00	.91	1.88	.76	1.94	.84
Setting advice on deposits	2.20	.79	1.98	.92	2.17	.71	2.09	.82
Getting advice on withdrawal	2.10	66.	2.07	.92	1.98	.80	2.03	.87
Good internal physical environment	2.10	.74	1.93	.80	1.87	.82	1.92	.80
Getting helps in opening account	1.70	.48	1.98	.73	1.68	.80	1.81	.75
Setting helps in collection of checks deposited	1.60	.70	1.90	.71	1.83	89.	1.83	69.
Ease of transaction	1.90	.74	1.90	.84	1.85	.70	1.88	92.
Over time banking services	1.80	.79	1.92	.73	1.97	.73	1.93	.73
Parking Facilities	1.70	.82	2.12	.79	1.78	.80	1.92	.81
Security of the deposit	1.90	.74	1.80	92.	1.68	.83	1.76	.78
Security from hijackers in bank premises	2.00	.94	1.87	.72	1.68	69.	1.80	.74
Confidentiality of the deposit	2.10	.74	2.12	.82	1.87	9/.	2.01	.79
Convenient Service charges	1.80	.79	2.02	.70	2.10	.81	2.03	92.
Attractive interest rate on deposit	1.80	.92	1.78	77.	1.95	.71	1.86	92.
Positive mentality of friends and relatives about the bank	2.00	.94	2.03	.92	1.98	.80	2.00	98.
Suitability of other customer of the bank	1.70	29.	1.93	.92	2.05	.75	1.96	.82
riends or relative employee in bank	1.60	.70	2.05	.71	1.98	.80	1.97	92.
Suitability of bank ownership	1.40	.52	2.13	.79	1.85	.70	1.92	.75
Expertise of the personnel	1.90	88.	2.25	.74	1.80	.79	2.01	.80
Modern equipment	1.80	.79	2.13	.82	1.72	89.	1.91	77.
Cleanliness	1.80	.92	2.20	.97	1.72	89.	1.94	.87
Commitment for new facilities	2.00	.82	2.25	.87	1.75	.59	2.00	.78
Interior decoration	1.90	88.	2.30	.94	1.80	.79	2.03	68.
Availability of complaint box	1.80	.79	2.20	1.04	1.97	77.	2.06	.90
Free from Nepotism	1.90	.74	2.05	66.	1.97	.80	2.00	.87
Sitting arrangement for customers	2.00	.94	2.05	.93	2.08	80	2.06	27

Table 05: Satisfaction of customers of different banks

Banks	Agrani	i Bank	rani Bank Sonali Bank		Janata Bank	Rupali Bank		City Bank		Prime Bank Islami Bank	3ank	Islami Bank		AB Bank		StanChart Bank		Total	
Variables	Mean	SD	Mean	SD	Mean SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean SD		Mean	SD	Mean	SD
Location	2 00		2.60	1.35	1.80 .42	1000	.95	1.10	.32	1.20	.42	1.00	00.	1.20	.63	1.10	.32	1.59	.83
Promot service	2.50		2.80	1.03 2.	130	7 2.80	.63	1.30	48	1.30	48	1.30	.48	1.30		1.30	.48	1.88	88.
Availability of service 2.60 provider	e2.60	.84	2.60	1.17 2.	a in the	.97 3.10	66.		.71	1.11	.33	1.80	1530			1.50		2.03	1.04
attitude	of3.20	1.14	3.20	.79 2.	2.90 1	1.1 3.60 0	.70	1.70	.82	1.20	.42	2.00	.82			1.90	6	2.39	1.14
Suitability of time of 3.50 operation	of3.50	.97	3.00	1.05 2.70	5	1.0 3.30 6	1.16					1.70				1.70	.67	2.31	1.16
advice	on3.80	.92	2.70	1.25 2.50		1.0 3.50 8	.85	1.60	.70	1.70	.67	1.90	.74			2.00	ę. 4	2.36	1.16
advice	on3.40	.97	3.00	1.25 2.90	PER D	1.2 2.50 9	1.27	1.27 1.90	88.		.84	1.60		52 200		1.60	.84	2.22	1.18
Good internal physical 3.80 environment	al3.80	1.23	3.00	1.25 2	2.90 1.	1.2 3.20	1.03	1.03 1.60	.70	1.40	.70	1.80		2018		1.30	.48	2.31	1.25
Getting helps opening account	in3.10	88.	2.70	1.49 3.30		.95 2.80	1.14	1.141.70	.82	1.40	.52	2.00	.82		.82	1.50	.53	2.24	1.12
Getting helps in collection of checks denosited	in3.10 ks	88.	3.40	1.43 3.30		.95 2.50	76.	1.80	.63	1.40	.52	2.10	88.	2.10	.57	2.00	.67	2.41	1.07
Fase of transaction	3.10	.88	3.00	1.33 3.20	1.0	.92 3.00	.82	1.80	.42	1.60	.70	1.70	.95	1.90	74	1.90	88.	2.36	1.06
Over time banking 2.70 services	1g2.70	29.	2.70	1.16 2.80	Ties o	.79 2.40	.84	1.80	.63	1.70	.48	1.60	.70	2.10	.32	1.70	.82	2.17	.85
Parking Facilities	3.10	88.	2.70	1.16 2.90	-1	99 2.60	.84	1.90	.57	1.40	.52	1.70	.67	2.00	.67	1.80	.92	2.23	.97
Security of the deposit 3.40	sit 3.40	1.07	2.80	1.32 3.00		82 3.00		1.152.00	.82	1.80	.42	1.90	.74	1.80	.63	1.70	.67	2.38	1.06
Security from hijackers in bank	from 3.10 bank	1.10	2.70	1.06 2.80		.63 2.70	ME IS	1.252.00	.67	1.30	.48	2.10	88.	1.80	.63	1.80	.79	2.26	1.00
premises	00 000	00	00 0	00	00 0	88 2 90		1 101 80	79	1.40	.52	1.70	.67	2.00	.82	2.10	88.	2.29	1.01
Confidentiality of the 2.90	Ne.290	.33	7.30			00 2.30		71.00	1	7. 10		711		1	-2.				

deposit	A STATE OF THE STA		100		1									7						
Convenient Service 2.90 charges		88.	3.20	1.03 3	3.20	1.2 3.	3.10	.74 1.50		71 1.40	0 .70	1.8	1.80	92 2	2.30	.67	2.20	1.03	2.40	1.10
Attractive interest rate 3.00 on deposit		.82	3.00	1.15 2	2.50	.85 3.	3.30	1.061.60		.70 1.80		1.03 1.90		.88 2	2.00	.67	2.30	1.06	2.38	1.06
Positive mentality of 3.21 friends and relatives about the bank		.92	3.50	1.18 3	3.00	.94 3.	3.00	1.151.90	HEY TA	88 1.60	0 .70		3. 06.1	.88	2.00	.67	1.70	.82	2.42	1.12
Suitability of other 3.50 customer of the bank	175-1	.71	3.60	1.17 2	2.90	.88 2.	2.80	1.141.80		.79 1.70	0 .82		1.70	.67	2.00	.82	1.90	.74	2.43	1.11
Friends or relative 3.22 employee in bank		1.09	3.20	1.23 3	3.20	1.1 2.	2.70	1.161.80		.79 1.90	0 .57		1.70	.82 2	2.00	.67	1.80	.92	2.38	1.11
Suitability of bank 3.10 ownership		66.	2.70	1.25 2	2.90	.99 2.	2.90	99 1.80		92 1.80	0 .63		1.80	.92 2	2.30	.82	2.00	.67	2.37	1.02
Expertise of the 2.60 personnel		.70	2.30	1.06 3	3.10	1.1 3.	3.30	1.062.10	5.9	88 1.60	0.70		2.10	.88	1.70	.82	1.60	.52	2.27	1.03
Modern equipment 2	2.90	1.10	2.20	.79	2.80	1.2 3.	3.10	.88 1.90		88 1.40	0 .70		2.20 .6	.63 1	1.70	.82	1.10	.32	2.14	1.04
Cleanliness	3.40	1.26	2.20	79 2	2.70	1.2 2.	2.70	1.162.10		.88 1.70	79. 0	7 2.10		.74 2	2.10	88.	1.70	.82	2.30	1.05
Commitment for new3.30 facilities	STE	.95	2.40	1.17	2.90		2.80	1.032.00		94 1.70	79. 0	7 2.30		95 2	2.20	.63	1.80	67.	2.38	1.00
coration	3.30	.48	2.80	1.03	2.90	.74 2.	2.60	1.171.70		.82 1.80	0 .63	3 2.20		.79 2	2.20	.92	1.60	.97	2.34	1.00
Availability of 3 complaint box	of3.40	76.	3.00	1.15 3	3.10	.99 2.	2.40	97 1.70		.67 1.40	0 .52			.67	pi sa	.67	2.00	.82	2.33	1.04
Free from Nepotism 3		.63	2.90	.99	2.80	.79 2.	2.90	1.291.70		.82 1.50	17. 0		1.70	.82	1.80	.92	1.80	.92	2.26	1.07
Sitting arrangement3.50 for customers			3.00	1.41	3.60	1.3 3. 5	3.50	.85 1.70	ME	.82 1.50	17. 0		1.80 1	1.03 1	1.70	.95	1.80	.79	2.46	1.30
Total Mean93 (∑Mean)	3.82	1	82.8		86.4	8	87.3	22	52.5	45.91	91	55	55.1	S	55.5		52.2		68.29	

Table 06: Satisfaction of customers of different groups of banks

Groups of Banks	FCB		NCBs		PCBs		Total	
Variables	Mean	SD	Mean	gs	Mean	SD	Mean	SD
Location	1.10	.32	2.17	.87	1.13	.40	1.59	83
Prompt service	1.30	.48	2.60	.74	1.30	.46	1.88	88
Availability of service provider	1.50	.71	2.73	66:	1.46	89.	2.03	1.04
Friendly attitude of the personnel	1.90	.74	3.23	.95	1.68	.80	2.39	1.14
Suitability of time of operation	1.70	.67	3.13	1.07	1.65	77.	2.31	1.16
Getting advice on deposits	2.00	96.	3.13	1.14	1.68	69.	2.36	1.16
Getting advice on withdrawal	1.60	.84	2.95	1.20	1.65	77	2.22	1.18
Good internal physical environment	1.30	.48	3.23	1.19	1.65	.74	2.31	1.25
Getting helps in opening account	1.50	.53	2.97	1.12	1.70	.76	2.24	1.12
Getting helps in collection of checks deposited	2.00	.67	3.07	1.10	1.85	.70	2.41	1.07
Ease of transaction	1.90	.88	3.08	76.	1.75	.71	2.36	1.06
Over time banking services	1.70	.82	2.65	98.	1.80	.56	2.17	.85
Parking Facilities	1.80	.92	2.83	96.	1.75	.63	2.23	76.
Security of the deposit	1.70	.67	3.05	1.08	1.87	.65	2.38	1.06
Security from hijackers in bank premises	1.80	.79	2.83	1.01	1.80	.72	2.26	1.00
Confidentiality of the deposit	2.10	88.	2.90	96.	1.73	.72	2.29	1.01
Convenient Service charges	2.20	1.03	3.10	96	1.75	.81	2.40	1.10
Attractive interest rate on deposit	2.30	1.06	2.95	66.	1.82	.81	2.38	1.06
Positive mentality of friends and relatives about the bank	1.70	.82	3.18	1.03	1.85	11.	2.42	1.12
Suitability of other customer of the bank	1.90	.74	3.20	1.02	1.80	.76	2.43	111
Friends or relative employee in bank	1.80	.92	3.08	1.13	1.85	.70	2.38	1111
Suitability of bank ownership	2.00	.67	2.90	1.03	1.92	.83	2.37	1.02
Expertise of the personnel	1.60	.52	2.83	1.03	1.88	.82	2.27	1.03
Modern equipment	1.10	.32	2.75	1.03	1.80	.79	2.14	1.04
Cleanliness	1.70	.82	2.75	1.17	2.00	.78	2.30	1.05
Commitment for new facilities	1.80	.79	2.85	1.03	2.05	.81	2.38	1.00
Interior decoration	1.60	.97	2.90	.90	1.98	.80	2.34	1.00
Availability of complaint box	2.00	.82	2.97	1.05	1.78	99.	2.33	1.04
Free from Nepotism	1.80	.92	2.95	.93	1.68	.80	2.26	1.07
Sitting arrangement for customers	1.80	.79	3.40	1.15	1.68	98.	2.46	1.30
Total Mean (∑Mean)	52.2	A STATE OF THE STA	88.36		52 20		00.00	

GBI	ומטוכ סלוו ווסממכתו וולס סומחו			2					
Banks Variables	Agrani Bank	Sonali Bank	Janata Bank	Rupali Bank	City Bank	Prime Bank	Islami Bank	AB Bank	Stanchart Bank
location	1.82	2.36	1.50	5.09	1.10	0.92	0.77	98.0	0.79
Prompt service	1.79	2.15	1.53	2.15	0.93	0.87	9.76	1.00	0.93
Availability of service provider	1.44	1.53	1.44	1.72	0.88	0.50	06.0	0.82	1.00
Friendly attitude of the personnel	1.78	1.88	1.71	1.80	1.00	09.0	1.00	1.00	1.27
	1.75	1.43	1.59	1.50	0.94	0.94	0.85	08.0	0.85
Getting advice on deposits	1.90	1.35	1.25	1.84	0.70	0.85	0.79	0.75	0.91
Getting advice on withdrawal	1.79	1.58	1.21	1.19	0.95	1.00	9.76	0.68	0.76
Good internal physical environment	2.11	1.58	1.38	1.68	0.94	0.78	1.06	0.78	0.62
Getting helps in opening account	1.41	1.50	1.65	1.47	1.00	1.00	1.33	0.81	0.88
Getting helps in collection of checks deposited	1.63	1.79	1.65	1.39	1.06	0.70	1.17	1.17	1.25
Ease of transaction	1.55	1.67	1.45	1.88	1.00	92.0	0.94	1.12	1.00
Over time banking services	1.42	1.29	1.33	1.50	1.00	0.85	92.0	1.05	0.94
Parking Facilities	1.63	1.04	1.26	1.53	1.19	0.74	0.94	1.11	1.06
Security of the deposit	2.13	1.22	1.67	2.00	1.43	0.82	1.12	1.29	68.0
Security from hijackers in bank premises	2.07	1.17	1.47	1.50	1.33	0.65	1.24	1.20	06.0
	1.45	1.26	1.61	1.21	0.95	0.70	0.85	1.25	1.00
Convenient Service charges	1.32	1.39	1.78	1.72	0.71	0.61	98.0	1.21	1.22
Attractive interest rate on deposit	1.67	1.50	1.79	1.74	0.89	. 98.0	1.00	1.00	1.28
	1.52	1.40	2.31	1.36	0.95	0.84	0.95	1.00	0.85
Suitability of other customer of the bank	1.75	1.50	2.07	1.47	06.0	0.81	0.77	1.05	1.12
Friends or relative employee in bank	1.46	1.52	1.78	1.29	1.06	0.95	0.77	1.00	1.13
Suitability of bank ownership	1.48	1.13	1.45	1.45	1.06	1.00	0.95	1.15	1.43
Expertise of the personnel	1.30	96.0	1.35	1.43	1.24	08.0	1.31	0.89	0.84
Modern equipment	1.38	1.22	1.12	1.48	1.12	0.78	1.47	0.89	0.61
Cleanliness	1.48	96.0	1.17	1.42	1.50	0.85	1.17	1.24	0.94
Commitment for new facilities	1.57	96.0	1.32	1.27	1.33	1.00	1.21	1.16	06.0
Interior decoration	1.65	1.33	1.07	1.08	0.94	1.00	1.29	1.16	0.84
Availability of complaint box	1.70	1.20	1.29	1.26	77.0	0.70	1.11	1.05	1.11
Free from Nepotism	1.39	1.45	1.22	1.81	0.81	0.79	0.89	0.90	0.95
Sitting arrangement for customers	1.46	1.43	1.89	1.94	0.77	89.0	98.0	0.94	06.0
	48.79	42.75	45.32	47.20	30.45	24.35	29.86	30.34	29.17

ASPECTS OF ENTREPRENEURSHIP DEVELOPMENT IN BANGLADESH: A HISTORICAL APPROACH

Sheikh Ashigurrahman Prince*

ABSTRACT: Entrepreneurship development means the gradual growth of entrepreneurship in such a way that it becomes more advanced and can contribute positively to the overall development of a country. In ancient times, the village community of Bangladesh was self-reliant and so entrepreneurship did not flourish. During the British Raj and Pakistan Period there was little favourable environment for the development of entrepreneurship by the people of Bangladesh. During Bangladesh period law and order situation and political environment were not congenial to the development of entrepreneurship. Government should strictly maintain good law and order situation and frame positive industrial policy for the development of entrepreneurship in the country.

ENTREPRENEURSHIP DEVELOPMENT

Entrepreneurship is essential to national wealth building. It is not enough for a country to have land, labour, capital and natural resources. It needs the talent, ability and drive of the entrepreneur to turn these resources into profitable enterprises. Among developing countries, the contributions of the entrepreneurs have lately been recognized. It is, therefore, important to study the past of entrepreneurship development in our country with a view to plan for the future. Now, what is entrepreneurship?

Cole defines entrepreneurship as the purposeful activity of an individual or a group of associated individuals who undertake to initiate, maintain or aggrandize a profit oriented business unit for the production or distribution of economic goods and services. Hoselitz says, "in addition to being motivated by the profit, an entrepreneur must also have some managerial abilities and, more importantly he

must have the ability to lead".

McClelland identifies two characteristics of entrepreneurship. First 'doing thing in a new and better way' and second, 'decision making under uncertainity'. Higgins defines entrepreneurship as "the function of seeing investment and production opportunity, organizing an enterprise to undertake a new production process, raising capital, hiring labour, arranging for the supply of raw materials and selecting top managers for the day to day operation of the enterprise". According to Drucker, "Entrepreneurship is neither a science nor an art. It is a practice. It has a knowledge base. Knowledge in entrepreneurship is a means to an end. Indeed, what constitute knowledges in practice is largely defined by the ends, that is, by the practice." The Dictionary meaning of 'development' is "the gradual growth of something so that it

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becomes more advanced", "the process of producing or creating something new", and "new event or stage that is likely to affect what happens in a continuing situation." So, entrepreneurship development means the gradual growth of entrepreneurship in such a way that it becomes more advanced and it can contribute positively to the overall development of the country as a whole.

OBJECTIVES OF THE STUDY

The main purpose of the study is to examine the overall picture of entrepreneurship development in Bangladesh since middle age to the close of the twentieth century. Khaleda Zia Period (1995). The specific objectives are:

- To see historical retrospect of entrepreneurship development in Bangladesh;
- (ii) To find out the position of entrepreneurship development in the middle age:
- (iii) To see the position of entrepreneurship development during the British Raj;
- (iv) To see the position of entrepreneurship development during Pakistan period;
- (v) To investigate in to the level of entrepreneurship development during Bangladesh period (up to 1995); and
- (vi) To suggest some policy recommendations, for the overall development of entrepreneurship in Bangladesh.

METHODOLOGY OF THE STUDY

Methodology means the way of doing something. It also means the underlying principles and rules of organization of a philosophical system or inquiry procedure.

Given the nature of the study, it was required to collect data mainly from secondary sources. Data regarding entrepreneurs and 'development of entrepreneurs' were collected from Bangladesh Bureau of Statistics and concerned organizations. Furthermore, research studies, books, journals, newspapers and reports have been consulted for achieving the objectives of the study. For collecting primary data, a structured interview schedule was prepared for taking interviews of the existing entrepreneurs. At the time of preparing interview schedule sufficient care was taken to select questions according to the objectives of the study. But the historical retrospect of the study was drawn from the time between Nawab period to 1995 with special emphasis on the period from 1971 to 1995. Most of the historical data were collected from secondary sources with due acknowledgements.

ENTREPRENEURSHIP DEVELOPMENT IN BANGLADESH

Historical Retrospect of Entrepreneurship in Bangladesh

Before Bengal came into contact with the industrially developed regions and countries, people were organized in a peculiar type of economic, religious and social system, the basic unit of which was the agricultural village. The village community was the most important and interesting feature of the economic life of Bengal. The village life was in no way dominated by towns but it had economic linkage with them. The towns in Bengal had more religious importance and were aloof from the general life of the country. The village was self-reliant and the village community consisted mainly of the farmers and the various types of artisans. There was an elaborate division of labour or working force based mainly upon classes, religions, races, castes,

communities and groups.⁷ The compact system of Bengal village community effectively protected artisans from the pressures of external competition and this resulted in the absence of localization of industry in Bengal. This situation created a great obstruction in the entrepreneurship growth and development. The attitude of the people was not conducive to the growth of entrepreneurship. As a result, the province of Bengal remained a backward agricultural society.

Middle Age

In the history of Bangladesh, Bengal in the middle ages was famous for her agricultural products and handicrafts, which were in abundance and too cheap. During that time Bengal was called 'The paradise of nations' 'The Paradise of India' or 'The Realm of Paradise.8 For her wealth she was well recognized through out the world. At that time many travelers traveled the province and their descriptions about the province were no less copious in glorifying the land which had, a hundred gates to enter and not one to come out again. The farmers of the province produced rice, wheat and other grains, sugar cane, cotton, opium, indigo, oils of different kinds and vegetables. Other economic products, found in abundance, were lacca, wax, long pepper and salt. On the other hand, there, were the artisans and the weavers who produced the finest cloth of the cotton and silk which was famous in the world. Side by side Bengal also produced arts and crafts which had both domestic and foreign markets. The ivory and brass works of Murshidabed, pottery works of Krishnanagar, embroidery and shell cutting of Dhaka, gold and silver jewellery and shankha of Dhaka, shitalpati of Sylhet, were other important manufactured goods. Boat Industry, wood works, metal works, potteries, palanquins, sugar, salt and other small scale industries were produced in abundance for local and foreign markets. 10

At that time the *Nawbab* or his representatives created the congenial atmosphere for producers, manufacturers, businessmen and traders of home and abroad. The elements of the atmosphere were political stability, well established communication system, management, organized hat, bazaar, *gonzas* and also an authority to look after the weight, measurement and quality of goods. ¹¹ There was also an organized capital market which was traditional in nature and was run by the so called *Mohajon* and *Dadani* businessmen. For this reason, entrepreneurial activities

fostered in Bengal region to some extent at that time.

Export earning increased rapidly because of an increase in the quantity of export. In exchange of export the Bengal-province got more money in terms of precious metal that is gold, silver and other metal coins. ¹² It also created a golden opportunity to reinvest export earning in the field of industry but Bengalee traders failed to do so. In this light, one can think that the economy of Bengal had monitized but it was not true. All of the metal money which came to Bengal and in the hands of Bengalee traders through import in exchange of export drained out in various ways from Bengal. Paying the army in cash was a great political advantage for the rulers. ¹³ But it had nothing to do with the economic life of the people. The producers got some cash in hand while they sold their products in the gonzas, but that cash was taken away from them the next day by way of land tax and other *abwabs* and *nazars*. ¹⁴ Using important metals as jewellery was another sector. Men and Women of the aristocracies had ornamented themselves profusely. That was again useless in terms of economic use of precious metals.

The worst thing happened when the Delhi Emperor demanded tribute from Bengal in cash. It is said that every year one and a half crore of rupees were drained

out to Delhi and general business used to come to standstill due to lack of currencies for about six months after the dispatch of sacks of silver coins. 15 Another drainage was the participation of the Europeans in the country's inland trade. They bought goods in one market and sold in another and out of the profit, thus made, they bought goods and left for Europe. Such export was an absolute loss to the country's economy because it did not bring anything in return. Such traffic of inland trade by the Europeans was a very common phenomenon after 1717 when the English got the right to trade in the country free of any duties other than an annual sum of three thousand rupees payable at imperial treasury at Hughly. 16

The real economic life of the farmers, the craftsmen and the artisans was not good in the middle ages of Bengal because the prices of the commodity which they produced, were too low to induce the husbandmen for producing for market. In 1739 rice was sold eight mounds for a rupee and on that count the Western gate of the city of Dhaka was said to have been opened since it was closed by Shaistakhan (1679-88). Similarly, the price of textiles remained more or less static though there was tremendous demand for textiles and the supply frequently fell far below the demand. But such a situation never led to proportionate rise in prices. So, the market was rather imperfect and in the absence of full operation of market forces producers

remained tied to tradition.17

From the above discussion it is clear that the middle age of Bengal was marked by low prices of goods and it was a period of low wages too. A Dhaka letter of 28 August, 1736 mentioned that "men who helped the weavers earned one Pun couris a day and their rice. 18 According to Taylor, the wages of a weaver in Dhaka in the mid-18th century was from one and a half Acrot rupees and that of his assistant from 8 anas to 12 anas per month. He further states that working together, the head weaver who buys the thread, the weaver who makes the cloth and the purneyman who assists the weaver and, above all, who work for the Mulbooskhas would earn Rs. 47 in six months. The best spinners in Dhaka who were mostly women earned about 12 anas to 14 anas per-month working about 3 hours a day on an average. Again, Taylor says that women spinners could produce a quarter of a Sicca weight of thread in a month and the price of this sort of thread was Rs. 3 to Rs. 3.4 per Sicca weight.19

So the producers of Bengal were not able to accumulate capital through savings owing to low income. Hence, their economic life was stagnant and they failed to

change their production method and their fortune.

On the other hand, a class named Banian was created in that period. They made more money by taking opportunities from Dadani business, Middlemenship, Dalall and other activities. 20 They got it from 'export business of Bengal. But they did neither anything for the general mass, nor for themselves and nor for the country. All evidences suggest that production, organization, techniques, distribution and marketing, conditions of producers, price structure of commodities all remained more or less unaffected by the emergence of the rich Banian class. The rise of a city based wealthy class in Europe led to capitalist transformations. But similar transformation never took place in Bengal though the Banian capital here was equally great. Scholars say that the colonial waves had stopped the normal development of capitalist changes. Banian capital had been shifted from economic activities to land control. Their capital was also shifted or was misused competing with each other in lavish spending on the occasions of religious ceremonies like Births and Deaths, Marriages, Durgapujas and so on. At that time social status was determined by one's wasteful expenditure of capital, development and establishment of industry were not considered honourable in the thought of the contemporary society.²¹

From the above analysis, It can be said that the *Nawab* and others created a great economic chance to change the economic conditions of the people and also to change the economy from agriculture to industry. But some evil rules and regulations which were passed by the *Nawab* and his representatives and traditional society prevented them from building up a new industrialized nation in the world.

We also found that there were scarcities, famines and exploitations in Bengal during the *Nawab* period. Aristocratic social and political structures kept the people in a perennial state of stagnation. Fabulous wealth earned from export trade and agriculture did not lead to any agrarian or commercial revolution as it happened in Europe. All the gold and the silver that flowed into Bengal quickly disappeared in the basin of the military and the social aristocracies and the society at large remained unchanged.

The Period of Company and The British Raj

The economic history of the people of Bengal during the Company and the British Raj periods is a history of exploitation, deprivation, woes and sorrows. The British East India Company drastically changed the old economic relations of Bengal. There was a sharp break from the past in all respects of trade and commerce, arts and craft, manufacturing and husbandry. But the break took place not through any conscious plan on the part of the new regime. The whole existing economic structure was allowed to be dismembered by a cruel and ruthless method of plundering the resources of the country.²²

The eagerness of Robert Clive was only to achieve Company's solvency by participating in the revenue collection system of the country. But he never meant ruination of the country's economy by crude plundering of its resoures. When Clive left Bengal, there was a general rush of the company's servants, and of all classes of Europeans, towards the interior trade of the Bengal province. Bengal was taken by them, as Thompson and Garrett aptly described it, as a 'Pagoda tree'- just shake it and get crop of gold and silver. 23 At this time another measure, duty free business, was taken in the case of inland business. The duty free trade on the part of the company's servants alone meant eliminating the local merchants from competition. All the servants of the company went into the countryside for private trading and compelled local competitors they encountered in the market to sell their products at a lower rate. They set up monopolies of essential goods by illegally disallowing the local merchants to deal in those goods. Against such injustice and oppression complaints were, of course, made but in vain.²⁴ These types of monopoly activities of East India Company destroyed budding entrepreneurs of Bengal and created obstacles in the initial stage of entrepreneurship development.

British company ruled the country as businessmen. So their main activities were to collect revenue and profit from the people of Bengal. The policy of collecting revenues by means of extortion and often by force compelled many of the entrepreneurs and the rich farmers (prospective entrepreneurs) to leave their homestead and become *sanyasis* and *fakirs*. Because of such an anti-people revenue collection policy of the rulers devastating famine struck Bengal in 1769-70. About one third of the total population died during this famine. The policy also led to the destruction of the thousand-year old cottage industry of Bengal along with its entrepreneurs.

It was found from various studies of researchers that Bengal was an export oriented province and she exported finished goods. But after the Industrial Revolution, situation took reverse turn. In order to feed the rapidly expanding factories of England, raw materials, instead of finished products, began to be exported from Bengal. In addition to this the imperial Government also imposed exorbitant protective tariffs on all finished products exported to England and the national entrepreneurs were discriminated against. Very soon, export of finished products was totally stopped. Factories and production organizations, small and large, were automatically closed down. Finally, Bengal became a source of raw materials and market of finished products for the British.

The whole period of the British occupation of Bengal and Eastern part of India is marked by the total destruction of her industrial base. The world recognized cotton weaving, pottery making, ship-building, salt and sugar making etc. became a part of history. The once thriving business and industrial areas became desolate localities owing to anti-entrepreneurial activities of the colonial Government. As a result, local people including budding entrepreneurs fell back upon agriculture. Dependence on primary activities grew rapidly. When the British left in 1947, Indian entrepreneurs' especially Bengalee entrepreneurs, became practically non-existent.²⁵

Upto 1947 the economic features of East Bengal were stagnation, inequality, poverty and frequent incidents of famines. Such was the economy, which the then East Bengal (East Pakistan) inherited from the past. But there was no significant economic difference between the two regions i.e. East and West Pakistan.²⁶

People who inhabited the regions of Eastern Bengal and Assam gradually understood that they were economically exploited by the British, and the Bengalee Muslims in particular felt that they were relatively deprived in relation to metropolitan Bengal and majority community of Hindus. A sense of deprivation developed from the fact that West Bengal was much more developed than Eastern Bengal. However, within Eastern Bengal the Bengalee Muslims felt that their economic life was largely controlled and dominated by communities other than their own. Land ownership was thought to be largely held by Hindu landlords with Muslims being in the position of tenant farmers or small holders. Financial intermediation, trade, commerce and rural industry were largely controlled by Bengalee Hindus and in the upper reaches of commerce in some trade by *Marwaries*. Hafiz²⁷ says, when East Pakistan came into being, she had virtually no industrial base except for three medium sized cotton textile mills and three small sugar mills. The outsider also controlled much of the urban trade and commerce and dominated the bureaucracy, the teaching and the legal professions.

The Bengalee Muslims sought to advance themselves to a position where they would be politically in command of the machinery of the state. They expected to assume control over title to land, to use the machinery of state to advance themselves by entering Government service to develop the infrastructure of Eastern Bengal and to promote the industrialization of this region. Given the fact that Bengalee Muslim entrepreneurship was virtually non-existent, the state was expected to both mobilize resources and initiate the process of economic development and structural change. Given the importance vested in the machinery of the state, as the prime mover of economic development, Muslim community put great emphasis on the control over the machinery of the state.

Pakistan Period

The above stated fact primarily found expression in the struggle of the Bangalee Muslims for Pakistan. This consciousness at last created a country named Pakistan in 1947. The deprived people were very happy and expected that the golden days were coming within a short period. But it was another history of deprivation by the West Pakistan based rulers.

After the creation of Pakistan a great exodus of Bengalee Hindus and marwaries created an enromus vacuum in the industrial arena. As a consequence of the discriminating policy of the Government of Pakistan it was subsequently filled up by the West Pakistanis. This Government was based in West Pakistan and patronized the non-Bengalee Business communities to thrive, mainly in the West wing. The Government made East Pakistan a captive market for their industrial goods by making this region a cheap source of industrial raw materials. A survey on Pakistani entrepreneurs shows that in 1956, only 3% of the total industrial assets were controlled by Bengalee Muslims, 2% by marwaries, 8.5% by Bengalee Hindus and the remaining 86.5% by the West Pakistanis.²⁹ It indicates that Bengalee Muslims had not been favoured by the Pakistani rulers into any significant access to industrial ownership until the mid-sixties when the military regime of General Ayub Khan sponsored, with political motives, the formation of local Bengalee Muslim bourgeoisie with support and protection of the state through East Pakistan Industrial Development Corporation (EPIDC), Pakistan Industrial Credit and Investment Corporation (PICIC), and Investment Corporation of Pakistan (ICP) etc. which can be regarded as "state sponsored industrialization drive.30 Ayub Government extended its backing to the growth of private entrepreneurs loyal to the Government, who were mostly non-Bangalees with little or no root in the soil of Bangladesh.31 The documents of five-year plans might well bear testimony to this fact.³² It helped create a dependent Bangalee Muslim bourgeoisie which was close to the Pakistani power elite and also could, in disguise, act as a caretaker of the interests of the West Pakistan based Government at the center. This might well explain the underdeveloped and 'spoon-fed' character of the Bengalee Muslim bourgeoisie, acting in league with and as an appendage to the Pakistani ruling regimes.³³

The industrialization policy of the Pakistan Government also acted heavily in favour of concentrating of industrial assets in the hands of a few non-Bengalee instead of creating a broad-base of industrial ownership of the country. This might have acted as a retarding factor in the process of industrialization in the Pakistan

period.

The state of Pakistan could play a vital role for the development and growth of entrepreneurship in East Pakistan. But she did not do it. Rather she tried to exploit this wing to develop West Pakistan. In order to prove it the researcher draws a pen

picture of deprivation by the Pakistani state during 1949 to 1970.

The Government of Pakistan spent only 33 percent of her total revenue and development expenditure in East Pakistan during 1949-1970.³⁴ At that time Pakistan received 6439 million U.S. dollars from abroad as aid but only 30.1 per cent of that was disbursed in East Pakistant.³⁵ There was a 4018 million taka deficit in the East Pakistan's Regional Balance of payment during 1948-69. At the same time deficit rose 55064 million taka in West Pakistan's regional balance of payment.³⁶ It means West Pakistan's import and investment was more than that of East Pakistan. Resource transfer was another variable which indicates how a region exploited another region. In the Pakistani regime the West wing transferred resources from the East wing the

value of which was taka 11790 million.³⁷ It is known that a state is run by the state machinery. But in Pakistan the Government intentionally followed a discriminatory policy. Under this policy few Bengalee people were able to get central Government jobs.³⁸ In the case of basic commodity consumption and social and physical infrastructure, the picture of East Pakistan was poorer than that o West Pakistan.³⁹

All these evidences prove that the Government of Pakistan willingly thwarted the development of east Pakistan and finally tried to develop West Pakistan by way of exploitation and deprivation of East Pakistan. But the people of East Pakistan who once dreamed that the country and the countrymen will prosper if they owned a land were totally disappointed. The Pakistani Government failed to remove the sense of relative economic deprivation of the people of East Bengal which fuelled the forces of Bengalee nationalism that finally led to the emergence of an independent Bangladesh in 1971.

Bangladesh Period

After almost two hundred years of British rule and 25 years of Pakistani domination, Bangladesh emerged as an independent nation in South Asia in December, 1971. The country possessed a long colonial history which, characterized by social, political and economic exploitation, resulted in a pillage and drainage of vast wealth in all sectors from the country. 40

After independence, Bangladesh people got a land almost completely destroyed. A few industries that she had were destroyed during the liberation war. Her socioeconomic infrastructure was also damaged. Most of the people were engaged in agriculture and Jute was its main agricultural crop, the principal item of export for Bangladesh. On the other hand, all the industrialists who belonged to West Pakistan, migrated from Bangladesh to Pakistan.

On January 3, 1972 an Order entitled Acting President's Order No. 1, 1972 was proclaimed with the objective of safeguarding properties abandoned by the West Pakistanis.41 This authorized the new Government to take over the control and management of the industrial and the commercial concerns, the owners of which had already left-Bangladesh. All the jute, textile and sugar mills were nationalized along with the banks and insurance companies by an order in March, 1972. As a result, insurance business was placed under Government control. Most inland and coastal shipping, including the absentee owner's property and other fixed assets valued at Tk. 1.5 million and a major portion of the foreign trade were also nationalized. Because of these steps, a large public sector then became a reality. But that public sector could not flourish as the nation expected. Rather it gradually disintegrated and began to bear huge losses due to inefficiency, mismanagement, political chaos, idleness of working class, lack of patriotism, lack of farsightedness of political leaders, redtapism, favourtism, nepotism and non cooperation of bureaucrats. Therefore, the hopes of the industrialization of the country were not materialized. The dream of industrialization was gradually diminished. However, the role of the private investors and the small entrepreneurs in the nation-building activities was not totally ignored. The Government allowed investments up to taka 2.50 million in the private sector by small and medium sized entrepreneurs and also fixed a period of moratorium of ten years on nationalization of such private sector ventures. The spirit of the small industrial investment policy of the Government was looked upon by prospective investors with understandable suspicion. As a result, till mid-July 1974, practically no entrepreneur worth mentioning came forward to invest. In order to slove the

situation, the industrial investment policy was revised in July, 1974 and again in 1975. In the first revision the investment ceiling was raised up to taka 30 million and in the second revision the ceiling was raised up to taka 100 million. Participation of foreign private investment in collaboration with private entrepreneurs was permitted. Till then foreign collaboration had been limited to the public sector only. Ceiling on foreign investment was also totally withdrawn. A moratorium on nationalization was declared for a period of fifteen years from the date of going into production of the enterprise owned by private entrepreneurs. A tax-holiday was declared for seven years and other incentives for private investors were announced. Two special financial institutions- Bangladesh Shilpa Rin-Sangshta and Bangladesh Shilpa Bank were formed to help the investors, both the private and the public, by providing them with short and medium-term loans. Unfortunately, the response from the private entrepreneurs whether small or medium was inadequate. The country was experiencing turmoil in every sector. The labour front, especially, was in a chaotic condition, mainly due to the prevailing political unrest and insecurity. It was obvious, therefore, that entrepreneurs would not feel very easy in making any investment. If the number of registered factories is of any indication of the prevailing situation, then it can be seen that during Awami League regime even the existing entrepreneurs dwindled gradually.42

A number of fundamental changes were made in the country's economic policy during Ziaur Rahman's regime. The new policy raised the ceiling of private investment to taka 300 million.⁴³ In 1978, the ceiling on private investment was waived totally and the moratorium clause of nationalization was abolished.⁴⁴ It was reiterated that any industry that was nationalized would be paid compensation on fair and equitable grounds. Tax holiday and such other incentives, introduced earlier, were reintroduced. However, the major policy-change decision was to disinvest some of the industrial units which were declared abandoned after the liberation war and placed under public corporations for management.⁴⁵

The Government also declared that if the owners of black money used their fund to purchase the disinvested industrial or business units by 30th June 1978, no legal action would be taken against them. This was no doubt a desperate attempt towards privatization of the economy. The next steps of the Zia regime was denationallsation. By 1979, '40% of nationalized industries had been handed over to private entrepreneurs. Of the total of 785 nationalized industrial units, 159 were returned to the original owners and 200 were sold to the private bidders. ⁴⁶ Many of these concerns were profitable. At that time, state financial institutions extended financial support to the private entrepreneurs on easy terms. Prior to 1975, only taka 120 million or 4% of the total loan sanctioned by the state financial institutions went to the private sector. But after 1975, the pattern was overwhelmingly reversed and as a result, a large sanction amounting to taka 2364 crore went to the private sector between 1975-82. ⁴⁷

The policy of privatization (denationalization) was to motivate the private entrepreneurs to invest more in the private sector. Zia emphasized on maximizing Gross National Product (GNP) growth rate through all- out encouragement of the private sector by activating the private entrepreneurs.⁴⁸ By 1981-82, the investment of private entrepreneurs in industry rose to taka 2260 million.⁴⁹ In 1973-74, it was only taka 87.4 million.⁵⁰

An investment Board was established to assist the private entrepreneurs. The Investment Advisory Centre of Bangladesh (IACB) was also reorganized. The

Investment Board was the final authority for granting approval to private investment proposals. The Dhaka Stock Exchange, which had remained inactive since independence, reopened its doors from mid-1977.

By 1980 nearly 3500 industrial units, mainly in the private sector, of dairy farming and dairy products, deep sea fishing, agricultural machinery and equipment, export oriented ready made garments and drugs and pharmaceuticals were approved by the Investment Board, involving an investment of taka 1024.9 million including a foreign exchange component of taka 407 million. Before Zia's period, the private sector of Bangladesh was essentially biased towards trading and commercial activities where returns on investment capital were quick and rates of profit high.⁵¹ Indenting houses, traveling agencies and shopping concerns were the favoured field of activities by the private entrepreneurs. Zia's investment and economic policy encouraged entrepreneurs to trade new areas. Entrepreneurship in dairy farming and dairy products, deep sea fishing and export oriented ready made garments were basically new in Bangladesh. A number of infrastructural projects like ship repairing, building of barges and engineering works, etc., found place in the investment portfolios of the private entrepreneurs. Some evil activities like high political ambition, military coup, partisan spirit, political unrest etc. created obstacles on the way to country's industrialization. Hence, entrepreneurship did not increase at the expected rate.

During Ershad's regime, two industrial policies were taken up-one in 1982 and the other in 1986. According to the industrial policy of 1982, public sector investment was limited only to six sectors and disinvestments and decentralization continued at a greater pace. By June 1983, 185 nationalized industrial units were disinvested. The second five year plan (1980-85), formulated by the Zia regime, was revised and made public in May, 1983. As an official policy, it declared its intention to allow the private sector to have a more pronounced role in the economy. Encouragement of the private investment became one of the main economic objectives of the Government.⁵²

During Ershad era (1982-90), expansion of private investment and entrepreneurship was a declared policy of the Government. The revised Industrial policy of Ershad in 1986 was a landmark of liberalization policy introduced for the greater benefit of the private entrepreneurs. The two industrial policies of the Ershad era were aimed at providing generous incentives to the private entrepreneurs, liberalizing trade and privatizing, decentralizing and introducing freedom of enterprise in general. Major thrust was to promote private investment in manufacturing industries.

However, in real terms, the development of entrepreneurship and the expansion of the private sector were considerably slow. The rate of growth of manufacturing employment was somewhat accelerated, implying a decline in productivity per worker, which according to the data of the Census of Manufacturing Industries (CMI), has gone down at an annual rate of 6.3%. As a declared policy of the Government, during this period the development financial institutions like Bangladesh Shilpa Bank and Bangladesh Shilpa Rin Sangstha were very liberal in giving financial assistance to private entrepreneurs. But political connections and considerations often decided who would receive such assistance and how much he would receive. Unfortunately, the loan recovery rate of outstanding dues from the entrepreneurs was painfully low and rarely exceeded 12%.⁵³ Industries or business units against which loans were sanctioned were often non-existent, which means that a major portion of the loans was never invested properly. It is difficult to assess where the money did go. But

economists and all other related persons identified three possible sectors where the money could have gone. A big portion went for importing luxury items, some was invested in non-productive businesses and a considerable amount was drained out of the country. This very often led the international donor agencies like the World Bank, the International Development Agency (IDA) and the Asian Development Bank (ADB) to suspend their financial assistance to the development of financial institutions.

When Ershad captured state power in 1982, restoration of the economic progress was a major excuse. When he was ousted from the state power, the country was in total ruins. During his nine years of rule (1982-90) the average growth rate of GDP was only 3%. 1972-81, it was 6%. The increase of per capita net national income (1972-73) was only Taka 35. The country became more import dependent. Instead of increasing, investment declined. Internal food procurement also declined. Subsidy on agricultural inputs was gradually withdrawn and agricultural loan disbursement stopped. Agricultural production became practically stagnant. On the other hand, the dependence on the agriculture sector did not decrease. 75% of the country's total labour force were engaged in agriculture, as they were in 1947. The country became more dependent on foreign aid and loans. During 1980-81 financial year, the foreign aid component of the Annual Development Plan was 65%. By 1988-89, it increased to 98%.

The increasing dependence on foreign aid, made the moneyed class more import-oriented than production oriented. Commodities produced by local entrepreneurs faced an uneven competition from the imported goods. Many of the jute and cotton textile units, which were decentralized during the Ershad regime, were shut down or laid off as their products could not compete in the market. Political situation gradually worsened, labour class also got agitated. Hartals and strikes increased. Extortion, hooliganism and terrorism became common phenomena of the country. Law and order situation deteriorated. As a result, the annual growth rate of industrial sector came down to 3% during 1982-89 period which was 13.9% during 1972-81 period. Private investment during 1980-81 period was 90 million Taka which at current prices amounted to 200 million taka. By 1989-90, it stood at only 258 million Taka. In 1980-81 period, the total investment, as percentage of GDP, was 16% and by 1988-89, it came down to 9% only. Inflation has always been 10% +.

Begum Zia came to the state power through an election conducted by a Caretaker Government. It was thought that the country would go ahead through entrepreneurship development in general and industrialization in particular. In this connection the new Government introduced a new industrial policy in 1991 and it was revised in the next year. Under this policy the Government stressed on private sector and also declared that the country would be developed within a short time and would be industrialized through proper utilization and development of private sector. For this reason, the Government empowered the financial institutions for giving loans on very easy terms and conditions. The Government took a liberal package policy to attract local and foreign capital and investors and also launched a liberal fiscal policy. Training programmes along with financial support and assistance activities were provided for the local entrepreneurship development. As a result, local trade, business, commerce and small industry like poultry, dairy, fishing, readymade garment enterprises, etc. increased at a rapid pace.

During Begum Zia's period (1991-95) the banking institutions of Bangladesh disbursed taka 30648 crore as loan to the private entrepreneurs. ⁵⁴ Under the Fourth Five Year Plan (1990-95), the Government allocated taka 4360 crore for investment

in the private sector.⁵⁵ During 1991-96 period, the Investment Board invested 4785 million dollars in Bangladesh of which 2527 million were foreign investment and 2258 million local investment.⁵⁶ By 1991-96 period, sixty new industrial units were established in the export processing zone. These industries invested about 150 million U.S. dollars in the same period.⁵⁷ Bangladesh Small and Cottage Industries Corporation also took some important measures like entrepreneurship development, efficiency development, exchange of technological knowledge, etc. towards entrepreneurship development.

All the efforts of the Government failed to develop the private sector and industrialization still remained a far cry. During Begum Zia's period the rate of growth in industrial sector gradually declined. In 92-93 it was 9.1 percent and it came down to 6 percent in 95-96. Appebdix table 12 shows it clearly.⁵⁸

It was important to create a well organized financial market for industrialization and for potential entrepreneurs. But during Begum Zia's regime, the financial market was full of chaos. Rate of interest always fluctuated. As a result, local saving and investment suffered greatly. In that period it was seen that party members of the ruling political party were appointed as Managing Directors in the banking institutions. Party affiliation was the main criterion to get loan from the bank. So, actual and new businessmen and entrepreneurs did not get expected amount of loan. Therefore, broad based entrepreneurship did not flourish as was expected. On the other hand, the recovery rate of the disbursed loan was too low. The Finance Ministry source informs that in 1995 the volume of defaulted loans stood at taka 12668 crore 4 lakh. This was 40 percent of the total loan disbursed.⁵⁸ This rate was the highest during the five-year's rule of the past BNP Government. In 1994 the volume of defaulted loan was 29 percent of the total disbursement. Defaulted loan rose by 11 percent within a year (1995) and it crossed the danger point. 60 During that period (1991-96) public owned industrial sector bore losses to the extent of taka 3431.80 crore.61

A huge amount of defaulted loan was transferred out of the country in various ways. A portion of that money was invested in unproductive sectors as well as in black marketing.

It is a known fact that without investment, no industrialization or economic progress can occur. Volume of investment local or foreign, private or public depends on a congenial atmosphere which facilitates free flow of capital from the entrepreneurs aiming at economic growth, poverty alleviation, employment generation and improvement of the quality of life of the people. This congenial atmoshaere can also help develop entrepreneurship. Lack of congenial environment discourages the development of entrepreneurship and entrepreneurs.

A congenial investment environment is affected not only by economic factors but also by extra-economic variables. The extra economic variables are bureaucratic apathy, administrative corruption, corruption by existing political power, socio-political unrest and labour militancy.

Redtapism and administrative corruption increased to a great extent. The bribe taking practice of the Government officials with minor exceptions was seemingly institutionalized. It is alleged that most people have to pay regularly to some officials to process papers. Without bribe files do not move. According to a former secretary of the Internal Resources Division, "In India and Pakistan, they are corrupt but they work. In Bangladesh, they are corrupt but they do not work. They are corrupt and inefficient too. ⁶² Political unrest which was created by the opposition and the ruling

party (BNP) was there and it spread everywhere. Law and order situation deteriorated, social and economic life was also disturbed by the terrorist and party activities. All theses creatred environment which was not favourable for entrepreneurship development.

CONCLUSIONS

For the development of entrepreneurship, improvement law and order situation is a must. No foreign investors will come forward to invest their money in a country where law and order situation is not O.K. Over and above, *hartal* culture should be stopped altogether. An understanding among all the political parties should be reached so that *hartal* can be stopped altogether.

Proper industrial policy should be framed and implemented so that new and existing entrepreneurs get incentives, which would, in turn, help develop entrepreneurship. The Government should also control smuggling, remove *redtapism*, stop-bureaucratic corruption and administrative complexity fully. It will help the entrepreneurs to implement their projects on time and thus, overall entrepreneurship will develop automatically.

Government should change its present education policy for speedy development of entrepreneurship in Bangladesh. In this regard the government should introduce courses relating to entrepreneurs development in various levels, especially in higher levels of education. Government should also encourage business associations to start consultancy services and to introduce training programmes in the country so that the new entrepreneurs get some basic idea of entrepreneurship development.

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Table 1: Wages in Calcutta, Before 1757 and in 1757

Before Janua					In Janu	ary 1757	mini G. han	e Steer of A
Bricklayers	3 Pun	10 gandas	couris	Perday	4 Pun	0 gandas	couris	Perday
Coolic	2 Pun	10 gandas	couris	Perday	4 Pun	0 gandas	couris	Perday
Boy	1 Pun	15 gandas	couris	Perday	2 Pun	5 gandas	couris	Perday
Women	1 Pun	15 gandas	couris	Perday	2 Pun	0 gandas	couris	Perday
Carpenter	3 Pun	0 gandas	couris	Perday	3 Pun	10 gandas	couris	Perday
Best carpenter	4 Pun	0 gandas	couris	Perday	4 Pun	10 gandas	couris	Perday
Carpenters	-			E-MEIGHTON.	TO POUR	gariads		50 TO ST
Mate	7 Pun	0 gandas	couris	Perday	8 Pun	0 gandas	couris	Perday
Painter ource: B. P. C	3 Pun	0 gandas	couris	Perday	4 Pun	0	couris	Perday

Table 2: Region-wise Distribution of Revenue and Capital Expenditure in Pakistan 1950 –57 / 1960 - 70

Total			Oruvate		olic Rev	Pakistan enue Total	Public	ment To Priva	tal public te (6 +8)
(1)	1		-		1	(7)	(8)	(9)	(10)
1/10	1000	700	B00	2410	7200	4000	2000	2000	9200
2540	2700	1970	730	4510	8980	7570	4640	-	13620
1340	9700	6700	3000	11040	12840				25850
5480	16560	11060	5500	17540					41830
	29960	20430	9530	35500	51250	61980			81000
1.	(1) 710 540 340 480 5070	(1) (2) 710 1000 540 2700 340 9700 480 16560 5070 29960	(1) (2) (3) 710 1000 700 540 2700 1970 340 9700 6700 480 16560 11060 5070 29960 20430	(1) (2) (3) (4) 710 1000 700 300 540 2700 1970 730 340 9700 6700 3000 480 16560 11060 5500 5070 29960 20430 9530	Total (1) (2) (3) Oruvate (1 + 3) (1) (2) (3) (4) (5) 710 1000 700 300 2410 540 2700 1970 730 4510 340 9700 6700 3000 11040 480 16560 11060 5500 17540 5070 29960 20430 9530 35500	Total (1) (2) Public (3) Oruvate (1 + 3) (4) (5) (6) 710 1000 700 300 2410 7200 540 2700 1970 730 4510 8980 340 9700 6700 3000 11040 12840 480 16560 11060 5500 17540 22230 5070 29960 20430 9530 35500 51250	Total (1) (2) Public (3) Oruvate (1 + 3) (4) Total (6) Total (7) 710 1000 700 300 2410 7200 4000 540 2700 1970 730 4510 8980 7570 340 9700 6700 3000 11040 12840 23710 480 16560 11060 5500 17540 22230 35600 5070 29960 20430 9530 35500 51250 61980	Total (1) (2) (3) (4) (5) (6) (7) Total (8) Public (8) 710 1000 700 300 2410 7200 4000 2000 540 2700 1970 730 4510 8980 7570 4640 340 9700 6700 3000 11040 12840 23710 13010 480 16560 11060 5500 17540 22230 35600 19600 5070 29960 20430 9530 35500 51250 61980 30630	Total (1) (2) (3) (4) (5) (6) (7) Total (8) Public (9) 710 1000 700 300 2410 7200 4000 2000 2000 540 2700 1970 730 4510 8980 7570 4640 2930 340 9700 6700 3000 11040 12840 23710 13010 10700 480 16560 11060 5500 17540 22230 35600 19600 16000 5070 29960 20430 9530 35500 51250 61980 30630 31630

A. Aid Disbursements in Rs. at \$ scarcity	East Pakistan	West Pakistan	Total
value (in Rs. billion) 1. 1948-49 – 1960 – 61	1.01	10.77	
%	4.84	10.77	15.61
	31.0	69.0	100
2. 1961-62 – 1968-69	14.49	31.48	45.97
%	31.5	68.5	100
3. Total	19.33	42.25	61.58
%	31.4	68.6	100
B. Aid Disbursements in \$ (in \$ million)	1941	4106	6439
%	30.1	69.9	100
C. Aid Commitments in \$ (in \$ million)			-50
1. 1947-60	542	1516	2058
%	26.3	73.7	100
2. 1960 – 70	1482	4100	5582
%	26.5	73.5	100
3. Total	2024	5616	7640

%	26.4	73.6	100
D. Compostion of Disbursed Aid in US \$ (in million)		ing to Section	
Project Aid including technical assistance	825(25.2)	2127	3271
%	42.3	51.8	50.8
Non-project and Commodity Aid	671(34.8)	1248	1927
	34.6	30.4	29.9
% 3. Food Aid	445 (35.9)	791	1241
3. Food Aid	22.9	19.3	19.3
%		4106	6439
4. Total	1941	4100	100
%		and the second	100

Source: (A) Panel of Economists (EP), (B), (C) and (D), Muhith, 1978.

Table 4: Balance of Payments of East and West Pakistan (1948-49) to 1968-69)

		East	(Rs. million)
1948-49 to	Nominal price	+ 592	- 8116
1950 - 61	Scarcity price	+ 5368	- 20989
1962 -	Nominal price	- 6526	- 18180
	Scarcity price	- 9386	- 34075
	i i i i i i i i i i i i i i i i i i i	- 5934	- 26296
	Nominal price	LA STA	E ASTRUMENT
	Scarcity price	- 4018	- 55064

Source: Report of the Panel of Economists of the Fourth Five Year Plan, Tables 1-A, B,C, 76-78.

Table 5: Transfer of Resources from East to West Pakistan (1948-49) to 1968-69)

(in F	Rs. Million)			25 m Satisface
	1948-49	to	1961-62 to	1948-49 to
	1960 -61		1968 - 69	1968 – 69
Aid a actually utilized in East Pakistan	4840		14490	19330
East Pakistan's due share of aid in Proportion to population	8430		26710	35140
Transfer from East to West on Aid account (2-1)	+ 3590		+ 12220	+ 15810
East Pakistan's balance of payments	+ 5370		- 9390	- 4020
Transfer of resources from East to West (3 +4)	+ 8960		+ 2830	+ 11790

Source: Report of the Panel of Economists of the Fourth Five Year Plan, Tables – 1, 75.

Table 6: State Machinery of Pakistan: Share of Bangalees in %
Army Air force Navy

	Army	All IUI	CC IVAVY	
Military Establishment (1963) (a) Commissioned Officers (b) Amica Commissioned officers	5 7.4	17	1	
(b) Junior Commissioned officers (c) Warrant Officers (d) Other ranks	7.4	13.3 28.0		
 (d) Other ranks (e) Branch Officers (f) Chief Petty Officers (g) Petty Officers (h) Leading seaman and below 	7.1	20.0	5 10.5 17.3 28.8	
2. Bureaucratic Establishments (1966) Class I Officers in Central Secretariat Disparity 3. Entrepreneurs (1959)		East 170	West 631 771	11(% of fixed assets)

Source: 1 & 2 Jahan, 1982 (3) Papanek, 1967.

Table7: Number of Registered Factories in Bangladesh 1969-70 to 1976-77

3121	
3741	
3196	
3810	
3190	
2819	
2819	
2845	
2976	
	3196 3810 3190 2819 2819 2845

Source: Maheshwari 1992, p. 95.

Table- 8: Loan Disbursed by the Banking Sector 1990-96

	2372322025	Quantity	
	1990 - 91	17823 crore Tk.	
	19991- 92	17939 crore Tk.	
	1992 - 93	19318 crore Tk.	
	1993 - 94	20972 crore Tk.	
	1994 – 95	25921 crore Tk.	
į	1995 - 96	30648 crore Tk.	

Source: Statistical Department, Bangladesh Bank, Bangladesh economic Survey, 1996, Appendix- p. 19.

Table 9: Allocation of Private Sector Investment in the FFYP 1990-95 at 1989-90

	prioco	
Items	Total sector	Private sector
Agriculture	18233	7212
Manufacturing.	8450	4360*
Energy	9350	500
Physical Planning	7455	6214
and housing	13653	3180
Transport and	14699	5534
communication	68930	27000
Others		
Total		

Source: FFYP (1990-95) Statistical Year Book of Bangladesh, Bangladesh Bureau of Statistics, 1994, p. 589.

TRENDS, DIFFERENTIALS AND DETERMINANTS OF FERTILITY IN BANGLADESH

Tapan Kumar Roy¹
Dilip Kumar Mondol²
Abul Kalam Azad³

ABSTRACT: Reduction of fertility is one of the major problems in Bangladesh. The fertility rates have been declined but it is still far from replacement level. There has been unexpected halt in TFR and TMFR during a decade. In this study, an attempt has been made to assess the fertility differentials and determinants by using 1999-2000 BDHS data with the help of Multiple Classification Analysis. The multivariate analysis shows that female education, age at marriage, residence, female working status and access to mass media are the important determinants of fertility. Again, religion, husband occupation, contraceptive using status, electricity ownership and breastfeeding status are also differentials of fertility. The fertility-inhibiting effects of four principal proximate determinants are observed by Bongaarts model. The result indicates that lactational infecundability had the highest fertility reducing effects followed by contraceptive and marriage.

INTRODUCTION

The population of Bangladesh has been passing through a difficult phase of transition and it has already grown to a size that poses a formidable difficulty for the policy makers to plan for a sustainable development. These populations have grown from about 29 million in 1901 to about 130 million in 2001. This huge population made the nation as ninth most populous country in the world and one of the most densely populated in South Asia (834 persons per square kilometers, (Population Census, 2001:13)). It was note in current census 2001 that about 40 percent of the population was under 15 years of age, about 56 percent were between 15 and 64 years and 4 percent were age 65 and over. The relatively young age structure of the population exhibits continued rapid population growth in the future and constitutes a built-in population-momentum which will continue to generate population increases

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well into the future, even the face of rapid fertility decline (Mitra, Ahmed, Saha & Kumar, 2001:1-2).

The above population age structure increases dependency ratio and creates pressure on maternal and child health and nutrition services, pre-school care and different levels of educational facilities. The over population continues to create high population density, widespread poverty, low literacy rate, various social problems and standard of living has faced greater problems. The rapid population growth rates are offsetting socio-economic development and are expected to have serious consequences.

However, Bangladesh has achieved a considerable increase in contraceptive use over the past decade and in turn, an appreciable decline in fertility. The change has been taken also in the family norm and a decline in infant and child mortality (Caldwell & ors., 1999:67-84).

Many experts hold the strong view that the family planning program played a major role in the rapid decline of fertility in Bangladesh. Lapham and Mauldin (1984) argued that family planning programs contributed to the change in fertility. Again, Robey, Rutstein and Morris (1993) recommended that family planning has had the most direct influence on fertility. Cleland and others (1994) concluded that the Bangladesh family planning program was the main factor responsible for fertility decline in the country. They also noted "if policies are implemented with sustained resolve, fertility decline is possible, even in the absence of rapid economic development and social change."

But many experts do not agree that a family planning program can have a major effect on fertility. They consider that the major change in fertility has been brought about not only by birth control methods but also by other changes in the desire to have children (Bairagi & Datta,2001:5-6). Caldwell and others (1999) expressed doubt that only the Bangladesh family planning program could bring TFR down from the mid-1970's level of more than 6 children per woman to a nearly 3, without a change in society. Pritchett (1994) demonstrated with citing examples of different countries that contraceptive use itself had a minor role to play in decreasing fertility. He also argued that for the reduction of fertility desired fertility is important which depends on development, culture and so forth. In Bangladesh, the socioeconomic development carried out since 1970 is in progress but a very slow rate (Islam & ors., 1996:3).

Fertility decline is also due to other proximate determinants besides contraceptive use. Bongaarts and Potter (1983) observed that 96 percent of the variance in the total fertility rates could be explained by the four principal proximate determinants namely marriage, contraception, induced abortion and lactational infecundability.

Objectives, Data and Methodology

This study exhibits the trends in fertility levels in Bangladesh from 1960-2000. Before 1975, though some changes in fertility did take place but due to poor quality and unreliability of data, the analysis of fertility would be severely hampered. National level data have been used for the period 1975-2000.

This study also investigates differentials and determinants of fertility in Bangladesh. The multiple classification analysis (MCA) was used to identify the important factors, which affect on fertility. For the multivariate analysis of the differentials and determinants of fertility decline, the 1999-2000 Bangladesh

Demographic and Health Survey (BDHS) have been used. The study also provides fertility-inhibiting effects for each principal four proximate determinants and to identify the contribution of each proximate determinant and their percentage change.

The 1999-2000 BDHS employed a nationally representative, two-stage cluster sample design. The sample was selected from the master sample maintained by the Bangladesh Bureau of Statistics for the implementation of surveys before the census 2001. The survey considers ever-married women of reproductive age as eligible for interview. A sample of 10,268 households were selected from which 10,000 eligible women were interviewed.

For MCA, children ever born was used as a dependent variable and the independent variables were: residence, female education, age at marriage, religion, husband occupation, female working status, contraceptive use status, access to mass-media, electricity ownership and duration of breastfeeding of mother.

LEVELS AND TRENDS OF FERTILITY

For any country, it is important to know the levels and trends of current fertility because of its direct relevance to population policies and programs. Though the levels and trends of fertility in Bangladesh is declining, it is still very high compared to any developed countries. It is fluctuating within a relatively narrow range expect in catastrophic situations such as war and famines.

Crude Birth Rates (CBR) and Contraceptive Prevalence Rates (CPR) Trends
Trends of CBR are presented in table 1. The rates were gathered from various
sources considering sampling and non-sampling variability. This was observed around
50 births per thousand populations until the mid 1960s. From 1960, the population
started to grow at an unprecedented rate and the growth rate was about 2.5 percent
per year up to 1970s. But before 1950s, though CBR was high, it could not be
realized due to high fertility and high mortality. Since independence in 1971, fertility
declined slightly was about 47 births per thousand. However, because of the varying
quality of data, it is difficult to be precise about the onset of the fertility decline.

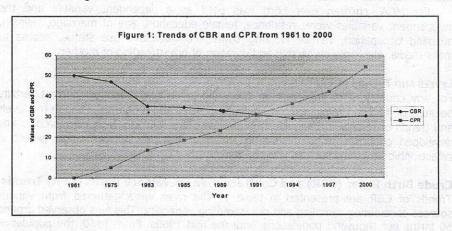
After liberation war of Bangladesh in 1971, fertility rate was started to decline. The remarkable decrease in crude birth rate was between 1980s and 1990s. The main reason was that in 1978, Government of Bangladesh declared population pressure as the leading

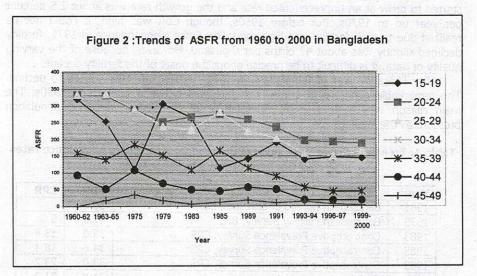
Table 1: Trends in Crude birth rates (CBR) and Contraceptive prevalence rates (CPR), according to sources 1961-2000

Year	Source	CBR	CPR
1961	Bangladesh Bureau of Statistics, BBS	50.0	-
1975	Bangladesh Fertility Survey, BFS	47.0	5.0
1983	Contraceptive Prevalence Survey, CPS	35.0	13.8
1985	Contraceptive Prevalence Survey, CPS	34.6	18.4
1989	Contraceptive Prevalence Survey, CPS	33.0	23.2
1991	Census	31.0	31.2
1994	Bangladesh Demographic and Health Survey, BDHS	29.1	36.2
1997	Bangladesh Demographic and Health Survey, BDHS	29.4	42.0
2000	Bangladesh Demographic and Health Survey, BDHS	30.2	54.0

problem. At the same time, non-governmental, private and international organizations have undertaken various programs concerning population control. The door-to-door family planning services were noticeable and dramatic change in fertility was occurred at that time. During a decade, between the year 1990s and 2000s, CBR was about around 30 per thousand.

Trends of CPR also indicate that current use of contraceptive has substantially increased and such an increase level in CPR definitely has helped in the reduction of fertility level. Contraceptive prevalence rate has increased about 11 times higher from 1975 to 2000. Figure 1 shows the trends of CBR and CPR.





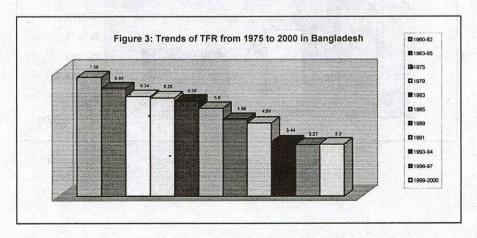
Age-specific Fertility Rates (ASFR) and Total Fertility Rates (TFR) Trends ASFR for the year 1960-2000 in Bangladesh are exhibited in the table 2. It was found that much of the change in fertility has been occurred among the younger age groups such as 10-14 and 15-19 age groups of females. The age pattern of fertility

also indicates that Bangladeshi women have children early in their childbearing period. This rate was near about 300 in early 1960, and then started to decline and it was 144 in 2000 for the 15-19 age groups. The same declining patterns of fertility rates were also observed for the 20-24 age groups. This was probably due to the change of marriage patterns and there had been an increase in the age at marriage, owing to a rise in the age at menarche. Besides, the poor nutritional status of females may also be a reason for adolescent sub-fecundity(Chowdhury & Huffman,1978:19). ASFR for the remaining five reproductive age groups showed irregular patterns and except few years, it revealed declining pattern and the lowest fertility observed among the oldest age groups. An extremely steep decline in fertility occurred in Bangladesh and one of the most reductions in Asia (Islam & Ors., 1996:7). Figure 2 indicates such type of trends of ASFR.

TFR was over 7.0 children per women in 1960s, and in the late 1970s, this rate seems to have fallen about 6.3 children and continued up to 1983. After 1985, TFR was started to decline and dramatic change has been observed after 1991. TFR remained almost unchanged at 3.3 children per woman in the next three Demographic and Health Survey conducted in 1993-94, 1996-97 and 1999-2000. TFR in those periods were 3.4, 3.3 and 3.3 respectively. The data depicted in figure 3, reflect such type of TFR that occurred in Bangladesh. Virtually, there was no decrease in total fertility rates during those periods. That unexpected halt in TFR naturally raises questions about the factors of fertility dynamics and the future prospect of fertility decline in Bangladesh and has created concern among planners and policy makers.

Table 2: Trends in ASFR from 1960 to 2000 in Bangladesh

group 15-19 20-24	321 333	253 331	111 289	306 252	265 267	114 274	142 259	191 235	140 196	147 192	144 188
25-29	334	335	291	239	229	282	225	203	158	150	165
30-34	274	241	250	203	181	224	164	150	105	96	99
35-39	160	140	185	153	108	167	114	89	56	44	44
40-44	93	52	107	68	49	45	56	50	19	18	18
45-49	-	18	35	17	6	12	18	10	14	6	3
TFR	7.58	6.85	6.34	6.25	6.05	5.60	4.89	4.64	3.44	3.27	3.3



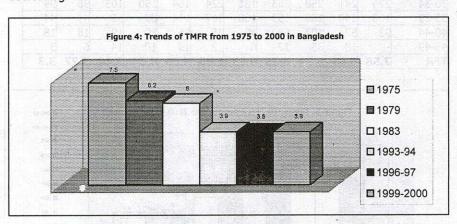
Age- Specific Marital Fertility Rates (ASMFR) and Total Marital Fertility Rates (TMFR) Trends

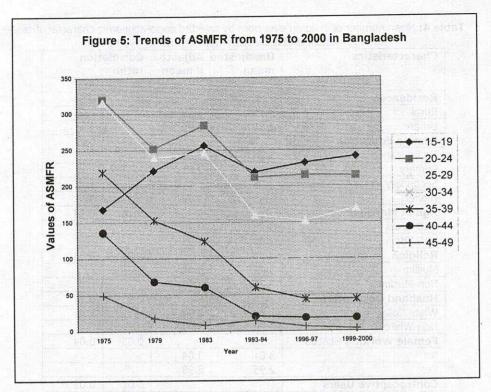
The marital fertility rates show a declining pattern of fertility in Bangladesh. TMFR has decreased 48 percent from 1975 to 2000, 37 percent from 1979 to 2000 and 35 percent from 1983 to 2000. However, TMFR was approximately constant for the three BDHS (1994-2000) survey. Figure 4 shows the trends of TMFR from 1975 to 2000 in Bangladesh. ASMFR was highest among the women aged 15-19 and it has increased 43 percent from 1975 to 2000, 9 percent from 1979 to 2000, 10 percent from 1994 to 2000 and 4 percent from 1997 to 2000 though it was decreased 6 percent in 1983.

Table 3: Age-specific marital fertility rates (ASMFR) and total marital fertility rates (TMFR) for currently married women during 1975-2000

Age group	BFS 1975	BFS 1979	CPS 1983	BDHS 1993-94	BDHS 1996-97	BDHS 1999-2000
15-19	168	221	256	219	232	241
20-24	320	252	284	212	215	214
25-29	316	239	246	160	152	169
30-34	276	203 -	200	105	96	99
35-39	219	153	124	60	44	44
40-44	136	68	60	20	18	18
45-49	49	17	8	14	6	3
TMFR	7.5	6.2	6.0	3.9	3.8	3.9

The apprehension is that due to the changing pattern of this rate and change in nuptiality pattern in conjunction with the increase of contraceptive use for women of marital union. The other age specific marital fertility rate shows declining patterns. Because, age at marriage is low and relatively large number of 15-19 year of ages women are married. Figure 5 shows the same patterns of marital fertility rates and its trends. This rate was lowest for the age group 45-49 and now it is sharply decreasing.





DETERMINANTS OF CHILDREN EVER BORN: MULTIPLE CLASSIFICATION ANALYSIS

There are a variety of socio-economic factors that may influence on fertility. To identify the differentials pattern of mean number of children ever born, the well-known Multiple Classification Analysis (MCA) is employed. The result indicates that the proportion of variance explained by MCA is not very high (Multiple R^2 =0.08 and R=0.283). The low value of R^2 may be due to some inter-correlations among the predictor variables considered here or there may be some other factors, which may affect the mean number of children ever born. Among the selected variables, female education, age at marriage, residence, female working status and access to mass media appears as the important determinants of children ever born. Religion, husband occupation, contraceptive using status, having electricity, duration of breastfeeding play relatively important role on children ever born.

Female education has emerged as the most significant predictor for explaining fertility variations and has the strongest association (η =0.19) with children ever born. The effects of educational status remain high after adjusting for the effect of all other predictor in the model (β =0.17). Both the adjusted and unadjusted mean number of children ever born for women who are illiterate is higher fertility than educated women. It is important to note that highly educated women have been found to have lower fertility. The difference between women of secondary education and illiterate are on average 1.8 births and the difference between women of higher education and illiterate are on average 2.3 births. This may be due to the fact that women with more education marry later and have less low fertility within marriage.

Table 4: Mean number of children ever born by selected socio-economic characteristics (Multiple Classification Analysis), BDHS 1999-2000

Characteristics	Unadjusted mean	Adjuste d mean	Correlation ratio	
			η	β
Residence			0.07	0.04
Rural	3.19	3.09		
Urban	2.81	2.90		
Female Education			0.19	0.17
No Education	3.85	3.81		
Primary	2.96	2.91		
Secondary	2.05	2.01		Jack of
Higher	1.49	1.52	-JENE	
Age at Marriage			0.16	0.14
<18 Years	3.28	3.30		
>18 Years	1.99	1.95		
Religion			0.04	0.03
Muslim	3.06	3.05		
Non-Muslim	2.85	2.90		
Husband Occupation	10000000		0.03	0.02
White Collar ¹	2.90	2.99		
Non-White Collar ²	3.09	3.07		
Female Working Status	FR-Ser	P1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	0.05	0.04
No	3.01	3.04		
Yes	2.95	2.90		
Contraceptive Users			0.01	0.02
No REPLANAUMON ADMESSALD	2.57	2.60	en inch	o eta
Yes in the same time again ten	2.98	2.73	The sale	r sy a
Access to Mass Media	direm neem	le-militari	0.06	0.04
No the supply said travally	3.05	3.03		
Yes 9 subblish that was	2.90	2.95	history.	n and
Having Electricity	of oun-en-		0.09	0.01
No w saratost north reseases	3.02	3.02	ington h	- Bane
Yes dame to be a set of the	2.92	2.94	Sagtemar	Auth
Duration of Breastfeeding	rational ten	Shaor ar	0.01	0.02
<18 Months	3.02	3.13	Early Ba	The second
≥18 Months	2.90	2.87		a ra

Multiple $R^2 = 0.08$

Multiple R=0.283

Note: 1. White collar: Professional, Management and Technical

2. Non-white collar: Clerical, Sales, Agri-self-employee, Agri-employee, Household domestic service, Skilled manual works

Age at marriage directly affect on fertility. There exist an inverse relation between age at marriage and fertility. The higher age at marriage the lower number of children ever born. Women who marry at least 18 years have on average 3.30 children and women who marry above 18 years have on average 1.95 children.

Residence shows a moderate effect on children ever born (η =0.07). Respondents with an urban residence have lower fertility (2.90 children per women) than their rural counterparts (3.09 children per women). This may be due to the fact that women in urban area have late marriage, higher level of real income, better health services, educational facilities, and employment opportunities in the modern sector.

It is often observed in developing countries that husband's occupation is closely associated with social status. It exhibits a moderate effect on children ever born (η =0.03, β =0.02). Women whose husbands are non-white collar occupation tend to have higher fertility (3.07 children) than white collar (2.99 children). Such a situation is conceivably due to the effect of education on non-white collar and white-collar

occupation.

Religion also shows moderate effect on fertility (η =0.04, β =0.03). Muslim community has higher fertility than their non-Muslims counterparts. It may be due to the religious value systems, which influence individuals. Mean children ever born are 3.05 and 2.90 respectively for Muslim and non-Muslims community.

Ownership of electricity shows relatively weak strength in explaining variation in mean number of children ever born. Household having electricity are on average 2.94 children per women and household without electricity are on average 3.02 children

per women.

The work status of women also shows a substantial effect on childbearing. Women who were involved in income-generating activities had a lower average number of children ever born (2.90 children per woman) than their non-working counterparts (3.04 children per woman). The higher average number of children ever born among non-working women may be due to the fact that they have low socioeconomic status.

Women who use contraceptive show the highest fertility than those who are non-user. It is observed that mean children ever born are 2.60 those who do not use contraceptive and children ever born are 2.92 those who use contraceptive. It may be cause of different social setting in society. It is also note that women who breastfed their child greater than 18 months have lower fertility than those who breastfed their child less than 18 months.

It is observed that women who have heard or seen a message about fertility on the Radio/TV/Newspaper or Magazine/Poster or Billboard tend to have lower fertility than those who reported no mass media exposure. So we can say that media exposure may be useful for motivating and familiarization of wives and husbands about reducing fertility.

PROXIMATE DETERMINANTS OF FERTILITY

In order to improve our understanding of human fertility, its variations among different groups and causes of the variations, it is necessary to analyze the mechanisms through which socioeconomic variables influence fertility. For these, Bongaarts and Potter (1983) have developed a model to measure the effects of individual behavior patterns of fertility, which he termed as proximate determinants. They also observed that total fecundity (TF) is less variant from population to population and lying between 13 and 17 births per women with a standard value of 15.3.

Among the proximate determinants, marriage is the primary determinants of the length of individuals' reproductive life and early marriage increases the period of

exposure to sexual activity and thus contributes to high fertility. Female education inspires women to get delay marriage and also helps herself to accept contraception. Women who marry at higher ages get less time to bear child and their attitudes are also different from younger women.

Marriage is common features and universal in Bangladesh and government has fixed the minimum legal age at marriage for females and males. Average age at marriage is 18.4 years for females and 25.9 years for males(Mitra, Ahmed, Saha & Kumar, 2001:79). It indicates that women marry man who, on average is seven and half years older. The singulate mean age at marriage exhibits an increasing trend for both sexes (Table 5). Since 1975, the female singulate mean age at marriage has increased by 2.1 years: from 16.3 years in 1975 to 18.4 years in 1999-2000. Since 1961, the singulate mean age at marriage for males and females has increased by 13.1 percent and 32.4 percent respectively. It envisages a consistently wide gap between the ages of brides and grooms, averaging 8 years. Table 5 shows a summary measure of a marriage patterns and its trends and age gaps of husbands and wife. It is also observed that age at marriage is still low in Bangladesh through upward trend in age at marriage is evident. The change in marriage pattern is also reflected by a change in the proportion never married for the age group 15-19, 20-24 and 25-29 respectively (Table 6). The proportion never married increases 4.02 times higher for age group 20-24, 4.2 times higher 25-29 from 1975 to 2000. This change in age at marriage has contributed to the fertility reduction. In Bangladesh, induced abortion is illegal. The national level data on abortion is absent due to social obstacles. But some evidence from hospital and clinic records and other sources suggests that abortion is not rare in Bangladesh (Bairagi & Datta, 2001:14). Now a days, several government and non-government clinic have been providing Menstrual Regulation (MR) services and

Table 5: Singulate mean age at marriage (SMAM) and its trends

Year	Source	SN	1AM	Age difference		
	SECTION	Male	Female	PE INDICATE DE		
1961	Census	22.9	13.9	9.0		
1974	Census	23.9	15.9	8.0		
1975	BFS	24.0	16.3	7.7		
1981	Census	23.9	16.6	7.3		
1989	BFS	25.5	18.0	7.5		
1991	Census	25.0	18.1	7.0		
1993-94	BDHS	25.6	18.2	7.4		
1996-1997	BDHS	25.7	18.2	7.5		
1999-2000	BDHS	25.9	18.4	7.5		

records of clinic suggest that a rising trend in MR in Bangladesh. It may be conducted that induced abortion in Bangladesh is not negligible and due to medical facilities it is increasing day by day. The BDHS data does not permit for the estimation of induced abortion rate. For these purposes, the Demographic Surveillance system in Matlab data is used to estimate induced abortion rate. Ahmed et. al. (1996) have also suggested to estimate total abortion rate in Bangladesh and it was 0.18. Due to under reporting, this estimate should be taken as a lower bound of the total abortion rate in Bangladesh.

Contraception is regarded as one of the principal proximate determinants of fertility. It means through which eligible couples control their standard family size. It is also a device through a pregnancy can be avoided. Bangladesh has achieved a successful family planning program and is often considered to be an example of an effective family planning program in a country without a high level of socioeconomic development (Koenig & ors., 1987: 117-127; Duza & Nag, 1993:37). The national family planning program has achieved a remarkable success in a

Table 6: Percentage of never married women in age group 10-14, 15-19 and 20-24

		0-24		- IV/15 6453		
Year	Source	Percent never married				
	off and the	15-19	20-24	25-29		
1975	BFS	29.8	4.6	1.0		
1983	CPS	34.2	4.0	0.7		
1985	CPS	47.5	7.1	1.0		
1989	BFS	49.0	12.0	2.3		
1989	CPS	45.8	9.3	1.6		
1991	CPS	46.7	12.3	2.8		
1993-94	BDHS	50.5	12.4	2.2		
1996-97	BDHS	49.8	17.2	3.4		
1999-2000	BDHS	51.9	18.5	4.2		

short period of time with the help of government and NGOs attaining a contraceptive prevalence rate of 8 percent in 1975 and 54 percent in 2000. Between BDHS 1994 and BDHS 2000, contraceptive prevalence rate has increased by 20 percent, from 45 to 54 percent. The dominant change in contraceptive prevalence rate has been occurred since late 1980. Such an achievement demonstrates that family planning can be successful not only in the short run, but can achieve high and sustained levels of contraceptive use in a population with low levels of socio-economic development.

Breastfeeding is almost universal in Bangladesh and it is treated as another important determinants of fertility. It prolongs the period of post-partum amenorrhea - an infecundable period following a birth or a late term abortion during which women are usually unable to become pregnant due to suspension of the normal cycle of an-ovulation and menstruation. The length of the post-partum amenorhea period varies widely among populations. The principle behavior factor affecting this length is the duration and intensity of breastfeeding. Without breastfeeding the average amenorrhea interval is short which is usually 1.5 months (Leridon, 1977:39). With increasing duration of breastfeeding, the duration of amenorrhea increases to some extent, but not at a constant rate. Thus breastfeeding patterns in a society have important effects on its fertility level. The median duration of breastfeeding is 30.5 months and has declined from 36 months in 1993-94 to 33 months in 1996-97 and to 31 months in 1999-2000 (Mitra, Ahmed, Saha & Kumar, 2001:137). According to BDHS 1999-2000, the mean duration of breastfeeding is 31 months and mean duration of postpartum amenorrhea is 9.4 months. There have been a slight decline in the duration of amenorrhea over the last few years, the mean length of postpartum amenorrhea fell from 12 months as calculated from the 1989 BFS, the 1991 CPS and the 1993-1994 BDHS data to 10 months in the BDHS survey (Huq & Cleland, 1990:65; Mitra & ors. 1994:77).

Table 7 presents the estimated values of the indices of the four principal proximate determinants of fertility. The each component of each index represents the proportionate reduction in fertility attributable to each fertility determinant. The lower the index value, the greater is the fertility reducing impact. The index C_m represents the proportion by which TFR is smaller than TMFR as a result of marital pattern. In this way, C_c indicates the proportion by which TMFR is smaller than TN (Total natural fertility) given the effectiveness of contraceptive use and C_i express how much TN is smaller than TF (total fecundability) due to the effect of lactational infecundability. It is note that in the first BDHS survey 1993-94, contraception had the highest fertility reducing effect that is for 39.0 percent (C_c =0.610) reduction of TN relative to TMFR.

Table 7: Estimation of Indices of Proximate Determinants of Fertility in Bangladesh

Indices of Proximate determinants	Bangladesi and Hea	Percentage change from 1994 to 2000		
	1993-94	1999-2000	Ope 1	
C _m	0.761	0.776	1.971	
C _c A S = 1	0.610	0.559	-8.361	
C _i	0.653	0.520	-13.907	
Ca	0.971	0.962	-0.927	
Combined effect of four indices $(C_m \times C_c \times C_i \times C_a)$	0.289	0.217	-24.9	
PHOR METERS OF ME	15.3	15.3	The section of	
ort than TFR	4.50	3.32	ensa Inastrescino	

Postpartum infecundability is the second most important fertility reducing factor, decreasing the total fertility rate by 34.7 percent (C_i =0.653). The marriage pattern contributed the lowest fertility reducing effect and reduced actual fertility levels below total fecundity by 23.9 percent (C_m =0.761). However, in the latest BDHS survey 1999-2000, it was shown that lactational infecundability had the highest fertility reducing effect (48 percent) followed by contraception accounting 44.1 percent (C_c = 0.559) reduction and marriage pattern had 22.4 percent fertility reducing effect. During the period 1994 to 2000, the index of marriage declined by 1.97 percent but the index of contraception increased by 8.36 percent and the index of lactational infecundability increased by 13.9 percent.

The combined fertility limiting effect of the four proximate determinants was 0.289 in 1994 and 0.217 in 2000, showing a reduction of 24.9 percent in fertility during the period 1994-2000. The decline total fertility rate was 4.5 to 3.32. The main reason is that between this time some socio-economic development have been occurred because by this period socio-economic factors such as infant mortality rate, life expectance, crude birth rate, crude death rate etc. have been changed and after all, standard of living has been increased.

DISCUSSION AND CONCLUSION

This study reveals some of the important features of fertility in Bangladesh. Total fertility rate remained stable between the 1960 and mid 1970 according to various sources of data. Since 1975, TFR started to decline. TFR fell by about 12 percent

between 1975 and 1985. By this time, crude birth was falling down by 35.7 percent and CPR has increased 10.8 times. ASMFR has also started to decline since 1975. Dramatic change of TFR has been occurred at the beginning of the twentieth century. But, TFR remained almost unchanged in the next three BDHS's conducted in 1993-94, 1996-97 and 1999-2000 and those rates are respectively 3.44, 3.27 and 3.31. Total marital fertility rate also exhibits the same patterns. That unexpected halt in TFR and TMFR has been created alarming situation for policy makers of Bangladesh.

Though, CPR increased 1.5 times higher from 1994 to 2000, the effect of the increased CPR was counterbalanced mostly by the decreased abortion ratio and the recent impact on fertility of the Bangladesh national MCH-FP program is negligible (Bairagi, 2001:137-143). In addition to that abortion data at the national level are not

reliable.

The unchanged fertility from 1993-94 to 1999-2000 indicated Plateauing of the level of fertility. M. Ataharul Islam (2003) observed in a study that the plateauing situation is due to population momentum effects, shifting towards adoption of a less method mix, no substantial improvement in child survival status and reduction in postpartum infecundability period. The stagnation in the level of TFR indicates that the continuation of some modern methods have declined during the recent past (Islam, 2003:22-68). This might be attributed to, other reasons, the recent change in the door-steps services at the grassroots levels to one-stop service being implemented through the HPSP. The impact of the change in the service delivery system on the long-term use of contraception in rural areas of Bangladesh needs to be examined very carefully in order to resolve the concerns of different groups of users. To explain the underlying cause of plateauing fertility situation, the intensive and in-depth study is required pertaining to age at marriage, age at childbirth, birth interval, regional differential and quantum and tempo effect of fertility. The detail explanation is beyond the scope of this study.

In this study an attempt has been made to observe fertility differentials by using MCA. The findings suggest that female education, age at marriage and female working status are the important differentials to reduce fertility. Education may affect fertility through rising age at marriage of women. It also increases women's knowledge and use of birth control as well as provided better opportunity for labour force participation, for women of life and fertility (Anker, 1975:11; Freedman & Berelson, 1977:25). It is observed in Bangladesh that all women are married within age 25 years but higher educated women do marry later than less educated women. A number of studies have been supported this findings that employed women have lower fertility than those who have not worked at all (ESCAP, 1981:21). It is evident that several authors in Bangladesh have found fertility to be low among non-Muslim women (Roy & ors., 2004:58-61). The relationship between religion and fertility is

insignificant.

Cultural norms, demographic patterns and socioeconomic factors play a role in shaping the character of marriage in a society (Aziz & ors., 1985:7). Socioeconomic and cultural changes such as education, employment, urbanization, low infant mortality and family planning uses decrease fertility. Fertility-inhibiting effect of the three most important proximate determinants; marriage, contraception and lactational infecundability estimate have been made by Bongarts Classification. The analysis indicates that lactational infecundability is the most important factor for fertility reduction. Contraception is the second most important factor followed by marriage, which has least contribution for fertility reduction. Contraception effect is

now declining. Marriage shows that tso motivate them to control their family size. The following policy implications should be drawn from this study in order to achieve further fertility decline.

(i) Age at marriage for male and female should be increased; (ii) Attempt should be made to motivate couple for using contraceptive to decline fertility; (iii) The government should be taken a balanced program of family planning with simultaneous practice of breastfeeding and use of modern contraceptive, so that women have longer birth interval; (iv) Female education should be compulsory at least primary and secondary and establish adhere is an appreciable increase in the proportion never married females and consequently increases the tendency of age at marriage in the proportion of single up to age group 25-29 (Table 6). Marriage variable increases but at a very slow rate.

The fertility decreases at younger ages due to an increase in age at marriage. The single age at marriage is increasing slowly but steadily. In 2000, it reached 25.9 years for males and 18.4 for females, indicating gap of 7.5 years between husband and wives (Table 5). To achieve raising age at marriage, a structural change in the society is essential which may reduce fertility. Data on induced abortion are not available due to legal and social constraints. As a result effect of abortion are not measurable. But, hospital, clinic records and other sources suggests that induced abortion is not rare and is according fertility levels as well as in fertility reduction. The joint effect of marriage and induced abortion has increased from 1994 to 2000. Again, the joint effect of marriage and contraception has observed same for the BDHS 1993-94 and BDHS 1999-2000. The effect of joint variable marriage, contraception and abortion would not change much due to prevailing socio-economic and cultural reasons. This may be that contraceptive services have been retarded and there is a suspension of contraceptive decline.

Socio-economic development is essentially required to enhance the status of women and women empowerment. The involvement of women in productive activities will not only help to improve the economic condition but will alult female education center especially in rural areas; (v) Mass-media promotion program should be taken to understand the disadvantage of over population and their impact on society. Mass media like television and radio have a tremendous influence on a couple having child.

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PROBLEMS AND PROSPECTS OF PRIVATE UNIVERSITIES IN BANGLADESH

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ABSTRACT: This study is an attempt to review and to critically evaluate the role, current scenario, problems and prospects of private universities in Bangladesh. Our government is very much concerned about education. That is why it has given priority to education in the national budget for the last few years. Yet it is not possible for the government alone to ensure higher education for the growing population of the country. It is also the duty of our private sector to supplement governmental efforts. It is undeniable that in order to face the challenge of 21st century, we need to make our large population highly educated. Private universities can play a significant role in this regard.

INTRODUCTION

Education plays a vital role for the development of a modern society as well as a country. The development of a society largely depends on the nature, extent and standard of higher education and higher education is now considered as a means to faster development of a country. Bangladesh Government already understood this reality and adopted some measures through establishing free or subsidized compulsory education at different levels- primary, secondary and tertiary. The cumulative effect has been the creation of a large pool of potential students awaiting admission for higher education in universities. Only a small percentage (5% to 12%) of them can be accommodated in our public universities; a few of them can manage to get admission abroad. In the context of higher education the public universities in Bangladesh are not enough to satisfy the increasing demand of higher education. The private universities have been rendering supplementary services to the nation by accommodating the students who are interested in higher education. Parents and students cordially welcomed the establishment of private universities as a bold step forward towards providing higher education in English medium in Bangladesh. The establishment of private universities also relaxed the pressure of large-scale admission seekers on the limited number of seats available in public universities. The Private University Act, 1992 mentioned this as a special point and said that the main objectives of private universities will be to meet the growing demand for higher education and to create skilled manpower for the economic development of the country.

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Before the private university Act, 1992, all universities in Bangladesh were in the public sector only. Starting from 1993 the number of private universities grew up to 37 in 2002. Among the 37 private universities in Bangladesh 9 of them are situated outside the capital, five are in Chittagong, one in Comilla, two are in Sylhet and one is in Bogra. (Appendix-A)

OBJECTIVES

The main objectives of this study are as follows:

- 1. To know the historical background of private universities
 - 2. To know the current scenario of private universities
 - To see how they are doing for the development of higher education in Bangladesh
 - 4. To make some comparisons between public and private universities
 - 5. To identify the problems faced by private universities, and
 - To suggest measures for solving the problems.

METHODOLOGY

Both primary and secondary data were used for the purpose of the study. Primary data were collected through personal interviews with teachers, administrators, and students of various private universities. Intellectuals and guardians have also been interviewed with the help of open-ended questionnaires. Secondary data have been collected from articles, seminar papers, newspapers, and annual reports of University Grantss Commission (UGC) of Bangladesh.

HISTORICAL BACKGROUND

The public universities could not expand due to fund constraints and on the other hand violence, session jam, misdirected student politics; off and on closure of public universities and delayed academic programme encouraged people to establish private universities. There was a class of people and private trusts who were interested to establish university with private initiative including funds and there was also some growing wealthy class of people who were ready to pay higher price for the education of their wards, if a place was not found in state universities. Moreover, market and social conditions both from the supply and demand side played an important role in the establishment of private universities¹. In that context, the government gave it legal coverage and so Private University Act, 1992 was introduced and that Act allowed private sector to participate in establishing universities. The main objectives behind establishment of private universities were as follows²:

- To meet the growing demand for higher education
- To expand higher education
 - To make higher education available to the common people, and
 - To create skilled manpower for the economic development of the country

In 1998 the private university Act of 1992 was amended to remove some of the limitations and prevent misuse of the Act. According to the Private University Act the pre-conditions for the establishment of a private university are as follows:

- At the initial stage a minimum of two faculties are needed;
- Fixed deposit amounting to Taka 5(five) core has to be maintained in any government recognized bank.

- Academic plan, opening of faculties/departments, appointment of teachers, syllabus and expected standard of education are to be approved by the UGC.
- 5% of the total seats have to be reserved for free studentship of the poor and meritorious students;
- Salary of teachers and tuition fees of the students are to be stated.

Apart from these, one of the major conditions is that a house rented or owned having 10,000 sft. of floor space should be required for classrooms, academic and administrative activities, library, laboratories, seminar room and other facilities.

The private University Act does not provide detailed framework for governance. However, it mentions certain authorities and offices for governance and administration of private universities. The President of the country is the chancellor of all private universities. The main executive body of a private university is its syndicate, or a board of governors, a regency council, or a trustee board. Whatever is the name of the executive body, it must have at least nine members. A private university is to have an academic council, also comprising of at least nine members, headed by the Vice-Chancellor. According to the Private University Act, a pro vicechancellor is to be appointed for assisting the vice-chancellor and for supervision, coordination and monitoring of activities of the faculties or schools of studies of a private university. Matters relating to assets of a private university and its finance have to be taken care of by a finance committee of at least five members headed by a treasurer. Also in a private university, there should be a registrar. Other important academic and administrative positions in a private university include deans of faculties, a controller of examination and chairpersons of departments. In addition to the above authorities/offices, a private university can set up other bodies only with the consent of the chancellor. The syndicate/board of governors/regency/trustee board should be constituted with people who have long experience in education, culture, industry, science, technology and administration. A private university has the power to frame statute, if necessary for academic, administrative and for other affairs, with the approval of the chancellor.

Foundations of Private University in Bangladesh get a sanad (legal authority) and the permission to run such university only upon the recommendation of the UGC. UGC has the power to visit and monitor the activities of the private universities. The Chancellor (President) can cancel the sanad for certain reasons if, after an enquiry by a judge of the High Court with provision of appeal. The university however can

submit an appeal petition to review and revise the decision. In Bangladesh, the first private university that started functioning was North South University (NSU) in January 1993 and the first university outside the capital was The University of Science and Technology, Chittagong in 1993³. The courses offered in the private universities are present and future market oriented and the main departments/courses of private universities are BBA, MBA, Computer Science, Economics, English, Political Science, Civil Engineering, Electrical Engineering, Sociology and Anthropology, Bangla, Islamic History, LLB, MBBS, Physiotherapy, B.Ed, M.Ed and Philosophy⁴.

PRIVATE UNIVERSITIES AND CONTRIBUTION TO HIGHER EDUCATION

Public universities have all the requisites and facilities like- space, faculties and other physical attributes than a good number of private universities but the present 17 public universities of Bangladesh are not enough to satisfy admission seekers in higher education. Most of the public universities are plagued by dirty politics, session jam and financial mismanagement. The lack of proper monitoring system and corruption are eating up the vitals of higher education systems in public universities. In this circumstance, the establishment of private universities was a welcome step in Bangladesh.

The first private university, North South University, started with only 139 students in January 1993 with 3 departments. After one decade, in 2002 there were 37 universities with 28 Institutes, 105 Faculties, 261 Departments, 34432 students and 2948 teachers.(Appendix- A & B)

The number of universities (both public and private) was experiencing increasing trend during the study period. In 1996, the numbers of public and private universities were 11 and 16 but in 2002, increased to 17 and 37 respectively. Increasing rate of total number of universities was 100% whereas it was 54.54% for public universities and 131.25% for private universities. (Appendix-A)

The private universities are progressively increasing their institutions, faculties and departments compared with public universities during the study period. In 1996, the total number of institutions, faculties and departments of public and private universities were 31(18 public and 13 private), 92 (46 for both) and 260 (218 public and 42 private) respectively. By 2002 total number of institutions, faculties and departments of public and private universities increased to 53 (25 public and 28 private), 166 (61 public and 105 private) and 607(346 public and 261 private) respectively. Increase in the rate of total institutions was 70.97% during the period, whereas it was 38.89% for public and 115.38% for private universities. Total number of faculties also increased to 80.43% and for public university it was 32.61% and for private university it was 128.26%. Total number of departments of private universities increased to 521.96% where it was only 55.96% in public universities. (Appendix-A)

The total number of student's enrollment of universities increased by 126584 (80.10%) compared with 1996 i.e. 70284. In private universities this increasing rate was 800.65% whereas it was 38.66% in public universities. Number of student's enrollment in private universities increased year by year but still it is far away from public universities, because in public universities average number of students was 76260 (84.8% of total enrollment in universities in 2002) whereas it was only 15545 (15.2%) in private universities. But the number of student's enrolment of private university has been increasing year by year which is a good sign for the development of private universities in Bangladesh. (Appendix-B). Average number of students during the study period was highest for Asian University of Bangladesh, i.e. 3409 and it was lowest for prime university, i.e. only 11. (Appendix-D)

Most of the private universities are trying to employ highly qualified teachers although there has been severe dearth of senior ones and the trend has been to increase the number of full-timer on grounds of enhancement of faculty commitment in both curricular and extra-curricular activities of students. The total number of teachers in university level was 4285 in 1996, whereas it was 3844 (89.7%) in public and 441(10.3%) in private universities. This number of teachers increased by 93.89% during the study period and it became 8308 in 2002 whereas it was 4556 (39.44%)

for public and 1411 (568.48%) for private universities. (Appendix-B) This kind of increasing trend of private universities indicates the development and creation of job opportunities within the country. Average number of teachers during the study period was highest (123) in International University of Business, Agriculture and Technology and lowest (6) was in Prime University. There were no teaching staffs in Begum Gulchemonara Trust University and Pundra University of Science and Technology. (Appendix-E)

The teacher-student ratio has also been encouraging in some of the private universities. During the study period, the average student-teacher ratio was 1:16.71 in public universities whereas it was 1:10.23 in private universities. (Appendix-B) As a result, in private universities student attendance, participation and evaluation of students can be easily ensured and monitored properly compared to public

universities.

Positive aspects of private universities

Private universities have been rendering good services to the nation by accommodating the students who are interested in higher education but only 17 public universities cannot accommodate all of them. Some percentage of students who cannot or do not go to public or foreign universities, can avail themselves of higher education in the private universities.

Most private universities run their academic programmes on the basis of semester system and have introduced four-year undergraduate courses. A number of private universities have academic link programmes with foreign

universities with provision of credit transfer.

In private universities courses are completed in time, results published in time and practically no difficulties are faced in terms of students' politics.

The syllabus and curriculum of some private universities of Bangladesh can be compared well with those of foreign universities of high standard.

The cost of private universities is relatively less than the cost of studying abroad. So, for a guardian whose ward fails to get an access to public universities, has merit, can provide quality education at a lower cost than any university abroad.

Students who have more than two years of break of study are debarred from admission to our public universities. Thus a huge number of students, who became ineligible for admission into public universities, are now getting

the opportunity to get higher education from private universities.

Private universities are using the experience of retired qualified persons who

are still capable of working.

Private universities can help maintain academic schedule and avoid session jams. So students can get their degrees on time and can enter the job market 2 to 4 years earlier than a student of a public university. From this point of view getting degrees from private universities is much more worthwhile than that of public universities. As a matter of fact the cost of degrees from public universities is too high because of the prevalence of session jams. Higher tuition fees of private universities are more than offset by their strict adherence to academic calendar.

- Investing in private universities is also worthwhile from the national point of view of manpower development and creation of job opportunities within the country.
- Social benefits of private universities are much more glaring since they have been able to keep a sizeable portion of our people engaged in the pursuit of seeking knowledge, who could otherwise have been frustrated and involved in non-social activities.
 - Students of private universities can prepare themselves for job market and outside the country because their medium of instruction is English.

After establishing private universities many renowned educationists, journalists, philanthropists and intellectuals expressed the view that it was quite ambitious and also difficult to run universities in private sector. They argued that since in our country we cannot run our public universities successfully, private sector could never make it viable. They also argued that, though some of our private enterprises became successful and makes profit in business, but establishing and developing universities through private sector is quite different. But at the instance of the national policy of encouraging the development of private universities, a few were established within a short period. At that time most of the private universities got the attention and confidence of people and became successful in getting students and also they have already attained respectable status and recognition at home and abroad. That's why nowadays students are obtaining degrees from private universities and they are getting jobs in private banks, NGOs, multinational companies and also in government offices. It is very encouraging to observe that graduates from private universities are often being preferred for better jobs in the private sector and it is a good sign for the development of the country as a whole. So, we can conclude that private university plays a vital role in order to produce skilled manpower as well as for the development of the country.

Problem Areas

Private universities are going through a period of transition, experimenting with new method of teaching, assessment and techniques of governance⁵. So they have still some deficiencies and problems for operating properly and maintaining quality education in Bangladesh. The problems of private universities are as follows:

- Most of the private universities are facing shortage of classrooms, spacious libraries, sufficient rooms for teachers and administrators, space for indoor and outdoor games, student's common rooms and auditoriums. Shortage of space is also responsible for limitations in the enrollment of students.
- Not merit but money is the main criteria for admission in a private university. In most cases the students who fail to get admission in a public university goes to private university and get admission there in exchange of large amount of money.
- Ensuring quality education is a matter of commitment on the part of the
 providers and this fact alone necessitated traditionally the participation of
 dedicated people under the supervision of representative government to run
 universities in a purely non-profit oriented manner. But unfortunately
 majority of them is doing nothing but business and their usual trends are to

operate it as a commercial motive. There could not be quality education but

having turned into profit making coaching centers.

Most of the private universities in Bangladesh are facing the major problems of senior and qualified full time teachers. Due to shortage of full time qualified teachers the private universities have become dependent on part time teachers, which are drawn from public universities basically from Dhaka University and Bangladesh University of Engineering and Technology (BUET) who are working part time in three to four or more private universities at a time, which is seriously affecting their efficiency. They basically take it as their extra source of income. Sometimes teachers of one subject are teaching another subject.

In most of the private universities there is a shortage of senior and qualified teachers. Promoters purely on economic grounds prefer fresh graduates only. Those young graduates also take this profession on temporary basis. So the rate of teacher turnover is very high. Moreover, the dearth of senior teachers in the country compels the private universities to depend upon the part-time services of the small pool of experienced faculty from public universities. That is why two types of teachers are found here and those who are just beginning their career in teaching and those who have finished

their golden moments in the public universities.

It is true that private universities have created job opportunities for potential teachers but so far they have taken hardly any measures for faculty development. The young bright teachers hesitate to continue their career in private universities because they do not offer a well-defined career path. Neither they help the teachers with opportunities to get scholarships for higher studies nor do they come up with provisions for young teachers to study with leave. Moreover, there has been little or no provision for research and or publications, which hamper faculty development in these universities. Private universities now are filling their higher positions with the senior teachers from public universities, who are also using the opportunity by taking extra-ordinary leave for a number of years from the parent university. But when they go back to their original work places, there will be a huge gap in private university positions at higher levels. At that time it will be difficult for a large number private university to fill up positions of heads, deans and the like.

Private universities are following American examination system. One examiner, namely the course teacher, prepares the question paper for examination and he/she is the sole assessor of answer scripts. It has merits and also some demerits. One demerit is that a particular student may be either favored or victimized. In some private universities the students evaluate teacher's performances (TER). Students may use this TER as a weapon to dominate or embarrass teachers who are dedicated to maintain academic discipline and are unwilling to allow students adopting unfair means in examination halls. For that reason students from private universities are getting much-inflated grades compared to students from public universities.

It is true that students passing HSC examination, at first try to get admission in the public universities. Those who do not get admission in the public universities seek admission in the private universities. Most of the students of our country pass SSC and HSC in Bangla medium. That is why they are very poor in English. Though most of the private universities offer some intensive and foundation English courses for their students, they fail to enhance their language (English) efficiency because of poor planning and administration of these courses. So it is quite difficult for the students to pursue higher studies in English. Most of the private universities are running short of students and that is why they could not maintain strict admission test to admit only deserving students.

The high cost keeps the poor students away from the private universities.
 Education at private universities is still beyond the means of the common people. It failed to a great extent to fulfill the expectation of the government

to bring higher education to common people.

Most of the private universities have failed to create corporate character of
the university governance. One common complaint about the governance of
private universities is that it is too much person based. Moreover, some of
the initiators try to control almost all the authorities by putting his own
people, such as wife, daughter, son, daughter-in-law and even old mother,
mother-in-law in different positions. This has been possible because of the
absence of detailed guidelines about the composition of the different
authorities.

It is also alleged that most private universities have been functioning
without fulfilling the terms and conditions as envisaged in the University
Ordinance. In the absence of a proper statute for governance, there hasn't
been a well-planned and balanced development of departments or
administrative set-up for recruitment and management in these private
universities.

SUGGESTIONS

It is true that some universities in Bangladesh are maintaining the acceptable standard in providing higher education but their number is still poor. In order to reduce existing problems and maintain quality of education, the following efforts should be made and implemented in private sector universities of our country:

- Private universities should not be treated as profit-oriented organizations.
 They should charge tuition fees, which are just necessary for the smooth
 running of the programs concerned. They can contribute better to the
 development of the society and country if they provide quality education
 with reasonable tuition fees.
- An appropriate campus should be obtained with adequate land area and built-in-spaces for accommodating various sizes of classrooms, academic and co-curricular activities, libraries, seminar-halls, auditoriums, laboratory, staff and students' common rooms, canteen etc.
 - The libraries and laboratories of the private universities should be enriched by all means. They need to be expanded and properly equipped by procuring high standard books, journals and the latest equipments. They should also provide Internet facilities to the students.
 - Appointment of full time faculties, especially at the senior levels, is very crucial for private universities. More full-time teachers and scholars and academics of national and international reputation should be drawn with

- Well-designed curriculum is not enough for quality education; proper emphasis should be given for faculty development in all possible ways. Moreover, measures for keeping teachers' motivation and dedication at their highest level are to be ensured.
- In order to increase credibility, all private universities should design and implement strict admission criteria and take admission test so that only the deserving students can enroll. Not money but merit should be the only criterion of applicants for getting admission in private universities.
- In order to encourage general/middle class meritorious students to avail themselves of higher education, private universities should offer full or partial scholarships, exemptions from fees etc, on the basis of their academic performance, conduct etc.
- Fees charged by private universities should be reasonable so that middle class people can afford it. This could help private universities to attract meritorious students and increase enrollment.
- Examination system is to be so built up that the students find it rewarding to devote their time and energy to their studies and keep themselves away from adopting unfair means in examination halls.
- Arrange job fares in order to help students to get jobs by way of making close relations with reputed companies at home and abroad.
- An association among the private universities has to be developed so that they can exchange ideas, organize seminars, workshop etc.
- Steps should be taken for ensuring proper decentralization of activities of private universities up to district level so that students from the length and breadth of the country can be benefited.
- Collaboration with foreign universities should be developed to that students can be admitted there either on credit transfer or on exchange programs basis.
- Government should frame a detailed outline for the formation of different authorities of private universities. There must be a kind of independent council or agency to monitor the quality of education. Also there should be a body to assess the physical resources, quality of faculty members and students and curriculum of the private universities.

CONCLUSION

More number of private universities has been coming up day by day in Bangladesh. There is variety in size, faculty, location and sponsors of private universities. Private universities have come into existence out of the overdue necessities to provide scope for higher education to the growing number of students who are either deprived of entrance into public universities or are desirous of avoiding the troubles of session jams. The most important reasons for which private universities should grow is that they will keep a large section of our young generation busy in learning and

developing themselves and thereby reaping two-fold benefits of: (i) avoiding indulging in undesirable activities and (ii) finding ways to build meaningful future.

The life of the private universities in Bangladesh is not long enough to make comprehensive judgment on governance, quality of education it imparts and the fulfillment of expectations of all sections of people. Some of the private universities have become renowned and their contribution to the education sector cannot be overlooked.

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APPENDIX-A

Comparative Statistics of Public and Private Universities during 1996-2002

	n	Universities			Institutes			Faculties		۵	Departments	3
Year	Public (%)	Private (%)	Total	Public* (%)	Private (%)	Total	Public* (%)	Private (%)	Total	Public* (%)	Private (%)	Total
1996	11 (40.7)	16 (59.3)	27	18 (58.1)	13 (41.9)	31	46 (50)	46 (50)	92	218 (83.85)	42 (16.15)	260
1997	11 (40.7)	16 (59.3)	27	17 (60.7)	11 (39.3)	28	49 (50)	49 (50)	98	223 (68.20)	104 (31.80)	327
1998	13 (44.8)	16 (55.2)	29	17 (54.8)	14 (45.2)	31	51 (50)	51 (50)	102	234 (67.05)	115 (32.95)	349
1999	13 (44.8)	16 (55.2)	29	21 (61.8)	13 (38.2)	34	53 (47.7)	58 (52.3)	111	245 (62.82)	145 (37.18)	390
2000 500	13 (43.3)	17 (56.7)	30	21 (55.3)	17 (44.7)	38	55 (48.2)	59 (51.8)	114	256 (62.59)	153 (37.41)	409
2001 PB	17 (44.7)	21 (55.3)	38	22 (48.9)	23 (51.1)	45	63 (50.8)	61 (49.2)	124	340 (65.51)	179 (34.49)	519
2002	17	37 (68.5)	54	25 (47.2)	28 (52.8)	53	61 (36.7)	105 (63.3)	166	346 (57.00)	261 (43.00)	209
Average	13.57	19.86	33.43	20.14 (55.24)	17 (44.76)	37.14	54 (47.65)	61.29 (52.35)	115.3	266 (66.72)	142.7 (33.28)	408.7
Increasing rate (%)	54.54	131.25	100	38.89	115.38	70.97	32.61	128.26	80.43	55.96	521.43	133.46
Average Increasing rate (%) Der vear	7.79	18.75	14.29	5.56	16.48	10.14	4.66	18.32	11.49	7.99	74.49	19.06

*Excluding National University and Bangladesh Open University

Source: University Grants Commission (UGC) Annual Reports

APPENDIX-B

Comparative Statistics of Students and Teachers in Public and Private Universities during 1996-2002

Vear	N	Number Of Students	ents	Numt	Number Of Teachers	STS	Teachers	Teachers Students Ratio
	Public* (%)	Private (%)	Total	Public* (%)	Private (%)	Total	Public*	Private (%)
1996	66461 (94.6)	3823 (5.44)	70284	3844 (89.7)	441 (10.3)	4285	1:17.3	1:08.7
1997	67282 (92.2)	570 (7.82)	72990	4015 (87.4)	. 581	4596	1:16.8	1:09.8
1998	67145 (91.7)	604 (8.26)	73194	4303 (82.5)	914 (17.5)	5217	1:15.6	1:06.6
1999	70355 (84)	13358 (16)	83713	4429 (78.5)	1214 (21.5)	5643	1:15.9	1:11
2000	77865 (81)	18246 (19)	96111	4796 (74.9)	1608 (25.1)	6404	1:16.2	1:11.3
2001	92562 (77.3)	27200 (22.7)	11976.	5147 (70.3)	2170 (29.7)	7317	1:18.0	1:12.5
2002	92152 (72.8)	34432 (27.2)	126584	5360 (64.5)	2948 (35.5)	8308	1:17.2	1:11.7
Average	76260 (84.8)	15545 (15.2)	91805.4	4556 (78.25)	1411 (21.75)	2962	1:16.71	1:10.23
Increasing rate (%)	38.66	800.65	80.10	39.44	568.48	93.89		
Average Increasing rate (%) per year	5.52	114.38	11.44	5.63	. 81.21	13.41		

Source: University Grants Commission (UGC) Annual Reports *Excluding National University and Bangladesh Open University

APPENDIX-C

Number of Institutions and Faculties of Private Universities during 1996 to 2002

of History Hell DO COLLEGE	Place &				Institute	e 2	2	2	1			1	L Facult	aculty 1
Name Of Universities	rear or Establishment	1996	1997	1998	1999	2000	2001	2002	1996	1997		1998	1999	
North South University	Dhaka, 1992	2	2	2	2	2	2	2	5				2	2
University of Science and Technology	Chittagong, 1992		1	1	1	1	1	1	2	4	4		2	5 4
Independent University	Dhaka, 1993			ч	1	1	1	1	4	4	4		4	4
Central Womens University	Dhaka, 1993						1		7	2	2		7	2 2
Darul Ihsan University	Dhaka, 1993	2	2	2	4	4	3	3	m	3	3		3	3
International University of Business Agriculture and Technology	Dhaka, 1993	4					8	00	5	2	2		1	7 7
Islamic University	Chittagong, 1993	2	-1	-	1	2	2	2	4	3	m		3	3 3
Ahsanullah University of Science and Technology	Dhaka, 1993			1	П	н			4	М	m		m	3
American International University, Dhaka	Dhaka, 1995								m	3	m		2	3
University of Comilla	Comilla, 1995			1	1	1			4	3	2		7	2 2
Asian University of Bangladesh	Dhaka, 1996						1	1		3	4		2	5 5
East-West University	Dhaka, 1996		н	н	1	1		1	3	3	3		4	4
University of Asia Pacific	Dhaka, 1996								4	5	2		2	5 5
Queen's University	Dhaka, 1996									4	4		4	4
Gano Bishwabidyalaya	Dhaka, 1996		Н	н	н	н		1		-	2		7	2 2
The People's University of Bangladesh	Dhaka, 1996									3	4		4	4
Dhaka International University	Dhaka, 2000					3	က	3					1	4
BRAC University	Dhaka, 2001							1						

Manarat International University	Dhaka, 2001										Ī	Ì	2
Bangladesh University	Dhaka, 2001						Г						8
Leading University	Sylhet, 2001											1	m
Begum Gulchemonara Trust University	Chittagong, 2002												
Sylhet International University	Sylhet, 2002						П						2
University of Development Alternative	Dhaka, 2002												4
Premeir University	Chittagong, 2002												m
South-East University	Dhaka, 2002	27				H		7					2
Stamford University	Dhaka, 2002						П						2
Daffodil International University	Dhaka, 2002			i									2
State University of Bangladesh	Dhaka, 2002						П						3
IBAIS University	Dhaka, 2002					2			N.				2
City University	Dhaka, 2002		515		8		1		01				108
America Bangladesh University	Dhaka, 2002						-	12.		100			2
Prime University	Dhaka, 2002								7				2
Northern University	Dhaka, 2002		ear.							Tr.			2
Southern University	Chittagong, 2002	185. 186		1			7						3
Green University of Bangladesh	Dhaka, 2002										100		4
Pundra University of Science and Technology	Bogra, 2002		(A1)			ja.		84	eL	03	l de		
	TOTAL	13 11	14	13	17	23 2	78	4 0	4 0	5 +	15 0	9 -	0 1

Source: University Grants Commission (UGC) Annual Reports

Number of Departments and Students of Private Universities during 1996 to 2002 APPENDIX-D

The state of the second second of the second		•	Dep	Departments	ıts					N	Number of Students	Stude	nts		
Name Of Universities	1996	1997	1998	1999	2000	2001	2002	1996	1997	1998	1999	2000	2001	2002	Average
North South University	5	9	9	9	9	7	7	1107	1277	745	564	881	3213	3625	1630
University of Science and Technology	4	12	12	21	21	34	35	798	928	1094	1605	1605	1157	1238	1204
Independent University	11	П	12	12	12	13	14	543	490	742	1095	1569	2163	2280	1269
Central Womens University	2	10	4	10	10	9	9	142	101	94	84	102	108	106	105
Darul Ihsan University	m	2	7	9	9	4	4	388	490	718	935	1245	1623	1882	1040
International University of Business Agriculture and Technology	4	17	17	56	26	26	26	322	523	742	974	1422	450	441	969
Islamic University	4	3	3	5	5	9	9	176	202	279	260	883	2060	2521	954
Ahsanullah University of Science and Technology	2	2	5	9	7	7	8	141	299	92	813	1057	1269	1337	715
American International University, Dhaka	4	4	4	5	5	11	11	206	411	710	751	1197	1865	2345	1069
University of Comilla		2	2	3	3	3	3		30	48	164	164	643	482	255
Asian University of Bangladesh		7	4	9	9	9	9		268	54	3173	4091	5824	6741	3409
East-West University			11	11	2	7	8		127	33	1000	846	1572	2127	951
University of Asia Pacific		4	9	9	9	9	2		29	52	517	808	2176	1462	847
Queen's University		9	4	4	4	4	4		86	285	635	827	828	705	268
Gano Bishwabidyalaya		9	9	9	12	12	17			62	157	251	246	461	235
The People's University of Bangladesh		9	12	12	12	12	12		97	299	331	486	989	554	401
Dhaka International University					7	9	9					812	833	944	863

Manarat International University 2 3 Bangladesh University 1 5 Leading University 3 1 Begum Guldhemonara Trust University 3 1 Sylhet International University 18 18 Premeir University of Development Alternative 3 2 Premeir University 3 2 South-East University 3 2 Daffodil International University 3 2 State University 2 2 City University 2 2 America Bangladesh University 3 2 America Bangladesh University 3 3 America Bangladesh University 3 4	3/3	3 8 3 5 604
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		730 730
		50 50
		100 100
		11 1
Northern University 4		-
Southern University 5		
Green University of Bangladesh		109 109
Pundra University of Science and Technology		
TOTAL: 42 104 115 145 153 179 261		

APPENDIX-E Number of Teachers and Teachers Students Ratio of Private Universities during 1996 to 2002

THE LEGISLAND STREET STREET STREET			Num	Number of Teachers	Teac	hers					Teach (Teac	her Stu	Teacher Student Ratio (Teacher Per Student)	Ratio Jent)		
Name Of Universities	1996	1997	1998	1999	2000	2001	2002	Average	1996	1997	1998	1999	2000	2001	2002	Average
North South University	38	4	81	116	132	149	172	105	29.1	29.0	9.2	4.9	6.7	21.6	21.1	17.4
University of Science and Technology	116	120	135	125	125	250	295	167	6.9	7.7	8.1	12.8	12.8	4.6	4.2	8.2
Independent University	47	46	57	92	9/	100	106	73	11.6	10.7	13.0	14.4	20.6	21.6	21.5	16.2
Central Womens University	26	28	27	23	23	141	33	43	5.5	3.6	3.5	3.7	4.4	0.8	3.2	3.5
Darul Ihsan University	43	64	09	86	102	161	156	86	9.0	7.7	12.0	9.5	12.2	10.1	12.1	10.4
International University of Busin. Agri. and Technology	89	81	97	148	154	137	157	123	3.6	6.5	7.6	9.9	9.2	3.3	2.8	5.7
Islamic University	28	26	45	59	74	185	140	80	6.3	7.8	6.2	9.5	11.9	11.1	18.0	10.1
Ahsanullah University of Science and Technology	33	09	92	104	215	06	212	115	4.3	5.0	1.0	7.8	4.9	14.1	6.3	6.2
American International University, Dhaka	21	26	42	53	81	69	69	52	9.8	15.8	16.9	14.2	14.8	27.0	34.0	18.9
University of Comilla		12	18	25	25	171	71	54		2.5	2.7	9.9	9.9	3.8	8.9	4.8
Asian University of Bangladesh		22	54	92	128	69	189	92		25.8	1.0	34.5	32.0	84.4	35.7	35.6
East-West University		25	33	43	20	264	82	83		5.1	1.0	23.3	16.9	0.9	25.9	13.0
University of Asia Pacific		27	52	78	103	74	274	101		2.5	1.0	9.9	7.8	29.4	5.3	8.8
Queen's University			41	89	77	70	77	29			7.0	9.3	10.7	12.3	9.5	9.7
Gano Bishwabidyalaya			33	44	62	88	83	62			. 1.9	3.6	4.0	2.8	5.6	3.6
The People's University of Bangladesh			47	62	89	98	94	92			6.4	5.3	5.5	7.4	5.9	6.1
Dhaka International University					92	40	88	74					8.8	20.8	10.6	13.4

Source: University Grants Commission (UGC) Annual Reports

ENVIRONMENTAL POLICY ADVOCACY IN BANGLADESH: A NEW PHENOMENA

Farjana Nasrin*

ABSTRACT: The article mainly concentrates on common trends in environmental policy making process, some selected campaigns and impact of advocacy on policy formulation and in implementation in Bangladesh. It also describes some selected environmental campaigns of advocacy groups which were conducted by the civil society, NGOs, common people, professional organization and media to create awareness among the people and policy makers and to facilitate the participation of people in the environmental policy making process. This process has offered the opportunity of involving people in policymaking and its implementation and enabling them to become more active and effective citizens.

INTRODUCTION

There is no doubt that environment is today a major concern of both developed and developing countries of the world. The mismanagement of man-made environment jeopardizes the existence of people of Bangladesh. Environmental problems are noticeably deteriorating and posing potentially serious health hazards and threatening out growth prospects. Recently, Bangladesh government recognized that it would not be possible to sustain high growth ratr without effective management of the environment. On the other hand, civil society, NGOs, professional organizations, media, voluntary organizations are emerging with movements for environmental protection. Some of them are going forward as an advocacy group to influence government to take or change environmental policy. They help in creating strong social movements through various advocacy strategies, which ultimately influence the government to take necessary steps.

ADVOCACY GROUPS VS INTEREST GROUP

Advocacy groups play planned, organized and continual communicating role to convince people and policy makers to change and to change them to commit themselves to policy reform or policy implementation. The efforts of advocacy emerge from a reformative paradigm to reclaim the state to citizens and to ensure transparency and accountability in the institutions of governance (Samuel, J. 2000:52). On the other side, interest groups are formally organized to protect or promote their common, similar interest. Lapalombara has included the term political

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in his definition of interest group probably to play up the political activities of groups in their various political maneuverings and intrigues in pursuing their interest at the expense of others. But advocacy groups are playing an important role in spreading awareness about environmental degradation among people. They create pressure to government to take necessary steps on the behalf of the people. Advocacy groups differ from the traditional interest group advocacy. People centered advocacy generates relationship that are different from interest group. Advocacy organization or group draw their strength from people and are accountable to them through their members, constituencies and the affected groups. Interest groups have close relationship with Political parties. Advocacy groups do not seek political power for itself, it seek merely, when it act to influence the government to take or change policy. More recently NGOs, or at least a bloc amongst them are working through the association for development agencies in Bangladesh (ADAB), an apex body for NGOs which attempted to exercise political leverage on the GOB through cultivating close political links with the ruling party. These links have given them some capacity to advocate policy changes favorable to the poor at the national policy-making level(Rehman, 1999:10).

ENVIRONMENTAL POLICY PROCESS IN BANGLADESH

From the environmental perspective, Bangladesh is caught in a vicious circle. Bangladesh government has taken concrete policy for the harmonious existence of human being. Policy making is a process of bargaining, competition, persuasion and compromise among interest groups and governmental officials (Dye, R Thomas, 1981). A number of institutions such as government and non-government institutions are now in the process of preparing and implementing environment policy and programmes. Each institution has a specific role to play in the process.

The government of Bangladesh has undertaken some important steps for controlling environmental degradation. At the international level, she took steps for concluding and ratification of twenty-nine conventions treaties and protocols related to environment (Huq, Rashidul 2001 p-29). At the national level, the government has undertaken environment policiess and action programmes: Flood Action plan (FAP; 1989), Environment policy and Action Plan (1992), Forestry policy (1994), National Environment Management Action plan (NEMAP;1995), National Energy Policy (1995), Bangladesh Health and Environmental Action plan (BHEAP;1995), New Agriculture Extension Policy (1995), Forestry Master plan (1993-2013), National Conservation strategy (1997), enforced Environment Conservation (Amendment) Act 2000, Environment court Act 2000. There are a number of on- going projects being implemented by the Ministry of Environment and forest with financial assistance of World Bank, UNDP, ADB (Asian Development Bank), CIDA, and NORAD etc. The most relevant among them are SEMP, AQMP, BEMP, NCS, SBCP, and Costal Green Belt project, FRMP etc.

COMMON TRENDS IN ENVIRONMENTAL POLICY

Bangladesh still lacks adequate policies and programmers to tackle the environmental problems. In most cases they either do not exist or are grossly (Hossain, 1995:257). Many environmental problems are grounded due to institutional failures and poor governance. Three institutional failures are especially important for environmental management: inadequate property and uses rights, insufficient information and opportunities for local stakeholders to participate in decision making and weak

monitoring and enforcement of environmental standards (Human Development Report,2003:127). Various development policies received high priority in the national policy packages, which brought success to some extent in society. Environment is not an academic and scientific debate, but a matter of survival. Environment issues could not attract proper attention to the policy makers of Bangladesh till the recent past. Some common characteristics of environmental policy are stated below:

In Bangladesh the decisions and actions to protect environment are all taken and implemented on the basis of class interest (Mahfuzullah,1999:182). Public opinion rarely affects public policy; instead public policy shapes public opinion (Dye,1981:342). Aid donors have established a high degree of ascendancy over policy making in Bangladesh due to the country's heavy dependence on aid to under write its development budget and despite improved self – finance and build up of foreign exchange reserves, most major policy agendas at the macro and micro levels remain heavily influenced by donor policy advice usually attached a conditionalities to a variety of aid programme (Sobhan, 1999:13). Keeping them delight, the policy makers has ignored the economic value of environment in the policy making process of development.

So far, no significant progress has been made in implementing these conventions at the national level. However, action plans and strategies are being drawn up to implement some of the conventions, National as well as sectoral laws are to be

updated in line with these conventions (Hague, 2000:289)

The average yearly budget allocation is a small portion of the total government expenditure. In addition, there is no specific policy or indications for environment issue in the 2004-2005 budget proposal.

The law making and policy making process in Bangladesh do not represent the will of society at large, let alone those of poor people, women or other disadvantaged

persons of society.

Despite the environment being cited as an important concern, it is hardly found that politicians and national decision makers are implementing politically unpopular but environmentally friendly policies to protect the long deteriorating environment.

until recently (Ahmed and Rahman, 2002:671).

There are several guidelines, logilogiolation, policies, strategies and plans such as National Conservation Strategy (NCS), National Environment action Plan (NEMAP), National water policy etc. There is very little harmonization and coordination between these. Implementation process and institution are very weak (Rahman, 2000:61) Bangladesh has 200 sectoral environment laws but the levels of observance and enforcement capability is very low. Pollution control policies are not well designed, meaning that they would have been both weak and unnecessarily costly even if they had been implemented vigorously. Current waste management practice in Bangladesh is far from satisfactory due to absence of national waste management policy and strategies as well as inadequate measures on waste issues incorporated into different environment related ways, acts (Aziz,2001:62).

Virtual lacks of enforcement of regulatory measures have made Dhaka (and Bangladesh in general) a polluter's heaven (Bakhtier 1996 p- 375). Present enforcement of environment protection and pollution control laws is almost non-existent due to poorly equipped laboratories of DOE (Development of Environment), insufficient manpower and logistics, poor annual budget, inadequate legislations, lack of coordination among various agencies of the government and absence of a sustainable development strategy (Bakhtier,1996:372).

Considering the above characteristics of environmental policy, some problems of present environmental conditions are identified as ineffective policy, low enforcement capability of laws, finance and manpower, lack of governance, lack of coordination among various concerned authorities, lack of commitment to protect environment among political parties and policy makers, lack of cost-effective and sustainable technology and low level of public awareness and participation.

ADVOCACY FOR ENVIRONMENT

Many advocacy groups such as Civil society, NGOs, professional organizations, community based organizations, Journalist, media launched some campaign to create awareness among the policy makers and the public about environmental degradation. They propagate and disseminate the social movement and lead the movement also. Some steps were taken to stop environment degradation by the government due to those campaigns. They had to make government conscious about environmental issues and compelled to take necessary steps in this regard. The name of some groups and the cause of selected campaigns are stated below.

Name of Campaign	Causes
Campaign to protect the Osmani Uddayan	-Cutting of thousand of trees -Destruction of unique natural features and scenic beautyChanges in local ecology -Air and noise pollution
Advocacy for Ecological Agriculture	-Water, soil, pollution, -Organic waste and GHG emission -Land degradation -Water logging -Depletion of ground water
Campaign for ban poly bags	-Soil, and water pollution -Causes heath hazards (Skin diseases, cancer) and affect soil quality and agriculture -Clogging of the river lakes, the sewerage system other water systemBurning poly bags create poisonous hydrogen cyanide gas.
Campaign for banning two stroke engine	-Air and noise pollution -Causes health hazard (irritation, headache, fatigue, asthma, high blood pressure, heart diseases and cancer).
Campaign for Banning dirty dozen	-Water and soil pollution -Land degradation -Organic waste and GHG emission -Depletion of ground water -Affect soil quality and agriculture
Campaign for flood Action plan-20	-The sand deposit in soil has increased because of mud walls, which interrupt natural, flow of waterAgriculture, livestock and plant resources had affected Fish production was reduced in Lauhajong river -The people outside the project area experienced a severe floodLoss of natural eco-system.
Campaign against the adverse effects of KJDRP (Khulna- Jessore) Drainage Rehabilitation Project.)	-Caused heavy water logging in the entire areaLoss of natural eco-system

Campaign for save Buriganga	-Air, water, soil pollution -Waste generation -Large volume of solid waster -Morphological change of the river -Encroachment of river side.
Campaign against Arsenic contamination of Water	-Cause health hazards, skin diseases, liver failure, respiratory problems, and death.

CAMPAIGN TO PROTECT THE OSMANI UDDYAN

A citizens' committee named "Movement to protect 11 thousand trees at Osmani Uddyan" was formed in the first week of May 1999 against the decision by the government to cut down trees. Here civil society reacted against the proposal. Many independent voices were heard in support of protecting the Uddyan. The campaign had got strong media coverage especially in the Daily Star of 7,13, 19, 21, 23, 27 May, 1, 3, 6, 8, 9 June, 28 July 1999; the Sambad 22, 27 May, the Janakantha 20 May, 3, 6 June, 1999. The independent 27 May, 6 June, 16 June. Citizen committee continued rally, human chain, and press conference. A public opinion survey conducted by CFSD showed that 90% of the city dwellers were against the government decision (Chowdhury, 2001:139). CEN urged the government to shift the proposed conference center from Osmani Udayan. A select group of people (academicians, intellectuals, NGOs, professional organizations) called on the minister for public works and they requested him to select a new site for the conference center. To resist this decision, the civil society activated the network with professional organization, academicians, NGOs and came foreword to conduct intensive national and international advocacy against this move. FEJB has raised voice against construction of the majestic NAM conference center at the heart of the last garden in capital city of Dhaka (Chowdhury, 2000: 263). The FEJB and a number of other organizations regularly took part in the protest meetings. The movement rallied all environment conscious citizens of Dhaka around it and put a pressure on the government and as a result it finally bowed down to the popular demand on last 7november(Chowdhury, 2000:263). As a result of intensive and extensive campaign by advocacy groups (Civil society, NGOs, media, academicians, professional organizations), the government decided to spare the Osmani Uddayan.

CAMPAIGN FOR PROMOTING ECOLOGICAL AGRICULTURE

Agricultural scientists have blamed unplanned use of agrochemicals (fertilizers and pesticides) as one of the principal reasons behind loss of soil fertility in the country (The Dainik Ittefaq 6 January, 8 April, 1999 and the Financial express, 6 January, 1999). Print media especially the Janakantha (19-06-99), The Daily star (20-01-99, 04-05-99), the Ittefaq (27-06-99, 16-06-99, 03-03-99), the financial express ((20-05-99, 06-10-99)) played a significant role to create awareness of people and also policy makers. The NGOs criticize the adoption of green revolution policy for the destruction of soil fertility, water resources and bio-diversit. They propose a suitable alternative in the form of organic or ecological agriculture, which is characterized by "high productivity, environmental friendliness, less investment and farmer's self-reliance" (Mahtab,1992:134). Proshika started developing this alternative strategy, in 1976. Proshika undertook an action research initiative, set up a demonstration farm for providing formal and non-formal training and technical and financial supports to its

group and staff members as well as to other NGOs. UBINIG conducted a study on chemical agriculture in 1990. UBING strongly opposed the use of pesticides. Proshika conducted workshop and seminars to promote ecological agriculture by using different communication media at different levels of communication. An NGO network was formed and they discussed with agriculture minister and agriculture secretary. They presented a study of a comparative analysis on conventional and ecological agriculture. As a result of these campaigns, the ministry of agriculture has accepted the concept of ecological agriculture.

CAMPAIGN FOR BAN POLYTHENE

Environment and social development organization (ESDO) and 56 organizations and professional bodies of the anti-polythene campaign worked for a lonf time to band polythene. As a result, the use of polythene has slightly decreased. A workshop, jointly organized by center for sustainable development (CFSD) and ESDO on 25 September 1994, stressed the need for creating awareness against the use of poly bags. The print media especially the Daily Star (29/09/91, 26/09/94, 17/09/98) the Dainik Sangbad (28/10/93, 10/10/94), the Bhorer Kagoj (14/01/94, 05/01/94, 10/10/98, 29/09/98), the Janakhantha (16/09/98), the Independent 9/10/98, 24,10,98) motivated people and create awareness against the bad effects of poly bags. Some NGOs professional organizations had organized several meetings workshops and conducted studies to make people land policy makers aware about the environmental hazards of poly bags. As public opinion grew against the poly bags, the government decided to ban polythene from 2002.

CAMPAIGN FOR BAN TWO- STROKE ENGINE

The print media has strong contribution in creating public awareness against two stroke engine vehicles. Some of them are the Daily Star (14/01/99, 16/01/99, 16/02/99), the Bhorer Kagoj (15/01/99, the Sangbad (17/01/99, 29/05/98. The Independent (24/09/98, 09/03/99, 25/12/99, 26/12/97, 04/06/99). BELA and BLAST filed a writ petition against two-stroke engines which are less fuel-efficient and release about 30-100 time more unburned hydrocarbons and more carbon monoxide. BELA filed a writ petition (No. 300/1995) against vehicular pollution. BELA served legal notice to Rupali Bank against the loan sanction for import of two-stroke engine (this Bank violated the government decision about environment conservation). After long time, the government decided to ban two stroke engine.

CAMPAIGN FOR BAN THE DIRTY DOZEN

The adverse effects of chemical pesticides have been Proshika's grave concern for a long time. In 1993, Proshika conducted a study on the current pesticides situation and located resource persons and interest groups to conduct an effective advocacy campaign. To strengthen the campaign, a coalition was formed with CEN, CUP (Coalition for the Urban Poor), BELA and Proshika. A massive media campaign was lunched, several meetings, opinion-sharing sessions, press briefings and work shops were organized to further expedite the campaign. In 1995 a memorandum was submitted to the ministry of Heath, the Ministry of Agriculture, the Ministry of food, the Ministry of forestry and Environment and the Ministry of Commerce. The memorandum asked for prohibition on the import sale, and the use of pesticides. The government canceled the registration of 11 different pesticides including five items from chloredane and dieldrin groups of dirty dozen.

CAMPAIGN FOR ANTI FLOOD ACTION PLAN(FAB)

The anti FAP campaign has been going on for the last five years. Controlling flood by building huge infrastructure has been the main emphasis of FAP. The plan has no concern for long term socio-economic and environmental consequences in adopting such structural solution. It has a significant role in highlighting the civic concerns of the Flood Action Plan and its undesirable side effects. As more scientist and citizens speak out about the need to protect the river functions and the media spreads the messages in intelligible terms (Khan, 2000:25). FAP raised controversies from its very inception, particularly its environmental aspects (Huq and Khan,1994). The NGOs through CEN, ADAB, BELA, DAT (Development Association of Tangail), Unnyan Sohojogi Team, Nijera Kori, UBING had carried out a major advocacy campaign against FAP, which created conflict and confrontation between the government and the NGOs. Some left political parties, peasant organizations, student's organizations and individuals also became part of the anti FAP movement and became critical of the FAP initiatives (Gain, 2000:291). Many meetings and conferences were held to mobilize and aware people to demonstrate against FAP- 20. In 1994, BELA filed a petition in the High Court on behalf of the people of Tangail. The petition firstly rejected by the Court but after Appellate division judge stated that BELA had sufficient interest to move a writ petition in the public interest though not personally aggrieved authorities for violating laws. After campaign and the result of the case in the court, FAP related construction was stopped.

CAMPAIGN AGAINST THE ADVERSE EFFECTS OF KJDRP (KHULNA-JESSORE DRAINAGE REHABILITATION)

Local NGOs, people's organization and civil society were mobilized to stand against the adverse effects of KJDRP. Media campaign was launched .The project design was rather arbitrary and geo-morphological characteristics of the land were not taken into consideration. Thus, the project has reached an impasse. The NGOs along with Proshika has since been reviewing KJDRP proposal. Proshika took the leading role in preparing a memorandum. The NGOs have sent memorandum to the ADB (Asian Development Bank) in Manila. The NGOs working ground had impact on the ADB which took it seriously and decided to raise it as an advocacy issue in the 30th annual general meeting of ADB in Japan. As an impact of the memorandum and consultation, ADB has paid attention to the adverse effects of KJDRP.

CAMPAIGN FOR SAVE BURIGANGA

The Buriganga is nearly dead because of encroachment, pollution by tannery, industry, and domestic swage. A survey conducted in 1998 by the DOE showed that the river flowing by the capital's western blank had been boxed in by at least 244 establishment, most of which are shift homes, small factories, dockyard, boat-making workshops etc. (Ahmed and Shshnaz,2000:29). The owners of these establishments include political leaders, Members of Parliament, armed forces, personnel, businessmen, etc. (Gain, 2000:180). To recover from such situation BAPA started its movement of save Buriganga on the 5 August of 2000. 25 organizations and educational institutions and hundreds of enthusiastic individuals attended the meeting on the 18th June, 2000, and a rally was organized to create awareness of the people. The people near Buriganga demanded that the river should be saved. The DOE had taken up a program with the slogan "Buriganga Bacho". BELA served a legal notice (4098/1999) on different agencies of government for their inaction in protecting the

river Buriganga from illegal encroachment and pollution. PARASH, CEN, BCAS, FEJB, BLAST, BELA and the Daily Star jointly organized a seminar held in Dhaka on the 31st January, 1999. They urged the government to save physically and biologically dead Buriganga River. The news got coverage from all the national dailies and TV channels (Mahjabeen, 2002:31). Print media, basically the Bhorer Kagoj (13-05-99, 09-06-99), the Ittefaq (13-05-99) the Daily Star (12-05-99, 03-05-99) played a significant role in creating awareness and public opinion. As public opinion grew against the encroachment upon the river, the government immediately decided to act by lunching a save the Buriganga campaign (Ahmed and Shahnaz, 2000:30).

CAMPAIGN AGAINST ARSENIC CONTAMINATION OF WATER

Arsenic contamination of ground water in Bangladesh has identified as a major water quality problem and reached an alarming stage. It has been estimated that about 35 million people in Bangladesh are exposed to high levels of arsenic contamination. Poor people are affected both physically and socially and they are the worst sufferers. any local, national and international NGOs in Bangladesh are carrying out arsenic mitigation programs. BCSIR (Bangladesh council for Scientific and Industrial Research), DCH (Dhaka community Hospital) NIPSOM (National Institute of Preventive and Social Medicine), WHO (World Health Organization) DPHE (The Department of Public Health Engineering) UNICEF, BRAC, Proshika all worked (tested samples of tube-well, survey, research conducting on the situation, try out of he filtration system) to remove arsenic. In September 1996, a memorandum was forwarded to the Prime Minister by a coalition of IDPAA at Proshika, ADAB, BELA, CEN and NGO forum for drinking water supply and sanitation urging to investigate into the problems of arsenic contaminations and find out appropriate measures. As a result of submission of the memorandum, the government took certain measures.

SUMMARY OF IMPACT OF ADVOCACY

Many appropriate plan policies and projects were taken by the government because of environmental advocacy. The government has been able to lunch an environmental action plan through a participatory planning process called NEMAP. Instead of traditional top-down approach, people at the grass roots level are involved in the planning and implementation of an action plan. The uddyan is public property building a half in it would amount to refusing the public access to its use (Chowdhry,2001:13). Opinion polls suggested that the 99% people were opposed to the idea of destroying the uddyan (Chowdhury,2001:139). The experiences of the move to protect the Osmani Uddyan point to two realities: Citizens can take initiatives with possibility of success to protect environment and elitists concern for environment draws public attention (Mahfuzullah,2001:182). After accepting the concept of ecological agriculture, all the extension agents of the Ministry of Agriculture have been asked to produce green manure and compost. District and Thana level committees have been formed by the Ministry to find out effective ways and means of promoting ecological agriculture.

Due to internal (MPs, party lawmakers, bureaucracy) and external (pressure groups, Dhaka chamber of commerce and industry, manufacturers and traders, workers of polybags) pressure, plan to ban polythene was implemented. After long lime (1991- 2001) advocacy, government approved the decisions to ban use and marketing of polythene bags in Dhaka city from January 1, 2002. To implement this policy decision, government sought the support of the civil society and NGOS,

professional organizations and community based organizations. People get rid of wide

spread use and unplanned dumping of polythene bags.

The court issued a rule nisi upon the government to show cause why they (concerned authority) should not take adequate and effective measures to cheek pollution. CNG refueling center with the financial help from the World Bank are established in Dhaka city. The government has recently decided to ban the import of motor vehicles powered by two-stroke engines in order to curb air pollution and to offer financial incentives for converting large number of transports to use gas as fuel. Conversion of two – stroke engines into CNG- powered vehicles is considered to be feasible from environmental, economic and technological points of view (Shahnaz, Kazi 2001 P- 226). News reports say that under the decision taken at a high level meeting, the movement of vehicles like baby taxes and auto-rickshaws will be prohibited, in phases, in the four metropolitan cities of Dhaka, Chittagong, Khulna and Rajshahi within five years (Chowdhury, Majumder and Rana, 2001:223). People, awareness of the adverse effects of pesticides has been created by the campaign and farmers are gradually leaning towards the natured control over pesticides.

NGO's network presented a paper prepared by CEN for the Earth Summit that held in June in Reo de Janeiro. The paper eloquently presented that the project (FAP) did not take into account the interest of the people or of the environment. The position paper also suggested that FAP should have a clearly defined people participation programme and system of accountability to the people. After advocacy for anti FAP- 20, UNDP withdrew their technical assistance from FAP. In this process, legal basis for public interest litigation was established. The events revealed the dilemma about people's participation inherent in the attitude of FAP management (Mahfuzullah,1999:91). The National water Management plan (NWMP) superseded the FAP which received strong criticism over the post years for paying too little attention to year- round water issues and not just floods, for not incorporating

environmental considerations and for failing to ensure people participation.

ADB commissioned a special mission on KJDRP to investigate into the concerns expressed by the NGOs. ADB also recognized the demands and recommendations of NGOs. ADB postponed funding until Environment impact assessment (EIA) of the project is done. The NGOs organized several meetings in the locality and trying to

make the ADB and government listen to them.

BIWTA launched a demolition drive in 27-28 may, 2001. The second and third phase of the drive was conducted in July 2001. A total of 247 illegal structures and 100 kutcha and semi-pucca structures were demolished and riverbank was treed to some extend (the Independent. 2 agust-2001). 'Buriganga Bacho' Andolon congratulated the government for the programme of demolition and started tree plantation project on the west bank of the river to protect the further encroachment (Mahjabeen 2002 P-31). The government formed a national steering committee to find the cause, degree and effects of arsenic contamination in the ground water. The committee would also initiate certain possible preventive measures. A committee of experts has also been formed to make recommendation in this regard. Several projects has accomplished on arsenic testing and marking the tube-well in collaboration with government, NGOs and UNICEF. DPHE -WHO study and BRAC action research on community based arsenic mitigation project revealed the strategy to mitigate the problems. Different government and Non-government agencies have been working on safe water supply through different mitigation technology and motivation campaign to increase the coverage of safe water in the arsenic affected areas of the country. (Hossain, Gain, Zakariya and Chowdhury,2002:275). Proshika has given the highest priority to water testing tube well making, supplying of safe drinking water, social awareness building among the public and conducting advocacy campaigns. BRAC has been playing an active role since 1996. Over the years, it has gained experience in training community members in testing tube-well water for arsenic in a cost – effective way (Chowdhury and Zakariya, 1999).

ANALYSIS OF ENVIRONMENTAL ADVOCACY MOVEMENT

Analysis of the above environmental campaigns shows that one should take note that these campaigns have been performed not also with making networks among advocacy groups but also without making networks, they performed individually. But their mission is similar while united or individually strong and forceful campaign and effective strategies have made it successful. Along with the resistance on the ground and mobilization at the level of civil society, NGOs, professional organizations, media, the networks enter into a legal battle with the government to frustrate the eviction move. Sometimes, the advocacy groups did not get support from political parties. But print media coverage has been created awareness among the people; the civil society, the policy maker and they also help to make public opinion. Advocacy groups get public support and public participation.

Characteristics of advocacy

(1) Organized and continuing activity,

(2) Aims to positive changes,

(3) Raise public demand in the policy making process,

(4) Demand for new arrangement in existing power relation, and(5) Advocacy process is active, creative and research oriented.

The arena of advocacy: To change in existing power-relation, advocacy efforts need to organize public opinion. Thus these efforts need to work in various arena, such as building network, making short and long-term alliances and coalitions, media, legislation, approaching Donor agency/international organization, Ministers, bureaucrats, advocacy groups.

Strategies of advocacy: The above institutions help in creating strong social movements through various advocacy strategies, which ultimately influences the government to take necessary steps. The major advocacy strategies are network, coalitions, alliances, negotiations, bargaining, dialogues, seminar, workshops, meeting, cultural actions, social movement and agitation and legal step.

Successes of advocacy campaign:

(1) Awareness build-up about environment,

(2) Empowerment of poor people

(3) Co-operation and network build-up among advocacy groups, media, administration and civil society, NGOs,

(4) Increase participation of the mass people,

(5) Ensuring of transparency and accountability of administration,

(6) Making people oriented policy and implementation,

(7) Leasing legal mechanisms to ensure an ecologically sound environment, and

(8) Policy reforms.

Limitations

But apart from such success, there are many limitations.

These are:

 Taking decisions about environment protection are also subject to changes and modifications. In Bangladesh, most often, decisions are taken only to flout them subsequently. Implementation of decision is very important (Chowdhury, Rahman, Majumder and Rana, 2001:223).

 Despite a rising awareness about the needs for protecting environment, environmental degradation already cut a swathe through Bangladesh quite

fast during the last three decades (1970-2000) (Chowdhury, 2000:3).

 In Bangladesh, many advocacy groups face problems in performing their missions of creation of public awareness and mobilizing public for collaborative ventures in voting the people, the civil society, NGOs, media and government and its policy makers.

 Sometimes, political parties do not protest against government. During the process of agitation to save the Uddyan, political activists and sympathizers conspicuously remained absent from taking position against the government

(Mahfuz, 2001:182).

 Sometime media coverage created sensation and controversies between advocacy groups and the government. They cannot satisfy the rising awareness and need for environmental information.

• There is suspicion among people that the civil society organization is politicized. As for example, a survey among Internet users conducted by the daily Prothom AlO showed that 74.98 % people think that civil society is politicized (Mahajabeen, 2002:36).

 There is little coordination among different advocacy groups networks in terms of planning, data / information sharing or advocacy strategy. There is

a lack of sustained co-operation among different campaigns.

Many networks are centered in Dhaka, which has raised the question as to

how representive they are of wider civil society interests.

 Although the advocacy groups effect policy influences through various advocacy campaign both at local and national levels, such campaigns remain sporadic without any sustained plan or achieving lasting result (Proshika Activity Report,1996-97:21).

 A Major theme in all advocacy campaigns has been the exploitation of poor women and men in developing countries and it is thus crucial that civil society are able to accurately represent the views of their constituents (Beck

1999:54).

 This failure of vision is compounded by a lack of commitment of civil society and advocacy groups to protect the environment from degradation.

It has been observed that after a few months of the announcement, poly

bags are still found to be used in every city, even in Dhaka.

 As the campaign for ecological agriculture grew stronger, its impact on agriculture and environment was clearly visible. Though in 1992, the government banned distribution of imported low quality fertilizer but newspaper reports confirm that some adulterated and substandard fertilizers (smuggled from India) are in use in the northern border areas of Bangladesh (Bangladesh Environment Out look, 2001:137)(CFSD).

RECOMMENDATIONS

In order to protect environment form degradation, we must work together as civil society, advocacy groups, NGOs, media, administration, and public to change our own behavior.

- A need is felt for strengthening advocacy capacities, competence and more specialized technical knowledge of the development NGOs across the country (Proshika Activity Report, 1996-97:21).
- Different advocacy campaigns have stressed the need for insider-outsider coalitions, which fill the space between confrontational advocacy and uncritical collaboration. Considering the above coalition, there is need to organize such a campaign for protecting environment in Bangladesh.
- Good campaigns are built on good informational and research and this should be properly ensured.
- A micro-macro linkage will be absolutely necessary to organize a movement or an advocacy campaign as such actions require forming and setting both horizontal and vertical alliances, coalitions and networks to be effective and visible at all levels (Karim,1999:85).
- Most sector's policies effect the environment, but too often environmental considerations do not influence policy making. Government-non-government institution and bilateral aid agencies need to systematically incorporate environment impact assessments into their policies and programmers.

Policies and programmers are urgently needed to address the present environmental problems such as land productivity, water quality and quantity, fisheries, forest etc. aimed atprotecting quality, efficiency as well as biodiversity of natural resources (Islam: 1991).

The media in Bangladesh has been highlighting many of the issues to promote awareness and movement building in public and advocacy groups and government. The media have the responsibility to exercise their function in environmental surveillance, consensus building and socialization, to strive for the protection of a sustainable environment (Chowdhury, 2000:261).

- The government should welcome any suggestions from the advocacy groups and civil society for the establishment of a transparent, corruption-free and accountable administration to institutionalize democracy.
- Only successful environmental campaign with contribution and participation of both experts on the one hand and activists and general people on the other can make it come true. (BAPA, 2002:671).
- Media will play a significant role as watchdogs and regularly keep people aware on the development about environment programs through advocacy.
- Throughout an advocacy effort many roles and talents will be needed at different stages of movement and organizational life cycle (Cohen, 2000:17).

CONCLUSION

Involving environmental advocacy in policy making process provides an opportunity, however on a limited scale, and it become an open space for greater interaction with government as well as for influencing their policy. The biggest gains to society cannot be pecked up through uncoordinated individual action (Mancur,2003:133). The strength of policy advocacy is the power of strong and effective participation and

support of the people, civil society, professional organizations, NGOs, media and these are now applied in all advocacy initiatives. The main lessons of advocacy movement is that environment advocacy recently has made a few achievement in environment policy making and implementation process, but there has been a qualitative change in government attitude toward environmental issues in Bangladesh. Facing problems are increasing day after day, advocacy groups have been making sustained advocacy and play a vibrant and representative role for people centered policy in environmental movements.

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THE VILLAGE COURT IN BANGLADESH: IMPLICATIONS FOR DISPUTE SETTLEMENTS

Noor Mohammad*

ABSTRACT: The Village Court is instituted in order to make pacific settlement of the village disputes and to make disposal of the cases less expensive and to make settlements of the cases possible within a short time for the rural poor. This study shows that Village Court is working throughout the country but it faces numerous problems such as political interferences, corruption, nepotism etc., and that is why, its effectiveness is not satisfactory and up to the mark. These problems should immediately be eliminated for ensuring justice for the sake of the poor people in the country. The village people are not so satisfied with the disposal of the cases but its popularity is increasing day by day. This paper evaluates the Village Court in connection with the existing problems and possible implications of the Village Court in Bangladesh.

INTRODUCTION

Most of the people of our country live in the village and they are almost uneducated. It is very difficult for these poor people to maintain cases from the far away of the city. So, if any system remains in the village stage for the disposal of the cases, they could get rid of much troublesome and expenses. The rural disputes may be lessened due to speedy trial of the cases. For keeping peaceful and smooth environment of the village area, the disposal of the cases is imposed on the Union Parishad. But the importance of establishing and sustaining a fair system of dispute resolution in rural Bangladesh can hardly be overemphasized. The rural poor are facing major problems as to justice from the Village Court. So far it is observed that there are two separate types of adjudication, namely shalish and the state's judicial organ into rural areas through specific legislation. Shalish means informal adjudication of petty disputes both civil and criminal in nature, which is held by matabars. It is voluntarily decided and controlled by the parties themselves and the time and money is required in Shalish for the disputes settlements. The another one is the rural state judicial arm dealt with the civil and criminal cases of a petty nature. The Village Court under the Village Court Ordinance, 1976 has not been operated effectively. During the period of Ershad regime, attempt was initiated for decentralizing and providing justice to the rural people and in this

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¹ Md. Moksuder Rahman, Bangladesh Sthaniya Swayattashasan (Local Self-Government in Bangladesh) (Dhaka: Rajshahi University Text Book Board, 1988), pp. 181-185. The researcher has translated a few parts from Bangla to English.

regard, the criminal courts named Magistrate Court and Civil Courts as Munshif's Courts were established. But it failed due to stiff resistance from both lawyers and judicial officers'. Since the independence of Bangladesh, the Government of Bangladesh felt the necessity for the speedy trial of the cases and also provides the village people with justice in a less expensive. For the sake of the effective justice, the Government finally formulated a draft in the form of a Gram Adalat Bill, 1998. With a view to coping with the situations, the Village Court has been introduced under the Village Court Ordinance, 1976 and later on the Village Court's Rules, 1976 was passed for the observance of the Village Court Ordinance, 1976. The responsibilities of the trial of the cases were not imposed for a certain period but the same responsibility is given of the Village Court Ordinance, 1976. Later, the Village Court was amended in 1979 for effective implementation of the Ordinance. The Village Court Ordinance is discussed here critically with a view to assessing the potentialities and constraints of the Village Court under the Village Court Ordinance, 1976 and will put forward some policy implications in this regard for the purpose of developing the Village Court systems in Bangladesh.

Background

The administration of justice is the touchstone of the excellence of a Government. The formal Courts including the Supreme Court of Bangladesh in the formal manner ensure this administration of justice.³ Bangladesh was independent in 1971. Naturally, Bangladesh inherited colonial institutions and legacies. ⁴ The developments of legal systems have been passed through various stages and have gradually developed as a continuous historical process. The process of evolution has been partly indigenous and partly foreign and the legal system of present day emanates from a mixed system, which has structure, legal principles and concepts modeled on both Indo-Mughal and English law.5 It is mentioned that during the ancient time, there were assemblies of elders in the village known as Panchayet. Certain Muslim rulers like Sher Shah and Akbar gave some moral and administrative supports to the Panchayet systems.⁶ The Panchayet had jurisdiction over almost every type of dispute in the village community. They decided both civil and criminal cases and their powers were not ordinarily bound within any financial limit. The Panchayet jurisdiction and authority suffered declining with the downfall of Mughal rule in India.⁷ Indeed, during the entire British period, the Panchayet justice arrangement was never specifically singled out for abrogation. On the contrary, its usefulness was recognized. They used to perform judicial role. They settled

disputes and in most cases tried to bring about amicable settlements between the parties. In course of time, central authority was established by the king who became the highest judicial authority. This system of judicial administration continued till the

² The Village Court means the Village Court constituted under the Village Court Ordinance, 1976 (Ordinance No. LXI of 1976, 3rd August 1976).

³ M. Aftab Uddin Khan, "Working of the Conciliation Boards in the Municipal Areas of Bangladesh", Journal of Local Government, Vol. 24, No. 2, July-December, 1995, p. 6.

⁴ Ibid.

⁵ Thid

⁶ Kamal Siddiquei, Local Governance in Bangladesh, Leading Issues and Major Challenges (Dhaka: University Press Limited, 2000), p. 142.

⁸ Ibid., p. 143.

Muslim rule was established in the Indian sub-continent. During the medieval period, the administration introduced in Bengal did not extend to the village level. After the advent of the Mughals judicial systems, the judicial systems were reorganized. 9 The · empire and the Quazis were appointed for administering judicial functions in the village level. In ancient northern India, there were three tiers of adjudication such as kula, sreni and puga. The kula (Panchayet of family/ relatives) was the lowest Court and was composed of kinsmen having the right to decide on small matters concerning members of the kula. The sreni was the next higher Court, having jurisdiction over traders, artisans and the like, pursuing similar or related means of livelihood. Often the sreni had jurisdiction over the members of different castes too. The puga was a court having jurisdiction over members of different castes and occupations belonging to the same village or township. There are indications that Panchayet were independent in their working. During the British period, the British government decided to set up union Benches and Courts under the Bengal Village Self-Government Act of 1919. This Act provided for two three-member bodies at the union Parishad (then called Union Board) level, one (the Union Benches) dealing with criminal cases and the other dealing (Union Court) with civil cases. Lord Cornwallis introduced the Permanent Settlement Act in 1793. The Zamindars were entrusted with the collection of revenue and the maintenance of law and order in the villages. These tasks were carried out with total disregard to the needs and abilities of the villagers to pay taxes and justice respectively. 10 From the above implications and traditions, it may be pointed out the prevailing traditional Shalish-bischers, Village Courts etc., prevailing in the country is the out come of those historical perspectives.

In the Indian subcontinent, the Government of Pakistan promulgated two Ordinances such as the Muslim Family Law Ordinance, 1961 and the Conciliation Courts Ordinance, 1961 (Ordinance No. XLIV of 1961). The Muslim Family Law Ordinance provided regulatory measures and procedures for registration of (i) marriages, (ii) polygamy, (iii) maintenance, (iv) child marriage, (v) inheritance, and (vi) rights of children of parents' deceased before grandparents, etc., and empowered the Union Councils at the village level to deal with the provisions of the Muslim Family Laws Ordinance. Similarly, the Conciliation Courts Ordinance empowered the Union Councils to deal with the minor offences or disputes of criminal and civil nature, which were kept outside the jurisdiction of any criminal and civil court. In 1976, the Government of Bangladesh repealed the Conciliation Courts Ordinance and the Village Court Ordinance was introduced in 1976 in all the Unions to settle minor criminal and civil disputes. The main objective of the Village Courts was not to determine right or wrong or punish the wrongdoers but to make an amicable settlement of the disputes.

Methodology

This work has been made a cross sectional descriptive study and qualitative data have been collected. Findings of this work are presented in an analytical description. Not a single method rather than a combination of different methods has been used for collecting data from the respondents and key informants. Survey, Case Study, Focus Group Discussion and Observation methods are used in this study. The village

⁹ Ibid., p. 144.

¹⁰ Ahmed Shafiqul Huque, "Colonial Administration and Centralization: History of Local Government in Bangladesh", Journal of Local Government, Vol. 14, No. 1, January–June 1985, p. 17.

¹¹ Ibid., p. 145.

named Farash pur has been selected for this study because it is a very familiar village to the reseracher where the necessary information will be collected easily. Moreover, the cross sectional people will also be found here. In addition, a research fellow of the Institute of Bangladesh Studies, Rajshahi University who was also a Magistrate of the first class is taken as a case study.

FORMATION OF VILLAGE COURT

The Village Court is consisted of a Chairman and two members to be nominated in the prescribed manner, by each of the parties to the dispute. 12 Provided that one of the two members to be nominated by each party shall be a member of the Union parishad concerned. The Chairman of the Union Parishad shall be the Chairman of the Village Court, but where he is, for any reason, unable to act as Chairman or his impartiality is challenged by any party to the dispute, any member of the Union parishad appointed in the prescribed manner shall be the Chairman of the Village Court. If either party to the dispute consists of more than one person, the Chairman shall call upon the person constituting that party to nominate the two members on their behalf, and if they fail so to nominate, shall authorize anyone of such person to do so, and thereupon the persons so authorized shall alone have the right to nominate such members¹⁴. If any party to the dispute does not find any member of the Union Parishad to be impartial, he may seek the permission of the Chairman to nominate any other person to be a member of the Court in place of the member of the Union parishad; and if the Chairman is satisfied that there are good grounds for giving such permission, he may permit the party to do so.15 Where members required under this section to be nominated are not nominated within the prescribed time, the Village Court shall, without such members, be deemed to have been validity constituted for the purpose of this Ordinance, and trial shall proceed accordingly. 16

It is stated that when 3 persons constitute a Court under section 8; there is no provision for revision by the District Judge as against a decision with a Court of 3 men and strictly speaking no revision lies in such a case to the District Judge. ¹⁷ Mofizur Rahman Vs. Joynul Abedin¹⁸ states that if the judgment of the Village Court is accepted by 3:1, it shall be final. No appeal shall be lie to the Assistant Judge's Court. If any decision is accepted by 3:2, then any party can appeal to the Thana Magistrate for its validity within thirty days in the case of criminal case. If the case is civil matter, then the petition shall be filed to the Assistant Judge's Court. Dabir Uddin Mondol Vs. Chairman¹⁹ where it is stated that Chairman awarding a decree not in conformity with majority shall be void. It is held that as such the order passed by the Chairman must be declared to have been passed without lawful authority.

Section 5 of the Village Court Ordinance, 1976.

¹³ Ibid., 5(3).

¹⁴ Ibid., 5(2).

¹⁵ Ibid., 5(4). • ¹⁶ Ibid., 5(5).

¹⁷ 20 DLR (1968) 161,

¹⁸ (44 DLR 158). ¹⁹ (18 DLR 65).

JURISDICTION OF THE COURT

The Village Court are constituted and shall have jurisdiction to try a case when the parties to the dispute ordinarily reside within the limits of the union in which the offence has been committed or the cause of action has arisen. Where one of the parties to a dispute ordinarily resides, and the offence has been committed or the cause of action has arisen, within the jurisdiction of one union, and the other party ordinarily resides within the jurisdiction of another union, then a Village Court may be constituted in the union in which the offence has been committed, or as the case may be, the cause of action has arisen, but each party shall have the right to nominate, if it so chooses, its representatives from its own uinion.

CRIMINAL CASES

Under section 3 (i) of this Village Court Ordinance, the Chairman of the Village Court shall have jurisdiction the following criminal cases contained in the Code of Criminal Procedure, 1898 (Act V of 1898), specified in part I of the schedule.

- 1. Sections 143 and 147 are related to the offence of unlawful assembly of the Penal Code (Act XLV of 1860). Read with the Third of the Fourth Clause of section 141 of the Code, when the common object of the unlawful assembly is to commit an offence under section 323 or 426 or 447 dealing with the offences related to hurt, mischief, criminal trespass of that code, and when not more than ten persons are involved into unlawful assembly.
- 2. Sections- 160, 323, 334, 341, 352, 358, 426, 447, 504, (first part) 508, 509, and 510 of the Penal Code that deals with the offences such as affray, hurt, grave and sudden provocation, wrongful restraints, assault, penalties for assault or criminal force, criminal trespass, intentional insult, penalties for criminal intimidation, intending to insult the modesty of women etc.
- 3. Sections- 379, 380, and 381, deals with the offences related to the theft, theft in dwelling house, theft by clerk or servant of property in possession of master etc., of the Penal Code, when the offence committed in respect of cattle.
- 4. Sections- 379 of the penal code, when the offence is committed in respect of any property other than cattle, and the value of such property doe not exceed five thousand taka.
- 4A. Section 380 and 381 of the Penal Code, when the offence is committed in respect of any property other than cattle, and the value of such property other than cattle, and the value of such property doe not exceed five thousand taka.
- 5. Sections 403, 406, 417 and 420 dealing with the Penal Code, when the amount in respect of which the offence is committed does not exceed five thousand taka.
- 6. Section 427 of the Penal Code, when the value of the property involved does not exceed five thousand taka.
- 7. Sections 428 and 429 of the Penal Code, when the value of the animal doe not exceeds five thousand.
- 8. Sections 24, 26 and 27 of the Cattle Trespass Act, 1871 dealing with the offences.
- 9. Attempts to commit or the abetment of the commission of any of the above offences.

²⁰ Ibid., 6(1).

²¹ Ibid., 6(2).

Haji Fazal Karim Sikdar Vs. Khuruskul²²

Cases involving complicated question of facts and law cannot be decided by the Conciliation Courts.

Shafi Ahmed Vs. Gopal Mia²³

When evidence established that the case was one falling under section 325 of the. Penal Code, but the Magistrate framed a charge under section 323 of the Penal Code that will not make the case triable by Conciliation Court.

Kabir Ahmed Vs. S.D.O²⁴

It is also a well-established principle of natural justice that a person who has bias in favour or against either of the parties to a dispute is not competent to try it, and this applies in cases of chairman of Conciliation Court under the Conciliation Courts Ordinance. It is also held that the offences under the section of 341 of the Penal Code are only triable by the Chairman of the Conciliation Court. There is no jurisdiction of the Magistrate for trial of these cases. The order of giving more compensation Taka. 250.00 under the offences committed under section 349 of the penal code shall be unlawful.

It is held in the Sahad Ullah Mallick Vs Chairman²⁵ that there is no power of the Conciliation Court of giving penalty or fine to the accused. Golam Rasul Vs. Crown²⁶ states that imprisonment or fine cannot be adjudicated by the Conciliation Court, but only compensation to the extent of Rs. 250 (except in cases under 428 or 421 p.p. Code). It is held in the case that Md. Juran Mondal Vs. A. H. Chowdhury clause (b) of sub section (4) of section 5 of the Village Court Ordinance provides that if the case of the Ordinance provides that if the case falls under part II of the Schedule and the representative of the parties are not nominated by the parties within the prescribed time, the Ordinance is to issue certificate to the effect that the Conciliation has failed. Clause (a) of section 3(2) bars any Conciliation Court to entertain any conciliation proceeding relating to a property of a minor. It is stated that offence brought under 147 of the Penal Code is triable by the Village Court if the accused persons are not more than ten.²⁷ It is held that if the theft wealth amounts to not more than five thousand taka, Magistrate shall not take it as of trial. If this case is filed to the Magistrate Court, then the Magistrate can shift to the Village Court for trial. It is a bounden duty of the Magistrate to do it. Sultan Sheikh Vs. S.D.O²⁸ refers that if any member or the representative of the party does not put signature, then it would be treated that he has not expressed his consent.

Civil Suits

Under section 3 (i) of this Village Court Ordinance, the Chairman of the Village Court shall have jurisdiction the following civil suits contained in the Code of Civil Procedure, 1908 (Act V of 1908), specified in part II of the schedule.

²² (17 DLR 463).

²³ (18 DLR 725).

²⁴ (19 DLR 623).

²⁵ (21 DLR 134).

²⁶ (3DLR).

^{27 32} DLR 21.

²⁸ (16 DLR 667).

1. Suit for the recovery of money due on, contacts receipts of other documents,

Suit for the recovery of movable property, or for the value thereof,

3. Suit for the recovery of possession of immovable property within one year of dispossession.

4. Suit for compensation for wrongfully taking or damaging movable property.

Suit for damages by cattle trespass.

When the amount claimed or the price of movable property or the value of immovable property involved doe not exceed five thousand taka. Under section 3(2), a Village Court shall not try a case in relation to an offence specified in part I of the schedule if the accused had previously been convicted in part II of the Schedule if-(a) the interest of a minor is involved in the suit; (b) provision for arbitration has been made in a contract between the parties to the dispute; (c) the provisions of subsection (I) shall not apply to a suit or proceeding to establish a title to any immovable property in respect of which an discharge of his duty is a party to the

dispute.

(3) The provisions of sub section (I) shall not apply to a suit or proceeding to establish a title to any immovable property in respect of which an order for delivery of possession has been made by a Village court or to recover possession thereof. In this regard, there are a few case laws²⁹ such as Sekander Ali Vs. Chairman mentioned. The Conciliation Court cannot give any decision in respect of title. Yet, any decision is given which shall not influence over the title. The same decision is found in the 33 DLR 201 and 21 DLR 400. Abdul Haque Vs. Mockbul. In this case it is held that although the paddy reaping case is triable by the Village Court yet, this Court cannot give any decision relating to title. Notwithstanding, if the Village Court give any decision in question of title, the validity of its shall not be denied. In addition, no question relating to this order shall not be raised under section 151 of the Civil Procedure Code. Moreover, it is held that if any judgment is accepted unanimously or 4:1 ratio voting, then there shall be no appeal or revision against that judgment. Only, the writ petition shall be filed to the High Court Division. It is held that suits for recovery of damages caused by wrongful possession of immovable property not cognizable by the Conciliation Courts.³⁰ In the case of Muhammad Nurul Islam Vs. Ananta Ram Sarma that monthly rent payable by a tenant for use and occupation of a shop as a monthly tenant is nothing but money payable under a contract. Hence the Conciliation Court has jurisdiction to entertain this suit under clause I, section B of part I of the Ordinance.31

It is held that suit for recovery of barga produce for a sum of Rs. 290.00 excessively triable by the Conciliation Court. The Small Cause Court was at all competent to try the cases. Under this case Kabir Ahmed Vs. S.D.O³², it is held that it is unlawful to recover money fined by the Conciliation Court filling cases in the Assistant Judge's Court. It is held that if the Village Court settles any suit exceeding its jurisdiction, then this decision shall not be treated as final.³³ It is declared that if any order is not given subject to any special Act or Ordinance, then the Civil Court

²⁹ 33 DLR 201 and 21 DLR 400.

³⁰ Chana Sardar vs. Chairman, Rasulpur Union Council.

³¹ Civil Reference No. 1 of 1965 under 46, rule 6, Code of Criminal procedure (17 DLR 415).

^{32 (19} DLR 623).

^{33 1982} BLD 147.

shall interfere upon that matter.³⁴ The Mobarock Ali Vs. Md. Eiasin states that there is no bar to challenge the judgment of the Village Court. If it is found in that petition that the Chairman exercise his power malafidely or maliciously, then the case shall be filed to the Civil Court. It is stated that when 3 persons constitute a Court under section 8; there is no provision for revision by the District Judge as against a decision with a Court of 3 men and strictly speaking no revision lies in such a case to the District Judge.³⁵ Abdul Bari Mia Vs. Conciliation Court³⁶ states that the Conciliation Court constituted without approval of the members cannot give any decision legally. It is found in the case of Syeda Khanam Vs. Abdul Jabbar³⁷ that where the required number is not specified, in that case, the Village Court shall continue its functions.

RELATED STATUTORY LAWS OF BANGLADESH

There are some statutory laws in the country, having bearing relevancies in resolving disputes settlements in the village rural people of Bangladesh. A few of them are mentioned here.

The Oaths Act, 1873

The Oaths Act³⁸ is a landmark in the case of village dispute settlements for ensuring justice to the rural poor people in Bangladesh. Because, under this Act, if any problem is created in relation to dispute settlements, the Court can take necessary measures to resolve the disputes for the purpose of establishing justice to the concern parties.

The Gram Sarkar Ain, 2003

It is held under this law that the Gram Sarkar³⁹ can resolve the village disputes through peaceful settlements for the purposes of maintaining peace and discipline in the village or locality. With the introduction of this law, it is found that Chairman of the Village Court or the union parishad and the Gram Sarkar of the ward may deal with the disputes held in the locality. It may be mentioned that at present the dual administration is prevailing in each Union parishad in the country. Because, the Chairman of the Union parishad and the Gram Sarkar of the ward can deal with the disputes.

Discussion

The Village Court Ordinance deals with the issues such as unlawful assembly, protection of animals, protecting legal rights etc., which are given emphasis for the purposes of developing and maintaining sound environment in the country. The inserting punishment is not up to the mark because the provisions of this Ordinance in relation to offences and remedies are formulated during the British period and it is still executed in the country and has not yet been reviewed its justifications. The Village Court has no powers to pass a sentence of imprisonment for fine, but if it holds a person guilty of an offence specified in Part I of the Schedule it may order the

^{34 28} DLR 406.

^{35 20} DLR (1968) 161.

^{36 (21} DLR 314).

³⁷ (18 DLR 62 (WP).

³⁸ The Oaths Act, 1873 (X of 1873).

³⁹ The Gram Sarkar Ain, 2003 (VI of 2003).

accused to pay to the aggrieved person compensation of an amount not exceeding five thousand taka which is inconsistent at the socio economic aspects of our country. In a suit relating to a matter specified in part II of the Schedule the Village Court shall have power to order payment of money up to the amount mentioned therein respect of such matter or delivery of property or possession to the person entitled thereto. It is observed that the inserted compensation is insufficient to face the realities. Because, the offenders do not think twice to break the laws. For that reason, it should be enhanced for meeting up the present situation of the country. It is also observed that the petty matters relating to civil and criminal are given upon the Chairmen of the Village Courts to settle those disputes with the amicable manner.

POWERS OF THE VILLAGE COURT

Normally, if any offence has been taken place in the area of a Union Parishad, the cases are disposed in that Union Parishad. After introducing of the Village Court Ordinance, 1976, some amendments were made. In accordance with the Ordinance, if the two parties are living in the area of a same Union, in that case, the Village Court shall dispose of the case in the Union Parishad. In course of time, there are some problems created. Consequently, the Village Court Ordinance 1976 has been amended in 1978. It is added that if the two parties of the case belong to separate Union. In that case, the concerned union of the Village Court shall dispose of the cases where the incident took place. Provided that, both the parties can nominate member of their respective union. It is declared before that if the Court decided as accused of the criminal cases, the court reveals judgment on him for giving compensation. This compensation shall not be more than one thousand taka. But this power of the Village Court has been extended from one thousand taka to five thousand taka. A Village Court may issue summons to any person to appear and give evidence, or to produce or cause the production of any document: Provided that-

- a) no person who is exempt from personal appearance in Court under subsection (1) of section 133 of the code of Civil Procedure, 1908 (Act V of 1908) shall be required to appear in person.
- b) a Village Court may refuse to summon a witness or to enforce a summons already issued against a witness when in the opinion of the Court the attendance of the witness cannot be procured without such delay, expense or inconvenience as in the circumstances would be unreasonable.
- c) a Village Court shall not require any person living beyond its jurisdiction to give evidence or to produce or cause the production of a document unless such sum of money would think sufficient for defraying his traveling and other expenses.
- d) a Village Court shall not require any person to produce any secret document or unpublished official record relating to any affairs of the State, or permit any person to give any evidence deprived from such secret document or unpublished official record except with the permission of the officer at the head of the department concerned, who shall give or withhold such permission as he thinks fit. 40
- (2) If any person to whom a Village Court has issued summons to appear and give evidence or to produce or cause the production of any document before it

⁴⁰ Section 10(1) of the Village Court Ordinance, 1976.

willfully disobeys such summons, the Court may take cognizance of such disobedience, and after giving such person an opportunity to explain, sentence him to a fine not exceeding two hundred and fifty taka. 41

CONTEMPT OF VILLAGE COURTS

A person shall be guilty of contempt of a Village Court if he, without lawful excuse-

- a) offers any insult to the Court or any member thereof while the Court is functioning as such; or
- b) cause any interruption in the work of the Court; or
- fails to produce or deliver a document when ordered by the Court to do so; or
- refuses to answer any question of the Court which he is bound to answer; or refuses to take oath to state the truth or to sign any statement made by him when required by the Court to do so;
- e) refuses to take oath to state the truth or to sign any statement made by him when required by the Court to do so; and the Court may, without any complaint having been made to it forthwith try such person for such contempt and sentence him to a fine not exceeding five hundred taka. It is observed that the practices the contempt of Village Court is hardly found in the rural areas of Bangladesh. In addition, the Chairmen of the Village Court do not strictly maintain the rules regarding the contempt of the Village Court. 42

PROCEDURE TO RESOLVE DISPUTES

Any person can file triable civil and criminal cases giving fee taka four and two respectively in favour of the Chairman of the Union Parishad along with an application. The application shall be included the following particulars

- 1. The name of the Union Parishad in which the application is made
- 2. The name, description and place of residence of the petitioner
- 3. The name, description and place of residence to the respondent
- The name of the Union in which the offence was committed or the cause of action arose
- 5. The compliant or the nature and valuation of the claim with particulars in brief, and
- 6. the relief claimed.43

An application under this rule shall be accompanied by a fee of Taka two if the case relates to part I and by a fee of Taka four if it relates to part II.⁴⁴ When an application is rejected by the Chairman of the Union Parishad under sub section (1) of section 4, it shall be returned to the petitioner together with the order passed on it.⁴⁵ An application for revision under sub section (2) of section 4 shall be made within 30 days from the date of rejection, to the Assistant Judge having jurisdiction.⁴⁶ An application under sub rule (2) shall be in writing shall be signed by the petitioner,

⁴¹ Ibid., section 10(2).

⁴² Ibid., section 11.

⁴³ Section 3(1) & (2) of the Village Courts Rules, 1976.

⁴⁴ Ibid., section (3). ⁴⁵ Ibid., section (4).

⁴⁶ Ibid., section 5(1).

shall contain the names, descriptions, and addresses of the parties and shall be accompanied by the original application rejected and returned by the chairman of the union parishad and shall also contain, in brief, the grounds in which the application for revision is made. ⁴⁷ If the Assistant Judge to whom an application is made under sub section (2) of section 4 is of opinion that order passed by the Chairman of the Union Parishad is malafidely or substantially unjust, he shall return the application to the petitioner together with the order in writing directing the Chairman of the union parishad to admit the application. ⁴⁸ When an application has been admitted its particulars shall be entered in a register to be maintained in form 1, and year of the case in the said register also be endorsed on the application. ⁴⁹ When a case is referred back under sub section (2) of section 8 by the Thana Magistrate or Assistant judge, as the case may be, for reconsideration, the case shall be heard as a fresh application. ⁵⁰

If the application is accepted, the chairman should write it down to the form no.1. If the complain is unacceptable, it can be rejected. If the Order is unjustified, the aggrieved party can apply within thirty days to the Assistant Judge or Magistrate of the first class for review. The Chairman shall serve summon with the help of his official staffs for presence specifying the date and time to both the plaintiff and the defendant. The summon shall be served personally and the acknowledgement of the receiver of the summon is to be taken and also put signature just opposite page of the summon. If the defendant is not found then one piece of the summon shall be hung of his house in broad day light and it should be treated as serving of the summon. After serving of the summon, the Chairman shall order the plaintiff and the defendant for nominating their members and then the Court shall be instituted. After institution of the Court, Chairman shall order the opposite party to submit their written statement or objection. If the written objection is not presented, it should be informed of him orally or be written form. The specified date for trial to be held. The hearing of the case shall not be adjourned for more than seven days. If the applicant is failed to attend to the meeting for specific date and if it deems to Chairman that the applicant is in negligence, the chairman may reject the petition. If the applicant applies for retrial within ten days, he can rearrange it and the date of the case will be fixed up and the same procedure is to be maintained for the defendant.

It is observed that the court fees of the Village Court is very insignificant in comparison to socio economy changes of Bangladesh and it should be increased with the change of time and with the relevancies of the Civil and Criminal Court fees of Bangladesh. With the insignificant of this Court fee, the Village Court has to face numerous difficulties, as the offenders do not think twice for committing offences.

RECOVERY OF FINE

If any person denies to pay the fine for contempt of Court and to disobey the summon spontaneously then it should be sent after expiry of the specified period mentioning the information to the Magistrate of the first class (Cognizance Court). The Magistrate Court deems it of his own judgment and to take necessary action for recovery of the fined money. If it is delayed or he fails to recover of the money then

⁴⁷ Ibid., section 5(2).

⁴⁸ Ibid., section (6).

⁴⁹ Ibid., section 7(1).

⁵⁰ Ibid., section 7(2).

it should be given jail or fine. After the expiration of the specified date for recovery of the money for compensation then it should be recovered as dues.⁵¹

No Appearance Through Counsel

Not standing anything contained in the Bangladesh Legal Practitioners, and Bar Council Order, 1972 (P.O. No. 46 of 1972), no legal practitioner are not permitted to appear on behalf of any party to a dispute before any Village Court. ⁵² If a person required under this Ordinance to appear before a Village Court is a pardanashin lady the Court may permit her to be represented by a duly authorized agent who shall in no case be a paid agent. ⁵³ It is held in the 1984 BCR 29 that no case is conducted in the Village Court through the lawyers.

Transfer of Certain Cases

Where the Thana Magistrate is of opinion that the circumstances of a case relating to a matter falling under part I of the schedule and pending before a Village Court are such that the public interest and the ends of justice demands its trial in a Criminal Court he may, not withstanding anything contained in this Ordinance, withdraw anything contained in this Ordinance, withdraw the same from the Village Court and forward it to the Criminal Court for trial and disposal. ⁵⁴ A Village Court may if it is of the opinion that in a case relating to a matter aforesaid and pending before it the ends of justice demand a punishment for the accused, forward the case to the Criminal Court for trial and disposal. ⁵⁵

Investigation by Police

Nothing in this Ordinance shall prevent the police from investigating a cognizable case by reason of the fact that the case relates to an offence specified in part I of the Schedule, but if such case is taken to a Criminal Court, and such cases shall be disposed of by such Court as if this Ordinance had not been promulgated.⁵⁶

Pending Cases

This ordinance shall not apply to cases triable under this Ordinance which immediately before the coming into force of this Ordinance, are pending in any Civil or Criminal Court, and such cases shall be disposed of by such Court as if this Ordinance had not been promulgated.⁵⁷

It is observed that the powers of Court especially in respect of contempt of Court is very insignificant. Because, the present socio economy realities have already been changed. But the amount of Taka for fine is still stagnant which is not possible for meeting up the present requirements of the country. That is why; the range of fine/imprisonment should immediately be enhanced for meeting up the present environment of the country.

⁵¹ Section 12(1) & (2) of the Village Court Ordinance, 1976.

⁵² Ibid., section 14(1).

 ⁵³ Ibid., section 14(2).
 54 Ibid., section 15(1).

⁵⁵ Ibid., section (15(2).

Ibid, section 16.Ibid, section (17).

Finality of the Decisions of the Village Courts

If the decision of a Village Court, is binding on the parties and shall be enforceable in accordance with the provisions on this Ordinance.⁵⁸ If the decision of Village Court is by a majority of three to two, any party may, within thirty days of the decision, apply in the prescribed manner,-

(a) If the case relates to an offence pacified in Part I of the Schedule to the

Thana Magistrate, and

(b) If the case relates to a matter specified in Part II of the Schedule, to the Assistant Judge having jurisdiction; and the Thana magistrate, or as the case may be the Assistant Judge, if satisfied that there has been a failure of justice, may set side or modify the decision, or direct that the dispute be referred back to the Village Court for reconsideration.⁵⁹ Notwithstanding anything contained in any other law for the time being in force, any matter decided by a Court in accordance with the provisions of this Ordinance shall not be tried in any Court, including a Village Court.⁶⁰

ENFORCEMENT OF DECREES

Where a Village Court decides to award compensation to a person or to order the delivery of property or possession it shall pass a decree in such from and in such manner as may be prescribed register. 61 If any money is paid or property or possession is delivered in the presence of the Village Court in satisfaction of the decree, it shall enter the fact of payment or delivery, as the case may be, in the aforesaid register. 62 Where a decree relates to payment of compensation and the decretal amount is not paid within the prescribed time, the Chairman of the Village Court shall forward the same to the Union Parishad concerned which shall proceed to recover it in the same manner as a tax levied by a Union Parishads is recovered under the Local Government Ordinance, 1976, the Union Parishad and shall be paid to the decree holder. 63 Where the satisfaction of a decree can be had otherwise than by payment of compensation, the decree may be presented for execution to the Court of the Assistant Judge having jurisdiction and such Court shall thereupon proceed to execute the decree as if it were a decree passed by itself.⁶⁴ A Village Court may, if it thinks fit, direct that the amount of compensation be paid in such installments as it may fix.65

REFORMATIONS TOWARDS GRAM ADALAT

It is still the Government has not any step for restructuring the informal shalish system in Bangladesh. But some attempts were made during the Ershad period to decentralize the justice systems. But it was failed due to corruptions. The lattest proposal in the form of a Gram Adalat Bill, 1998 sponsored by United Nations Development Program advocates essentially the imitation of the Nyaya Panchayet model practised in India. Considering this aspect, the Government drafted Gram

⁵⁸ Ibid ., section 8(1).

⁵⁹ Ibid., section 8(2).

⁶⁰ Ibid., section 8(3).

⁶¹ Ibid., section 9(1).

⁶² Ibid., section 9(2).

⁶³ Ibid., section 9(3).

 ⁶⁴ Ibid., section 9(4).
 ⁶⁵ Ibid., section 9(5).

Adalat Bill in 1998. Under this draft, some reformations relating to village court are brought which are given below⁶⁶ in the summary form

> The Gram adalat will be composed of three adjudicators (other than elected local government functionaries), nominated by a selection authority consisting of the local MP, the district judge and the District Magistrate

The Gram Adalat will be normally located at the Thana headquarters but it

could be mobile within its jurisdiction

If payments ordered by the Gram Adalat are not recovered within the prescribed time, these shall be treated as an unpaid tax levied by the Union Parishad and collected as such

> The decision of the Gram Adalat is ordinarily to be treated as final, except that the district and Sessions Judge may call for records and pass such

orders as deemed fit by him/her

Legal practitioners shall not be permitted to appear on behalf of any party to a dispute before a Gram Adalat. Both criminal cases and civil disputes of a minor nature shall be tried by the Gram Adalat.

REFORMATIONS TOWARDS SHALISH

Traditionally, Bangladesh is noted for the shalish system prevailing in the country. It is basically held in the rural areas by the rural matabars for peaceful settlements of the disputes in petty nature. But this system is not so effective in the present context of Bangladesh. In this regard, some non-governmental organizations such as Banchte Shekha, BLAST, Legal Aid, Ain O Shalish Kendra etc., are working to develop this syems. They suggested some reformative measures as to Shalish, which is given below:

reorganization of the existing shalish committees or formation of new ones with the specific intention of increasing the representation of women and the poor in these bodies

provision of training to the saltshakers so that they are made aware of the

basic principles of justice and relevant laws

facilitation of the shalish process by the NGO functionaries through recording of complaints, issuing of notice to the relevant parties, arranging accommodation for shalish to be held, initiating the process of shalish to be conducted by the shalish committee, monitoring of the decisions and followup of the actions taken by the shalish committee; and

maintenance of a panel of lawyers at the district level to file and fight cases in the formal courts in case the Shalish process or the shalish decision is

defined or violated by the parties concerned.

DISCUSSION

It seems that these changes of the village adalat systems shall not be fruitful to the rural poor people including women. Because, the Adalat shall mostly be set up at the Thana level where such people will not able to come to the Court for justice due to poverty. It shall also be time consuming. Moreover, the local representatives are enlisted for the selection of the adjudicators, which is also a matter of doubt for

⁶⁶ Kamal Siddiqua, *Local Governance in Bangladesh, Leading Issues and Challenges*, (Dhaka: University Press Limited, 2000), p.151.

providing justice to the poor. This Court shall be more politicized due to appointment procedure, as the appointment of the concerned staffs shall be regulated by the people's representatives. 67 Consequently, the Court shall be more complicated. For that reason, the proposed Gram Adalat Bill, 1998 should be given serious thoughts before finalization. From the field investigation and other relevant sources, it may be pointed out that the opinion and suggestions of Dr. kamal Siddiquei relating to Gram Adalat may be good but the researcher cannot agree with all the opinions of him. The researcher observes that the existing systems of Village Court are good but it needs somewhat empowerments due to socio economy changes of Bangladesh. Because, since independent in 1971, the major amendments of the Village Court Ordinance, 1976 has not been taken place. That is why; some amendments of the Ordinances may be undertaken. It suggests that the powers of class one judicial officers may be shifted to the Chairmen and their status should be upgraded. It is possible for the chairmen to exercise the judicial powers because it is observed that the existing Chairmen of the country are almost educated and they are coming with a level best. In addition, it is also a technical matter to exercise judicial powers. That is why; it does not need to be highly educated. The necessary training is sufficient. In this regard, all kinds of trainings like the cadre service (Bangladesh Civil Service) should be given to the chairmen as well as the members so that they can motivate the union people well for the betterment of the inhabitants.

Moreover, many international and domestic organizations are working in this regard. In respect of Shalish, it seems that the suggestions held by the different nongovernmental organizations is good and well but the researcher does not think so. From the field based experiences, the researcher observed that in fact, Shalish is undertaken in the village or in the rural areas but it is not given priorities at the present level due to the existing Village Court, a legal foundation. So far it is understood that there is no legal basis of the disputes settlements though the Shalish in the rural areas in Bangladesh but it is still in enforcement in the traditional form. Finally, it seems that if the Government educates the people providing technical and general education first. The disputes in the rural or the urban will be eliminated from the society. That is why; the quality education is necessary for the countrymen so that they can understand one another and all kinds of grievances may be rooted out from the society. In this regard, the Government should not think about the Shalish and it is nor necessary to implement the recommendations made by the NGOs and it should not be implemented the formulated drafts recommendations for the empowerment of the Village Court or the Shalish. At first, the Government should first and foremost duty to educate the rural poor people through possible all means and in this regard the government should come forward to invest a lot for this purpose. In this regard, food for education, poverty alleviation program, vocational education etc., may be undertaken in order to ensure quality education. It believes that the country will ultimately be developed and all kinds of disputes in the rural areas will be eliminated.

CASE STUDIES

The following case studies are undertaken as empirical investigation for this work in order to justify this topic.

⁶⁷ Ibid., p. 152.

Case Study 1

Md. Hatem Ali Khan (Freedom Fighter No-C/199), Age: 50 years, Occupation: Agriculture, Vill: Farash Pur, P.O: Roy Gram, P.S: Kaligonj, Dist: Jhenidah on 14.12.2004.

He was asked about the problems implicated with the Village Court during the dispose of the cases. In response to this question, he stated that there are many factors that create problems of the Village Court such as (I) Influences of the politics, (ii) the chairman becomes one sided due to money, relatives, partization, corruptions, (iii) Grouping, (iv) Masthany or Gundamy of the terrorists, (v) moral character of the Chairman.

Secondly, he was asked what were the barriers faced by the Chairmen of the Village Court in the implementation of the Village Court Ordinance. He replied that non-implementation of this Ordinance due to corruption; bribe, evidence or absence of witness, influences of the power party politics etc.

Thirdly, he was asked, on what ways these problems might be over come. He said that moulding of moral character, creating good social environment through education, knowledge based education, not for getting vote in exchange of Taka, selection of the Chairmen and members who possessed in moral character.

Fourthly, he was asked on what ways, the Village Court might be more effective. He also uttered that building awareness, formulating wisdom society, quality education, reorganization of the present education systems and the technical education is to be given priorities basis to the rural people and make the people active providing technical education.

Case Study 2

Md. Abdul Sattar (Ex UP Member), Age: 40 years, Occupation: Business, Vill: Farash Pur, P.O: Roy Gram, P.S. Kaligong, Dist: Jhenidah on 14.12.2004.

He was asked about the problems of the Village Court during the dispose of the cases. He stated the problems such as i) Influences of the underground party (sometimes), (ii) the local respectable persons are not invited for the hearing of the cases, iii) the persons of the power party either member or non members are invited or called for the disposal of the cases, iv) the young are given priorities instead of old people for hearing of the cases, v) the concern people do not pay heed to the Chairman, vi) negligence to the Chairman due to power party.

He was asked about the problems of the implementation under the Village Court Ordinance. He said in reply that) Insufficient power of the Chairman or the member, ii) non implementation of law due to relatives, party, voting matter, etc iii) lack of proper enforcement of law and iv) biasness

He was asked how to come over those problems. He said that I) to make practice in the right way or honestly and for that reason, we have to go back for 50 years ago. At that time people spoke honestly, we should have to follow the customs of that period. ii) Stoppage of mal practice of law, iii) to have respect for all and are equally treated as per qualifications.

He was asked how to make effective of the Village Court. He said that quality education with honest practice might be effective for the implementation of this Ordinance.

Case Study 3

Dr. Enus Ali, EPI, R.M.P, Age: 45, Occupation: Govt. service, Vill: Farash Pur, P.O: Roy Gram, P.S: Kaligonj & Dist: Jhenidah on 14.12.2004.

Mr Enus was asked about the problems of the Village Court during the dispose of the cases. He stated such as law for the rich not for the poor, influences of the rich man, threats of the strong party upon the weak even the chairman, fear /intimidation of the terrorists, grouping, village politics etc.

He was asked about the implementation of the Village Court Ordinance. He argued that non-implementation of law due to politics, insignificant punishments,

party systems, chairman becomes biased, influences of the rich man etc.

He was asked how to come over those problems. He put arguments such as good governance or administration, good character and self-goodness, maintaining neutrality, training, mechanisms setting separately for the local government bodies like *Shadeen Durniti Daman Commission* (Independent Anti Corruption Commission) etc.

Dr. Enus was asked how to make effective of the Village Court. He put his thoughts such as proper coordination, attitude to be changed for the fair and neutral

justice, philosophy to be changed, mentality to be set up in the right way.

Case Study 4

Md. Matiur Rahman (Existing member), Age: 38, Occupation: Business, Vill:

Farash pur, P.O: Roy Gram, P.S: Kaligong, Dist: Jhenidah on 14.12.2004.

Mr Member was asked about the problems of the Village Court at the trial of the cases. He informed me in such a way- pressure group and power party politics, coming election factors, personal interest, secret session for the disputed matter before finalization, giving bribe to the chairman etc.

He was asked about the implementation of the Village Court Ordinance. He informed in this way- implementation of law is rarely done due to personal interest,

coming election or voting, relatives, law is in the form of black and white.

He was asked how to come over the problems. He narrated in the way- by proper implementation of the Gram Sarkar, giving importance to the public opinions and building awareness and he also pointed out that it can be effective of the village court though the proper implantation of the Gram Sarkar.

Case Study 5

Md. Rabiul Islam Khokon (Shopkeeper) and Palash, son (on behalf of the Chairman) of existing Chairman, Paltan Mia, Roy Gram UP, Kaligong, Jhenidah on 15.12.04. They are unitedly asked in a shop about the problems of the Village court at the time of trial. They stated in the manner- influences of the power party politics, relax due to power party, local mastany, local terrorists, lack of proper attendance of the parties, less importance of the local cases held by the chairman, partization, presence of uneducated and illiterate people, divisions of the community or grouping, traditional ethics, mal practices of the local members, conflicts of the local leaders and local member etc.

They were asked what are the legal gaps of the Ordinance. They pointed out that insufficient protection measures, lacks in coordination, insufficient logistic supports, non-implementation of law due to corruption, tendency of lawmakers are the lawbreakers etc.

They were asked how to get over those the problems. They argued that empowerment and modernization of the Gram Sarkar Policy, enhancement of punishment or legal supports, non interference of the Chairman during trial of the cases regulated by the local M.P., not misusing of the power held by the local M.P., handling the proper coordination held by M.P.

They were also asked how to make effective implementation of the Village Court. They put their thoughts- helping unitedly to the chairman, attitude to be established for justice, honesty to be maintained by any how, establishing rule of law, local leaders, and the member should unitedly help the chairmen, union jail to be established, corruption to be rooted out, honest intention to be grown, establishing jury board, empowering more Magistracy power etc.

Case Study 6

Dewan Muhammad Humayun Kabir was a Magistrate who dealt with a good number of Village Court's disputes when he was performing as a Magistrate of the First Class and presently he is on Deputation and doing as a research fellow of IBS, RU. The researcher asked and talked to him as stated previous manner. He expressed that-the Chairman's are not properly empowered; because the Officer in Charge (O.C) of the thanas does not pay heed to their words. Frequently, the Chairmen have to face the Officer in charge of the thanas legally or illegally for various problems raised by the people to the Chairmen concerned. The village people often raise very objectionable demands to the Chairmen. As a result, the Chairman does not keep strictly to his principles and failed his dignity to the Officer in Charge. Moreover, he/she has no police force for his security so that he cannot dispose the cases properly. In fact, it endangers his life insecurity.

Focus Group Discussion

The focus group discussion consisting of the mentor, tea maker, common people, school teacher, imam, postmaster, ex-member etc., was held in a tea stall in the village of Farash pur, Kaligong Jhenidah, on 16.12.04. They were asked about the problems of the Village Court at the time of disposal of the cases. They presented their ideas and views such as - influenced by the local leaders, strong and notorious terrorists hinder the trial of the cases, Chairman himself/herself may be biased, power party politics strongly influenced, relatives and relations, influential personalities, upper authority of the Chairmen through hallo, law for the rich not for the poor, pressure and power party politics etc.

They were asked about status of the implementation of the Village Court Ordinance. They said in reply that proper implementation is not possible due to politics, cash-capital, corruption, and strong powerful personality.

They were asked on what ways the problems might be overcome- they argued that selection of the honest person, awareness of the people, Elite Fore like Reb to be established. Moreover, it is possible through the every body's co-operation, with the help of the ethically and morally sound personality etc., in Bangladesh.

Discussion of the Field Study

From the above study, it is observed that the Chairmen of the Village Court are carrying out their duties as per rules, but their duties are not properly done. Rather the duties of the Chairmen towards Village Courts are partially observed. The procedure that should be maintained is not regulated properly. The local as well as the National politics often influence the Village Court. The Court is not doing well due to corruption and it is not effective due to negligence of the Chairmen. The objective of this Court is not ensured through the disposal of the cases. The formation of the committee is not satisfactorily made. Most of the respondents argue that the Village Court is not for the poor but for the rich as the court is frequently guided by the rich

people of the society. The Court remains some legal problems such as absent of strong regular police force, no Magistracy power directly; officer in charge is not paying heed to the litigation of the village court during the investigation. The Chairman of the Court does not handle the disputes regular basis rather it is held a day within a week or within two weeks of his office in the formal manner. The formation of the committee for the disposal of the cases is not regulated properly. During the disposal of the case, it has been told that expert opinion and the old people's perception is to be added or may be taken for it. The power of the Chairman is sufficient and this power should not be enhanced. The registration of the case is maintained in the satisfactory way. The proper investigation is not done as per rule. The Village Court may be made effective by the inspection frequently by the Upazilla Nirbahi Officer and with the help of law enforcing agency, co-operation by all, and implementation of the Gram Sarkar Ain and elimination of the local and the national politics in this regard. The trial of village court is undoubtedly a best system. But the Chairmen has put forward some complains to the proper authorities in this regard. They said that there is no provision for producing the accused persons before the court and sometimes the people don't want to obey their judgments. Besides, there is no proper arrangement for collection of the fines.⁶⁷

The village court cannot confirm imprisonment except in the case of contempt of court or summon. 68 Moreover, several studies are undertaken on Village Court. These studies argues that lack of clear ideas among concerned government officials, UP functionaries and members of the general public, corrupt practices or noncooperation among UP functionaries, and lack of adequate powers in the hands of the Union Parishad, etc., hinder the working of the village courts. 69 At the early stage, a question was asked to a District Magistrate about how well did the village benches and courts operate? The departing District Magistrate and SDOs, it appears that two separate courts, one for civil and one for criminal matters, did not constitute the best of arrangements, particularly at the Union level. In the early 20th century, it was not easy for District Magistrates, SDOs and Circle Officers to monitor the working of these courts and benches. The community of pleaders was also not happy with the new arrangement since they considered it to be in competition with their vocation. Besides, there were also considerable problems such as the members of the courts are illiterate and Sámi illiterate, inability of some chairmen and members to contribute to the dispensation of proper justice due to political motives, dishonesty, nepotism, influences of village touts, adequate supervision by the controlling authority etc. 70 The spirit or the systems of alternative dispute resolution may be introduced for the dispute settlements for the rural poor in Bangladesh.

RECOMMENDATIONS AND CONCLUSION

In fact, the procedure for dispute settlement through the Village Court is a landmark for resolving rural disputes settlements in Bangladesh. It is observed that the Village Court

⁶⁷ Gram Adalat (Village Court), Journal of Local Government, p. 55.

⁶⁸ Kazi Md. Afsar Hossain Chaki, Sthanio parzae unnoyan abong Siddhanto grohona Union parishader bhomeca (Development of Local Stage and the Role of Union Parishad for Undertaking Decision), Journal of Local Government, Vol. 26, No. 1, January-June, 1997 p. 14. ⁶⁹ Kamal Uddin Siddique, Local Governance in Bangladesh, Administration (Dhaka: University

Press Limited, 2000), p. 146.

⁷⁰ Ibid.

Ordinance is implemented partially for providing justice to the rural poor people in Bangladesh. The village people are benefited in all respects with a little expense. The most of the Village Courts in Bangladesh are often influenced by the local and National politics. Most of the village disputes are disposed by the Chairman of the Village Court but a few of the cases are shifted to the Assistant Judge's Court and the Magistrate of the first class. This Court is established not only for the betterment of the village people but it is a judicial organ of the Government and it is also a media for establishing justice in the country. So, there is no subjective difference than the other courts of Bangladesh. The judicial functions in the grass root level are to be ensured by any means. It is observed that there is hardly difference between the objectives of the Union Council Conciliation Court established in 1919 and that of Village Court Ordinance, 1976. The Government is trying to implement the Village Court Ordinance in Bangladesh. In this regard, many organizations are also working to ensure justice to the poor people in the country. Administration of justice is to be established through the proper monitoring of the Court's performances and in this regard, this Village Court should be given more importance and the accountability of the judicial functions should be ensured in a regular basis strictly through proper manner. The responsibilities and duties of the concerned Chairman as well as the members of the Village Courts should be ensured through all difficulties in Bangladesh for bringing about sustainable development and environment of the country.

The Village Court should be kept free from all kinds of corruptions and also free from local and National politics. The Village Court should be decorated compulsorily and also to make a separate Eslas like the Civil Courts in a separate room in the Parishad, which might be called Eslash of the Union Parishad in the district during the disposal of the cases. The existing Court's fees and other facilities of the Village Courts are to be increased considering the socio economy aspects of the country in order to make effective administration of justice to the poor people of the country. The Government should take care enough for the effectiveness and implementation of the Village Court under this Ordinance and in this regard, more judicial powers of the Chairman are to be shifted for providing justice to the poor people of the rural and remote people of the country. The newly enacted the mode of settling disputes named Alternative Disputes Settlements known, as ADR which is worldwide used now a days for settling disputes the petty matters should be introduced formally in the Village Court Ordinance. The Chairmen of the Village Courts should be given comprehensive judicial trainings like the BCS judicial cadre service. The evaluation and monitoring systems of the Courts will also be made properly. In this regard, the adequate logistic supports should be given for developing this system. Moreover, it may be mentioned from the research reports that the village people is still happy with the achievements of the Village Court and its popularity is increasing day by day in the country.

Journal of the Varendra Research Museum Vol. IX (2004), 165+ viii pages Editor: Saifuddin Chowdhury

Introduction

The ninth volume of the *Journal of the Varendra Research Museum* [JVRM] came out after a long gap of ten years. This is the prime research journal in Bangladesh on the history and culture of ancient and medieval Bengal and South Asia. The present volume carries a total of twelve articles—seven concerned with the ancient period, three with the medieval period, and two with the modern. Out of the seven articles belonging to the ancient 'Hindu'-Buddhist times five deal with local history within the North Bengal region, one talks about Bengal as a whole, and the very first article belongs to the high Indian history of the fourth century BC. One of the medieval history articles deals with local history in North Bengal, another covers Bengal in general, and the third has nothing to do with Bengal at all, but talks about early Umayyad architecture of Palestine, Syria and Arabia. The two modern period articles deal respectively with the birth and growth of the Varendra Research Museum itself and post-partition migration from India to Rajshahi.

ARTICLES ON THE ANCIENT PERIOD

The first article, "Espionage System of the *Arthaśātra* of Kauţilya" (pp. 1-15) by Manjula Chaowhury is a piece very rich with information and documentation from primary sources. It is a comparative study covering many classical sources such as *Manusmṛiti, Kāmandaka, Śukranitisāra*, the *Rāmāyaṇa*, the *Mahābhārata*, *Tebijja Sutta*, Aśoka's Edicts, *Mitākṣarā* etc. as well as the *Arthaśāstra* itself.

However the article suffers from a host of lapses including misspelt words, bad

grammar, irregularities in transliteration, anomaly in 'Notes and References' entries and so on. 'k' has been transliterated as both ś and śh even in the same sentence: Ajātaśatru and Vaiśhālī (p.3). There are some confusing names such as Śāsanārdha (p.3) given as Śāsanahara on p.6 and in foot notes 7 and 10 (p.14). A number of quotes have remained unidentified. For example, Manusamhitās words "kāravaro... śrayau (p.8) and Arthasāstra's words, "vāṇijako...—janah." (p.9). On page 4 the author says that Mauryan emperor Asoka had four purposes in sending dūtas to certain rulers, but she has given only three examples. Similarly, "four types of mission officers" are mentioned on pp.5-6, but only three names are given. Many of the Sanskrit quotes in the notes are grossly misspelt and confusingly transliterated. And what is 'Asiatic Society of Calcutta' in note 13 (p.14)? There is no organization with

The second articles by Chittranjan Misra entitled "Some Economic Aspects of Ancient Bengal: Epigraphic Evidence" (pp. 17-36) is however based not only on epigraphic record but also on "material remains, literary works," accounts of foreign visitors as well as works of later historians. So, the title could be somewhat different to reflect this fact. However, the piece is very informative and well-documented. It

this name. Apart from such deficiencies, the article lacks historical information about Kauţilya and the *Arthaśāstra*—their time, and perspective of the book's composition.

The introductory para is inadequate in this regard.

gives a fairly clear and comprehensive, though partial, picture of the economic condition of pre-medieval Bengal that covers situation in villages, rise of towns, land system, agriculture, crafts and industries, monetary system and internal and foreign trade.

But the material has been used in a timeless fashion—absence of reference to time (in most cases) has left scope of some ambiguity. Absence of diacritical marks has often created confusion, sometimes serious. For example, the expression "the amount of land in the system of Kulyavapa was much larger than that of Kulyavapa' (p.57) conveys no meaning to the reader. In fact, the journal (present issue) as a whole suffers from this drawback. I would suggest that the VRM authorities have a uniform system of transliteration which should be employed throughout in the journal

(especially in writings on ancient and medieval topics).

As with most articles in this volume, the present article also suffers from spelling anarchy, grammatical deficiency and anomalous punctuation. A few glaring instances are: 'Vijayasena' and 'Bijayasena' are used at the same time and place (p.22). On page 20 'ceases' has been wrongly used in place of 'cesses' and 'myraids' in place of 'myriads'. 'Obverse' has strangely become 'overseas' on pp. 29 and 30! Expressions such as "Gupta and post-Gupta king" (p.19), 'agriculture products' (p.20), 'increase of cultivate lands' (p.20), 'it is recording in the Naihati Copper-Plate' (p.23), 'a large items of pottery . . .' (p.25) are annoying enough. 'Notes and References', despite being quite rich, suffers from various irregularities and a serious lack of uniformity. A reference was necessary on the observation, "The copper-plate inscriptions . . . contemporary Bengal." (p.20)

On the whole the article is largely descriptive and there is little interpretational exercise. The concluding para is very general and weak. The observation, "it was the wealth of ancient Bengal which played a vital role in the development of its society, political system, education and culture" is too general and requires explanation and illustration in order to be established. Some of the paragraphs are too long and could

easily be split into two or three paras each.

M. Mokammal H. Bhuiyan's article "Identification of Three Hindu Deities" (pp. 37-43) is an interesting piece. The identification of the first and third figures seems to be fairly right, but that of the second is not so convincing. Illustration of the Kaushambi and Ahichchhatrā heads was absolutely necessary for a fair comparison with the second figure. The illustrations given are not so brilliant, particularly figure 3 is very indistinct. The time is also not made clear. And what is early period? (p.40) Budhagupta's date (first part of the 5th century) (p.40) is clearly wrong. Actual time is the last quarter of that century (c. 475-95 AD). In fact, it is Chandra Gupta II (c. 375-414 AD) and Kumara Gupta (415-55 AD) who dominate the first part of the 5th century.

Numerous linguistic defects grossly disturb the flow of the prose. Some instances: "his worshippers which mentions in the . . . inscription" (p.39)., "ornament which is always putting on by him" (p.39); "images of later period are basically differ with ours" (p.40). So many spelling mistakes and grammatical errors infest the tiny four-page piece. Irregularities are also noticeable in the 'Notes and References' section. Titles of articles should be put in quote marks which are lacking in notes 7 and 8 (p.42). The title of the article itself is somewhat misleading, because the identification is not "of three Hindu deities" but of "three terracotta objects" (p. 37). However, on the whole the article is a worthwhile piece.

A most carelessly written articles is "Jagaddal Vihara and Two Inscribed Stone Pillars" (pp. 49-56) by Bijoy K. Banik. The English is too defective and some sort of grammatical nihilism rules over the whole text. A few illustrations:

1. ". . . it became was an important centre of Natha religion,

which is located at a distance of . . ." (p.46);

2. ". . . published in the Itihas Journal of Itihas Parishad Patrika" (p.48);

3. ". . . stone pillars which is octagonal in shap has been

found . . ." (p.51); and

4. "Both the . . . stone pillars have found near the eastern wing of both the monastery" (p.52). Such anomalies are hopelessly numberous throughout the article.

Diacritical marks have not been used uniformly and this has created a good deal of confusion. Deciphering of the pillar inscription does not seem to be very sound. 'Makk' is a strange word unknown in the Sanskrit language and such a personal name is unimaginable. On page 49 the writer identifies the 6^{th} letter in tine 2 of pillar-A as da in the text, but in the transliteration it is shown as Na. In the transliteration of the pillar-B inscription the diacritical mark for the long a in the word $K\bar{a}yastha$ is missing and the proper name Bhavya has become Bhava in the translation (p.50) which seems unwarranted.

Note 38 has been printed as 34 in the text (p.51). Note 42 has not been marked at all in the text. Reference is lacking for the material taken from K.N. Dikshit (p.52). Reference is also lacking for the sentence starting with "According to some scholars" on p.50. What scholars? example? Notes 1 and 27 give two spellings for the same name: 'Maitra' and 'Maitrya' respectively. However both seem to be wrong and the right spelling should be Maitreya. Mr. Abul Hashem Miah (p.47) has turned Md. Abul Hashem Mia and Abul Hasem Mia in notes 34 and 35 respectively (p.56). Notes are anomalous to a great extent. For example, author's name is given sometimes 'first name first' and sometimes 'last name first'. The article's name is missing in note 37. In many places article titles are not marked off with quote signs.

The analysis part is weak. Dating of the pillars as late 12th and early 13th centuries makes the Buddhist Jagaddala Vihara flourshing under the Senas and the Sultans which is grossly unlikely. On the whole, however, the article is a pioneer exercise and, as such, deserves appreciation. In fact, it is too early to deal with the big question. More excavation on all the relevant sites is necessary before a fruitful study would be possible. The present article serves the purpose of drawing the

authority's attention.

Shah S.M. Rahman's tiny article, "A Study on Terracotta Balls from Mahasthan Region", (pp. 57-62) has better English, though not flawless. The arguments advanced are good and the interpretation plausible. Illustrations are good. But the author admits that his interpretation is rather hypothetical and needs more evidence to be confirmed.

The article, though so short, suffers from carelessness of its author. A number of references given in the text are not found in the list of references provided at the end. These include Cunningham 1883, Sinha 1967, and Martine and Brown 1994. On the other hand, the list contains some redundant entries such as Barua 1934, Bhandarkar 1931, and Sing 1994. There are anomalies in writing names and a lot of bad spelling. Westmacott 1878 in the text (p.57) has become Westmaccot 1875 in the reference (p.62). Rahman is spelt as 'Rahnan' everywhere in the reference list.

Mukapaddya' is a strange word (pp. 59, 62) which should be 'Mukhopdhyay'. Irregularities infest the 'References' part. Titles of articles given without quote marks

are often confusing.

A long article on "A Few Unique Bengal Sculpture of Varendra Research Museum" (pp.63-82) has been contributed by Maliha Nargis. A 2-page introductory narrative is followed by description of three Buddhist and two Brahmanic sctulptures (two male, two female and one mixed). These are *Ratnasambhava, Avalokitesvara, Khadirvanī Tārā, Kalyānasundara* and *Sarasvatī* respectively. Then follows a discussion about the evoluation of the Pala school of art. The Conclusion at the end is not only short, but has very little to do with the subject matter of the article. It rather records the writer's lamentations about the general apathy in Bangladesh towards the study of sculptures, which is not at all strange in a country where Islam is the religion of the people and the state as well. Just before the conclusion illustrations of three sculptures are given. But the absence of the other two hampers the reader's interest and understanding.

Bad English and methodological indiscipline have marred the quality of the article. Wrong spelling, words missing, redundant words, falty grammar, confused tenses, numbers, syntax etc. have created linguistic havoc throughout the article. The very title says "A Few Unique Bengal Sculpture . ." which is grammatically wrong because 'sculpture' after 'a few' has to be plural—'sculptures'. Other examples; (1) "VRM was established in 1910 under of Kumar S. K. Roy..." (p.63); (2) "Taranath[a] has not only discussed about stone-sculpture only but also . . ."(p.64); (3) "In several numbers of inscriptions/sculptures . . .(pp.64, 70); (4) ". . . at present there is dirth of it." (p.81); (5) ". . . all effort should be taken to grow awareness to ventilate the ideas on sculptural studies . . .;" (6) ". . . he has been described more than two arms" (p.65); (7) "The goddess is clad a sari. . ." (p.69); (8) ". . . other sculptures which belongs to this period . . ." (p.79). Absence of diacritical marks is a hazard. Many Sanskrit terms are wrongly spelt, such as 'Shiposhastram' [Shilpashāstram] 'Taranath' [Tāranātha] and Shūlpaṇi [Shūlapāṇi] (all on p. 64).

More agonizing is the anomally in the references. The writer provides end notes for references, but calls it 'Select Bibliography' which is strange. Then there are so many other deficiencies. First, lack or references: (1) Tāranātha's opinion (p.64); (2) 'According to some art historians' and 'art historians believe . . .' (p.64); (3) 'according to the scholars from the stylistic point of view . . .' (p.75); 'according to Susan L. Huntington . . ., (p.78). Second, vague references: (1) Note 10 (p.82) uses op.cit. but it is not clear whether it refers to earlier note 6 or note 8. (2) Notes 25 and 29 (p.82) are wrong, irregular and incomplete entries. (3) Note 26 (p.82) is confusing because it is not clear whether op.cit. refers to earlier note 25 or note 15. (4) Notes 7,9, 23 and 28 (pp.81-82) lack page nos. (5) Notes 2, 4 and 5 are vague as there is no information (date etc.) of the interviews. The reference 'NSP, p-58' on page 67 is also uniertelligible. It is strange that two different pieces of sculptures have the same accession no. (VRM 642) (p.77) in the same museum.

The first sentence on page 65 says that 'some unique <u>stone</u> sculptures' are to be described. But one of the five pieces described, *viz. Kalyānasundara* is made of bronze, not stone (p.71). No interpretation relevant to the so-called 'unique' sculptures is offered in the 'Evolutionary Process . . ." section (or elsewhere in the article). In fact, three (*Sarasvatī*, *Kalyānasundara*, and *Khadiravanī Tārā*) of the five sculptures have practically been shown to have followed the general trend (p.78-79) of the time. The other two are not-mentioned at all in this section. Then, whither

uniqueness? On the whole, this article is a very raw first draft by an immature writer

and should not have been printed on the pages of the JVRM.

A very solid article titled "A Hoard of Silver Punchmarks from Baigachha" (pp.99-124) has been contributed by Marie-Francoise Boussac and M. Shafiqul Alam. The brief but well-written text ($1\frac{1}{2}$ pages) offers very meaningful interpretation of the important finding. The information and ideas presented in the text has been supported by extensive notes which take much more space than the text itself, because of their rich and very informative content. Then follows a catalogue of the various types (sub continentally found and classified) to which the coins of the hoard belong. This has been followed by very good pictures of all the 33 pieces. The only errors I notice are two printing mistakes—(1) a redundant 'e' in the word 'Punchmarks' in the title, and (2) the word 'Coinage' in note 13 which should have been in italics. Absence of diacritical marks is a vexing element. Despite these negligible falts, the present reviewer earnestly feels that this piece is a work of original research which very much suits the VRM's goal and purpose. Indeed, it is the right piece to be the lead article of JVRM's present issue since the article on Arthaśāstra has little to do with the Varendra region or Bengal except the fact that this region was included in the Mauryan empire.

ARTICLES DEALING WITH MEDIEVAL HISTORY

A very good article has been penned by Shah M. Shafiqullah. "Calligraphic Ornamentation in the Umayyad Architecture" (pp. 83-91) is an interesting, informative, well-documented, and well-illustrated piece which presents a lucid account of Umayyad architecture in Palestine and Syria between AD 691-729.

(although a 743AD speciment has also been referred to)

Despite high quality of the article some drawbacks are however noticeable in it. (1) The intext reference mentions Figs.I, II, III and IV (pp. 85-86) but in the illustrations the numbers are given in Arabic numerals such as 1, 2, 3, 4 (pp. 87-89). Conformity is required in this case. (2) Khalifa Hisham's dates are given as 724-43 which is right. But then 'a ruined water-gauge dated 104/722-3' has been assigned to the reign of Hisham (p.86) [instead of that of Yazid II (AD 720-24)]. (3) Other discrepancies include: (a) different spellings of the same word such as Qusayr 'Amra and Qusyr' Amra (P.86), Qasr al-Hayr al-Gharbi (p.86) and Qusr al-Hayr al-Gharbi (pp. 86-90); (b) capitalization of the first letter is missing in 'magnificent' (p.85) and 'later umayyad' (p.86); (c) the word 'Kufi' on the 7th line on p. 86 has not been italicized unlike elsewhere; same is the case with the word 'Kitab' in note 1 (p.90); (d) the words 'op.cit.' are redundant in notes 10 and 20 (p.91); (e) 'p. 81-82' should be 'pp. 81-82' in note 10 (p.91).

Above all, legitimacy of inclusion of this article in JVRM may be seriously

questioned since its subject-matter has nothing to do with Varendra or Bengal.

Ashiara Khatun's article "Antiquities of Ghoraghat: An Unnoticed Mosque" (pp. 93-98) is important for its exploratory nature and treatment of a new item, viz. a ruined mosque found inside the Ghoraghat Fort in Northern Bangladesh. However, as usual with most articles in this issue of JVRM, this piece is also beset with too many linguistic and methodological failings. Even proper names have been misspelt. Thus, Nazimuddin has become Naziuddin (p.94), Buchanan has been repeatedly written as Buchaman (pp.94-95) and Niamatullah as Niamutuallah (p.97). Gobindaganj and Baroduari both have two different spellings (pp. 93, 96 and pp. 96-98 respectively).

Wrong spelling and bad grammer occur frequently in the text such as 'boarder out post' (p. 94), 'types of bulldings' (p.95), "the author . . . 'personality surveyed the fort" (p.95), ". . . palace are still in existence through in a ruinous state" (p.97). 'Baroduari' is sometimes put in italics (p.95) and sometimes not (pp.96-98).

More objectionable is the absence of necessary references. A long quote from Buchanan Hamiltion on p.94 has not been identified. And such a long quote should have been indented and put in smaller font and single space. Reference is also required for the last half of the next paragraph (pp.94-95). The five notes which are given at the end of the article do not seem to be correctly arranged in every case. Nos. 3 and 4 appear to have been interchanged. On the whole, the article is an interesting, informative and rather carelessly written piece.

AKM Shahnawaz has authored an article titled "Development of Cities in Bengal During Sultani Period According to Some Primary Sources" (pp. 125-132). In the introductory paragraph also the author has argued that in the absence of contemporary "hisotry-books" on the Sultani period, primary sources such as coins, inscriptions and traveller's accounts have been the foundation of his writing. But in the "bibliography" (actually End Notes) that he has provided at the end of the article all entries except one refer to secondary works. The solitary exception [no. 24 (p. 132)] has been used for only one information (Fig.8). Therefore, the article is based almost entirely on secondary sources, not primary ones.

Despite that, the article is profusely informative and reflects the author's genuine interest and diligent investigation in the subject. But his discussion on the name(s) of Bengal in the ancient period is somewhat redundant for the specific topic. On pages 129-31 the author has enlisted the names of 8 "cities" with some primary information and a few speculations about them. But there is hardly anything which gives any idea of their 'development'.

The article suffers from a number of errors, weaknesses and contradictions some of which are mentioned below:

(1) Arrival of Arab traders "in this county" "in the *eighteenth century*" (p. 125) is clearly wrong and is contradicted by the author's statement on p.127, "Arab domination . . . in the Indian Ocean during the *eight century.*"

(2) Another contradiction is noticed in the statement that "just after" Bakhtiyar Khalji's conquest of "Nadia in 1204" a new trend promoted the rise of new cities in Bangal (p.125), as compared to the statement on page 127 that "in the beginning of the thirteenth century a kind of decrepitude" prevailed in the "development of cities in Bengal".

(3) A third example of contradiction is to be found on page 128 where within the space of four lines such opposite statements, "there was no convenient communication system" [here 'communication' meaning transport] and "there was easily available water transport system" are printed.

(4) Some confusion on dates is also visible in this article. (a) Reign of Shashanka is given as AD 606-637 on page 126. But authentic historical works maintain the years to be AD 593-94-635(?). 606 AD is the date of Shashanka's rival Harshavardhan's accession. On page 129 a confusing statement says that an inscription of a Satgaon mosque engraved in 1487 contains Arsha Sajla Mangkahbad engraved in the reign of Jalaluddin Fateh Shah (1481-86)! Dates of most of the major Bengal Sultans are neatly provided with their names, but the practice has not been followed in cases of Shamsuddin Firoj Shah [1301-1320] and Nasiruddin Mahmud Shah [1442-1459]. Dates of Marco Polo, Rashiduddin,

Mahuan and Zoa D'Baros are also missing unlike those of the others of their

category.

There are some rather sweeping statements in the text which are supported neither by arguments nor by documentation. One example: "But in the degrading economic condition during the reign of Sena and Barmana (sic) ports and cities were about to be abolished." (p.127) First of all, the diction is grotesque. Sena and 'Barmana' [Barman] are not two rulers but two dynasties. So it should be "during the rule (not reign) of the Senas and Barmans." Moreover, ports and cities cannot be 'abolished', they can decline or disappear, or can be abandoned or obliterated. Now comes the question: What is the rationale of the statement? The author has argued that in the seventh century Huen Tsang and 'Yetsing' [sic] saw Tamralipti as a prosperous port. Then, with the Arab occupation in the eighth century of the sea trade in the Indian Ocean, Bengal economy declined. If it is so, then the crisis should have hit the Pālas who ruled from mid eighth to early twelfth centuries and the Chandras who dominated South Bengal in the tenth-eleventh centuries. But skipping those two dynasties the author jumps on the Sena and Barman rule in the 12th and 11th-12th centuries respectively to find ports and cities "about to be abolished"! A second example is also to be found down in the same paragraph (p. 127). The author observes, "In-this period [2nd half of the 14th century] trade was revived. The intellect of Arab traders was connected with it." Evidence? or reference? Nothing is provided in support of this statement.

The language of the article is badly weak in terms of grammar and diction. Glaring spelling errors include: Muslim rules [rulers] (p.125), Siltani [Sultāni], Kasbha [Kasba], Barah Mihir [Varāhamihira], Summa [Sūhma], Hogli (Hughli), (all on p.126); [Shamsuddin], Yetsing [I-tsing], Barmana [Varman/Barman], Debicoart[Debikot] (all on p.127); Pandus [Pandua], Chines [Chinese], Gaisuddin [Ghiasuddin] (all on p.131); beside [besides] (pp. 127, 131); reeearch [research] (p. 130); Atulsur [Atul Sur] (pp. 131-32, notes 2 & 5); Chattapadhya [Chattopadhyay] (p.132, note 6); Britanica [Britannica] (p.132, note 7); Zadabur (Jadavpur?] (p.132; note 13). There are also some strange/vague/wrong/ungrammatical expressions/ phrases in the text such as : (1) "During the very beginning of the Muslim rule" (p.126) [At]; (2) "The terms . . . originated during the reign of the Hindu [?] and it is found . . . " (p.126); "Praised highly of the port of Tamralipti (p. 127) [spoke highly of . . ,] (3) ". . . capitals [?] of mint-cities" (p. 128); (4) "It stood to the west ten miles from Tribeni." (p. 129) [ten miles to the west of]; (5) "Mention . . . made on one inscription . . . and to other inscription" (p. 130). The documentation is also

defective.

The End Notes/References have been labelled "Bibliography" which they are not. Note 7 (p.132) has referred to the Encyclopaedia Britannica without italicizing the title and without mention of edition or publication date which renders the reference invalid. In fact, references to sources like encyclopedias, dictionaries are given by entries, not by pages. Titles of articles should be within quote marks which are absent in such notes as 1, 7, 11, 12 and 17. No unpublished source such as a doctoral dissertation should be italicised but put in quote marks, unlike what has been done in note 13. The op.cit. in notes 23 and 25 are meaningless as there are two different publications in the same author's name in two earlier notes (1 and 13).

On the whole, the article under review is a haphazard extempore writing, which seems to have been printed without proper preview, editing and proof-reading.

ARTICLES ON TOPICS OF MODERN TIMES

The next article on partition migrants to Rajshahi town (pp. 133-151) penned by Mahbubar Rahman is hardly a historical study. It is a sociological investigation based mostly on interviews with only thirty immigrants out of many thousands. The first one-third of the article contains some general information and is based on only six documents. The rest is the author's reconstruction of which he gathered from his respondents. In terms of time also the article deals with too recent a subject (in fact) to be relevant to the VRM's concerns.

The last article (by M. Manirul Haque) (pp.153-160) deals with the history and significance of the Varendra Research Society and Museum, Rajshahi. It is a well-documented piece written in lucid prose, although some grammatical flaws are to be found here and there. By the very nature of the subject-matter the article had to be descriptive rather than interpretative. A contradiction is noticed regarding the date of inauguration of the VRM building—27 November 1919 is given on page 155 while page 157 records 1920. The name Akshay Kumar Maitra (one of the founding fathers of VRM) is to be frequently encountered in the article and the documentation. But most authentic publications give the celebrity's last name as Maitreya, not Maitra.

Some minor deficiencies are also noticeable in the "Notes and References" part.

GENERAL OBSERVATIONS

The Journal of the Varendra Research Museum Vol. IX (2004) is indeed a valuable publication that contains a good deal of new knowledge. This is a very useful document for future researchers. But it is laden with deficiencies of assorted kinds. It is all the more unfortunate as the issue has come after a long gap of ten years. There should not have been any dearth of time for review, revision and editing of the articles which must have come in rather gradually. Apart from that, it seems that no proper proof-reading was done before the final printing. A common set of rules should be followed for the JVRM (documentation and other matters) and those rules may be printed at the end of each issue. The cover, paper, print, and get-up are good. Many of the illustrations are good, but some are not (for example, Fig. 3 on p. 41). Then several illustrations are lacking e.g., Stone Pillar. B on p.54, Ratnasambhava and Avalokiteshvara in Maliha Nargis' article, and the mosque under discussion in Ashiara Khatun's article. One can only hope the VRM authorities will take much more care in producing their esteemed journal's future issues.

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Journals and Books (in English)

The Journal of the Institute of Bangladesh Studies, Vols. I—XXVIII (1976-2005)

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The New Province of Eastern Bengal And Assam (1905-1911) by M.K.U.Mollah (1981)

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History of Bengal: Mughal Period, Vol. 1 & 2 by Abdul Karim (1992,1995)

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