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PRECARIOUS HABITAT AND MARGINALIZATION: A CASE STUDY OF RIVERBANK EROSION DISPLACEDS IN BANGLADESH

Md. Zulfiqar Ali Islam*

Abstract: The paper deals with a recurrent phenomenon of riverbank erosion displacement to the riparian people of Bangladesh. The consequence of this environmental hazard directly contributes to the process of rapid marginalization and pauperization for its people. The paper encompasses the displaceds loss at both the individual and community levels and consequent change and mobility in their social hierarchy. It focuses their unflinching courage and resilience in their adaptation to the riverine environment of Bangladesh.

Introduction

The environmental disaster of riverbank erosion is a recurrent phenomenon to the riparian people of Bangladesh. It contributes directly to the process of rapid marginalization and pauperization for the people. Because it displaces millions of people from their riparian tract every year (cf. Elahi and Rogge 1990) and claims many lives and properties as well. The disaster often dislocates cultivable land and human settlements, and also it destroys standing crops, roads and communications. While the majority of rural people do not have access to food, housing, and medical facilities, the disaster of riverbank erosion further intensifies this alarming condition annually.

An estimate indicates that 85 percent people of Bangladesh lived below the poverty line in 1970s (see Karim 1998; Khondoker et al. 1995; FAO 1989, GPRB 1980). The incidence of the very poor declined from 43 percent of the population in 1991-92 to 36 percent in 1995-96; the incidence of the poor declined from 59 to 53 percent (World Bank 1998:1). In spite of this, perhaps 70 million people are seriously under-nourished, as they cannot afford sufficient food at current prices (BBS 1992; Tarrant 1982).

Since land is the principal resource to the rural people, this disaster aggravates the rate of landlessness, homelessness, and un- and under-employment. As a matter of fact, the overall social and economic development of the county receives deterioration in such alarming condition. It is surprising but the fact is that the riverbank erosion displaceds¹ of Bangladesh

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¹ The riverbank erosion displaceds are those who are displaced due to riverbank erosion at least once. The present study designates them as a distinct category of riparian people in Bangladesh. They have already lost their dwelling unit of homestead and have experienced at least one move due to the disaster of riverbank erosion. This concept has been used in this study to mean the displaceds population and the displaceds households as well. The displaceds are categorized into four: once, twice, thrice, and more than thrice. This categorization is based on the frequencies of their displacement from the riparian tract due to riverbank erosion.

have unflinching courage and resilience to adapt to their riverine environment. This paper explores the socio-economic loss and consequent immense sufferings of the riverbank erosion displacees of two Bangladesh villages—Sehala and Kaloni. Finally, the paper suggests some recommendations, which the policy planners may consider for their future planning of rural development.

Study Locale and Data Sources

Sehala and Sehala Kaloni—two medium-sized villages of Sadar Thana of Nawabganj District—have been selected as study locale. These two villages are covered by the same mauza.² They are located in the same physiographic and ecological setting. They have identical culture area, and regional economy. The geographical features of this thana³ indicate that more or less half of its area amounting to 91,039 acres is charland⁴. The unstable characteristics of the Ganges (see Hossain 1991; Kalam & Jabbar 1991) and the Mahananda attest the fact that the north bank of the Ganges (Bangladesh) and the both banks of the Mahananda are more susceptible to erosion. It is one of the worst erosion affected thanas in the country (see Currey 1979; Nazem and Elahi 1990). The principal rationale for selecting Sehala and Kaloni as study area is that a sizeable number of displacees from different erosion-affected areas of this thana have settled in these peri-urban villages in order to search for food, shelter, and employment. Since Sehala and Kaloni adjoin Nawabganj Town and Barind Tract, they provide the displacees with the access to the labour market of Nawabganj Town and to the agricultural employment of the Barind Tract as well. The sample size of the village of Sehala is 36 displacee households (20.34% of the total) and its population is 233 (23.49% of the total). Another village Kaloni has 104 displacee households (55.03% of the total) with a population of 533 (57.68% of the total). The present study considers all the displacee households of both the villages as the appropriate primary sampling units. The displacee household heads were directly interviewed and in this way they represent each sampling unit. The study is based on an extensive fieldwork for a period of 12 months from July 1991 to June 1992. The empirical data of this study have been updated in 1994-95. The villages were surveyed intensively with two structured questionnaires. Additionally, other supplementary methods of participant observation, informal interviewing, group discussion, case histories, and case studies have been adopted for examining the accuracy of data collected.

² It is a geographically defined land revenue unit. The land revenue survey undertaken by the Government of British India coined the term *mauza* for revenue purposes. It was the unit of this survey. This was defined in the note of Directions for Settlement Officers, 1849 as a parcel of land which had a separate name in the revenue records, i.e., practically a local subdivision of an estate or *mahal* (Nelson 1923; Wilson 1855). *Mauza* is nothing but the lowest revenue area for which the settlement records were prepared in 1850. One *mauza* may comprise one or more villages.

³ It is a higher tier of the local government administration in Bangladesh. It is positioned in third step of administration, i.e., Division, District and then *thana*. It comprises two or more unions and district comprises two or more *thanas*. It is estimated that its administrative area is about 181 sq. km on an average and an average of 176,000 population live under its administration.

⁴ A mid-channel islet in the riverbed is called *charland* in Bangladesh. It is any accretion in the river, which may be seasonal or may survive for several decades. *Charlands* are abundantly found in the large rivers of Bangladesh, such as, the Ganges, the *Jamuna*, etc. The intense competition among floodplain inhabitants to cultivate these *charlands* and/or to settle on it creates social clash in terrible form. These lands were regulated in the British India by Bengal Regulations XI, 1825 (see Wilson 1955).

Patterns of the Displacees Socio-economic Loss

The cataclysm of riverbank erosion causes an enormous loss of the riparian people. The pattern of displacees loss may be categorized into following manner: loss at the individual level, and loss at the community level. The displacees of Sehala and Kaloni reported the loss at the individual level due to riverbank erosion principally includes land erosion, crops damage, and damage to tangible properties. The food shortage, damage to transport and communication, lack of drinking water and sanitation facilities have been included into the loss at the community level. It eventually presents the displacees a tremendous reduction of employment opportunities and income as well.

Loss at the Individual Level

All the displacees of Sehala and Kaloni lost their land—agricultural and homestead—due to riverbank erosion (Table 1). Both the cultivable land and homestead of three-quarter displacees of Sehala and more than 87 percent of Kaloni have been eroded and dislocated by the attack of riverbank erosion. The rest one-quarter from Sehala and 12.50 percent displacees of Kaloni lost their homestead only. The loss of land reduces their sources of employment, production, and income. At the end, they were compelled to receive a radical change and mobility in their socio-economic standing.

Riverbank erosion causes a considerable damage to the standing crops of the displacees. It is found that 30.56 percent displacees of Sehala and more than 72 percent of Kaloni suffered from the damage to their crops stood on the land for receiving maturity. To reduce the loss of crop damage, some of the displacees cut their immature crops from the field and/or some of them grazed cattle on that cropping field subjected to the erosion-attack of river. The damage to food crops result into food shortage at the community level.

More than 58 percent displacees of Sehala and more than 88 percent of them reported that riverbank erosion offered them a huge damage to their tangible properties. The tangible properties include houses, trees, crops, land, source of drinking water, places for defecation, and the like. Haque (1991) found that a little more than 86 percent of the respondents indicated the damage to their properties due to riverbank erosion. It renders them destitute and helpless in confronting with the cataclysm of riverbank erosion and in adapting to the hazardous environment on their riparian tract as well.

Since all the displacees of both villages lost their cultivable land and homestead plots due to riverbank erosion, no variation has been found in this regard of the basis of any social variables. Nevertheless, the displacement status marks out that the preponderant majority of once, twice, and thrice displacees of Sehala and Kaloni suffered from the damage to their properties. Moreover, the second highest proportion of more than thrice displacees (91.30%) lost their standing crops due to erosion. The correlation is partially positive at 0.8901 level for Sehala and at 0.3673 for Kaloni.

While all the average, poor, marginal and nearly half of landless displacees of Sehala lost their properties all the average, poor, and marginal peasant displacees of Kaloni elicited the damage to their crops and to their properties as loss due to erosion. More than 86 percent landlines of Kaloni referred to the damage of their properties. The correlation is significant at 0.5550 level for Sehala and at -0.6867 for Kaloni.

The majority of upper (66.67%) lowers (62.50%) and marginal (56%) income groups of Sehala considered their damage to properties. At the same time, 91.67 percent upper and 92.73 percent marginal income groups of Kaloni referred to their damage of properties due to erosion. ON the other hand, 87.50 percent of middle and about 86 percent of lower income groups of Kaloni indicated their loss of standing crops. The relationship is significant at 0.6557 level in Sehala and at 0.9667 in Kaloni.

Table 1
The Displacees' Loss at their Individual Level

Variables	HH		Land-Loss		SEHANA=36		Property Damage		HH		Land-loss		KALONI=104		Property Damage	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Displacement Status																
Once	26	100.00	26	30.77	8	30.77	14	53.85	39	100.00	39	100.00	25	60.10	35	89.74
Twice	6	100.00	6	33.33	2	33.33	4	66.67	24	100.00	24	100.00	18	75.00	21	87.50
Thrice	4	100.00	4	25.00	1	25.00	3	75.00	18	100.00	18	100.00	11	61.11	16	88.89
More Than Thrice	-	-	-	-	-	-	-	-	23	100.00	23	100.00	21	91.30	20	88.96
	$\rho=0.8901$								$\rho=0.3673$							
Land Ownership																
Rich Peasant	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Average Peasant	1	100.00	1	100.00	-	-	1	100.00	1	100.00	1	100.00	1	100.00	1	100.00
Poor Peasant	3	100.00	3	33.33	1	33.33	3	100.00	5	100.00	5	100.00	5	100.00	5	100.00
Marginal Peasant	3	100.00	3	66.67	2	66.67	3	100.00	12	100.00	12	100.00	12	100.00	12	100.00
Landless	29	100.00	29	27.59	8	27.59	14	48.28	86	100.00	86	100.00	57	66.28	74	86.05
	$\rho=-0.5550$								$\rho=0.6867$							
Annual Income																
Upper	3	100.00	3	100.00	-	-	2	66.67	12	100.00	12	100.00	10	83.33	11	91.67
Middle	-	-	-	-	-	-	-	-	16	100.00	16	100.00	14	87.50	13	81.25
Lower	8	100.00	8	37.50	3	37.50	5	62.50	21	100.00	21	100.00	18	85.71	17	80.95
Marginal	25	100.00	25	32.00	8	32.00	14	56.00	55	100.00	55	100.00	33	60.00	51	92.73
	$\rho=-0.6557$								$\rho=0.9667$							
Educational Status																
Graduate	1	100.00	1	100.00	-	-	1	100.00	2	100.00	2	100.00	1	50.00	2	100.00
Higher Secondary	-	-	-	-	-	-	-	-	2	100.00	2	100.00	1	50.00	2	100.00
Secondary	1	100.00	1	100.00	-	-	1	100.00	11	100.00	11	100.00	7	63.64	9	81.82
Primary	6	100.00	6	16.67	1	16.67	4	66.67	9	100.00	9	100.00	6	66.67	8	88.89
Illiterate	28	100.00	28	35.71	10	35.71	15	53.57	80	100.00	80	100.00	60	75.00	71	88.75
	$\rho=-0.5997$								$\rho=-0.6330$							
N	36	100.00	36	30.56	11	30.56	21	58.33	104	100.00	104	100.00	75	72.12	92	88.46

The educational status shows that all the displacees of Sehala educated up to secondary and graduate levels, two-third of primary educated and more than half of illiterate displacees referred to their loss of properties. Simultaneously all the graduate and higher secondary and the significant proportions of secondary (81.82%), primary (88.89%) and illiterate (88.75%) displacees of Kaloni shows the same evidence in this regard. The educational status and individual loss are correlated at 0.5997 level for Sehala and for Kaloni at 0.6330.

Loss at the Community Level

A considerable proportion of the displacees indicated that riverbank erosion causes, in the last, food shortage at the community level. Their proportion is three-quarters of Sehala and 80.77 percent from Kaloni (Table 2). They claimed that riverbank erosion damaged their standing crops to a greater extent and the production of food crops was significantly reduced. The disaster of riverbank erosion deprived them of having foodgrain for household consumption and for sale as well. They suffered from food shortage in respect of their production subjected to riverbank erosion. Eventually, the food shortage at household level results into the scarcity of foodgrain in market and it multiplies the reference price-rate of foodgrain.

One-quarter displacees of Sehala and more than 17 percent of Kaloni mentioned that roads, highways, and flood-protecting embankment were also destroyed by the attack of riverbank erosion. The destruction of roads and highways breaks the established communication and transportation off. In addition to that, the serious damage of embankment causes high flood on the riparian tract and it sweeps away the lives and properties of the riverine people.

The displacees of Sehala and Kaloni were suffered from the scarcity of drinking water after displacement from their original homestead due to riverbank erosion. This disaster destroys their sources of drinking water, such as, tubewell, ringwell, etc. After displacement, most of them made their hut on flood protecting embankment and it developed a clustered settlement of them. They were compelled to carry drinking water from the sources situated in the premises of neighbours' homestead and/or from the sources located in the neighbouring villages. They were not provided with any water source from the institutional sources. Nearly 39 percent displacees of Sehala and about 55 percent displacees of Kaloni mentioned that they found no source of drinking water on the BWDB5 embankment and they had to grapple with the scarcity of drinking water.

Most of the displacees confessed that they did not have any latrine in the premises of their original homestead. They were habituated of defecating in bushes near the riverbank and/or at anywhere and everywhere (cf. Karim 1992). They found no such facilities at their clustered settlement on the flood-protecting embankment. They were compelled to defecate in the dark in the open places. In case of emergency in the daytime, the female displacees used the latrine owned by their neighbors. They reported that this situation sometimes resulted into unpleasant relations with the latrine-owners. It was sheer matter of embarrassment for both the parties. One-quarter displacees of Sehala and more than 14 percent from Kaloni lost their latrines due to erosion. Except for this proportion, the displacees of both the villages were used to defecating anywhere and everywhere. And till now they are not aware of using latrine especially sanitary one.

⁵ Bangladesh Water Development Board.

Table 2 : The Displacees' Loss at their Community Level

Variables	HH N	SEHALA=36	HH N	Lack of Sanitation	Transport & Com.	Drinking Water	Food Shortage	HH N	Food Shortage	Transport & Com.	Drinking Water	Lack of Sanitation
Displacement Status												
Once	26	6	26	8	6	10	20	39	33	6	20	2
Twice	6	23.08	6	30.77	23.08	38.46	76.92	39	84.62	6	51.28	5.13
Thrice	4	50.00	4	16.67	50.00	50.00	50.00	24	91.67	5	14	4
More than thrice	-	-	-	-	-	25.00	100.00	18	12	3	11	3
								23	66.67	4	45.83	16.67
									73.91	17.39	52.17	26.09
Land Ownership									$p=0.6174$			
Rich Peasant	1	-	1	-	-	-	-	1	-	-	-	-
Average Peasant	3	100.00	3	-	100.00	100.00	100.00	5	3	100.00	3	100.00
Poor Peasant	3	100.00	3	33.33	100.00	100.00	100.00	12	60.00	80.00	60.00	80.00
Marginal Peasant	29	33.33	29	-	2	66.67	33.33	86	75.00	58.33	11	66.67
Landless	3	75.86	3	9	11	37.93	75.86	12	83.72	6	43	3
									$p=0.6159$	6398	50.00	3.49
Annual Income												
Upper	3	100.00	3	-	1	1	100.00	12	3	5	2	2
Middle	-	-	-	-	33.33	33.33	100.00	16	25.00	41.67	16.67	16.67
Lower	8	87.50	8	1	1	2	7	21	56.25	25.00	5	9.52
Marginal	25	68.00	25	8	7	11	17	55	90.48	19.05	15	8
									$p=0.3969$	35	35	14.55
Educational Status												
Graduate	1	100.00	1	1	-	1	100.00	2	1	2	2	2
Higher Secondary	-	-	-	-	-	-	-	2	50.00	100.00	100.00	100.00
Secondary	1	100.00	1	1	-	1	100.00	11	7	8	7	6
Primary	6	8.3.33	6	3	2	3	100.00	9	63.64	72.73	63.64	54.55
Illiterate	28	71.43	28	5	9	50.00	20	80	66.67	22.22	55.56	33.33
									$p=0.7032$	5	41	2
									86.25	5.00	51.25	2.50
									$p=0.5744$			
N	36	27	36	9	14	38.89	75.00	104	84	18	57	15
									80.77	17.31	54.81	14.42

Note: Decimal figures indicate percentages & multiple responses considered.

The displacees loss at the community level is marked out by their displacement status in the following way. All the status groups had to suffer from food shortage as they had lost their standing crops of foodgrain due to riverbank erosion. In respect of landownership, all the average and poor peasant displacees of Sehala also referred to the shortage of food due to same reasons. A different evidence is shown by the average and poor peasants of Kaloni. The only average peasant and 80 percent of poor peasants elicited the destruction of transport and communication and the lack of sanitation facilities as well at the community level. While two-third of marginal peasants from Sehala considered the lack of drinking water, more than 31 percent of landlines people of the same had to suffer from the lack of sanitation during the period of shelter on the BWDB embankment. On the other hand, three-quarters of marginal peasants and nearly 84 percent of landlines from Kaloni had to suffer from food shortage, as they did not have any adequate income to meet their daily food requirements. It is noticeable that the reference price-rate of foodgrain was highly fluctuated as the standing crops of foodgrain were massively damaged by the attack of erosion.

The annual income status shows the same findings. The preponderant majority of all income groups had to suffer from food shortage at the community level. The educational status also shows the same evidence with a little difference. All the graduate and secondary level educated displacees, more than 83 percent primary educated and 71.43 percent of illiterate displacees from Sehala referred to the food shortage as the loss at the community level. The only one graduate and the single secondary level educated displacees of this village also elicited the lack of drinking water and sanitation facilities in this regard. At the same time, all the graduate and higher secondary level educated displacees of Kaloni found the destruction of transport and communication, lack of drinking water and sanitation facilities as the loss of their community caused by riverbank erosion displacement. Moreover, the preponderant majority of secondary educated displacees referred to the destruction of transport and communication, land that of primary educated and illiterate displacees mentioned the food shortage as the loss of their community. It can be inferred that the educated displacees deserve the quality of appreciating their community level loss induced by the cataclysm of riverbank erosion.

The statistical analyses indicate that displacement status is partially positively correlated with their identification of loss at the community level. It is significant at 0.9496 for Sehala and at 0.6174 level for Kaloni. The variables of land ownership, annual income, and educational status show partially negative correlation. It is because that the landlessness, un- and under-employment, and illiteracy are the trademark of this vulnerable people on the riparian tract of Bangladesh.

Change in Marital Status

The enormous loss induced by riverbank erosion causes a radical change and consequent mobility in the displacees' socioeconomic status. Their socio-economic capacity in social hierarchy has been remoulded in deterioration by this disastrous situation.

They have received dislocation in their marital status. Their age structure indicates that Sehala and Kaloni have 4.73 percent unmarried female displacees each (Table 3).

Table 3
 Mobility in the Socio-economic Status of Displacees

Socio-economic Statue	SEHALA HH: N=36 Pop. N=148		KALONI HH: N=10 Pop. N=317	
	N	%	N	%
Marital Status				
(Marriageable population)				
<i>Unmarried Women</i>	7	4.73	15	4.73
<i>Divorce Women</i>	1	0.68	4	1.26
<i>Widow</i>	3	2.03	22	6.94
<i>Widower</i>	10	6.76	26	4.20
Land Ownership				
<i>Upward Vertical Mobility</i>	-	-	-	-
<i>Downward Vertical Mobility</i>	23	63.89	88	84.52
<i>Horizontal Mobility</i>	13	36.11	16	15.38
Occupational Status				
<i>Upward Vertical Mobility</i>	-	-	-	-
<i>Downward Vertical Mobility</i>	21	58.33	67	59.62
<i>Horizontal Mobility</i>	15	41.67	37	40.38
Residential Pattern				
<i>Upward Vertical Mobility</i>	1	2.78	2	1.92
<i>Downward Vertical Mobility</i>	11	30.56	34	32.69
<i>Horizontal Mobility</i>	24	66.67	68	56.38

1.35 percent female displacees of Sehala and 1.26 percent from Kaloni to be unmarried although they have reached at the marriageable age.

Case # 1

Amiran Khatun of Sehala is 38 years old. She is with her window mother and until now she is unmarried. After the riverbank erosion displacement, her father expired being stroked and her brothers started to lead their nuclear family life. She has no schooling. None of her kingroup and neighbours undertakes any effort to make her wedlock. It is because of her desolated economic standing due to riverbank erosion displacement. She has bought a sewing machine and lives on it. She earns □ 20.00 per day.

Sehala has 1 (0.68%) divorcee woman among the displacees and Kaloni has 4 (1.26%) divorcees. Their parental families have been rendered destitute after receiving riverbank erosion displacement. Such situation compels their parental families to be unable to satisfy their husband's demand for dowry. As a matter of fact, 2 (0.63%) of 20-44 age group from Kaloni were divorced by their husband. One of the widows from Sehala and one of the widowers from Kaloni have lost their conjugal partner due to the riverbank erosion-attack. The widow's husband expired being stroked after receiving riverbank erosion displacement. And the widower's wife was victimized by the attack of riverbank erosion during her bathing in the river Mahananda. The field data attest the fact that the preponderant majority of the displacees who have received immense sufferings to their marital status due to riverbank erosion are women.

Social Mobility in Land Ownership

Following the national classification of land ownership (BBS 1981b, 1984; see also Abdullah, Hossain and Nations 1976; Alamgir 1975) the land ownership pattern of the displacees of Sehala and Kaloni has been stratified into following five strata.

1. Marginal Peasant occupies up to 1.00 acre of land;
2. Poor Peasant owns land between 1.01 and 2.50 acres;

3. Average Peasant holds 2.51-7.50 acres of land; and
4. Rich Peasant has land of 7.51 acres and above.

The field-data indicate that due to riverbank erosion, the proportions of landlines from Sehala and Kaloni are increased from 25 to 80.56 percent and from 12.50 to 82.69 percent respectively. The present proportions of landlines are more than 3 times multiple for Sehala and nearly 7 times for Kaloni. Land is the primary but very scarce resource in rural Bangladesh. Nevertheless, agricultural land provides about 90 percent of rural population (Jansen 1987) or more than 80 percent of the total population (Halli 1991) with employment and source of income. The preponderant majority of Bangladeshis continue to depend, in one way or another, upon the rural land resources (Elahi and Rogge 1990). The land ownership ascribes the requirements of survival and social status and privilege to the members of an agrarian society like Bangladesh.

The dislocation of land due to riverbank erosion causes an intergenerational mobility of the displacees in their land ownership status. It shows horizontal and downward vertical mobility but it has no upward way. It is indicated that nearly 64 percent displacees from Sehala and 84.62 percent of Kaloni are impelled to join the lower strata of landholding (Table 3). On the other hand, in spite of erosion, more than 36 percent displacees of Sehala and 15.38 percent from Kaloni horizontally remain in their respective strata of land ownership.

Social Mobility in Occupational Status

The occupations of displacees household heads has been ranked on the basis of their socioeconomic status in the community. Agriculture is at the top of this rank-order. It is followed by teaching, business, service, sharecropping, tailoring, building construction, hiring out bullock cart, rickshaw-pulling, hawking, agricultural labour, day labour, hair cutting, and maidservant. The downward vertical mobility and horizontal mobility are occurred in the displacees occupational status. It is due to riverbank erosion and consequent perennial loss of homestead, and cultivable land, of them. This precarious situation causes the fall of their economic standing and compels to accept any type of odd job for survival.

The displacees of both the villages also received downward vertical mobility in their occupational status. They account for 58.33 percent of Sehala and 59.62 percent of Kaloni (Table 3). The horizontal mobility is occurred in the occupational status of 41.67 percent displacees households of Sehala and of 40.38 percent of Kaloni.

The displacees lost their homestead, cultivable land, and other tangible goods due to riverbank erosion. Consequently, they are compelled to receive a great fall of their economic standing. After displacement, they migrated to Sehala and Kaloni from their places of origin. In order to survive, they are forced by changing environment to receive any odd and/or low-paying job.

It is revealed that 27.78 percent of Sehala and nearly 26 percent displacees from Kaloni were engaged in occupations based on manual labor before their displacement. These proportions of them are raised to 80.56 percent for Sehala and more than 66 percent for Kaloni after their displacement. The present proportions are 2.9 times multiple for Sehala and 2.56 times for Kaloni in comparison with their pre-displacement status of manual labour-based occupations.

This finding is empirically supported by the findings of Lomnitz (1977) in the Mexican socioeconomic context. He found that the marginal is engaged in unaffiliated and low-paying manual labour, unpaid family labour, and small-scale family enterprises. Nevertheless, the findings of this study do not correlate with Lewis' concept of culture of poverty'. Lewis

(1966) inferred that in Latin America, urban poor causes their own poverty as they use deviant behaviour and attitudes in socio-economic interactions.

The nature of mobility in occupational status of the displacees of Sehala and Kaloni indicates a wide diversity of occupation. They were engaged in 8 different types of occupation before displacement, while after displacement they are compelled to do 14 types of occupations. Most of their present occupations are physically rigorous and/or low paying. The tasks of these occupations are really pig though the displacees have been doing that in order to survive in their hardship.

Change in Residential Pattern

The hierarchy of the displacees' residential pattern comprises concrete structure of houses at the top, mixed structure at the middle, and non-concrete structure at the bottom. It is found that only 1 (2.78%) displacee household of Sehala and 2 (1.92%) of Kaloni have received upward vertical mobility (Table 3). It is because these households have good economic standing based on service in abroad and business. To resettle in Sehala and Kaloni, 30.56 percent displacees of Sehala and 32.69 percent from Kaloni are failed to deserve of its original status in residential structure on the riparian tract. They have received downward vertical mobility in this respect. On the other hand, two-third displacees of Sehala and 65.38 percent of Kaloni have deserved their original status of dwelling unit albeit they received riverbank erosion displacement.

Change of Family Type

The riverbank erosion also caused structural mobility in the displacees' family type. The field data also indicate that the displacees of Sehala had 77.78 percent joint and 22.22 percent nuclear families. Nearly 43 percent of joint and all the nuclear families did not receive any structural change but achieve horizontal mobility in their structure. In Kaloni, the displacees had 68.27 percent joint and 31.73 percent nuclear type of families. Nearly 43 percent of joint and all of nuclear families received horizontal mobility after displacement as they are in the status quo.

Moreover, 57.14 percent of joint families from Sehala and 80.20 percent of Kaloni are structurally rendered nuclear families. It is because that the displacees started to lead nuclear family life, as they have to confront with economic hardship caused by erosion. In nuclear family life, the family heads have to bear the liability of few members and they found it easier than that of joint families.

Conclusion

Since riverbank erosion dislocated cultivable land enormously, the source of employment and income of the riparian people is reduced to a very great extent. The displacees of Sehala and Kaloni were dependent on land and agricultural activities in respect of getting employment and of earning income. Almost all of them were cultivators and agricultural labours in their original setting of the riparian tract. Since they lost their cultivable land due to erosion, the landholders become landlines or peasant of less amount of land. The employers become unable to employ agricultural labourers and the labourers found no employment in agricultural sector. The agricultural production and income of the landowners were significantly reduced and the sources of employment and of income of the landless displacees are limited and reduced as well. As a matter of fact, their employment market and income level was tremendously deteriorated by the cataclysm of riverbank erosion.

The mobility and changes in socio-economic status of the displacees tremendously mould the formulation and undertaking of strategies for their survival in the precarious environment. It usually limits their skills and opportunities of employment in one way or another. Because of their downward vertical mobility in their socio-economic status, they lost their socio-economic capacity and status in social structure. The riverbank erosion presents a prodigious need to the displacees and they are compelled to meet these needs in their own ways in the devoid of institutional response.

Policy Recommendations

The findings of this study claim some policy implications. The government and non-government organizations should respond to the displacees' prodigious needs induced by riverbank erosion. This response should be made in the immediacy of riverbank erosion for aiding the displacees in their environmental adaptation on the riparian tract.

- The measures for prevention of riverbank erosion require a large-scale engineering works and huge financial cost. Since it is not possible for the individual to undertake effective measures in this respect, the government should do the job in time.
- The displacees to be sheltered at any cost in the immediateness of erosion. The government should provide adequate assistance of shelter for them.
- The displacees expect that the food ration should be pressed into service by the government in the immediacy of riverbank erosion. Because they have to grapple with food crisis and thus the emergency food ration may lessen their sufferings.
- They are subjected to health hazard and the epidemic is its ultimate result. They government should provide them with health care and low-cost house with sanitary latrine and clean drinking water facilities. This assistance will aid them in adapting to their reverie environment.
- The financial assistance and housing materials are crucial to the restatement of the displacees. They receive meagre financial assistance from their neighbours and/or kin but not from any organization. They expect that the government and/or non-government organizations should be the viable sources of such assistance. The government should provide them with a homestead plot for their resettlement.
- Riverbank erosion affects all the riparian people tremendously through eroding agricultural land and destroying employment facilities which land could provide with them. The displacees expect that the government should provide employment in non-agricultural sector for them for their survival.

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CHANGING ROLE AND ROLE-CONFLICT OF THE RURAL WORKING WOMEN IN A BANGLADESH VILLAGE

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Abstract: The paper attempts to highlight some of the important issues regarding changing role and role-conflict of the working women of Puthiara village in the district of Rajshahi. The changes that have taken place in the role performance of the rural working women have been emphasized. The conflicting situation faced by the rural working women in performing household works and works in the working places has been analysed.

Introduction

Traditionally women are bound up with the homestead closely, but they have performed many productive activities along with the household activities. It is said that the women invented agriculture and still today they are largely involved in post harvest works. In this way they are performing diversified roles in their whole lives. Their contribution in the household works as well as nation building is important. "But it is found that no nation, developing or otherwise, calculates the contribution made by women outside the so called 'productive' labour forces"¹

Socialization process, sex based division of labour, patriarchal social system and religious ideology generally determine the separate roles for men and women. From the very childhood a girl develops her attitude, personality, behaviour etc. in accordance with prevailing social norms and values. Socialization process is responsible for the sex appropriate behaviour. In this context, Chatterjee (1988) has commented on Indian society, which is also important in understanding the socialization process of our society. Chatter states that "the earlier conditioning of the girl child through psychological brain washing and socialization processes which clearly outline the differences between "boy's work or play", and "girl's work or play, "boy's toys" and "girl's toys", help women to become strong advocates of the importance of the mother-wife role in a woman's life"²

In addition to that, the division of labour on gender lines put women into domestic realm. It is a general notion that women are not fit for performing outdoor works because of the obvious physical differences between men and women. This kind of sexual division of labour allocates indoor work to women and outdoor work to men.³ Women of rural areas are found hard working within their households. They usually spend long time (approximately 14 hours) a day to perform unpaid household chores and also performing the post harvest work.⁴ It is assumed that domestic works are obvious and compulsory for women. Accordingly they are termed as inactive and housewives. This assumption ignores the value of women labour.⁵ In a purdah bound society, especially in rural areas, it is assumed that involvement of the income earning activities outside the home deteriorates the social status of women. Hence, all works of our society divided into two categories —masculine and feminine.⁶

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With the change of time, human needs and ideas have also been changing. During the 1970s and onward women have started to come forward and opted for income generating activities and indeed have in many cases broken the rigidity of purdah. In this connection Custers (1997) has stated that "... after Bangladesh was struck by famine in 1974, landless women are forced to look for outside employment. They started ignoring the rules of seclusion, or purdah, because of the need to ensure their own and their families' survival."⁷ Involvement in outdoor employment indicates their changing roles in the society. Those who are educated they can opt for a prestigious job but women without formal education and skill, involved themselves into the work related to physical labour. It is found in many surveys that women contributed 25% to 30% of the total income of the poor families in our rural areas. There are 55% to 77% women of the landless families engaged themselves as labourers and try to contribute their families economically.⁸

However, this changing situation indicates a new dimension of women's role. Involvement in outdoor income earning activities creates some extra pressure on the working women. In addition to the traditional role as housekeeper, they have to perform some new responsibilities in their working place and thus, suffer a mental tension – the role-conflict. Working women have to maintain a balance between the household duties and the duties of working place. Rahman's (1996:20) statement about the role-conflict among the working women may be mentioned here. He states that "although the women participate in outdoor income earning activities, it is expected that they must have to perform all the household responsibilities, too. After performing all the domestic works, they may spend their time in outdoor income earning works. To maintain this social value, they have to face critical situation and thereby they suffer from internal conflict."⁹ Similar observation was made by Islam (1975)¹⁰ and Sood (1991)¹¹.

The paper deals with the problems faced by the rural working women in performing their dual roles. Types of role-conflict, level of satisfaction with the dual roles and the coping mechanisms adopted by the rural working women are the major focus of the study. Major objectives of the study are: i) to examine major changes in the role of the rural working women; and ii) to understand the role-conflict of working women as 'house keepers' and 'wage earners'.

Methodology

This paper has been done principally on the basis of the primary data collected from the Puthiara village of Rajshahi district during the period of October, 1995 to August, 1996. Anthropological method of participant observation was adopted for data collection. In addition to that, household census, interviews of the working women and a few case studies were undertaken for data collection.

Puthiara is a peri-urban village approximately 15 km. north of Rajshahi city. It has a population of 1777 of which 901 are males and 876 are females. The total number of household is 388. As it is a peri-urban village, a sizeable number of the working people (45.1%) are engaged in various types of non-agricultural occupation. On the other hand, 55.9% people are engaged in agriculture and agriculture related occupation.

In Puthiara, a total number of 95 working women are found to be involved in various types of income earning works. Out of these 95 working women, 74 (77.9%) are engaged in two rice mills of this village as day labourers, 5(5.3%) are engaged in sari selling, 3(3.15%) in service and others are engaged in poultry raising, petty business, maid servants, earth cutting etc. All these 95 working women are married, of which 47 (49.5%) live with their husbands, and the rest are divorced, widowed or separated from the husbands. Most of the working women (77.9%) are found to have no formal educational background where only two (2.1%)

are found to have attained education upto the secondary level. The working women of Puthiara village are found between 15 to 65 years of age. It may be mentioned that out of the total-working women 42 (44.2%) are the household heads.

Changing Pattern of Role and Role-Conflict of Working Women in Puthiara

This section discusses about the role of the working women in their households and working places and tries to understand the nature of role-conflict in the context of Puthiara village. Different dimensions of changing roles and role-conflict of working women are analysed. The amount of time they spend in the working places and household works, the problems they face by performing the dual roles, the conflicting situation they encounter by performing the dual roles, the mechanism they developed to cope with this situation are some of the important issues discussed in this section.

Time Spent by the Working Women in Working Places and Their Roles in Working Places

The working women of Puthiara (especially who work at rice mills) usually spend almost dawn to dusk in their working places. They expressed their unhappiness regarding this inhuman labour to which they are subjected to by their employers. They cannot complain against the authority who let them perform their labour to an intolerable degree due to the fact that they would lose their jobs if they are unwilling to do so.

It is observed that there is a relation between the nature of the works done by the respondents and the time spent by them in their working places. Table-1 shows how much time they generally spend in their working places in a day.

Table 1
Hours in a Day by the Working Women at their Working Places

Hours	No. of Respondents	Percentage
3-5	12	12.63
6-8	14	14.74
9-11	8	8.42
12 & above	61	64.21
Total	95	100.00

Source: Field notes, 1995-96

Table - 1 indicates that maximum respondents, that is, 61 (64.21%) spend approximately 12 hours a day in their working places. All of them work in the rice mills. Again 14 (14.74%) and 12 (12.63%) respondents are found to work between 6 to 8 hours and 3 to 5 hours respectively. Table also shows that 8 (8.42%) respondents work 9 to 11 hours a day.

Women who are engaged in paddy processing work, start their work at 6:00 a.m. All day long they perform their duties one after another. They boil the paddy and dry up them under the sun for whole day. While doing this they have to be careful, because the quality of rice depends on the level of dryness. For that they roll and spread the paddy several times a day. After drying, they sweep them together and do the winnowing. At the last stage, they put the paddy in the bags and make them ready for carrying to the mill for husking. They also do the winnowing after husking the paddy and separate the chaff from the rice.

Generally, their work comes to an end at around 6:00 p.m. After day's hard work, they wash themselves and come back to their residence. It is notable that they do not get weekly leave from their employers.

On the other hand, the working women who are engaged in other types of occupation, spend relatively less time in their works. Sari sellers, hawkers and such other workers usually have no time limit for their work. In other words, they are 'free workers.' However, they may work for a longer period for a better earning. Service holders, earth workers and maidservants usually work till the time desired and fixed by the employers. They generally work for seven to nine hours a day. Women who are engaged in small scale poultry raising and petty business usually work for four to six hours.

Now obviously question arises that how do they manage household works while they have to spend such a long period of time in their working places. It is observed that they really face difficulties in managing both household works and works for income earning.

Role of Working Women in Household Chores

Traditionally women have to accomplish the household chores. But when the same women engage themselves in income earning activities, it does naturally affect their daily household activities. Here attempts have been made to analyse whether there is any change in the role of the working women's household chores. It has been done through a comparative analysis of the household chores of the working women of Puthiara before and after their entrance into income earning activities. The comparative data are presented in Table-2(A) and 2(B). It may be mentioned here that household chores include cooking, washing clothes and utensils, cleaning the house, fetching water, rearing of children, looking after children's education, looking after husband and other members of the family, poultry raising and grocery shopping.

Table-2(A) demonstrates that before entering into income earning, 82 (86.32%) respondents performed the household chores like cooking, washing clothes and utensils, cleaning the house, fetching water by themselves. Again, 67 (70.52%) respondents used to perform their child rearing responsibilities by themselves. Before income earning only 18 (18.94%) respondents had school going children. Among them 8 (8.42%) respondents used to perform this responsibilities by themselves. Table also shows that 46 (48.42%) respondents used to perform the poultry raising activities by themselves. It is important to mention that before income earning not a single respondent performed the work of grocery shopping. For this work they were totally dependent on the male members of their households.

Table 2(A)

Types of Household Chores Performed by the Working Women Before Income Earning

Household Chores	Self	Self & Others	Others	Total
Cooking	82 (86.32)	9 (9.47)	4 (4.21)	95 (100.0)
Washing clothes & utensils	82 (86.32)	9 (9.47)	4 (4.21)	95 (100.0)
Cleaning the house	82 (86.32)	9 (9.47)	4 (4.21)	95 (100.0)
Fetching water	82 (86.32)	9 (9.47)	4 (4.21)	95 (100.0)
Rearing children	67 (70.52)	7 (7.37)	-	74* (77.89)
Looking after children's education	8 (8.42)	8 (8.42)	2 (2.10)	18** (18.94)
Looking after husband & other members of the family	85 (89.47)	10 (10.53)	-	95 (100.0)
Poultry raising	43 (45.26)	3 (3.16)	-	46 (48.42)
Grocery shopping	-	8 (8.42)	87 (91.58)	95 (100.0)

Source: Field Notes, 1995-96.

* Before income earning, 21 respondents did not have any children.

** Before income earning job only 18 respondents had school going children.

Note: Figures within the parentheses indicate percentage.

Table 2(B)
Types of Household Chores Performed by the Working Women after Income Earning

Household Chores	Self	Self & Others	Others	Total
Cooking	63 (66.32)	25 (26.32)	7 (7.36)	95 (100.0)
Washing clothes & utensils	59 (62.11)	30 (31.58)	6 (6.31)	95 (100.0)
Cleaning the house	57 (60.0)	32 (33.7)	6 (6.3)	95 (100.0)
Fetching water	55 (57.89)	33 (34.74)	7 (7.37)	95 (100.0)
Rearing children	56 (58.95)	23 (24.21)	-	79* (83.16)
Looking after children's education	10 (10.52)	19 (20.0)	2 (2.11)	31** (32.63)
Looking after husband & other members of the family	41 (43.16)	13 (13.68)	-	54 (56.84)
Poultry raising	30 (31.58)	13 (13.68)	-	43 (45.26)
Grocery shopping	20 (21.0)	13 (13.7)	62 (65.3)	95 (100.0)

Source: Field Notes, 1995-96.

* 16 respondents did not have any children.

** 31 respondents had school going children.

Note: Figures within the parentheses indicate percentages.

Table-2 (B) shows that 63 (66.32%) respondents opined that they themselves do the cooking. In addition to this, Table also demonstrates that 59 (62.11%) respondents perform washing clothes and utensils, 57 (60.0%) respondents clean their houses, 55 (57.84%) respondents fetch water, 56 (58.95%) respondents rear their children by themselves. For child rearing, 23 (24.21%) respondents take others' help. Due to the lack of time, most of the respondents cannot raise poultry as before. Only 30 (31.58%) respondents are found to do this work by themselves. Now 20 (21.0%) respondents do the grocery shopping which they never did before becoming income earners.

As mentioned earlier, most of the working women of Puthiara spend a lot of time (ranging 7 to 12 hours a day) in their working places. As a result they cannot afford to perform all their household responsibilities in due time. So, they have to share these responsibilities with other helping members of the household (such as mother, sister, and daughter). But those who have no helping members, they do all the household chores by themselves. They do some of the works before going to the working place and rest of the household works after returning from the working place. Generally, these working women do not have the financial ability to engage maidservants. As a result, when they do not have any helper, they have to perform all the household chores by themselves.

From Table-2(A) and 2(B) we see that from cooking to fetching water, there has been a little change occurred for the respondents after entering into income earning activities. It is evident from the above discussion that as a result of rural women's participation in income earning, in some cases their roles in various kinds of household chores have increased while in some cases it has decreased. But it is needless to say that in spite of some changes their roles in household chores are still very important and obvious.

Helping Hands in Household Works

It is found that there are 55 (57.9%) respondents who have the helping hands where the rest 40 (42.1%) do not have any. They have to perform all the household works by themselves. Here only those persons are included as helping hands who help in cooking, fetching water, washing clothes and utensils, cleaning house, rearing up of children and poultry raising. Information collected regarding this issue has been presented in Table-3.

Table 3

Helping Hands for Working Women in Performing Household Works

Helping hands in household chores	No. of Respondents.	Those who help						
		Daughter /Son	Husband	Mother	Sister	Mother-in-law	Neighbours	Others
Have	55 (57)	33 (34)	13 (1.7)	7 (7.36)	7 (7.36)	3 (3.16)	8 (8.42)	3 (3.16)
Do not have	40 (42.)	-	-	-	-	-	-	-
Total	95 (100)	-	-	-	-	-	-	-

Source: Field Notes, 1995-96.

Note: 1. Responses in some cases were more than in one category.

2. Figures within the parentheses indicate percentage.

Table-3 shows that most of the respondents, that is, 33 (34.7%) get assistance from their daughters and sons in performing household chores. Again, 28 (29.5%) respondents report that they get the additional support in performing household works from their mother, sister, mother-in-law, daughter-in-law and neighbours. Only 13 (13.68%) respondents get help from their husbands.

It has been observed during the conversation with the respondents that their daughters assist them more than their sons. They help their earning mothers in cooking, fetching water, cleaning house, looking after younger brothers and sisters, poultry raising etc. Income earning mothers also expect their daughters' assistance in their household works more than their sons because of prevailing social values. Again, the respondents generally get their husbands' help only for looking after their children. It is noticeable that these working women receive little co-operation from their husbands or other male members of the household for helping them in household works. The male members generally uphold the view that women should do all the responsibilities of the households. The males usually get the opportunity of relaxing at their residences when they return from their outdoor works. But for working women, relaxing is nearly impossible. Most of the males consider it disgraceful to their status to perform domestic works. On the other hand, the females consider it as their sacred duty. So, they expect additional support from female helpers rather than males in performing household works. The working women seldom get co-operation from other adult male members of the household in performing household works.

It is observed that the working women of Puthiara suffer from a kind of conflict in performing dual roles in household as well as in working place. On the other hand in rural areas, social attitude towards those who enter into income earning activities by breaking the rigid custom of purdah, is not generally favourable for them. There is a prevailing notion in our society that generally the working women are not good mother and housewife in comparison to non-working women¹². Because, they can not spare enough time for their children and family. Similarly, in Puthiara it is generally believed that a working woman can never be a good mother or a good housewife. Therefore, one who is more or less economically solvent, does not like his wife to enter into income earning activities. And those who allow their wives to earn, do not feel comfortable. Therefore, women who work for income, usually face a kind of uncomfortable situation at home because of male member's attitude. Fear of a possible complaint against their negligence or inadequate performance of household obligations creates an additional psychological pressure on them.

In this connection, let us discuss a very ordinary affair like cooking. Cooking is indispensable for women and it is generally supposed to be a very easy task. But in reality, cooking is a complex and time-consuming task. It takes approximately 4 to 6 hours per day to complete the task of cooking. It is not so inconvenient for the non-working women to perform this duty because they do have enough time to spare for cooking. But cooking appears really difficult and troublesome to the working women after day's hard work in their working places. While collecting data during fieldwork, many working women opined that they face real problem in performing the duty of cooking being working women. After doing the work at working place, they get tired and do not feel easy and comfortable in doing the cooking at home. They feel performing this duty as an additional burden. But there is no alternative before them as this work is fixed for them. As a consequence, a kind of internal conflict develops in them. It has been found that although husband and wife are engaged in the same profession and they spend the same time in their working places, but all the household responsibilities are due for the wife after returning home. At home, husband has the right to relax but there is no leisure time for the wife. As a result, the work-time of the wife in working place and home become much higher than the husband. It is observed that though a working mother brings in income that raise the standard of living for her family, or brings her self-satisfaction, she must perform more total work and might worry about whether or not her children are getting proper care¹³.

In this village, the working mother suffer from a kind of mental anxiety when they go to their working place leaving their children at home, especially if there is no proper person in their households to look after them in their absence. Consequently, they find themselves in an extremely critical situation to concentrate on their works in the working place leaving behind their children. If they have any near kin-member in their household such as, mother, sister, mother-in-law, sister-in-law, they can leave their children under their supervision and do not face any problem. Otherwise, they have to work leaving their children at home. Sometimes if it is possible, they take the children with them to their working places. Among the rice mill workers, some working mother have to work in their working places keeping their children beside the rice mill's courtyard. As a result, they cannot take proper care of their children. In this connection, some information has been collected to show whether the working mothers' income earning works affected the duty of properly looking after the children. Opinions of the respondents in this regard are presented in Table-4.

Table 4
Opinion of the Working Women Regarding Looking After Children

Opinion	No. of Respondents	Percentage
Neglected	51	53.7
Not neglected	28	29.5
Not applicable*	16	16.8
Total	95	100.0

Source: Field Notes, 1995-96.

* 16 respondents did not have any children.

Table-4 shows that 51 (53.7%) respondents opined that the task of looking after children is neglected due to their involvement in income earning activities. On the other hand, 28 (29.5%) respondents stated that their children are not neglected. This is because, in these cases, they have some helping members to take care of their children in their absence.

Moreover, the working women of Puthiara face various kinds of problems in different household works such as, eating, bathing, *namaz* (saying daily prayers), proper caring of the husband and other members of the household. Some respondents reported that their husbands generally think that their wives cannot fulfil their obligation as a housewife properly. Consequently, the working women have to struggle with different critical situations in accomplishing household responsibilities unlike the non-working women.

Level of Satisfaction of Working Women in Performing Dual Roles

Working women tend to perform diversified (such as housekeeper, wife, mother, worker etc.) and conflicting roles at the same time. Neither can they neglect their household duties nor can they ignore their duties in working places. So, they have to maintain a balance between household and working place obligations. Now, the question naturally arises as to what level of satisfaction they have in performing dual roles. Opinions regarding this are shown in Table-5.

Table 5
Level of Satisfaction in Performing their Dual Roles
(Household Work and Income Earning Work)

Level of Satisfaction	No. of Respondents	Percentage
Satisfied	32	33.68
Not satisfied	60	63.16
No clear opinion	3	3.16
Total	95	100.00

Source: Field Notes, 1995-96.

The data in Table-5 shows that 32 (33.68%) respondents are satisfied in performing their dual roles. They opined that they can afford to carry out both household and income earning work properly. On the other hand, 60 (63.16%) respondents are not satisfied with their performance and tend to suffer from role-conflict. Only 3 (3.16%) respondents did not express any clear opinion regarding this. It appears from the above Table that majority of the respondents are not satisfied with their dual role performances. They are in an uncomfortable situation, because they have to spend long time and do tiring work in their working places as well as have to fulfil all household obligations. Many of them have complained that cooking, eating, taking care of children and other household duties are hampered due to their income earning works. They feel acute scarcity of time. Thus on the basis of foregoing discussion, it is apparent that the working women of Puthiara are found to suffer from role-conflict.

Household Chores and Income Earning Works: Relative Importance

It is necessary to ascertain the opinion of the respondents regarding the comparative importance of the household chores and income earning works. Data regarding their opinion on this issue is presented in Table-6.

Table-6 demonstrates that majority of the respondents, that is, 47 (49.47%) consider their income earning work more important. However, 41 (43.16%) respondents expressed the view that both the works are equally important to them. Only 7 (7.37%) respondents consider their household works more important than their income earning works.

Table 6

Respondents' Opinion Regarding which one of the Works (Household Work and Income Earning Work) Appear to be More Important

Type of work	No. Respondents	Percentage
Household work	7	7.37
Income earning work	47	49.47
Both	41	43.16
Total	95	100.00

Source: Field Notes, 1995-96.

It is observed that those who have paid more importance to income earning work are the only income earners of their households. Their economic need is so severe that they prefer income earning work much more important than the household work. On the other hand, those that considered both the works equally important, they are the additional income earners of their households. Respondents, who have paid more importance to the household work, their economic need is not so severe and their participation in income earning is not regular.

So, it is apparent from the above discussion that inspite of the adjustment problems with the dual roles, the working women of Puthiara are continuing their income earning works. However, they do not want to ignore their family and household responsibilities. As a result, they obviously suffer from role-conflict and they tend to adjust with the situation.

Conclusion

Through the discussion it is apparent that due to income earning of the working women of Puthiara village their role have been changed in some extent. Their role dimensions are found to be divided into two spheres- household chores and works at the working places. As a result, it is observed that their total working hours (household chores and income earning works) have increased. In most cases working women of Puthiara village perform household responsibilities by themselves. Some could manage to have helping hands (such as, mother, daughter, and sister) in performing the household responsibilities. In this context, it is observed that most of the working women are found to be over burdened with dual roles. Only a few could lessen their household responsibilities with helping hands.

In maintaining this dual role, many of them tend to face role-conflict. Due to this role-conflict they generally suffer from mental tensions. Out of the total working women, 51(53.7%) opined that their household works are hampered. Because, during the period of their absence in the household, they feel that responsibilities such as, rearing children and other household works cannot be properly performed by others. However, as the income earning works and household works both are important and obvious to the working women of Puthiara, it is necessary for them to adjust with the situation. Accordingly, they have now adopted self-devised mechanism to cope with the situation.

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JOINING BROTHEL: SOCIAL ACTION AND POWER IN BANGLADESH

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Abstract: The study brought forth the determinants that sway the females to opt for selling sex as their calling. It has been viewed from the perspective of dictatorship or democratic choices. The determinants for joining the sex trade unveils intricate psychosocial factors of which certain public branding has been identified as an outweighing ingredient that depends on the individual interpretation of worldview. Social mobilization is hinted at to arrest new entrants to sex business to contain sexually transmitted diseases in Bangladesh. The study opens venues for subsequent quest too.

I. Introduction

Sexuality is a social construction of biological drive. It is multidimensional and dynamic. Perhaps the most powerful influence in sexuality is through the gender role and is exerted by the social norms and values that shape the relative power, responsibilities and behaviour of women and men. For men, sexual context is almost universally prescribed as a way of proving one's manhood and are encouraged to think primarily of sexual performance which often motivate them to risk taking behaviour. Men's and women's mutually reinforcing gender roles place a woman's health at risk when they lead to unwanted pregnancies and unsafe abortions, gender-based abuse and violence, genital mutilation, rape, and sexually transmitted diseases (STDs) including Human Immunodeficiency Virus (HIV) and Acquired Immunodeficiency Syndrome (AIDS). Ross (1996) has pointed out that, in Bangladesh, commercial sex workers (CSWs) particularly the female sex workers are worst affected in terms of prevalence of STDs and its consequences. This is compounded by lack of social acceptability of their profession that hinders their health care seeking behaviour. Further, the symptoms of most STDs are camouflaged in their early stages, and by the time they are diagnosable, they cross the stage of effective treatment. In females, STDs can cause infertility, ectopic pregnancy, cervical cancer and fetal loss by mother, low-birth weight baby and mental retardation of infant. Because of socio-cultural barriers to the care of women with STDs, both the incidence and sequel are likely to be more severe in Bangladesh than elsewhere. There has been an increase in HIV infection in Bangladesh, and CSWs are among the high-risk groups.¹ To alleviate the suffering of female CSWs, there is acute need, beside adequate medical treatment, to ascertain and eliminate causes for which females join this hazardous profession, is stated in a draft paper by the Government of Bangladesh. The paper also states the reasons that are traditionally considered to be the causes that encourage females to join the profession as prostitution itself, broken homes, easy money, urbanization and industrialization, international travel, and changing behavioural pattern.² Unfortunately, these factors were not

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adequately analysed with a comparison group, as apparent to the researcher of this work. In a draft manuscript, Shahidullah points out that in Bangladesh the influencing factors and their correlates may be the same for women who join different professions outside their homestead. He further noted that the reasons behind females seeking jobs outside homestead as domestic help, industrial labour, construction labour and other jobs are more or less the same as those who join rings involved in anti social activities.³ So the question arises "then what are behind the scene reasons for joining prostitution?" A partial answer may be found in a news report written by Eva where she highlights the events shown in a televised documentary where the females are the victim of rape, dowry, and *fatwa* or interpretation of Islamic sanctions.⁴ In most situations, for no fault of their own, young females are subjected to different sorts of labelling, the worst being "sexually abused girl" by those who themselves abuse them, comments Islam. These girls when once labelled are neglected by the society and kin.⁵ They suffer physically and psychologically, and some drift to sex work where this sort of label does not matter. This study was undertaken with the assumption that the labelling of the females by members of the society is a major contributing factor towards females accepting prostitution as a means of livelihood. Labelling means the public stamping, typing or categorising of a person. This study identified and measured the labelling effect among female prostitutes and other non-prostitute females working outside homestead. The effect is the profession taken up under the influence of that label. Moreover, the study helped to identify the categories of labels put on the sex workers which when controlled could possibly curtail new entry in the profession, and thus may reduce the social burden of STDs in the long run.

II. Background and Methodology

According to Nag, the historical background of prostitution in India can be traced back to three hundred BC. Young unmarried girls dedicated to God in Hindu temples, often became objects of sexual pleasure for the priests and the pilgrims.⁶ Rahman in an article on prostitutes trace back its origin and comments that prostitution existed even in ancient times. As soon as the institution of marriage reached a certain stage of perfection, prostitution was clearly demarcated, and since then prostitution has been in existence in some form or other as a commercialized vice. Prostitution reached new heights after the Second World War. During the British period, brothels developed in Indian subcontinent including Bangladesh and thus prostitution developed in an organized form. Although the exact number of CSWs in brothels throughout the country is not enumerated and documented, some approximation has been made by social workers. About 50 thousand female commercial sex workers are working in different brothels in Bangladesh. Out of this figure, the number of brothel based commercial sex workers in the three places selected for this study were approximately 500-700 in Jessore Sadar, 600-800 at Goalandaghat of Rajbari, and 3000-3500 at Tanbazaar of Narayanganj. The number of CSWs in the brothels usually does not remain constant because of their high rate of mobility.⁷ Besides the sex workers, a large chunk of female population across the country are working outside their homestead in different short-term contractual jobs. Information from local people showed that about 215 women were working in clusters in short-term contractual jobs at the study places – about 60 females amass each day in Jessore Sadar, 30 in Goalandaghat of Rajbari, and 120 around Tanbazaar of Narayanganj.⁸

Referring to an eminent female lawyer of Bangladesh, Fariha highlights the penal codes that attempt to protect women who are victims of violence – sections 364A, 366A, and 373. Though these laws contain severe punishment for sex offenders including the clients, yet somehow the clients are never booked. The Suppression of Immoral Trafficking of Women Act 1993 in Bangladesh says that a brothel constitutes of two or more women, and that a prostitute's income is not illegal. Section 8 of the Act provides penalty for living on the

earnings of another prostitute, yet allows the mother, son or daughter to live on the earnings.⁹ Further, Reaz has highlighted that the constitution of Bangladesh protects the rights of all citizens to choose their profession, but it does not acknowledge prostitution as a profession. At the same time government issues registration to prostitutes through notary public and from class-I magistrate, which shows that the state offers legal approval to sex trade. On the other hand, the state terms prostitution as immoral and illegal that has a provision of punishment too. Sections of people are reaping the benefit of these mutually contradictory clauses and statements.¹⁰

The paper is a qualitative, case-control, analytic, retrospective and unobtrusive sociological study by phenomenological investigation. The cases were the females who were commercial sex workers in brothels. The females who work outside their homestead in professions other than commercial sex work were the controls. For selection of cases, brothels at Jessore Sadar, Goalandaghat of Rajbari, and Tanbazaar of Narayanganj of Bangladesh were taken as study places. These were the brothels that topped the list of brothels in terms of number of CSWs.¹¹ Same three districts of Jessore, Rajbari, and Narayanganj were considered for the selection of controls. The total time required for data collection and other associated conventionalities took up roughly two years time from July 1997. The exact backward looking time of event for data collection varied from respondent to respondent. Data was gathered by in-depth interview using in-depth interview-outlines for both cases and controls. Necessary field testing of the interview-outlines and site preparation was done beforehand. Initially, the *sardarnis* or the informal leaders at brothels were identified at the three sites by sociometry who later helped in collecting data from the cases. Sociometry was also used to identify the informal leaders from among the controls who also helped to collect data from the controls. Using 90.0 percent confidence level and 10.0 percent acceptable error, the sample size calculated for each of cases and controls was sixty-six. Proportionate probability sample fragments from each of the sites was taken for both cases and controls. With the help of the informal leaders, the cases and controls were picked up by snowball sampling technique. The convenient time of the day for data collection were 12:00 M-3: 00 PM, and 1:00-3:00 PM respectively for the cases and controls. The data were analysed both statistically and illustratively. Interpretation of the analysed data was done in both etic and emic forms. Ethical issues in conducting the study were taken care of. The quality control of data was ensured.

III. Analysis and Interpretation

The cases and controls that stated exclusively label or non-label phenomenon as contributing to the choice of profession has been arranged in table 1. Sex work as profession was taken up by thirty-three cases following phenomena exclusively attached with labels, while eighteen cases took up the profession following phenomena exclusively without any perceived labels. These accounted for 64.6 and 35.3 percent of the cases respectively. Among controls, twenty-eight started their work outside homestead following phenomena exclusively with perceived labels, while twenty-one started work with phenomena exclusively without any perceived labels. These accounted for 57.1 and 42.8 percent of the controls respectively. Among cases, the phenomenon attached with labels, as "offspring of CSW" was the most frequent one while "dowry defaulter" by in-laws was the next frequent one, accounting for 15.7 and 13.7 percent respectively. The most frequent phenomenon among cases not attached with labels was seen to be as enticed with job and sold to brothel by conniving locals, and kidnapped and sold in brothel. Each of these two phenomena accounted for 9.8 percent. Among controls, the phenomenon exclusively attached with label, as "dowry defaulter" by in-laws was the most frequent accounting for 20.4 percent. Dislocation of family following natural calamity was the most frequent phenomenon exclusively without any attached label among controls accounting for 16.3 percent. Females exclusively attached with labels were seen among cases as well as controls. At the same time females exclusively attached with non-labels were seen among

Table 1

Distribution of Cases and Controls by Phenomenon Exclusively Attached with Either Labels or Non-Labels that Preceded in Choosing their Profession

Cases'		Controls'	
Phenomena	f %	Phenomena	f %
Labels		Labels	
"Offspring of CSW"	8 15.7	"Dowry defaulter" by in-laws	10 20.4
"Molested" while working as clandestine CSW	2 3.9	<i>Shateen</i> [†] after husband's remarriage	7 14.3
"Sexually abused" premaritally hindering marriage	2 3.9	"Loan defaulter" to local money lender	3 6.1
"Despoiled" by local goons after desertion	2 3.9	"Loan defaulter" to non-government organization	5 10.2
"Jilted" by boyfriend which hindered marriage	2 3.9	"Burden" on son(s) and/or their wife(ves)	3 6.1
"Sexually abused" post-maritally at previous work site	1 2.0	Subtotal	28 57.1
<i>Shateen</i> [†] after husband's remarriage	3 5.9	Non-Labels	
"Insecure" after death of parents, took shelter in brothel	2 3.9	Supplement husband's income	4 8.2
"Covert CSW", refuge to avoid police harassment	4 7.8	Supplement parent's income	3 6.1
"Dowry defaulter" by in-laws and torture	7 13.7	Dislocation of family following natural calamity	8 16.3
Subtotal	33 64.6	Acute financial need after becoming widow	1 2.0
Non-Labels		Husband temporarily away from family for better earnings causing economic hardship	1 2.0
Enticed with job, sold to brothel by conniving locals	5 9.8	To meet cost of medicine for sick family member(s)	2 4.1
Kidnapped and sold in brothel	5 9.8	Being fired from a fixed job joined the temporary one	2 4.1
Doped and brought to brothel	1 2.0	Subtotal	21 42.8
Poverty	1 2.0		
Dislocation of family following natural calamity	4 7.8		
Exploitation of male sexual needs for higher income	2 3.9		
Subtotal	18 35.3		
Grand Total	51 100.0	Grand Total	49 100.0

[†]It is a Bengali word used for denoting affinal kinship between the wives of same husband

cases and controls too. So, a question arises as to what is the weightage of label or non-label on females to turn them towards sex trade and non-sex trade. In other words, it is necessary to measure the risk of labelling and its effect on females. In a case-control study like this, the method of measuring the risk is by calculating the odd ratio, or the cross-product ratio, which is a measure of strength of association of risk factor and outcome.

To calculate the odd ratio, cases and controls exclusively attached with labels and without labels were considered and tabulated in table 2. The calculated odd ratio is 1.4, which is more than 1, the null value for interpretation of odds ratio.

Table 2
Crossover Comparison of Cases and Controls by Labelling Status

	Case	Control	Total
Labelled	33	28	61
Not labelled	18	21	39
Total	51	49	100

Odds Ratio = 1.4

Note: Boldface numbers are used for calculation of odds ratio

The cases and controls exclusively attached with labelling or non-labelling phenomena are represented in table 1. The question arises which form of phenomena, attached with label or not attached with label, carries what weight for the causation of cases or sex workers, and controls or non-sex workers. The answer is provided in table 2 where the odd ratio has been calculated to find the relative weight of phenomena. As the calculated value is just more than 1, so it can be inferred that the labelling phenomena have some influence on the causation of cases, or here the choice of sex trade as profession. As there is no cut-off point to demarcate strong or weak association between the cause and effect, the researcher assumes that the causal association is a weak one. This assumption is based on the fact that the calculated odd ratio has just crossed the null value and is more distant from the next ascending whole number. There are few other determinants that need to be considered when interpreting the odds ratio say Fletcher, Fletcher, and Wagner.¹² These determinants are

Consistency of association, specificity, temporal relationship, coherence, and biological plausibility. Putting all efforts, the researcher did not come across any other study where odds ratio was calculated to determine the strength of association of labelling with taking up of sex work by females. This remains open to other researchers in a variety of settings. If the findings are consistent with this study it will serve to increase the validity of inference of this study and those that may be done in future. The specificity and temporal relationship of label on taking up of sex work needs further verification on whether attaching a label pushes a female to take up sex work, and on withdrawal of label the choice of sex work can be prevented. The coherence of this study where labelling phenomena has been related to sex work is supported by existing knowledge in psychological and sociological theories that point to the psychosocial factors that inspire people in different settings. There is some biological plausibility in the assumption that psychosocial trauma brings about certain biochemical changes in the body as is noted by Crider et al.¹³

Substantial work has been done at both home and abroad on the different behavioural aspect of commercial sex workers working within brothel and outside it. On review of the available studies, if the pros and cons are taken into account, ignoring the mode of sex work as within brothel and outside brothel, considerable differences and similarities with this study

findings may be noted. Some studies conducted in Bangladesh and other countries are discussed to highlight the different aspects. Mostafa comments that the phenomena of deception or coercion of females into sex work goes against the laws of Bangladesh.¹⁴ The interviewees of this study also pointed out coercion and deception as phenomena that brought them to the brothels, acts that go against the laws of the state of Bangladesh. The portrayal histories of the cases and controls also point out that it is the females of the society who are branded and labelled and denied all forms of formal and informal justice. Commenting on another aspect, Badaruddin points to the abuse of *shariah* or Muslim law, and ignorance of statutory laws as hurdles that prevent the implementation of Muslim Family Law Ordinance, that are made to play in favour of males and to the detriments of females in Bangladesh, a Muslim majority country.¹⁵ Bhuiyan too found that the socio-cultural picture in rural Bangladesh is such that neither the *shariah* nor statutory laws are followed, rather something in between is regulating the society.¹⁶ The portrayal histories in this study has pointed out again and again to the prerogative of males to give divorce or declare separation or desert, all being due to the misuse of *shariah* and non-implementation of statutory laws. The females are deprived of their rights from the very onset of marriage by having to forego their share of property from the parental home and further on divorce, separation, or desertion they are once again deprived of their rights from their affinal home. This dual deprivation probably puts them in a lurch, and when age is favourable, it sways them to sex work. Another aspects of the existing social practice in Bangladesh is that a male is allowed to have four wives concurrently on the pretext of permission given by *shariah*, ignoring the additional clause of equal rights and respect to all four wives. Here again, the males use the *shariah* to the detriment of females denying her equal rights of concurrent multiple marriages. The statutory law allows both husband and wife to divorce their spouse on reasonable grounds only. But the implementation ignores the wife's right and the husband divorces on petty pretexts. The non-implementation of rights of a wife in divorce proceedings is probably the outcome of male prerogative of concurrent multiple marriages and other societal discrimination. Proclamation and enforcement through amendment of statutory laws for single marriage at one time, and permission for dissolution of marriage on reasonable ground should be implemented giving equal rights to husband and wife. This may decrease discrimination in favour of males and bring females on equal footing.

United Nations Population Fund report, edited by Duza, has laid stress on the decreased social security and rights for females with its accompanying conditions, including dowry, to be contributing factor in the sexual exploitation of females in Bangladesh.¹⁷ This is supported by Babul who too puts a great weight on dowry as a factor that compels females to accept sex trade.¹⁸ This study too has put weight on dowry as phenomenon of sex work. At the same time the study has identified that non-payment of dowry puts a label on a female and exposes her to physical torture by the branding party followed by self-inflicted mental torture when she can neither bear it nor shun it. Probably as a finale, she is either exploited by others, or takes up exploitation of males through sale of sex. Choudhury, in a magazine, noted that on one hand women are held up to high moral expectations and on the other they are sexually abused and ostracised in Bangladesh.¹⁹ Kapur too, has noted that in Indian subcontinent, the males maintain double standards of sexual conduct in a male dominated society. Great emphasis is placed on chastity and marital fidelity of females while the same rules do not apply to males.²⁰ The interview with the respondents of this study has also accentuated this aspect where females are forcibly abused by males and later emblazoned by them. The responsible members of the society also overlook the wrong doings of the males and put the whole blame on the females calling them despoiled girls. A similar standard is noted within marriage too. Infidelity of the husbands have to go unnoticed while that of the wives have to be rebuked and

stern action taken in the form of dissolution of marriages. Kapur has identified basically two groups of prostitutes: one where the females willingly accept sex work, the voluntary ones; and the other where they are forced, coerced or deceived into accepting sex work, the involuntary ones.²¹ This study has gone one step forward to identify the phenomena that precede the acceptance of sex work. It is evident from the present study that even among those who become voluntary prostitutes, according to Kapur, there are certain common features that push the females into sex work. One of these features is the gender, sex, or sex work related societal label, which make the life of females unbearable in the society at large and push them into a society where the branding is of no consequence. Thus, it can be surmised that instead of considering the sex workers as voluntary and involuntary, as Kapur, they can be considered as those who have been labelled and those who have not been labelled prior to joining sex work. Those not labelled are forced, deceived or are aware of the higher income in the sex trade. Unlike Chakraborty's finding in a Calcutta brothel where about 70.0 percent of the sex workers joined the profession due to poverty or following family disturbance,²² no such straight conclusion could be drawn from this study. Khan comments that in Asia gender roles with its associated social duties and obligations are such that any transgression may be severely reprimanded through stigmatization, social exclusion or abuse.²³ This too, probably points to labelling phenomena as emphasised upon in this study. McGrath et al. found that Ugandan females too occasionally have multiple sexual partners as a revenge on husband for having other sexual partners.²⁴ That such revenge by females on being jilted or suspected of infidelity is not uncommon in Bangladesh too, as is seen from this study.

To limit the entrance of female in sex trade, whatever the phenomena, social workers and thinkers have come up with varied suggestions at different times. There were the abolitionists, regulationists, prohibitionists and so on as was gleaned from Kapur's review of measures to curb the spread of sex work. She observes that no amount of regulation or abolishing law can stop or slow sex trade, it only changes the mode: open or underground. The prohibitionists prefer to change the social setting such that females are discouraged, without imposition, from joining sex trade. A social revolution is necessary to bring down acceptance of sex work by females.²⁵ The researcher of this study agrees with prohibitionists that, considering the intricate social fabric in Bangladesh, things cannot be changed overnight. Patience and compassion combined with increased absorbing social build-up and respect for females may go a long way to make the society such that the females do not think themselves to be labelled. The society too should not label anyone easily on petty pretext. Behavioural and social change is also considered due from the health perspective. Social thinker, Islam, identifies labelling as a major stumbling block to women's health in Bangladesh. Society and kin neglect a sexually abused girl.²⁶ In this study too, it was noted that the kin of labelled females do not give social and moral support to the females, consequently health related problems are also probably not dealt with. Referring to the Vancouver Conference of 1996, Tan stresses that behavioural and social change are a must to contain the epidemic of AIDS and STDs, and that the emphasis should move from concepts of individual risk to concepts of social vulnerability specially in high risk groups as sex workers.²⁷ Parker considers that, to reduce the transmission of STDs and promote sexual health, multi-pronged interventions for diverse groups of population within the broader framework of risk behaviour, social injustice, inequality, stigma, discrimination, sexual rights, and community development is called for.²⁸ What better than reducing the number of sex workers and their clients within a social framework of compassion and resourcefulness? This can be answered from behavioural point of view. Social psychologists Hilgard, Atkinson, and Atkinson agree with Schaffer and Lazarus and view human behaviour as the outcome of situational influences and individual's

own perceptions.²⁹ Beatt on review of MacKinnon's theme on sexuality states that sexual abuse is considered as social injury occurring on personal level.³⁰ It may be concluded from the above discussion on phenomena that societal labelling and individual perceptions manipulate females into accepting sex trade that can be best minimized by social mobilization using the strategy of prohibition.

The interpretation so far has been mostly related to females from the society at large. Little has been touched upon the females who were born and brought up in brothels, which is represented by a large chunk of the cases attached with label. What follows is the interpretation regarding ascribed CSWs based on some experience and assumptions of the researcher of this work? It is often noted that time and again, females have tried to come out of the cycle of sex trade but were not accepted in the society at large. They had to return to the brothel after a short sojourn. This strengthened their conviction that once a sex worker will have to be a sex worker and their female offspring have to carry on doing the same as they too are stigmatized as off spring of commercial sex workers. The female offspring cannot use their consanguinal identity if they come out and mix in the larger society. Hence, they probably cannot participate in the different social institutions. The male offspring, on the other hand, are not strictly stigmatized as the females, and can either become a male functionary at the brothels or acquire some skill and become a part of the social institutions. Generally, people are less bothered about the parental origin of males. This discriminatory attitude of the society towards the male and female offspring of sex workers is not desirable. The female offspring should be socially viewed as the male offspring and opportunities provided to come out of the vicious cycle of 'CSW begetting CSW'. This too requires social mobilization through creation of awareness so that female offspring of CSW can come out of the four walls of the brothel and enjoy same opportunities, shoulder to shoulder with the other members of the society. The social mobilization will have to include the sex workers themselves too. Hopefully, this will further reinforce the prohibitory approach towards containment of sex trade and thus contain the spread of sexually transmitted diseases in the society.

IV. Conclusion

Considering the social action and power in Bangladesh, the application of social mobilization strategies to prohibit the joining of sex trade by females following societal labelling is the need of the hour to contain the aftermath of indiscriminate sex, such as diseases and psychosocial trauma. Since prostitution is the outcome of complex human phenomena, the approach to its solution would have to be multipronged and multiphased based on further operational research.

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THE EMERGENCE OF MODERN SOCIAL WELFARE INSTITUTIONS IN BENGAL IN THE 18TH AND THE 19TH CENTURIES: THE BRITISH EXAMPLE

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Abstract: The paper starts with the assumption that the British rule in India not only brought about a change in the political structure, but also introduced new ideas about social problems and institutions to tackle them. Such secular social welfare institutions were a departure from the traditional religious charities and provided examples for the native elite and social leaders to emulate and follow. The paper catalogues and discusses sixty three such institutions and endowments founded by the British in the eighteenth and nineteenth centuries in Calcutta.

In tracing the origins and development of the modern social welfare institutions in Bengal in the eighteenth and nineteenth centuries one cannot lose sight of the colonial context in which they arose. The British conquest of India, before anything else was a great disruptive event. It disrupted and dislocated not only a political power but disrupted a traditionally settled society along with its values and hierarchies. Thus, colonialism by its very presence created a set of unforeseen problems. It was not merely a change in demographic composition but it was the violent imposition of an alien order. There was, a new power structure, a new trading system and new social institutions which replaced the old. There was disintegration on one side and the coming of a new society on the other. There was insecurity and anxiety on the one hand; excitement and promise on the other. The replacements and reorganizations have been called modernization by the social scientists and historians. But it was a difficult transition for most of the aliens, as well as for the natives, for the rulers and as well as for the ruled. It was not smooth, nor was it without resistance or revolt.

Most of the Englishmen who came to India were themselves victims of similar social changes and disruptions at home—changes brought about by socio-economic upheavals² and reconstructions called capitalism. Expanding capitalism, in the shape of imperialism used these very men to its purpose. It was the dislocated and the desperate, the free-floating landless people and the fortune-hunters who risked their lives to make the six month-long, very uncertain and dangerous journey by sea to India in search of a better life. Most of these dare devils were recruited for the army. A smaller number of men who had some capital entered into the trades. The sea-port they landed in, called Calcutta, was not yet a city. It was more of a new settlement on a stretch of reclaimed marshy land—very hot, rather wet and very unhealthy. The soldiers were made to live in barracks and camps without much family comfort;³ others did not live any better, at least not initially. The new-comers all suffered from uncertainty, tension and anxiety, as much as the native people who thronged the city, did. The native settlers as well had similarly come from villages far and wide in search of livelihood. Thus the new city was a place where diverse people of different background, social status,

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caste, skills, occupation and different expectations came together, mixed and mingled with one another. In villages people would not mix in this manner. It was a taboo. Hence such mixing was a cause for uneasiness and tension. The presence of the aliens made matters worse. The native community looked at the English with distrust, anxiety and fear. The English likewise looked at the native people with incomprehension and annoyance. Thus the new city started with a baggage of problems.

The problems were the influx of job-seekers, insanitary housing, insufficient drainage, absence of medical facilities, outbreak of epidemics like plague,⁴ cholera,⁵ small-pox,⁶ and malaria.⁷ Then there were the problems caused by new administrative measures like the new land-revenue system which brought about a series of famines, which in its wake caused pauperization, vagrancy and beggary. These were problems which touched everybody. But then there were problems specific to the East India Company soldiers; problems like alcoholism, disruptions caused by it, desertions, injuries, destitutions, illegitimate births and venereal disease.

The fortunate few among the English, who belonged to the ruling community and the trading class, were the beneficiaries of this new system. They were not too bothered with the problems at first. Either they were indifferent or simply failed to understand the seriousness of the problems. There were still others who thought it was not the business of the company to solve the problems of the subject people. But when the problems accumulated and combined to create a threat to society and the civil order, the company administrators in India and their supervisors in England could not shut their eyes to it any longer. The Charter Act of 1813 enjoined that the Company look after the well-being of the Indian people and Rs. One lac was kept apart for this purpose. The money however was not used for ten years. And when it was used, it was spent mainly for education. However, if not at the administrative level, at a private level many people contemplated ameliorative measures to tackle the urgent social problems. Charities were organized by the churches, and institutions were erected to meet specific problems. Lastly, legislations were enacted to ensure law and order. In the creation of these institutions the rulers were inspired and guided by the experience of such and similar institutions at home. However the colonial character of these early social welfare institutions in Bengal was brought out by the fact that all these institutions were meant for the Europeans and addressed to the problems of the European community. However, these English institutions served as examples for the native social leaders to follow at a later date. Destitution, vagrancy and early mortality in the European community were the problems that first attracted the attention of the rulers.

Clive possibly was the earliest of important men to notice the problem of vagrancy among European soldiers. These vagrants were either the lay off or deserters from the army or marine ship, or just fortune-seekers sneaking out from England. Young boys and girls left orphan by the death or desertion of their parent also swelled in number Kipling's famous character Kim is one such destitute who had been left an orphan during the Sepoy Mutiny. There are recurrent references to such European vagrants in the official records of the time.

Thus, one of the earliest of English benevolent institutions that concerned itself with the problems of families left destitute by the death of soldiers was called Lord Clive's Fund⁸. It possibly was also the earliest of western social welfare institution in Bengal. This fund was established in 1770 for granting pension to invalid European officers and soldiers of the Company and to their widows. The fund was created at 8% interest and the Courts of Directors of East India Company was made its trustee. But there is an irony. While the idea behind the institution was western, the money provided came from an indigenous bequest. The money of the Fund came from a bequest of 5 lac rupees of Mir Jaffar Ali Khan, the Nawab of Murshidabad, given over to Lord Clive. It was Lord Clive's idea to transfer it into a welfare

fund. Nawab Saifuddowlah Mir Jaffar's successor (at second remove) subsequently presented another donation of Rs. 3 lacs to the fund. There is no way of knowing if this money was given out of his free will or were extracted as protection money by Lord Clive.

However, the fund went by the mane of Lord Clive. After all it was Clive's idea. The fund started operating from 6th April 1770 with ten lac of rupees. But since Lord Clive's day the army had increased considerably and the interest of ten lacs went a very little way towards the demand for pension by 1834 and the Fund was reported to be under strain⁹.

There were however other funds with a similar purpose. Bengal Military Widows fund¹⁰ which became operative possibly from January 1809. Then there was the Marine Pensions Fund¹¹ operative since 1783 meant for the disabled or super-annuated mariners and their widows. Maruls of Hastings in 1819 proposed the formation of a King's Military Fund¹² for the purpose of sending home in comfort and respectability the families of deceased British officers who may have been left destitute. The fund was created in 1820. But the subscription was not general and no time was given for the accumulation of funds. The heavy disbursement caused the fund to be depleted and the fund was in doldrums by 1824 - being left with only Rs. 6,000/-. The Government came forward with an annual donation of Rs. 6,000/- and Committee of General management made subscription by the officers compulsory.¹³

All these funds were military funds. The earliest fund concerning the interest of civil officers was started in 1804 to provide for the maintenance of the widows and of children born of wedlock of subscribers left indigent by retirement sickness or otherwise. Money from the fund could be spent also for recovery of health of the sick subscribers. It was called the Civil Fund and was managed by a committee of trustees consisting of the chief Secretary, the Accountant General, the Sub-Treasurer and the Civil Auditor. An annual donation of 2,500 was promised by the Court of Directors of the East India Company. The rate of contribution was Rs. 10/- p.m. for every thousand of salary going upto Rs. 50/- per month for those earning more than Rs. 4,000/- p.m. or 300/- in England. For the maintenance and education of children in India or in Europe according to the age of the child the following rates were fixed. Till the 5th year Rs. 30/- p.m. or 30/- pound annually. Till the end of 8th year Rs. 40/- per month or 60/- annually. Nine to eleven years Rs. 50/- p.m. or 80/- annually; twelve years onwards Rs. 60/- p.m. or 100/- per annum. If a subscriber to the fund would be dismissed from the service of the company he would cease to be entitled to the benefits of the Institution and in the event of his death his widows and children shall in the like manner have no claims to the benefits of the Institution. But in such case the amount of his actual contribution to the Fund would be returned to him with interest at the rate of 10% per annum.¹⁴ The fortune of the Civil Fund had its ups and downs. In the mid-thirties there was a great uproar about mismanagement of the fund.¹⁵

All these funds starting as charitable funds developed into contributory annuity funds and the initiative was in most cases governmental. The first genuinely private charitable organization was conceived under the auspices of the St. Jhon's Church in Calcutta and was named Charitable fund for the relief of distressed Europeans and others. It depended largely on private collections made in the Church on the three festivals of Christmas, Easter and Whit-Sunday. It had another distinction of being the first charitable organization whose benefits were available to the native paupers of this country as well.

But the resources of the Fund proved inadequate to the growing demand made on it. The situation became particularly strained in 1806 when the Government aid was sought and found to the tune of Rs. 800/- per month. The Fund position was particularly strengthened by the receipt of three generous legacies at this time. These were the bequests of General Claude

Martin, Mr. Charles Weston and Mr. Joseph Barretto.¹⁶ General Claude Martin who had an Indian style of living, left Rs. 50,000/- for the Fund. Mr. Charles Weston who had become justifiably famous for his munificence, even while he was alive, - (for giving out 100 gold *mohurs* to indigent people every month.) left Rs. 100,000/- for the fund. Mr. Weston's will had stipulated that the interest on the fund be applied "to the assistance and relief of families and individuals labouring under the pressing miseries of poverty, hunger, disease or other painful misfortunes and distresses forever." Mr. Joseph Barretto's bequest added another Rs. 5,700/- to the rest.

A 'Proving House' was established in Kidderpore where the reality of the distressed applicants was investigated and sometimes tried by offer of work. The destitute were of each sex and of every colour and feature- the young and the aged, the maimed and the blind, the diseased and the ill-fed. The great majority were the descendants of the Portuguese and other Europeans and also natives of the lowest class of life. We have figures of recipients for the year 1823 which show that between January and December 1823 a total of 7623 persons received relief from the Fund. Of these 4272 were Europeans, 734 descendants of Europeans, 2077 Mussalmans, and 540 were Hindus. The average recipient per month was 640.

The two organizations that concerned themselves with problem of waifs and orphans were also private and the initiative behind the organizations came from an ex-military officer in one case and a clergyman in another.

Maj. Gen. Kirkpatrick possibly was the first person who set about in right earnest to do something about the problem of orphans of the army men. In 1782 he circulated a proposal for organizing a society to tackle it. An association named Bengal Military Orphan Society was formed in March 1783 to house and educate children of officers and soldiers of Bengal establishment dying indigent circumstances. A school and boarding house was started as a private institution at Kidderpore entirely supported by contributions from officers. Eventually another institution of the same kind was called for another school was started at Alipore. Since then the earlier institution at Kidderpore was known by the name of Upper school and the Alipore school as Lower Orphan School.

The executive committee consisted of a Governor, a Deputy Governor and twelve managers. There were also seven internal committees consisting of 6 members each to assist the management. The members were drawn from the various cantonments of the Presidency, Dinajpore, Benaras, Cawnpore, Saugar, Meerut, Nasserabad and Dacca- all these comprising the Bengal establishment. The C-in-C was usually the Governor of the General Management Committee. The Deputy Governor was the principal executive officer. The office of the Secretary was usually filled by the Chaplain. The Chaplain who was brought directly from England used to be given a salary of Rs. 850/- p.m. and free accommodation. Of this Rs. 500/- was given from the Orphan Society fund and Rs. 350/- by the Government. Government also contributed the entire income of the Government Gazette press established in 1815. Funds were also supplemented by Tolls collected from a bazaar situated on the school grounds. Contributions from officers ranged from Rs. 18/- per month for it. Colonels to Rs. 1-8 as p.m. for Conductors and Deputy-Commissaries. The expenditure for the upper branch in 1823 was Rs. 180,000/-

No child was admitted who by inheritance or bequest was possessed of Rs. 7,000/- or of a property yielding an annuity of Rs. 420/-. Another ever remarkable feature of this school was that illegitimate children were equally admissible as those born out of wedlock.

The upper school was divided into male and female sections. Besides education to prepare the girls for larger society,- get together and dances were periodically organized in which outsiders, officers at nearby establishment were invited to participate. Girls and boys were

instructed in Persian, Hindustani and Bengali languages. Male wards at 15th year of age were indentured to Government to fill situation in public offices. Society also helped its inmates to settle in England allowing them a starting capital of 60/- pounds. Female orphans getting married in England received an equivalent of Rs. 2,000/- in sterling. In 1823, £ 6000/- were disbursed in England on this account.

The Lower Orphan School was entirely supported by Government at the rate of Rs. 3/- per month for each orphan. This was subsequently raised to Rs. 5/-. Children of non-commissioned officers and privates were sent to this school. The invidious class distinction was reflected in their self-defeating disqualification clause: No orphan possessed of property valued at Rs. 1,000/- could be admitted unless as a paying student. Children could stay with parents till their 4th year and in exceptional case till the 5th year. Boys were sent for employment from 13th year onwards- as Drummer boys, Fifes, Trumpeters or as apprentices to the stud department or to private individuals. Children of parents belonging to Regiments on the move – who were not allowed to take children with them, could leave them in this school as boarders. In 1823 there were 649 Children in this school and the annual expense for them was Rs. 70,000/-.

These two institutions were not adequate to cope with the large number of boys, waifs and orphans that floated around the cantonments. A clergyman Rev. Thomason moved by the destitute condition of the female orphans of European soldiers started a Female Orphan Asylum at Circular Road, Calcutta with ten girls collected from the 66 King's Regiment on 1 July, 1815 with a mistress in charge. He campaigned among the European community for subscription and also persuaded the Government to make a grant of Rs. 3/- per month for each orphan. As a result of his campaign within two years Rs. 14,000/- were received as donation and above Rs. 7,000/- as monthly subscription. The Asylum bought a house for itself at Rs. 37,000/-, the number of inmates swelled everyday and in 1824 it had 76 orphans. It some times received even 15 day old baby. Care was taken to educate the girls in household work and other skills but finding suitable employment was difficult. With a view to obtain teaching posts the girls were also instructed in Bengalee with the hope that 'Ladies Society for Female education' would employ them. Since white collar jobs were difficult to come by, in the twenties it was thought expedient at one stage to equip the girls for 'more menial occupations'. Reverend Thomason's wife was connected with the committee of Lady managers.

This account of the English charitable institutions make one point quite clear: it is that while these institutions were extremely useful, these being confined within European community, did not even touch the fringe of a problem and such efforts were hardly known to the native Bangalee community to make any significant impact on them. And the problem of destitution, along with such other problems, was not confined to only one segment of the society. The India Gazette had commented on the impracticality of drawing a distinction between the European and the native paupers.

We shall briefly give account of other similar societies, homes and funds that came up in subsequent years.

District Charitable Society¹⁷: This Society was the oldest Charitable Society in Calcutta, having been founded in the year 1830. The Society actually grew out of the Christian Found of Calcutta Church which had different churches of Calcutta working in close collaboration trying to disburse relief to the poor. All the churches developed their funds from their own periodic collections and operated autonomously; but the Central Committee supervised with the hope that they would 'evolve a system of exact inquiry and careful superintendence to stop wastage or extravagance'. Here the word 'District' did not mean political district but

ecclesiastical district or church parish. The society assisted destitute persons of all classes without reference to race or creed; it maintained an Alms-house, and an Asylum for Lepers.

As regards the resident poor, the society distributed relief by means of District Committees; Calcutta for this purpose, had been divided into districts. The local vestries acted as District Committees, each receiving from the central office of the Society a monthly grant. These grants were supplemented by local collections. The funds thus available were distributed among the Christian poor residents. As regards the relief of the casual and non-resident Christian poor, a monthly grant was placed at the disposal of the Commissioner of Police. The swelling number of natives thronging the church precinct made the governors of the Committee reflect that, some way of associating the natives with their effort was necessary to take the burden off the Church and that the society should be broadened to accommodate the various creeds and colours. As a consequence Mr. E. Ryan, Chief Justice and Rev. T. Dealtry proposed to take in some lay Europeans and natives. A sub-committee with this end in view was formed on 22nd April, 1833 with eight members, of which Dwarakanath Tagore was one. The committee later co-opted seven more Indians to the committee. This special committee was supplied with funds for the relief of the non-Christian native poor.

The main objective at which the Society aimed in its distribution of relief were (1) that the relief should be granted under an organized system, (2) that no relief should be granted without inquiry by the Committee. The society employed an inquiry officer, whose services, were made available, when required, to the various other local committees. A register was maintained by the society of these reports for quick reference.

The out-door relief granted by the society was for the most part given in money, often in the shape of monthly allowances; at times, however, in the form of rations or uncooked food as well. In addition to giving out door relief, the society assisted deserving persons by paying their travelling expenses to join appointments out of town and it also paid for the education of pauper children.

The Alms-house: The society's Alms-house was the largest institution of its kind in India. It was entirely supported the District Charitable Society. It was situated on Amherst Street, Calcutta, and the premises were divided into two enclosures by a wall. Each of these enclosures was a large two-storied ward of equal capacity, one for men and the other for women and children. The inmates were classed under two heads : (i) incapable, i.e. those who through old age or infirmity were unable to work, and (ii) the able-bodied. These latter were divided into those who were willing to work but were temporarily out of employment, and those who were disinclined to work.

Persons were admitted to the institution either (a) by the Commissioner of Police or (b) by the secretaries of the District Committees, subject to the approval of the Commissioner of Police, who was in Executive charge of the institution. As a rule, able-bodied men were not allowed to remain in the institution for more than three months. During this period they were required to perform all the work of the house, such as cooking, washing, baking, carpentry, gardening, etc. The women were similarly employed in needle-work and in washing. Those who sought employment were allowed leave during the day, but were required to return by evening.

During 1890 the average daily number of inmates was 135, the total number of persons admitted or re-admitted being 604.

The Leper Asylum¹⁸: it was intended both for the Europeans and the natives. It consisted of two distinct and separate enclosures one for men and the other for women. Each enclosure

had three buildings for Hindus, Muhammadans, and Christians, respectively. The Christians included the Indo-Europeans, but their number was small. The average daily number of inmates in 1890 was 84 and the Asylum during the same year cost the district Charitable Society Rs. 10,526.

During the year 1890, including the cost of the Alms-house and Leper Asylum, the actual relief afforded by the society amounted to Rs. 82,022.

Society of St. Vincent de Paul¹⁹: This society, established in 1876 was under-purely Roman Catholic management. Its organization was somewhat similar to that of the District Charitable Society. It granted relief through "Conferences" corresponding to the District Committees of the Charitable Society. For each of the Roman Catholic parishes of the town there was a Conference which distributed relief to the residents of the parish.

The relief was given in kind (uncooked food), but sometimes small money grants also were given for the purchase or renewal of tools workmen; to defray arrears of rent, or to pay for the passages of people leaving town.

The society also worked out a scheme by which lads leaving school and obtaining employment but on small inadequate salaries might be housed in private families at a small cost.

The expenditure on relief given by this society during 1890 (including a fixed annual grant of Rs. 1,800 to St. Vincent's Home) was 8,511.

St. Vincent's Home: This Institution was situated in Kidderpore, and was intended solely for women and children. It was a Roman Catholic Institution, And was managed by the Order of the Daughters of the Cross, Admission to it was not limited to any particular creed, all females being admitted. The Home was supported by public subscriptions and a monthly grant of Rs. 150 from the Society of St. Vincent de Paul. Admission to the Home was entirely at the discretion of the Lady Superioress. The Institution was divided into three departments- (a) the Home, (b) the boarding department, and (c) the nursery for little boys and foundlings. The first two departments were intended (1) as a refuge for women who sought reform or relief, and (2) a shelter for the incurables and the distressed. The total expenditure in 1890 was Rs. 25,078-10-6.

Home of the Little Sisters of the Poor²⁰: This Institution was intended for the aged and disabled persons and was managed entirely by the Little Sisters of the Poor. The Institution was supported by public charity, and admission rested with the Lady Superioress. In 1890 there were 18 men and 29 women in the Institution.

St. Mary's House of Charity: This was another Institution intended chiefly for the aged women, though young persons were sometimes admitted. The House was established in 1888 and the average daily number of inmates during 1890 was 30. The House was governed by a Committee, and admission was obtained by a recommendation to the Honorary Secretary.

Lawrence-de-Souza Home²¹: This was an endowed Institution founded by late Lawrence-de-Souza. It was governed by "a Committee of East Indian lay-men, who in terms of the testator's will" must not be bigoted or priest-ridden". the Institution was intended for East Indian widows and orphans. Admission to this Home rested entirely with the Committee. In terms of the testator's will, should his estate pass into the hands of the Administrator General, the management of the Home was to pass into the hands of the District Charitable Society.

Society of Friends of Foreigners in Distress: This was a small Society for the assistance of foreigners, and the assistances were given for procuring passages for foreigners to their native

countries. The Society was managed by the Imperial German Consulate. The Secretary of the consulate was the Secretary of the Society. Natives of France and of the southern countries of Europe were not eligible for the benefits of the Society, the reason being that the Consuls of those countries had not joined it as members. During 1880 and 1890, Thirty one (31) persons were assisted with passages. There was one pensioner on the Society in 1890 and this was a woman She received Rs. 50 a month.

Women's Friendly Society²²: This was a Society established in 1888. It was mainly an Industrial Society, and work, skills such as sewing, glove-cleaning, die-stamping, etc. were given to women, who attended the Society's Institution. They were also provided with meals in addition to being paid for their work.

The Society also kept a registry-office for women who were desirous of obtaining employment. It also maintained a boarding house, in which "a safe and comfortable home was provided for young girls employed in shops and also for maid-servants out of employment" This branch of the Society's work was started on 1890. 21 girls took advantage of the Institution. The Society also contemplated carrying out a system of rescue-work among fallen women.

The Protestant Home: This was a Home for fallen women founded by the late Miss Fendall. It was open to both Indo-European and native women. Unfortunately it did not survive long.

We shall now mention a few English Charitable Endowments²³ created in the last century:

(i) **John Baretto's Calcutta charity**: John Baretto died in 1813 without having made a regular will. However he had managed to leave a signed instruction for the drawing-up of one. He died before the will could be drawn up. He left a moiety of his estate "for pious purposes, such as masses to be said in churches in Calcutta Bombay and Goa," and for the benefit of such poor objects as they (his executors) shall think deserving." The vagueness of the bequest led to litigation and by a decree of the late Supreme Court, dated 18th November 1814, a portion of the fund was devoted to Calcutta charities. So far as the poor were concerned a sum Rs. 5,539-15-10 was ordered to be made over annually to the Vestry of St. John's Church, another sum Rs. 5,702-7-14 in a like manner to Wardens of the roman Catholic Church of Nossa Senhora de Rozario of Moorgeehatta Cathedral for distribution to the poor.

The two Vestries distribute the amounts at their discretion, but there was no restriction of creed. Both bodies expended the income in monthly allowances. The St. John's Vestry has 51 pensioners and the Moorgeehatta Cathedral 120.

(ii) **John Baretto's Widow Fund**: Under the same decree of the then Supreme Court establishing the Calcutta charities mentioned earlier, a sum of Rs. 2560.00 was ordered to be set apart for the payment to ten widows monthly pensions of Rs. 21-5-4 each. The fund was held by the High Court, and the nomination to the pension list was in the hands of the official Trustees of Bengal.

(iii) **Claude Martin's Fund**: General Claude Martin who died about the same time as John Baretto left a sum of Rs. 50,000/- to the poor of Calcutta. This fund was administered by the Chaplain of St. John's Church. The benefits however were not confined to any particular class of people or religious denomination. The income of the fund was distributed in monthly pensions. There were 187 pensioners on the fund-receiving pension in 1890.

(iv) **Charles Weston's Fund**: Charles Weston died in 1810. By his will Mr. Weston bequeathed a lakh of rupees, the interest of which was to be spent "towards the assistance and relief of families and individuals labouring under the pressing miseries of poverty, hunger,

disease or other painful misfortunes and distresses." by a decree of the Supreme Court, dated the 7th April, 1812, the administration of this charity too was entrusted to the Vestry of St. John's Church by whom relief was given without reference to creed. The income on the fund was given away in monthly pensions. There were 43 pensioners in 1890.

(v) *Mrs. Elizabeth Athanass Fund*: This was a rather small fund at the hands of the Administrator General of Bengal. It was administered too by the same person. The corpus of the Fund was Rs. 2,000/- only under the terms of the deceased Lady's will, the interest on the Fund was for the benefit of widows and orphans. The charity lay unused for a number of years and accumulated to Rs. 7000/-. The Administrator General however took steps to distribute the accumulation and there were one widow and nine orphans on the fund in 1890. The orphans were placed in the Calcutta Free School.

(vi) *John Athanass' Fund*: Mr. Athanass' created this fund consisting of Rs. 4000/- by his will dated the 18th September, 1833. Under the terms of the will the interest on the fund was to be distributed by the St. John's Vestry "amongst the poor, the blind of both eyes and cripples of this town and suburbs of Calcutta." There were two pensioners on the fund in 1890.

(vii) *Lady William Bentinck's Fund*: This Fund was established in 1835 and consisted of Rs. 12,500/-. The Fund was in the hands of District Charitable Society of Distribution to the poor. There were nine persons on the Fund receiving monthly allowances, in 1890.

(viii) *Mrs Maria English's Charity*: This Fund consisted of Rs. 71,700/- and was in the hands of the Official Trustee of Bengal. Under a decree of the High Court in the suit of the Advocate General Vs. The Administrator General, out of the interest of the Charity, less than Rs. 200/- per annum, was to be spent for Masses at Church and the rest was ordered to be made over to the District Charitable Society to be applied to the relief of the poor at the discretion of the society. There were five pensioners on the Fund in 1890.

(ix) *Anthony de-Souza Charities*: This fund consisted a huge sum of Rs. 4,21,700/- and was in the hands of and administered entirely at the discretion of Sir Walter de Souza. A sum of Rs. 948 out of the interest on the said money was being distributed monthly to indigent persons in Calcutta and the balance of the income being spent in Bombay.

(x) *Northbrook Fund*: This Fund consisted of Rs. 10,000/- being the surplus of Lord Northbrook Memorial Fund and was made over by the subscribers to the District Charitable Society. One-half of the income was reserved for native paupers and the balance was dovoted to the general purposes of the Society. There were no religious qualifications needed to be a pensioner on the Fund.

(xi) *Robert Bentley's Fund*: This Charity consisted of Rs. 30,200/- and was a bequest of Mr. Bentley to the St. John Churclis Vestry, "for the relief of the indigent and other objects of the said institution." Portion of the income was reserved for Vestry purposes. The balance was to be given away in monthly pensions. There were eight pensioners on the Fund.

(xii) *Mrs Anne Bentley's Bequest*: This consisted of Rs. 43,200/- invested in Govt. Securities for distribution, "By monthly donations to and among poor persons." Under the terms of Mrs. Bentley's will the interest on the sum was to be divided equally between the Vestries of St. Paul's Cathedral and St. John's Church and no person was to get more than Rs. 12 a month. There were twelve pensioners on this Fund.

(xiii) *Mrs. A.G. Leondy's Fund*: This Fund had Rs. 7000/- under the administrative control and supervision of the Administrator General of Bengal. It was for general charitable

purposes. There were two persons receiving fixed and four persons receiving temporary monthly allowances from the charity. Casual relief was also frequently given from the Fund.

(xiv) Mrs. Elizabeth Oliver's Charity: This consisted of Rs. 3000/- the interest of which was to be distributed to the, "poor of Calcutta." The income was spent in monthly pensions.

(xv) Mrs. Emma Hubbard's Charity: This trust consisted of 2,500/- the interest of which was spent by the Chaplin of St. John's Church, Calcutta on the poor of the parish. There were no pensioners on the Fund. The income of the Fund was spent on the purchase of the blankets, clothings etc. for the poor.

(xvi) Mrs. Elizabeth Dumoulin's Fund: This was a bequest of Rs. 2200 to the St. John's Vestry for "Charitable purposes." The income, about Rs. 7/- a month was given away to a poor widow.

(xvii) Thomas Hutt's Charity: This Fund had no money capital but consisted of house property. Under the terms of Mr. Hutt's will, dated the 14th January, 1826, the rents were to be made over to the St. John's Vestry, "for the purpose of being distributed to the poor of all classes". The net income from the property was about Rs. 1200/- a year and was distributed in monthly pensions to ten persons.

(xviii) James Sheriff's Fund: This Fund consisted of Rs. 13,500/- and was in the hands of and administered by, the Chaplain of St. Andrew's Scottish Church. The income was for the benefit of poor members of the Church. There were eleven pensioners on the Fund.

(xix) Mrs. Sepandro's Fund: This Fund consisted of Rs. 38400/- One third of the interest on this Fund was devoted to the Roman Catholic widows. The Fund was held and administered by one Mr. David Cowie who was also executor of Mr. Colvin, Mr. J. Baretto and Mrs. Sepandro. There were seven widows receiving monthly allowances from the Fund.

(xx) Mrs. Mary Logman's Fund: There was Rs. 10200/- in this Trust. It was in the hands of the Administrator General of Bengal. The interest on this Fund was paid to the Superior of the Portuguese Mission in Bengal. The Fund was meant for poor relief. There were forty-six persons receiving monthly allowances. The Fund was for Roman Catholics only.

(xxi) Sassoon's Fund: The District Charitable Society received this Fund as a donation from Sir Albert Sassoon. The interest on the Fund was to be applied, "for charitable purposes under the name of the Sassoon's Fund." There was no Pensioner on the Fund.

(xxii) Mrs. Rose Ann Greenway's Bequest: This Fund consisted of Rs. 6,000 in the hands of the Official Trustee of Bengal who paid the interest to the District Charitable Society.

(xxiii) Joseph Cones' Charity: This Fund consisted of Rs. 15,000 and was in the hands of the High Court. In the suit of Das Mercedes Vs. Cones the High Court ordered Rs. 50 a month representing the interest on the Charitable Legacy was meant for widows and orphans according to the testator's will, be handed over to the District Charitable Society. There was however another condition, that; "preference be given to Roman Catholics and members of the testator's Family. The pensioners on the Fund were four in 1890- all four being Testator's grand children.

(xxiv) Cheke's Fund: This Fund had a capital of Rs. 11500 and under a decree of the High Court in the suit of J.M.G. Cheke Vs. The Administrator General, the income of the Fund was

to be, "applied for the benefit of the widows and orphans." There were four widows drawing monthly allowance from the Fund.

(xxv) *Mrs. Nina Forster's Fund*: This consisted of Rs. 20000, portion of the residuary estate of Mrs. Forster, bequeathed to the District Charitable Society. There were no condition attached to the bequest, and there were no pensioners on the Fund.

(xxvi) *Massey Baba John's Bequest*: This constituted of house property and Government Securities and was in the hands of the Administrator General of Bengal. In terms of a decree in the suit of Naibandoff Vs. The Administrator General, the surplus income of the legacy, intended for the benefit of the prisoners of the Court of Request was ordered to be paid to the District Charitable Society, "to be applied for the general purpose and object of the Society." This surplus was in the average of about Rs. 3000 annually. There were no pensioners on the Fund.

The relief from the Endowments were mostly given in cash to the poor men and women individually. But there were other endowments with specific purposes of which Education attracted the attention of many benevolent persons. Education naturally enjoyed a high premium in a changing society of specialized professions. We shall mention only a select number of such Endowments for Charitable Education.

(i) *John Baretto's Educational Fund*: Under a decree of the High Court in the suit of Simson Vs. Baretto a sum of Rs. 1224-15-11 was ordered to be set aside for the education of children. The Fund was in the hands of High Court and the nominations were in the hands of the Registrar of the Original Side. There were six children on the Fund costing Rs. 8 a month. The balance of the income was given to Hindu boys.

(ii) *Lawrence de Souza Boy Fund*: It was a bequest consisting of Rs. 225000 in the hands of the Official trustees of Bengal. This was meant for the education of boys in the Doveton College. There were eleven boys on this Fund.

(iii) *Lawrence de Souza's girls Fund*: This bequest to the tune of Rs. 75000 was few marked for the education of Girls at the Doveton Young Ladies' Institution.

(iv) *Mrs. Nima Forster's Fund*: This Fund consisted of Rs. 9000/- in addition to Rs. 20,000/- given over to the District Charitable Society and was put in the hands of Archdeacon of Calcutta. He selected a girl for education at the Pratt Memorial School. According to the terms of Mrs. Forster's will, should at anytime the school ceased to exist, this Fund was to laps to the District Charitable Society.

(v) *Bruce Institution*: The school had a capital of Rs. 667500/- in the hands of the Accountant General of Bengal. The Fund was for the maintenance of and education of pauper Eurasian girls who were elected to the benefits of Charity by a Body of Governors. The girls when elected were place for educational Institution selected by the Governors. There were hundred and eight girls in 1890, receiving education at the cost of this Fund.

(vi) *Orphan Fund, Howrah*: This consisted of Rs. 5400/- invested in Government Securities and was in the hands of the Magistrate. The Fund was managed and disbursed by the Chaplain of Howrah, the interest being applied to the education of Indo-European orphans in the Howrah District. The Fund was raised by Mr. and Mrs. J. Lindsay and represents the proceeds of a Fancy Fair.

(vii) **Bengal Masonic Association:** This Fund was for children of indigent freemasons. This Fund was established in 1869. It had a capital of Rs. 84000/- invested in Government and other securities. In addition to the interest on these the Association was also supported by capitation assessments from the Lodges of the Masonic District of Bengal and by voluntary contributions. Of the thirty-five children, only six, 2 boys and 4 girls only were from Calcutta and the other children were in schools in various places of India. Children were elected to the scholarships by the subscribers at the half-yearly meetings.

(viii) **Benevolent Institution:** This Fund was raised by Rev. C. Jordon and Rev. G.H. Rouse of the Baptist Mission. The Fund had a capital Rs. 26,000/- in the hands of Mr. Robert Belchambers. The money was spent for the education of children in "undenominational" schools.

(ix) **Calcutta Free School:** This was the oldest Charity School in Calcutta and was founded in 1790. It afforded free education to both boys and girls. Pay scholars were also admitted. There were no fixed numbers of Founderers. They were regulated by the Funds available. Admission to the Institution rested with the Governors. There were 373 children- 211 boys and 162 girls in the school in 1890.

(x) **La Martiniere:** This Institution was founded by the Late General Claude Martin who left a large sum of money for the establishment of a school for Christian children of Calcutta under the direction of the Court. The school was opened was 1st March, 1836. There were two sections, one for the boys and other for the girls. Under a decree of the High Court, there would not be less than 105 free boarders, of which 73 were to be boys and 30 girls. Election to the foundation rested entirely with the Governors. At the end of 1890 there 161 boarders on the rolls.

(xi) **Loretto Orphanage:** This was an orphanage for girls and was under the management of the Loretto Nuns. Admission rested with Lady Superioress, There were no fixed number of free boarders. At the end of 1890, there were 336 boarders in the institution.

(xii) **Catholic Male Orphanage:** This was a purely Roman Catholic Institution and was intended for orphan boys. It was managed by the Irish Christian Brothers. At the end of the year 1890, there were 192 boys on the rolls.

However European Charitable endowments were not confined to educational grants alone. There were funds allocated for other special areas of social welfare like prisoners relief, debtors' support, medical relief and famine relief. A short list of a few of these charitable funds 24 are as follows:

(i) **Mrs. Sally Murray's Fund:** In the hands of the St. John's Vestry, and in terms of Mrs. Murray's will the interest was to be applied by them "in obtaining the release from custody of persons deserving of or fit objects of charity and commiseration who may from time to time be imprisoned in the Great Jail of Calcutta for debt."

This Fund was very seldom used and had accumulated to over Rs. 33,000/-

(ii) **John Baretto's Debtors' Fund:** In the suit of Simpson Vs. Baretto, already mentioned, a sum of Rs. 1,060-10-8 was ordered to be annually set apart for the benefit of deserving debtors.

The Fund was held by the High Court and the income was at the disposal of the Registrar of the original side.

(iii) *Claude Martin's Prisoners' Fund*: This Fund consisted of Rs. 2,50,000/- in the hands of the High Court. The income was distributed by the visiting Justices of the Presidency Jail to released convicts. By a recent order of the High Court, the benefits of the Fund, formerly confined to Calcutta, have been extended to Bengal.

(iv) *Charity Fund*: It is a small Fund of Rs. 5,100/- held by the Accountant General, Bengal, on behalf of the Judges of the Small Cause Court in whose hands the administration say. The interest of the Fund was for the relief of deserving 'debtors by judgement.'

This account of the English Social Welfare Institutions and Endowments in Bengal stops at the 19th century and is not at all exhaustive. But the English rulers discovered soon enough that their ameliorative measures were not adequate to the ever-increasing problems. It neither eliminated the problems nor went deep enough to understand them. Hence in the subsequent after years 1845, a series of Inquiry commissions to investigate into the causes of vagrancy, pauperization, epidemic diseases, lunacy mendicancy etc. were instituted. Native co-operation were sought in the welfare efforts and found. Native efforts on their own soon followed in the foot-steps of the British example.

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SOME OBSERVATIONS ON THE ROLE OF WATER SECTOR SCHEME IN DEVELOPMENT OF RURAL BANGLADESH

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Abstract: The paper explores the fact that Water Sector Scheme has multidimensional impact on the community. On the one hand, the scheme safeguards crop through preventing floodwater, facilitates irrigation and creates employment opportunity for the rural people. On the other hand, stagnant rainwater inside the embankment increases salinity, damages roots of the trees, helps leech breeding, making cultivation difficult. Similarly the enclosure of internal canals hampers water current giving rise to the quicker growth of water hyacinths which obstructs boating and restricts fishing, thus dwindling people's employment opportunities as well.

I. Introduction

Water Sector Scheme is a sub project of Rural Development Programme involving construction and maintenance of embankments as well as excavation of drainage and canals. In Bangladesh perspective, two prerequisites are vital to improve the condition of mass in rural areas; firstly, enhance food production; secondly creation of employment opportunities. The embankments save crops from floodwater and excavation of canals facilitates irrigation augmenting food production. Similarly construction/maintenance of embankment and excavation of canals create employment opportunity for rural people. One of the major objectives of the Water Sector Scheme is to create employment for the rural poor in general and the unemployed youths and the poor/destitute women in particular.

Basically 50% of the rural development resources are spent on construction and rehabilitation of coastal and river embankments and excavation of drainage and irrigation systems (Country Strategy Outline, Agenda 8, 1995). In collaboration with the Bangladesh Local Government Rural Development and Water Resource World Food Programme (WFP) assists these programmes to enhance productivity through Food For Work Programme (WFP, 1999)). This programme also provides employment opportunity for the rural poor, which must have contributed to improvement of the quality of life of the local/rural people in general.

Research shows that along with positive impacts the scheme has provided some unintended effects in some of the project areas. It has been reported that the water logging, due to insufficient water management and inadequate proper drainage, has resulted in to the Sulphur deficiency in 1.6 million hectare (Islam and sadeque, 1992).

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Similarly long term use of ground water for irrigation increased salinity of the soil. As a result Nitrogen Sulphur and Zinc content of the soil is depleted causing decreased fertility and ultimate less of crop production (Barghouti and LeMoigue, 1991). Besides, flood control schemes have altered the natural flood plain giving rise to marshy lands decreasing arable lands (GOB, 1991). Moreover, continued use of ground water has resulted in the drying up of the ponds, ditches, canals and road side reservoirs. This results in the decrease of fish production (Ali, 1991; Rahman, 2000).

Keeping this background in mind, present study assesses the role of Water Sector Scheme implemented by BWDB (Bangladesh Water Development Board) in improving the condition of mass in rural Bangladesh. The paper seeks to identify whether people, living in the project areas are being benefited as an impact of construction/maintenance of embankments and excavation of canals or the unintended effects of the scheme overshadows its general records of success.

II. Research Methods and Technique of Data Collection

Although a combination of case study, survey and PLE (Participatory Learning Experiences) methods were used for collecting data yet the information were largely collected by using PLE. PLE is a method for interacting with the villagers, understanding them and learning from them about their own development. Through PLEs qualitative information from the earth-workers as well as other groups regarding the impact of the project were generated.

In the study, a number of PLEs based on PLE techniques were facilitated mainly with the beneficiaries and also with different stakeholders in the project. PLEs were facilitated by using various methods such as mapping, wealth ranking, metrics ranking, and scoring, time trend analysis and focus group interviews. They contributed to a better understanding of the reasons behind the facts identified in the survey and the different views about programme output, effects and impact.

A comprehensive checklist was compiled with a view to gather information demanded by the format of the study. The checklist covered the list of indicators intensively and look at the processes of causation and other qualitative aspects. In course of developing seasonality chart and time trend analysis and specify seasonal variation in food consumption, in income, information on employment, employed days and wage rates were obtained from the respondents. Information on the socio-economic differences of the respondents were obtained through wealth ranking and the perceptions of the respondents on wide ranging socio-economic issues were obtained through scaling, and vector scoring. Social maps were drawn to show socio-economic stratification in the area. Historical data of the area I came from document analysis, past surveys and informal sessions with elderly people who have lived in the area for a long time.

Twelve unions under three districts were selected as sample areas, such as: Dakshin Digholdi, Uttar Digholdi, Purba Ilisshya Paschim Ilisshya (Bhola); Mirat, Kasab, Balihar, Uttar gram; Naogaon Sadar (Naogaon) and Dhansagar, Rayenda and Nalbunia (Sharankhola)

The PLE sessions were facilitated with male earth-workers, their female counterparts, traders and business persons, farmers and landowners, representative people, the school

teachers, ex chairmen and other informants, women group members of GOs, NGOs, and Grameen Bank and women living at adjacent areas were also interviewed since they are also the stakeholders of the intervention or holds the information about the impact of the project. The PLE sessions with farmers, landowners, businessmen, rickshaw and van-pullers, representative people were arranged at UP offices with the initiative of the concerned UP Chairmen. These informants (number ranged from 25 - 30) were previously contacted and requested to attend the sessions. The PLE sessions with boatmen and fishermen were arranged at the river side and some of their houses. The sessions with the female household members of the boatmen, fishermen and earth-workers were arranged at their houses.

III. The Impact of Water Sector Scheme on the Community

The impact of Water Sector Scheme has been assessed by utilising selected socio-economic indicators, mentioned above. The paper tries to assess the impact of the scheme largely on community level.

3.1 Roads to Prosperity

3.1.1 Food Production has increased

The Water Sector Scheme in the project areas has brought significant change in food production. Embankments save cultivable land from flood water and excavation of canals in the project areas and enables farmers using surface water for irrigation. As a result cropping intensity has increased and shifting from traditional rice varieties to HYV was possible. Almost all respondents in the sample areas (except a part of Sharankhola) said that there was an increasing shift from local variety to High Yielding Variety (HYV).

3.1.2 The Roads Created by Embankments Facilitate Implementation of Technology in Farming

Embankment created a number of connecting roads to the Growth Centres, towns and remote villages, which facilitated implementation of technology in agriculture hence boost the production. The necessary agricultural inputs are easily available and cost relatively cheaper. Farmers can consult resource persons about agriculture because expertise can move easily to the villages.

3.1.3 The Growth Centres have Expanded

The embankment has caused development of a number of connecting roads reducing distance to the growth centres. Moreover embankment itself acts as roads. For instance, previously the route from Uttargram to Manda was Uttargram via Nowhata via Sutihat via Pataghata to Manda. The total fare was 50Tk. that came down to 20 Tk. It increased the number of passengers as well as buyers and sellers which contributes to the expansion of growth centres.

In the project area non-motorized vehicles like Bicycle, Rickshaw-van, Rickshaw, and Push-Bullock-carts are used for carrying goods to and from rural markets and urban destinations. Major cargoes are carried by vehicles on the project roads included cash crops, cereals, and vegetables. Goods/commodities transported through the roads have increased after construction and better maintenance of embankments.

Almost all types of shops/enterprises were found on the growth centres, namely, pan-biri, grocery, stationery, clothes, shoe-store, cookeries/utensils repairing, rickshaw-cycle/radio-watch shops and repairing, saloon, tailoring/cloth-cum tailoring, bedding/pati/mat house, pharmacy/doctor's chamber, tea-stall/sweet meat, restaurant/hotels, library, fertilizer-pesticides store, machinery/spare parts/sanitary /hardware store, laundry, construction materials, furniture/timber/decorator shops, rice-mills, saw-mills, biscuit factory/bakery/confectionery, fire wood, fruits store, arat/ godown, welding, jeweller shops, art/glass house, black smith/kamar house, prawn-fish depots and diesel/petrol shop.

3.1.4 The Embankment and Connecting Roads have Contributed to the Expansion of Rural Trade and Business

The market has shifted from weekly to daily in many of the growth centres. The supply of perishable goods is more reliable for regular marketing. Temporary & permanent shops were established alongside the embankments in the three different project areas for trade & business. For expansions of trade and business long-distance trade come up to create new business for improved communication, road access and transport. To establish small-scale industries Growth centre has been serving as crucial marketing outlet for the local people. After construction of roads the spatial boundary as well as the commercial activities of the centre have steadily been expanding and the volume of weekly transactions in the market expanded. Trading of agricultural inputs has increased even in the remote villages and agricultural producers obtain better prices.

3.1.5 Embankments and Roads Contributed to Benefit the Transport Owners and Passengers

There has been an increase in vehicle in almost all areas. Earlier there was no rickshaw van, at present 150- 200 or so rickshaw van have been operating every day. Ownership of both motorized and non-motorized vehicles has gone up thereby raising the number of owners in all the areas. Increased availability of transport has brought down the cost and reduced time requirements. There is much more vehicular and pedestrian traffic with the emergence of roads. The most dramatic difference was in rickshaw and baby taxi traffic, which has increased in all project areas.

After creation of roads the mode of transportation shifted from boat to bicycle van, rickshaw and truck. The transporting charges by boat are 10Tk. per hundred kg while 25 Tk is charged for the same quantity of goods for transporting by rickshaw van. Even then people prefer transporting goods, particularly perishable goods by van since it saves time.

The numbers of transportation carrying passengers have increased. All types of non-motorized vehicles on the roads were found to carry passengers along with other commodities and cargoes.

3.1.6 The Roads Created by Embankment Helped to Availability of Agricultural Inputs

Timely and easy availability of agricultural inputs are crucial for the framers for farming. Now a days agricultural inputs are easily available. Agricultural inputs must have had positive effect on the agricultural production in the areas. There are many who said that there is a reduction in the cost of agricultural inputs which encourage farmers to use it, on the other

hand it was noted that the price of agricultural inputs has increased as a result of introducing rickshaw vans instead of boats. For instance, the carrying cost of 50 mounds goods from Rajapur Bazar to Rayenda was 100 Tk. by boat as against Tk.500 by rickshaw van. Even then the traders can send insecticides, fertiliser to remote villages, which they could hardly send by boats.

3.1.7 Agricultural Production has Increased

PRA Participants in high land and big as well as middle range farmers said there were increase in the agricultural production. This increase in agricultural production must have been due to irrigation facilities, easy availability of and reduction in costs of agricultural inputs. Which is a definite indication of very positive impact of the scheme in the agricultural sector in the areas. The availability of transport make it possible for farmers to verify prices in different markets and decide on alternative buyers. For availability of transport it is possible to market perishable goods in time.

Contrary to other areas, it was found that fish production has increased due to excavation of Srimatkhali khal in Uttargram of Noagaon. There had not been any water in the months of Kartik to Jyaishta but at present the canals hold water throughout the years excepting Baishakh-Jyaishta which harbours plenty of fish and thus reducing fish price. Previously, one Kg of fish cost 60 Tk. which is now being sold at 40 Tk.

The Government and unemployed youths share 40% and 60% of the trees planted beside the embankment respectively.

3.1.8 Income Generating Activities/Employment Opportunities has Increased

The embankments created employment opportunity for a section of rural poor:

Establishment of increased shops on the slope of embankment, turn-over/buying and selling of goods and vehicle movement on developed roads, volume of commodities trade, number of buyers and sellers and the increase in number of shops/enterprises, and facilities/services would suggest that there has also been significant increase of employment through these indirect means.

The connecting roads, caused by embankments provide different types non-farm activities, such as: rickshaw/ van puller, vendors, door to door salesmen etc. It has made direct contribution to develop self employment through saving money. The roads also benefited the agricultural labours. Wage rate remains high during work season. The labourers have gained a better bargaining capacity as availability of non agricultural jobs have increased and their dependence on large farmers decreased.

Participation of the rural poor including the women groups in development activities has been facilitated by construction of the roads. The road provided short to long term job opportunities. Choseable income earning occupations such as trading van or rickshaw puller and diversified business ventures. Women have been engaged as caretaker of plantation grown on the slop of the embankments & participation in the NGO/Grameen Bank development activities. Labourers could save money and invest for long term productive activities. But the scheme encountered some problems which decreases employment

opportunity to certain extent. The issue is addressed below, in the section 'Unintended Effects'.

3.2 Unintended Effects

Notwithstanding its general record of success, the scheme has encountered some problems and provided some unintended effects. Although the big and middle range farmers informed that prior to excavation of canals the natural drainage system through canals could not hold the rain water resulted in over flow of the water in farmland which made cultivation difficult. While the marginal farmers said that before excavation of the canals, the rain water used to flow into the river, but at present the canals hinder proper drainage causing water clogging. Now crop production is declining because of water logging in the farms in low laying areas, like most part of Sarankhola and low land of Noagoan as well as Bhola. Earlier 2 Bighas of land used to yield 100 mounds per year in three cropping seasons. At present the amount has reduced to only 12 mounds.

Before the Rayenda embankment was constructed at Sharankhola the major part of earning was derived from coconut and betel nut, now it has decreased sharply. Stagnant rainy water increases salinity and damages the roots of the trees, as a result the trees are dyeing. A single betel nut tree used to produce 200 betel nuts has decreased to 40 per tree. Similarly people used to get 2000 Tk. from a single coconut tree per year and that has come down to 100 Tk.

It was also found that the excavation of canals caused dwindling small scale cultivable land in some areas. Because at the time of excavation of canals the surplus soil has been dumped in the land beside the excavated canals and has made it unusable. In order to revive the land for cultivation the owners need to spread the damped soil to a flat surface suitable for tilling. This needs 1000-2000 Tk. for labour cost, which they can hardly afford. These lands used to produce 1500-kg rice per acre before excavating the canals. It also yielded vegetables and pulses. Those who have half an acre of such land they used to get eight months feeding from the land. Now it has turned to barren land.

Similarly earlier they used to cultivate vegetables beside the embankment and tend cattle grazing on the weeds grown in the embankment areas. After developing community forestry on slope of the embankment they can no longer grow vegetables and graze cattle there.

Moreover, the pastures have decreased as a result of dwindling grazing land due to maintenance of embankment and plantation in all the sample areas. Only 20% respondents raise livestock. Tending cows has decreased markedly, particularly at Sharankhola. Because the embankment has resulted water logging inside the embankment areas. Prolonged water logging brings about flowing of water. The stagnant water helps breed the leeches favourably and increases their population. Earlier ebbs used to take away the leeches with the down flow of water, the embankment prevents it. Now these leeches stick to the feet of the grazing cows resulting in developing ulcers in infected parts of the cattle, sometime causing death. The leeches have also made it difficult for the farmers to work in the field. At the time of our field work in Sharankhola (month of June) it was observed that vast farmlands with scattered potholes are left without crops because the farmers failed to work in fear of leeches.

Water logging, resulted from construction of embankment has helped insects grow faster demanding insecticides worth 200 Tk. to control them in a land of 2 Bighas. A farmer in Sharankhola informed that he had incurred a loss of 22000 Tk. from 22 Bighas of lands. He could not save the crop even after spending 3000-4000 Tk. for insecticides and fertilizer. Now he needs to sell out his 4 Bighas of land in order to pay back his debt. In such a way the marginal farmers are turning into landless, some switched to other professions.

As a result of contraction of Rayenda embankment, a number of canals have become blocked. Due to the absence of water current the stagnant water has given rise to quicker growth of water hyacinths. The huge growth of water hyacinths obstructing boating and restricted fishing.

It is worthnoting that the impact of embankments and excavation of canals on highland farmers and low land farmers vary in Noagoan and Bagerhat, particularly at Sharankhola. People in Noagoan said that before excavation of canals the flood water would over flow the area and thus damage saplings. As a result of excavating the canals the water goes to Atrai-via Srimatkhal. This canal and Basna khal made the drainage of logged water in the field quicker while people in Bagerhat faced difficulties with logging water caused by excavation of canals and construction of Rayenda embankment.

IV. Conclusion

An attempt have been made to ascertain the impact of the Water sector Scheme on the people in adjacent areas of the sample unions where the embankments were constructed and have been maintained and canals are excavated. It was clearly evident that the project has brought significant changes in the lives of the people.

It is obvious from the fact that despite some unintended effect the magnitude of the achievement is highly significant. Effects of water schemes are reflected in increased cropping intensities and higher production. Value of land has remarkably increased both in the developed growth centres and in the catchment of water schemes. It showed increased trading prospects and cropping potential after implementation of the projects. The embankments saved crops and houses from flood water and canals helped irrigation as well as drainage of the rain water and flood water.

People in Bagerhat mentioned that their sufferings are not due to construction of embankments but as a result of mismanagement of sluice gates. In their view it is necessary to install high voltage sluice gate in order to control the flow of water in and out. People of Nazipur are in need of construction of embankment to the north side of Nazipur. In some parts of Sharankhola irrigating the farm land has become difficult. It would have been better if the concrete reservoir could be built for irrigation. Many of the respondents said that crop production would have increased if there were irrigation canals, because much water is wasted. All the evidences suggest that before developing effective flood control and irrigation schemes it is very vital to review all aspects from the point of environmental management.

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POVERTY-ENVIRONMENT NEXUS : A CASE STUDY OF DAKATIA VILLAGE, KHULNA

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Abstract: It has been observed that the environment does affect the level of poverty of an area. The level of poverty has been measured in terms of land under possession, total production received from the land and the level of income earned in a year by the individual farmers. The relationship between environment and poverty has also been shown with the help of some statistical tools. The relationship among the variables is positively correlated in terms increasing or decreasing the actual value of those variables. However, this paper has made an attempt for exploring the linkages and interrelations between poverty and environment degradation of an area named as the Beel Dakatia in the Khulna region.

I. Introduction

The present study has made an attempt to illustrate the relationship between poverty and environment of Dakatia village located within the Beel Dakatia area. To analyze this relationship, the statistical tool i.e., correlation and regression analyses have been applied. Three variables have been considered in this study. These are: total land areas, productivity of land and income of the people of living in Beel Dakatia village. Among these variables, there is a positive correlation and regression relation. This explains if the land area for cultivation decreases, the total productivity will also decline. Similarly, if total production falls, the total income of the people will be lower. As the land area for cultivation is reduced due to the water-logging in the Beel Dakatia, the available land for cultivation decreases; consequently, the level of income of the farmers decline, causing them to be poorer.

This study aims at determining the relationship between poverty and environment using three variables, such as, total land area, productivity of the land and income of the people living in Dakatia village. In line with this broad objective, this paper has the following specific objectives:

- to ascertain the physical factors which caused the problems of water-logging; and,
- to find out linkage between environmental disaster and poverty of the people.

II. The Study Area and Methodology

The Beel Dakatia area is comprised of 11,980 hectares which includes seven unions under Dumuria and Phultola thanas of Khulna district and two unions of Abhoynagar thana of Jessore district (HASKONING, 1992). And Dakatia village is situated adjacent to the north corner of Khulna City and extended up to the south corner of Jessore district (22°30' N and 89°15' E). Map 01 shows the location Dakatia village in context of Bangladesh and Khulna

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district. This area belongs to the active deltaic plains of south Bengal siltation brought in by tides initially formed the ground layer of the Beel Dakatia. The deposits of silt varied from place to place. Some parts remained low and other parts become raised. People started living on the raised land, where fishes were in abundance in the lower portions. This saucer like land formation (depression) came to be known as the Beel Dakatia.

The simple random sampling technique was used to collect data from the study area. Firstly, a complete list of the total farmers/landowners was prepared. Ten per cent of the total farmers/landowners of Dakatia village were randomly selected and interviewed. The field survey was completed in April 1998.

Relevant data were also collected from the secondary sources, such as, Community Development Library (CDL), Bangladesh Institute of Development Studies (BIDS), Bangladesh Centre for Advanced Studies (BCAS), Bangladesh Institute of Technology, (BIT), Khulna, PRODIPAN (a local NGO), Institute of Bangladesh Studies (IBS) of Rajshahi University, Coastal Development Partnership (CDP), and Centre for Urban Studies (CUS). And other published and unpublished reports were also consulted to obtain additional data for the study purpose.

III. Study Findings

3.1 Causes of Water Logging

The Beel Dakatia is a water-logging area is located in the south-western region of Bangladesh. Before 1960, the water of this Beel area was used to drain out through the Hamkura and the Upper Solmari rivers. The majority of the Beel area was under cultivation. The area was susceptible to flooding through monsoon rain and intrusion of tidal saline water through these rivers. Subsequently, the flood and tidal saline water caused to severe damage to the crop (mostly paddy) of this area.

Due to the construction of the embankment and sluice gate by the erstwhile East Pakistan Water and Power Development Authority (EP WAPDA), the salt water of sea could not enter into the Beel area. As a result, there was a new advent of agricultural practices in these areas. The Beel area was also brought under cultivation, and the overall economic condition of the farmers had improved over night. But better days were temporary – only for a period of 10 to 15 years (The Daily Janakantha, 24 October, 1997). From 1979, the water of the marshy land within the polder could not be drained out. A vast area was developed like alluvial land from the mouth of the river adjoining the sluice gate. In 1980, at least 4000 hectares of land were affected by water-logging and most of them were part of polder no. 25 (The Daily Janakantha, 24 October, 1997). By the turns, polder nos. 24, 27, and 28 were also affected by water-logging. After implementation of the Coastal Embankment Project (CEP), the tide water from the river could not enter into the Beel. The tide water was obstructed by the sluice gates. The tide water with alluvial soil remained stagnant at the sluice gates and sediment gathered. Previously, the tide water entered into the vast Beel and at the same time, water used to drain out from the Beel through the rivers. Due to the construction of the embankment, there was no scope to drain out the sediment. The rivers turned into plain land. An area of 8 to 10 kilometers of the Bhadra, the Hari, the Hunkura, the Shalmari, Jhinadha and Shalta rivers were silted around the sluice gates and in some places, the depth of the river water was around only 1 to 3 meters. The water during the rainy season flooded in the Beel of eight thanas of Khulna and Jessore districts and the water could not be drained out. As a result, vast area has been suffering from permanent water-logging.

Our field investigation identified the following inherent causes of water-logging in the Beel Dakatia area:

- the construction of embankment was technically flawed. The outlet mechanism in the sluice gates failed due to deposit of heavy silt-loads during the down flow in the rivers and canals. As the one way outlet could not distribute the silt deposits evenly over the large area and raise its level, morphological changes occurred accelerating siltation in the drainage channels, raising the water level outside the gates to an abnormal height;
- due to lack of maintenance, the outlet mechanism in the sluice gates gradually started failing;
- for a long time, the influential people living near the sluice gates had controlled the regulation of water for fishing during the ebb of tide. After construction of the embankment, some local fish traders started shrimp culture in the area making small dykes for holding the river water. These unplanned constructions of dykes have considerably reduced the drainage capacity of the river. This interference was considered by to be one of the major causes of soil deposition at the mouth of the sluice gates resulting in water-logging; and,
- Indiscriminate shrimp culture in the area adjacent to the connecting rivers has caused reduction of water-flow leading to silt deposit at the mouth of the connecting rivers.

At the time of the field work for the study, the channels are almost totally silted up blocking all drainage channels and the area is now water-logged causing about half a million people landless.

3.2 Land Area under Agricultural Production

It is estimated that only 32 per cent of the Beel Dakatia area is available for cultivation, of which 14 per cent is flood free and the remaining 18 per cent is temporarily flooded (HASKONING, 1992). Temporarily flooded area is mostly used for single crop in the dry season while double and triple crops are grown on the flood free areas. During Rabi crop (mid October to mid March) and early Kharif I (mid March to mid July), the surface soil became highly saline due to evaporation of soil moisture and accumulation of salt as the saline ground water moves upwards through capillaries activities. The decreases with the initiation of the monsoon rains. The soils become suitable for T- Aman in July. In topsoil begins to become saline in November, reaches its peak in April and gradually this region due to salinity problem, the cultivation of upland Rabi and Kharif - I crops are very limited (K. Hafiza and A. Hazrat, 1997).

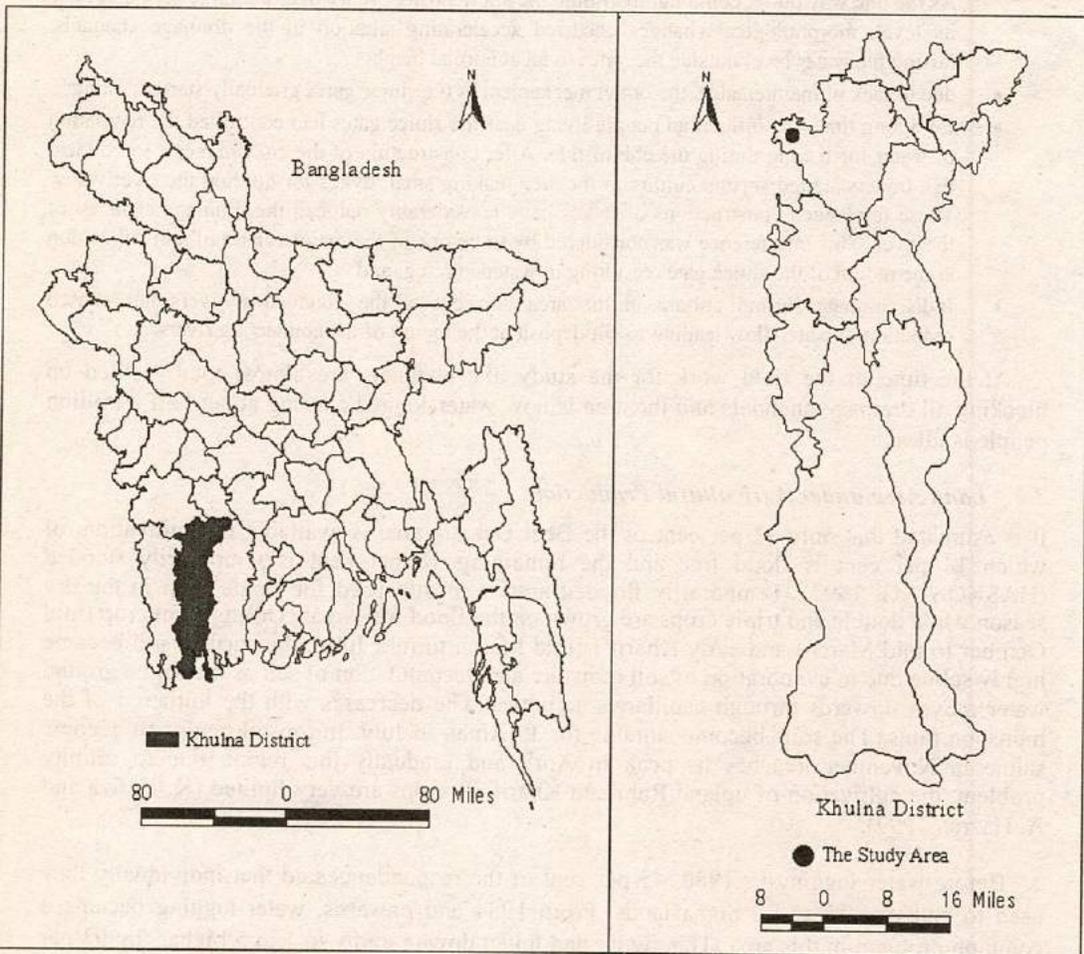
Before water logging i.e.1980, 45 per cent of the respondents said that individually they used to cultivate 15 to 20 bigha lands. From 1984 and onwards, water-logging became a common problem in this area. This figure had fallen down rapidly to 1 to 5 bighas, by 93 per cent and 87 per cent in 1990 and 1998 respectively (Table 1). In 1980, the study area was not under water logging problem.

Table 1
Area under production in 1980, 1990 and 1998

Year	Under cultivation in bigha								
	1-5	5-10	10-15	15-20	20-25	25-30	30-35	35-40	40+
1980 (before water logging)	-	1	13.8	44.6	33.8	1.2	1.2	2	2
1990 (after water logging)	93	6.9	-	-	-	-	-	-	-
1998 (after water logging)	87	12.9	-	-	-	-	-	-	-

Source: Field survey, 1998

Map 01: Location of Dakatia Village in Context of Bangladesh and Khulna District



3.3 Level of Production

The water-logging problem in the Beel Dakatia area has adversely affected the local agriculture. The water congestion had become acute since 1984. Gradually, the agricultural production came down. Since most people of the area were solely dependent on agriculture, their economic backbone was broken by this unprecedented man-made disaster. About 97 per cent of the respondents in the affected area thought that the productive land of the Beel Dakatia which once used to yield bumper crops, was salinized by prolonged water congestion. And its productivity had been drastically reduced. Indeed, most croplands had become completely fallow as they were no longer productive (Atiur, 1995).

About 44 per cent of the respondents produced comparatively higher quantity of paddy before water-logging (1980). During 1990-1998, the highest percentage had produced comparatively less quantity of paddy in terms of per acre yield. On the other hand, the vegetable production seemed not to be significantly affected after the water-logging. Before the water-logging, the people of the study area used to produce paddy on their agricultural land but their agricultural land was under water. The villagers had to give more attention to the cultivation of vegetables on their homestead land, which is not under water (Table 2).

Table 2
Amount of agricultural production

In Metric Ton	1980 (before water logging)		1990 (after water logging)		1998(after water logging)	
	Vegetables (%)	Paddy (%)	Vegetables (%)	Paddy (%)	Vegetables (%)	Paddy (%)
1-10	19.05	8.5	11.9	15.18	14.33	19.22
10-20	4.10	44.4	0	13.7	4.5	17.43
20-30	1.1	33.9	0	7.91	0	5.3
30-40	0	9.12	0	0	0	0
40+	0	3.2	0	0	0	0

Source: Field survey, 1998

Prior to water-logging, the Beel Dakatia area was a granary of Khulna. The area was more than self-sufficient in food production. Since 1984, thousands of farmers found themselves in situation, which was almost impossible situation to cope with. They could no longer continue as farmers and had to either become fishermen or petty traders for mere survival.

3.4 Changes in Occupation and Levels of Income

Another study showed that the monthly farm income varied between Tk.800 to Tk.2000 whereas the monthly incomes of petty traders/small businesses as well as service holders varied from Tk.2000 to Tk.5000. The fishermen earned Tk.1000 – Tk.1500; wage labourers were in the lowest category earning Tk.800 to Tk.1200 per month. Although, previously agriculture was the main occupation, the recent data shows that about 63 per cent of the people had become fishermen due to the unique problems in the Beel Dakatia. Petty traders and businessmen comprised about 16 per cent while agriculture and homestead gardening comprised 8.5 per cent. According to the report of Haskoning (1992) and local information, about 40 – 50 per cent of the people were in the labour force leading to a high dependency ratio. The majority of the landless and marginal farmers had switched their occupation to fishing and day labour in construction works (PRODIPAN, 1996).

While in 1980, about 43 per cent of the respondents earned Tk.60,000 to Tk.69,000 annually, but in 1990 and 1998 this percentage came down to only 8.6 and 4.1 per cent respectively (Table 3). This indicates that there has been a decreasing trend of incomes of the farmers over the years, after the water-logging in the study area. Our study records that the farmers' annual incomes were around TK. 60,000 – TK. 69,000 had fallen by 28 per cent in 1990 and 13 per cent in 1998. On the other hand, concentration in the annual income groups of TK.10,000 – TK.19,000 of the farmers had increased. The Table 3 shows that 12 per cent of the farmers used to earn Tk.10,000 to TK.19,000 per annum in 1980. While in 1998, about 31 per cent of the them had annual income of the same amount, showing 257 percent variations. It signifies that the farmers' income had been reduced substantially and, as such, they were becoming poorer day by day.

Table 3

Annual income of the household heads of Dakatia village, 1980, 1990 & 1998

Annual income (in Taka)	1980 (before water logging)	1990 (after water logging)		1998 (after water logging)	
	% of total	% of total	Variation in % over 1980	% of total	Variation in % over 1990
Below 10,000	-	25.3	-	20.5	-
10,000 – 19,000	12.1	27.1	223	31.1	257
20,000 – 29,000	-	12.1	-	11.1	-
30,000 – 39,000	20.1	9.1	45	11	54
40,000 – 49,000	3.9	7.8	201	11.1	286
50,000 – 59,000	12.1	6.5	53	8.5	70
60,000 – 69,000	30	8.6	28	4.1	13
70,000 – 79,000	16.7	3.6	21	2.6	15
80,000 – 89,000	5	-	-	-	-
90,000 – 99,000	-	-	-	-	-
Above 100000	-	-	-	-	-
Total	100	100		100	

Source: Field survey, 1998

IV. Discussion

4.1 Relationship Among the Variables

For discussion purpose, here X_1 indicates total land in bigha, X_2 indicates production in metric ton and X_3 indicates income in Taka (in thousand). The estimated correlation's co-efficient of these variables are:

- Co-efficient of correlation between X_1 and X_2 is 0.78;
- Co-efficient of correlation between X_1 and X_3 is 0.87;
- Co-efficient of correlation between X_2 and X_3 is 0.69;
- Partial correlation co-efficient between X_1 and X_2 is 0.24;
- Partial correlation co-efficient between X_1 and X_3 is 0.70;
- Partial correlation co-efficient between X_2 and X_3 is 0.77;
- Multiple correlation co-efficient among X_1 and X_2 , X_3 is 0.81;

The result of multiple regression shows that the selected variables are the realistic ones, and portray the exact situation. The all values of correlation are positive. It indicates that a change (increase or decrease) in one variable produces a significant change in the other variables in the same direction (i.e. increase or decrease). In other words, a positive value of r indicates that large values of one variable occur with the large values of the other and small values of one variable occur with the small values. According to the findings of the study, large quantity of land will lead to a large amount of production, and in turn, a large amount of production will lead to higher incomes. A moderate relation is present among the concerned variables.

The correlation co-efficient illustrates whether there is togetherness or relationship between the variables and the extent of relationship existing between them. It fails to give us a measure of the probable movements of one variable in terms of the other. For estimating the probable change in one variable in terms of the other, regression analysis is required. The regression equations of the variables are as follows:

The regression equation of X_2 on X_1 is $X_2 = 27.4 + 1.45X_1$

The regression equation of X_1 on X_2 is $X_1 = 10.7 + 1.5X_2$;

The regression equation of X_1 on X_3 is $X_1 = 6.9 + .05X_3$;

The regression equation of X_3 on X_1 is $X_3 = -0.65 + 2.10X_1$;

The regression equation of X_2 on X_3 is $X_2 = -4.92 + 5.65X_3$;

The regression equation of X_3 on X_2 is $X_3 = -0.5 + 0.70X_2$;

These regression equations clearly show that by putting actual values of the variables will indicate that there is a positive relationship between area under cultivation and level of income by the farmers. Similarly by applying these equations among the all farmers living in Beel Dakatia Village will exhibit the same phenomena in respect of relationship between area and cultivation and the level of income earning.

However, these statistical tools display that due to reduction of agricultural land at the disposal of the farmers; the level of income will be also reduced substantially. Consequently, there is reflection of the people of being poorer.

V. Conclusion

The Beel Dakatia is the glaring example of a man made disaster. Unforeseen condition, faulty construction of the coastal embankment and lack of proper maintenance of the polders in the Beel Dakatia area, however, led to a tragic situation. Instead of protecting the Beel from saline water intrusion, there was initiation of water-logging together with salinity, which turned into a huge permanent water body. The impact of this water-logging and salinity over a period of thirty years in Beel Dakatia has been disastrous for the physical environment; the people of the area and their livelihood. The magnitude and suffering of the population is incalculable.

There are positive correlation between total land, productivity and income. Low amount of land leads to a low level of production. Low productivity leads to low real income and low productivity is reflected in low income. Low level of real income means low savings and low level of savings leads to a low investment and to deficiency of capital. The deficiency of capital, in turn, leads to a low level of productivity and back to low income and productivity depends on amount and quality of land. A situation of this type, as a whole, can be summed up in line with the trite proposition that "The Dakatia village is poor because its environment is poor".

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APPROACHES IN THE FLOOD HAZARD STUDIES OF BANGLADESH: A REVIEW

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Abstract: This paper aims at assessing the application of hydrological and geomorphologic approaches in flood hazard studies in Bangladesh. Most of the flood-based studies in Bangladesh are inclined towards the hydrological approach. Very few recent studies have applied geomorphic approach in this field. The major strength of geomorphic approach is, it provides the opportunity to establish a relational database between geomorphic units and other parameters like soil, land elevation, landuse, flood depth and duration etc. But prior to establishing such database the measurement and calculation of hydrological parameters of flood on different geomorphic units is a must, which requires the application of hydrological approach. Infact it is the combination of these two approaches that offer a stronger and more reliable ground to study flood hazards in Bangladesh.

I. Introduction

Aim of flood hazard or flood susceptibility study is not only to study the areal extent and further characteristics of flood that have occurred in the past, but rather to predict the effects of the future floods of various magnitudes and to assess the damage that may occur. In predicting the occurrence of floods and the damages they are likely to produce, the hydrologist, geographers, engineers or planners may need to assess one or more characteristics of floods. Dunne & Leopold¹ identified these characteristics as,

- Volume of storm runoff, which is necessary for the design of storage works for flood control, water supply and irrigation.
- Peak flood discharge, which is necessary for designing bridges, culverts, spillways on dams, and other storage devices.
- Flood height depth and extent, which are critical determinants of the chances of survival of structures, crops and human lives and of the cost
- and feasibility of rendering structures resistant to flooding.
- Time distribution or the duration of inundation is necessary for reservoir design.
- Rate of rise of flood or river level which in particular affects the warning and evacuation procedures, and is also important in determining the height of the embankment.
- Velocities of flows across the valley bottom, which affect the amount of damage done to the structures and channel improvements or the amount of scouring of soil from the agricultural land.

These hydrological characteristics are also interrelated with climatological factors, and are affected by the configuration of the local topography. Flood hazard thus can be evaluated using the **hydrological** and the **Geomorphologic approach** In Bangladesh flood hazard

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researchers are less acquainted with the geomorphological approach since most of the flood hazard studies were undertaken by engineers and hydrologists. Sole application of the geomorphological approach in flood studies is almost non-existent. Though the approach has been applied frequently to study river and floodplain morphology, but for the study of flood events geomorphology has mostly been treated as an aid to hydrological analysis.

In a flood prone country like Bangladesh application of different approaches in this field would not only add new dimensions to the flood based researches but could also provide opportunity to incorporate multidisciplinary concepts in such studies. With this view the present paper aims at outlining the strength of geomorphological approach, particularly when combined with hydrology in studying floods.

II. Hydrological Approach in Flood Hazard Studies

The hydrological approach for flood hazard study is oriented towards the calculation, measurement and estimation of different parameters of flood. These are done with the objective to assess the severity of floods; to design storage works for flood control, water supply and irrigation; to determine the over-topping of the stream banks and the artificial embankments; to assess the damages done by floods, etc. Calculation of the flood hazard incorporates a variety of hydrological methods and techniques such as, estimation of storm runoff volume; rational method to predict the peak runoff rate; flood frequency analysis; unit hydrograph method; multiple regression analysis of annual floods; flood routing methods etc.

Most of the flood based studies in Bangladesh tried to analyse the hydrological aspects of this natural disaster depending on the prevailing data like, gauged rainfall records, gauged flood stage discharge records, river cross sections etc. These data are measured by and are available through the Bangladesh Water Development Board (BWDB). These data are usually analysed and presented applying some hydro-statistical methods, which are as follows: (1) Simple hydrographic analysis showing the river or flood water level and peak discharge of a river over time; (2) Frequency analysis; and (3) Probability analysis.

Besides these, recent flood studies have also incorporated a few computer-based flood-modelling systems like MIKE II.

III. Geomorphologic Approach in Flood Hazard Studies

As has been mentioned before most of the flood studies in Bangladesh are based on hydrological information. Use of a geomorphological approach is rather recent in the country. Very few studies could be found that has used this particular approach. Before proceeding towards the review of the studies it is necessary to outline what this approach deals with.

The geomorphologic approach basically is concerned with two facts. **Firstly**, the micro relief of the land governs the flow of floodwater, its accumulation in depression etc. Thus it is logical that the study and detailed mapping of the relief substantially contributes to the forecasting of the future flood conditions. **Secondly**, more important than the relief situation, is the fact that the present landform configuration and the distribution pattern of gravel, sand, silt and clay, has been formed by probably the same river that will cause flooding in the future.

The approach can be applied in flood studies in various ways. The most widely used method in flood hazard analysis using geomorphological approach incorporates:

- (a) Preparation of a detailed geomorphological map emphasizing fluvial landforms such as floodplain, terraces, natural levees, backswamps, pointbar complexes, former river beds, etc.

by interpreting remote sensing images (aerial photograph and satellite images), linked with field checks and sample analysis.

- (b) This is followed by investigations on actual flood to define for instance the following flood characteristics of, source of flood water and direction of flow, area of inundation, duration of inundation, depth of inundation, internal / external drainage, source of sediment areas and type of erosion and sedimentation, partly by remote sensing interpretation and field work.

The study of the landform configuration and distribution pattern of fluvial sediments has contributed to an understanding of the hydrological regime of a river, and therefore, to the nature of the floods. In principle, morphological methods require little hydrological information. But in order to establish the flooding characteristics for each geomorphic unit, data acquired through hydrological analysis is required. To know the flood heights of a particular flood event with a particular return period on different geomorphic units, first it is essential to know the probable flood height of that particular flood for which hydrological analysis of past flood records is needed.

Since the application of geomorphological approach in flood hazard study is not widely used in Bangladesh there is no recognized geomorphological map of the entire country. Infact, most of the geomorphic maps of the country are moderated versions of the physiographic units of the country. On behalf of The Department of Soil Survey of Bangladesh Government, Brammer² (1965) conducted a *Reconnaissance Soil Survey* on Dhaka district in 1965 where he produced a very generalized geomorphic map in combination with soil characteristics with a scale of 1:25,000, on the basis of air photo interpretation and field survey. This map provides very preliminary information on the geomorphology of Dhaka district.

Of the very few flood studies using the geomorphological perspective, one is by M.Oya³ (1990). The study tried to find the relationship between geomorphologic units and areas subject to flooding in the Brahmaputra-Jamuna and Ganges plain based on a geomorphological classification. Kubo and Sumiko⁴ (1993) also attempted to identify flood characteristics according to the geomorphic features in the northwestern region of Bangladesh. Both the studies have been more or less simplified geomorphic analysis not incorporating much of the hydrological parameters of floods within the geomorphic units.

A few Bangladeshi researchers interpreted the geomorphological maps of small portions of Dhaka region using remotely sensed images and GIS for flood hazard and risk assessment and zonation. A.T.M. Asaduzzaman⁵ (1994) did one such study titled as 'A Geomorphic Approach To Flood Hazard Assessment and Zonation in Bangladesh Using Remote Sensing and Geographic Information System'. Another such study was attempted by Choudhury⁶ (1998), who used geomorphic approach aided by remote sensing and GIS techniques to assess flood risk of Dhaka City.

IV. Strength and Limitations of Geomorphologic and Hydrological Approaches

4.1 Strength of Geomorphologic Approach

In Bangladesh, the magnitude of flood and the damages caused are strongly related to the micro relief and landuse pattern of the country. Bangladesh though a flat country has a variety of geomorphic units like natural levees, floodplains, river terraces, tectonically uplifted terraces and depressions. These varying landforms, their topography and soil association has a full control over the depth, duration and magnitude of flooding. Different geomorphic units have different flood frequency and flood magnitude. The lower floodplains are inundated by annual floods, which is considered not a disaster but a requirement for agricultural production. The housing in the floodplains are also built on higher platforms locally known as *bhiti* to

prevent the structures from annual flooding. The flood levels for the 10 years flood are high enough to inundate the structures on the floodplain but not high enough to reach the higher levees and the terraces which are about 6 to 8 meters high. The 1988 flood in general inundated the ground floors of the higher levees and medium high terraces. The probable flood height for 100 years flood in Dhaka city as estimated by Choudhury⁶ (1998) revealed that it could reach the highest terraces that has an elevation of about 8 meters from sea level.

There has always been a keen relationship between the physical configuration of the land and the landuse pattern of the country. Agriculture is the typical landuse for low flood plain, depressions and valleys, whereas most of the settlements have developed on the higher terraces and levees (Figure 1). Flooding in the higher terraces is indicative of high risk as these areas are occupied by more vulnerable elements at risks, like people, structures and infrastructures. Agricultural activities are located on the backswamp/floodplain areas and on the depressions, as they have to depend on the yearly flooding. The endurance to flooding varies among different crops. Rice has higher tolerance to flooding compared to mustard. Moreover different varieties of rice have different types of tolerance to flood depth and duration. As the vulnerability of these landuses and element at risks differs so does the frequency and magnitude of floods. Thus use of geomorphological approach in flood hazard study also provides a basis for flood risk assessment in Bangladesh.

4.2. Limitations of Hydrological Approach

Though floods in Bangladesh is a regular phenomenon, but the increasing emphasis on the study of this phenomenon is an act of this decade. Particularly after the hazardous flood of 1987 and 1988 the inflow of foreign interest and money in the study of flood generated many reports, research papers, books from different disciplinary viewpoints, and suggesting various prevention measures. Most of the flood studies in Bangladesh so far done used the various statistical techniques in analyzing different hydrological parameters of floods; thus the approach is more hydrological. The data that have been used for such analysis are mostly like, gauged rainfall records, gauged flood records, river cross sections, river discharge measurement data, data on river level rise etc. These data are measured by Bangladesh Water Development Board (BWDB) and are available with them.

The common complains from the researchers regarding the application of the approach in flood hazard analysis is, scarcity of data, inaccuracy and inconsistency of data, constraints in data availability both from field sources and official sources etc. Precisely, hydrological analysis in Bangladesh becomes cumbersome due to scarcity of relevant data. The nature of hydrological data that are collected by the Hydrological Directorate of BWDB are not sufficient enough in using the standard hydrological methods of analysis like unit hydrograph or multiple regression. Since the time distribution of runoff throughout the storm is not measured in our country the unit hydrograph analysis becomes impossible. Moreover, lack of required data on drainage area and topography prohibits the use of multiple regression analysis in flood hazard prediction.

Tejada and Guibert⁷ (1993) and the River Survey Project (FAP 24) by Delft Hydraulics and et.al⁸ pointed out some possible shortcomings of river stage/discharge measurement techniques of the Hydrological Directorate, which are as follows,

1. The duration of the discharge measurement is sometimes very long in terms of measuring the change in the cross sectional area of the river and the measurement of river stages, the hydrological conditions might change meanwhile, especially during the flood season.
2. There is a possibility of over estimation of depths of river water during high currents, since a tape running with the string, which suspends the current meter during velocity

measurements, usually measures depths. Instead of such conventional methods of gauging water depths, modern methods like SONAR Sounding and Digital Geographic Positioning System (DGPS) could be used. SONAR Sounding has already been used for measuring water depth at Jamuna River.

The River Survey Project tried to measure the discharge during the water receding period and compared it with the data of BWDB; they found the data of BWDB to be quite exaggerated.

Besides these measurement problems, some important parameters of floods are not even measured, they are more or less assumed. For example no particular technique exists for measuring the depth of the flooding, it is rather assessed from the versions of the flood-affected people or from measuring the flood marks on the buildings and walls immediately after a flood event. Moreover the velocity of flow is very difficult to assess. Thus when data availability and reliability is doubted, the authenticity of the results could be questioned.

4.3. Limitations of the Geomorphologic Approach

Few attempts that were made to view floods of Bangladesh from a geomorphological perspective were mostly done by foreign researchers. This was because the majority of the studies on floods in Bangladesh were initiated by hydrologists or the water engineers rather than by a geomorphologist. However, the basic shortcomings for using the geomorphological approach are,

- a) There is no established Geomorphological Map of the country, even of a part of it. The researchers who want to work with this approach have to interpret and prepare their own geomorphological maps often with different legends.
- b) The hydrologic and topographic data required for geomorphic units are very arduous to obtain both from primary and secondary sources; this also generates difficulty in determining the accurate extent, depth and duration of flooding on different geomorphic units. Though it is possible to derive the information from indirect sources, like from the depth of flooding on different soil types; from flood time satellite imagery, maps and reports, still data accuracy is questionable for the country has a very complex geomorphology due to large variations in the micro relief.

V. Conclusion

The mapping of the geomorphological units could provide information regarding the variables that have direct and indirect impact on flooding, such as, particular geomorphic conditions, land elevation, soil type have some impact on flooding depth and duration. Using this approach the relationships between geomorphology and other parameters like soil, land elevation, landuse, flood depth, duration and extent could be derived by mapping of soil and physiographic maps, landuse maps, multi-temporal aerospace images. The data derived from these sources could be combined with the geomorphic units to establish a strong database. But prior to establishing all these relationships and databases, the measurement and calculation of different hydrological parameters of flood on different geomorphic units is needed and this cannot be done without the incorporation of hydrological approach. Infact, Bangladesh is a flat riverine country where heavy precipitation and overflow of rivers are the major causes of floods. On the other hand the micro relief of the fluvial landforms play a major role in controlling the flood depth and extent. Under such circumstances flood hazard assessment and zonation can be best judged by combining geomorphological and hydrological datasets. The hydrological datasets (frequency-discharge relationships) can be updated by geomorpho-

logical mapping and by morpho and litho-stratigraphical techniques on fluvial landforms. On the other hand the predicting capacity of the geomorphological hazard maps can be improved by indicating the recurrence interval of flooding of different geomorphic units. Thus by deriving correlation between hydrology and geomorphology of smaller area extrapolations can be made for much larger areas where little or no datasets exists.

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ADDRESSING PROBLEMS OF INFORMAL SETTLEMENTS: ALTERNATIVE MODEL PROJECTS

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Abstract: The present study focuses on unplanned areas in a former district town (Mymensingh) of Bangladesh where the dwellers have no land right and civic services are absent or very poor. The study suggests three alternative model projects, which would be applicable to solve the housing problem of the dwellers of informal settlements in former district towns of Bangladesh.

I. Introduction

Nowadays all the cities of the Third World are going through a phase of population influx mainly due to rural urban migration. For instance in 1960 less than 20% of the population of low-middle income countries was urban and by the year 1990 this portion has increased to 34% (World Bank, 1995a, p.11.). This rapid increase in the urban population is creating housing problems and most of the migrants who are unable to find decent living in the formal housing sector are forced to take shelter in the informal settlements.¹

The urban population of Bangladesh is also increasing very rapidly. During the 1980-93 period, the urban population growth in Bangladesh was 5.3% and the total urban population of the country increased from 8.0% to 17.0% (World Bank, 1995 a.p.222). The urban population growth in Bangladesh is not only confirmed to the big cities only but also in the former district towns.² It is projected that by the year 2000 urban population may raise to 26% (37 million), 39% by 2010 (57 million) and 45% by 2045 (80 million) and this will put undue pressure on urban land (Haque, M.M. 1990, p.3). In case of Mymensingh town, the population growth rate is also alarming and the total urban population 11.6% of the total enumerated population of the district. During the 1981-1991 census period the population of Mymensingh municipality increased from 1,07,863 to 2,02,000 but in 1974 the figure was only 76,036.

Both rural push and urban pull factors have contributed to the large-scale rural urban migration in Bangladesh during the recent decades. In either case, there have been regional variations. Natural hazards like riverbank erosion, cyclones, tornadoes, tidal surges, draught and floods and to some extent regional area specific push factors. Many social factors also act as rural push factors. The urban pull factors are the real or perceived opportunities for employment security, education, and other social development in urban centre.

Most of the migrants in cities and towns find some works in the informal sectors but are unable to manage proper shelter; as a result the informal settlements are growing rapidly.

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¹ **Informal settlements:** Informal settlement as, the places where land subdivision and construction had been carried out through informal process (RAJUK, 1993). In this study, Informal Settlements mean the type of settlements which have no land right and spontaneously growing on public owned land (Railway's land, Khash land, Vacant land etc).

² **Former district towns:** Before creation of 64 districts, there were 21 districts in Bangladesh. The previous 21 district towns called here as former district towns.

There were 914 slums in Dhaka City and about 5 lakh people are living there (Land Ministry Report, 1989, p.na). In a recent survey it has been found that there were 36 slums in Mymensingh town and most of these informal settlements are growing sporadically in the fringe areas of the Mymensingh municipality (Department of Urban Social welfare, Annual Report, 1993, p.12). It has been observed that all the Paurasabha towns have unauthorized informal settlements. Out of these, the towns that are under upgradation by Government agencies and donors and have a population of 50,000 to 3, 00000 have been considered initially as the candidate town for this study. Having 5.77% compound annual growth rate, Mymensingh town is one of the fast growing town, and thus, selected as study area. Within Mymensingh Paurasabha, there are seven wards and a number of 36 small medium and big sized informal settlements. Out of these seven wards, the wards having maximum informal settlements (wards 3, 6 & 7) have been finally selected as study area. A random number of households (75 households from each ward) have been interviewed. Total 225 samples were collected and the data were analysed by using the computer software package programme SPSS. The data were checked before transferring those to the computer and represent them in tabular form. This paper within its limited scope, examines the present condition of the informal settlements of Mymensingh and suggests some alternative model projects to improve the housing condition of the dwellers of informal settlements.

II. Existing Housing Condition and Service Facilities

Mymensingh is a district since Mughal period and the city stands on the bank of the river Brahmaputra. So migration of a large number of people is caused by riverbank erosion and flooding. The report of the Department of Urban Social Welfare, Mymensingh, 1993, showed that there were 26 slums and squatter settlements in the city. Kalirchar, Jublighat, Patgudam, Railway more, Kacharighat, Marakhala, Bihari camp, Malancha and Adarsha colony, etc. are the major informal settlements in the Mymensingh town. The existing housing condition of the dwellers are as follows:

2.1 Land ownership Pattern

In the study area about 55 % households have no land, they live on public lands, 14 % of the respondents were residing on railway's land and 2.6% occupied the government vacant land (Table 1). It is observed that some people through underhand practices, as well as through power holders initially manage land. In Mymensingh town, a notable amount of lands are occupied by some people in C.K. Ghosh Road and Rambabu Road (*Sangbad*, 27April, 1993).

Table 1
Land Ownership Pattern of the Respondents

Land ownership pattern	Number of respondents			Total (%)
	Ward 3	Ward 6	Ward 7	
Inherited	-	4	2	6 (2.6)
Relative	-	-	2	2 (0.9)
Rented	1	14	1	16 (7.2)
Gifted	1	3	5	9 (4.0)
Public	72	17	35	124 (55.0)
Occupied open space	-	2	4	6(2.6)
Purchased by saving	1	3	4	8 (3.6)
Purchased by loan	1	1	1	2 (0.9)
Railway's land	-	11	21	32 (14.2)
Other's	-	20	-	20 (8.9)
Total	75 (33.33%)	75 (33.33%)	75 (33.33%)	225 (100%)

Source: Field survey, 1994.

2.2 Space and Construction Materials

For living, most of the dwellers (75%) of informal settlements have only one room, only 17.8% of the households have been using 2 rooms (Table 2). Of the total surveyed households, 36.0% had floor space less than 50-sq. ft. Generally, the poorest, destitute and new comers live within this floor space. Majority of the respondents (49.8%) reside within floor space of 50 to 80 sq. ft. Average height of the homes ranges 4 to 8 ft. The construction materials of the walls of the houses are brick, tin, bamboo, straw, polythine, wood, mud, jute bag, etc. The majority of the dwellers used straw and bamboo as shade materials. In the study area about 48.9% of the households were satisfied with their present housing condition and the others 51.1% were not satisfied (Alam, 1994, p.61). The reality of satisfaction was that the dwellers of the study areas constructed their houses on public land and these lands were rent-free. So the respondents think, this condition is better and answered that they are satisfied with their present housing Condition. The perceptions regarding satisfaction on the existing shelter depends on the fact that investment for upgradation of housing structures might go waste because there was no certainty that they would not face eviction.

Table 2
Number of Room of the Families

Ward No.	Number of rooms					Total (%)
	1	2	3	4 - 5	5+	
3	54	13	6	2	-	75 (33.33%)
6	48	22	2	-	3	75 (33.33%)
7	67	5	2	-	1	75 (33.33%)
Total	169 (75.1%)	40 (17.8%)	10 (4.4%)	2 (0.9%)	4 (1.8%)	225 (100%)

Source: Field survey, 1994.

2.3 Use of Water

As regards drinking water, it was found that the drinking water was not available in the study area. In Kalirchar area the problem of drinking water was acute. Sometimes the poorest groups of ward 3 drunk the river water. About 5.3% of the households used river water for drinking purpose. Majority of the respondents (37.8%) shared tubewells with other families and 26.2% of them availed NGO's facilities for this purpose (Table-3).

Table 3
Use of Water in the Study Area.

Sources of water	Use of water		
	Drinking Total (%)	Bathing Total (%)	Washing Total (%)
Private tube well	17 (7.6)	14 (6.2)	16 (7.1)
Paurasabha's tube well	15 (6.7)	3 (1.3)	6 (2.7)
Tap shared with others	1 (0.4)	-	-
Tube well shared with others	85 (37.8)	21 (9.3)	27 (12.0)
Paurasabha's stand pipe	27 (12.0)	-	4 (1.8)
Wells	9 (4.0)	9 (4.0)	5 (2.2)
Rivers	12 (5.3)	95 (42.2)	88 (39.1)
Ponds	-	55 (24.5)	49 (21.8)
NGO's tube well	59 (26.2)	28 (12.5)	30 (13.3)
Total	225 (100%)	225 (100%)	225 (100%)

Source: Field survey, 1994.

2.4 Sanitation

In case of toilet facilities, 40.9% households used private latrine, 12.9% used latrines made available by the NGOs, 17.8% shared latrine with other families and 25.3% have no latrine in the study area. But the structural condition of those latrines was not so satisfactory (Field Survey, 1994).

2.5 Use of Electricity

It was also found in the study areas that there was little access to electricity for home lighting. As 30.2% households have been availing the facilities of electricity of which majority of them were connected illegally. The other 69.8% have no electric facilities (Table 4) Maximum of the households have tendency to pay the electric bill if PDB provide electricity to their house legally.

Table 4
Electric Facilities in the Study Area.

Ward No.	Availability of electricity			Electricity existed nearer to the houses		
	Yes	No	Total (%)	Yes	No	Total (%)
3	10	65	75(33.33)	16	49	65(28.9)
5	41	34	75(33.33)	28	6	34(15.1)
7	17	58	75(33.33)	50	8	58(25.8)
Total	68 (30.2%)	157(69.8%)	225(100%)	94(41.8%)	63(28.0%)	157(69.8%)

Source: Field survey, 1994.

2.6 Internal Footpath

As the houses under the informal settlements areas were very congested, there was no brick build road or footpath. They used very narrow space as internal footpath. In the study area about 82.2% households have no footpaths (Field Survey, 1994). Generally they used the narrow space between two houses.

2.7 Medical Facilities

The overcrowding, unsafe, unhygienic, etc. are the general characteristics of informal settlements. Majorities of the dwellers were very poor and have no ability to take care about food and medicine. They were suffering from various diseases. As they have no ability to purchase medicine from market, majority of them (52.2%) avail government medical facilities. Only 15.6% households avail provided by the NGOs, but those were largely for babies and mothers.

2.8 Occupation

The type of occupations in the study areas varied to a large extent. From field survey, it has been found that there were 37.8% labours, 26.7% small business holders, 10.2% transport labour, and 8.0% service holders. 2.2% hawkers (Table 5).

Table 5
Occupation of the Head of the Households

Occupation types	Ward wise distribution			Total
	Ward 3	Ward 6	Ward 7	
Transport labour	11	4	8	23(10.2)
Beggar	2	2	1	5 (2.2)
Factory labour	2	4	1	7 (3.1)
Day labour	33	16	36	85(37.8)
Hawker	2	2	1	5 (2.2)
Service	3	9	6	18 (8.0)
Agriculture	2	2	0	4 (1.8)
House maid/servant	2	1	1	4 (1.8)
Small business	12	27	21	60(26.7)
Others	6	8	-	14 (6.2)
Total	75 (33.33)	75 (33.33)	75 (33.33)	225(100)

Source: Field survey 1994.

2.9 Income

Generally the lower income group of people live in the areas of informal settlements. It has been found in the study that majority of the families (32.4%) have monthly income Tk. 501-1000, 29.8% of them earn Tk.1001-1500, 15.1% of the sample families earn Tk. 1501-2000, 8.0% of them earn more than Tk. 3000 and 4.0% of them were very poor and have an income up to Tk. 500 only (Table 6). So majority of the families (67.6%) could not save a single taka (money) for their future needs. Self-financing was an important aspect of the present study. In the study area, about 69.6% respondents were agreeing to self-financing approaches. But some of them were fearful about the cost of the land. If land could be supplied with minimum cost or long-term recovery basis, then most of the dwellers would agree to build their houses on self-financing approach. The followings are the suggested alternative model projects, which may be applicable to solve the housing problem of the dwellers of informal settlements in the medium sized town of Bangladesh.

Table 6
Monthly Income of the Household-heads

Monthly income (in Taka)	Frequency (H/H)	Percentage (%)
Up to 500	9	4.0
501 - 1000	73	32.4
1001 - 1500	67	29.8
1501 - 2000	34	15.1
2001 - 2500	15	6.7
2501 - 3000	9	4.0
3000	18	8.0
Total	225	100.0

Source: Field survey, 1994.

III. Alternative Model Projects

Due to lack of financial ability Government will act as promoter and facilitator (National Housing Policy, 1993, p.4). Keeping this in view, three alternative model projects have been designed in this study in such a way, that the projects can run with self financing approach and also will help to solve the housing problem of the dwellers of informal settlements as well as to improve the existing housing condition with minimum Government Financial support.

Table 7
Relative Advantages of Three Alternative Model Projects

Items	Project - I	Project - II	Project - III
Name of the projects	Development of site and services scheme for 200 lower income group of people in Mymensingh town (monthly income more than Tk.3000).	Resettlement of 600 landless families at Mymensingh (monthly income Tk. 2000 - 3000)	Resettlement of 500 landless families at Mymensingh town (monthly income less than Tk.2000)
Project period	12 months	18 months	18 months
Project facilities	1 katha plot for each family, Main & branch roads, water supply, street light, Dustbin, Drain (pucca), Mosque, Primary school, Market.	0.5 katha plot for each family, Main & branch Roads, Water supply (communal tubewell), Street light, Dustbin, Drain(pucca & kucha), Poor flash(P.F) latrine(1 for each family) Mosque -1, Primary school, Market(2 plots auction for cross subsidization), Housing loan Tk.2000 per family	0.5 katha plot for each family, Main & branch Roads, Water supply (communal tubewell), Street lighting, Dustbin:30 (1 for each family), Drain(pucca & kucha), Poor flash(P.F) latrine(1 for each family) Housing loan Tk.2000 per family Mosque -1, Primary school -1, Market(2 plots auction for cross subsidization).
Project cost	Tk.101.30 lakh	Tk.137.38 lakh	Tk.121.26 lakh
Cost recovery	Tk.144.00 lakh	Tk.172.80 lakh	Tk.146.40 lakh
Net profit	Tk. 42.70 lakh	Tk. 35.42 lakh	Tk. 25.14 lakh
Benefit cost ratio	1.4:1	1.25:1	1.2:1

Source: Field survey, 1994. (PWD construction rate, 1994 has been used)

Project I: 4.70 acres public land will be used for this project and 66.91 sq.mile (1 katha) land will be supplied for each family. In the study area, the required land is not scarce. As a facilitator, initially government will invest only Tk. 73.0 lakh (excluding land value) for land development and service facilities. As it is a site and services project within 12 months all activities of the project will be completed. If government is unable to supply land, then government will bear all the costs including land value (Tk. 101.3 lakhs) of the project -I. After twelve (12) months total recovery of the project - I will be Tk. 144.0 lakhs and net profit will be Tk. 42.7 lakhs. Project period, facilities, cost, recovery and Benefit Cost Ratio are shown in table 7.

Project II: 7.5 acres land will be used for this project. The project will be depending on the availability of public vacant land. If the public land is scarce then Government will purchase the land and primarily pay from the recovery to be made from the project-I and from the beneficiaries. The rest amount will be paid within 10 years from the recovery of project-II. In the study area the railway's land is comparatively higher than the others public land, so land development cost will be minimum. If the railways land are available, then project-I and project-II may be start simultaneously. As project-I is a site and services type, so all kind of services and land development works of project - II will be conducted by the recovery of project-I. Total cost of the project-II will be Tk.137.38 lakhs and Tk. 172.8 lakhs respectively. Net profit of project-II will be Tk.34.92 lakhs. So it is possible to implement project-II with the recovery of project-I.

To overcome the dominance of middle income groups in the project, after 10 years land tenureship will be offered to them and maintain office record with an identity card and signature of the beneficiaries will be maintained. Project -II will be a self-financing project, if the non-government organizations are involved in various development programmes, then minimum financial help from government will be required for this project. Project period, facilities, cost, recovery and Benefit Cost Ratio are shown in table 7.

Project-III: The project will be alternative of Project-II. If public land is to be scarce within the city areas then the Project-III will be started. 6.4 acres land will be required for this project and land will be purchased from the recovery of Project-I. It is also possible to provide housing loan from the recovery of Project-I. Total cost of the project will be Tk. 121.26 lakhs (including housing loan Tk. 2000 per family) and it is possible to implement the Project -III with the recovery of Project -I. Total recovery and net profit of Project -III will be Tk.146.4 lakhs and 25.14 lakhs respectively Project period, facilities, cost, recovery and Benefit Cost Ratio are shown in table 7.

From the recovery of Project-III, after 3 to 5 years another 5 acres of land will be purchased and in this process the project for the lower income group or landless people will be continued by self-financing approach.

IV. Conclusion

Growth of urban population is an important factor of generating informal settlements in the urban areas especially in the Metropolitan Cities. The former district towns first affected by the informal settlements then the dwellers march towards the Metropolitan Cities. Both the cities and towns, settlement conditions of the dwellers were very much poor and unhygienic. The existing facilities like, water supply, sanitation, drainage, waste disposal etc. can compare with a drop of water in the ocean. The researcher expects that within 12 years land, housing and basic services problem of the dwellers of the informal settlements will reach in a permanent solution using minimum government financial help. The profit money may be also utilized in different former district towns of Bangladesh for the same purpose. The study has been conducted in only three wards (out of seven wards) and only seventy-five households have been surveyed from each ward. If it is possible to survey each ward then a perfect and clear picture will come out. For further study about informal settlements in the former district towns, the present study may be used as a guideline.

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LIBRARY RESOURCE SHARING NETWORKS IN BANGLADESH

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Abstract: The present study focuses on the concept of Resource Sharing Network, Types of Networks, Information Technology, Internet, and highlights the need for development of Library Resource Sharing Networks (LRSN) and suggests measures to overcome problems related to functioning of LRSN.

1. Introduction

In this age of information technology one can easily understand the importance of rapidly growing flow of information resources in every sphere of human knowledge. Now-a-days information is not only important to the researchers, it is also very much important to the policy planners, decision-makers, administrators, politicians, technocrats' etc. Therefore, information is not only the 'raw materials' for the researchers but also is the key to socio-economic and cultural development of a country. The information is ever growing in nature. The modern technological methods like printing press, photocopiers, computers etc. have come to be applied to the production of information and their growing in the 19th and 20th centuries have been more than a geometrical rather than an arithmetical ratio. The phenomenal growth of these information technologies has helped tremendously to become an age of information explosion. It is not possible on the part of a librarian and information scientist to collect and disseminate all the information to his users needs. Allen Kent¹ succinctly described the situation (in view of American libraries) and raise a few questions like:

- i) There have been 30 million unique title published since Gothenburg—how many have Anything more than 5% of these—some have less than ½%.
- ii) There are 50-100 thousand journals published currently—how many subscribe to more than 10-15%—some subscribe to less than ½%.
- iii) About 500 thousand books will be published world-wide in 1974—how many will buy more than 10-15%—some will buy less than ½.

If this is the situation in USA the richest country in the world, how can the libraries and information centres in the countries like Bangladesh afford to acquire all materials locally for their users? The solution to this problem lies with the development of a resource sharing networking program among libraries and information centres to share each other resources.

II. Conceptual Framework

Library Resources

The term "Library Resource" will be used to designate any and all of the materials, functions, and services, which constitute a modern library system.²

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Resource Sharing

Resource Sharing means collective use of all library operation, which include acquisition, processing, storage, maintenance, preservation exchange of materials and staff etc. The concept of resource sharing, not new one in the field of library and information science, is synonymous to the terms 'Library Co-operation', 'Inter Library Loan', 'Inter Library Co-operation' etc. It refers to those who have been working in the libraries or have something to do for the development of libraries, emphasising the need for library co-operation with other partners, and these kinds of activities found also in the ancient libraries. The need to share resources is probably almost as old as libraries themselves. Fetterman claimed to have some evidences to indicate that the library at Alexandria loaned books to the library at Pergamum around 2000 Bc.³ Earnest C. Richardson⁴ in the library Journal of 1899 expressed his ideas of inter-library co-operation. The Farmington Plan was initiated in 1948 and discontinued from 1972.⁵ it was a voluntary effort among 60 libraries to jointly assume responsibility for acquiring important, current publications to ensure that they would be available in an American library. It is important to note that in addition to sharing responsibility for acquisitions, participating libraries also agreed to process materials, and submit catalogue copy for inclusion in the U.S. National Union Catalogue as quickly as possible. Probably from the middle of the 20th century the term 'Library co-operation' was replaced by 'Resource sharing' and has gained popularity and acceptance through out the world.

Resource

The term 'Resources' applies to anything referring to man, material or action, in the field of library—reading and audio-visual materials, equipment, techniques and personnel. By the term 'Sharing' means to participate in each other's properties, functions, also in cheers and sorrows, in the field of library sharing of reading and audio-visual materials, equipment, techniques and experts.

According to Bhargava⁶ "the term 'resources' applies to anything, person or action to which one turns for aid in time of need. The word 'Sharing' entails opportunity, allotting or contributing something that is owned to benefit others". 'Resource sharing, in its most positive concepts, entails reciprocity, implying a partnership in which each member has something useful to contribute to others and to which each one is willing and is ready to make available when needed. This sort of co-operation attitude among the partners is needed for the establishment of a network of resource sharing.

Network

Network means grouping to provide joint services and facilities. It is a plan to fulfil a common objective on a co-operative basis among librarians, teachers, scientists and other users. The term refers to agencies that are organised to provide joint library services and facilities.

Many scholars have defined network from different angles. Webster's New World Dictionary, 1978⁷ defines network as "an interconnection or inter-related chain, group or system" and a system as "a set or arrangement of things so related or connected as to form a unity or organic whole" or "a regular, orderly way of doing something: order, method or regularity".

Martin⁸ defines a network as a "group of individuals or organizations that are interconnected to form a system to accomplish some specific goals."

In a nutshell, it may be said that network is a joint venture among individuals or organizations to fulfil a common objectives on co-operative basis. It is a process by which a clientele in one organization uses the materials from other organization.

Library Network

Woodsworth⁹ defines, "a library network assumes a formal organization, composed of number of libraries that have some shared goal or goals, and that realise the goal(s) in part through reliance on computing and telecommunications technologies."

Library network means, according to Rayward,¹⁰ "A system of library relationships, ordered or structured according to a variety of forms of agreement, through which sustained communication can take place and by means of which bibliographic and other information, documentary materials and expertise, of a kind and to a degree agreed upon, are transmitted."

The ALA seminar on network and multi-type library co-operation in 1977 defined library networking as "the co-operatives structures, which cross jurisdictional, institutional and often political boundaries to join in a common enterprise, several types of libraries—academic, special and public."¹¹

Library resource sharing, library co-operation, library consortium, library network are all various terms given to the same activity which means that a group of libraries have come together and entered into some kinds of formal organization for the purpose of sharing the resources of each other's materials, functions, services, and the staff to their mutual benefit, realising that only through resource sharing the greatest amount of the best information can be provided to most of the users at the most reasonable cost.

Types of Network

Handel and Saraf¹² classified resource sharing network in four types in view of functions performed, type of library, subject matter, type of material, means of financial resources, degree of automation as follows:

- a. Equally distributed networks: all participants holding equal (but different) quantities of material to be utilized only by the participants.
- b. Star networks: one participant holding substantially all the resources, to be utilized by other participants holding substantially equal quantities, at times overlapping, to be utilized by themselves as well as others.
- c. Hierarchical networks: Unsatisfied needs are passed along to the next greater resource centre.
- d. Mixed networks: combination of the above types of networks.

With regards to purposes and functions, some networks are devoted primarily to the sharing of bibliographic information such as cataloguing records. Others are concerned mostly with resource sharing through inter-library loan, co-operative collection development, union list of serials, and reciprocal borrowing. In respect of purpose there are single purpose and multi purpose networks. Single purpose library networks support a particular single function. Such as to prepare union catalogue. The multi purpose networks that support a wide range of library functions, from cataloguing to reference e.g. OCLC (Online Computer Library Centre). In respect of library categories networks may be of two types: single type and multi type. Single type that form among libraries of the same type generally has an underlying assumption of solving shared problems and common goals. NNLM (National Network of Libraries of

Medicine), RLG (the Research Library Group), RSSN (Rural Social Science Network), INRD (Information Network for Rural Development) MILC (The Midwest Inter-Library Center) are some of the examples of single type network. Multi type networks includes all types of libraries. These are established to make optimum use of existing library resources. The main factor that lead to establish a multi type library network can provide all materials to the readers and that the readers of academic and special libraries can benefit from public libraries and vice-versa. Multi type library network shall be sponsored initially by government funds. AMIGOS, MLC, PALINET, SOLINET, etc. are some of the examples of multi type networks.

According to geographical distribution networks may be of: National, Regional & International and each of the type may be of either single purpose or multi purpose and these can be either expanded or be confined within city, country, or state territories. BNB, NACIS, NATIS, NICDAP, NISSAT, NLLST, NNLM, PSSC, etc. are some of the examples of National networks. AIBA, ADIPA, APDC, APEID, APINESS, POPIN, ASTINFO, DEVINSA, RINMAP etc. are some of the example of Regional networks and AGRIS, ICSU, INIS etc. are some of the examples of International networks.

Computer based library networks may be of two types. Network of a library can connected two library computers on the same desk or connects computers around the world. The types of library connections designate the type of library networks, two of which are LAN (Local Area Networks) and WAN (Wide Area Networks).

LANs connecting systems in a library creates Local Area Networks. The server in close and the library workstations make the connection directly to that server. The larger LAN may have many servers.

WANs when the library data signals extend beyond a LAN, the system has grown to a Wide Area Network. This type of network connection may include microwaves, satellites and high speed phone lines.

III. Information Technology

Another facet for building a sound framework for resource sharing is the induction of latest information technology techniques. In fact the success of the whole resource sharing program and networking activities depends upon the information systems technologies—as computer and telecommunication components, software development, combinatory searching techniques and interactive needs of access to information system and their data bases are transforming many of the traditional library procedures, practices and functions. Information system technology comprises of the activities of information storage, information processing and information transfer (acquisition, cataloguing, classification, circulation, storage and retrieval etc.) In these areas the computers have revolutionized the entire procedures. The great advantages of machine-readable databases over the manually operated catalogue and services are many and ease:

- i) in searching the entire data base;
- ii) of updating records/collection;
- iii) of conversion to other media;
- iv) of compiling union catalogues etc.

Internet

Now a day the term network has been replaced by the broader term Internet and gained highly popularity in the global scale. Through the Internet information can pass through in a matter of

seconds to any corner of the world. All countries in the world have access to the Internet, and they can exchange information freely in a convenient manner. The Internet is a network of networks. These networks are connected to world's information super highway. This makes a forum for world community for communication either directly or indirectly. Direct communication refers to the exchange of information that takes place in form of mails, chat or even talks. In the indirect communication the end user's client system use to gather information from the bulletin boards, common accessible pages kept for public in host computers used as servers.

IV. Importance and Need for Development of LRSN

In this age of information explosion it is not possible on the part of a librarian or an information scientist to collect and disseminate all the information to his users needs. In this respect Allen Kent¹³ viewed that few of the libraries could acquire 10 - 15% of the total publications of different countries of the world. He also opined that in fact only 1 - 5% is being bought by some of the renowned libraries.

Due to financial and other administrative constraints it is not possible for any library or information centre, especially of the third world countries, to afford to acquire all the books, journals and other reading materials, modern equipment locally for their users.

In 1967 the Board of Directors of four American Library Associations (ALA) emphasized the need for library co-operation and approved a joint statement on interlibrary co-operation.

The statement set forth 'the imperative need for co-operation' within the assumption that "no one library can be self-sufficient" and that "libraries acting together can more effectively satisfy user needs." Allen Kent.¹⁴

In this age of information and budgetary limitations, it is absolutely not possible for any library to be self-sufficient in all respects and satisfy the needs of her users individually. At present, it is found that most of the libraries are encountered with the following problems:

- i) Information explosion
- ii) Increase in user demand
- iii) Shortage of fund
- iv) Lack of adequate supportive facilities i.e. modern equipment and technologies.

Now it is the challenge for the librarians how to overcome these problems and embark upon to perform the main objective of librarians to provide the right information to right person at the right time. The solution is that all the libraries have to seek and extend co-operation within the framework of a network of resource sharing.

V. Library Resource Sharing Networks

5.1. Bangladesh Context

There are about three thousand different types of libraries in Bangladesh, engaged in library and information services with limited resources, information materials, equipment and modern technologies. In fact there are very little initiatives for resource sharing activities in Bangladesh. Although the importance of library co-operation is well known to the librarians and information scientists of Bangladesh. The activities relating to resource sharing network is not activated among the partners. Only a few partners are actively working on resource sharing

network activities. Very recently at local level some initiatives have been taken for resource sharing, these are BANGLANET, BANSLINK, BERNET, INRD, ISN, NAIS, NASTIP, and RSSN. And efforts are being taken to participate in a number of regional and international information networks originated by external initiatives. These are AGRIS, APINESS, DEVINSA, DEVSIS, HELLIS, POPIN, SAIC, etc.

BANGLANET See ISN.

BANSLINK (*Automation and Networking of Science and Technology Libraries in Bangladesh-1995-98*)

A Networking project initiated by the Ministry of Science and Technology, Bangladesh and was implemented by the Bangladesh National Science and Technical Documentation Centre (BANSDOC). The duration of the project was 3 years (June 1995 – June 1998).

Specific Objectives: The main objectives of this project were:

- a. To collect relevant information and create database for proper observation and examination of the research and development works in the field of science and technology of Bangladesh;
- b. To keep aware of the Ministry of Science and Technology about the development of science and technology and its application in the country for the purpose of planning and decision making;
- c. To assist the researchers/scientists and planners of different agencies to get easy research course;
- d. To help selecting research techniques in the national level;
- e. To ensure saving of national property by avoiding duplication of research;
- f. To expand the field of research and development through mutual co-operation;
- g. To increase proper use of information resources and to standardize of client services to a certain stage through computerizing the major functions and client service systems of all the Science & Technology Libraries and Information Centres.

Following are the participating libraries and information centres of the project:

- BANSDOC (Central Network Service Centre), Dhaka;
- Dhaka University Library, Dhaka
- BUET, Dhaka;
- BCSIR Library, Dhaka;
- Atomic Energy Centre Library, Dhaka;
- Agricultural Information Centre, BARC, Dhaka;
- IPGMR (Former) Library, Dhaka;
- National Health Library & Documentation Centre, Dhaka;
- Planning Commission Library, Dhaka;
- Science & Technology Ministry Library, Dhaka;
- Rajshahi University Library, Rajshahi;
- Chittagong University Library, Chittagong;
- Bangladesh Agricultural University Library, Mymensingh;
- Jahangirnagar University Library, Savar, Dhaka;
- Khulna University Library, Khulna; and
- Shahjalal Science & Technology University Library, Sylhet.

- Science & Technology Ministry Library, Dhaka;
- Rajshahi University Library, Rajshahi;
- Chittagong University Library, Chittagong;
- Bangladesh Agricultural University Library, Mymensingh;
- Jahangirnagar University Library, Savar, Dhaka;
- Khulna University Library, Khulna; and
- Shahjalal Science & Technology University Library, Sylhet.

BERNET

Recently UGC of Bangladesh has taken the initiative to establish a network among the top listed eleven universities of Bangladesh, called BERNET (Bangladesh Education and Research Network). There shall be a large data base resource centre where books, journals, research reports and other information along with the academic curriculums of the universities will be preserved in data base form. With this program the teachers and students of the universities and the researchers at large will be able to use information according to their needs.

INRD

Information Network for Rural Development was framed in 1992 by CIRDAP in Dhaka with the objectives to promote the use and exchange of information on rural development and poverty alleviation by sharing resources, to improve the capability of the network members, to assist network members to adopt and use new information technology and to assist in developing the skills of the network members and other information personnel. The libraries and information centres, working in the area of rural development, ranges from the following government, non-government and international organizations are the members of INRD.

ADAB, Dhaka	CDL, Dhaka	NILG, Dhaka
BARD, Comilla	FHIB, Dhaka	RDA, Dhaka
BAU, Mymensingh	Forest Directorate, Dhaka	SAIC, Dhaka
BIDS, Dhaka	FRI, Mymensingh	SMC, Dhaka
BIISS, Dhaka	IBS, Rajshahi	SSRC, Dhaka
BPATC, Dhaka	ICDDR, Dhaka	UNISEF, Dhaka
BRAC, Dhaka	ILO, Dhaka	WFP, Dhaka
BRRI, Gazipur, Dhaka	ISWR, Dhaka University	

Since its inception to April 1994, CIRDAP has been carried on the responsibility as the focal point and tried its best to give an institutional shape. Later on BARD, Comilla took the responsibility of focal point. A working committee consisting of 7 members has responsibility to plan and implement the network activities. The working committee meets every quarter to review the past activities and plan for the next quarter.

INRD had been in operation for about three years. During this period, 3 issue of a bulletin namely INRD Bulletin, containing the publication and periodicals holdings of the network members, have been issued and distributed among the members. A format for reporting data was prepared following that recommended by the Library Association of Bangladesh (LAB), the data entered into CIRDAP's bibliographic database using CDS/ISIS

facilities to provide full Internet services On Line. INS's computer network is connected with the global information Super Highway via a VSAT (Very Small Aperture Terminal) of 64 kbps capacity provided by the Bangladesh T&T Board. ISN has been allotted by the Asia Pacific Network information Centre a large number of IP (Internet Protocol) addresses to be utilized by the BANGLANET Club members. Banglanet has been registered at the INTERNET Network Information Centre.

AGRIS

Agricultural Information System is a mission oriented system by Food and Agricultural Organization (FAO) to provide a comprehensive coverage of the world wide information on agriculture in its broadest sense – forestry, fisheries and food science etc.

NAIS

BARC with its resources, establish linkage the libraries of National Agricultural Research System (NARS) and develop a co-operative National Agricultural Information System (NAIS) to meet the information needs of the agricultural research.

The ultimate goal of the NAIS is to:

- i) Design and lead a co-ordinated and co-operative communication network to assist overall development in agriculture;
- ii) Develop a National Agricultural Library containing agricultural publications of all relevant institutions in the country;
- iii) Upgrade professional skills of information scientists of the NARS through training, workshop, and seminar.

NASTIP

National Science and Technology Information Policy, Bangladesh adopted in 1986 under direction of the NCST, under which BANSDOC will be co-ordinating body for information networking. The S&T policy which urges, among others, to create a centralized facilities for collection and dissemination of scientific information. The S & T policy recognises that a strong information base in needed to facilitate rapid acquisition, organization and dissemination of information. BANSDOC is thus to stimulate the networking process in the field of science and technology in Bangladesh.

RSSN

Rural Social Science Network was established in 1993, by a group of social scientists and scholars in Bangladesh with the objectives to provide an open forum for interdisciplinary discussion on vital rural development issues to identify the research needs in the rural and agricultural sectors; to disseminate the finding of research in the form of briefs for polity makers, to strengthen linkage among researchers, policy planners and project/program managers and to promote some other activities relating to rural development in Bangladesh.

In the field of social sciences, five networks have been proposed. These are networks of (i) University Libraries, (ii) general college libraries, (iii) technical and special libraries, (iv) libraries of each division of Bangladesh, and (v) National libraries (Wanasundera).¹⁶ in this respect, it is proposed that a national social science library and information centre that is, to be

created to function as the national co-ordinating body and national focal point to organise the proposed social sciences information network.

There exists another network in Bangladesh under the Department of Public Libraries. The Department of Public Libraries was established in 1983 by amalgamating the already established government public libraries (including the Bangladesh Central Public Library). The Department has also created a network of public libraries, covering all the district headquarters, except 2 (Narsindi and Sariatpur) (Badiur Rahman).¹⁷

5.2. Regional and international

In 1973, Bangladesh participated in the Simla Conference (1973) under the UNESCO auspices, boosted by the ICSSR at the Indian Institute of Advanced Study, where among others, emphasis was given for the establishment of exchange of documentation services. And this is the first attempt was made by the Asian countries to form such a documentation exchange service centre.

DEVINSA

The Development information Network for South Asia is a collaborative system initiated in June 1980 with its headquarters at the Marga Institute, Colombo, Sri Lanka, to meet with the information requirements of the Committee on Studies for co-operation in Development in South Asia (CSCD). More specifically, the functions of DEVINSA are to bring under bibliographic control, published and unpublished literatures, produced in the South Asia region, and to make it available as reference for development activities by policy makers, planners, researchers and providers of literature and information. DEVINSA is currently circulating monthly abstracting journals focusing on socio-economic development in member countries i.e. Bangladesh, India, Maldives, Nepal, Pakistan and Sri Lanka covering a wide range of subjects relating to social sciences. DEVINSA also provides a monthly database update services available in electronic format only. BIDS and CIRDAP in Dhaka are the DEVINSA member institutions among which BIDS is serving as the national focal point of the DEVINSA program in Bangladesh.

HELLIS

The HELLIS (Health Literature Library and Information Services) network in South East Asia Region of World Health Organization was originated in 1979 in New Delhi to strengthen the health science libraries of the countries of the region, including Bangladesh, by the year 2000. The objective of the network was to develop the participating health science libraries of Bangladesh under the leadership of the National Health Library and Documentation Centre as the national focal point. The objective of the HELLIS network are to: a) make better use of the resources available within the country, b) make better use of the available resources in other countries of the region, and c) make better use of the available resources in other regions.¹⁸

SAIC

The SAARC Agricultural information Centre (SAIC) was established in 1988 in recognition of the pressing need for a regional information system for effective promotion of co-operation and co-ordination in production and exchange of information in agriculture and allied sciences among the member states. The SAIC Governing Board composed of one member from each SAARC country, formulates policies and oversees the function of the center.¹⁹

The objectives of the SAIC broadly are:

- i) To establish an agricultural information network with effective linkages with national institutions in the member states;
- ii) To identify and document all pertinent literature published and unpublished in the fields of agriculture sciences, including forestry, fisheries, livestock and allied disciplines;
- iii) To serve the agricultural information needs of the member states; and
- iv) To promote new and better techniques, including training for handling and disseminating agricultural information

The completed projects of the SAIC include:

- i) Directory of Agricultural Institutions in SAARC Countries;
- ii) Directory of Agricultural Scientists and Technologists of SAARC countries;
- iii) Database on fish diseases in the SAARC region;
- iv) Database on potato;
- v) Directory of Agricultural periodicals of the SAARC countries;
- vi) Bibliography on women in Agriculture in the SAARC REGION; and
- vii) Directory of on going research projects in SAARC member states.

Participating in these above networks, Bangladesh immensely benefited in various ways, especially in the field of agricultural information services. But this is not enough for a developing country like Bangladesh. What are needed are that some kinds of local / national efforts are to gear up in order to form a forum of resource sharing activities among the libraries within the country.

VI. Emerging Problems

In this age of inflation, shortage in budget and information explosion, the importance of resource-sharing network is well recognized by most of the informants. And many of them may take initiative to establish the aforesaid Internet programs, but it is not easy to run such programs successfully. There are many co-operative efforts that dissolved in their mid-way. Some disbanded when they lost relevance for participants. Some simply outlived the times in which they existed. Others discontinued due to changing attitudes of the partners. There are many problems that prohibit either the establishment or growth of a Resource Sharing Network. Some of the major problems are as follows:

- i) Absence of regular monitoring of the activities of network programs in terms of regular correspondence, meetings, seminars, dissemination of information and other relevant matters;
- ii) Inadequate support facilities (in all participating libraries) e.g. micro computers, photocopiers, microforms, video-tapes, audio-visual materials, electronic database, furniture, trained manpower, telephone facilities, etc.;
- iii) Existence of bureaucratic attitude among administrative setup that hinder quick disposal and decision regarding resource sharing in terms of decision making for resource sharing among the partners and attending partners needs, etc.;
- iv) Negative attitude in developing library facilities by the administrative/controlling authorities e.g. placement of inadequate funds for acquiring reading materials and equipment.

VII. Conclusion and Policy Implications

In the light of foregoing discussion an effective mechanism is to be evolved for smooth establishment and functioning of Resource Sharing Network. This is required in order to encounter information centres. The present world mainly depends on information technology and the libraries and information centres are the provider of such information. But it is not possible for any single library to collect and provide all the information to her users needs. So co-operation among the libraries and information centres in Resource Sharing has become a useful way to disseminate knowledge among the partners.

Behaviour and attitude of users, library personnel and administration require particular attention in resource sharing networks of modern age. They have to mutually reinforce the climate that is highly conducive to the flourishing of library resource sharing.²¹

Bangladesh is one of the poorest countries of the world. It is an agro-based country and the economy is largely depended on agriculture. Therefore, the development of the country depends on the development of her agriculture. Agricultural and rural development mostly depend on current flow of up-to-date information. To provide current and sufficient information there is need for information network. The initiative taken in Bangladesh in this field such as BANSLINK, BERNET, INRD, ISN, NAIS, RSSN, SAIC etc. will surely play an important role.

The success of a network, however, largely depends on the mutual understanding voluntary initiatives and cooperation among the participating organizations/persons. In order to attain the objectives of resource sharing in library facilities the following measures are suggested:

- The program should always be in functioning i.e. more activities should be launched such as regular meetings, discussions, seminars, workshops, publications etc. To perform all these activities all participating members should have cooperative with each other whole-heartedly. The focal points should be more active to keep aware of network activities among the members;
- In case of a network, there is inadequacy of fund, which need to be taken care by the members of the network within the country. In this connection external financial support is required. To have external financial and other technical support, communication should make with aid giving agencies like Asia Foundation, Ford Foundation, FAO, WB, UNDP, UNESCO, etc.
- In order to keep aware of the users, the facilitators and the partners of Library Resource Sharing Network about the activities of resource sharing. Every year there should have a slogan and this slogan should widely be circulated by the national media and through posters, leaflets placards, etc. Bearing in mind the usefulness of resource sharing of library facilities, all the members/partners of LRSN should take utmost care to work sincerely according to network programs.
- Network should undertake both shorter and longer period training programs of all categories of staff and officers of the member libraries. In fact, all the staff and officers are not fully aware and conversant with the concept and activities of resource sharing. Therefore, it would be useful to arrange training facilities for the staff and officers phase by phase by the network focal point. Since fund, for arranging such a training program would be a problem, the UN Agencies like ESCAP, UNDP, UNESCO, etc. could be approached.
- Regarding administrative constraints as mentioned in the problems there should have an open discussion among the partners of network and the recommendations of such discussion could be transmitted to the respective controlling/administrative bodies of the partners of network. This is to be done immediately in order to quick disposal of the decision that is being undertaken by the network.

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Acronyms

AASSREC Association of Asian Social Science Research Council	APEID Asia and the Pacific Program of Educational Innovation for Development
ADIPA Association of Development Research and Training Institute of Asia and Pacific	APINESS Asia Pacific Information Network for Social Sciences
AIBA Agricultural Information Bank of Asia	ASTINFO Regional Network for the Exchange of Information and experience Science and Technology in Asia and the Pacific
AIC Agricultural Information Center	
APDC Asia and the Pacific Development Center	BANGLANET Bangladesh Network

- BANSDOC Bangladesh National Scientific and Technical Documentation Centre
- BANSLINK Automation and Networking of Science and Technology Libraries in Bangladesh
- BARC Bangladesh Agricultural Research Council
- BARD Bangladesh Academic for Rural Development
- BARI Bangladesh Agricultural Research Institute
- BAU Bangladesh Agricultural University
- BERNET Bangladesh Education and Research Network
- BIDS Bangladesh Institute of Development Studies
- BIISS Bangladesh Institute of International and Strategic Studies
- BNB British National Bibliography
- BOSLA Bombay Science Librarians Association
- BPATC Bangladesh Public Administration Training Centre
- BRRRI Bangladesh Rice Research Institute
- CDI Community Development Library
- CIRDAP Centre on Integrated Rural Development for Asia and the Pacific
- CLASSNET Clinical Arts Service System Network
- CONSER Co-operative Online Serials
- CREN Co-operation for Research and Educational Networking
- CUSI Co-operative Union Serials List
- DEVINSA Development Information Network for South Asia
- DEVSIS Development Services information Network
- EPSTC Family Planning Services and Training Centre
- ESCAP Economic and Social Commission for Asia and Pacific
- FEDLINK Federal Library and Information Network
- FFHIB Food for the Hungry International, Bangladesh
- HELLIS Health Literature Library and Information Services
- IBS Institute of Bangladesh Studies
- ICDDRDB International Centre for Diarrhoeal Disease Research, Bangladesh
- ICSU International Council of Scientific Unions
- ILO International Labour Organization
- INNERTAP International Network on New and Renewable Energy Resources and Technologies for Asia and the Pacific
- INIS International Nuclear Information System
- INRD Information Network for Rural Development
- ISN Information Services Network Ltd.
- LRSN Library Resource Sharing Network
- MEDLERS Medical Literature Analysis and Retrieval System
- MLC Michigan Library Consortium
- NACO National Co-ordinated Cataloguing Operations
- NACISIS National Centre for Science Information System
- NAIS National Agricultural Information System
- NARS National Agricultural Research System
- NASTIP National Science and Technology Information Policy
- NATIS National Technical Information System
- NCCP National Co-ordinated Cataloguing Program
- NELINET New England Information Network
- NICDAP National Information Centre for Drugs and Pharmaceuticals
- NILST National Lending Library for Science and Technology
- NISSAT National Information System for Science and Technology
- NNLM The National Network of Libraries of Medicine
- NREN National Research and Educational Networking
- OCLC Online Computer Library Centre
- PALINET Population Information network
- PSSC Philippine Social Science Council
- RDA Rural Development Academy
- RINMAP Regional Information Network on Medicinal and Aromatic Plants
- RLG The Research Library Group
- RSSN Rural Social Science Network
- SAARC South Asian Association for Regional Co-operation
- SAIC SAARC Agricultural Information Centre
- SDI Selective Dissemination of Information

- SMC Social Marketing Company
- SOLINET South-eastern Library Network
- SSRCB Social Science Research Council, Bangladesh
- SYB Statistical Yearbook of Bangladesh
- UNDP United Nations Development Programme
- UNESCO United Nations Educational Scientific and Cultural Organization
- UNIS United Nations Information System
- USB Universal Serials and Book Exchange
- WB World Bank
- WFP World Food Programme
- WLN Western Library Network

REGULATION OF INSIDER TRADING: A COMPARATIVE STUDY BETWEEN BANGLADESH AND AUSTRALIA

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Abstract: The study, predominantly concerned with the legal framework of insider trading regulation in Bangladesh, analyses the drawbacks of our jurisdiction in light of Australian legal regime. The study concludes that elimination of insider trading is imperative to restore peoples' confidence in the market. This end could be achieved through the legislation of suitable laws and their proper implementation. With a view to strengthening the insider trading regulatory regime of Bangladesh, some recommendations in light of Australian legal regime have been put forward in the paper.

I. Introduction

Informational efficiency is, among others, important characteristics of a security market. Insider trading makes a market informationally inefficient since securities are traded on the basis of private information. Such inefficiency results in breaking up the integrity of the market through impairment in investors' confidence.

Presenting a concrete definition of this trade is really hard. As the term implies, "insider trading is the exploitation by a person of an informational advantage in relation to the body corporate or its securities, to obtain a benefit which is not available to the general public."¹ In other words, a working definition prescribes that insider dealing occurs when an individual or organisation buys or sells securities when knowingly in possession of some piece of confidential information which is not generally available and which is "price sensitive", i.e. likely, if generally available, materially to affect the price of the security.²

Share scam 1996 greatly diminished investors' confidence and left thousands of new entrants as penniless. Since then, the concerned authorities of Bangladesh have been trying to restore this confidence. But their efforts appear to have been failed. Because, investing public as well as institutions are still away from the market. In such a situation, achieving sustainable improvement of the securities market warrants a careful study, inter alia, on the insider trading regulation. This study is predominantly concerned with the legal framework of insider trading regulation in Bangladesh. In analysing this regulation, the drawbacks of our jurisdiction have been investigated in light of Australian legal regime. Rest of this article is organised as follows. section II concentrates on the rationale for regulation, while section II explores pertinent provisions of both jurisdictions. And, finally, section III summarises recommendations by way of conclusion.

II. Rationale for Regulation

Insider damages an essential component in the proper functioning of the securities market, that is investors' confidence.³ The objective of this restriction on insider trading is to ensure that the markets operate freely and fairly with all participants having equal access to relevant

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information⁴ in other words maintaining a level playing field. The regulation is premised on the following benefits:⁵

- i. all investors have equal access to securities information;
- ii. officers are more likely to comply with their fiduciary duties owed to the shareholders;
- iii. economic efficiency in the securities market is promoted because it does not damage market integrity; and
- iv. loss to the issuing company, its investors and shareholders is avoided.⁶

In fact, regulation is needed to facilitate capital formation, not to impede it. The purpose of capital market is not to beget regulation, but rather to transfer capital from suppliers to users, from investors to business. Regulation should facilitate this process by ensuring that markets operate in an efficient, cost-effective and fair manner.⁷ Insider trading plays a role subversive to this end. Because it truly transfers capital from the investors which goes to the insiders, instead of business. Rather, it caused a dire detriment to the business by destroying investors confidence that usually invites a sudden collapse in the market. Hence, without question, protecting the interest of investors, at least those who are less capable of fending themselves, is virtually important to ensure their continued faith and confidence in the integrity of the markets. But it is important to recognise that protection is only a means to an end, not an end in itself.⁸ Because, regulation should strike a balance among often competing goals and objectives. Striking the proper balance between the needs of investors and the needs of issuers should be primary role of regulator in today's market.⁹ A well designed and administered regulatory system instils investors confidence, preserves a broad public interest in efficient markets, and safeguards against fraud and misconduct.¹⁰ Keeping this objective in view, regulation should be formulated and enforced in such a manner that protects the legitimate interests of all players of securities markets.

III. Laws Governing Insider Trading in Australia and Bangladesh

Australia

Australia regulates insider trading by statutory laws. This regulation was based common law fiduciary concept until 1991. Because the then prohibition was based upon Company Bill 1973 (UK). The policy justification for the law was that insider trading is a form of wrongdoings akin to breach of fiduciary duty, since an inside takes advantage of price sensitive non-public information acquired in connection with his or her office.¹¹ However, they were exclusively criticised on two grounds. They gave rise to practical difficulties in certain situations (for example, they made it difficult to conduct "due diligence" inquiries before buying a business). And they seemed to be largely ineffective and widely disregarded.¹² The recent provisions, introduced in 1991 as an amendment to Corporations Law 1989 (CL'89), no longer depend on the establishment of a fiduciary or similar connection between the trade and a relevant company. These amendments in 1991 emphasised on the possession of inside information instead of relation between the individual and the respective issuer of the securities. Currently insider trading is regulated under CL'89 (effective from 1 January 1991). Hence all sections mentioned in this article with respect to Australia are taken from this law unless otherwise stated.

Bangladesh

Securities Laws¹³ would not contain any clear prohibition on insider trading. They did not define the term 'insider trading' either. Directors and officers of the company usually carry on this trading. In relation to trading by those people, the Securities and Exchange Ordinance 1969 (SEO'69) spells out that:¹⁴

Where any director or officer of an issuer of a listed equity security or any person who is directly or indirectly the beneficial owner of not less than ten per cent of such securities makes any gains by the purchase and sale, or the sale and purchase, or any such security within a period of less than six months, such director and officer or beneficial owner shall make a report and tender the amount of such gain to the issuer:

Nothing in Provided that this sub-section shall apply to the security acquired in good faith in satisfaction of a debt previously contracted.

This could not be regarded as an effective and adequate restriction on insider trading. In practice, this provision has little force to arrest insider trader though, it is widely believed that this trading is one of the most significant issues that causes debacle of market in Bangladesh.¹⁵ In the wake of almost unregulated unfair practices, the authorities concerned had to have a fresh thought on it. The Securities and Exchange Commission (SEC), the capital market watchdog, with prior approval of the government, makes regulatory provisions titled Securities and Exchange Commission (Prohibition of Insider Trading) Regulation 1995 (hereinafter called Regulation '95). Since then this is regarded as the basic law in relation to regulation of insider trading. It is not a statutory law, rather a bye-law made by SEC. Its inefficacy and inadequacy have been explicitly proved through its total failure in combating this trade in 1996. In scrutinizing the loopholes of Regulation '95, the issues considered in present study are: a) Inside information and its unfair uses; b) Explanation of price sensitive information; c) Presumption about availability of information; d) Identification of insider traders; e) Consequences of contravention's of insider trading provisions; d) Definition of securities; g) Prohibition against tipping; and h) Exception to the insider trading provisions.

3.1 Insider Information and its Unfair Uses

Australian legislation provides inclusive definition of the word "information". Section 1002A states that "information includes matter of supposition, matters insufficiently definite to warrant being made known to the public, and matters relating to the intention or likely intention of a person." It is a very wide expression of information. Even it seems to embrace person's undisclosed intention. In *Ampolex Ltd v Perpetual Trustee Company (Canberra) Ltd*¹⁶ it was held that defendants were insider because they knew of their own intention to convert certain convertible notes at a higher conversion rate than the conversion which the rest of the market believed applied.¹⁷

As per s 1002G and the definition of information, the supposition is "information", even if it may later turn out to be incorrect.¹⁸ Despite this wide definition of information, if person forms a private conclusion from a set of publicly available facts that private conclusion should not amount to inside information. This is because s 1002B(3) states that information is generally available if it consists of deductions, conclusions or inferences made or drawn from readily observable matter or generally available information.¹⁹

Section 1002E(a) deems a body corporate to possess any information which an officer or the body corporate possesses if the information came into her or his possession in the course of the performance of duties as such an officer. Section 9 provides a definition of officer which includes employees of a body corporate.

Unlike Australia, Bangladesh law governing insider trading does not afford any definition of the term "information". This term is, therefore, not used in the same manner in both jurisdictions. Thus, it appears to be a shortcoming for Bangladesh. But inclusion of merely supposition using one's own wits being outright detached from any inside information, seems

to be imposition of stumbling block on personal ability on market assumption. It is so because, to be guilty of insider trading, one is no longer be needed to have an attachment to the corporation whose securities are traded. If such assumption is prohibited, then how the investors will keep up with their pursuit of making profit from securities market. Hence I regard, inclusion of merely supposition using one's technical skill as inside information might be revised even for Australia.

Avoidance of an inclusive definition of the term "information" in law ultimately left the court open to decide on it. For a country like Bangladesh, I believe, a concrete definition could serve better towards the effective regulation of insider trading. Definition of information provided by CL'89 could be an example for this purpose.

3.2 *Explanation of Price Sensitive Information.*

Use of price-sensitive information is imperative in committing an insider trading which falls within the prohibited degree. Bangladesh unlike Australia, has provided a vivid enumeration of price sensitive information. Section 2(d) of Regulation'95 provides that:

"price-sensitive information" means any such information which, if published, may influence market price of the concerned security and includes the following information, namely- (i) report in respect of the financial condition of the company or any basic information in respect thereof, (ii) information relating to dividend; (iii) decision for giving right shares to security-holders, issuing bonus or giving similar other privilege; (iv) decision of the company for purchasing or selling any immovable property; (v) information relating to BMRE or establishment of new unit of the company; (vi) basic change in the field of company's activities (e.g. produced goods, preparation and implementation of plan or policy decision in respect thereof, etc.); (vi) any other information determined by the Commission by notification in the official Gazette.

Australian legislation, CL'89, did not use the term "price sensitive" literary, but its explanation regarding effects of information implies that it has to be price sensitive as well not being generally available. Emphasising on its price sensitivity s 1002C explains that a reasonable person would be taken to expect information to have a material effect on the price or value of the securities of a body corporate if the information would, or would be likely to, influence persons who commonly invest in securities in deciding whether or not to subscribe for, buy or sell those securities.

A criticism of this definition is that it involves a shift from the test of 'materiality' to a test of whether the information has influence or not. For example, information that the government is reviewing taxation concession available for research and development might cause a potential investor in a technology company to 'wait and see' (i.e. it could not affect his decision whether or not to buy those securities at that time), even though the information may not affect the price of the technology company's securities in a significant way.²⁰

The influence test set out in s 1002C does not apply to the subjective limb of the 'insider definition. In order to satisfy that definition it must be shown that the person knew or ought reasonably to have known that the information was not generally available and, if it were generally available, it might have a material effect on the price or value of those securities. A criticism of this limb of the test that the use of the expression 'might' rather than 'would' lowers the threshold of knowledge which must exist.²¹

In contrast with Bangladesh, Australian legislation does not enlist any specific criteria to prove its price sensitivity instead, the regime leaves a broader rule of objectivity test. This test is not relevant in Bangladesh. Because, effects of information need not be considered to

determine the merit of an insider trading issue. If the information used in trading by possessor that anyhow falls within the specific criteria, the person could be caught for this offence. However, the list is not exhaustive. The end part of the list contains that, "any other information determined by the Commission by notification in the official Gazette. This scope for further illustration appears to be rational to combat a priori events. However, for the sake of justice, objectivity test like Australia, could be attached to the information to be determined by the SEC for this purpose in exercising its discretionary powers.

3.3 *Presumption of Availability of Information*

Regulation'95 attaches such information, which, if published, may influence market price of the securities concerned. But it does not postulate when an information has to be regarded as published. It may create a genuine confusion amongst the persons involved. In this regard, Corporations law provides that information is generally available if:

- i) it consists of readily observable matter;
- ii) it is made known in a manner that would be likely to bring it to the attention of persons who commonly invest in securities of a kind whose value might be affected by the information, and a reasonable time for information to be disseminated among such persons has elapsed; or
- iii) it consists of deductions, conclusions or inferences drawn from readily observable matter or information made known in a manner likely to bring it to the attention of persons who commonly invest in such securities.²²

The phrase "readily observable matter" is not defined. Must the information be readily observable by the public or the people who commonly invest in such securities, or it is sufficient if it is readily observable only to the observer?²³ While there is no guidance on this issue in the Corporations Law, it would appear that the information must at least be readily observable to the persons who commonly invest in such securities.²⁴ This view is supported by the extraordinary memorandum to the legislation, which equates readily observable matter with "facts directly observable in the public arena."²⁵

Since publication is a core tenet of inside information, Regulation'95 should have illustrated the situation when information is to be considered public or generally available like CL'89. Otherwise the offenders may take the advantage of this ambiguity to reap their selfish interests.

3.4 *Identification of Insider Traders*

Removing the previous need for attachment between the persons and the issuing companies the current CL '89²⁶ categorically mentions that use of information is the prime concern regardless of any connection between the user of that information and the corporate entity concerned. The Griffiths Committee (a parliamentary committee) argued that the basis for ascertaining whether insider trading has occurred should be the use of information. Upholding this approach s 1002G(1) provides an identification of insider as a person having no connection with a body corporate who, for example, merely overhears a conversation in a lift or on the street is regarded as insider, if the person knows or ought to know that the overheard conversation is inside information. In accordance with the changed emphasis as mentioned in present legislation, the expression 'insider trading' is not strictly correct. It is more accurate to describe the provisions as dealing with the 'misuse of non-public information.'²⁷

Thus under the existing legislation in Australia, an insider is any person who possesses inside information and who knows that the information is non-public. Person also includes a

body corporate.²⁸ It is apparent from s 1002G(1) that a person who merely overhears a conversation in anywhere in any manner is regarded as an insider if that information falls in a prohibited category. Hence, the expression "insider trading" is not literally correct. It would be more accurate to describe the provisions as dealing with the misuse of non-public information"

Regulation'95 still, by contrast, emphasizes a connection between the possessor of information and the issuer of securities. Further it treats equally both direct and indirect relation between the above. Because, defining the term insider, the Regulation'95 illustrates that.²⁹

"[I]nsider" means - (i) any such person who is a director, principal stock holder, managing agent, banker, auditor, adviser, officer or employee of any company; (ii) any such person who may know any price sensitive information or may be considered to have the opportunity of knowing the said information because of his connection with any person mentioned in this sub-section(i) or because of any connection with the company or because of his position.

S 2(e)(ii) of Regulation'95 highlights, inter alia, indirect connection, the relation between the possessor of such information and the company through the persons mentioned in s 2(e)(i). Nevertheless, in any case, an attachment to, or connection with the company has been considered as a constituent element.

The previous regulatory regime in Australia required such a connection with the body corporate. Persons connected with a body corporate included its officers, employees, substantial shareholders as well as persons with a professional and business relationship with the body corporate. Further it was necessary to prove that the insider came into possession of information by virtue of that connection.³⁰

Subsequently, the Griffiths Committee thought this aspect of the previous legislation was unnecessary complication.³¹ Thus it recommended removing this condition which is reflected in the current legislation. Having regard to the importance of the Griffiths report, Bangladesh should amend its identification criteria by deleting any requirement of relation between the insider and the body corporate.

3.5 Consequences of Contravention of Insider Trading Regulation

Penalty provision for contravention of this regulation is ambiguous and confusing in Bangladesh. Section 5 of the Regulation'95 provides some minor penalties in addition to the liabilities incorporated in the Securities and Exchange Commission Act 1993(SECA'93). Apparently, SECA'93 does not seem to have attached any penalty to insider trading. Regarding the expression 'insider trading', the Act includes in one of SEC's functions to 'prohibiting insider trading in securities'.³² Correspondingly, the Act envisages with regard to penalty that.³³

- (1) Whoever contravenes or attempts to contravene or abet the contravention of any provision of this Act shall be punishable with rigorous imprisonment for a term which may extend to five years or with fine not exceeding Taka Five Lac or with both.
- (2) Whoever under this act, rules and regulations: - (a) Fails to comply with any order or direction; or (b) Fails to furnish necessary information; or (c) At the time of inspection or investigation whoever fails to produce necessary paper and documents or failed to cooperate with the Commission, the Commission may caution such person in writing or it may impose fine not exceeding taka one lac and for continuous default a fine of taka ten thousand per day for each day of default.

This punishment has been provided for the contravention of the SECA'93, but not for the Regulaion'95. The above sub-section 2 of SECA'93 might be applicable to insider trading

since this trading is prohibited by the Regulation made under this Act. But curiously this penalty is lower than that of sub-section (1) of SECA'93.

Moreover, neither of the cautions, such as fine Taka one lac or in the case of continuous default Taka ten thousand per day for each day of default is a real penalty for such trader. Because, they seem not to care of any caution, nor did they feel any difficulty to pay little amount of money like one lac. Thus the penalties enshrined in SECA'93 does not reasonably work as an effective deterrent for the insider. Contemporaneously, the penalties provided by the Regulation'95 might not be stringent enough to combat this unlawful trading. In this regard, s 5 of the Regulation goes as follows:

If any person contravenes the provision of regulation 4, the Commission may, without prejudice to his other liabilities under the Act or the validity of provision relating to the penalty imposable upon him, take the following actions against him, namely: - (a) if the said person is stock-broker or stock-dealer or authorised representative of any other intermediary licensed for dealing in securities, the Securities and Exchange Commission may cancel or suspend his licence under the Dealer, Stock-broker or Sub-broker Regulation, 1994 or any other regulations; (b) may direct him to take over the charge of the share or stock acquired through insider trading for a special period or not to transfer the said security for a specified period, and may direct to company concerned not to give effect to such transfer or not to take any consequential action in accordance with the said transfer.

Cancellation or suspension of brokers' licence or non-transferability of securities for the time being could not be effective penalty for such a trade. First and foremost penalty has to be imprisonment, and pecuniary punishment should be at least five times of the profits made through such trade.

Under CL'89, consequences of contravention of insider trading regulatory provisions are considerably severe. It attaches both criminal as well as civil liabilities. Besides, Supreme Court and Federal Court may make various orders. Consequences of insider trading provisions in Australia can be described as follows.

3.5.1 Criminal Liability

A natural person who breaches the primary prohibition in s 1002(2) is guilty of a criminal offence punishable with a penalty of AU\$200,000.00 (Tk.60,00000.00 approximately) or imprisonment for five years or both.³⁴ A body corporate is liable to fine of five times the maximum amount which may be imposed on a natural person, ie. AU\$1 million³⁵ (Tk. 30 million approximately). At the time when this penalties were introduced, the government indicated that it was conscious that they were high but stated that it was necessary to send a very clear signal to the market that the insider trading could not be tolerated.³⁶ It explicitly identifies the weakness of the law of Bangladesh. Punitive measure is prime deterrent towards the commission of any offence. Hence, punishment for contravention of insider trading provisions should be severe in line with Australia.

3.5.2 Enforceability of Transaction

In Australia, it appears that transaction entered into in contravention of the insider trading laws are not void from the beginning but may be voidable at the option of the aggrieved parties of the transaction. Under CL'89 the court has also wide powers to make orders in proceedings relating to contravention of insider trading laws. Such orders may include a declaration that a contract of purchase or sale of securities is void or voidable.

3.5.3 Civil Liability

Section 1005 entitles a person, who has suffered loss or damage by the breach of insider trading provisions committed by another person, to recover the amount of the loss or damage by action against that person or against any other person involved in the contravention. It is not, as a matter of law, necessary that the insider trader be first convicted before the innocent party can exercise his right to civil remedy. It is sufficient for the innocent party to show on the balance of probabilities that a contravention has occurred³⁷ any such action must be commenced within six years after the date that the cause of action arose.³⁸ Further, facilitating the determination procedure of adequate loss or damage caused by the contravention, s 1013 sets an artificial measure of damages to be applied in respect of the trading and procuring offences³⁹, but not the communicating offences.⁴⁰ Thus tipping prohibition is entirely governed by s 1005,⁴¹ not by s 1013.

Damages are measured essentially by reference to the difference between the amount that would have been paid if the information have been generally available.⁴²

Section 1013(2) enables a body corporate that issued securities to an insider to recover an amount of money from the insider, as loss suffered for the purpose of s 1005 measured in the same fashion.

Under s 1013(3) a seller is entitled to recover from the insider purchaser as a loss suffered for the purpose of s 1005 calculated in the same manner. Similar action by the seller is allowed against a person procured by an insider to purchase the securities as well as any other person involved in the contravention. S 1013(4) equally enables the buyer who did not possess the information, to recover from the insider, as loss measured in the same way. Similar action by the seller is also applicable to the person procured by the insider as well as other person involved.⁴³

3.5.4 Action by the Australian Securities and Investment Commission (ASIC)

The ASIC may, if it considers that it is in the public interest to do so, bring an action in the name of, and for the benefit of, the body corporate for the recovery of that loss [for which the body corporate is entitled to recover under s 1013(2)] -s 1013(6).

Liable for Double the Financial Benefit Gained

Potentially an insider may be liable for double the financial benefit gained by the contravention. This is because not only the insider liable to either the buyer or seller of the securities under s 1013(3) or (4) but the insider is also liable under s 1013(5) for the same amount to the body corporate in whose securities the insider has traded.⁴⁴ The ASIC may, if it considers that it is in the public interest to do so, bring an action in the name of, and for the benefit of, the body corporate for the recovery of that loss- s 1013(6).

3.5.5 Courts orders

Additionally s 1002U authorises the courts, the Supreme Court and the Federal Court, to make various orders if it finds a contravention of s 1002G. These include orders restraining the exercise of different types of rights attached to the securities (for example, voting rights) or restraining the acquisition or disposal of securities or vesting the securities in the ASIC. Further, CL'89 furnishes a variety of orders that may be passed in connection with the

securities offences. Generally, this includes injunctive relief to restrain insider trading under s 1324 and orders for compensation as well as orders varying a contract or refusing to enforce any or all or its provisions.⁴⁵

ASIC may apply to the courts for orders under s 1114 in respect of contravention of s 1002G including an appointment of a receiver and an order declaring that a contract is void or voidable. It is evident from the above discussion that individual, body corporate as well as ASIC could be a party of enforcement proceedings of insider trading provisions. And considerable civil remedy and stringent criminal penalty have been attached to the commission of the offence. Moreover, despite the conviction of the persons involved in a criminal case, he/she may be charged with civil liability too.⁴⁶ Put another way, the same person can be sued simultaneously in both civil and criminal courts. This rigorous provision has been adopted taking into account the degree of negative effect of insider trading to the healthy operation of securities market.

A clear distinction can be drawn in respect of penalty provisions between the two jurisdictions. Bangladesh law is far more relaxed than that of Australia. The former could be updated by borrowing various punitive measures from the latter as pictured above.

3.5.6 Definition of securities

The subject matter of insider trading seems to be securities. But, Regulation '95 totally avoided defining the holy grail of this trade. In denoting the term 'insider trading' the Regulation '95 states that "insider trading means buying and selling or transferring by any other means of any security by any insider on the basis of price sensitive information."⁴⁷ Imposing prohibition on such trading the Regulation '95 spells out that "No person shall either himself or through any other person deal in any insider nor shall be given any personal advice or help in respect of such trading."⁴⁸

Specific and inclusive definition of securities in such a law is deemed to be imperative. Because the primary objective of this law is to ensure a fair-trading in securities market.

Unlike Bangladesh, Australian legislation has incorporated an inclusive definition of this important term. Under s 1002(A)(1), securities mean:

- share in the body corporate. Share in the body corporate does not include as yet unissued shares;⁴⁹
- debentures including convertible notes, issued by the body corporate;
- prescribed interests, such as units in unit trusts, made available by the body corporate;
- units of shares or prescribed interests;
- an option contract to buy or sell any of the above.

In addition, s 1002A extends the definition to include securities issued by a government, an unincorporated body or any other person. A similar definition of securities could be framed in view of the description provided by CL '89. But definition might be similar but not identical. Because it has to be drawn in the context of securities market in Bangladesh. Specifically, option contracts are not tradable in Bangladesh. So it could be kept outside the purview of this definition.

3.6 Prohibition against Tipping

The Regulation '95 does not seem to prohibit an insider tipping or communicating inside information to another person. It has just proscribed that "No person shall give any personal

advice or help in respect of such trading".⁵⁰ Advising or helping someone in trading with securities may not necessarily mean tipping for the same purpose. One may receive inside information by overhearing any personal conversation in person or on the phone or in any other means between insiders though the insider did not intend to let that person know such information. In such a case, neither the insider nor the trader could be blamed under current legal regime in Bangladesh. Considering the importance of such situation, Australian law has encompassed this within the prohibited degree. It is apparent from the definition provided in s 1002G(1) that a person having no connection with a body corporate who, for example, merely overhears a conversation in lift or on the street is regarded as insider if that person knows, or ought to know, that the overheard conversation is inside information.⁵¹

More clearly, s 1002G(3) of CL'89 strictly prohibits an insider tipping or communicating inside information to another person. This prohibition applies only to listed securities. An insider must not, directly or indirectly, communicate the information, or cause the information to be communicated, to another person if the insider knows, or ought reasonably to know, that the other person would or would be likely to:

- subscribe for, purchase or sell, or enter into an agreement to subscribe for, purchase or sell, any such securities; or
- procure a third person to subscribe for, purchase or sell, or enter into an agreement to subscribe for purchase or sell, any such securities.

Section 1002G(3) makes it easier for the prosecution to prove a breach of the prohibition against tipping than was the case under the previous version of this prohibition. Now, to establish a breach, it is no longer necessary to prove that there was an association or arrangement between the insider and the tippee with respect to dealing in the securities. It is now necessary only to show a communication of inside information to tippee.⁵²

In Regulation '95, there is no wording like 'cause the information to be communicated to another person.' Thus tipping prohibition under this Regulation suffers from inadequacy or lack of foresightedness. It could be made more vivid and effective taking Australian provisions into account.

3.7 Exceptions to the Insider Trading Prohibitions

The Regulation '95 does not embrace any list of exceptions, in fact, it left no room for special circumstances. If this is the case, then some persons like underwriters, holders of dealer's licence might be often found trading with inside information. In view of the above reality CL '89 has enumerated some exceptions to this liability. These exceptions in some cases alleviate unintended consequences of the strict application of the insider trading provisions and on the other hand, facilitate acceptable commercial activity.⁵³

Sections 1002H-1002S contain the following exceptions to dealing and procuring [s 1002G(2)] and tipping [s 1002G(3)] prohibitions. Since the prohibition is no longer depends on proving a connection company and is now very broad, it is obviously necessary for some holders of inside information to have some substantial defences.

3.7.1 Redemption of Prescribed Interests by a Trustee

Pursuant to this exception, a trustee company which possesses inside information may, without breaching s 1002G(2) redeem prescribed interests in accordance with a buy-back covenant contained or deemed to be contained in the trust deed at a price that is required by the deed to be calculated, so far as is reasonably practicable, by reference to the underlying value of assets of the business undertaking to which the prescribed interest relates, less any reasonable charge

for purchasing the interest.⁵⁴ This section may be defective in its application in that, it applies only to the trustee and does not extend to the manager, who is usually the company, that buy-back the prescribed interests.⁵⁵

3.7.2 *Underwriters and sub-Underwriters*

Underwriters and sub-underwriters are often active in marketing securities. Usually an underwriter will insist on obtaining information about the issuing body corporate and the proposed issue before it agrees to enter into an underwriting agreement. If underwriters were subjects to insider trading regulations, it would severely curtail the practices of underwriting.⁵⁶ For this reason, s 1002(1) provides an exemption from the preliminary prohibitions for underwriters and sub-underwriters in respect of subscribing for, and selling securities. Tipping provisions also do not apply to underwriters both for procuring a person to enter into underwriting agreement or to subscribe for securities.⁵⁷

This provision is defective, as it does not exclude the person receiving the inside information from s 1002G(2), i.e. the recipient of the inside information can not subscribe for the shares without breaching s 1002G(2).⁵⁸ The rationale for underwriting tipping exception appears to be that without which it would not be possible for share issue to occur.⁵⁹ Brokers are not exempted since they are believed to be one of the classes of persons most likely to contravene the insider trading laws. Exemption of brokers from tipping provision might be regarded to be an invitation for brokers to abuse any informational advantages that they may possess.⁶⁰

3.7.3 *Communication of Information Pursuant to Legal Requirements*

The communication of inside information pursuant to a legal requirement will not amount to a breach of s 1002G(3).⁶¹ The law that created this requirement may be any statutory law in force in jurisdiction concerned, or any regulatory authority. Therefore, for example, communication in accordance with Australian Stock Exchange (ASX) or ASIC requirement, or in pursuance of discovery obligations under a legal proceeding, will not breach the tipping prohibitions in s 1002G(3).

3.7.4 *Purchases in Compliance with Legal Requirements*

A person will not breach s 1002G(2) by purchasing securities to comply with a requirement imposed by the CL'89 even though that person possesses inside information in relation to those securities.⁶² The explanatory memorandum by way of example noted that in relation to arrangements reconstructions and take-overs ss 414, 701 and 703, in certain circumstances, require a body corporate to purchase shares from dissenting shareholders, where those shareholders so request.

Where the body corporate does so while in possession of inside information it will not be taken to breach of the insider trading provisions. The exception is only intended to apply where the purchase is, in pursuance of a requirement (rather than discretion), imposed upon the CL'89.⁶³

3.7.5 *Chinese Walls*

CL'89 provides a Chinese wall exception that applies to transactions made by a body corporate⁶⁴ partners⁶⁵ or security dealer⁶⁶ with regard to securities of an entity, despite the above possession of inside information relating to those securities. A Chinese wall is the adoption of certain procedures within a business organisation to prevent the dissemination of information between the departments of that organisation. To exploit the advantage of this

exception, the Chinese wall must satisfy the legislative requirements in force between the person entering into the transaction and the person possessing the inside information.

This exception is necessary because of s 1002E and s 1002F which attribute to a body corporate or to partners of a partnership, any information which the officers of the body corporate or any of the partners of a partnership respectively know or ought reasonably to know.⁶⁷ Prohibition on advising the clients has been imposed under Business Rules 3.5 of ASX. It states that if the broker firm is in possession of price sensitive inside information in relation to a client, then a broker shall not give advice to any other client of a nature that would damage the interests of either of those clients unless a Chinese wall prevents the broker giving the advice possessing the relevant price sensitive inside information.⁶⁸

However, the Chinese wall exception only applies to the dealing offence and it is not an exception in the case of procuring or tipping offences.⁶⁹ Nevertheless, the effectiveness of Chinese wall is not beyond debate even in Australia. Professor Tomasic testified before the Griffiths Committee that there "has never been a Chinese wall that does not have a grapevine".⁷⁰ The difficulty with this exception is that it relies on the integrity of the organisation, which claims to have a Chinese wall in place, for its efficacy.

The Chinese wall exception in the current legislation has been relaxed. The previous legislation considered whether the Chinese wall was 'reasonably designed to ensure' that information did not pass. Whereas the present legislation considers the Chinese wall "could reasonably be expected to ensure' that information did not pass. The present test appears to be more lenient and further weakens the arguments in support of the necessity of the existing Chinese wall exception. Moreover, there are no guidelines in CI'89 or its regulation which provides guidance on how to set up an effective Chinese wall.⁷¹ In such an absence, the Conflict of Interest Guidelines of the International Banks and Securities Association of Australia recommended that the following procedure should be followed in establishing a Chinese wall.

- i) There should be physical segregation of parts of the organisation (for example, the underwriting and corporate advisory areas must be segregated from other areas of the organisation. The benefit of physical segregation should not be undermined through frequent transfer of personnel between segregated departments or through common computerised access to price sensitive information obtained by the departments.
- ii). Companies should maintain a list of embargoed securities which can not be dealt in by employees or persons connected with employees.
- iii) Employees should use in-house brokers/dealers when engaging in transactions on their own account
- iv) Brokers/dealers acting on behalf of employees' transactions to a compliance officer or to the head of the relevant functional area.
- v). Employees should sign information statements about insider trading and also undertakings that they are familiar with the insider trading information.

Bangladesh law, however, does not contain any provisions as exception from insider trading liability. In view of the importance of the above exceptions, it might not be too much to say that without such exceptions, Regulation' 95 itself has left enough scope to be frequently contravened by the above excepted persons. As for example, underwriters shall have to possess sometimes even inside information for the sake of its sound business commitment without which securities trading would be undoubtedly in jeopardy.

Purchasing under legal requirement is sometimes obvious for the betterment of both company as well as securities owners, the impetus of securities market. Such a purchase would be a clear violation of insider trading provisions in many occasions unless exempted. However, Chinese wall exception seems to be a problematic issue with respect to its proper implementation. Because, persons' integrity is the main factor in such a case. In Bangladesh, there would be nothing surprising to many, if not all, to see holders of Chinese wall exception pursuing dishonest policies to fulfil their selfish interests by neglecting the greater interest of wider community. Nonetheless, this exception could be cautiously inserted in the regulatory regime in Bangladesh. Australia, as for example, has approved this exception in spite of its potential misuse by some dishonest persons.

IV. Conclusion

The foregoing pursuit reveals that the laws of Bangladesh governing insider trading are poor, inadequate and weak by nature. Having considered the disastrous effects of insider trading, such transactions shall have to be dealt with iron hand especially in a country like ours, where in many occasions, irregularities prevail over the true sense of regularity. With a view to strengthening the insider trading regulatory regime of Bangladesh, some specific recommendations have been furnished in this endeavour. The pinpoints of those submissions read as follows:

- i). The term 'information' could be defined like Australia since it is the nucleus of this trade. But inclusion of persons' supposition as information is not advisable.
- ii). Objectivity test of information could be attached to Bangladesh legislation. At present, it does not provide objectivity test to prove price-sensitivity of information. Because, effects of information need not be considered in determining the merit of an insider trading case. An objective test could be imported from Australia to make the market players better off.
- iii). Publication of information is a core tenet of inside information. Regulation '95 does not enumerate the circumstances when an information is to be considered public or private either. An explanation in this regard could be incorporated to Bangladesh regulation reflecting the views as mirrored in preceding discussion.
- iv). Identification of Insider Trader is really a tough job. Bangladesh law still maintains a relation between the trader and issuer concerned in judging commission of insider dealing. Investigation carried out by the Griffiths Committee reveals that such relationship is an unnecessary complication. They augured that the basis for determining whether insider trading has taken place should be the basis of information, instead of relation. Hence, such a connection between the trader and issuer of securities could be struck off from Bangladesh legislation.
- v). A clear disparity is observed in relation to remedy against contravention of such regulation. Punishments provided by the SECA '93 as well as Regulation '95 for violation of insider trading provisions have been argued as ineffective. And suggestions have been made to make this punishment severe in line with Australia. Simultaneously, the extent of liability should be broadened to round up the offenders as has been formulated in this text.

- vi). Regulation '95 deals with trading in securities. But it did not define this term. A definition could be drawn on Bangladesh jurisdiction having regard to the spirit as enshrined in CL'89.
- vii). Tipping prohibition in Bangladesh could be made more explicit as has been prescribed by Australia.
- viii). Regulation '95 does not contain any exception for any players of the market. In such a situation, some persons like underwriters, holders of dealers' license, etc., might be often found as insider trader. To save some obvious needs, a list of exceptions could be inserted as framed in this discourse.

Insider trading is believed to have extensively tarnished the market integrity which ultimately led to the occurrence of share scam in 1996. The market is yet to regain the confidence of investing public. The loopholes of Regulation '95, as pictured in this article, warrant an immediate attention of the authority concerned. Elimination of insider trading is imperative to restore people's confidence in this market. This end could be achieved through the legislation of suitable laws and their proper implementation. Hence, an appeal has been made to the authorities concerned for taking above suggestions into account for removal of drawbacks of present regulation to address the issue properly. Further, adequate measures, it is submitted, have to be taken to ensure the fair application of the pertinent laws to make the regulation more effective and generously productive.

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HUMAN RIGHTS AND PREVENTIVE DETENTION UNDER THE SPECIAL POWERS ACT, 1974

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Abstract: Nations which have become independent after the adoption of the Universal Declaration of Human Rights in 1948 have mostly accommodated Human Rights provisions in their constitutions. Bangladesh is not an exception to it. But the executives in the name of administrative efficacy are violating these rights. This article shows how and in which way these rights are violated in Bangladesh in the name of the Special Powers Act, 1974 and suggestion has been made here to do away with this repressive law.

Introduction

Human Rights are inherent in human beings. These rights are inalienable and to be enjoyed by all human beings from their very birth without distinction as to race, sex, language or religion. Men are endowed with these rights without this life would have become animalistic. The World Conference on Human Rights adopted a resolution known as the Vienna Declaration 1993, which stated that "Human Rights are Universal, indivisible, interdependent and interrelated". This is a very comprehensive definition, which covers all aspects of rights. Human rights are essential for a man and without which he cannot live like a human being. Human Rights are, therefore, nothing but birthrights associated with the very birth of mankind, because these are fundamental requirements for the existence of human beings.

Human rights are to be enjoyed equally, freely and without any arbitrary public or private interference. But it is a reality that human rights face various types of interference in many countries including Bangladesh. In Bangladesh there is a typical law known as the Special Powers Act, 1974 herein after to be referred to as SPA, which provides for preventive detention by restricting the free movement of a person. Though no definition of preventive detention has been provided in this Act, in practice it means the confinement of a person in jail and as such his free movement is restricted and so he cannot meet his relatives, friends and others whenever he wants. However, both the two terms Preventive and Detention have been defined separately and jointly in legal lexicon.

The word "preventive" means that restraint whose object is to prevent probable or possible activity which is apprehended from a would be detainee on ground of his past activities.¹

"Detention" means "keeping back". This may take place either by physical force, that is to say, the person detained is kept back by physical force or threat, or it may be due to deception practiced on the person concerned, or it may be due to inducement or persuasion, that is to say, a rosy picture may be painted before the person concerned and on account of this rosy picture the person concerned remains in the house, or money may be offered by way of inducement, or it may be even an offer to marry. All this and many others may well be inducement or persuasion which would ultimately keep back the individual concerned and so

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long as that individual is under the influence of the persuasion or inducement and is thus kept back, he must be deemed to be detained. [Alamgir v. State, 1956 BLJR 184; I.L.R. 35 Pat 93: AIR 1957 Pat 285]. There is no 'detention' if the keeping back is due to an act of nature. 'Detention' does not mean 'imprisonment'. The word 'imprisonment' is always used in the sense of punishing a person, whereas 'detention' does not denote any punishment. [Gurdial Singh v. State, 1977 Cr LT 15 (19) (Delhi): 1977 Punj. LR (DS) 61: 1977 CLR 1 (Delhi)].²

In *A.K. Gopalan Vs. State of Madras* (AIR 1950 SC 27) it has been stated that the words "preventive detention" had nowhere been defined in Indian Law. The word "preventive" is used in contradistinction to the word "punitive". The object is not to punish a man for having done something but to prevent him from doing it. The justification for such detention is suspicion or reasonable probability and not criminal conviction (AIR 1950 SC 27).³

The Special Powers Act has been facing vehement criticism due to its inhuman character from the very beginning of its enactment. In this article efforts are made to find out the nature of misuse of powers in guise of the SPA by the executives by citing some leading cases. The study reveals the nature of violation of human rights by the misapplication of the SPA and remedial measures are suggested for preventing the violation of human rights.

Bangladesh Constitution of 1972 and Preventive Detention

In the original constitution of Bangladesh which was enacted in 1972, there was no provision relating to special powers for preventive detention, proclamation of emergency and suspension of fundamental rights. Rather, rights to protection from arrest and right against detention were guaranteed under articles 31 and 32 of the constitution. Though there were laws in different countries of this subcontinent regarding preventive detention, the framers of the constitution of Bangladesh carefully avoided such type of black provision. Originally Article 33 did not leave any scope for preventive detention. But in 1973, this Article was replaced by the second amendment in the present form under which any person can be arrested and detained. So according to the above amendment, the above fundamental rights are not available in the case of persons arrested or detained under any law providing for preventive detention. The laws relating to preventive detention were thus enacted subsequent to the amendment of Article 33 of constitution⁴.

The Special Powers Act, 1974 came into force on February 9, 1974. Clause 3 of Article 33 specifically lays down that these safeguards as to arrest and detention under clause (1) and (2) will not be applicable in cases of persons who are enemy aliens or who are arrested and detained under any law providing for preventive detention i.e. under the Special Powers Act, 1974.

The Special Powers Act was adopted in line with the of Indian Security Act (MISA), 1971, the Security Act, 1952 and the Public Safety Ordinance, 1958 of Pakistan. But the provisions of the Special Powers Act are more anti-humanitarian than these three laws.

Background of the Enactment of the SPA, 1974

The preamble of the Act provides that in order to provide for special measures for prevention of certain prejudicial activities, for more speedy trial and effective punishment of certain grave offences, the Special Powers Act is enacted. After the emergence of Bangladesh, P.O. 50 was promulgated in order to face the grim and grave situation in May 1972. But due to the improper application of the law, people were harassed and victimised routinely, which caused the government to face severe public criticism. So the government repealed the P.O. 50 along with the Security Act, 1952 and the Public Safety Ordinance, 1958 and legislated the Special

Powers Act, 1974 on 4th February 1975. Under this Act, any person can be arrested and detained if there is apprehension that he may commit "prejudicial act"⁵ which means-

- a. to prejudice the sovereignty or defence of Bangladesh;
- b. to prejudice the maintenance of friendly relation of Bangladesh with foreign states.
- c. to prejudice the security of Bangladesh or to endanger public safety or the maintenance of public order;
- d. to create to excite feelings or enmity or hatred between different communities, classes or section of people
- e. to interfere with or encourage or incite interference with the administration of law or the maintenance of law and order;
- f. to prejudice the maintenance of supplies and services essential to the community;
- g. to cause fear or alarm to public or to any section of the public;
- h. To prejudice the economic or financial interests of the state.

In the Pakistan regime, it was Awami League which submitted a bill on 20th September 1958 to repeal the tyrannical black law, the Security Act, 1952. But Awami League after coming into power, submitted a bill called the special powers bill, 1974 which is more tyrannical and repressive than the Security Act, 1952. While discussing on the special powers Bill in the parliament in 1974, the ruling party M.P. Serajul Haque termed the proposed law (Special Powers Act) as "the whitest law that we are bringing against blackest background."⁶ The then Law Minister Mr. Monoranjon Dhar told in the parliament that the law would be used only to prevent massive smuggling, hoarding, black marketing, killing, arson, etc. prevailing at the time. But it is fact that the law has been widely and indiscriminately used against the political opponents by the ruling party.⁷

Drawbacks of the SPA

Since under this law a person can be detained up to six months without the approval of the Advisory Board and up to indefinite period with the approval of the Advisory Board and up to indefinite period with the approval of the Advisory Board, this has been indiscriminately termed as a black and repressive law. All the political parties, since the enactment of the law, describing it as a repressive law, have been demanding its repeal, but for 25 years from its enactment, nothing has been done for repealing such anti-humanitarian law under which many innocent men had been and are being detained mostly on the ground of differences in political opinions.

The Bangladesh Nationalist party (BNP), before coming into power repeatedly demanded repeal of the Act, but after assuming power, the party asserted that it is a necessary law and without this law the country could not be administered. The then Prime Minister Khaleda Zia emphatically said that, in fact, this law has been used widely from the date of its enactment by all successive governments to oppress the political opponents of the ruling party. Under this Act, in 1996 a number of influential leaders and several thousand activists of A.L were detained by the then government.

The Awami League also committed to repeal all black laws including the Special Powers Act, 1974 before it came into power by the parliamentary election held on 12th June, 1996. But ironically, after assuming power, the AL government deviated from its stand drastically and now the ruling party defending the same law as necessary. Prime Minister Sheikh Hasina said, "Since previous governments did not repeal it, so we cannot." On March 11, 1997 Prime Minister Sheikh Hasina ruled out the possibility of repealing the Special Powers Act, saying that the Act had been identified by the previous governments as an essential to run the state.⁸

Detention and its Nature

Detention is of two types under constitutional law - (i) punitive detention and (ii) preventive detention. Punitive detention is given by a court of law while the preventive detention is given by executive authority i.e. by District Magistrate or Additional District Magistrate. Punitive detention is given to a person for committing a crime but preventive detention is awarded for preventing the accused from committing prejudicial acts. Suspicion or reasonable possibility of the impending commission of prejudicial acts is sufficient for preventive detention. Section 3 of the Special Powers Act, 1974 gives power to the executive authority to arrest and detain someone on the subjective satisfaction of the concerned executive officer. If the concerned officer is personally satisfied that there is sufficient cause of suspicion against any person of committing any of the acts prohibited by the Special Powers Act, he can give order for preventive detention. The Civil Servants may abuse the power and as such he is not free from controversy. He is not accountable to anyone for awarding preventive detention. Political leaders very often, experience says so, exert influence upon the Magistrate or Additional Magistrate and also on the police officer so that they exercise subjective satisfaction for detaining political opponents.⁹ It is a hard reality that in most of the cases the Magistrates try to serve the vindictive desire of the ruling party.

Whatever may be the expressed purpose of the enactment of this Act, the inner intention was to crush the opposition parties. So the power of the preventive detention under this Act has been greatly abused for the last 25 years and more, as it has been stated earlier, by the ruling parties. Hundreds and thousands of political leaders and workers have been and are being detained under this law, sometime, years together without any trial. This law, in actual practice, negates all the avowed commitment and spirit of the constitution, particularly the fundamental rights guaranteed by the constitution.¹⁰

Rule of Law and Preventive Detention

The Act provides for indefinite periods of detention subject to certain limited but virtually ineffective safeguards. This arbitrary and malicious discretion of the government is grossly against the very doctrine of rule of law. District Magistrate or Additional District Magistrate can initially issue detention order for 30 days. Later, it can be extended by the approval of the Government. In this respect, the Ministry of Home Affairs plays a vital role. Under this Act, the detainee is not produced in a court and he is deprived to defend himself by any legal practitioner. This is a denial to the constitutional safeguards of an arrested and detained person who is not produced, as per the provision of this Act, to the nearest Magistrate within 24 hours from the time of his arrest. So this Act has been regarded by Gazi Muhammad Shahjahan MP of BNP as a "jungle law framed by the previous Awami League government in 1974."¹¹

In case of detention beyond the period of 6 months, the approval of the Advisory Board comprising of three persons - two persons qualified to be appointed as Supreme Court Judges and one senior government officer is necessary. The detainee can only submit a representation to the Advisory Board against his detention. But it is a very lengthy process and as such the detainee cannot receive any relief. Under this Act, the detainee may be kept inside the jail for years together subject to the satisfaction of the Advisory Board, because there is no provision in the law for legal representation by the detainee to the Advisory Board and as such he remains in the prison for indefinite period without trial, without court proceeding. This Act does not provide any compensation in favour of the detainee in case of his grossly wrongful detention. That is why this Act was regarded by Justice Abdur Rahman Chowdhury as the "blackest law of the black laws"¹².

The Judicial Relief

Under the Special Powers Act, an aggrieved person, on account of his preventive detention, can file a *Habeas corpus writ* under Article 102 of the constitution in the High Court Division and 95% of such cases, High Court Division declares the detention as illegal and without lawful authority.¹³ But after release of the detainee on High Court Division order, in most cases, he is detained again and after his release, he is detained again and so on and so forth. In this way, the number of detainees remains always higher than that of released persons. Besides, in many cases, the poor detainee cannot bear the expenses of the cost of writ petition. So he remains inside the jail for years together and at one time he dies there without knowing the 'offence' on account of which he was arrested and detained. So this is, no doubt, a repressive and anti-humanitarian law from which the nation is striving hard to be freed.

Some Cases Under the Special Powers Act

A very recent case of detention will surely manifest the ugliest application of this Act. Azaduddin, chairman of 7 number char Alexander union parishad P.S. Ramgati of Laxmipur district and a freedom fighter, was arrested under the Special Powers Act. He was also earlier arrested and detained twice under this Act, in 1996. In the present case, a High Court Division Bench Consisting of Kazi A.T. Monowaruddin, J. and Muhammod Zoinul Abedin¹⁴, J. declared the detention of Azaduddin as illegal and without lawful authority and ordered his immediate release. He was arrested for political jealousy and rivalry. The High Court Division in the earlier cases also declared his detention as illegal. In each time he was detained by the order of the District Magistrate (Deputy Commission of Laxmipur District) on the same grounds. The High Court Division, on 1st September, 1999, ordered not only release of Azaduddin but also ordered the D.M. to pay compensation personally to Azaduddin of taka ten thousand to be deposited in the High Court within 30 days from the date of order and as because the said District Magistrate repeatedly detained the said chairman on the same unreasonable grounds, the learned judges treated it as contempt of court, and the victim is allowed to file a suit of contempt of court against the said District Magistrate. The Court also ordered the Secretary of the Ministry of Home to make an inquiry about those officers (civil servants) who repeatedly ordered illegal detention in the country and to take action against them. The govt. prayed for leave petition to the Appellate Division against the order of the High Court Division, but it has been rejected.

In another case, 4 B.N.P leaders in 1997, were arrested and detained in which the High Court Division not only declared the detention order as illegal but also ordered to pay compensation to each of them of taka one lakh. Mrs. Bilkish Akhtar Hossain filed a writ petition against the detention of her husband Dr. Mosharraf Hossain, who was one of the 4 BNP leaders and were arrested under the Special Powers Act, 1974. Md. Mozammel Haque J. and Md. Hasan Ameen, J of the High Court Division of the Supreme Court of Bangladesh said:

"To detain a person means to curtail his fundamental right of liberty, right of movement and right to speak. When without trial such fundamental rights guaranteed by the constitution are curtailed and invaded by the discretionary action of the detaining authority, the very next moment the aggrieved citizen is entitled to seek relief under the constitution in view of the provision of article 44 read with article 102 of the constitution. Right to liberty, right to movement and right to freedom are so much valuable fundamental rights of each citizen that no authority can take it away without due course of law"¹⁵

Observation of the Learned Judges

"In the instant case it appears that the detainee's rights of freedom of movement (Article 36), the right of freedom of assemble (Article-37) and right to protection of life and personal

liberty (Article 32) as guaranteed by the constitution have been invaded by the detaining authority with malafide intention under the garb of the Special Powers Act. Considering the facts and circumstances of the case and provisions of law as considered above as well as the order and grounds of detention made in this case and also considering the materials on record, we are of the view that the detention of the detainee is absolutely illegal, without lawful authority and is made in an unlawful manner. Since the fundamental rights of the present detainee guaranteed under the Constitution have been invaded and violated by the detaining authority maliciously as stated above, since the detainee has been depicted as a leader of the terrorists and provocateur and instigator of the saboteurs and thereby the detaining authority caused irreparable damage to his reputation, name, dignity, honour, prestige, image and social status in the eyes of the public at large, since all these scandalous, derogatory and defamatory news have been circulated through various Government news media, other news agencies, newspapers and journals of this country and abroad, since he was detached from his family members and deprived of his normal avocation of life for being subjected to inhuman mental and physical torture in jail for last 17 days, since such detention is malicious and malafide and made for political victimisation and since then detainee has been compelled to take shelter before this Court for proper relief and redress and thereby he has been forced to spend a huge sum of money as litigation costs, we are of the view that the ends of justice will be met if we award a reasonable but exemplary lump-sum monetary compensation in favour of the detainee. Therefore, we assess such reasonable and rational lump-sum monetary compensation of Tk. 1,00,000/=(Taka one lakh only) to be paid by the Respondent Nos. 1 and 2 to the detainee considering the above reasons and sufferings of the detainee and his social position."

The repressive character of the Special Powers Act and the consequent sufferings of the detainees as a result of improper application of this Act and also the helplessness of the judicial authorities is seen from the findings of some of the cases disposed of by the Supreme Court of Bangladesh.

In another case the Appellate Division observed,¹⁶

"We have accordingly no doubt that the framers of the constitution intended to empower the High Court Division to pass appropriate order in the case of illegal or improper deprivation of liberty of person and the power to do so is not at all fettered because of the absence of nomenclature of the nature of writ in the constitution. Under Part III of the Constitution, certain fundamental rights have been guaranteed. Clause 1 of article 44 which also occurs under Part III lays down that the right to move the Supreme Court in accordance with clause 1 of article 102 for the enforcement of the rights conferred by this part, is guaranteed. It is therefore, evident that the enforcement of the fundamental rights and this remedial rights is itself made a fundamental right by being included in part III of the constitution. The Supreme Court is, thus constituted by the constitution, the protector and guarantor of fundamental rights and so long as the fundamental rights specified under part III remain in force, it is the constitutional responsibility of the Supreme Court to protect them when the right conferred under clause I of article 44 of the constitution is invoked."

The writ of Mohsin Sharif V. State¹⁷, it is found that Shahjahan, a young boy of 18, was arrested on 18.12.73 by Armed personnel of Dhaka Cantonment, Artillery Headquarters. He was taken to Ramna Police Station and a G.D. entry was made showing his arrest under section 54 CrPC. Soon thereafter, the officer-in-charge of Ramna PS was asked by the Rakkhi Bahini authority to hand over Shahjahan to the Headquarter of the Rakkhi Bahini. Shahjahan was handed over to the Rakkhi Bahint. It was alleged in this case by Mohsin Sharif, the brother of Shahjahan, that Shahjahan has been inhumanly tortured by Rakkhi Bahini and he was last seen by his brother at the Headquarter of the Rakkhi Bahini on 02.01.74. Since then

there was no trace of Shahjahan. Mohsin Sharif then filed a Habeas Corpus writ petition for the production of his brother before the court. The High Court Division ordered that Shahjahan should be Produced before it. But the Rakkhi Bahini could not produce Shahjahan before the court; actually he was killed by the Rakkhi Bahini. The court directed that an Inquiry Commission should be set up by the government to ascertain the true state of things as to the whereabouts of Shahjahan. But it was not done. To quote Justice Badrul Haider Chowdhury, "the court found that Rakkhi Bahini was functioning illegally. Shahjahan was never found again just vanished in the air." This was the blackest chapter in the history of preventive detention law in Bangladesh.

In *Madan Mohan V. Government*¹⁸ (writ partition No 879 of 1977) Madan Mohan was arrested on 5.7.77. The High Court Division declared detention illegal and ordered his release. Madan Mohan was released but at the Jail gate he was again arrested by serving a fresh order of detention. This was done just to frustrate the High Court Division's order.

In *Farzana Haq V. Bangladesh*¹⁹ (Writ petition No 271 of 1990) Sanaul Haq Niru was arrested and detained first on 139.87 under the Special Powers Act. His detention was challenged in writ petition no. 187 of 1988 and the court declared the detention illegal and directed the release of detainee on 10.5.1988. But Niru was not released. Another fresh order of detention was served against him on 29.9.1988. Niru was not placed before the Advisory Board within the statutory period of 120 days. The High Court Division again declared the detention order illegal and directed his release. But Niru was not released; rather another fresh detention order (third time) was served and it was challenged by another writ petition (writ petition no 989 of 1989). Again the court declared the detention illegal and directed the detainee's release. But even this time Niru was not released; rather another fresh detention order was served. The matter came up before a Division Bench of the High Court Division in writ petition no 270 of 1990. The Court said:

"The least can be said is that the detaining authority is paying little regard to the order of the court. It is unfortunate that the authority which is obligated under article 32 of the constitution to protect the liberty of the citizens and further required under article 112 thereof to act in aid of the courts order should flout the laws by resorting to authoritarian acts ... we are satisfied that the detention is illegal and the detainee shall be set at liberty forthwith."

Another worst case of detention may be cited as reported in 52 DLR 16 regarding the detention of a victim named Shubhra of Maghbazar, Dhaka. He was arrested and given detention under the Special Powers Act, 1974. The detention order was challenged under writ No. 1607 of 1999 to the High Court Division.

After hearing, the High Court Division made the rule absolute, declared the detention illegal and directed the respondent to release him. Thrice detention order was passed and on three occasions the High Court Division declared the detention of Shubhra illegal and directed the respondent to release the detainee. But unfortunately as soon as the detainee came out from jail gate, every time he was served with the fresh detention order and kept him in custody on the selfsame grounds and was kept in custody. In disposing of the detention case, the High Court Division held that only to frustrate the judgement of the High Court Division successive orders of detention were given which is nothing but interference with the course of justice. Further, the High Court Division directed the detaining authority not to repeat such illegal detention order to frustrate the judgement. A copy of the judgement was sent to the secretary, Ministry of Home Affairs, for information and for taking necessary action for such repeated illegal detention orders of the selfsame grounds to a citizen of an independent and democratic country like Bangladesh.²⁰

There are numerous examples of illegal detention which help us to form idea regarding the abuse of power under the Special Powers Act by the executive Branch by detaining innocent persons. As a result of misuse of the Special Powers Act a large number of innocent persons are becoming victims of violation of human rights.

Mis-application of the SPA

Bangladesh parliament formed a parliamentary sub-committee consisting of three members in 1997 in order to find out the mis-application of law with reference to the Special Powers Act, 1974. The sub-committee submitted its 31 page report to the parliament on 7 September, 2000 after three years study of the Special Powers Act records from February 1974 to December 1998.

It is revealed from the report that 91765 persons were detained under the Special Powers Act from February 1974 to 31 December 1998. But 99% detainees were released due to vague, indefinite and weak grounds and in 80% of such cases govt. was defeated. During this period (25 years) 12745 writ petitions were filed against detention of which 11393 cases were declared illegal. The present govt. (AL govt.) detained 11733 persons during the period from June 1996 to December 1998 but released 12053 persons detained earlier. Besides, 9573 special criminal cases were lodged against the detention orders, of which 9176 were declared illegal by the court. The sub-committee also observed that out of 100 selected cases 38 detentions were declared illegal due to vague, indefinite and uncertain grounds while in 22 cases the govt. orders were found to have been given without lawful authority.²¹

The following table will show the number of detainees arrested under the Special Powers Act, 1974 and kept in jail for years together without trial.²²

Table 1
Number of Detainees under the SPA 1974

Year basis number of detainees under the Special Powers Act, 1974		
Year	Total Number	Number of Released Persons Through Writ of Habeas Corpus
1974	513	13
1975	1114	31
1976	1498	46
1977	1057	25
1978	753	30
1979	960	31
1980	710	41
1981	1759	29
1982	1548	54
1983	872	44
1984	643	36
1985	882	38
1986	2194	94
1987	4585	327
1988	4907	741
1989	4482	871
1990	4615	1099
1991	5302	1710
1992	6497	1594
1993	3669	1066
1994	2968	830
1995	4173	1805
1996	5413	3376
1997	4016	Not available
1998	6740	Not available
1999(Jan-Jun)	6650	Not available
Total	55300	

The following statistics show the number of cases filed, set aside and pending under the Special Power Act, 1974.²³

Table 2
Number of cases Filed, Set Aside and Pending Under the SPA

Year	Case filed	Case set aside	Case pending
1987	93	62	31
1988	168	134	44
1989	475	463	12
1990	1342	1249	93
1991	1671	1616	55
1992	2711	2200	511
1993	602	573	29
1994	659	470	189
1995	198	176	22
1996	1623	1585	38
1997	1870	1822	48
1998	918	881	37

Conclusion

The foregoing discussion reveals that with whatever saintly motive the Special Powers Act may have been enacted, it has been used invariably to repress people whom the administration do not like or in other words the opposition political leaders and activists. Ironically this Act was used against the leaders and activists of Awami League who framed this black law in 1974. It is now being used by the Awami League Government against its political opponents to annihilate them for the sake of its party politics. Who knows that it will not be used again against Awami League, if the present political situation is changed. This law must be repealed in order to uphold the principle of democracy, which provides for free and fair involvement in politics and political opinion. From its inception the SPA has been recklessly criticised by a large section of the community and also the opposition political leaders who have become its victim. So we suggest immediate repeal of the tyrannical law in order to develop a democratic and congenial atmosphere where all people will enjoy fundamental human rights, like freedom of opinion, freedom of movement and liberty, rights to life and person etc. That the SPA is a black law, that it deprives a man of his fundamental rights, that it puts a person into prison for no fault at all cannot be denied any more. In the whole of this sub-continent repressive law like this or in any other form is extremely detrimental to the growth and maintenance of human rights. Indeed it appears to be a farce to talk of human rights and at the same time nourish and apply laws like the SPA. To be honest and sincere in upholding our constitution we must immediately repeal the SPA. The SPA serves the interest of the ruling parties and not the common people.

Reference

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2. *Ibid* p. 392
3. *Ibid* p. 898
4. Article 33 has been substituted by Act xxiv of 1973, section for the original article 33.
5. Section 2(f) of the Special Powers Act, 1974 (Act no of 1974)
6. *The Daily Star*, 25th July, 1999.

7. *Ibid*
8. *Ibid*
9. *Dhaka Courier*, 13th August, 1999 pp.16-17
10. *Ibid*
11. *The Daily Star*, 25th July, 1999
12. *Ayeen: Prabandha Sankalan*, Rajshahi 1999, p.152
13. *Dhaka courier*, 13 August, 1999
14. *The Daily Inquilab*, 30th September, 1999
15. *Bilkis Akhtar Hossain Vs. Bangladesh MLR Main Stream Law Reports*, Vol. 2, 1997 (Dhaka)
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17. *Ibid*
18. *Ibid*
19. *Ibid*
20. *The Daily Star*, 14 August, 2000 Article, "Who is misleading the prime Minister?"
21. Cited in the *Daily Star* 8 September 2000; Editorial, *Daily Inquilab*, 10 September, 2000 reported from Jatya Sangsad.
22. Published by Ministry of Home Affairs, cited in *Dhaka Courier*, 13th August, 1999 and *Daily Star*, 25th July 1999. It is to be noted that we applied to Registrar of the Supreme Court of Bangladesh who promised to supply the stated information. But later on, he refused to supply the information by giving a letter written by a junior officer of the Supreme Court. The information was wanted for research work. It is not confidential information, but still then an administrative officer like a Registrar of the Supreme Court denied to supply information which is required for research work and not for any political affairs and the information was wanted officially by a research director and Dean of the Faculty of Law, Rajshahi University. Such is the position of our one of the state affairs.
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Reference

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AN INSIGHT INTO THE MARKETING OF PERFORMING ARTS

Syed Ahsanul Alam*

Abstract: The paper examines whether the marketing techniques used in the profit-for sector can be applied to the non-profit sector in general and arts marketing in particular. This paper presents the concepts and explore techniques used in marketing all forms of performing arts, and intended to educate and inform the marketing manager of the organizations engaged in marketing, drama, theatre, concerts, dance and music etc. about the value of utilizing marketing and promotional techniques to ensure a more viable and successful arts marketing organization.

I. Introduction

Traditional marketing concepts heavily rely on the ideas of designing products and services to cater the needs of the consumers rather than on the marketer's desire and tastes. This is in conflict with the concept of Arts-marketing in general and with the true aesthetic values of art and creativity in particular thus posing a special challenge to the arts marketing organization.

However, marketing activities have become essential for organizations engaged in marketing artistic performance if they are to succeed in today's competitive arts market. Many music groups like Eagles, Bee Gees, Abba and dance troupes like Soviet Ballet have long-standing reputations for quality productions. The consumers feel confident when they buy a ticket for one of these events that they will experience a quality production and get the money's worth. But it is interesting to note that many of these performing groups have been offering their performances without a thorough understanding of modern marketing knowledge and skills.

II. Key Concepts in the Marketing of Performing Arts

Concept of marketing performing arts is relatively a new issue for marketing organizations engaged in drama, theatre, concerts, dance, music and other forms of entertainment businesses. Owing to its newness, arts marketing may defy a universal definition. However, in order to facilitate a systematic analysis of marketing creative arts we would like to define the concept in the following manner. According to Keth Diggle, "The primary aim of Arts Marketing is to bring an appropriate number of people into an appropriate form of contact with the artists and in so doing to arrive at the best financial outcome that is compatible with achievement of that aim"². This definition is a shift from traditional one in the sense that here emphasis has been put not on the tastes and preference of the consumers alone but unlike in the traditional sense, here the marketer has to be innovative in applying techniques to create demand suiting the creative offerings of the performers.

The critical question in arts marketing therefore is, what is to be marketed? The art in the broad sense is a service with a unique characteristic. It is not the 'art form "itself that is to be

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marketed, but the experience associated with an artistic performance. For example, the consumer does not consume or possess the concert rather he/she experiences the music and the performance of the art.

Since the artistic performance can be experienced by many persons at one time, it has the quality of being marketable. The product "Art" is capable of providing an experience to a large number of people. But in reality the marketplace for cultural art is limited, highly segmented and quite selective. It is the job of the arts marketer to understand the marketplace so as to reach and cultivate a larger cultural audience. This will not only help cultural enrichment but also provide a positive environment for the artist who can continue to create art for the art's sake.

III. Arts-marketing as a form of Service Marketing

Arts marketing can be further classified as a segment of services marketing. A good is defined as an object, device, or thing, whereas a service is a relationship, an act, or a performance. Purchase of good leaves the consumer with something tangible. But when one purchases a service there is generally nothing tangible. Indeed, a service is consumed but not possessed. Unlike goods, which are produced then sold, services are produced and consumed simultaneously. The service provider often presents himself at the time of consumption. For example, the dancer must be present for the stage performance, which is viewed and experienced by the audience.

In arts marketing, the relationship between the provider and the consumer is of utmost importance. If a consumer feels that he is treated poorly he may look for a new service provider. Consequently, if someone attends a dance performance or a theatre or concert and is not satisfied about the quality of the artists, the performance itself, the comfort of the auditorium and the overall environment, he might seek another form of cultural entertainment the next time. When one purchases a ticket for a theatre or a drama show, one is purchasing a perceived "experience". If expectations are not fulfilled and satisfaction not ensured, the art consumer or audience may not give a return visit.

Therefore, it is important to remember that the quality of the service is inseparable from the quality of the service provider. Many theatres and dance companies have longstanding reputations for quality productions. The consumer feels confident to buy a ticket even at a high price of such reputed companies because he/she is sure to experience a quality performance and get his/her money's worth.

According to Philip Kotler, "Marketing strategy is designed to provide two specific benefits to its users"³. First is improved satisfaction to target markets. Because marketing places a great emphasis on understanding the needs of the market being served, a poor understanding will result in consumer's needs and desire not being adequately served. For example, a theatre group producing plays that do not attract the audiences risks losing them. Second benefit is that of improved efficiency in marketing activities. Making decisions and plans with insufficient knowledge can result in costly mistakes both financially and loss of consumers' confidence.

IV. Marketing Mix for Arts Marketing

Fundamental to any discussion of marketing is an explanation of the elements of Marketing Mix such as, Product, Price, Place Promotion and Public Relation. Clearly, the problems of product, price, promotion and place are different with marketing tangible goods compared to marketing of services or any sort of performing arts.

4.1 Creative Product Strategy for Performing Arts

The traditional marketers begin by identifying their target market's desires and then makes a product or services that will satisfy the consumer's real or imagined needs. However, when marketing performing arts such as drama, theatre, dance, music, concerts etc. it is important to remember that, "artists strive to 'lead' the society to examine 'new' as well as classical dimensions"⁴. Traditional product development decisions are usually based on the assumption that the product in question will satisfy a segment of the market at a profit. But this may not hold valid in the case of artistic good. Because, often artistic presentations do not initially please the arts consumers. That is why most of the art films and abstract arts can't attract a good number of audiences in order to remain viable. Tastes and knowledge of new art forms have to be cultivated. It is often argued that artists should be truly responsive to the needs of their audiences. This argument may have pragmatic appeal in a business sense but this view, is in direct conflict with the classical view that allows the artists complete freedom and creativity. Performers who act according to the dictation of the market or consumers would have to compromise with his creative genius, which will enable him to keep everlasting impression in the field of art and culture.

The strategic implication is that the artist or the performer presents his or her product in the best way possible and attempt to identify, reach, and cultivate the arts market. That is why Sam Guckenheimer rightly said, "We were going to do a certain kind of theatre no matter what people wanted. Our task was to find the people who wanted our kind of theatre"⁵.

4.2 Pricing Strategy for Performing Arts

The second element of the marketing mix, pricing, is one of the more challenging aspects of arts marketing and also a difficult aspect to realize. Non-profit does not mean losing money or not to make money. Both for-profit and non-profit organizations use pricing techniques to obtain a surplus. The difference is a semantic one and in most cases it matters how organizations define the word profit. The profit for organization sees profit in terms of cash inflow, whereas the non-profit views its profit as the maximum use of and quality of its product or service⁶. But in reality costs have to be covered and income needs to be generated to sustain and stimulate new creative productions or artistic offerings. In the case of arts marketing, pricing refers to income generated from sale proceeds of tickets, etc.

In today's competitive cultural arts market, the consumer is offered a wide array of cultural experiences and stimuli. The arts marketer has to ask himself what prices will the consumer pay for the satisfaction of an arts experience? According to Guckenheimer, "prices should be high enough so that anyone who can and will pay a lot to attend will do so. At the same time, anyone who really wants to come should be able to"⁷.

The purpose of pricing would then be to maximize income, at the same time stimulate sales of tickets, and cultivate new markets for artistic offerings. The artistic offerings especially, performing arts are traditionally priced below cost in order to attract audience from different spectra of the society⁸. If pricing is based on actual costs of production, it would be beyond the reach of the majority members of the society. While huge amount of money is to be spent for creative performance, they should not be priced so high as to detract the consumers from this high quality performance.

The arts product is to satisfy inner feelings and aesthetic needs of the people of any civic society, which can enrich and enlighten the members towards a more refined society. Therefore, artistic endeavours should not be for the rich alone. Hence, business, government, and private donations should fill the gap between revenue earned from the sale of tickets and actual costs incurred.

4.3 Promotional Strategy for Performing Arts

The third element in the marketing mix is promotion. This includes advertising, publicity, public relations, and other related promotional activities such as fund-raising and audience development. Traditionally the arts marketers had little or no promotional concept and budget. In case of shortage of fund it is unfortunate that their promotional budget are cut first.

However, some artists today feel that any form of promotion or advertising activity degrades their artistic appeal. They feel that the creative performance itself posses inherent attraction to draw attention of the cultured section of society. Non-profit organizations are unrealistic to assume that their services are so worthwhile and beneficial to the society that the public will voluntarily patronize and support them. But due to the competitive nature of the arts market today, the public needs to be aware about available productions, exhibitions and offerings of art products. Promotion solves this problem by making the audience aware of the product. That is why Bernard Lefort of the Paris Opera Bailey rightly staled, "You can't wait for the public to come to you, you have to go to them"⁹.

Advertising is the most common form of promotion. It covers a wide variety of activities, utilizing both print and broadcast media, including brochures, banners, posters, newsletters, billboards, and even such promotional novelties as T-shirt, mugs, pens, pins, etc. When developing an advertising campaign, it is important to realize the inherent strength, weakness, and limitations of each of the major media available. For instance, newspaper advertisement is obviously less costly than a four-colour magazine advertisement, yet it is often less visually attractive and effective in reaching a target audience.

Publicity is news about an organization that is placed in the media by someone not affiliated with the organization. For example, a local newspaper may publish a feature story on a dancer of a renowned dance company performing in the town. Publicity is the key to effective promotional coverage when working with a small budget. The organization receives exposure without having to pay for it. The organization can stage free concerts or band show in the community and invite the local press, television and radio to cover the event. It becomes a community affair and interesting story that provides free publicity of the arts organization. Other media may also be approached for interviews of key members of the art marketing organizations.

Publicity can also take advantage of business tie-ins. Each time any corporation is approached for its support by an arts organization, the corporation in turn receives the media coverage as well. The press conference is another free tool of publicity that can work to the advantage of the arts organization. However, before the news media will be interested in attending a press conference, they need to feel confident that it is worthwhile and newsworthy.

4.4 Public Relations Strategy for Performing Arts

PR encourages people to adopt a favourable attitude towards an organization. Its objectives are more long-term in the sense that it aims to earn public acceptance and support for an organization's goals, its services or products. Public relations utilize a variety of means to build goodwill and support of the general public. Developing singular contacts with key media personnel and establishing courteous relationships with the media personnel increases the chance of successful and appropriate media coverage for performing art organizations.

4.5 Place Strategy for Performing Arts

The final element of the marketing mix is place, the "Where and how" the purchase will be made, and where it will be consumed. The profit sector describes place as distribution, which

is physically routing the product out into the marketplace. In general, the marketer strives to place his product in the most convenient location as far as possible. However, performing arts organizations cannot always be located in most scattered areas. For obvious reasons they must establish facilities in areas that can serve the greatest potential audience, usually on major urban areas such as capitals, metropolis or cities having significant and sizeable art clientele.

Many of the performing arts companies today are operating at either government or privately funded centres located in selected metropolitan areas. Another area of concern to the arts marketer is how and where the tickets will be sold. The ticket office is not always easily accessible to the public, either for its location or limited hours of operation. Therefore, many arts organizations may utilize outside ticket sales offices by arrangement with other organizations like banks, bookstores, selected retail shops, department stores etc.

The arts marketer does not have the flexibility to experiment with place or distribution strategies available to the profit minded sector. Instead, he is restricted by fixed locations and limited time slots for performance schedules.

V. Conclusion

Marketing of performing arts should be seen as more than just pushing tickets. The individual performing arts organizations can no longer sit back and wait for the audience to attend these performances. What the customer expects is called the primary service package, and to this what the marketing organization can add are the secondary service features¹⁰. In the case of marketing performing arts, one should realize that the artistic offering is the core product. But it is the responsibility of the arts marketer to augment the core product and present it to the arts lover or audience. The symphonies of Mozart and Beethoven presented by different orchestras have a sizeable market. Shakespeare theatre, Haymarket theatres of UK and Globe theatre of US are successfully marketing play-acting and other forms of creative performance. Dhaka theatre and Peoples theatre of Calcutta are examples of organizations presenting performing arts. It is crucial to not only make the marketplace aware about the organization and its art, but also to cultivate the new and potential audience. The artistic performance should be available to a wider segment of the people and through the marketing techniques presented, the arts marketer can make this possible by bringing his product to the broader public. Proven marketing techniques allow the arts marketer to be responsive to the needs of the audience as well as cultivate a new market in order to be viable in the long run.

The benefits of practising marketing activities in the sale of creative art products rests on goal-oriented promotional plan that can provide more than a potential increase in public awareness about the organization and its offerings. Proper market planning can go a long way in fulfilling the objectives of the art organizations by letting people aware about their products in a more informed way.

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MECHANISMS FOR EFFECTIVE FINANCIAL PLANNING

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Abstract : Financial plan comprises forecast financial statements like Balance Sheet, Profit & Loss Account, Trading Account, a statement of capital expenditure, sources & uses of funds, impact of financing decision and investment decision covering marketing and production decisions. Short range plan covers one year while long range plan adheres to 3 to 10 years. Short term planning includes strategies for the day to day operation. Fluctuation in sales, uncertain future, business threats, and weakness creates constraint in financial planning. This may be controlled through using software package i.e. electronic spreadsheet. Model prescribed by Prosanna Chandra is an encouraging step for effective financial planning.

Planning is simply thinking ahead, and it involves forecasting or estimating what will take place in the future. To manage a firm, it is necessary to formalize the planning process into written documents and control the subsequent action through comparing with planned goal.¹ A planned is used as a set of guidelines or expectations with the provision that frequent deviations or modifications may be there. Business plans are found in long range and short range. Long range planning covers 3 to 10 years. Short term planning covers one year and the planning interval is influenced by the financial strength of any particular firm².

E.F. Brigham and others³ hold the idea that managers are concerned with future financial statements and the effect of alternative assumptions and policies on these projected or proforma statements. The preparation of proforma statements starts with sales forecast. Business firms exist within a dynamic environment. Therefore, planning is essential. Planning involves determining the goals of the organization, specifying operating and financial strategies to achieve the goals, projecting results that will be used to monitor and measure performance and developing contingency plans. Financial planing is formulated at the very highest level of management and encompasses marketing and production decisions. It is the analysis of long term investment and financing changes and concerned with which risks to take and which to shun. It requites a forecast of the impact of financing and investment decisions on the firm's welfare.⁴

A complete financial plan includes proforma financial statements, a statement of capital expenditure, statement of sources and uses of funds, business strategies, planned financing, a forecast of revenue and expenses etc. The basic requirements for financing planning are forecasting administrative procedure, recognition that competitors are also engaging in the same exercise.

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F. Mory and Finnerty⁵ hold the idea that seven main financial decisions are capital budgeting, capital structure, dividends, liquidity, and financing and liabilities management. The major components of financial plan are risk, cash flow break-even, a financial planning model, sales forecasting, forecasting costs, short term financial planning. Actually projected financial statements are used in long term financial planning. Short term financial planning includes strategies for the day to day operation of the firm. Projected financial statements are prepared on a quarterly or monthly basis for the use in short terms planning. The cash budget is used to predict and evaluate the flow of funds into the firm. Cash budget contains the following information.⁶

- a. Projecting the timing and amount of funds needed to meet expenses as they become due.
- b. Forecasting the timing and amount of cash receipts that will flow.
- c. Projecting the timing and amount of excess cash balance and plan as to what to do with this funds.
- d. Finding the timing and amount of funds needed from short term borrowing and projecting currency translations in case of foreign currency needs. The proforma statements used in financial planning are significant because if projected operating results look poor, management can redesign its plans for the next year and acquisition of funds becomes easier. The most important element in financial planning is the sales forecast. Sales forecast begins with a review of sales over the past 5 to 10 years. National economy, conditions in the product market are considered. The first step in the percentage of sales method of forecasting is to isolate the balance sheet items that vary directly with sales. It is a tie in between forecasting sales and forecasting financial requirements. Some times technical know-how and judgement combination as engineering analysis is followed for estimating financial requirements. Operation analysis based on nature of operations of particular firm is also emphasized to determine the financial requirements.

P.V. Kulkarni⁷ states that in estimating financial requirements, cost, liquidity, interest burden, control, risks, availability, seasonally etc. are considered.

S.C. Kuchhal⁸ observes that fluctuations in sales and uncertain future create difficulty in financial forecasting. Margin of errors, use of few sets instead of one set of projected financial statements and cash budgets, revision of forecast with changes in sales, inventory and balance of debtors etc. are most contributory. Adjustment, revisions of forecast, learning by trial and error, simple forecasting are also significant.

I. M. Pandey⁹ holds the idea that financial planning refers to the ideas of a firm's long term growth, profitability investment and financial decisions. Capital expenditure programs, debt equity combination, sources of finance, trade off between financial policy variables etc. are very much appropriate for survival of any business.

Petty and others¹⁰ recommend that the proforma statements prepared by a particular firm can be used to monitor or control the firm's financial performance. Comparison of actual results with monthly Performa statements provides warning to locate the financial problem creeping if any. Close watch on profitability and over all performance of business is easily maintained. They suggested for two sets of financial estimates, one for best and the other for worst situation. This will help in monitoring the performance. Financial planning software package, i.e. electronic spread sheets have facilitated quick evaluation of different scenarios at a low cost. Advent of the micro computer has broadened the use of financial forecasting and planning mechanisms to estimate the financial requirements, find the possible scope for financial changes, fund requirements, fix up cooperate financial policy for continuous business growth and improvement of financial performance.

John W. Lowis of England¹¹ finds that tools of effective forecasting and planning are mainly the past records, standards for performance, management accounting, market forecasting, statistical method and operation research. The basic principles of planning emerging from forecasting are clear cut objectives, comprehensive adequate fact finding based on measured standards, sufficient enough to facilitate control, flexible, realistic, attainable, well communicated, simple economic and appropriate in cost of installing and implementation.

N. J. Coulthurst of Loughborough University¹² recommends that if budgetary planning and control are to be effective, budgets must provide a realistic forecast of the future and effective control through comparison with actual figures. The major constraint is that actual cash flows and fund flows appear to be worse than budgeted figures. To face the odd situation, the full monetary effect of transactions is to be considered in preparing financial forecast and plans.

Prasanna Chandra¹³ opines that percentage of sales method and budgeted expense method are the two basic mechanisms to arrive at proforma income statement. Historical relationship is assumed to exist between various elements of cost to sales while budgeted expense method adheres to estimating the value of each items on the basis of expected development in the particular period. Practically, combination of the two techniques is more appropriate to face the financial uncertainties in future. To overcome the circularity problem in performing financial planning as the balance sheet and income statements are interrelated, external fund requirements may be forecasted through the following equation.¹⁴

- EFR = Ex. Fund Req. (External fund requirement)
 Δ/S = C/A and F/A as proportion of sales.
 (Current Assets and Fixed Assets)
 ΔS = Expected increase in sales
 L/S = Current liabilities and provisions and fund borrowing as
 proportion of sales
 M = net profit margin
 S^1 = Projected sales for next year
 d = dividend pay out ratio
 Δ/M = Change in the level of investment
 SR = Scheduled repayment
 $EFR = \Delta/S \{ \Delta S - L/S(\Delta S) - MS^1(I-d) \}$

Managers are always concerned with future financial statements and the effects of alternative assumptions and policies on their projected statements. The preparation of financial planning helps the firms with financial control by identifying potential outcomes under the firm's financial policies under different economic conditions and by formulating contingent strategies. It also provides a benchmark consisting of projected financial results against which future financial performance may be evaluated. Detailed budgets are critical to the firm's ability to control its costs and to monitor its sources and use of cash.

Professor. H. Rahman¹⁵ in a study an "Essential tools of Financial Management & their applicability in Nationalized Industries in Bangladesh" states that the public sector enterprises suffer from over capitalization, poor inventory management, non-availability of services of competent financial consultant, foreign exchange limitations, non-availability of licenses for

importing spares and labour unrest. These problems affect the financial operation of the business and as such remedial measures should be taken in these respects.

In the public enterprises of Bangladesh, there are greater constraints in financial planning due to severe shortage in cash flow, excessive financial and operating leverage, unfair competition in market, unusual threats and weakness, lack of opportunity and strength, congenial business environment, managerial know-how, shortage of technical manpower and absence of clear-cut financial information systems. In banking sectors, recently introduced FSRP has facilitated the better financial planning and monitoring of their performance. However, it can be concluded that computerized financial planning based on the functional relationship of elements of cost of sales, business environment, monetary adjustment, financial policy and strategies of the business, nature of risk prevailing, business strength, weakness, opportunity and threats (both internal and external) etc. may strengthen the effectiveness of financial planning of any particular firm as to pave the way towards wealth maximization of the firm through continuous business growth and development as evidenced by increasing share in market, market price of share, stability in demand for product, popular image in market and fulfilment of social responsibilities.

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CREDIT UTILIZATION AND DIVERSION : A STUDY OF BORROWERS OF RAJSHAHI KRISHI UNNAYAN BANK

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Abstract: The study seeks to identify the nature of credit utilization/diversion by the borrowers of Rajshahi Krishi Unnayan Bank (RAKUB), and locates factors responsible for diversion. Findings were that borrowers having lower holding size, receiving smaller sized loans, having illiteracy, receiving loans adequately, receiving loans not timely, receiving short term loans, receiving loans indirectly diverted their loans in unproductive purposes. Most diversion was made for household expenses followed by crop production and land purchase. It was found that the amount of loan and timeliness of receipt of loan affected the diversion, and proper credit use by small farmer is better than that of bigger farmers was not proved. The credit use by the large borrowers is better.

Introduction

Rural households borrow credit for financing various kinds of expenditure. The demand for loans may arise when the income is not sufficient to maintain a minimum consumption level. It may also arise when a farm household can meet its food requirement but lacks funds to purchase other essential commodities. On the other hand, some households may opt for loans to augment their surplus for use on different kinds of investment. The loan repayment capacity of farm household is dependent on the pattern of loan uses. The use of loan depends to a large extent on the nature of demand. The use of credit (part or full) for any other (describable or indescribable) purposes is described as diversion. The differences between the credit receipt and actual use indicate the extent of diversion.

The main objectives of the study are: i) To identify the nature of credit utilization/diversion by the borrowers; ii) To locate factors responsible for diversion of loans; iii) To suggest guidelines for policy measures.

The study hypothesis: i) Loan diversion is dependent on size of land holding, literacy, number of dependant and earner, loan amount, annual income, purpose of loan, timeliness and mode of receipt of loan, adequacy of loan, number of installments, security, terms of loan. ii) Proper credit use by smaller farmer is better than that of the bigger farmers.

Review of Literature

Alam and Nath (1989) found that the extent of the adoption of improved technology increases with land size and the non-adopters are forced to divert substantial portion of loan money to consumption purposes. In case of large farmers, diversion of loan money has been to trading purposes or unproductive purpose such as land purchase, electioneering, social ceremonies and luxurious consumption. Crop loan is relatively more used for unproductive purpose. Khan (1973) found in his study that misuse of loan was more among the farm borrowers than non-

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farm borrowers. Smaller farmers diverted bank loan mostly for unproductive purpose while larger farmers and trade borrowers diverted for productive purposes. Misuse was more among borrowers who experienced delay in disbursement. Diversion was less among borrowers who because of inadequacy of bank loan were able to contract additional loans from other sources, had opportunity to earn income from subsidiary occupations, had better supervision and guidance from bank authorities, and among those who obtained bank loans at relatively higher rates of interest. Higher level of education, lower number of earning members, lack of availability of subsidiary income, inability to manage additional borrowings, high extent of family expenditure for food, lower rates of interest, delay in obtaining loan, high initial cost of raising loan from bank, and lack of inadequate loan supervision are associated with the diversion of loans.

Ganguly (1975) suggested that to prevent misuse of credit, the loan could be advanced partly in kind. He prescribed low interest rates for low farm size group and high interest rates for the higher group to discourage any diversion of funds.

Parikh and Sharma (1976) in their study found that 71.30 percent of the amount of loan was utilized for farm purposes, whereas the remaining 28.70 percent was spent on unproductive items of consumption, social ceremonies, etc. It is noteworthy that small farmers diverted only about one-fifth of the crop loan for unproductive purposes as against more than one-third of the same was diverted by the large farmers.

Pati (1976) in his study revealed that on an average, 79.59 percent of the total loan was used for productive purposes. He observed that the diversion of credit was mainly due to non-availability of consumption credit. Guruswami (1975) identified that about 18.68 percent of the respondents diverted loans because of non-availability of finance for consumption purposes, diversions of this sort would negatively influence the repaying capacity of the borrowers since the uses to which the borrowed money was put were not in the nature of improving the economic status of the intended beneficiary. Shukla et.al. (1975) in their statistical test rank correlation between items of credit utilization and the items of credit performance ($r_{ho} = 0.93$) indicated that a farmer preferred to obtain credit for fertilizer, irrigation and seed but in practice, it was found that they used only traditional varieties of seeds and the amount so saved was used for marriage and unproductive purposes. Ghakhar and Gangwar (1975) found that 54.31 percent of short term credit was used for unproductive purposes, whereas it was worked out to be 27.37 percent in respect of medium and long term credit. Thus, short-term credit was more misutilized than medium and long term credit by the small farmers.

Hanumappa and Ninan (1986) found that almost 70 percent of the loan borrowings of the rural poor were channelised towards household expenditure. The proportion of loans used for household expenditure declined continuously in the case of household belonging to higher asset group. Singh and Dhawan (1978) in their study showed that there was a greater diversion of short term credit to consumption as compared to medium and long term credit and the proportion of credit diverted was inversely related to size. Further, the analysis also showed that there were significant inefficiencies in credit use in all size categories of farms. The study of Talukdar et.al. (1978) revealed that the highest amount of diversion of cash loan was found among marginal and large farmers. Similarly, the diversion of loan in kind was the highest among the marginal farmers. The medium farmers utilized the whole amount of loan in kind for productive purposes. Khan (1987) found that misuse of funds was more among those borrowers who experienced delay in disbursement of the loans. Timely delivery with close personal supervision is the prescriptive suggestion for effective utilization of rural bank loan.

Shah (1961) in his study found that 75 percent of the borrowings was utilized in family expenditure.

Sinha et.al. (1978) suggested that as the size of holding increased the borrower take loan for unproductive purposes. The marginal and small farmers are genuinely interested in farming operations and take loan for productive purposes. Gupta (1978) found that of the total loan received, only one-third was mobilized for productive purposes. Those who received big amount of loans used it for productive purposes and those who took small amounts spent it mostly on unproductive purposes.

Materials and Methods

Ten bank branches of Rajshahi Krishi Unnayan Bank in Rajshahi district were selected purposively for the study. A total of 441 samples were selected from ten sample branches randomly and individually for each branch. The borrowers of individual branch that were in the list of the loan ledger were taken into consideration. Irrespective of period of receipt of loan by the borrower, the samples were selected from the list. Interviewing the selected borrower collected the sample data by a pre-tested interview schedule. The data were cross checked with the individual loan folio maintained with the branch. Different statistical tools like means, cross tabulation, correlation and regression were used.

Correlation matrices for loan diversion with thirteen variables: Y = Loan diversion (percent of diverted amount to loan amount); x_1 = Size of land holding (acre); x_2 = Number of dependant; x_3 = Number of earner; x_4 = Education of borrower; x_5 = Loan amount; x_6 = Purpose of loan; x_7 = Annual income; x_8 = Timeliness of receipt of loan; x_9 = Mode of receipt of loan; x_{10} = Adequacy of loan; x_{11} = Type of security; x_{12} = Number of installment; x_{13} = Terms of loan.

{Regression of loan diversion with thirteen variables: With a view to finding out the diversion of loan that was affected by some other factors, multiple regression was practiced. The loan diversion was dependent variable and denoted as Y , and all other variables were independent variables and denoted as x . The equation for this was developed as: $Y = f(x_1, x_2, x_3, \dots, x_{13})$ where, Y = Loan diversion (percent of diverted amount to loan amount); x_1 = Size of land holding (acre); x_2 = Number of dependant; x_3 = Number of earner; x_4 = Education of borrower; x_5 = Loan amount; x_6 = Purpose of loan; x_7 = Annual income; x_8 = Timeliness of receipt of loan; x_9 = Mode of receipt of loan; x_{10} = Adequacy of loan; x_{11} = Type of security; x_{12} = Number of installment; x_{13} = Term of loan. The function of the model was as:

$$\text{Linear Model: } Y = a + b_1x_1 + b_2x_2 + \dots + b_{13}x_{13}$$

The discussion of each of the variables was as: (Y): The amount of loan diverted out of total amount in percent. A zero score for non-diversion, 1 score for part diversion and 2 score for full diversion. (x_1): Actual quantity of land in acre owned by the borrower. (x_2): A 1 score for each of the number of dependant. (x_3): A 1 score for each of the number of earner. (x_4): Education was measured by giving zero score for illiterate, 1 score for primary educated, 2 score for secondary educated and 3 score for >secondary educated borrower. (x_5): Actual amount of loan. (x_6): A zero score for crop, 1 score for irrigation equipment, 2 score for cattle, 3 score for fishery, 4 score for milch cow, and 5 score for 'others' loan. (x_7): Actual annual income amount in taka. (x_8): A zero scores for timely and 1 score for 'not timely'. (x_9): A zero scores for direct and 1 score for indirect mode of receipt of loan. (x_{10}): A zero scores for adequacy and 1 score for inadequacy. (x_{11}): A zero score for hypothecation, 1 score for land mortgage and 2 score for pledge/fixed deposit receipt. (x_{12}): A zero score for one installment

and 1 score for more than one installment. (x_{13}): Zero score for short term, 1 score for medium term, and 2 score for long term.

Regression procedure: The regression analyses were done with diversion as dependent variable and other thirteen as the independent variables in the computer using SPSS/PC⁺ package. 'Stepwise selection' procedure was practiced upto normal criteria (PIN 0.05). In stepwise selection procedure, the variables that were reaching upto PIN 0.05 level of criterion, the analysis was finished automatically. Thus, the variables that were significant at 0.05 level were entered in the equation for inference. Variable selection terminated when no more variables met entry and removal criterion.

Results and Discussions

As regards loan distribution, borrowers of <2.50 acres of land holding constituted 44.6 percent of the total but received only 33.2 percent of total loan amount. Borrowers of >2.50 acres land holding size constituted 55.4 percent of total borrowers but received 66.8 percent of total loan.

Dependant and Diversion: Where the borrowers had no dependant or had 9-12 dependants, full diversion occurred in majority of cases; where borrowers had 1-4 dependants, no diversion and where borrowers had 5-8 dependants, part diversion occurred in most of the cases. As the number of dependants increase, the diversion also increase.

Earning member and Diversion: Where there was one earning member, full diversion occurred in most of the cases; where there were two earning members, part diversion and where there were three or more earners, no diversion happened in majority of the cases. The higher the number of earning member, the lower is the diversion and vice versa.

Diverted/utilized loan amount: It might be found out that 'no divertee' borrower constituted 76.9 percent of the total number but received 81.6 percent of total loan. On the other hand, part and full divertee borrower constituted 8.8 percent and 14.3 percent of the total borrower respectively but they received 8.6 percent and 9.8 percent of the total loan. Of the total loan received by the partial divertee borrower, 67.0 percent was utilized and 33.0 percent was diverted. The borrower who did not divert any loan took more loans in proportionate to their number.

Land holding and Diversion: Majority of the landless borrowers did not divert their loans followed by medium, large, small and marginal borrowers. The larger borrowers (>2.50 acre) diverted their loans less than the smaller borrowers (<2.50 acre). The landless, medium and large borrowers utilized comparatively more amount loan as to 7.0 percent, 51.5 percent and 17.1 percent respectively in comparison to total amount of loan in each size of land holding being 6.5 percent, 50.0 percent and 16.8 percent respectively. But the marginal and small borrowers diverted at least one and half times of the amount (10.8 percent and 32.0 percent as against 6.2 percent and 20.5 percent respectively). The average amount diverted by the landless was Tk.381.4 as against average loan amount of Tk.6373.9 per borrower. The amount of diversion by the landless borrower was the least in comparison to other size group of land holdings. It gradually increased to Tk.1496.5 for marginal, Tk.1658.8 for small, Tk.1969.8 for large borrowers with the exception of medium borrowers having an amount of Tk. 1115.8 per borrower. The average amount of diversion was Tk.1293.3 for all categories of land holding per borrower. The percentage of diverted amount to utilized amount was least for landless (6.4 percent) and highest for marginal (28.1 percent) and small (24.4 percent) borrowers. Thus, the

analysis of diversion in relation to the size of land holding revealed that the landless borrowers diverted the least amount as compared to other land holding size. It is; therefore, apparent that size of holding did not influence diversion.

Loan size and Diversion: Tk.5001-10000 (3rd category) and Tk. >10000 (4th category) loan sizes were utilized in maximum (85.3 percent and 91.5 percent respectively). Tk.<3000 (1st category) and 3001-5000 (2nd category) loan size were diverted in maximum (24.9 percent and 28.3 percent respectively). The higher the loan size, the greater was the utilization and the lesser the loan size, the greater was the diversion. Percent of diverted amount to utilized amount was highest for 1st and 2nd category and lowest for 4th category.

Literacy and Diversion: The >secondary educated borrower utilized major portion of their loans followed by illiterate, primary and secondary educated borrowers but full diversion was least for illiterates and as the literacy increased, full diversion in that cases were also increased. Amongst the borrower who did not divert any loan, majority of them were illiterate (34.2 percent) followed by primary educated (33.9 percent), secondary educated (25.4 percent) and >secondary educated (6.5 percent) respectively. As the literacy increased, the diversion was also increased and the utilization decreased. Diversion is positively correlated with the literacy. The illiterate and primary educated borrowers utilized better of their loans as compared to the secondary and >secondary educated borrowers. The less educated borrowers are the best utilizer of loans.

Purpose of loan and Diversion: Least diversion was made in case of milch cow (85.0 percent) followed by irrigation equipment (84.1 percent). But maximum diversion was made (full or part) for fishery loan (29.4 percent) followed by crop (25.8 percent) and cattle loan (25.3 percent). As regards the amount involved, the utilization of irrigation equipment loan was maximum (97.3 percent) followed by milch cow (92.3 percent). Maximum amount of diversion was made on fishery loan (21.6 percent) followed by crop loan (18.4 percent), cattle loan (17.4 percent) and others loan (17.4 percent).

Terms of loan and Diversion: Borrower who received short-term loan, diverted partly and borrower receiving medium terms diverted fully in most of the cases. Long term loans were better utilized and short and medium term loans were less utilized.

Land holding-wise and term-wise loan borrowing and Diversion: The extent of diversion was involved only 12.6 percent of total credit. Large proportion of short, medium, and long term loans (82.7 percent, 84.5 percent and 100.0 percent respectively) were used for stipulated purpose and 17.3 percent for short, 15.5 percent for medium and no amount for long terms were diverted. In case of short term, the proportion of diversion was maximum for larger sized land holders (>1.00 acre) being 29.2 percent for small borrowers, 10.9 percent for medium borrowers and 19.9 percent for large borrowers. The position was least for landless and marginal borrowers (<1.00 acre) being 9.1 percent and 9.0 percent respectively. In case of medium term loan, the percentage of diversion was minimum for landless (3.5 percent) whereas it was maximum for marginal (30.3 percent), small (17.9 percent), medium (13.0 percent) and large borrowers (17.5 percent). This indicated that landless borrowers misutilized less of their loans in all terms. As the size of land holding increased, the diversion of the loan gradually increased and vice versa in case of short-term loans. In case of medium term loans, the diversion was maximum by the marginal borrowers. Taking all short, medium, and long term loans together, the landless borrowers made least diversion of loan (6.0 percent) and they were the best user of credit followed by medium (9.9 percent), large (11.1 percent), small (19.6 percent) and marginal (21.9 percent) borrowers. The medium and large borrowers were

also the least divertees because of the fact that two-thirds of the total loan was disbursed to these two categories of land holding.

Land holding-wise and purpose-wise loan borrowing and Diversion: Where most irrigation equipment and milch cow loans were utilized and many crop, fishery and cattle loans were diverted, the landless borrowers used 100 percent of their irrigation equipment, fishery and milch cow loans and diverted most of their 'other loans'. The marginal borrowers diverted most of their fishery loan (76.9 percent), the small borrowers diverted most of their other loans and utilized fishery and milch cow loans fully. The large borrowers utilized full of their irrigation equipment, fishery and other loans and diverted maximum of their crop (55.0 percent) and milch cow loans (40.0 percent). The landless borrower diverted only 6.0 percent but the other category of borrowers diverted more amounts they received. It is, thus, concluded that the landless borrowers are the best users of loans.

Type of security and Diversion: Three-fourths of the borrowers (76.7 percent) received loan by mortgaging land and one-fourth without mortgaging tangible property (crop hypothecation 20.4 percent and pledge/fixed deposit receipt 2.9 percent). Of the borrowers who took loans by mortgaging land, 77.2 percent of them did not divert and 22.8 percent diverted partly or fully. Receivers of loans on crop hypothecation, 75.6 percent did not divert and 24.4 percent diverted partly or fully and receivers of loans on pledge/fixed deposit receipt security, 76.9 percent of which did not divert and 23.1 percent diverted. Land mortgage secured loans were utilized in maximum (88.4 percent) and diverted in minimum (11.6 percent). Crop hypothecation loans were least utilized in comparison to loans under other security. This indicates that tangible security is the prime criteria in disbursement of loan. The loans that were provided through land mortgage security were utilized in better way than any other secured loans.

1. Others loan are UNCDF, cash credit, betel leaf, business, beef fattening, land leveling, poultry, weaving, orchard.

Annual income and Diversion: Most borrowers of the lowest (Tk.<15000) and Tk.45000-60000 income group did not divert their loans, and most of the borrowers of Tk.30001-45000 income group diverted partly of their loans and majority of the borrowers of Tk.15001-30000 and >60000 income group diverted fully. This means that the borrowers of lowest income group and higher income group were the best users of loan. Medium income groups in maximum did part diversion.

Timeliness of receipt of loan and Diversion: Among those who received loan timely, majority of them did not divert and among those who did not receive loan timely, majority of borrower diverted their loans fully followed by partly. Timely receipt of loan discouraged diversion. Receipt of loan not timely, full diversion occurred more followed by non-diversion and part diversion. Full diversion was made in case of not timely receipt.

Mode of receipt of loan and Diversion: Borrowers who received loan directly, majority of them did not divert but borrowers who received loan indirectly, majority of them diverted fully. Adequacy of loan and Diversion: When the loans were received adequately, full diversion was maximum followed by part and non-diversion. Most inadequate loans were either not diverted or least diverted but most adequate loans were fully diverted.

Source of income and Diversion: The borrowers who had no additional source of income, the diversion by them were least whereas the borrowers who had additional sources, the diversion by them were in maximum.

Number of installment and Diversion: 44.4 percent of the borrowers received loan in one installment and 55.6 percent in more than one installment. The diversion was least when disbursement was made in one installment but highest when made in more than one installment.

Purpose of Diversion

The diversion of credit might be for productive or unproductive purposes. The purpose of diversion was analyzed in this study two ways: Firstly, the borrowers who diverted their loans, what amount of loans they received from the bank, and secondly, what amount of loan actually was diverted by the borrower out of the amount of loan they received. A total of 102 borrowers (23.1 percent of total borrowers) diverted their loans of which 39 borrowers (38.2 percent of the diverteed borrowers) diverted partly and 63 borrowers (61.8 percent of the diverteed borrowers) diverted fully. Diversion of loan was made for various purposes as household expense topped the list (36.3 percent) followed by crop production (18.6 percent), land purchase (11.8 percent), matrimonial (8.8 percent), cattle purchase (6.9 percent), business (6.9 percent), house repair (5.9 percent), old debt repayment (2.0 percent) and electioneering (2.9 percent). The household expense means mainly consumption of food, medical expenses, education, litigation, and other family expenses. As regards the loan investment (alias receipt by the borrower who diverted) in various purposes of diversion, again it indicated that the biggest proportion of loan receiving borrower (33.0 percent) diverted for household expenditure. Almost the same result was found by Rahman (1979)[†] above 30 percent were found to use for consumption purposes. Other purposes were crop production (19.4 percent), land purchase (13.5 percent), house repair (9.2 percent) business (7.6 percent), matrimonial (7.5 percent), cattle purchase (5.2 percent), electioneering (4.0 percent) and old debt repayment (0.5 percent). Of the total amount of loan diverted (which was 12.6 percent of total loan amount), 50.1 percent was diverted for productive and 49.9 percent was diverted for unproductive purposes. Of the diverted amount, highest amount was diverted for household expense (22.0 percent) followed by crop production (17.1 percent), land purchase (16.0 percent), house repair (13.1 percent), matrimonial (11.0 percent), business (9.4 percent), cattle purchase (7.6 percent), electioneering (3.2 percent) and old debt repayment (0.6 percent).

Land holding and Purpose of diversion: The borrowers of <2.50 acres of land holding diverted their loans more for unproductive purposes (64.9 percent as against 31.1 percent). On the other hand, borrowers of >2.50 acres of land holding diverted their loans more for productive purpose (68.9 percents against 35.1 percent) than unproductive purposes. Of the total landless borrowers 55.6 percent diverted loan for household expense. The small and medium borrowers also mostly diverted for this purpose. A slightly higher result was visualized by Rahman (1979)[†] (59-64 percent). The marginal borrowers diverted most of their amount for matrimonial purpose whereas the large borrowers mostly diverted their loans for business purpose. It was revealed that landless borrowers were the least diverteed than other category of borrowers and more than half of the borrowers made diversion for household expenditure purpose. The landless and large borrowers made minimum amount of diversion but the marginal and small borrowers made maximum amount of diversion.

[†] Atiqur Rahman, "Usury capital and credit relations in Bangladesh Agriculture: Some implications for capital formation and capitalist growth" The Bangladesh Development Studies, Vol. VII, No. 2 summer 1979, p. 1-46.

Loan size and Purpose of diversion: The loan size of 1st, 3rd and 4th category were diverted more for productive purposes but loan size of 2nd category was diverted more for unproductive purposes. The 1st category of loan size was mostly diverted for crop production. 2nd and 3rd category of loan sizes was mostly diverted for household expense and land purchase respectively. The 4th category loan size mostly diverted for crop production.

Education of borrower and Purpose of diversion: The illiterate, primary and >secondary educated borrowers diverted their loans more for unproductive purposes but secondary educated borrowers diverted mostly for productive purposes. No electioneering and old debt repayment was found for illiterates.

Adequacy and Purpose of diversion: Adequacy and diversion purpose was analyzed in two ways. Firstly, what amount of loan was received by the borrower, whether adequate or inadequate, who diverted their loan and secondly, what amount of loan actually diverted by the divertee borrower out of the total loan received. From both point of view it was found out that the divertee borrowers who received adequate amount of loan, maximum of which diverted their loan for unproductive purposes whereas the borrowers who received loan inadequately, maximum of which diverted their loan for productive purposes.

Timeliness of receipt of loan and Purpose of diversion: The divertee borrowers who received loan timely, diverted their loans mainly for productive purposes and those who received loan 'not timely' maximum of whom diverted for unproductive purposes.

Terms of loan and Purpose of diversion: No diversion was made in long term loan. Of the short-term loan divertee, more borrowers diverted for unproductive purposes, and of the medium term divertee, more borrowers diverted for productive purposes.

Mode of receipt of loan and Purpose of diversion: The divertee borrowers who received loan directly, maximum of them diverted for productive purposes and those who received loan indirectly, diverted their loans for unproductive purposes.

Correlation matrix for loan diversion with thirteen variables: There was no significant relationship of loan diversion with all thirteen independent variables in the equation. But among all variables the diversion had the highest but negative correlation with the loan amount (- 0.1066) followed by timeliness of receipt of loan (- 0.1028). This means that with the decrease in loan amount and with the increase in time in receiving loan, the diversion increased. Among all the variables, size of land holding has the highest significant relationship with the annual income (0.7985**) followed by number of earner (0.5230**), number of dependant (0.2531**), loan amount (0.1828**), education of borrower (0.1804**), all are significant at 0.05 level of significance. The matrix can be seen in the Appendix-I

Analysis of multiple regression with thirteen variables: The analysis of multiple regression of loan diversion on all thirteen independent variables indicated that the variable loan amount (x_5) was the most influential factor for the diversion. The equation entailed a negative sign. That means that where there bigger amount of loan, there was less diversion and vice versa. The second highest influential factor was the timeliness of receipt of loan (x_8). This was also negative. Where there timely receipt of loan, there was less diversion and vice versa. Timeliness of receipt of loan thus, was a great factor for diversion. These two factors are significant at 0.05 level of significance. The result sheet of the analysis can be seen in the Appendix II.

Testing of Hypothesis

The hypothesis was that loan diversion is dependent on the factors like size of land holding, literacy, number of dependant, number of earner, loan amount, annual income, purpose of loan, timeliness and mode of receipt, adequacy of amount, number of installments of loan receipt, type of security, terms of loan. Proper credit use by the smaller farmer was better than that of bigger farmers. From the findings, it was inferred that the amount of loan and timeliness of receipt of loan by the borrower - these two were the most determining factors that affected the diversion. In other words, where there was less amount of loan, there was more diversion and also where there was delay in providing loan, there was more diversion. As regard to other part of hypothesis, from the findings it was inferred that most of the landless borrowers did not divert their loans they received. It is concluded that the small borrowers (<2.50 acre) diverted more of their loans than the large borrowers (>2.50 acre). So, the hypothesis that proper use of credit by smaller farmers is better is not proved at all. The use of credit was better by the large borrowers. Relatively smaller farmers diverted bank loan mostly for unproductive purposes, while larger farmers for other productive purposes. It is found that misuse was more among those borrowers who experienced delay in disbursement of loans. It was also observed that diversion was less among those borrowers who because of inadequacy of bank loan were able to contract additional loans from other sources.

Conclusion

Majority of borrowers were medium borrowers (2.51-7.50 acre) and borrowers of >2.50 acre land holding size received major share of loans. Majority of borrower did not divert their loans and major portion of loan was not diverted. As the number of dependant increase, the diversion level also increase. The higher the number of earning member, the lower was the diversion and vice versa. The larger borrowers (>2.50 acre) diverted their loans less than the smaller borrowers (<2.50 acre). The landless borrowers utilized maximum amount of their loans received by them whereas marginal borrowers diverted more amounts than borrowers of other size of land holdings. The higher the loan sizes, the greater was the utilization and vice versa. Less educated borrowers were the best utilizer of loans. Least diversion was made in case of milch cow followed by irrigation equipment. But maximum diversion was made for fishery loan followed by crop and cattle loan. Long term loans were better utilized than short and medium terms. Taking all short, medium, and long term loans together, the landless borrowers made least diversion of loan. The loans that were provided through land mortgage security were utilized in better way than any other secured loans. Borrowers of lowest income group (Tk.<15000) were the best users of loan. Timely receipt of loan discouraged diversion. Full diversion was made in case of not timely receipt of loan in most of the cases. Among the borrowers who received loan directly, majority of borrowers did not divert their loans. Out of the total loan utilized, maximum amount was received directly. Most inadequate loans were either not diverted or least diverted but most adequate loans were fully diverted. The borrowers who had no source of income other than crop, the diversion by them was least. Diversion was least when disbursement was made in one installment than in more than one installment. The borrower made full diversion more for productive purposes whereas part diversion was more for unproductive purposes. More amount of loan was diverted for productive purposes in comparison to the number of borrower in this category. The borrowers of <2.50 acres of land holding diverted their loans more for unproductive purposes and borrowers of >2.50 acres of land holding more for productive purpose. Big sized loans were mostly diverted for productive purposes. The illiterate, primary educated borrowers diverted their loans more for unproductive purposes. Borrowers receiving loans adequately, diverted

for unproductive purposes whereas receiving loans inadequately, diverted for productive purposes. The divertee borrowers who received loan timely, diverted their loans mainly for productive purposes and receiving loans 'not timely' diverted for unproductive purposes. In short term, more borrowers diverted for unproductive purposes, and in medium term, more borrowers diverted for productive purposes. Borrowers receiving loans directly, diverted for productive purposes and those receiving indirectly, diverted for unproductive purposes. Where there more amount of loan, there was less diversion and vice versa. Diversion was less among those borrowers who because of inadequacy of loan were able to contract additional loans from other sources.

Table 1

Concise position of loan diversion with different related factors

Particulars	No Diversion	Part Diversion	Full Diversion	Total
Dependant:				
Nil	72.7	-	27.3	100.0
1-4	85.0	2.7	12.3	100.0
5-8	74.9	11.6	13.5	100.0
9-12	72.7	10.4	16.9	100.0
>12	86.2	-	13.8	100.0
Average	76.9	8.8	14.3	100.0
Earning member:				
one	76.7	8.9	14.4	100.0
two	73.9	10.1	16.0	100.0
three	81.3	8.3	10.4	100.0
>three	78.9	5.3	15.8	100.0
Average	76.9	8.8	14.3	100.0
Diversion of loan:				
No. of borrower	76.9	8.8	14.3	100.0
Amount of loan	81.6	8.6	9.8	100.0
Land holding (acre):				
<0.50	80.4 (85.5)	10.9 (10.1)	8.7 (4.4)	100.0 (100.0)
0.51-1.00	70.7 (74.1)	7.3 (8.6)	22.0 (17.3)	100.0 (100.0)
1.01-2.50	72.7 (74.8)	9.1 (7.6)	18.2 (17.6)	100.0 (100.0)
2.51-7.50	79.6 (83.4)	9.5 (9.7)	10.9 (6.9)	100.0 (100.0)
>7.50	76.7 (86.0)	4.7 (5.9)	18.6 (8.1)	100.0 (100.0)
Average	76.9 (81.6)	8.8 (8.6)	14.3 (9.8)	100.0 (100.0)
Loan size (Tk.):				
<3000	77.8	-	22.2	100.0
3001-5000	64.3	10.7	25.0	100.0
5001-10000	78.8	8.7	12.5	100.0
>10000	78.8	11.8	9.4	100.0
Average	76.9	8.8	14.3	100.0
Education of Borrower:				
Illiterate				
Primary	78.4	8.1	13.5	100.0
Secondary	76.1	9.3	14.6	100.0
>Secondary	74.8	10.4	14.8	100.0
Average	81.5	3.7	14.8	100.0
Average	76.9	8.8	14.3	100.0
Purpose of loan:				
Crop	74.2	13.9	11.9	100.0
Irrigation Equipment	84.1	3.2	12.7	100.0

Cattle	74.7	7.4	17.9	100.0
Fishery	70.6	17.6	11.8	100.0
Milch cow	85.0	15.0	-	100.0
Others	80.0	6.0	14.0	100.0
Average	76.9	8.8	14.3	100.0
Terms of loan:				
Short term	75.4 (72.9)	11.9 (12.5)	12.7 (12.5)	100.0 (100.0)
Medium term	75.2 (78.0)	8.4 (9.7)	16.4 (12.3)	100.0 (100.0)
Long term	100.0 (100.0)	-	-	100.0 (100.0)
Average	76.9 (81.6)	8.8 (8.6)	14.3 (9.8)	100.0 (100.0)
Type of security:				
Crop hypothecation	75.6	14.4	10.0	100.0
Land mortgage	77.2	7.4	15.4	100.0
Pledge/FDR	76.9	7.7	15.4	100.0
Average	76.9	8.8	14.3	100.0
Annual income (Tk.):				
<15000	80.0	8.6	11.4	100.0
15001-30000	74.3	9.5	16.2	100.0
30001-45000	77.3	9.9	12.8	100.0
45001-60000	80.3	5.6	14.1	100.0
>60000	74.1	8.6	17.3	100.0
Average	76.9	8.8	14.3	100.0
Timeliness of receipt:				
Timely	78.6 (82.2)	8.6 (8.8)	12.8 (9.0)	100.0 (100.0)
Not timely	65.5 (77.9)	10.3 (7.6)	24.1 (14.5)	100.0 (100.0)
Average	76.9 (81.6)	8.8 (8.6)	14.3 (9.8)	100.0 (100.0)
Mode of receipt:				
Direct	78.2 (82.2)	8.4 (8.4)	13.4 (9.4)	100.0 (100.0)
Indirect	68.3 (76.8)	11.7 (10.5)	20.0 (12.7)	100.0 (100.0)
Average	76.9 (81.6)	8.8 (8.6)	14.3 (9.8)	100.0 (100.0)
Adequacy:				
Adequate	76.5 (81.9)	8.9 (8.3)	14.6 (9.7)	100.0 (100.0)
Inadequate	78.3 (80.2)	8.7 (9.8)	13.0 (9.9)	100.0 (100.0)
Average	76.9 (81.6)	8.8 (8.6)	14.3 (9.80)	100.0 (100.0)
Other source of income:				
No source	80.7 (84.8)	8.6 (8.0)	10.7 (7.2)	100.0 (100.0)
Other source	72.2 (77.4)	9.1 (9.4)	18.8 (13.2)	100.0 (100.0)
Average	76.9 (81.6)	8.8 (8.6)	14.3 (9.8)	100.0 (100.0)
Installment:				
One	78.6	8.7	12.7	100.0
>One	75.5	9.0	15.5	100.0
Average	76.9	8.8	14.3	100.0
Purpose of diversion: (actual amount diverted)				
Productive	-	28.9 (24.9)	71.1 (75.1)	100.0 (100.0)
Unproductive	-	45.6 (20.2)	54.4 (79.8)	100.0 (100.0)
Average	-	38.2 (22.5)	61.8 (77.5)	100.0 (100.0)
Purpose of diversion: (borrowers receiving loan)				
Productive	-	28.9 (43.6)	71.1 (56.4)	100.0 (100.0)

Unproductive	-	45.6 (49.6)	54.4 (50.4)	100.0 (100.0)
Average	-	38.2 (46.9)	61.8 (53.1)	100.0 (100.0)

Source: survey data

Note: Figure in the parentheses is the corresponding loan amounts

Table 2
Position of loan utilization / diversion with different factors

Particulars	Loan utilized	Loan diverted	Total
Size of land holding (acre):			
<0.50	94.0	6.0	100.0
0.51-1.00	78.1	21.9	100.0
1.01-2.50	80.4	19.6	100.0
2.51-7.50	90.1	9.9	100.0
>7.50	88.9	11.1	100.0
Average	87.4	12.6	100.0
Loan size (Tk.):			
<3000	75.1	24.9	100.0
3001-5000	71.7	28.3	100.0
5001-10000	85.3	14.7	100.0
>10000	91.5	8.5	100.0
Average	87.4	12.6	100.0
Education of borrower:			
Illiterate	88.5	11.5	100.0
Primary	89.9	10.1	100.0
Secondary	82.0	18.0	100.0
>Secondary	87.5	12.5	100.0
Average	87.4	12.6	100.0
Purpose of loan:			
Crop	81.6	18.4	100.0
Irrigation Equipment	97.3	2.7	100.0
Cattle	82.6	17.4	100.0
Fishery	78.4	21.6	100.0
Milch cow	92.3	7.7	100.0
Others	82.6	17.4	100.0
Average	87.4	12.6	100.0
Security:			
Crop hypothecation	80.3	19.7	100.0
Land mortgage	88.4	11.6	100.0
Pledge/FDR	87.3	12.7	100.0
Average	87.4	12.6	100.0
Timeliness:			
Timely	88.0	12.0	100.0
Not timely	83.8	16.2	100.0
Average	87.4	12.6	100.0
Mode of receipt:			
Direct	88.1	11.9	100.0
Indirect	82.2	17.8	100.0
Average	87.4	12.6	100.0

Source: survey data

Table 3
Position of purpose of diversion of loan with different factors

Particulars	Productive	unproductive	Total
Size of land holding (acre):			
<0.50	4.4	12.3	8.8
0.51-1.00	6.7	15.8	11.8

1.01-2.50	20.0	36.8	29.4
2.51-7.50	55.6	28.1	40.2
>7.50	13.3	7.0	9.8
Average	44.1	55.9	100.0
Size of loan (Tk.):			
<3000	11.1	5.3	7.8
3001-5000	13.3	24.5	19.6
5001-10000	55.6	54.4	54.9
>10000	20.0	15.8	17.6
Average	44.1	55.9	100.0
Education of borrower:			
Illiterate	26.7	35.1	31.4
Primary	33.3	36.8	35.3
Secondary	37.8	21.1	28.4
>Secondary	2.2	7.0	4.9
Average	44.1	55.9	100.0
Adequacy of loan: (borrowers receiving loan)			
Adequate	73.3 (72.7)	86.0 (87.4)	80.4 (80.6)
Inadequate	26.7 (27.3)	14.0 (12.6)	19.6 (19.4)
Average	44.1 (45.8)	55.9 (54.2)	100.0 (100.0)
Adequacy of loan: (actual amount diverted)			
Adequate	73.3 (74.1)	86.0 (87.6)	80.4 (80.8)
Inadequate	26.7 (25.9)	14.0 (12.4)	19.6 (19.2)
Average	44.1 (50.1)	55.9 (49.9)	100.0 (100.0)
Timeliness of receipt:			
Timely	88.9 (90.4)	73.7 (78.2)	80.4 (83.8)
Not timely	11.1 (9.6)	26.3 (21.8)	19.6 (16.2)
Average	44.1 (45.8)	55.9 (54.2)	100.0 (100.0)
Terms of loan:			
Short	26.7	33.3	30.4
Medium	73.3	66.7	69.6
Long	-	-	-
Average	44.1	55.9	100.0
Mode of receipt:			
Direct	86.7 (85.5)	77.2 (85.9)	81.4 (85.7)
Indirect	13.3 (14.5)	22.8 (14.1)	18.6 (14.3)
Average	44.1 (45.8)	55.9 (54.2)	100.0 (100.0)

Source: survey data

Note: Figure in the parentheses is the corresponding loan amount

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Appendix I

Correlation matrix for loan diversion with thirteen variables

Correlation	Y	X ₁	X ₂	X ₃	X ₄	X ₅	X ₆
Y	1.0000						
X ₁	-0.111	1.0000					
X ₂	-0.005	2081**	1.0000				
X ₃	-0.144	.1154*	.1992**	1.0000			
X ₄	.0220	2002**	-1.002	.0267	1.0000		
X ₅	-.1066	2763**	.0459	-.0114	.0593	1.0000	
X ₆	.0115	.0811	.0421	.0678	.0885	-.0125	1.0000
X ₇	.0213	.7985**	.2531**	.5230**	.1804**	.1828**	.0864
X ₈	-.1028	.0745	-.0841	-.0189	.0788	-.0083	-.0252
X ₉	.0908	-.1040	.0198	.0539	-.1073	-.0544	-.0105
X ₁₀	.0150	.0011	-.0976	-.0590	-.0586	.0614	-.0933
X ₁₁	.0322	.0360	.0344	.0769	.1193*	.0657	.4734**
X ₁₂	.0398	.0704	-.0947	.0426	.0864	-.1182*	.3768**
X ₁₃	-.0381	.2355**	.1227*	.1411	.0208	.3619**	.2736**

Table continued...

Correlation	X ₇	X ₈	X ₉	X ₁₀	X ₁₁	X ₁₂	X ₁₃
X ₇	1.0000						
X ₈	.0557	1.0000					
X ₉	-.0516	-.1000	1.0000				
X ₁₀	-.0245	0.0644	-.0567	1.0000			

x ₁₁	.0348	-.0192	0.0469	-.1191*	1.0000		
x ₁₂	.1306*	-.0240	-.0710	-.0100	0.2200**	1.0000	
x ₁₃	.2357**	-.0336	-.0937	0.0179	0.3475**	0.2395**	1.0000

Significant: * = 0.01 & ** = 0.001

Appendix II

Multiple regression for loan diversion with thirteen variables

sY = Dependant variable

x₁ - x₁₃ = Independent variablesRegression variable = Y x₁ x₂ x₃ x₄ x₅ x₆ x₇ x₈ x₉ x₁₀ x₁₁ x₁₂ x₁₃/ Method = Stepwise x₁ x₂ x₃ x₄ x₅ x₆ x₇ x₈ x₉ x₁₀ x₁₁ x₁₂ x₁₃

SPSS/PC*

Multiple Regression

Equation Number 1. Criteria PIN .0500 POUT .1000
 Variable(s) Entered on Step Number

1... x₅ Loan amount
 Multiple R .10656
 R Square .01136
 Adjusted R Square .00910
 Standard Error 35.27051

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	1	6272.65002	6272.65002
Residual	439	546119.88948	1244.00886
F =	5.04229	Significant F =	.0252

Variables in the Equation.....

Variable	B	SE B	Beta	T	Sig T
X5	-3.19030E-04	1.42075E-04	-.106562	-2.246	.0252
(Constant)	20.225528	2.223807	.	9.095	.0000

Variables not in the Equation.....

Variable	Beta In	Partial	Min Toler	T	Sig T
X1	.019836	.019173	.923643	.401	.6884
X2	.004353	.004374	.997894	.092	.9271
X3	-.015607	-.015696	.999869	-.329	.7427
X4	.028380	.028492	.996486	.597	.5511
X6	.010201	.010259	.999844	.215	.8301
X7	.042222	.041749	.966599	.874	.3823
X8	-.103690	-.104280	.999931	-2.194	.0287
X9	.085287	.085649	.997042	1.799	.0727
X10	.021612	.021695	.996229	.454	.6500
X11	.039392	.039532	.995681	.828	.4081
X12	.027608	.027571	.986029	.577	.5641
X13	4.8022E-04	.000450	.869023	.009	.9925

Equation Number 2. Criteria PIN .0500 POUT .1000
 Variable(s) Entered on Step Number

2... x₈ Timeliness of receipt of loan
 Multiple R 14868
 R Square .02211

Adjusted R Square .01764

Standard Error 35.11824

Analysis of Variance

	DF	Sum of Squares	Mean Square
Regression	2	12211.32703	6105.66351
Residual	438	540181.21247	1233.29044
	F = 4.95071	Significant F	.0075

Variables in the Equation

Variable	B	SE B	Beta	T	Sig T
X5	-3.21610E-04	1.41467E-04	-.107424	-2.273	.0235
X8	-10.858398	4.948272	-.103690	-2.194	.0287
(Constant)	29.682304	4.845085	-	6.126	.0000

Variables not in the Equation

Variable	Beta In	Partial	Min Toler	T	Sig T
X1	.028643	.027748	.917742	.580	.5620
X2	-.004381	-.004410	.990877	-.092	.9266
X3	-.017587	-.017780	.999507	-.372	.7103
X4	.036867	.037098	.990193	.776	.4381
X6	.007583	.007665	.999205	.160	.8728
X7	.048522	.048159	.963327	1.008	.3141
X9	.075608	.075957	.986955	1.592	.1120
X10	.028489	.028694	.992015	.600	.5488
X11	.037464	.037797	.995334	.791	.4296
X12	.024996	.025092	.985404	.525	.6001
X13	-.003174	-.002990	.868087	-.063	.9502

PIN = .050 Limits reached

OPERATIONAL POLICIES AND MANAGEMENT OF DFIs: A STUDY OF BSB AND BSRS

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Nahida Bilkis Banu†

Abstract: Drawing on the operational policies and organizational set up of the two main DFIs in Bangladesh viz., BSB and BSRS and analysing the promotional measures adopted by these institutions, the article attempts to suggest measures to improve efficiency. Both the institutions are under the dual control of Ministry of Finance, Government of Bangladesh and Bangladesh Bank and they work under the policy framework approved by the Government. As the Government has begun to give emphasis to private sector development, their lending operations have been concentrated on fostering the growth of industries in the private sector. Although, the operational area of BSB is wider than that of BSRS, the two DFIs have more similarities than dissimilarities

I. Introduction

Banking institutions have been conceived as effective instruments for the socio-economic development of a country. Their banking services have spread to almost every sector of the economy. Also, banking services have gradually become specialised due to growing demands of society in general and beneficiary groups like customers, traders, farmers, manufacturers and entrepreneurs in particular. To cater to the particular needs, innovations have been made in banking, such as commercial banking, cooperative banking, rural banking, agricultural banking, investment banking and development banking. Development banking, also known as development finance institutions, is of recent origin and is engaged in encouraging industrialisation through the development of entrepreneurship.

At present in Bangladesh there are four development finance institutions in the public sector. These are: Bangladesh Shilpa Bank (BSB), Bangladesh Shilpa Rin Sangstha (BSRS), Bangladesh Krishi Bank and Rajshahi Krishi Unnayan Bank. The first two are meant for financing the industrial sector and the latter two are established for financing agriculture and to some extent agro-based small industries also. Besides, the Investment Corporation of Bangladesh is engaged in the development of the capital market while the needs of infra-structural facilities like construction, repair and remodelling of residential houses and flats are met by the Bangladesh House Building Finance Corporation. The present study is an attempt to highlight the programmes, policies and management of the two main development finance institutions, viz., BSB and BSRS for the promotion of entrepreneurship in Bangladesh.

The objectives of this study are to: i) examine the operational policies of BSB and BSRS; ii) study the organisational set up of BSB and BSRS; iii) study the promotional activities of the DFIs; and iv) suggest measures to improve their efficiency. In order to meet the objectives of this study both primary and secondary sources were used. Primary data relating to policies, strategies and management aspect etc. were collected from official records, project appraisal

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reports, registered books, various statements and also through interviewing the office executives. Secondary data were collected mainly from Annual Reports of BSB and BSRS and Government publications.

II. Bangladesh Shilpa Bank (BSB)

2.1 Basic Policies and Objectives

The promotion and development of entrepreneurship is the principal objective of BSB. With this in view, the major objectives are:¹ (i) to provide assistance in the form of local and foreign currency for the promotion of medium and large-scale entrepreneurship in the country; (ii) to underwrite the issue of shares or debentures, direct subscription of shares and debentures and guarantee for deferred payments for the promotion of entrepreneurship; (iii) to provide assistance for the creation of new projects as well as for balancing, modernisation, replacement and expansion of the existing industrial units in order to accelerate the pace of entrepreneurship development; and (iv) to provide assistance for the rehabilitation of sick entrepreneurship.

2.2 Sources of Finance

The financing sources of BSB are own capital, reserve and surplus, debentures, borrowing, quasi equity and deposits. Its total financial resources as on June 30, 1997, are shown in Table 1. It may be seen from the table that the total financial resources on that date were Tk. 10,842.6 million, of which paid-up capital was Tk. 1,320 million. Borrowing contributed more than one-half of the total resources. Deposits contributed the next major item, accounting for 11.0 per cent of the total.

Table 1
Financial Resources of BSB

Sources	Amount Tk. in Million	Percentage of Total
Subscribed & Paid-up Capital	1320.00	12.20
Reserve and Surplus	643.60	5.90
Borrowing	7550.90	69.60
Quasi-equity	134.70	1.30
Deposits	1193.40	11.00
Total	10842.60	100.00

Source: BSB, Annual Report, 1996-97, p. 36.

The BSB can borrow from the Government and, with the approval of the Government, from any bank or financial institution within or outside the country. BSB is also empowered to raise funds by issuing debentures.

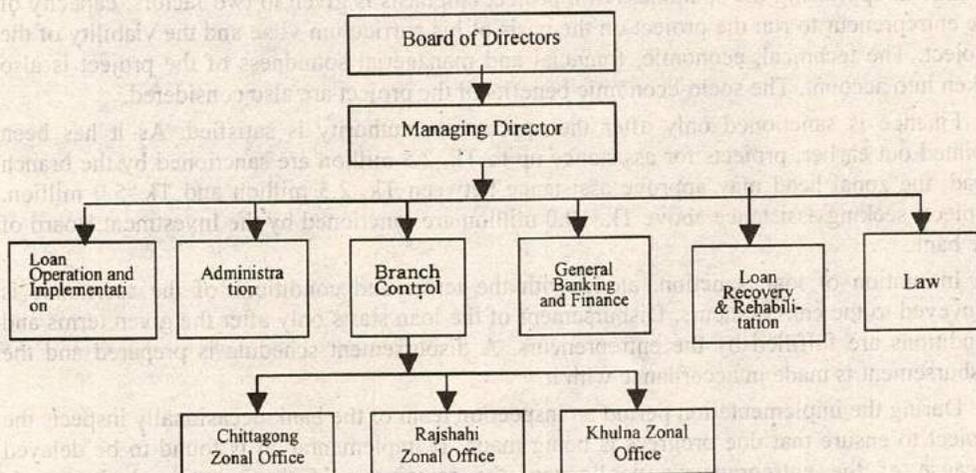
2.3 Management and Organizational Structure

The BSB Board of Directors consists of a Chairman, a Managing Director and seven other Directors. Four of the Directors are representatives of the private sector subscribing to the capital of the Bank. Others, including the Chairman, are appointed by the Government. The Board of Directors deals with the overall policy matters and provides general directions for the operations of the bank.

The Managing Director is the Chief Executive, responsible for day-to-day operations. He is assisted by a number of General Managers and is accountable to the Board of Directors.

Chart 1 shows the organisational structure of the bank. From the figure it may be observed that there are six divisions with the head office in Dhaka and three zonal offices at Chittagong, Rajshahi and Khulna. In addition, the bank has fourteen branch offices in commercially important districts.

Chart 1
Organisational Structure of BSB



Source: BSB Annual Report, 1993-94, p.30.

Loans above Tk. 10.0 million are sanctioned by the Board of Directors. The Managing Director has the power to sanction loans up to Tk. 10.0 million, the General Managers up to Tk. 5.0 million, and the Regional Managers up to Tk. 5.0 million and Branch Managers up to Tk. 2.5 million.

The power of rescheduling loan liabilities is as follows: (a) Managing Director: up to Tk. 10.0 million; (b) General Managers and Regional Managers: up to Tk. 5.0 million; (c) Head of End-use Department at the Head Office, Dhaka: up to Tk. 2.0 million; and (d) Branch Managers: up to Tk. 2.5 million.

2.4 Eligibility for Financial Assistance

Both public and private sector enterprises are eligible for financial assistance from BSB, provided they are enlisted in the Industrial Investment Schedule published by the Government. Projects not so listed may also be considered, if they are viable, with the approval of the Government. BSB extends financial assistance only to those industrial projects which are considered to be viable from the technical, financial, marketing and economic point of view, if the managerial capacity and credit-worthiness of the entrepreneurs are found satisfactory.²

Proposals for assistance are not considered if: (i) the entrepreneurs for new projects or BMRE of the existing units have defaulted in repayments to BSB or other financial institutions; (ii) the entrepreneurs have already received assistance for a project which is in the implementation stage, until and unless such project is completed and put into commercial

operation and the repayment performance is satisfactory; and (iii) the project belongs to a sub-sector which already has excess of units.

2.5 Loan Procedure

The prescribed form of application for financial assistance contains a set of information about the entrepreneurs and the proposed project. The details sought are the name and address of the entrepreneurs, their age, academic qualifications, relevant past experience, cost of the project, expected profitability, socio-economic aspect of the project and managerial and technical details. In appraising the soundness of a project emphasis is given to two factors: capacity of the entrepreneur to run the project on the basis of his curriculum vitae and the viability of the project. The technical, economic, financial and managerial soundness of the project is also taken into account. The socio-economic benefits of the project are also considered.

Finance is sanctioned only after the appropriate authority is satisfied. As it has been pointed out earlier, projects for assistance up to Tk. 2.5 million are sanctioned by the branch head; the zonal head may approve assistance between Tk. 2.5 million and Tk. 5.0 million. Projects seeking assistance above Tk. 10.0 million are sanctioned by the Investment Board of the bank.

Intimation of loan sanction, along with the terms and conditions of the assistance is conveyed to the entrepreneurs. Disbursement of the loan starts only after the given terms and conditions are fulfilled by the entrepreneurs. A disbursement schedule is prepared and the disbursement is made in accordance with it.

During the implementation period an inspection team of the bank occasionally inspects the project to ensure that due progress is being made. If implementation is found to be delayed because of the entrepreneur's negligence, the remainder of the sanctioned finance is suspended. A final construction report (FCR) is prepared by the team for the project going into commercial operation.

2.6 Promotional Activities

Apart from financial assistance, the bank extends various promotional services to expedite development of entrepreneurship. Some of these are: (a) identification of viable projects, (b) advisory service, (c) rehabilitation of sick projects, (d) special financial assistance, (e) seed capital assistance, and (f) measures to reduce overhead burden. These are highlighted below.

- **Identification of viable projects**—The bank initiates and identifies viable projects and develops their profiles. The profiles are made available to interested potential entrepreneurs.
- **Advisory service**—Interested entrepreneurs are also helped with various advisory services regarding financial, technical, managerial, marketing etc. Assistance is also given for arranging foreign marketing and technical collaboration in the implementation of joint ventures.
- **Rehabilitation of sick projects**—Some projects do not even come out of the construction stage. Some others become sick in their operation. In either case the bank is saddled with bad debts. Nor do these sick projects make their expected contribution to the economy. Industrial sickness and the consequent bad debts have become the central problem of the bank. From time to time, the bank launches special programmes to identify the sick projects, analyse the reasons for the sickness and take corrective measures to rehabilitate those projects.

Currently, there is a scheme of rehabilitating sick specialised textile and power loom projects. Its salient features are: (i) A rehabilitation scheme will be undertaken when a group consisting of four units each with around 200 looms is formed; (ii) A new public limited company will be formed on amalgamating the four members units. Each member unit will nevertheless enjoy separate legal entity to continue its own operations; (iii) Outstanding debt as on 30th June 1994 will be considered for restructuring of debt and 100 per cent penal and 75 per cent normal interest will be written off. The rest 25 per cent interest, principal and other charges, if any, will be kept in interest-free block account and will be repaid in 12 years by 24 half-yearly instalments; (iv) interest rate may range between 8.5 and 9.5 per cent per annum for term loan and 11.5 and 12.5 per cent per annum for working capital loan; (v) A debt-equity ratio of 75:25 will be considered on additional investment in which the entrepreneur has to provide 20 per cent additional equity and 5 per cent will be provided by the financing institution; (vi) In case of any failure in repaying the reconstructed loans as determined by the bank, all the facilities will be withdrawn and the legal process will be initiated to recover dues; and (vii) A committee comprising Deputy Governor, Bangladesh Bank as the Chairman, all participating financial institutions and the powerloom association will be formed for monitoring and coordination of the programme.

The bank also continues to rehabilitate projects individually on the basis of bank-client relationship.

- **Special financial assistance**—A "Special Assistance Fund"³ (SAF) has been created by the bank to assist projects that are: (i) based on local innovation and invention of products and processes; (ii) utilising indigenous technology; and (iii) for production of capital machinery and other non-traditional items.

Entrepreneurs of limited companies are eligible for SAF financing. In addition to the term-loan local currency loan, the SAF may also be utilised for providing equity support on limited scale by way of purchase of shares or conversion of a part of loan liabilities into equity. However, the total investment in a single project from the SAF including loan and equity support should not normally exceed 30 per cent of total capital outlay of the project.

A detailed appraisal would be done by BSB for examining the overall viability of a project eligible for financing out of SAF. SAF financing would be governed, among others, by the following terms and conditions:

- i. A concessional rate of 5 per cent interest would be charged on such assistance.
- ii. If the entrepreneurs default in repayment of their dues, whether interest or principal, on due dates of payment, penal interest @ 2 per cent per annum is charged.
- iii. The maximum permissible SAF loan to any project normally is Tk. 5.0 million. The minimum loan amount is Tk. 0.5 million.
- iv. The repayment period of loan should not exceed 15 years.
- v. The fixed assets coverage ratio should not normally be less than 1.3.
- vi. The repayment of loan will start 42 months after the first disbursement of loan or 24 months after the unit goes into commercial operation, whichever is earlier.
- vii. Interest accruing on the loan disbursed during the construction of the project will be calculated at a simple rate of interest and realised in five annual instalments after the expiry of the period of construction to be scheduled by BSB.
- viii. The first mortgage/hypothecation on the assets of the projects (both fixed and current assets) will be accepted as security of the loan or equity support provided from the SAF. Besides, personal guarantee of all promoters will be obtained.

- ix. Seed capital assistance—Another important promotional activity of BSB is to encourage technical entrepreneurs. The bank has introduced the scheme with the object of helping such entrepreneurs whose projects are technically feasible and economically viable but lack adequate financial resources. Seed capital financing is intended to bank. Moreover, hardly supplement the promoters' contribution.⁴ No details of the scheme were available in the any project has so far been granted seed capital assistance by the bank.
- x. Measures adopted to reduce overhead burden—Various measures, such as restructuring/rescheduling of the loan liabilities, interest remission etc. have been adopted by BSB in order to help problem entrepreneurship recover from financial distress. With a view to encouraging entrepreneurs for regular repayment, a rebate on interest due, which is currently 5 per cent, is being provided.

The entrepreneurs may avail rescheduling facilities depending upon the degree of repayment made by them on a particular date as follows.

- i. When 10 per cent of total overdues is repaid—The entrepreneur would be entitled to get waiver of 100 per cent penal interest and 75 per cent interest. The rest 25 per cent overdues will have to be paid within 45 days from the date of approval.
- ii. When 5 per cent of the total overdues is repaid—A waiver of 100 per cent penal interest and 50 per cent normal interest will be granted. The entrepreneur would have to repay 25 per cent overdues within 45 days and the rest 25 per cent overdues within one year from the date of approval.
- iii. When 4 per cent of the overdues is repaid—The entrepreneur would be waived from payment of 100 per cent penal and 40 per cent normal interest. He has to pay 16 per cent of the overdues within 45 days and the rest 44 per cent overdues within three years from the date of approval of rescheduling of loan liabilities.

III. Bangladesh Shilpa Rin Sangstha (BSRS)

3.1 Policies and Objectives

The basic policy of BSRS is to create a favourable industrial climate through the promotion of entrepreneurship.⁵ It encourages and broadens the entrepreneurial base of the country. The major policy objectives⁶ are: (i) to render financial assistance in local and foreign currency for the development of medium and large scale entrepreneurship; (ii) to extend assistance to existing entrepreneurs for balancing, modernisation, replacement and expansion of their units; and (iii) to assist in the rehabilitation of sick and ailing entrepreneurship.

BSRS received a major setback in 1985 when a Memorandum of Understanding (MOU) was signed between the Government of Bangladesh and donor agencies which debarred BSRS from financing new entrepreneurship.⁷

3.2 Source of Funds

The financial resources of BSRS come from local currency fund and foreign currency fund. The local currency funds consist of the paid-up capital subscribed by the Government, reserves and surplus generated through the operating activities of BSRS and borrowings from the Government, Central Bank and other sources. BSRS can also raise local currency through the issue of bonds and debentures.

Foreign currency funds, on the other hand, are derived by borrowing from international agencies, from the Government or from any bank or financial institution in Bangladesh.

Table 2

Financial Resources of BSRS

Resources	Amount Tk. in Million	Percentage of Total
Paid-up Capital	700.0	23.9
Reserve funds and other reserves	376.0	12.8
Borrowing	1795.9	61.4
Deposits	54.6	1.9
Total	2926.5	100.0

Source: BSRS, Annual Report, 1993-94, p. 31.

A look at the financial resources of BSRS from Table 2 reveals that borrowing contributed the largest proportion of financial resources. Paid-up capital comes second while reserves and deposits are subsidiary in the total resources.

3.3 Management and Organisational Structure

The BSRS Board of Directors consists of Chairman, the Managing Director and seven other Directors, all appointed by the Government. The Managing Director is the executive head and is assisted by the General Managers. An amendment to BSRS Order 1972, in December 1986, provided the Board of Directors greater autonomy in respect of take-over of projects, waiver of principal loan, interest and penal interest, creation of posts and filling up of posts etc.

BSRS has its head office at Dhaka, two zonal offices at Chittagong and Rajshahi, and four branches, one each at Rajshahi, Chittagong, Sylhet and Khulna. Apart from white collar and other executive staff, the organisation is equipped with professionals drawn from various disciplines. The organisation structure of BSRS is depicted in Chart 2.

The divisional offices of BSRS are under the charge of General Managers. Under each division there are more than two departments headed by Assistant General Managers. In all, there are seventeen departments in the head office.

At present, the zonal offices are not functioning, the General Managers having been withdrawn from the zonal offices. The branch offices also, having lost their importance, are run by junior level officers. All work being centralised at the head office, the entrepreneurs have to travel to Dhaka even for petty matters, which becomes a barrier to entrepreneurship growth.

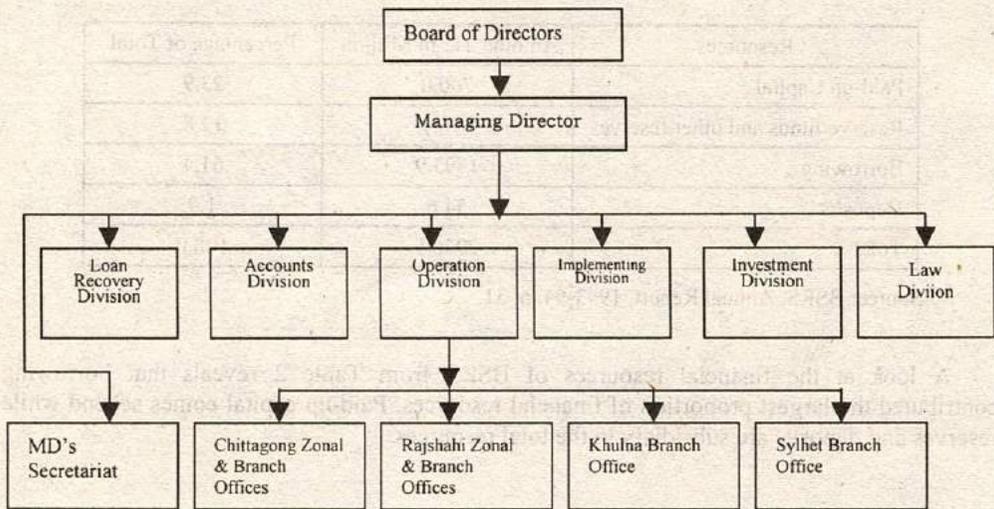
3.4 Eligibility for Financial Assistance

The same eligibility criteria as followed by BSB are applicable to BSRS.

3.5 Loan Procedure

There are two prescribed application forms, one for new and the other for existing entrepreneurship. The particulars required in the application form are the same as for BSB. The information covers two points: particulars of the entrepreneur promoters and outline of the projects containing cost of the project and means of financing, marketability, estimated profitability, debt-paying ability and economic justification of the project.

Chart 2
Organisational Structure of BSRS



Source: Head Office, BSRS, Dhaka

BSRS evaluates the projects in the light of some basic points. These are as under –

- i. **Entrepreneurial capability**—The entrepreneur is the central figure in industrial activity. His background and traits receive much attention in appraising a project, for it is widely recognised that a project can be improved if it is found weak, but if the entrepreneurs are weak and lack in business acumen, it would be difficult to improve the situation. BSRS examines the overall background of the entrepreneurs, their academic qualifications, their business and related industrial experience to assess their capabilities for operating the projects.
- ii. **Project viability**—After promoters, the next view is project oriented. A project gets sanction, if it is able to satisfy the following aspects: (a) whether the project is technically viable; (b) whether it is financially sound; (c) whether it is commercially feasible; and (d) whether it is socially desirable and economically justifiable.

Unlike BSB, the branch head, zonal head and General Managers of the BSRS have no power to give sanction. All these matters are referred to the Board. Grant of financial assistance is communicated to the entrepreneur through the sanction letter which also indicates the documentation to be executed with the Sangstha and other related formalities.

As with BSB, the Sangstha has an inspection team comprising members with financial and engineering background. Disbursements depend on the progress reports provided by the inspection team. Before the project starts commercial production, a project completion report (PCR) is prepared by the team.

3.6 Promotional Function

The promotional functions provided by the Sangstha are as follows:

- i. **Identification of viable projects**—New viable projects are identified and their profiles developed.
- ii. **Advisory services**—These relate to technical, managerial, financial, marketing and other aspects.

- iii. **Rehabilitation of sick projects**—The Sangstha has given major emphasis to the identification of sick and problem projects, analysing the causes and extending possible support to rehabilitate the projects. The rehabilitation scheme for textile and powerloom project, which was introduced by BSB, has also been accepted by BSRS.
- iv. **Technical assistance**⁸—With a view to improving the institutional efficiency of BSRS, an agreement on technical assistance has been signed by the Government with UNDP and ADB. The technical assistance includes rehabilitation of problem projects, improvement of management information system and various operational activities of the Sangstha.
- v. **Waiver of interest and penal interest**—BSRS has provided a number of incentives, rebates and concessions to the entrepreneurs for repaying the dues on schedule. Besides, a provision is made to grant waiver of interest and penal interest overdue for problem projects. A good number of entrepreneurs have availed of the opportunities.

The incentives available for the entrepreneurs are as follows: (a) an entrepreneur who is timely in repayments is entitled to a rebate of 2.5 per cent on interest; (b) the entrepreneur may be allowed waiver of penal interest if 25 per cent of the total overdue as on a particular date is paid; and (c) in addition to the above, an entrepreneur may be allowed the rescheduling of overdue/loans on the merit of each case. The amount to be waived in respect of interest and penal interest, the period of repayment of restructured loan etc. would be determined on the basis of the percentage of total overdue paid on a particular date, such as 10, 5 and 4 per cent as have been discussed in the case of BSB.

IV. Similarities and Dissimilarities between BSB and BSRS

Both DFIs have similar objectives of catalysing the industrialisation of the country. In their functioning and policies, however, some dissimilarities may be seen. These are discussed below:

4.1 Similarities

- Both are government-owned and work under the same umbrella like Industrial Policy, Annual Plan and other policies as circulated by the Government from time to time.
- Both extend their assistance only to companies incorporated in Bangladesh.
- The criteria for processing a loan application are the same for both.
- Both provide long and medium-term loan for the purchase of fixed assets.
- Both underwrite shares and debentures and provide technical and managerial assistance for the promotion and expansion of industry.
- Both require security against their loans. The land, buildings and machinery of the projects financed are taken as security. In addition, personal guarantees, jointly and severally, by all the promoters are also required to be provided.

Short-term loans are provided against pledge or hypothecation of stock or assets created out of loan. The value of the collateral must be about 3.5 times the loan amount.

4.2 Dissimilarities

- The BSB provides financial assistance to new as well as BMRE projects. From March 2, 1985, the role of BSRS in financing industries became limited to only BMRE of its own financed projects. It is noted that after a break of ten years, BSRS has resumed long term lending to viable new project from the year 1994-95.
- The zonal and branch offices of BSB have been entrusted with more operational powers in order to accelerate the industrial process. The branch head is authorised to preside over the meeting of Project Appraisal Advisory Committee (PAAC) in the case of loan proposal up to Tk. 2.5 million and can sanction loans to such projects. The zonal head can preside over loan proposal exceeding Tk. 2.5 million and can sanction loan up to Tk. 5.0 million. The zonal and branch offices of BSRS have no such powers.

- A special assistance fund has been created by BSB to provide concessional loans to projects based on local technology and production process.

BSRS is engaged in the improvement of existing projects. It would thus be seen that the two DFIs have more similarities than dissimilarities, but the operational area of BSB is wider than that of BSRS.

V. Conclusion

BSB and BSRS have emerged to meet the long-term financial needs of the industrial entrepreneurs. In addition to the financing function, the two DFIs have also been entrusted with the task of promotional activities. Over the years, the two DFIs have adopted a number of policies and strategies for fostering the industrial development in Bangladesh. The policies undertaken by them are more or less the same. Despite their policy measures the growth of this sector has been rather sluggish. No broad-based entrepreneurship has yet developed. The number of sick industries increases day by day. In fact, the DFIs have failed to achieve their desired objectives. The very causes of their failure lie in appraisal, inspection and follow up of the projects. Faulty appraisals have led the DFIs to faulty judgements, creating spectra of raising over-dues, which obstruct the return flow of funds. This obviously affects image and profitability of the institutions.

But finance should be provided only after making proper appraisal of the project proposal. To obviate illegal influence in project proposals, a Project Appraisal Examination Committee can be formed consisting of DFIs' executives, academics and professional. This committee can be empowered to examine and approve the project appraisal report.

The formation of a group of problem projects for the rehabilitation is a welcome policy of DFIs. Under this scheme the small projects can be grouped together with forming a public limited company without losing their own entities. The scheme has covered specialised textile and power loom projects only. But it should extend to other industries also.

The policy of waiver of interest and penal interest currently in vogue is not at all desirable. This only encourages wilful default and thereby affects institutional financing.

The zonal and branch offices of the DFIs should be made more effective by deputing adequate number of officials and by providing more decision making power with less interference from the head office. Such a move would lead to prompt and quality service for the development of local industries.

The top-level management needs to be restructured. They should have professional and technical competence. The deputation of civil servants to the top most position, which is currently in practice, should be stopped.

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COMPARATIVE PERFORMANCE EVALUATION OF PUBALI BANK LTD AND ISLAMI BANK BANGLADESH LTD

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Abstract: The study makes comparative performance evaluation of Pubali Bank Ltd. and Islami Bank Bangladesh Ltd. in terms of profitability, productivity and liquidity. According to the performance evaluation indicators set in the paper, the study found that the performance of IBBL is better than that of PBL, however, the profitability and productivity of both banks are low and both suffer from excess liquidity.

I. Introduction

Better standard of living of the people and the greater national economic strength is the outcome of higher productivity. Irrespective of the varying socio-economic achievement of a nation, productivity has influence on cost, prices, profits, outputs, employment's and investments (Febricant, 1961). Productivity is also an important measure of management performance in every institution (Chen and McGarrah, 1990) Therefore, the success or failure or status of an organization may be construed to be the function of effective or ineffective productivity management. Productivity management is concerned with the growth in output in relation to labour and capital inputs devoted to various functional areas of enterprise management (Bhattacharjee, 1990).

Profitability may be defined as the expression of net profits in terms of sales, capital employed, total investments, net worth etc. It refers to the ability of the enterprise to generate profits. It is also the primary measure of overall success of a enterprise (Bertil, 1980).

The concept of productivity relates to measurement of an organization's efficiency. In general, as a measure of performance evaluation, productivity can be defined as the ratio of output per unit (Bhuiyan and Akhtaruddin, 1989). Productivity, profitability and liquidity are the three important criteria of performance evaluation of a Bank.

Liquidity which is defined as the ability of a company to realise value in money, the most liquid of assets, has two dimensions, the time which is necessary to convert into money and the certainty of the conversion ratio or price, realise for the assets. Liquidity is an important consideration for newly established underwriting (Kulkarni, 1985).

This study makes comparative analysis of profitability, productivity and liquidity between Pubali Bank Limited (PBL) and Islami Bank Bangladesh Limited (IBBL). Both the Banks are private and schedule banks. But PBL is a conventional type of Bank which earns interest at a fixed rate while IBBL is a Bank based on Islamic Shariah which earns profit.

Consequent upon the Government decision to denationalise public banks, Pubali Bank has been converted into a public limited company in June 1983 as an interim step towards the

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process. After completing the necessary legal formalities and floatation of shares, the newly converted company with all its assets and liabilities had been transferred to private ownership.

On the other hand, IBBL, came into existence in March 1983, has been conducting all banking and investment activities on the basis of interest free profit and loss sharing (PLS) system conforming to the principles of the Islami Shariah. It has been performing all types of inland and international banking operations like any other commercial bank in Bangladesh. It invests its fund in various types of business industry and uses substantial amount of its fund net of liquidity requirements (Khan, 1993).

The comparative analysis of measuring productivity of the service sector in general and the conventional Banking and Islami Banking Sectors in particular is the burning problem in Bangladesh where Commercial Banks are found to face liquidity problem. Comparative productivity analysis in PBL and IBBL has not yet received adequate attention by the planners, economists, academists in general and the Bank executives, owners, loanees in particular.

In this study liquidity is also taken as one of the important measures of performance evaluation for comparative analysis of PBL and IBBL. Because, the solvency of a Bank depends on its liquidity position. In order to protect the Bank against hazards of illiquidity, a banker must make provision of liquid funds for certain type of deposit accounts which are volatile.

For such state of affairs the management of PBL and IBBL should give special emphasis on the management of productivity, profitability and liquidity. As per information available to us more analytical study has not so far been made in the context of comparative analysis of performance evaluation in terms of profitability, productivity and liquidity of PBL and IBBL. All these indicate the significance and in-depth study on comparative performance evaluation in terms of profitability, productivity and liquidity of PBL and IBBL covering its important methods of measurement.

II. Objectives of the study

The main objective of the study is to measure the profitability, productivity and liquidity of PBL and IBBL and to make comparative analysis between them. To this end the study has the following specific objectives:

- i) To examine the process of measurement of profitability of PBL and IBBL indicating comparative performance;
- ii) To examine the various process of measurement of productivity of the sample banks for the period under study indicating the comparative performance analysis;
- iii) To examine the liquidity position of the sample banks for the period under study indicating the comparative performance analysis;
- iv) To determine the contribution to National Exchequer by PBL and IBBL for the period under study.

III. Scope and Methodology

3.1 Scope of the study

The present study is both of an empirical and theoretical one. The scope of the study is limited to only PBL and IBBL. The empirical analysis of the study covers a period of six accounting years ranging from 1988 to 1993. The main reason for limiting the study within the said period is the time and resource constraints at the disposal of the researchers because the study is self financed.

3.2 Data Collection and Analysis

In order to achieve the above mentioned specific objectives of the study both primary and secondary sources of data were used. The main sources of secondary data have been annual reports, Investment Operation Manuals, Office Memorandum, Bangladesh Bank's circular, Organizational Manuals of the Sample Banks and Resume of activities of the Financial Institutions. These data were collected by the researchers themselves from Bangladesh Bank, Ministry of Finance and Head-offices of the sample Banks. Requisite primary data and information relating to the measurement of productivity, profitability and liquidity of the sample Banks were collected with the help of direct interview. To this end, concerned Senior Vice-presidents, Vice-presidents and Assistant Vice-presidents from IBBL were interviewed but the Senior Principal Officers, Assistant General Managers and Deputy General Managers of Pubali Bank were interviewed for this purpose.

The data and information thus collected have been processed manually. The statistical tools like averages, percentages and ratios had been used in the study in order to make it more informative and analytical to readers.

IV. Findings and Their Analysis

The major findings of this study have been discussed and analysed in the following sub-sections:

4.1 Measurement of Profitability of PBL and IBBL

'Profit' and 'Profitability' are two separate concepts. The former indicates absolute measurement while the latter indicates relative measurement, that is, profits in relation to some other variables (Chowdhury, 1988). When profit is expressed in terms of sales, it is known as profit margin. Again, when profit is expressed in terms of networth it is known as return on equity, when profit is expressed in terms of total investment it is known as return on investment (ROI), when profit is expressed in terms of capital employed it is known as return on capital employed (ROCE) (Sharma, 1974).

These techniques are generally used in measuring the profitability of public sector industrial enterprises for their performance measurement.

In commercial banks, the profit is defined as the difference between total income and total expenditure. Income and expenditure sources of the commercial banks may be grouped under two heads: (a) Interest and (b) Non-interest sources. In the terminology of commercial banking, the difference between interest income and interest expenditure is known as "spread" and the difference between non-interest expenditure and non-interest income is known as "burden". Therefore, alternatively profit is also defined as the difference between "spread" and "burden" (Chowdhury, 1988). In case of IBBL, spread is the difference between profit earned and Profit paid and the difference between non-profit expenditure and non-profit income is known as "burden" (Loqman and Muhiuddin, 1992). In this study, absolute profit of the PBL and IBBL have been reflected by gross and net profits where the latter is gross profit minus tax (on gross profit). Generally, absolute level of profit increases or decreases as the operation of the PBL and IBBL increases or decreases. But from the mere absolute profit figures, we cannot have any idea about the operational level of the Banks, without which it is not possible judge the actual strength of profit of the Banks. Therefore, in order to know the actual strength of profit, the actual profit is to be deflated i.e. to be divided by the total Banking operations. In that case, we shall get the relative profit or profitability of the PBL. In fact, the profitability, not the absolute profit, should be the criterion to measure the comparative performance of the PBL and IBBL.

For measuring the profitability, that is, for dividing the absolute profit by a suitable denomination, one can use various denominators such as total deposits, total credit, operating expenses, operating income, total network etc. whatever denomination is taken, one must be careful that it is truly reflective of total Banking operations. From the above point of view, the Volume of Working Fund (V) of PBL and IBBL are most appropriate. The Volume of Working Fund is defined as the balance sheet total minus contra items. Contra items are those items which do not involve direct raising or lending of funds by PBL and IBBL. For arriving at profitability figures, the study has used Volume of Working Fund (V) as denominator (Chowdury, 1988) for measuring the profitability of Indian Commercial Banks. The formula is now being used for measuring the profitability of PBL and IBBL as follows:

Profit (P) of PBL and IBBL is defined as difference between spread (S) and burden (B).

That is,

$$P = S - B \dots\dots\dots(1)$$

Again, spread is defined as $S = R - K$

where; S = interest earned and K = interest paid

Burden (B) is defined as $B = (M + O) - C$

Where; M = Manpower expenses; O = Other expenses; and C = Non-interest income

M and O together constitute non-interest expenses.

Therefore, equation (1) can be rewritten as

$$P = S - B = (R - K) - (M + O - C) \dots\dots\dots(2)$$

The equation (2) would give us absolute profit and in order to convert the absolute measure into relative measure, that is, profitability, the equation (2) is divided by the Volume of Working Fund (V). Then we would get

$$P = s - b = (r - k) - (m + o - c) \dots\dots\dots(3)$$

where, $p = P/V$; $s = S/V$; $b = B/V$, $r = R/V$,

$k = K/V$, $m = M/V$, $o = O/V$ and $c = C/V$;

The equation (3) is used for measuring the profitability of the PBL and IBBL.

Against this backdrop now let us analyse the measurement of profitability in the sample banks. Table-1 depicts the picture in this regard.

Table 1
Position of net profit before appropriation and profitability of PBL and IBBL during 1988 to 1993

(Figures in crore taka)

Year Sample & item	1988	1989	1990	1991	1992	1993	Average
Net profit before Appropriation (p)							
-PBL	3.9347	0.4318	(18.8216)	(33.9716)	(24.6531)	(10.9782)	(14.0097)
-IBBL	3.0669	2.2587	14.0546	10.5764	-	8.0400	6.3328
Volume of working(v)							
-PBL	994.6855	1122.5432	1208.7704	1371.4014	1618.5289	1807.6935	1353.9372
-IBBL	328.3095	385.2380	523.3613	691.4711	841.2878	1009.5721	629.8733
Profitability (P/V)							
-PBL	0.40%	0.04%	(1.56%)	(2.48%)	(1.52%)	(0.61%)	(0.96%)
-IBBL	0.93%	0.59%	2.69%	1.53%	--	0.80%	1.09%

Source: Annual Reports of PBL and IBBL during the period 1988 to 1993.

Note : i) Profitability is net profit (before appropriation) as percentage of volume of working fund (v)

ii) The figures in the parenthesis indicate the loss of PBL and negative position of profitability.

Table-1 shows the position of net profit before appropriation of Tax (P), Volume of working fund (v) and profitability (p/v) of PBL and IBBL during the period under study (1988-1993). It is observed from the above Table that the position of net profit of IBBL as compared to PBL is better, because the IBBL earned more profits during the five years out of six years under the study period. But the PBL earned profits only in two years out of six years during the study period and incurred losses in four years during the study period. It is observed that the volume of working fund of PBL is always higher as compared to IBBL during the study period.

Table-1 also depicts the position of average profitability of PBL which is negative 0.96% during the study period. Again, the average profitability in case of IBBL is 1.09% during the study period.

It is evident from the above analysis that the profitability ratio of IBBL is higher than that of PBL during the study period. It is also noticed that the profitability ratio in PBL is negative in major cases during the period under study.

In order to compare the performance of PBL in terms of profitability at a glance, the position of all components of profitability are depicted in the following Table-2

Table 2

Position of Profitability and its different components of PBL and IBBL during the period 1988-1993.

Profitability & its Components	1988		1989		1990		1991		1992		1993		Average	
	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL
Profit/V	0.40%	0.39%	0.04%	0.59%	(1.56%)	2.69	(2.48%)	1.53%	(1.52)	-	(0.61%)	0.80%	(0.96%)	1.09%
Spread/V	2.27	1.70	2.28	1.50	0.58	3.01	(0.49)	1.24	(0.07)	0.24	(0.58)	0.37	0.67	1.34
Burden/V	1.88	0.76	2.24	0.92	2.14	0.32	1.99	(0.29)	1.46	(0.24)	1.16	(0.43)	1.81	0.17
*Interest earned/V	9.35	5.93	8.96	6.01	4.25	6.96	7.69	5.54	6.98	3.93	6.24	3.84	7.91	5.37
*Interest paid/V	7.08	4.24	6.68	4.51	7.67	3.96	8.18	4.30	7.05	4.17	5.68	3.47	7.06	4.11
Manpower expenses/V	1.85	1.21	1.96	1.34	2.00	1.19	1.86	1.26	1.63	1.21	1.55	1.12	1.81	1.22
Office & other exp./V	1.03	0.71	1.02	0.98	0.99	0.81	0.82	0.75	0.79	0.88	0.73	0.78	0.88	0.82
*Non-interest income	1.01	1.16	0.74	1.41	0.77	1.68	0.68	2.29	0.97	2.33	1.10	2.33	0.88	1.87

Source: Authors calculation from Annual Reports of PBL & IBBL from 1988 to 1993

- Notes: i) Figures in the parenthesis indicate the negative position in profit, spread and burden of PBL
 ii) Each component of profitability in the table is divided by the volume of working fund (V)
 iii) Interest earned means the interest earned from loans and advances and investment and interest earned is assumed to be profit earned by IBBL.
 iv) Interest paid indicates the interest paid to the depositors and other debtors, interest paid is assumed to be profit paid by IBBL.

It is revealed from the above table that the average position of profit, spread, burden, interest earned, interest paid, manpower expenses, office and other expenses and non-interest income as percentage of V of PBL are (0.96%), 0.67%, 1.81%, 7.91%, 7.06%, 1.81%, 0.88% and 0.88% respectively during the period 1988 to 1993. Again, the average position of above mentioned components of profitability of IBBL are 1.09%, 1.34%, 0.17%, 5.37%, 4.11%, 1.22%, 0.82% and 1.87% respectively during the study period.

After analysing the position of all components of profitability in the above Table-2, it may be concluded that the performance of IBBL in terms of profitability is better than that of PBL.

4.2 Measurement of Productivity of PBL and IBBL

Productivity refers to a comparison between the quantity of goods or services produced and quantity of resources employed in the process. If the given quantity of resources lead to higher production, we infer that productivity has increased. More specifically, productivity is the ratio between output and input. We can compare output with man-hour input or with the total of labour and capital input or with some other indicators. Thus, there are several different kinds of output-input comparisons and so are the differences in the measurement of productivity [Bhatia].

Before going to the discussion on productivity indicators in Banks (specially in PBL and IBBL), it is worthwhile to understand the concepts of "output" and "input" in the Banking industry. Banking is a labour-intensive industry where other inputs are employed in relatively very small quantities. Labour becomes the major in the discussion on productivity of banks, because the different services such as accepting deposits, making loans and advances, acting as a clearing house, accepting bills for safe custody etc. rendered by banks to their customers are performed by and large through their manpower force [Bhatia]

In a study bank loans and investments are assumed to be output while financial liabilities, capital, labour and land to be inputs of Banks. In reality the loans and investments constitute the main earning assets of the Banks. To put it in a different way, a group of scholars consider a bank's gross income as its output and its gross expenditure as its inputs. So, a bank's productivity is defined as income divided by the expenditure. Income is used here as the closest proxy of the outputs (loans, investments and other earning assets) while expenditure is considered as the proxy of the inputs for the use of which a Bank has to bear the costs. The latter includes interest expenses, establishment expenses and other expenses on rent, advertisements, publicity, electricity, conveyance, postage, stationery and printing etc (Abedin, Roy and Mustafa, 1989).

Banking is primary a service industry. Services provided by a Commercial Bank include acceptance of deposits, extension of advances, remittance facilities for fund transfers, discount and collection of bills, foreign transactions etc. The output of Bank should, therefore, be the sum total of such services. The character of such services and their diversification make measurement of output of Bank is a real tough job. With the above limitations in view, we may visualize the main function of a commercial Bank as intermediation of funds acceptance of funds from various sources and their deployment in productive purposes. We may, therefore, take working funds of a Bank as a measure of output of a Bank while labour input may be measured in terms of total expenditure of manpower on salary, allowances, bonus, overtime and other benefits incurred by a Bank. While working fund figure is the numerator, expenditure on manpower represents denominator of the productivity equation.

In brief, we propose to use taka volume of working funds handled per taka spent on manpower as manpower productivity. This is 'V' represents taka volume of working funds of a Bank 'M' represents expenditure on manpower of a Bank during a particular year and thus productivity of a Bank during year is V/M (Taheruddin, 1989).

To assess the total productivity of a Bank (in this study both PBL and IBBL) either of the following two methods are generally used:

- i) The total productivity is construed as the amount of working fund per taka of total expenditure. Productivity rate of the Banks is arrived at by dividing the total working fund by total expenditure of the Bank.
- ii) The second method shows total productivity as the amount of income per taka of the total expenditure. By this method productivity rate of the Banks is arrived at by dividing the total income by the total expenditure of the Banks. Here the total

income is considered as output and total expenditure as input. This conforms to the common definition of productivity as output per unit of input (Huq, 1989).

In this study, the productivity had been measured in terms of total and manpower (M) productivity. In the first method V (Varde and Singh) is considered as output and in second method I (Loquman and Muhiuddin, 1992) is considered as output. In both methods E and M are respectively treated as inputs for measuring the total and the manpower productivity of the PBL and IBBL. In the first method, total productivity had been arrived at as the amount of working fund per taka of total expenditure and manpower productivity as the amount of working fund per taka expenditure on manpower. The first or second method indicates total productivity as the amount of income per taka of the total expenditure and manpower productivity as the amount of income per taka of the expenditure on manpower.

Against this backdrop let us compare the position of productivity of PBL and IBBL by measuring total productivity and manpower productivity under two methods mentioned above. Table-3 depicts the picture in this regard.

Table 3
Position of productivity of PBL and IBBL during 1988 to 1993

Productivity Year	First method				Second method			
	Total productivity (V/E)		Manpower Productivity (V/M)		Total productivity (I/E)		Manpower productivity (I/M)	
	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL
1988	10.04	16.24	53.97	82.56	1.04	1.16	5.59	5.86
1989	11.27	14.64	55.52	74.39	1.00	1.09	4.95	5.52
1990	9.46	16.80	50.04	84.23	0.85	1.14	4.51	7.28
1991	9.21	15.86	53.83	79.91	0.77	1.24	3.13	6.24
1992	10.56	15.96	61.40	82.52	0.84	1.00	3.28	5.17
1993	10.52	16.35	56.57	42.16	0.90	1.18	4.37	5.93
Average	10.18	15.98	55.22	80.96	0.90	1.19	4.31	6.00

Source: Annual reports of PBL & IBBL from 1988 to 1993.

Notes: i) Manpower productivity is expressed as the amount of working fund per taka expenditure on manpower.

A comparison of position of productivity of PBL and IBBL as depicted in the above Table-3 reveals that the total productivity of PBL and IBBL, on an average, are 10.18% and 15.98% respectively during the period 1988 to 1993 under first method of measuring total productivity. A comparison has also been made between PBL and IBBL regarding manpower productivity under first method of measuring productivity shown in the above Table-3 which are, on an average 55.22% and 80.96% respectively during the period 1988 to 1993. It is also evident from the table that the total productivity and manpower productivity of IBBL under second method of measuring productivity are also higher than those of PBL.

The above discussion makes it clear that the PBL has been suffering from low productivity in comparison with IBBL during the study period 1988 to 1993.

After analysing profitability, productivity of PBL and IBBL, it is also necessary to examine the liquidity position of PBL and IBBL comparative performance evaluation between them. The next section deals with the aspects of liquidity position of PBL and IBBL.

4.3 Measurement of Liquidity Position of PBL and IBBL

The business of a bank depends on the confidence, it creates in the mind of the depositing public. A bank creates confidence by maintaining enough liquidity to meet all demands for cash with it, but not too much cash, for cash is a non-income earning assets. The liquidity of a bank is determined by the top management of a bank depending upon the nature of business conditions in a country (Sundharam and Varshney, 1995).

Bank liquidity refers to the ability of a bank or banks to raise a certain amount of funds at a certain cost within a certain amount of time. Any assessment of the liquidity position of a bank or banking system, thus, involves consideration of all three elements amount, cost and time. The greater amount of funds a bank can raise in a certain time at a specified cost, the more liquid it is. Similarly, the sooner a bank can raise a given amount of funds at a certain cost, the greater is its liquidity. And the less it costs a bank to raise a given amount of funds in a certain period of time, the more liquid it is (Haslem, 1984). The precise method of determining liquidity needs for unstable deposit accounts, total liquidity needs of the bank can be found out by summing cash needs for seasonal reserve requirements and unstable deposit account. Proper planning of liquidity needs of a bank is sine qua non for maximum utilization of bank funds (Srivastava, 1975).

There are various methods of measuring liquidity of a bank. Of the various methods of measuring liquidity, ratio of cash to total deposits, liquid assets to total deposits and liquid assets to current assets have been used in this study to measure the liquidity position of PBL and IBBL.

In order to judge the solvency and liquidity of PBL and IBBL during the period from 1988 to 1993, the various ratios of determining solvency and liquidity as mentioned above have been analysed in the following Table-4.

Table 4
Liquidity position of PBL and IBBL during 1988 to 1993.

Ratios Year	Cash to total deposits		Liquid assets to total deposits		liquid assets to current assets	
	PBL	IBBL	PBL	IBBL	PBL	IBBL
1988	15.92	13.21	18.03	23.15	56.33	46.70
1989	15.52	12.53	19.39	26.10	60.44	50.79
1990	15.91	15.11	21.66	26.91	61.95	55.74
1991	12.50	21.35	19.93	36.93	59.55	77.49
1992	10.07	28.26	18.43	46.56	54.74	81.96
1993	09.68	35.67	32.82	49.91	58.16	90.62
Average	13.27	21.02	20.21	34.93	58.53	67.21

Source: Annual Reports of PBL and IBBL during 1988 to 1993.

Notes: i) Liquid assets include cash balance, money at call and short notice, bill of exchange and treasury bill including govt. approved securities.

ii) Current assets consist of liquid assets, balances with other banks and investment in securities.

iii) In case of PBL deposits consist of fixed deposits, savings Banks deposits, current accounts and contingency accounts. But in case of IBBL deposits consist of PLS term deposit PLS savings deposits, PLS short-notice deposits, Haj-deposits and current and contingency accounts.

Table-4 shows that the percentage of cash to total deposits of PBL and IBBL are, on an average, 13.27% and 21.02% respectively during the period 1988 to 1993 which is much

higher than the standard norms of 10% in both the cases. It is observed from the analysis that both the banks are suffering from excess liquidity reserve in the form of cash. It is also depicted that the percentage of liquid assets to total deposit of PBL and IBBL are, on an average, 20.1% and 34.93% respectively during the period 1988 to 1993 which is also much higher than the standard norms of 25% in case of IBBL but in case of PBL it is lower than the standard norms. This position signifies that the liquid assets of IBBL for the said period had been sufficient for maintaining liquidity reserve but the PBL had not been sufficient for maintaining liquidity reserve.

Table-4 also portrays that the percentage of liquid assets to current assets of PBL and IBBL are, on an average, 58.53 per cent and 67.21 per cent respectively during the period 1988 to 1993 which is also much higher than the standard norms 30 per cent.

All these signify that both the banks had been suffering from excess liquidity reserve in the form of cash, liquid assets and current assets as stated above. The impact of these excess liquidity in the form of cash, liquid assets and current assets are lying as idle in the banks hampering the profitability of the same.

In the above three sections, the position of profitability, productivity and liquidity of PBL and IBBL have been measured and analysed. The high and low profitability, productivity and excess liquidity of PBL and IBBL as observed in the above three sections have an impact on the volume of contribution to National Exchequer by the said banks. The next section deals with the contribution of PBL and IBBL to the National Exchequer.

4.4 Contribution to National Exchequer by PBL and IBBL

The contribution of commercial banks to the National Exchequer is highly dependent on the volume of profitability, productivity and solvency/liquidity of the same. High profitability, productivity and balanced liquidity of commercial banks usually enhance their contribution to the National Exchequer in the form of tax on profits and dividend to the Government Fund. Now let us examine the position of contribution of PBL and IBBL to National Exchequer during the period 1988 to 1993 sampled below in the table-5.

Table 5

Contribution of PBL and IBBL to the National Exchequer from 1988 to 1993.

Year	Tax contribution to the National Exchequer (in lakh)		Dividend to the National Exchequer (in lakh)		Total Contribution to the National Exchequer		Contribution to National Exchequer as percentage of working fund		Contribution to National Exchequer as percentage of profit.	
	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL	PBL	IBBL
1988	154.57	110.50	8.00	5.96	162.57	116.46	0.16	0.35	41.29	46.57
1989	13.18	77.30	--	5.18	13.18	42.48	0.01	0.21	30.53	36.52
1990	--	884.40	--	12.00	--	896.40	--	1.71	--	63.78
1991	--	55.10	--	12.00	--	568.10	--	0.82	--	53.17
1992	--	--	--	--	--	--	--	--	--	--
1993	--	400.00	--	12.00	--	412.00	--	0.41	--	51.24
Average	27.96	338.05	1.33	7.86	29.29	345.91	0.03	0.58	11.97	41.97

Source: Annual Reports of PBL & IBBL.

Table-5 portrays that the contribution of PBL and IBBL to the National Exchequer in the form of tax are, on an average, Tk. 27.96 lakh and Tk. 335.05 lakh respectively during the period 1988 to 1993. It is also observed that no tax contribution was made by PBL during the

period 1990 to 1993 and by IBBL in 1992. This signifies that no profits was made by PBL during the said period. IBBL also could not earn any profit in 1992. It is also clear that the amount of tax contribution by IBBL is much higher than that of PBL because of higher profitability and productivity of IBBL in comparison to PBL as already shown in the table 2 & 3.

Table-5 also recorded that the contribution of PBL and IBBL in the form of dividend to the National Exchequer are, on an average, Tk. 1.33 lakh and Tk. 7.86 lakh respectively during the period 1988 to 1993. It is observed from the table-5 that PBL contributed dividend to the National Exchequer only in 1988 and no contribution was made in subsequent periods which signifies that PBL could not earn any profit during the period 1989 to 1993, because of low productivity, negative profitability and imbalanced liquidity. The IBBL also did not contribute any amount of dividend to the National Exchequer during the period 1992. The above table-5 also reveals the position of total contribution to the National Exchequer, percentage of contribution to National Exchequer to working fund, percentage of contribution to National Exchequer to profit of PBL (Tk. 29.29 lakh, 0.03 per cent and 11.97 per cent) and of IBBL (Tk. 345.91 lakh, 0.58 per cent and 41.97 per cent) respectively, on an average during the period 1988 to 1993. It is evident from the above analysis that the total contribution of IBBL (Tk. 345.91 lakh) to the National Exchequer in the form of tax and dividend is much higher than that of PBL (Tk. 29.29 lakh) during the period under study.

Though the performance of IBBL in the form of profitability, productivity, liquidity and contribution to National exchequer is better than that of PBL yet the overall position of both the banks are recorded to be poor in respect of the above mentioned performance measurements. The factors responsible for such low profitability, low productivity and excess liquidity will be analysed in the next section.

V. Analysis of Factors Responsible for Low Profitability and Productivity

In a study it is revealed that a number of factors are responsible for variations in the productivity measures and also for low productivity (Bhattacharjee, 1990). In this study it is stated that there were five under-mentioned factors representing specific group homogeneous productivity measures. Each of these productivity measures is influenced by number of factors. The study also revealed that productivity measures were found to be associated with variations in policies, pertaining to structure and process as well as variations in deposit mix, credit mix and service packages offered by the banks.

As regard the factors responsible for low productivity and also for variations in productivity measures in the PBL and IBBL, opinions of the relevant personnel were sought for. The relevant personnel of the IBBL opined that of the various factors responsible for low productivity, the limiting factors to investment opportunities are the vital. This signifies low amount of investment thereby low earnings of net profits. Of the limiting factors to investment opportunities, the limited scope of terms and conditions of various modes of investments i.e. Murabaha, Musharaka, Mudaraba, Bai-muajjal, Hire-purchase, Qurd against T.D.R. and Qurd-E-Hasana (Ahsan, 1989).

Some of the borrowers opined that unnecessary delay occurred in disposal of investment proposal by the respective bank authority may be responsible for low investment profile of the bank. Again, the relevant personnel of PBL opined that of the various factors responsible for low profitability, low productivity and excess liquidity unfavourable conditions of investment policies, low loan recovery position as well as credit and advance policies are the vital.

VI. Conclusion

Performance evaluation is very important for any institution. It is even more important for financial institutions like banks, whose functions are commercial and service oriented in nature. In this study comparative performance evaluation of PBL and IBBL was made by measuring profitability, productivity and liquidity of both the banks. It is observed that the performance of IBBL in the form of profitability, productivity and liquidity is better than that of PBL. But though the performance of IBBL is better than that of PBL yet the profitability, productivity of both the banks are low and both the banks are suffering from excess liquidity which ultimately hampered the profitability of the banks.

The factors responsible for such state of affairs in case of IBBL are the limited scope and strict terms and conditions of investments. Again, the main factors responsible for such state of affairs in case of PBL were the unfavourable conditions of investment policies, credit and advance policies, unstable govt. policies, inefficient management and unsatisfactory recovery of loans and advances after denationalization. Both the banks are private banks doing their business independently. Therefore, it can be said that the investment policy of IBBL and investments and loans and advances policies of PBL should be improved to improve their performances in the form of profitability, productivity and liquidity.

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Glossary

- Murabaha:** On trade financing with exports, imports and stocks temporarily being owned by the bank and then sold off at appropriate mark-ups in price.
- Musharaka:** A partnership for sharing profit or loss on a productive investment.
- Mudaraba:** Venture capital or project finance for a fixed time provided by bank to an entrepreneur with profits and losses bearing shared.
- Bai-Muajjal:** It is a sale under which the price of item involved is payable on a deferred basis either lump-sum or instalment.
- Hire-Purchase:** Under this, items are purchased on joint ownership basis. The client pays the principal plus a share in the net rental value proportionate to outstanding share of the investor.
- Qurd-E-Hasana:** Benevolent loans given free of any service charge on compassionate grounds and special welfare considerations.

EVALUATION OF FUND ALLOCATION POLICY IN SOME SELECTED MILLS UNDER BANGLADESH STEEL AND ENGINEERING CORPORATION

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Abstract: Proper fund allocation policy is a must for the capital-intensive industry like Bangladesh Steel and Engineering Corporation (B.S.E.C). This paper has been prepared to critically evaluate the fund allocation policy as practised in BSEC and assesses its impact thereon. The study depicts that, their internal generation of fund is not suitable. They had to deploy short term resources for long term uses. Their current assets are financed by external liabilities. All of these unfavourable circumstances deteriorated the profitability of BSEC.

I. Introduction

The term 'fund' has been defined in various ways. For some people fund is literal cash, others define funds as cash and cash equivalents, still for others it is not quick assets or net working capital (i.e. excess of current assets over current liabilities). In general uses the term 'fund' frequently is used to include; (i) cash (ii) liquid assets (iii) current assets (iv) working capital and (v) total resources¹. Again according to other two authors² fund constitutes the prime importance in starting and operating any business enterprise. The most significant of all the financial activities of an enterprise is the raising and management of funds. Financial decision are those which concern the flow of funds from various sources and use of such funds³.

Of the major financial policies of an enterprise the fund allocation policy is the most important one. The success or failure of a business enterprise depends on correct fund allocation policy or otherwise of that enterprise. This is truer in case of the mills under Bangladesh Steel and Engineering Corporation (BSEC). This is because of the fact that the industry as a whole had been contributing to poor internal fund generation for a number of years⁴. For a capital-intensive industry like Steel and engineering, poor generation of internal funds adversely affects its fund allocation policy. For such state of affairs the financial manager of the mills under BSEC should give special emphasis on the fund allocation policy of the respective mills. This calls for an in-depth study on fund allocation policy in some selected mills under BSEC.

The main objective of the study is to critically evaluate the fund allocation policy in some selected mills under BSEC. To this end the study attempts to:

1. analyse the original fund allocation policy at the time of establishment of the sample mills.
2. examine the internal fund generation in the sample mills during the study period and
3. analyse the pattern of fund allocation policy in the sample mills during the operation period.

The study is limited to five mills under BSEC. These mills have been selected purposively having to easy availability of data and information. The study covers both the original period (the period of establishment of the mills) and selected operation period of the mills ranging from 1988-89 to 1992-93.

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The main feature of the study is the extensive use of secondary data. The main sources of secondary data have been Filled-up Project Proforma, Annual Accounts Statements of the sample mills and Annual Reports of BSEC during the relevant financial years. These were collected by the researcher himself from the concerned sources. Moreover primary data relating to reasons for changing fund allocation policy of the Sample Mills were used in the study. These were collected by interviewing the Chief/Dy. Chief Accountant of the sample mills with the help of a checklist prepared for the purpose.

The Present study deals only with the Public Sector Steel and Engineering Mills. In the study no Private Sector Steel and Engineering Mills were included. The study could have been more representative if private sector Steel and Engineering Mills were taken as sample for the study. But it was not possible due to time and resource constraints at the disposal of the researcher. Moreover, collection of actual data from private sector mills is very much difficult as because of their lack of cooperative mentality and unwillingness to disclose their data.

II. Findings and their Analysis

The major findings of the study have been discussed in the following sub-sections:

2.1. Analysis of Fund Allocation Policy at the time of establishment of Sample Mills

Determining and allocating the amount of funds required to start the projected enterprise is an important part of the investment⁵. Such amount of fund is required to allocate mainly for the purpose of investment in fixed properties namely; land and building, plant, machinery, equipment, furniture and fittings, etc., which are not held for the purpose of re-sale but required for running the business. Therefore, proper allocation of funds for investment in fixed properties is the vital financial policy among the various financial policies of an enterprise. In allocating the funds, proper attention should be given on the identification of the major components of investment costs..

An examination of the investment costs pattern of the sample mills as shown in their respective project Proforma indicates that the items of costs that would constitute the major components of investment costs in case of both the new and BMRE projected where funds were allocated had been: (i) Pre-construction expenditure (ii) construction works (iii) plant, machinery, equipment, furniture and fittings, and (iv) other costs viz. installation expenses, overhead costs etc.

In order to examine the pattern of funds allocation into the major components of investment costs in the case of the sample mills at the time of their investment, Table-1 has been presented below:

Table 1

Allocation of Original Funds for total Investments costs into major components of Sample mills at the time of their establishment (In Million Taka)

Major components of investment costs	Allocation of table funds				
	Sample-1	Sample-2	Sample-3	Sample-4	Sample-5
Pre-construction expenditures	0.31 (1.6)	6.80 (1.6)	0.46 (1.5)	8.06 (1.7)	0.34 (1.5)
Construction works	6.00 (30.6)	138.55(32.6)	9.42 (30.6)	166.38(35.1)	8.20 (35.2)
Plant, Machinery Equipments, etc.	10.95 (55.8)	227.37(53.5)	16.41 (53.3)	249.34(52.6)	11.79 (50.6)
Other costs	2.36 (12.00)	52.27 (12.3)	4.50 (14.6)	50.24 (10.6)	2.97 (12.7)
Total	19.62(100.00)	424.99(100.00)	30.79(100.00)	474.02(100.00)	23.30(100.00)

Note: Figures in the parentheses indicate percentage-wise position

Source: Compiled from the Filled-up Project Pro-Forma of the Sample Mills.

Table-1 depicts that pre-construction expenditures comprised 1.5 per cent to 1.7 per cent; construction works comprised 30.6 per cent to 35.2 per cent; plant, machinery, equipment etc. comprised 50.6 per cent to 55.8 per cent and other costs comprised 10.6 per cent to 14.6 per cent of the total funds allocated into investment costs of the sample mills 1 to 5 at the time of their establishment. This implies that according to the allocation of total funds, plant, machinery, equipments etc. occupied the highest position followed by construction works, other costs and pre-construction expenditure in all the sample mills. It is reported that plant machinery and equipments were imported from foreign currencies in case of all the sample mills. This emphasizes the use of foreign currencies in case of all the sample mills. The emphasizes the use of foreign currencies in the industrial development of Bangladesh.

2.2. Analysis of Internal Fund Generation during the Study Period

Fund flow statement comprising the sources and uses of funds is the technique followed in appraising fund allocation policy of an enterprise⁶. Internal fund generation is one of the most important sources of funds. The internal funds may be created one of undistributed profits, reserve and surplus and depreciation. It is recognised that the more the generation of internal funds the less the dependence on other sources viz. long term and short term. Against this background now let us examine the position of internal funds generation in the sample mills during the study periods 1988-89 to 1992-93. Table-2 shows the picture in this regard:

Table 2

Internal Fund Generation in the Sample Mills during 1988-89 to 1992-9 (In Million Taka)

Years/Sources	1988-89	1989-90	1990-91	1991-92	1992-93	Total
Sample-1						
Reserve and surplus	0.43	Nil	Nil	Nil	Nil	0.43
Undistributed profits (loss)	(27.61)	14.58	(6.80)	(51.14)	8.61	(62.36)
Depreciation	1.42	1.19	1.28	0.40	0.63	4.92
Total	(25.76)	15.77	(5.52)	(50.74)	9.24	(57.01)
Sample-2						
Reserve and surplus	Nil	Nil	Nil	Nil	Nil	Nil
Undistributed profits (loss)	(81.92)	286.56	(239.62)	(144.21)	(193.12)	(372.31)
Depreciation	26.28	29.10	30.53	30.63	31.02	147.56
Total	(55.64)	315.66	209.09	(113.58)	(162.10)	(224.75)
Sample-3						
Reserve and surplus	Nil	Nil	(2.65)	Nil	Nil	(2.65)
Undistributed profits (loss)	(51.81)	23.83	(21.53)	(19.93)	28.04	(41.40)
Depreciation	12.43	12.45	13.07	12.36	12.51	62.82
Total	(39.38)	36.28	(11.11)	(7.57)	40.55	18.77
Sample-4						
Reserve and surplus	Nil	Nil	Nil	Nil	Nil	Nil
Undistributed profits (loss)	(30.11)	2.44	(15.86)	(45.22)	(28.57)	(117.52)
Depreciation	14.17	14.17	20.32	22.50	23.16	94.32
Total	(15.94)	16.41	4.46	(22.72)	(5.41)	(23.20)
Sample-5						
Reserve and surplus	0.30	Nil	(1.65)	Nil	Nil	(1.35)
Undistributed profits (loss)	(19.13)	(3.91)	(7.32)	(29.64)	(34.17)	(94.17)
Depreciation	1.36	1.30	1.24	1.30	1.24	6.44
Total	(17.47)	(2.61)	(7.73)	(28.34)	(32.93)	(89.08)

Note: Figures in the parenthesis indicate negative position.

Source: Compiled from Annual Accounts Statements of the Sample Mills and Annual Reports of BSEC during 1988-89 to 1992-93

Table-2 depicts that, the total internal fund generation had been negative in sample-1 in all the years under study excepting 1989-90 and 1992-93 where it was positive. In sample-2 and 3 it had been negative in all the years excepting 1989-90 and 1990-91 where it was positive and in sample-5, it had been negative in all the years under study. Considering the total position of internal fund generation of all the years under study, it is seen that the position was negative equivalent to Tk. 57.01 million, Tk. 224.75 million, Tk.23.20 million and Tk. 89.08 million in sample 1,2,3,4 and 5 respectively. Thus it is observed that the position of internal fund generation of all the years taken together was the worst in sample-2 followed by sample-5, 1,4 and 3. Such worst positions of internal fund generation in all the samples had made negative contribution in the sources of funds in these cases. This negative internal fund generation was met up from long term and short-term sources of funds, which will be revealed later on.

2.3. Fund Allocation Policy during the Original and Operation Periods

During the operating period excepting internal fund generation the other sources of fund may be long term sources and short term sources. The long-term sources may include share capital, long term loans including debentures and sale of gross fixed assets. On the other hand, short-term sources may include Cash Credits and bank overdrafts, trade credits and other current liabilities and sale of current assets⁷. The other part of fund allocation policy that is the use of funds may be classified as long term and short term. Funds used in retiring share capital and long-term loans including debentures and investment in gross fixed assets are known as long term uses. On the other hand, fund used in investing current assets and retiring current liabilities are known as short-term uses⁸. Against this background, now let us examine the changing pattern of fund allocation policy through fund flow statement in the sample mills during the gestation period and operation periods. Table-3 shows the detailed picture of funds inflows and outflows in the sample mills during the operation period 1988-89 to 1992-93.

Table--3

Pattern of Sources and Uses of Funds in the Sample Mills during the Operation period in 1988-89 to 1992-93 (in Million Taka)

Items	Sample-1		Sample-2		Sample-3		Sample-4		Sample-5	
	source	use	source	use	source	use	source	use	source	use
Operation period internal fund generation	(57.01)	-	(224.75)	-	(18.77)	-	(23.20)	-	(89.08)	-
Long term sources and uses equity capital	103.13	-	2050	-	200	-	585.12	-	30.00	-
Long term debts	52.56	-	383.33	-	147.07	-	253.64	-	23.80	-
Gross fixed assets	-	168.3	-	3228.23	-	209.06	-	842.46	-	54.85
Current liabilities	233.17	-	27777.93	-	261.1	-	305.27	-	380.62	-
Current assets	-	167.49	-	1158.28	-	330.88	-	278.37	-	290.49
Total	335.85	335.85	4986.51	4986.51	626.94	626.94	1120.83	1120.83	345.34	345.34

Note: Figures in the parenthesis indicate negative position

Source: Compiled from Annual Accounts statements of the Sample Mill and Annual Reports of BSEC during 1988-89 to 1992-93.

It is revealed from Table-3 that during the intervening period of the selected operating period 1988-89 to 1992-93, internal fund generation showed negative balance to the extent of Tk. 57.01 million, Tk. 224.75 million, Tk. 23.20 million and Tk.89.08 million in sample -1, 2, 4, and 5 respectively. but internal generation of fund was positive Tk. 18.77 million in sample-3. Such negative contribution of internal fund generation to the sources of funds was met out of sources of equity capital in sample-4; out of long term debts in sample-2; and out of mainly from current liabilities in sample-1 and 5. Such situations are undoubtedly harmful for the sample mills because long term and short term resources could be employed to the productive purposes. Deployment of short term resources for long term uses is regarded, in principle and unsound practice for obvious reasons that it would give rise to the liquidity problem⁹. Such practice is seen in our sample-2. It is seen that in sample-2 net balance of long term sources stood at Tk. 158.58 million; whereas long term uses (in gross fixed assets) were equivalent to Tk. 3828.23 million was met from short term sources i.e. current liabilities.

The said Table also reveals that the short term funds demands equivalent to Tk. 167.49 million, Tk. 1158.28 million, Tk. 296.06 million, Tk. 842.46 and Tk. 54.85 million as against the short term resources to the extent of Tk.233.17 million, Tk. 2777.93 million, Tk. 305.27 million and Tk. 380.62 million in sample-1,2, 3,4 and 5 respectively. Thus there appeared short falls in the short-term funds in some cases which were covered up by deployment of long-term resources. In general, increases in current assets tend to be reflected in balancing changes in cash credits and overdrafts and in short term non bank facilities¹⁰. These appeared to have happened in case of the samples 1,2 and 5¹¹. The process is also unsound because the bankers, government and the project officials had unwillingly sheltered laxity in funds planning. Therefore, the fund allocation policy i.e. funds source and uses during operation period had been found unsatisfactory.

III. Conclusion

From the above analysis of the previous Table-1,2 and 3 it may be concluded that fund allocation policy of most of the sample mills appeared to be not sound and effective during the selected operation period. The Sample-2 had no sufficient long-term resources to be utilised in long term application. As a result, it had to deploy short-term resources for long term uses which was an unsound and also injudicious allocation of funds. Moreover, in case of the samples 1, 2 and 5 additional investment in current assets were financed by external liabilities such as cash credit, bank over draft etc. Such sort of financing had imposed heavy interest obligations, which in turn had affected the profitability of the sample mills¹². All such situations call for careful and effective planning and husbanding of fund allocation policy of the sample mills by their respective financial manager.

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4. Vide. *Annual Reports of Bangladesh Steel and Engineering Corporation* during 1988-89 to 1992-93.

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10. *Ibid.*
11. Vide, *Annual Reports of the Sample Mills* during 1988-89 to 1992-93.
12. *Ibid.*

CASH MANAGEMENT OF THE PUBLIC SECTOR SUGAR INDUSTRY IN BANGLADESH : A CASE STUDY

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Abstract: The study evaluates existing cash management practices of the sugar group of Bangladesh Sugar and Food Industries Corporation and suggests measures to avoid full dependence on cash credit and budgetary support by the Government.

I. Introduction

The most important component of current assets for daily operation of a business is cash. 'The role and importance of cash in a business enterprise can be compared with the blood stream of a human body whose steady and healthy circulation gives the vitality and strength to the human body' (De and Chakraborty; 1992:88). Cash is the basic input needed to keep the business running on a continuous basis. It is the money, which the firm can disburse immediately without any restriction. It is a non-earning asset and, therefore, it is required to know how much cash balance is needed to run the enterprise smoothly. If the organization does not keep sufficient cash in hand, it may not be in a position to meet the unexpected challenges that may bring down its credit in the market. On the other hand, cash that is idle or under used penalizes a firm either with lost income from unmade investments or in interest charges of funds it borrows to take up the slack. Desalvo (1977:114) opined that "cash is not an asset but a liability, a wasted opportunity unless it is earning money for its owner". Cash is indeed an asset only when it is properly used.

It appears that cash management is one of the key areas of financial management. But unfortunately, in Bangladesh, cash management is reported to be unsound in the case of public sector industrial undertakings. Hossain (1985:262) indicates that most of the units under the most of the units under the Bangladesh Textile Mills Corporation (BTMC) are suffering from shortage of cash which, in turn, has adversely affected the liquidity position of the individual units. But there is hardly any study on cash management of the sugar group of Bangladesh Sugar and Food Industries Corporation (BSFIC). In this perspective the present study is an insert attempt to fill in this gap.

II. Cash and Cash Management

The term cash with reference to cash management is used in two senses. In a narrow sense "Cash Consists of the firm's holding of currency and demand deposits" (Weston and Brigham, 1978:302). While, 'the broader view of cash also includes near-cash assets, such as marketable securities and time deposits in bank. The basic characteristics of near-cash assets

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is that it can be readily converted into cash, It serve as a reserve poll of liquidity that provides cash quickly when needed. It also provide a short-term investment outlet for excess cash and are also useful for meeting planned out flow of funds' (Khan and Jain. 1933:664). The present study employs cash in the broader sense. Thus, in this study cash is used broadly to cover cash and generally accepted equivalents of cash as demand and time deposits in bank(s), cheques, drafts, money orders, etc. and also marketable securities, i.e., short-term investment of cash.

In current practice, cash management encompasses management of the firm's cash flows (receipts and payments), maintenance of appropriate cash balances, decisions regarding investment in securities and decisions regarding short-term borrowings from banks and other sources. (Schall and Haley, 1991: 666). The system of cash management, thus, aims at keeping optimum cash balance and making maximum use of the cash resources. Bechler (1973:43) says "cash should be fully utilized as any corporate resources to ensure optimum corporate profitability". In a sound cash management programme, profit is maximized through the skilful administration of available funds. Enough money has to be provided to run the business and the surplus cash is to be invested. The point is that "Cash should be a working asset and every Taka should be used or invested so that profits are maximized" (Edirk, T.B. 1975:16). The short-term cash management has two inter-related ingredients, profit and cash planning.

Considering the above facts the objective of cash management is to provide advance signal as to: "What amount of cash is needed to attain short-term profit objective? How much of these cash requirements can be met out of the cash generated from current income? What are the magnitudes of the ebbs and flows of cash emanating from operations, and what are the size and frequencies of the resulting cash surpluses and deficits? What are the sources of cash (i.e., borrowings) and under what conditions or in what context are they available? (Ramamoorthy,1978:123). Therefore, the objective of cash management is to ensure the availability of the right amount of cash, at right time and at right time and at right cost to meet the obligatory cash outflow. Another objective of cash management is to enable the enterprise to increase its profit by proper utilization of cash resources.

The study strives to evaluate the existing cash management practices of the sugar group of Bangladesh Sugar and Food Industries Corporation (BSFIC). The objectives of the study are to:

- i) Examine the cash management techniques used by the Sugar Group of BSFIC
- ii) Study the actual position of cash and determine its adequacy or inadequacy
- iii) Suggest some measures to be taken by BSFIC for the improvement of cash management.

Since BSFIC is the only public sector sugar industry in the country, the Corporation has been selected for the purpose of the present study. In the private sector there is no sugar producing unit in Bangladesh. Thus, BSFIC alone accounts for 100 per cent of the total output of the industry.

As stated above, the present study is confined to the study of cash management of the sugar group of BSFIC. The study is related to a period of 10 years beginning 1984-85. The study is mainly based on annual reports, MIS reports and other related publications of the BSFIC. In addition, the authors visited two individual units and collected views through personal interview with executives supplementing factual position regarding the management of cash in the sugar group of BSFIC.

III. Findings and their Analysis

3.1 Cash Management Practices in the BSFIC

Our field survey reveals that different units under the BSFIC management determine their level of cash balances by making a cash forecast by means of cash budget once in a year. All the units prepare cash budget and quarterly budget usage statement for submission to the BSFIC head office. However, there is no system of variance analysis. The operating units keep cash only to meet day-to-day obligations. They never hold cash for meeting contingencies. Further, they also never think of optimum cash balance as they have cash credit limits with public sector commercial banks. When they need cash, they simply withdraw money from bank against their cash credit limit's. Thus, actual cash balance on a particular date was more the result of chance than any planning. The Corporation has no cash policy at all--neither at the head office level nor at the unit level. None of the units has a separate "Cash Department" There is, however, a cash section in each of the units under the direct control of the head of accounts Department. At the operating level, the head of the project is primarily responsible for overall cash management. He is assisted by the head of the accounts department.

3.2 Empirical Findings

3.2.1 Size and Growth of Cash Balance

The quantum of cash and bank balances and the trend therein in the sugar group of BSFIC during 1984-94 has been presented in Table-1.

Table 1 reveals that cash balance which stood at Tk. 5.5 crore (or 2.2 times) by the end year 1993-94, the largest cash balance (Tk 13.3 crore) being in 1990-91. The most revealing feature is that the cash balance was inconsistent over the period of time. There was high fluctuation from year to year. Such high fluctuation and inconsistent growth testimony weak cash management in the sugar group of BSFIC.

3.2.2 Cash Ratios

This section deals with important cash ratios to evaluate the cash management of the sugar group of BSFIC. These ratios are cash to current assets, cash to current liabilities, cash to monthly operating expenses, cash turnover, current ratio, quick ratio and coverage of current liabilities.

(i) Cash as Percentage of Current Assets

Cash is an important component of current assets. Although the share of cash in the total current assets generally uses to be small, yet the solvency of an enterprise depends to a great extent on the efficient management of cash.

A higher ratio of cash to current assets indicates a large volume of cash and a corresponding high level of liquidity, but at the same time it also shows that management is not bothering to manage its cash and thus wasting its resources (Clarkson and Elliott, 1983:43). Unfortunately there is no universal standard for the ratio of cash to current assets. However a working guide can be evolved by comparing the values over time or by computing the industry ratio.

Table-1 shows that there has been wide and frequent fluctuation in the absolute amount of cash as well as its relative share in the total current assets in the sugar group of BSFIC. The absolute amount of cash balance ranged between Tk 2.1 crore and Tk. 13.3 crore. In

relative terms, cash balance ranged between 0.5 per cent and 4.4 per cent in relation to current assets during 1984-94, the average for the whole period being 1.9 per cent (Table-2). In most of the years, increase in current assets had led to a decline in the percentage share of cash. Thus, besides wide and frequent fluctuation in the cash balance, there was hardly any relationship between cash and the total current assets. This suggests a little or no control over the cash balance in BSFIC.

(ii) Cash as Percentage of Current Liabilities.

The percentage of cash to current liabilities is another tool to judge the efficiency or otherwise of cash management of a business. This reveals how much cash is available to pay current obligations.

Cash to current liabilities ratio as shown in Table 2 reveals that in BSFIC the percentage ranged between 0.4 and 3.5 per cent with no definite trend of rise and fall. In 1990-91, when both the total current liabilities (Tk 592.7 crore) and the cash balance (Tk. 13.3 crore) was the highest, cash as percentage of current liabilities was not the highest in that year (Table-1 and 2). In most of the years, increase in total current liabilities had led to a decline in the percentage share of cash to current liabilities same as cash to total current assets ratio. Thus the sugar group of BSFIC did not have the practice of maintaining cash and bank balances in relation to current liabilities.

(iii) Cash in Terms of Number of Days Operational Requirements

This ratio is a rough evaluation of the adequacy of cash (and other fully liquid assets such as securities) in relation to current operating costs and expenses that are a current drain on working capital (Kennedy and McMullen, 1968:370) A firm should maintain sufficient cash balance for the smooth functioning of its day to day operations and maintaining liquidity and solvency position steady. The failure of a firm to meet its obligations, due to lack of sufficient liquidity, will result in bad credit rating, loss of creditor's confidence, or even lawsuits resulting in the closure of the company. Guthmann and Dougall (1955:395) opined that a business firm should keep its cash and near cash resources equal to the requirements of one month's normal expenditure; while Walker (1974) has prescribed for 2 months. If cash and near cash reserves happened to be more than this, it should be taken for granted that excess cash is being carried by the firm. Contrary to that, if the firm keeps cash balance below one month's normal requirements then it may be considered as acute shortage of cash or liquidity crisis. Thus BSFIC should maintain cash balance equal to one month's normal operating expenses.

Against this background, Table 2 reveals that cash balance of BSFIC was far below the suggested norm of 30 days in all the years under study. It was significantly low towards the closing years of the study. It ranged between 11 days and 1 day with wide fluctuation from year to year. This situation testimony poor cash planning in BSFIC. As a result of inadequate cash balance cash inflow, the operating units of the sugar group of BSFIC frequently default in making timely payment of the different operating expenses including salaries and wages of its work force.

(iv) Cash Turnover

An important measure of cash management is the cash Turnover Ratio. This shows the speed with which cash circulates in a firm (from cash to goods and again goods to cash). It should be kept in mind that neither a too large nor a small cash turnover situation is desirable for any firm.

(v) Current Ratio

Current ratio which relates current assets and current liabilities provides an easy to use measure of overall liquidity of a firm. It suggests the number of times that a firm's current assets cover its current liabilities. It is worked out as

$$\text{C.R.} = \frac{\text{Current assets}}{\text{Current liabilities}}$$

The ratio demonstrates how quickly a firm can meet its short-term obligations. Apparently, the higher the current ratio, the greater the short-term solvency and vice-versa. While, a very high ratio may suggest an excessive amount of current assets and management's failure to utilize the firm's resources properly. Contrarily, low ratio may indicate liquidity crisis. Although there is no hard and fast rule, but current ratio of 2:1 is traditionally regarded as an indicator of satisfactory liquidity position.

Against this background, Table 2 reveals that current ratio of the sugar group of BSFIC ranged between 0.5 and 1.5 with a declining trend over the period. This ratio was even below 1.0 in 7 out of 10 years of study. These facts clearly demonstrate that BSFIC management has miserably failed in maintaining short term financial solvency.

(vi) Quick Ratio

The ratio is similar to current ratio except that it excludes inventory, the least liquid current asset, from the numerator of the ratio. Inventory needs more time for conversion than other components of current assets or it would have no value at all at the time of real crisis. The term liquid assets, therefore, refer to those current assets which can be converted into cash immediately or at a short notice. As a rule of thumb, liquid ratio of 1:1 is considered satisfactory for a business firm.

It is evident from Table 2 that the liquid ratio was in extremely poor shape during the whole period of study. The Corporation could not provide minimum coverage protection to its short-term creditors. For instance, liquid ratio ranged between 2 and 6 with a declining trend. This ratio suggests very poor liquidity position of the sugar group of BSFIC. In fact, the Corporation became technically insolvent long back. It thus, requires vigorous efforts on the part of the management to improve the present situation.

(viii) Coverage of Current Liabilities

Coverage of current liabilities can be ascertained by multiplying the turnover of current liabilities (i.e., the ratio of sales to current liabilities) with the net profit margin (i.e. the profit before tax to sales) (Walter, 1967; and Mishra, 1975:30-43). In fact, coverage of current liabilities is the product of current liabilities turnover and net profit margin. Thus ultimately we get percentage of net profit to total current liabilities.

$$\text{Coverage of Current Liabilities} = \frac{\text{Sales}}{\text{Total Current liabilities}} \times \frac{\text{profit}}{\text{Sales}}$$

$$\frac{\text{Net profit}}{\text{Total current liabilities}}$$

This ratio measures the funds generation capacity of a firm in relation to its total current liabilities. 'The higher the coverage ratio, the greater the safety of the firm in paying its current debts' (Khandwal, 1985:10)

A perusal of Table 2 would reveal that the coverage of current liabilities in BSFIC had been quite alarming. Net profit was either very poor or negative. Furthermore, the turnover of current liabilities was very low. Consequently, the coverage of current liabilities on the whole was disheartening throughout the period of review.

The inference that can be drawn from the above is that the liquidity position of BSFIC was in bad shape. Cash from operation could not provide even the marginal coverage to the currently maturing obligations of BSFIC on account of poor or negative profit margin. It is, thus, a clear indication of miserably poor liquidity position of the company.

VI. Conclusion

Cash Management in the sugar group of BSFIC has been found in a very miserable shape. BSFIC Management did not pay attention to this important segment of working capital. Virtually the corporation did not have any cash policy at all both at the head office and at the unit level. The Corporation does not determine optimum cash balance as it has cash credit limit with the nationalized commercial banks. It is certain that actual cash balance in the sugar group of BSFIC in a particular day was the result of chance rather than any planning.

Financial analysis revealed that cash balance used to vary widely from year to year. It was miserably low in almost all the years under study. Cash to current assets and cash to current liabilities ratios reveal insufficient cash position. Cash balance was far below one month's operational requirements during the whole period of study. Consequently, cash turnover ratio was found to be high. Current ratio and quick ratio clearly demonstrate that BSFIC management has failed to maintain short-term financial solvency. Coverage of current liabilities was also found to be quite unsatisfactory. It was negative in 9 out of 10 years of review.

Thus there is, a need to exercise effective control over cash flows-both inflow and outflow. The Corporation may establish a separate cash department in each of its operating unit to formulate cash policies, techniques and procedures as also to co-ordinate and control functions relating to cash. But before establishing such department, cost-benefit factors should be carefully taken into consideration. There is ample scope for increasing cash inflow by increasing sales, reducing excess investment in stores & spares and implementing better collection policies for loans and advances provided to cane growers. This will certainly help BSFIC to avoid full dependence on cash credit and budgetary support by the Government.

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Table 1

Amount of Cash, Current Assets, Current Liabilities, Liquid Assets, Sales, Net Profit (loss) and Cash Operating Expenses of the Sugar Group of BSFIC During 1984-94

Year	Cash Balance	Current Assets	Current Liabilities	Cash Operating Expenses	Liquid Assets	Sales	Net Profit Before Tax
1984-85	2.5	165.3	112.8	86.4	70.1	68.5	(20.3)
1985-86	2.6	180.6	158.4	182.1	100.7	167.8	(33.1)
1986-87	3.1	226.7	236.5	259.1	93.1	220.7	(34.0)
1987-88	6.6	231.9	261.8	344.1	103.8	335.1	(17.5)
1988-89	8.9	203.4	256.8	286.0	112.1	293.3	(24.1)
1989-90	4.4	321.5	425.3	296.5	122.2	350.2	(24.5)
1990-91	13.3	484.0	592.7	455.3	132.8	490.7	(9.5)
1991-92	2.1	389.6	563.9	602.4	127.4	595.0	(65.5)
1992-93	3.2	237.3	528.8	618.5	124.9	587.4	(82.9)
1993-94	5.5	278.5	549.2	541.4	122.8	565.5	(14.4)
Mean	5.2	274.8	386.6	367.2	111.0	369.4	(27.7)

Note: Figures within the bracket show negative profits (net losses).

Table 2

Cash Ratios of the Sugar Group of BSFIC During 1984-94

Year	Cash to C.A. (%)	Cash to C. L.(%)	Cash Turnover (Times)	Cash in Terms of No. of Days of Exp.	Current Ratio	Quick Ratio	Coverag of Current Liabs.(%)
1984-85	1.5	2.2	27.4	11	1.5	0.6	(18.0)
1985-86	1.4	1.6	64.5	5	1.1	0.6	(20.9)
1986-87	1.4	1.3	71.2	4	1.0	0.4	(14.4)
1987-88	2.8	2.5	53.8	7	0.9	0.4	(6.7)
1988-89	4.4	3.5	32.9	11	0.8	0.4	(9.4)
1989-90	1.4	1.0	39.3	5	0.8	0.2	(1.6)
1990-91	2.7	2.2	36.9	11	0.8	0.2	(1.6)
1991-92	0.5	0.4	283.3	1	0.7	0.2	(11.6)
1992-93	1.2	0.6	183.6	2	0.5	0.2	(15.7)
1993-94	2.0	1.0	102.8	4	0.5	0.2	(2.6)
Mean (1948-94)	1.9	1.3	71.0	5	0.7	0.3	(7.2)

Notes: -Turnover of cash = $\frac{\text{Net Sales}}{\text{Cash balance}}$

(i) Cash in Terms of number of days operational

(ii) Requirements = $z \times 365$

(iii) Cash operating expenses

= Total expenses (Depreciation + interest)

PROBLEMS AND PROSPECTS OF HANDICRAFT EXPORT OF BANGLADESH: A CASE STUDY

Md. Abu Saleh*

Abstract: This paper highlights the problems and prospects of handicraft export from Bangladesh. Despite enormous potentialities to expand the export of handicraft items, these exports could not be appreciably enhanced due to lack of proper government support, design problem and failure to create demand in the export markets. The study concludes that if producers are guided properly to develop handicraft items in keeping with the modern designs, tastes and fashion orientations of the overseas buyers and are assisted to produce the goods at reasonable cost, handicraft exports can bring more foreign currency for Bangladesh in the coming days.

I. Introduction

Handicrafts of Bangladesh possess a historical fame, which attracted people from all over the world for centuries. This is because of the antiqueness and uniqueness of its products. The huge population of Bangladesh is associated with making crafts depicting the culture, tradition and lifestyle of the people. The speciality of Bangladesh handicrafts is that its production is processed completely by hand.¹ Generating low level or illiterate employment opportunities, creating the opportunity to utilise indigenous natural resources and providing the economic growth, the export of handicrafts products plays the vital role of sustaining the cultural heritage of the country for the future generation and disseminating it to the global community.² With the span of time, the handicraft sectors have been geared up in order to meet the sophisticated demand of the overseas markets. But the backward linkage in rural based industries, financial limitation, inefficiency of the exporters, handicraft industry of Bangladesh, lack of design diversification and infrastructure problems obstruct.³

II. Objective of the study

The Major objectives of the present study are

- i) To evaluate the export performance of handicraft export of Bangladesh;
- ii) To identify the marketing characteristics of handicraft exporters;
- iii) To identify the potential market of handicrafts abroad;
- iv) To identify the problems of handicraft export of Bangladesh;
- v) To determine the export market development problems of handicrafts;
- vi) To recommend ways and means for better prospects.

III. Methodology

The present study identifies the problems in terms of production and export of handicraft products and to highlight their various potentials and prospects for the export which lead to the economic growth of Bangladesh. The study has been conducted through sample survey interviewing method.⁴ Among the handicraft exporters, 9 units were selected covering 25%

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samples to assist in procuring the representative information as per the research objectives and were then interviewed. The exporters were selected on the basis of random sampling and a structured questionnaire was used to collect information from the respondent firms on the relevant aspects of export marketing. The analysis of the collected data is provided under the following headlines.

IV. Findings

4.1 *Infrastructure conditions of the handicraft industry in Bangladesh*

4.1.1 *Organisational Pattern of the Company*

The data collected from the sample exporters reveal that during the period of 15 years from 1976-90 about 78 percent of the total respondent units started their exporting business. Unlike other commodities, various ownership patterns were evident in the handicraft export firms. The selected sample expose that their ownership patterns may be divided into four classes. The ownership pattern of the respondents are illustrated below along with their percentage:

Table 1

Distribution of Organizational Pattern of the Respondent Firms.

Ownership Pattern	No. of Respondent	% of total respondent firms
Single ownership	3	33.33
Partnership Business	2	22.22
Private Ltd Co	2	22.22
Cooperative exporter	1	11.11
NGO	1	11.11
Total	9	100

From the above table it may be found that no public limited, Co. is involved in handicraft export Business. In fact, the handicraft export firms are yet to be organised as large-scale business i.e. Joint Venture or Joint Stock Company.

4.1.2 *Capital Structure*

It has been found that the handicraft export firms operate with low level of capital investment. The collected data depict that more than 44% firms invested capital of less than 10 lacs and 11% firms capital range 10 lacs to 25 lacs, 22% firms employed capital varying from 25 to 50 lacs and 22% firms belongs to more than Tk.1 core capital. However, the NGO operations have been facilitated by foreign financing and credit.

Table 2

Distribution of Capital size of the Interviewee Exporters

Capital limit	No. of Respondent	Percentage
Up to 10 lac	4	44.44
10 to 25 lac	1	11.11
25 to 50 lac	2	22.22
Core and above	2	22.22
Total	9	100

The respondents informed that about 56% of them are involved in manufacturing, exporting and retailing in internal market, 44% are associated in manufacturing, wholesaling and exporting.

4.2 Marketing Mix Analysis of Handicrafts in Bangladesh

4.2.1 Handicraft products in the country

In Bangladesh, various handicraft items are producing, which are mainly classified into mechanised or non-mechanized, manual or non- manual groups. The detailed categories of handicraft products are illustrated below.⁵

- i) Cane/ Bamboo/ Straw Crafts: Basketwares.
- ii) Jute Handicrafts: Plant hanger, door-string, door mats, place-mats, coasters, hammock, bedroom and beck stepper, shopping bags, dolls, Jute shoes and sandle etc.
- iii) Leathercraft: Wallet, handbags, belt, key case, coin-purser, ladies purse, passport cover, photo-frame, etc.
- iv) Embroidery and Needle Point Products: Nakshikantha, table cloth, place-mat, napkin, cushion paper, tapestry, crocheted products, ladies purse, spectacle case, bed cover etc.
- v) Clay Items: Terra-cotta dolls, animals and bird's figure, flower vase, decorative wall piece, pin and pen holder etc.
- vi) Coir Products: Door-Mates, floor-mates, runner for the floor, etc.
- vii) Shell Products and Pink Pearl: Jewellery figure, jewellery box, spoon, decorative items, hairpin, broach etc.
- viii) Wood Craft: Toy kitchenware, animal's figure, wall decorative piece etc.
- ix) Handloom Products: Lungi, bedspread, place mat, dhuti, jamdani scoll, tablecloth etc.
- x) Rajshahi Silk: Placemet, scroll, and scarf, cushion cover, tapestry etc.
- xi) Brass: Flowerpot, candle, stand, figure (Birds and animals), bells door rings decorative plates, etc.

From the above list of handicrafts cane, bamboo, straw, products, Jute Handicrafts, leather-craft, embroidery and niddle-work, shell-products, woodcraft and Rajshahi-silk are exportable and others are for domestic use. The analysis shows that raw materials used in handicraft items are, manual and mechanised products made by multitype raw sources i.e. cane, bamboo, silk, clay, leather nails, pasting solution, fabric, cotton/ synthetic yarn, raw jute's textile softener, dyes, yarn, chemicals etc.

It has been exposed that, the respondents are also involved in the export of many other items of handicrafts like Jute shoes, Textiles, Leather, Clay, Cane items, Nakshi Kanta, Jamdani, Straw baskets, Shell, Wooden items, Bamboo, Cane Baskets, Toys, X-mas decorating items etc. and countries of export are China, Vietnam, France, Phillipine, U.S.A, Germany, Canada, Japan UK, Sweden, Australia, Italy, Belgium, Netherlands etc.

Moreover, the respondents reported that 55.56% export contact conducted through personal direct mailing communication and 22.22% by EPB, 22.22% by trade fair and 22.22% by trade publication respectively. In spite of severe price competition in international market of handicrafts, the exporters have been trying to face the situation through diversification in product quality.

Table 3
Distribution of Competitors as Reported by the Respondent Firms.

Name of the Competitions (Country)	No of Respondents	percentage
Philippine & China	8	88.89
Indonesia & India	4	44.44
Thailand	3	33.33
Vietnam	2	22.22
Malaysia and France	1	11.11

From analysed data it is found that, 88.89% sample exporters view that their competitors are Philippine and China and 44.44% report that they are to compete with Indonesia and India and the other competitors are Thailand (33.33%), Malaysia and France (11.11). Moreover, 55.55% exporters also opined that the competitor's products are superior in terms of quality and 44.44% exposed that competitor's products are more acceptable in terms of price. Almost all the exporters informed that the foreigners buy our handicrafts because of innovative and diversified quality and somewhere the prices are reasonable. About 22.22% exporters reported that they collect their export items from other manufacturing firms according to the buyer's specification.

In the opinion of respondent exporters, 44.44% reported that skilled worker's scarcity, 33.33% reported that inadequate raw materials, 22.22% reported that irregular supply of electricity and 11.11% reported that banking formalities complexity are the major problems of producing handicraft items in their plants. But when the exporters are to collect their export items from other firms, quality could not be maintained and scheduled delivery could not be ensured and hence they lost their reputation and trust in the international market.

4.2.2 Pricing policy

Price is a prime element of marketing mix. In international market prices of handicrafts don't have specific trend. It is very fluctuating due to severe competition. The price is usually determined keeping in view foreign demand and competition criteria. All the respondents' view that our production costs are low in comparison with other exporting countries, but our quality has yet to be diversified. It has also been found that the component of production costs varies one unit to another.

The analysis of collected information indicates that 44.44% respondents cost of raw materials 41% to 50%, 33.33% firms labour cost 11% to 20% and 66.67% firms overhead cost 0% to 10%, 88.89% firms transport cost 0% to 10% and 44.44% firms other cost 0% to 10% respectively. Hundred percent respondents informed that many other costs can be reduced by better management practices like wastage of raw materials, labour cost, overheads etc, but 11.11% exporters opine that costing must be done on facts only, not on estimate. All the experts also view that the foreign markets of handicraft items are prospective; hence we should produce, as per imports' need and specifications, adaptive changes in styles and design as per the buyers demand. Hundred percent exporters have reported that they have not been assisted by Export Credit Guarantee Scheme, but they opine that export earnings from handicrafts could be increased by 10 to 50% by providing quality items at fair price. But all the respondent units like to perform their transaction by L/C. In spite of this, 22.22% exporters expose that they supply their goods on credit against documents or 40% advanced and the rest on cash after delivery.

But the export of handicrafts possesses better prospects due to low labour cost in the internal market and manufacturing. There is good demand for some high valued handicrafts in international markets such as bed sheet and bed cover in wrapped design and check, jamdani, silk scarf, garod cloth, wall hanging, noksikatha, jute shoes, and products respectively. On the other hand, some exportables are such as plain gray fabrics, cushion cover, designed Wallet, grass or straw products, wooden goods, bamboo-cane and reed made goods, clay, items, leather handicrafts etc.

4.2.3 Channel of distribution

The channel of distribution in respect of handicraft export items is not in lenier process. Exporters devise their channel for efficient marketing operations and also develop their distribution properly. Despite the facts, NGO's craft items are being distributed to foreign market through their own network. In respects of other exporters, they depend on buying house to distribute their products to foreign market. Thus it appears that 77.78% respondents use road transport to move products from internal production centre to sea port and air port, and 22.22% handicrafts export are performed by road transport. To export in India, 88.89% exporters use shipping transport and 66.67% exports are performed by air transport as regards urgent delivery. Cent percent respondents informed that, the importers bear the transportation cost and take the risk involved in transportation. The exporters also prepare relevant documents like invoice letter, packing list, C&F, XPL, GSP etc. exporting formalities when and where these are necessary. 22.22% exporters reported that fungus and insects have affected their stored items, which has been creating problem in exporting. From the analysis of collected data it is found that 100% handicraft exporters opine that Bangladesh Standard and Testing Institution standards are yet to be recognised by other countries, and 11.11% exporters have reported that the organization is not effective in rendering proper services. The respondents also view that the Chamber of Commerce is an important helping hand for asking inquiry report by importers requirements, but the association of handicraft exporters such as Banglacraft helps the exporters for policy recommendation and bargaining. All exporters view that Export Promotion Bureau has been playing a unique role in the development of export market by fair participation and relevant documentary help.

4.2.4 Promotion Policy

As regards of promotional activities, a firm gets its chance to communicate with potential customers, to "Beat the drum" about its products.⁶ But individual promotion efforts are limited in the case of handicrafts. Exporters promote their products by international fair and personal contact. Sometimes international buyers are informed by foreign mission or through exporters' association. The analysis shows that the trends of increasing fair participation, number of respondents and their percentage refers to stern competition in the international market of handicrafts. The respondents have reported that their training programs have not been adequate for better skill development. From the selected exports, only 66.67% firms have participated in various training programs either in the country or abroad during the period from 1976 to 1994. Despite the facts, the training programs have not facilitated all handicraft exporters, which was organised either in the country or outside the country. But only one unit has own training centre and the organization regularly organises training program only for self-skill development and promoting market. But the exporters association "Banglacraft" has been trying to organise many other training and promotion program. For example, "Agreements for the fourth phase cooperation program between ZDH/TA and FBCCI, DCCI, CCCI, Banglacraft and National Association of Small and Cottage Industries, Bangladesh (NASCIB) signed for the year of 1994 program of activities."⁷

4.3 Export Trends of Handicrafts from Bangladesh

The handicrafts of the country are being exported since 1972-73. The export earnings from the handicraft products have been increasing quite steadily during the past decades. About Tk.3 million worth of handicraft exports was made in 1972-73, and the total earnings from this sub-sector in 1991-92 was Tk.332 million, 211 million in 1992-93 and in the total export earnings of Bangladesh, handicraft contributed .01% in 1972-73 and .44% in 1991-92, and .12% in 1997-98. Despite fluctuations in export earnings, it did not exceed 1% of total export earnings of Bangladesh during last 25 years. The export trend of handicrafts is shown below along with percentage figure of total export earnings of Bangladesh.

Table 4

The Trends of Handicraft Export, and Its Share to Total Export of Bangladesh (Tk.'000')⁸

Year	Total Handicraft Export	%Change	Total Export of Bangladesh	% share of total
1972-73	306		12710382	0.01
75-74	9591	3034	5516760	.02
80-81	56356	82.98	11564374	.49
85-86	57369	1.80	24314015	.24
90-91	182989	218.971	60560881	.30
91-92	331896	81.37	75908560	.44
92-93	210790	-36.49	92575400	.23
93-94	292051	38.55	100975943	.29
94-95	259216	-11.24	139284577	.18
95-96	262241	1.17	158790869	.17
96-97	241106	-8.06	188130400	.13
97-98	271984	12.81	234163800	.12

From the above table it is found relatively the percentage figure of 1980-81 is better (.49%) than all other export year which was the highest export in the context of percentage of handicrafts of Bangladesh. With the rising world population and increasing standard of living, the use of handicrafts in foreign market has been growing with the span of time. In spite of these, Bangladeshi craft items in world market shows decreasing trend and hence, the item has not been enlisted in world market exporters (ITC) list.

Table 5

World Exports of Handicrafts.⁹ (value in million US\$)

1991	107713.92	5.19	.05
1992	17225.74	8.72	.05
1993	17437.17	5.43	.03
1994	19469.70	7.33	.04
1995	212559.45	6.46	.03

With the slow increase and decrease trend of handicraft export in the world market shows that the Bangladeshi handicrafts have not been successfully entered into the sophisticated world markets during the post-liberation period. The table reveals that Bangladesh's share in the global market of handicraft is less than one percent in every exporting year.

Table 6

Distribution of Major importing Countries of Handicraft Products from Bangladesh (value '000' US\$).¹⁰

Countries	1995-96	%	1996-97	%
U.K	1369	21.35	944	16.67
Italy	487	7.60	786	13.88
U.S.A	1575	24.56	725	12.81
Germany	562	8.77	694	12.26
Japan	415	6.47	422	7.45
Netherlands	336	5.24	319	5.63
France	251	3.92	174	3.07
Australia	84	1.31	166	2.93
Austria	218	3.40	162	2.86
Canada	158	2.47	133	2.35
Spain	55	.86	131	2.31
New Zealand	63	.98	107	1.89
Belgium	243	3.79	95	1.68
Sweden	20	.31	85	1.50
Denmark	98	1.53	79	1.40
others	478	7.44	640	11.30
Total	6412		5662	

From the analysing data and above figure it is found that the major handicraft importers from Bangladesh are U.K., Italy, U.S.A, Germany, Japan, Netherlands, etc. Moreover, U.K. Italy, U.S.A, Germany alone imports more than 50% of the total handicraft exports of Bangladesh.

4.4 Policy Support of the Industry

In the field of handicraft export Govt. has no special policy support for expanding the export market. No special attention was given for its development. The individual helping institution like Banglacraft has been bargaining to impose special policy support to the handicraft export.

Planning policy support: In our fourth five-year plan (1990-95), small and cottage industry policy is supported as follows.¹¹

With a view to realising the employment generation and poverty alleviation objectives, the Fourth Plan shall, cottage and rural industries. The public sector program for these category of industries will concentrate on promotional measures such as development of infrastructure facilities (e.g. industrial estates), training, extension and research, market promotion and availability of institutional credit and equity support. The implementation of program in these sub-sectors will extensively benefit people of the lower income groups including the poor and disadvantaged. Export promotion Bureau has been assigned with the

responsibility to promote international market of handicrafts and the institution assists the said exporters by ascertaining the foreign currency limit and international fair participation.

Group-wise allocation for small and cottage industries under the private sector investment programme during fourth five-year plan (1990-95) is given below:¹²

Table 7
Distribution of Allocation for Small and Cottage Industries during Fourth Plan (Tk. Crore)

Product Group	Allocation			
	Small Industries	%/Total allocation	Cottage Industries	%Total allocation
1. Food and allied Industries.	259	20	15	22
2. Textile products	194	15	11	16
3. Jute products	10	.76	1	1.5
4. Forest products	50	4	11	16
5. Paper products	66	5	2	3
6. Leather products	54	4	5	7.5
7. Chemical products	207	16	3	4.5
8. Non-metallic products	16	1.24	3	4.5
9. Electrical Industries	323	25	15	22
10. Service Industries	30	2.5	--	--
11. Others	83	6.5	2	3
Total	1292	100	68	100

Banglacraft is an association of handicraft exporters whose policy supports is designed as.¹³

- i. Product and design development.
- ii. Training for skill development.
- iii. Training for product development.
- iv. Quality control and packaging.
- v. Marketing both local and foreign markets etc.

V. Problems Related to the Handicraft Export

In the field of handicraft industry, export marketing is faced with numerous problems. The industry is an old one. But problems have not been realised of overcome during the long period. Now let us discuss the major problems as reported by the surveyed exporters.

5.1 Inadequate infrastructure facilities

From the observation, it has been noted that the outdated manufacturing equipment's, traditional production system, unreliable electricity supply, under-develop tele-communication network are the basic infrastructure hindrances in the growth and development of handicraft products in international market.

5.2 Lack of qualified person's involvement

In the field of handicraft export business, major participants are unqualified and unskilled or non-trained. Some of them are highly educated but not skilled and remaining persons do not have adequate managerial capacity and initiative.

5.3 Lack of adequate finance

Limited financing capacity creates problems of production and marketing of handicraft products-both at home and abroad. 55.56% exporters are involved in the production and

marketing of handicraft products who have very limited capital basis. The said small handicraft producers or exporters can not provide or are not able to take any loan from banks or any financial institution. They also reported that they do not have the capacity to manage the required loan or financial assistance from the banks.

5.4 Design limitation

The collected information exposes that the latest design is our prime need for handicrafts. 88.89% exporters view that our handicrafts are not diversified products due to paucity of skilled technocrat in this respect. So we can not compete in international market effectively due to this limitation.

5.5 Lack of proper training and research facilities

The data uncover that 22.22% exporters involved in the production of handicraft products have very little education and training. So it is not possible for them to adopt with the changing market conditions. They also have no research facility and quality and training experience in reality.

5.6 NGO's quota, condition, facilities and domination problem

It has been reported by 22.22% exporters that there are some NGO's which are patronised by other foreign countries and those countries collect their quota or needed handicrafts by the organization or selected media. As a result, the local traditional exporters can not get the chance of Penetrating into respective foreign market. These conditions, facilities and domination impede the development of handicraft export.

5.7 Inadequate Government Patronage

Reportedly, there is a serious dearth of Government's policy support to handicraft industry. Moreover, bureaucrats are also not sincere in executing the laid down policies leading eventually to problems for the handicraft export firms.

5.8 Foreign tariff and non-tariff barriers

The handicraft export firms are to confront problems arising out of foreign tariff and non-tariff barriers.

VI. Prospects of Handicrafts in International Market

In spite of small export earning of the handicrafts, its future prospects are also bright in respect of diversification and normal use of the items. The prospects of the handicraft products in external market are discussed below:

6.1 Traditional use of the products creates long term prospects

All exporters view that the Handicraft products are related to the cultural heritage of the country. It bears cultural symptom, system, and normal position of the society. So the long-term culture based handicrafts items are used traditionally in internal and external market and it has better prospects in the international market

6.2 Bright employment opportunity

The exporters opine that the development of handicraft industry may help create bright employment opportunities. The handicraft exports take the crafts-men to the international arena, in the process, create opportunities for employment for hundreds and thousands of them. So form this context handicraft export is very much prospective for internal socio-economic strength.

6.3 Usefulness of unskilled and low cost labour

Being a household industry, handicraft export provides employment opportunity to family labour, unskilled labour and lower cost labour particularly women who would otherwise have

little employment opportunity. This creates enormous prospects to continue handicraft exporting.

6.4 Small initiative and small capital can be absorbed in handicraft

Handicraft industry needs very small capital investment and small infrastructure facilities for utilising very small capital equipment, So handicraft export will be most significant from the view of export value and small capital arrangement.

6.5 Monopoly use of the product

Natural resources based handicrafts have a monopoly use because of their very little alternative use. Wood, bamboo, cane, straw, etc. are the natural products, which are basic materials for various handicraft items. So the world market of handicraft product is very much prospective.

VII. Recommendations

From this analysis all the important dimensions of the handicraft exports of Bangladesh, it is found that there are long and short-term problems and prospects for this product. In the context of export market prospects of handicrafts products some recommendations are highlighted below:

7.1 Product identification and diversification

First priority should be given to the identification of prospective handicrafts for international market and product diversification having future potentials in the different types of handicraft. Moreover, existing international market possibilities, newer products and diversified products should be included in the exported list.

7.2 Quality control and product standardization

Cent percent exporters opine that the handicraft product quality and standard are also the basic identification mark in international market. To fulfil the foreign buyers tastes and preferences, high quality products and their aesthetic values will have to be nourished. So quality and standard of the handicrafts should be improved by its colour, size, design, new ideas, uses etc.

7.3 Infrastructure development is essential

The institutional development and infrastructure development of the handicrafts should be facilitated by skill development program, classical drawing program, quality control and standardisation of the items, technological improvement, technical know-how involvement.

7.4 International marketing development

Marketing of handicrafts in international market is the most unique and important factor for our exporters and export market development. Towards this end, the following measures may be taken:

- i) Diversity and quality should be improved to enter into most competitive world market.
- ii) Popularisation of the handicraft in the world market is made through efficient promotion in the export markets.
- iii) To promote the crafts internationally, international media may be used with the support of government agencies.
- iv) Bangladesh Govt. should take Missionary steps and policy in the foreign country Mission could use various craft items to decorate the respective offices and the Mission should display the crafts and they should try to identify the prospective markets through systematic efforts.
- v) Demonstration of the handicraft products in international trade fair is and important

- vi) factor. Govt. should offer reasonable fair participation terms and conditions.
Exporters
- vii) proper representation from the sector in terms of both products and personnel's
- viii) could prove more effective.

7.5 Generalized the exportable surplus and price

Reasonable price condition needs tradable and exportable surplus of handicrafts. In our handicraft exportable exporting, prices are reasonable and generalized, so exportable surplus should be available.

7.6 Reasonable financial facility

Smaller and larger manufacture cum exporters of handicrafts need co-operation and help in financial aspects. The financial institution should provide reasonable financing and accommodation and should follow the Govt. finance policy and help exporters without making any classification.

VIII. Concluding Remarks

Handicrafts represent a potential non-traditional item of Bangladesh. It enjoys good market in the industrialized west. To expand the export earning of this item, it is necessary to take systematic steps to develop the product quality and design, explore the potential export markets through efficient marketing promotion and to improve the managerial skill of the handicraft export firms.

In Bangladesh there are plenty potential handicraft items, which may be systematically, developed to cater to the needs of fashionable foreign buyers. In view of globalization and rising trade liberalization it is necessary to increase the competition ability of our handicraft export firms. We must be able to offer handicraft products of modern design and of superior quality at competitive price to win the patronization of foreign buyers. Our Government should play a vital role to support the handicraft export firms in their product and market development efforts. A sound training program to create skill hands and managerial confidence is enviable to porter the export development efforts. It is hoped that he export of handicrafts will be able to contribute more to the national export development through the coordinated efforts of export firms, NGO's and Govt. Agencies.

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THE PRACTICE OF WORKERS' PARTICIPATION IN MANAGEMENT: A CASE STUDY OF KHULNA NEWSPRINT MILLS LTD

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Abstract: The present study investigates the practice of workers' participation in management of the Khulna Newsprint Mills Ltd. Revealing that the extent of workers' participation in the public sector industries is yet limited, the study puts forward steps necessary to contribute to increase workers' participation in management of the public sector industries, particularly in the Khulna Newsprint Mills Ltd.

I. Introduction

Every one in an organization, from the least-skilled labourers to top level managers, makes decisions. Least- skilled labourers decide where to put the shovel to remove dirt from the ditch. On the other hand, the top-level managers have to decide the mission and objectives of the organization. Decision-making is a primary source of power in an organization and on the basis of this, an organization is considered to have laid between two extremes from autocracy to democracy. "All decisions, one individual" is autocratic while "all decisions, all individuals" is called democratic. Other terms that can be used to explain the continuum between these two extremes in which the organizations lie are autonomy and participation. At one extreme all decisions are made by one individual-autonomy extreme, and at the other extreme all decisions are made by all members of the organization-participation extreme.¹

With the quest of people to increase productivity in an organization the participation aspect has been getting more emphasis day by day. Thus, the concept of participatory management received enormous significance to the intellectuals, organizations and management theorists and practitioners, and the involvement of workers in decision making process has been considered important in increasing the productivity of an organization. When workers are allowed to participate fully, they feel to have contributed to the decision making process and feel oneness as well as enthusiastic to implement the decisions. Nowadays, workers participation in management, as an important part of human relations, is deemed to be an important tool to boost up their motivation.

Through participation in management, workers are given an opportunity to exercise their initiatives and to make creative suggestions while making decisions regarding the achievement of goals. As a result, the workers feel encouraged to accept the onus of performing their respective part of activities towards the accomplishment of end results. The term participation is a widely used term. The meaning of participation has been often distorted because of its too widely use. The dictionary meaning of this term is 'the act of having a share or of taking part'². To define "participation is not so easy as it means to be. It is very difficult to have an exhaustive definition of participation and as such McGregor duly argued that participation is one of those misunderstood ideas that emerged from the writing and experiments of renowned writers of Human Relations School".³ According to Douglas McGregor "Participation consists

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basically in creating opportunities under suitable conditions for people to influence decisions affecting them. That influence can vary from a little to a lot... (participation) is a special case of delegation in which the subordinate gains greater control, greater freedom of choice with respect to his other responsibilities, the term participation is usually applied to the subordinate, greater influence over matters within supervisors responsibilities".⁴

From the above definition it is clear that in order to make participation a success there must be a suitable conditions which imply (i) enough time before the participation takes place, (ii) potential benefits greater than costs, (iii) relevance to employee interests, (iv) adequate employee abilities to deal with the subject, (v) mutual ability to communicate, (vi) no feeling of threat to either party, (vii) within the area of job freedom.⁵

Pateman has with great precision clarified the meaning of participation. According to his opinion "Participation must be participation in something, in this case participation in decision making".⁶ Probably most suitable definition of the term participation has been given by French, Isreal and Aas: "Participation refers to the process in which two or more parties influence each other in making certain plans, policies and decisions. It is restricted to decisions that have future effects on all those making the decisions and on those represented by them".⁷

According to Arun Monappa and his associate the participation seems to have involved the following elements:

- 1) The amount of verbal interaction between a supervisor and his subordinates.
- 2) The degree to which a supervisor performs his role in a group- centred way.
- 3) The degree to which a supervisor is active in making decision and setting goals for his work units.⁸

In spite of the variation in the meaning of participation, it has been taken for granted that participation means sharing the decision making process with the rank and file workers in an appropriate manner.

Workers' participation acts as an important aid to an organization in performing all the activities in a shared manner which results in good industrial relationship, increased productivity etc. It helps in devising a mechanism to resolve the conflict and reduce differences between the labourers and the management, and hence, leads to achieve a constructive co-operation among the individuals involved with the production process.

After the independence of Bangladesh, a seven-member committee headed by Kamruddin Ahmed was appointed on 19th February, 1972, to suggest immediately operational measures towards workers' participation in the management of industries and sharing of the fruits. On May 30, 1972, the Nationalized Industries Division submitted a policy paper on workers' participation and incentive systems, on the recommendation of the Kamruddin Committee, to the Cabinet. The paper submitted to the Cabinet emphasises the following issues:

- Including two representatives of the workers elected from amongst them within the enterprise on a five-member management board.
- Setting up of worker-management council for discussion of day to day problems of the factory;
- The principle of profit sharing and basis of profit sharing was spelt out ;
- A wage board rationalizing the wage structure of the nationalized sector was proposed;
- A moratorium on industrial action and collective bargaining was to be imposed once the policy came into effect;
- Trade union, were, however, to continue to discharge functions other than those of collective bargaining; and

- Decisions were sought on the pace and extent to which workers' participation should be introduced. It proposed to cover all public enterprises in the industrial sector, except those with foreign participation.⁹ Later on, in the light of the above points different workers' participation measures have been materialized gradually by the government. The number of researches made to date in this field is not so satisfactory. Notables are the work of Mohammad Mohabbat Khan¹⁰ and Muzaffar Ahmed.¹¹

Workers are the main factor of production. Now, workers are treated as an important partner of the production venture and as such the opinion of the workers are considered to be of utmost importance with a view to ensuring increased productivity, sound industrial relations, situation and effective functioning of an organization. If importance is given to the workers in making decision, the cost of control also becomes least. The Khulna Newsprint Mills Ltd., is the largest paper mill in our country. Moreover, it is a labour-intensive-manufacturing unit. Workers' participation aspect plays an important role in the smooth functioning of the mills undoubtedly. What is the present practice of workers' participation in different decision making process bears importance to the scholars, academics and policy makers concerned. Therefore, this study is an attempt towards getting familiarity with the present practices of workers' participation in management in the Khulna Newsprint Mills Ltd.

II. Objectives and Methodology

The purpose of the study is to investigate the practice of workers' participation in management of the Khulna Newsprint Mills Ltd., Khulna, Bangladesh. The more specific objectives of the study are:

- i) to assess the present situation of workers' participation in management of Khulna Newsprint Mills Ltd., Khulna;
- ii) to identify the nature and types of participation;
- iii) to analyse the problem areas confronting workers' participation in Khulna Newsprint Mills Ltd.
- iv) to suggest some possible steps to increase workers' participation in management of Khulna Newsprint Mills Ltd.

The present study is confined to the Khulna Newsprint Mills Ltd, Khulna. Both primary and secondary data have been used in this study. Two sets of Bangla version structured questionnaires have been used for two different groups of people, i.e, management personnel and workers in order to collect primary data. The sample size of the study was 70 persons. Of which 20 were from different managerial positions ranging from top to operative managers, i.e. managers, administrative officers, labour officers, account officers, senior supervisors etc. and the rest 50 were workers. Information schedule has also been used. Secondary data have been collected from different journals, publications, periodicals published from government and non-government agencies including the official records and accounts from the mills under study.

III. A Brief History of Khulna Newsprint Mills Ltd.

Khulna Newsprint Mills Ltd., the only newsprint manufacturing enterprise in the country, is located in Khalispur town of the district of Khulna, and is about 80 miles and 30 miles away from the Bay of Bengal and Sundarbans respectively.

It was established by the then Pakistan Industrial Development Corporation (PIDC) in 1959 to produce newsprint by using Gewa wood, growing abundantly in Sundarban forest. The survey of setting up the Khulna Newsprint Mills Ltd. was held in 1952, under the direct supervision of PIDC. In 1954, M/S Sandwell & Co. of Canada was appointed to conduct the

feasibility study of setting up a paper mill using the Gewa wood from Sundarban as raw material. PIDC started its implementation in co-operation with Canada in 1957. In August 1959, the mills started its commercial production with two paper machines (PM—1&2) having a total production capacity of 35,000 tons of paper per year. The production capacity was increased in 1965 to meet the increased demand of newsprint in the country. Another newspaper machine (PM-3) was installed with a capacity of 10,000 tons per year and the production capacity of paper machine No-1 was increased from 1200 feet to 1600 feet per minute.

After liberation it came under direct supervision of Bangladesh Paper and Board Corporation at first and then under Bangladesh Chemical Industries Corporation (BCIC) in July 1976. Since then it has been incurring losses, except for meagre profit made in '82-83, 1983-84 and 1984-85 and resulted in the accumulation of huge losses.¹²

IV. Workers' Participation in Management: Present Practices

For the purpose of better understanding of the workers' participation practice in management of the industrial undertaking in question it is imperative to discuss different forms of participation that exists in the different quarters of the world before we discuss the state of workers' participation in the mills under study and the followings are found to be noteworthy.

4.1 Joint Consultative System: Joint consultation is characterised by the management-worker relationship where the workers and their representatives do not have the authority to decide matters pertaining to the enterprise and its policies, rather it provides for a scope for discussion, exchange of views and expression of positions. It is up to the management to take any action in the light of discussion, as it feels better. In the Netherlands the 1950 Act describes the composition and powers of Works Council. All firms with more than 25 employees must establish a Work Council. The powers of the Council are mainly consultative in nature and participation in decision making is very limited.¹³

4.2 Profit Sharing Scheme: The Gaullist government of France in 1967 introduced a profit sharing scheme in the enterprise as a prelude toward participation, while most of the incentives from financial to non-financial recognize individual differences, the profit sharing emphasizes mutual interest. As a result, employees become interested in the economic success of their employer as their own rewards are also affected by it.¹⁴

4.3 Self-management: It is a movement beyond mere representatives and consultative forms of participation and allows the employees group to make a number of major decisions. This form provides for extensive use of group discussion, group expertise, group ideas and group influence and enjoys a large degree of decision-making autonomy.¹⁵

The self-management system is the resultant of the many events such as expulsion of Yugoslavia from the communist block, failure of centralized planning foaming dissatisfaction of the masses and the leadership crisis with the then prevalent state of affairs.¹⁶

Social ownership and decentralization of the decision making process are the two important characteristics of Self-Management System. Under social ownership property is administered and controlled by the workers themselves and decentralization in decision making process provides opportunities for workers to make decisions at plant levels.¹⁷

4.4 Co-determination System: Co-determination System existing in Germany provides the formal measures for participation of workers' representatives at top level in the management of industrial enterprises. Under this system participation ranges from the making of policy decisions to their implementations. The co-determination system consists of three bodies namely: (a) Supervisory Board (b) Management Board and (c) Works Council.

The Supervisory Board is formed with four workers representatives and four Shareholders' representatives. Then these two groups co-opt two additional members outside the enterprise, the union and the employers' organization, later on, the ten members elect an additional member by majority vote who serves as the chairman of the board. Supervisory Board determines the economic policy of the enterprise, exercises control over the Management Board and Keeps close contract with the implementation process of all these policies.

The Management Board, consisting three members appointed by the Supervisory Board, is the executive arm of the enterprise responsible for administering all activities and executing the general policies and overall programmes adopted by the Supervisory Board.

Works Council is formed through representation from both the workers and white-collar employees on the basis of their respective numerical strength. Depending on the number of employees its membership ranges from 1 to 35. The functions of Works Council are to negotiate on wages and working conditions, rules on the hiring and firing of groups, on cases of discrimination and on substantial change in the plant.¹⁸

4.5 Joint Management: Joint Management system of France is consisted of two bodies: (a) Enterprise Committees (Works Councils) (b) Tripartite Board.

The Enterprise Committee has to be set up in every enterprise where at least fifty persons are employed. The number of representatives is determined by the total number of employees at work and can vary between three to eleven. All the employees in the firm elect the representatives and the office of the representatives is tenable for two years. The powers of the Enterprise Committee include the right to receive information about finance and production of the firm. In effect, these committees have responsibilities for the administration of social benefits and grievances.

Tripartite Boards of Management, which provides the legal framework for workers participation in public sectoral enterprise besides Enterprise Committee. These Boards of Management or Tripartite Committees are organized on a tripartite basis which include governments representatives, consumers representatives and employees representatives.¹⁹

V. Different Committees of the Khulna Newsprint Mills Ltd. and their Compositions

The compositions of different standing and ad-hoc committees of the Khulna Newsprint Mills Ltd. are briefly described below:

Recruitment, Selection and Promotion Committee

Chairman	-	Managing Director (MD)
Member Secretary	-	Head of Administration
Member	-	Head of Accounts
Member	-	Head of the department concerned

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage - Management people -100%, Workers - Nil)

The above mentioned committee is a standing (permanent) committee. This committee takes all decisions concerning recruitment, selection and promotion of employees belonging to the categories of Workers, Staff and junior officers. Decisions regarding appointment and promotion of all senior and high-ranking officers are taken by BCIC. There is no opportunity for workers or their representatives to take part in decision making.

Tender Committee

Head of Accounts

Head of Purchase

Head of the concerned department (among the three departmental heads, the senior most one becomes the chairman)

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage - Management people 100%, Workers -Nil)

This committee is standing committee, can purchase goods worth Taka ten thousand in cash during emergency needs. It is seen that there are no workers or their representatives participating in the above mentioned committee. The responsibilities of this committee are as follows:

(a) Collection of Gewa wood (b) Taking decision on purchasing machinery and foreign plumps (c) Issuing tender notices and advertisements.

Participation Committee

Chairman	-	Managing Director (MD)
Member	-	Chief Engineer
Member	-	Chief Medical Officer
Member	-	Deputy General Manager (Operation)
Member	-	Deputy General Manager (M.P.I.C)
Member	-	Additional Chief Administrative Manager
Member	-	Deputy General Manager (Forest)
Member	-	Additional Chief Chemist
Member	-	Deputy Chief Accountant
Member-Secretary	-	Deputy Manager (Personnel)
Member	-	President, Khulna Newsprint Employees Union
Member	-	Three Vice Presidents Khulna Newsprint Employees Union.
Member	-	General Secretary, Khulna Newsprint Employees Union.
Member	-	Two Assistant General Secretaries, Khulna Newsprint Employees Union.
Member	-	Organization Secretary, Khulna Newsprint Employees Union.
Member	-	Publicity Secretary, Khulna Newsprint Employees Union.
Member	-	Cashier, Khulna Newsprint Employee Union.

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage -Management people -50% and Workers -50%)

The participation Committee is formed with equal number of representatives from Management and Workers, replacing thus "Work Council" (formed previously according to section 29, Industrial Relations Ordinance, 1969, as amended in 1980). This committee is ad-hoc in nature. The activities of this committee are as follows:

- i) To assists in the application of labour policy;
- ii) To gear up in acquiring production target;
- iii) To keep a good look out for reducing production cost;
- iv) To eliminate the wastage in industry ;
- v) To develop the quality of products;

It should be mentioned here that there is no provision to consult with workers in the fixation of target and quality.

Workers Participation Fund Committee

Chairman	-	Additional Chief Administrative Manager
Member Secretary	-	Deputy Chief Accountants
Member	-	General Secretary, Khulna Newsprint Employees Union
Member	-	Assistant General Secretary, Khulna Newsprint Employees Union

Source: Official records of Khulna Newsprint Paper Mills Ltd.
(Representation percentage- Management people- 50% and Workers 50%)

This committee, ad-hoc in nature, takes and implements decision about collection, distribution and control of workers welfare fund. It is seen that there is an equal representation in the committee.

Family Quarter Allocation Committee

Chairman	-	Deputy General Manager (Operation)
Member	-	Chief Accounts or his representative
Member	-	Deputy General Manager (Forest)
Member	-	Deputy Chief Operation Manager
Member	-	Deputy Chief Engineer (Civil)
Member	-	Deputy Manager (Admn.)
Member	-	Assistant Manager (Welfare)
Member Secretary	-	Assistant Colony Officer
Member	-	Assistant General Secretary, Khulna Newsprint Employees Union
Member	-	Executive Member, Khulna Newsprint Employees Union

Source: Official records of Khulna Newsprint Mills Ltd.
(Representation percentage- Management people- 80% and Workers 20%)

The main function of this committee is to allocate family quarters among staff and workers. Two workers representatives can participate in the above mentioned committee. This committee is also an ad-hoc in nature.

Canteen Committee

Chairman	-	Deputy Chief Operation Manager (Plump Mill)
Member	-	Medical Officer (one)
Member	-	Assistant Chief Accountant.
Member Secretary	-	Assistant Manager (Welfare)
Member	-	Assistant Yard Officer
Member	-	Four Executive Members, Khulna Newsprint Employees Union

Source: Official records of Khulna Newsprint Mills Ltd.
(Representation percentage-Management people -55.56% and Workers-44.44%).

All decisions concerning proper management and control of the canteen are taken by this committee. There are four workers' representatives involved as members in this committee. This committee is ad-hoc in nature.

Welfare Trust Committee

Chairman	-	Managing Director
Member	-	Deputy Chief Administrative Manager.
Member Secretary	-	Deputy Chief Chemist.
Member	-	Deputy Chief Accountant.
Cashier	-	Assistant Chief Accountant.
Member	-	Chairman, Officer Association, Khulna Newsprint Mills Ltd.
Member	-	General Secretary, Officer Association, Khulna Newsprint Mills Ltd..
Member	-	President, Khulna Newsprint Employees Union.
Member	-	General Secretary, Khulna Newsprint Employees Union.

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage : Management people -77.78% and Workers 22.22%)

This committee is ad-hoc in nature. The above-mentioned committee takes all decisions about supervision, preservation and proper distribution of the welfare fund among staff and workers. There are two workers' representatives in this committee.

Colony Discipline/Peace Committee

Chairman	-	Manager (Sales and Shipping)
Member Secretary	-	Assistant Manager (Labour Welfare)
Member	-	Assistant Manager (Store).
Member	-	Vice President, Khulna Newsprint Employees Union.
Member	-	Assistant General Secretary, Khulna Newsprint Employees Union.
Member	-	One water tester (P.P)
Member	-	One Office Assistant (Shipping)
Member	-	Junior Foreman (Mill side)
Member	-	One worker of electric lead hand.

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage: Management people -33.33% and Workers-66.67%)

The above mentioned committee, ad-hoc in nature, has been formed to maintain peace and order in the residential area of workers and other employees. This committee takes and implements decisions on matters of conflicts and quarrels by way of devising solutions in order to maintain peaceful environment in the colony premises. Two workers representatives have opportunity to participate in this committee. It is also seen that four others from the workers side have the membership in this committee.

Safety and House Keeping Committee

Chairman	-	Deputy Chief Chemist
Member	-	Additional Chief Engineer (Electric)
Member	-	Deputy Chief Engineer (Power)

Member	-	Deputy Chief Operation Manager (Chemist)
Member	-	Marine Engineer.
Member	-	Deputy Manager (Paper Machine)
Member	-	Fire Officer
Member Secretary	-	Assistant Manager (Labour Welfare).
Member	-	Deputy Assistant Super (Barker)
Member	-	Vice President, Khulna Newsprint Employees Union.
Member	-	General Secretary, Khulna Newsprint Employees Union.
Member	-	Two Executive Members, Khulna Newsprint Employees Union.

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage; Management people -69.25% and Workers -30.75%).

The functions of this committee are (a) To take measures to ensure security of the enterprise (b) To supervise, maintain and repair factory and residential buildings. There are four workers' representatives in this committee. This committee is also an ad-hoc in nature.

Training-cum-Production Centre Committee

Chairman	-	Managing Director (MD)
Member	-	Deputy Chief Engineer (Civil)
Member Secretary	-	Assistant Manager (Personnel)
Cashier	-	Accounts Officer
Member	-	President, Khulna Newsprint Employees Union.
Member	-	General Secretary, Khulna Newsprint Employees Union.

Source: Official records of Khulna Newsprint Mills Ltd.

(Representation percentage: Management people -66.67% and Workers 33.33%).

The above committee is ad-hoc in nature. There is a training cum-production centre for women, especially for the wives of workers and staff of this enterprise to train them up to produce various kinds of handicrafts during their leisure time. This production centre is directed and controlled by the above-mentioned committee. If we analyse the above mentioned committee, we can see that there is no opportunity for the workers to participate in the permanent committees. Only a few of the union representative (as workers' representatives) are included in the temporary or ad-hoc committees as members. In most of the cases, they do not have the opportunity to play important role in decision making.

VI. Participation of Workers in Management

6.1 Opinions of the Management People on Participation of Workers

Management people were asked different questions concerned with different factors affecting the manner of workers' Participation in the mills' management. The views expressed by the managers have been summarised below:

- Of the total respondents 75% think that there is a positive relationship between the workers having the training and their successful participation in decision making. They are of the opinion that if workers are imparted necessary training, they will be more able to participate in the management of the mills.
- Cent percent of the managers opine that the mill authority can not take all sorts of decisions. With the nationalization of this mill the scope of making decisions on such matters as, the setting of targets and prices, salaries and wages etc have been curtailed. Therefore, workers' participation will have little impact on the productivity of the mills.

- c. The respondents were asked as to whether there are any statutory provision for the workers' participation in decision making process. In reply to this question 90% of them expressed "yes".
- d. 65% of the respondents do not consult with the workers prior to giving instructions to the workers.
- e. About 85% of the managers and officers of the enterprise have admitted the importance and necessity of workers participation in industrial management. According to them, if the workers have the opportunity to participate the management, the following benefits can be achieved:
 - i) The motivation and job satisfaction of workers will increase;
 - ii) Production will increase;
 - iii) Effectiveness of instructions will increase;
 - iv) Working morale of workers will be higher;
 - v) Relation between enterprise management and workers will improve.
- (f) There are a few favourable opportunities for workers' to participate in the mills' management. Of course mills management shows the following causes as barriers to achieving a better workers participation in management:
 - i) Lack of legal obligations for workers to take part in management;
 - ii) Lack of educational qualifications of workers;
 - iii) Self centred mentality of workers;
 - iv) Lack of proper training of workers;
 - v) Misunderstanding between management authority and workers;
 - vi) Self-seeking mentality of workers union;

6.2 Workers Opinion on Participation in Mills Management

The responses of 50 active workers regarding their participation in management have been placed below:

- a. Cent percent of the workers replied that they did not have representation in the committee assigned with the responsibility of selecting and recruiting workers;
- b. Majority of the workers i.e., 76% of them think that there does not form any committee comprising the workers or their representatives with a view to making decisions or plans;
- c. Of the total respondents from workers a major portion, that is, 52% think that there is a positive relationship between training knowledge and effectiveness of participation. The workers are of the opinion that workers having proper training can play an important role in decision making process.
- d. 80% of the respondents expressed the views that the authority do not consult with them before instructions for work to them;
- e. About 80% of the workers think them necessary to participate in the mills' management;
- f. Of the total informants, about 80% observed objection from mills administration regarding their participation in the mills' management;
- g. 70% of the informants, think that workers' participation helps reduce labour unrest;
- h. 60% of them think that there is no legal provision of the workers for participation in decision making;
- i. According to the workers, they are not getting favourable opportunities to take part directly in this mills management for the following causes:
 - i) Ineffectiveness of government rules;
 - ii) Carelessness of the enterprise management;
 - iii) Lack of educational qualifications of workers';
 - iv) Lack of workers' training;
 - v) Lack of incentive;
 - vi) Indifference of the Collective Bargaining Agent.

The present study is confined to the Khulna Newsprint Mills Ltd, Khulna. Both primary and secondary data have been used in this study. Two sets of Bangla version structured questionnaires have been used for two different groups of people, i.e., management personnel and workers in order to collect primary data. The sample size of the study was 70 persons. Of which 20 were from different managerial positions ranging from top to operative managers, i.e. managers, administrative officers, labour officers, account officers, senior supervisors etc. and the rest 50 were workers. Information schedule has also been used. Secondary data have been collected from different journals, publications, periodicals published from government and non-government agencies including the official records and accounts from the mills under study.

6.3 Views of Workers Union Representative on Participation in Management

The opinions of the most of the representatives of Khulna Newsprint Employees Union on workers participation in management have been presented as under:

- a. The workers have no opportunity to take part directly in decision making process of the enterprise. Most of the important decisions are taken by the Head Office, i.e., BCIC. There are some permanent and ad-hoc committees in this enterprise to take some internal decisions.
- b. No workers or their representatives are included in the permanent committees. Only in ad-hoc committees, a few members of workers representatives have been included as general members. In matters of decision making by these committees, the workers representatives play insignificant roles.

VII. Conclusion

Various surveys and inquiries already carried out in Bangladesh reveal that the extent of workers' participation, especially in the public sector industries, is very limited. Khulna Newsprint Mills Ltd. is not an exception to this situation. However, the upper management of the enterprise is aware of the benefits of worker' participation in management, and have also expressed their eagerness for creating opportunities for increased workers' participation in the management of the enterprise.

It is believed that the following steps would contribute to increase workers' participation in management in Bangladesh, especially in the Khulna Newsprint Mills Ltd.:

- i) Govt. rules, ordinance, decision etc. concerning workers' participation in management should be implemented fully;
- ii) More effective avenues of workers' participation should be made in place of makeshift manner of participation;
- iii) Relations between management and workers should be improved to enhance mutual co-operation;
- iv) Conflicts between management and workers should be solved in a way to avoid misunderstanding and distrust;
- v) The workers should be gradually educated and trained to enhance their working skill as well as to deviate slowly from their self-centred mentality;
- vi) Working conditions should be improved and better working environment should be created and maintained.

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DEVELOPMENT OF SMALL AND COTTAGE INDUSTRIES IN THE CHANGING ECONOMIC REFORMS IN BANGLADESH

Rukshana Begum*

Abstract: The article analyses the present position of Small and Cottage Industries (SCI) sector and identifies the major hindrance of its development in the changing market economy. A strategic approach, for the removal of the bottlenecks faced by the SCI sector under trade liberalization is also put forward in the article.

I. Introduction

From very ancient times, by nature, the economy of Bangladesh is agricultural and rural in character. Of the total population, more than 85 percent are living in the villages and nearly 80 percent of them are dependent on agriculture as the primary source of living. But now, it is in the process of transition from a predominantly agricultural economy to a modern industrialised economy. There have been significant shifts in the structure of the economy during last two decades. The share of agriculture in Bangladesh GDP has fallen from 55% in 1970 to 36% in 1996. The share of industry in GDP increased from 9% in 1970 to 16% in 1996.¹

In respect of transmission process, Small and Cottage Industries (SCI) occupy a unique position in the economy of Bangladesh when compared to large and medium industries. The contribution to poverty alleviation of SCI sector cannot be underestimated. It has better advantages in harnessing our natural resources, employing skilled and semi-skilled labour, managing with less developed infrastructure facilities and producing goods for local market at a low cost of production disposed of economic activities, equitable distribution of income and balanced economic growth are greatly facilitated through the development of small industries to face the challenges of the new millennium.

In April 15, 1994, Bangladesh as the leader of the Least Developed Countries (LDC) signed the World Trade Organisation (WTO) agreements and entered the free market economy². In fact the market liberalisation policy was adopted in the year of 1991. In this regard government also agreed with the donors with various conditionalities and suggestions for wide ranging economic reforms, including reduction of wasteful protection and subsidizing, lowering of import tariffs and generally liberalising the trade. Accordingly government of Bangladesh took various structural adjustment programs. For a rapid growth the industrial policy provided the following incentives³:

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- regulatory complications and control will be reduced;
- a market based competitive price and interest rate structure will be developed and then will be a more equitable distribution of investable capital;
- a more harmonised industrial structure will be developed;
- a competitive and efficient banking system will be established.

In fact, the freeness of economy affected badly as a shock to the industries of Bangladesh. Experts opinion are that it is very much difficult to compete even in the domestic market with imported merchandises which were more freely available than before while the new investment tendency is very low. Maximum industrialists do not invest for production but they invest money for import of foreign goods to make more profit and avoid risk and competition. The effect of all these also fell on the small industries sector and suddenly it was realised that small may be beautiful but it is also highly vulnerable⁴. This article analyses the present position of SCI sector and tries to identify the major hindrances of its development in the changing market economy of Bangladesh and suggested some strategic approach for the removal of the bottlenecks under trade liberalisation.

Dealing briefly with the importance of the small and cottage industries sector in the economy, this paper tries to explore a non-mathematical and non-technical way, how it behaved in the global context of the overall economy and the general industrial sector growth. The survey results on small industries and cottage industries for 1991 published by the Bangladesh Small and Cottage Industries Corporation (BSCIC) in 1994 are used for reference data, extrapolated for subsequent years on the basis of other relevant information available. The sources of data are secondary in nature. These data were collected and compiled from the Bangladesh Economic Review, Industrial Policy 1991 & 1999, Fifth Five Year Plan and Other related papers etc.

II. Importance of SCI in Changing Economic Reforms

Small and cottage industries should have formed the base of its industrial structures in the light of the resource endowments and other socio-economic realities of Bangladesh. Its role on poverty alleviation is really unique. During the Fourth Five Year Plan, against the projection of 0.4 million employment generation, 0.35 million job opportunities were created. The contribution of the sub-sector to the GDP is about 5 percent. The SCI sector now employees 5 million people directly and indirectly which accounts for 82 percent of the total industrial labour force⁵. The agriculture sector is not likely to provide the required employment opportunity in the long run. The establishment of large-scale industry to offer large-scale employment is not considered to be a feasible option at the moment because of resource constraints. It is, therefore, imperative to develop means outside the agricultural sector for creation of employment opportunities- the SCI is an area where large-scale employment opportunities exist. Also the SCI can depend on simpler technologies, simple machinery and equipment and do not require very substantial energy and infrastructure inputs, need of capital and degree of skill to operate and to manage is low. Against the following arguments, the SCI has some inherent advantages:

- lower capital investment and larger employment potential at low per unit cost can be the better way of poverty alleviation;
- lower infrastructure requirement, consumption of energy & environmental risk;
- it permits wide geographical dispersal;
- simple machinery, simple production process, local resources use can be benefited to both the small local market and the large urban market; and
- relative smallness of size with its close supervision can provide better productivity.

The ministry of finance in its economic review published in June 1995 shows that small industries contribution to GDP remained stagnant at 4% while that of large industries increased marginally from 6% to 7%⁶.

Small and cottage industries also account for a significant portion of the value added generated by the manufacturing sector. Table 1 reveals that the contribution of SCI sector is comparatively higher than the medium and the large-scale industries⁷.

Table 1

Contribution of manufacturing to gross domestic products. (Take in crore)

Sector	Year						
	1992-93	1993-94	1994-95	1995-96	1996-97	1997-98	1998-99
Small and Cottage	2240.6 (2.9)	2330.2 (4.0)	2428.1 (4.2)	2522.8 (3.9)	2621.2 (3.9)	2799 (6.8)	2883 (3.0)
Medium and large	3662.7 (13.3)	4036.3 (10.2)	4488.4 (11.2)	4759.5 (6.0)	4918.9 (3.35)	5462 (11.0)	5582 (2.2)
Total	5903.3 (9.1)	6366.5 (7.8)	6916.5 (8.6)	7282.3 (5.3)	7540.1 (3.54)	8260 (9.5)	8464 (2.5)

Note: The growth rate showed in the bracket.

Source: Bangladesh Economic Review.

BSCIC survey (1990-91) as published in 1994 shows that the growth rate of small-scale industries has improved to 3.66% and the cottage industries 2.13% per annum.^{8 & 9}

A study by Michigan State University in 1987 on "Small-scale industries in developing countries: Empirical Widens and Policy Implication" shows that small-scale industries account for about 50% of the total industrial employment studied about 14 countries where the mean of 71% of all industrial employment was generated by small-scale industries¹⁰.

Under such situation massive efforts are to be given in the changing economic policy for promotion of SCI to capture its beneficial potentials.

III. SCI and Changing Economic Reforms

After the signing of the WTO agreement, the government of Bangladesh is now going through the rules and regulation of WTO. All types of foreign goods (SCI or large industries product) are now available everywhere in the Bangladesh's market. Domestic products are in tremendous stage of competition in respect of price, quality, and durability. As a result, some domestic small and cottage industries have already become seek. The market is very competitive. But the characteristics of our SCI entrepreneurs according to their formal

education and on the job training, years of experience and record keeping practices indicates their poor ability for management skill. But with the changes of trade globalisation the product preparation for export purposes maintaining the quality standard, specifications are yet to be studied. Because most of the proprietors' time is devoted only to produce the goods and services. The management and marketing activities account less than 15% of their time (The BIDS study conducted in 1981 carrying 11 thanas).

Government also fixed a target for SCI sector contribution to GDP in 1994-95 to be raised (after the signing of the WTO) to 7.51%. Also there are in industrial policy, 1991 made lot of promises in support of SCI, which remained largely unfulfilled. As a result, the fixed target of SCI contribution to GDP has not been achieved.

In the wake of liberalisation after 1991 upto 1995 average unweighted tariff on inputs dropped from 57.5% to 25.9% for all imports and the import weighted tariff dropping from 24.1% to 21.4% (Ministry of Finance, Economic Review, 1995).

Average tariff in Bangladesh is lower than other neighbouring countries. Simultaneously with the reduction of import tariff quantitative restriction are also being gradually phased out.

Under the open market, the nature of the needs for goods and services to the people are rapidly changing. But their supply from local source is not developing fast, regular and black marketing imports are hampering the local growth of appropriate technology required by the SCI entrepreneurs¹¹.

In spite of these, the evidence also supports the view that the international market could be a large component of demand for some special types of traditional SCI products. The only detailed study in this area has been undertaken by Huddle Ho, who examined the international demand for 81 different 'culturally-oriented' products. The Michigan State University study of 1987 also tried to identify the foreign demand of small enterprise goods and services in the export market. This study indicates that exports typically do not provide a major source of demand for small-scale enterprises. Although exports may have accounted for as much as 10% of total small product sales in Korea 1975 (Ho, 1982), approximately 20% of the total production of the Ghana (Tie Dye) industry is sold abroad (Chula, 1985). In Jamaica, virtually all crafts are exported (Fisses, 1981), while in India handicrafts and handloom commodities accounts for 6% of the country's values of export. Indeed, for many countries the vast bulk of the products of handicrafts industry are exported. Such studies would help to establish policy and program and select of cultural goods to take full advantages of international market.¹² Bangladesh has a world wide demand for Jute and Jute products, handicrafts, tea, shrimps, ready-made garments, leathers and leather products, *grameen check*, handmade cloth, silk etc. To promote our export oriented goods in global market small and cottage industries sector must be modernised.

IV. Problems of SCI in the Changing Economic Reforms

The changing economic reforms of Bangladesh came as a shock to our industries. Many found it really difficult to compete even in the domestic market with imported goods which were more freely available than before while new investment remain shy. The effect of all this fell on the SCI sector also. Suddenly it was realised that small may be beautiful but it is also highly vulnerable. The structural adjustment and various reform measures achieved many laudable macro economic gains but the SCI sector now are facing various problems. The main problems are:

Lack of Knowledge about International Market

The characteristics of formal education and on the job training, years of experience and record keeping practices indicated the ability for management skill of the entrepreneurs of SCI sector. Even most of them do not have the information about WTO rules & regulation regarding export, trade, Licensing, specification, supply, inspection by international surveyors, sanitary regulations, standards, quality measures, packaging, BSTI rules and relevant ISO-9000, 9001 etc. proper technology and production process.

Traditional Technology

Under free market the SCI sector growth is mainly dependent on market-cum-technology factors and technology innovations. In most of the cases they do not have the access to technology innovation which suits to their needs. Even if the SCI sector is able to identify their needs for technological improvement they do not have the resources to undertake most of the innovative ideas. So, this sector used to practice traditional techniques of production and management practices. As a result SCI sector cannot reduce the production cost and improve the quality of products in the perspective of international market.

Marketing Problems

The SCI sector needs institutional support for marketing assistance, infrastructural inputs and subsidised credit. Lack of institutional assistance for marketing this section cannot pertain to guidance for newly emerging marketable products.

Insufficient Credit Facilities

Most of the banks and financial institutions are suffering from trained manpower for making appraisal and monitoring projects of SCI sector. The SCI are facing the problem of finance confronting of both the fixed capital and the working capital to compete with the international market.

Absence of Subcontracting Culture

In the absence of product manufacturing through subcontracting culture, our SCI sector cannot introduce the system of "package deal" for the international market.

Lack of Proper Training

The entrepreneurs of SCI sector started their business of their fathers, in their own birthplaces and doing the business themselves. Hereditary skill transfer and learning by doing have their limitations in the production process and management practices. So, continuous training is also needed for development of entrepreneurship, management and marketing skill, upgrading production scales, cost and quality control penetrating new market and export and such other matters.

Lack of Skill

Most of the SCI sector learns their skill by hereditary. They do not have any formal or informal institutional training of skill development. At present a lot of sporadic activities are going on to address some of these needs but they need to be enlarged, systematized, coordinated and vastly improved in quality.

Identifying Investment Opportunities

Considerable information and work is involved in finding out the local availability of raw materials, labour, skill, market etc. to draw up bankable project proposals which are normally beyond the capacity of the prospective of the entrepreneurs of SCI's. The present usual practice of copying others blindly and crowding a sub-subsector has been often counter-

productive. So, SCI sector suffered to identify viable investment opportunities in the changing economic reforms of Bangladesh.

V. Conclusion and Policy Implications

The economy of Bangladesh is moving towards mechanisation in every stage of rural life to urban life. The changed scenario demands the individual or collective improvement of managerial capacity. Planned and very dedicated efforts are needed to develop the capacity of assimilation and upgrading technologies and promote innovation to face the challenges of changing economic reforms. SCI sector should contribute to our economy a larger share. A large number of issues can be addressed simultaneously by giving thrust to the SCI sector, such as wider employment, poverty alleviation, women's development fulfilling basic needs, helping the economy to grow faster at relatively low cost and so on. However, to achieve that, both the government and the private sectors have to come closer and act harmoniously and concertedly. With adequate commitments and actions, contribution of 10% to the GDP from the SCI sector by next five year is not an impossible dream.

The following recommendations are to be considered in the present day of changing economic reforms of Bangladesh for the promotion of SCI sector:

- For the promotion of SCI goods in the export market, new rules and regulations, specially those adopted in the Uruguay Round, need to be implemented so that the growth of the SCI sector can be boosted up.
- The identify of SCI products along with the countries of export of SCI product needs to be fixed so that the SCI sector can get opportunities to flourish uninterruptedly.
- Necessary measures need to be taken immediately so that the SCI entrepreneurs can enjoy the facilities of the Bangladesh Standard Testing Institution (BSTI) as well as of the ISO-9000, ISO-9001, ISO-9002 and the other relevant opportunities.
- The up-gradation of technology, reorganisation of tooling and above all, modernisation in all relevant aspects are emergent for the SCI sector.
- The sector needs to be provided with re-fixation of VAT, turnover tax, excise duty, income tax and with other financial incentives so that it can gain momentum in the free market competition.
- Institutional assistance needs to be provided for marketing emerging SCI products.
- A well equipped technology organ needs to be set up to develop the technological information network for the SCI sector so that it can maintain the liaison and linkage between the national and international forums.
- Bangladesh as a least developed country should take immediate steps to avail itself of the full advantage of preferential treatment committed to provide by the Uruguay Round for the least developed countries and this can help flourish the SCI sector tremendously.
- For accelerating the development of private SCI enterprises on the basis of efficiency, the export oriented SCI industries need to be declared as thrust sector and accordingly the facilities should be provided.

- The financial institutions need to give wide spread response to the call of SCI entrepreneurs. But most of the financial institutions are reluctant to respond to their call, and even most of them suffer from the lack of trained manpower to appraise the SCI projects properly. All these conditions have to be improved and for the sake of SCI development, loan should be provided on soft terms and accordingly severe condition for collateral should be relaxed.
- Relevant agencies in the public and the private sectors such as The Ministry of Industries, Board of Investment (BOI), Bangladesh Small and Cottage Industries Corporation (BSCIC), National Association of Small and Cottage Industries of Bangladesh (NASCIB) and other relevant financial institutions etc. need to work for identifying viable investment opportunities in the SCI sector, and accordingly to offer various options to the prospective investors through providing counselling services. In this regard BSCIC, FBCCI, NASCIB need to introduce the information networks and competent counselling services for the extending support to the SCI sector.
- The SCI entrepreneurs suffer from the limitations of hereditary skilled transfer and learning by doing. As a result, they always remain far from taking institutional training for skill development. So, BSCIC, NASCIB, Vocational Training Institutes (VTIs), Technical Training Centers (TTCs) etc. need to intensify their present effort of training on entrepreneurship development, financial management, technology management, quality control, quality management, IT management, marketing management, international trades' rules and regulation, market promotion etc. for the SCI entrepreneurs. The trade association and chambers of commerce and industries need to come ahead to extend more support for the SCI sector and accordingly they should introduce a subcontracting culture in this regard, and
- The services of the NGOs along with the relevant government agencies can also be utilised to motivate, organise, train and supervise the micro and small entrepreneurs at the village/grass root level.

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MARKETING OF JUTE GOODS OF THE RAJSHAHI JUTE MILLS: AN OVERVIEW

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Abstract: In view of jute goods of Bangladesh now faced with an unfavourable competition on the one hand, with the jute goods of other jute goods exporting countries and on the other with the synthetic products, the study attempts to investigate and evaluate marketing system of jute goods of Rajshahi Jute Mills. The study found that the survival of the jute industry heavily depends on the reduction of cost of production, aggressive sales promotion, product development and product diversification.

I. Introduction

"Jute is the main cash crop and jute industry is the most important agro-based industry of Bangladesh. Bangladesh produces about two thirds of the total world production of raw jute. About 50 lakh families are directly involved in jute cultivation. Jute is cultivated in about 22 lakhs acres of land every year"¹

"Jute industry, the main stay of Bangladesh economy, earns about 52 percent of the total foreign exchange earnings. It occupies key position in the world, jute goods export market with a minimum share of 35 percent. About 90 percent of our production of jute goods is exported to more than 100 countries in the world"²

Though Bangladesh earns about 52 percent of our total foreign exchange earnings by exporting raw jute and jute goods, yet it is a matter of great regret that at present jute goods of Bangladesh have been facing a very tough competition in the world market with synthetic products. That is why the demand of jute goods in the world market has been declining day by day.

Jute goods of Bangladesh are now facing a serious problem due to tough competition with jute goods of some jute goods exporting countries. At the same time synthetic products are now competing with jute goods because of the lower production cost of synthetic products.

"The survival of the jute industry is the function of various socioeconomic factors including marketing efficiency. The determinant of the same are product, place, price and promotion emphasizing order productivity, sales productivity, contract productivity and quotation productivity etc."³ In the above context, the objectives of the study are:

- i. To find out the problems and prospects of marketing of jute goods of Rajshahi jute mills.

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- ii. To identify the impact of marketing problem on the profitability of the jute mill.
- iii. To suggest the remedial measures of marketing problems and creating demand of jute goods in local and in international market.

The present study focuses on the Rajshahi Jute Mills which is a nationalized enterprise under the Bangladesh Jute Mills Corporation (BJMC). This jute mill is situated at Shyampur on Rajshahi-Natore Road about twelve kilometres from the heart of Rajshahi city. The mill was established by a renowned lawyer of Rajshahi, Mr. Shah Abdul Gafur Chowdhury and one Mr. Abdus Sattar along with some people on partnership basis and foundation was laid in the year 1969. After that they requested the then EPIDC to take the management of the mill. After liberation of Bangladesh the mill was nationalized by the Government and was placed under the direct control and supervision of the BJMC. The mill went into production on trial basis on 11th December 1972 and was formally inaugurated by the then Industries Minister Syed Nazrul Islam. On 31st March 1974, the mill started production on commercial basis. The authorized capital of the mill was Tk. 4,50,30,000,00/- Two kinds of jute goods are produced in the mill. These are Hessian and sacking. Now the number of looms in Hessian are 134 and in sacking are 105. There are now 1148 permanent male workers and 8 female workers. The number of temporary male workers are 421. There is no temporary female worker in the mill. The number of employees are 279 and officers are 73.

The functions of marketing starts before the production and as such the paper attempts to gather and analyse the whole range of data of the mill from pre-production state to post-sale situation. Here the data have been collected through interview with the management of the Rajshahi Jute Mills and from official records of the mill.

II. Methods and Procedures of Marketing of Jute Goods of the Mill

The Rajshahi jute mill produces two kinds of jute goods. These are Hessian cloth & bag and Sacking bag. Hessian cloth & bag are used in making bag, fine sack etc. Sacking bag is rather coarse bag than Hessian bag. The basic raw material for making these two kinds of goods is raw jute. Inferior quality of raw jute is used in making Hessian goods and superior quality of raw jute is used in making Sacking goods. Raw jute is procured from outside sources.

There are four sources of the mill from where raw jute is procured. These are : (1) directly from the producers; (2) from the Agents; (3) by Tender; and (4) from jute purchasing centres of the mill. There are four jute-purchasing centres of the mill. These are Chilahati, Nawabganj, Natore and the Mill Gate. The mill also purchases raw jute from authorised jute purchasing centres of BJMC. Two types of bale are used for carrying raw jute in the mill. One is raw bale and the other is pucca bale. The weight of the bale varies from 3 to 4 maund. The mill purchases generally three varieties of raw jute. Namely (1) Tosha (2) White and (3) Meshta.

For purchasing raw jute, there is a separate department in the mill, called "Jute Department". After receiving orders from the BJMC, the production department gives necessary requisition to jute department for purchasing required quantity of raw jute. The BJMC fixes the price of raw jute as per the instruction of the Government and the mill

authority purchases raw jute at the price fixed by the BJMC. The annual production target is fixed by the BJMC.

The foreign buyers of jute goods of this mill are from the U. S. A., the CIS countries, the UK, Sweden Iraq, Iran, Syria, Burma, Egypt etc. There is a warehouse of Rajshahi jute mill in Khulna. The annual export target of the mill is transported to Khulna by mill's own transports or by the transports of the contractors. Then from Khulna the jute goods is taken to Mongla sea port by the burgess. The export price of jute goods is also fixed by the BJMC. Besides Bangladesh some other countries also export jute goods. Hence the BJMC fixes export price by observing the competitive market price. The price of jute goods, which are marketed internally, is also fixed by the BJMC.

Profit motive is the ultimate objective of all industrial enterprises. Rajshahi jute mill is no exception to this general rule. So, to earn profit is the ultimate goal of Rajshahi Jute mill. But it is regrettable that the mill has been suffering losses for a long period

Experts in financial management opined that "profitability is increased among other things by the intensity of uses of inventory by way of greater marketing efforts subject to the existence of operating margin"⁴ Talukder in his study entitled "Effective marketing system for the developing economy" mentioned that "analysis of the marketing problem of Bangladesh cotton textile mills corporation in 1979 enlightened the basic factors leading to the heavy accumulation of finished goods due to absence of specific market-research"⁵ The Rajshahi jute mill has been suffering losses due to decline in demand of jute goods in the foreign market. There is a heavy operating loss of the mill and accumulation of stock piling. Other significant factors of losses are increasing cost of raw material, higher price of spare parts, increase in wages and salary of the employees of the mill and heavy interest on back loan etc.

III. General Problems of the Mill and Remedial Measures

In discussing with the mill management, the author has identified some general problems of the mill which can be discussed in the following points :

Continuous Loss

The profit and loss situation of the mill shows that the mill has been suffering losses continuously. This is not only due to decline in demand of jute goods in international market but in my opinion due to also inefficient management of the mill.

Power Failure

Power is the most important component of cost of production of jute goods of the mill. The power supply comes from Bheramara. Sometimes there is a frequent power failure which hampers production.

Inferior and Inadequate Quality of Raw Jute

Sometimes it is seen that the mill do not get right quality and adequate quantity of raw jute. That is why the production is hampered leading to inferior quality of jute goods.

Inefficiency of Workers

Most of the workers of the mill are either illiterate or less qualified. Moreover they are inefficient. So production of quality products cannot be expected from such workers.

Old Spare Parts

The machineries which were installed at the time of the establishment of the mill are being used till to-day. So the machines have become old leading to the loss of capacity production.

Break-down of Machineries

Sometimes there is a break-down of machineries which disturb normal production.

Inadequate Shipping Space

Sometimes it is seen that due to non-availability of shipping space, the exportable jute goods are kept in warehouse of Mongla sea-port leading to heavy demurrage.

The above mentioned problems of the mill can be removed to some extent if the following measures are taken. By removing those problems there is a great prospect of marketing of jute goods of Rajshahi jute mill.

- To minimize the losses of the mill, efficient management of the mill must be ensured through better training of the managerial personnel.
- Since there is a power failure of the mill, a generator must be installed and owned by the mill authority immediately which will ensure regular production.
- The mill authority should be ensured with the right quality and adequate supply of raw jute so that there is no interruption in production.
- The workers should be given necessary training, which will increase their efficiency of production.
- Old spare parts should be replaced by new ones, which will ensure smooth production function.
- Since there is a breakdown of machines, necessary steps should be taken immediately in this matter.
- Necessary measures should be taken in the non-availability of shipping space for exportable jute goods, which will minimize demurrage.

IV. Major Problems and Prospects in Marketing of Jute Goods of the Mill

Since 95% of the jute goods of the mill are exported to foreign countries, the major problems in marketing of the mill lies in export marketing which are summarised as follows :

- There is a stiff competition of jute goods in the world market with synthetic goods. So export of jute goods of Rajshahi jute mills have been decreasing. Moreover the manufacturing cost of jute goods is higher than synthetic goods.
- Export of jute goods is hampered due to irregular production and in delay in shipment of jute goods.

- Inadequate shipping service in some routes affect export of jute goods in some countries.

The above mentioned export marketing of jute good can be removed to some extent if the following measures are taken and if we can remove those problems, there is a great prospects of export marketing of the mill.

- 1) Better marketing Research and product Development.
- 2) Reduction in cost of production.
- 3) Market promotion.

According to UNCTAD Report "production costs in the mill in Bangladesh and in India can possibly be reduced by 15% & 11% respectively through modernisation, better quality control and improved maintenance of the mill"⁶ UNDP fact finding Mission suggested two major activities for 1) promotion of jute.

- 1) "Promotional programmes need to be made where the products have been proved to be commercially viable and competitive.
- 2) A strong public relation programme must be made to improve the consumer image of jute products which in the developed countries are in decline"⁷

Bangladesh requires aggressive market research and development to find out new uses of jute and product development and diversification to attract the foreign buyers. It can be mentioned here in this connection that in order to increase world demand of jute goods, BJMC has opened marketing research cell and 3 market promotions jute offices at Brussels, Nairobi and in Melbourne in 1977. Another four new offices were opened in Singapore, Abidjan, Istanbul and the USA in 1980-81. Market Research cell is engaged in various types of marketing research to uncover the major problems and at the same time to solve those problems of jute goods in international market.

V. Conclusion

The Rajshahi Jute Mill is one of the most important enterprise of BJMC. This mill is not only playing a significant role in economic development of the country but also is earning foreign exchange by exporting jute goods. The mill is also generating high employment opportunity and is achieving regionally balanced economic growth and effective utilisation of locally available raw jute.

From the overall analysis it could be concluded that the survival of the jute industry depends on the reduction of cost of production, aggressive sales promotion through product development and product diversification. In this connection the ministry of jute should take all necessary measures.

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CAPITAL ASSET PRICING MODEL: ASSUMPTIONS, USES AND LIMITATIONS

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Abstract: This paper explores the assumptions, uses and its limitations of Capital Asset Pricing Model (CAPM). Since CAPM may have implications for security pricing, development of an ideal investment strategy and evaluation of portfolios' performance by the investors, regulatory authorities and rating agencies in Bangladesh, the paper examines the CAPM in relation to their testability.

I. Introduction

Capital asset pricing model plays an important role in finance theory. The capital asset pricing model, almost always referred to as the CAPM, is a centrepiece of modern financial economics. The CAPM has been widely accepted for decades as a framework for explaining the trade-off between risk and expected return in securities market (Harrington and Korajczyk, 1993, p.1). It is an equilibrium-pricing model, and provides risk-adjusted return as opposed to mean adjusted return. Harry Markowitz (1965) laid down the foundations of modern portfolio management. In the mid 1960s economists Sharpe (1964), the 1990 Nobel prize winner in economics, Lintner (1965), Mossin (1966), and Treynor (1961) have also developed the CAPM (Gitman, 1991). The model gives us a precise prediction of the relationship that we should observe between the risk of an asset and its expected return. It provides a benchmark rate of return for evaluating possible investments. The model may inform us to make an educated guess as to expected return on assets that have not been traded in the market place (Reilly, 1989).

The CAPM uses investors' optimal portfolio choice to determine a natural measure of risk (Harrington and Korajczyk, 1993). In the CAPM, investor' optimal portfolios are well diversified and are constructed by holding the risky market portfolio and lending at a risk-less rate of interest. The insight offered by the CAPM provided theoretical impetus to the popularity of index funds but researchers soon began to find some troubling discrepancies when they tested model empirically (Blume, 1993).

Although this model has contribution in making capital budgeting and other decisions, it has some weaknesses, which should be considered by investors, regulatory authorities and rating agencies for successful investment decision.

The study is based on a comprehensive literature survey of Capital Asset Pricing Model. This paper attempts to explore the assumptions, uses and its limitations of CAPM through its early and recent empirical studies. The organization of this paper is to first identify the assumptions and uses of CAPM, and thereafter, the CAPM will be examined in relation to their testability.

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II. Assumptions Behind the Capital Asset Pricing Model

The CAPM is built upon a number of assumptions, some of which realistic, other of which are not. The CAPM is developed with following assumptions:

As far as investors are concerned, the model assumes:

- They are rational, risk averse, and utility maximisers
- They perceive utility in terms of return;
- They measure risk by the standard deviation of returns;
- They have a single period investment time horizon;
- They are price takers and have the homogeneous expectations about asset returns that have joint normal distribution.

Furthermore, the model assumes the financial markets are perfect and, especially that:

- there are no taxes;
- there are no transaction costs;
- Investors can both lend and borrow at the risk free rate of return.

Many of the assumptions that underline the CAPM are clearly unrealistic. However, whether or not the assumptions, which underlie the model, are realistic is not a matter of importance. The real question is whether the model works or not, and whether the model has predictive power or not.

The CAPM model in equation is as follows:

$$E(R_s) = R_f + (R_m - R_f) \beta$$

Where,

$E(R_s)$ = Expected return on a security "s"

R_f = the risk-free rate; usually proxied by the yield on Government Treasuries

R_m = the return on the "market", usually proxied by a representative sharemarket

β = called Beta; it captures risk; more specially β captures systematic risk performance indicator

$$\beta = \frac{\rho_{s,m} \delta_s \delta_m}{\delta_m^2}$$

Where, $\rho_{s,m} \delta_s \delta_m$ = co-variance between a security and the market portfolio

δ_m^2 = variance of market portfolio.

III. Potential Uses of the Capital Asset Pricing Model

Radcliffe (1994) as reviewed some implications of the capital asset pricing model and examined how theory might be used in practice. Three major topics were examined:

- Analyses of security pricing;
- Development of an ideal investment strategy;
- Evaluation of a portfolio's performance.

Pricing

The capital asset pricing model is a theory concerns the way assets are priced in relation to their risk (Haugen, 1993). It is an equilibrium-pricing model. The equilibrium price should

provide no opportunity for speculative profits. It should be set at such a level that expected returns from buying the security are identical to those available on an efficient portfolio of equivalent non-diversifiable risk (Radcliffe, (1993). If security is trading at a price lower than equilibrium, then speculative profit is possible and excess demand will exist until the price is forced up to equilibrium. If the security is trading at a higher than equilibrium price, speculator will sell until the price falls to equilibrium. The equilibrium pricing formula meets all the assumptions of the CAPM. In practice, the principal features of the model are used widely.

Strategy

The implication for portfolio strategy that arise from the CAPM are quite important and, even if not strictly true, they provide clear guidance. At the centre of this theory is the market portfolio. It is the single optimal portfolio of risky assets- the only portfolio of risky assets that should be held. In theory this makes sense; in practice it is impossible to achieve (Radcliffe, (1994).

Performance Evaluation

Concepts of the CAPM have been increasingly used by investors and speculators to evaluate the performance of one style of management against other. In fact a number of investment counselling services offer services that provide comparisons of performance based largely on measures employing the CAPM. Although these performance measures are typically used to evaluate the risk / return performance of large investment firms, such as mutual funds, bank trust department, and pension funds they could also be used by individuals of measure their personal performance, to evaluate the buy-sell selections of security analysis Radcliffe, (1993).

IV. Empirical Tests of the Capital Asset Pricing Model

Reilly, (1993) states that while there have been numbers test of the CAPM, too major questions should concern us. The first involves the stability of the measure of systematic risk, since beta is the principal measure, it is important to know whether past betas can be used as estimates of future betas. The second question is basic to the theory: whether there is a positive liner relationship as hypothesized between betas and the rate of return on risky assets or not.

4.1 A Simple Test of the Capital Asset Pricing Model

Sharpe and cooper, (1974) examined association between higher return and higher risk over a long period of time. In order to get portfolios with different betas they divided stocks into deciles once a year on the basis of the beta of each security (Elton and Gruber, (1991). Beta was measured using sixty months of previous data. Once a year for each year 1931 – 1967, all the New York Stock Exchange stocks were divided into deciles based on their rank of beta. The strategy consisted of holding the stocks of particular deciles over the entire period. The strategy outlined by Sharpe and Cooper involved investors dividing stock into deciles by beta based on the previous 60 months returns. If investors want to pursue the high beta strategy, they simply divide their funds equally among the stocks in the highest beta decile. They do this every year and observe the outcomes. Study shows that while the relationship between strategy and return is not perfect, it is very close. The rank correlation coefficient between strategy and return is over 0.93, which is statistically significant at the 0.01 level. Similarly, buying stocks with higher forecast beta would lead to holding portfolios with higher realized

betas. The rank correlation between strategy and beta is 95%, which is significant at the 0.01 level.

Sharpe and Cooper's work presents rather clear and easily interpreted evidence that, as general equilibrium theory suggests, there is a positive relationship between return and beta. Their results also support to the two-factor form of the CAPM (Elton and Gruber, 1991).

4.2 Early Empirical Test of the Capital Asset Pricing Model

Test on Individual Stocks

Most of the early empirical test of the CAPM involved the use of time series (first pass) regression to estimate betas and the use of a cross-sectional (second pass) regression to test the hypotheses derived from the CAPM model (Haugen, 1993). An early empirical study of the CAPM was conducted by Lintner and reproduced in Douglas (Elton and Gruber, 1991).

Lintner studied beta for each of the 301 common stocks in his sample. He estimated beta by regressing each stock's yearly return against the average return for the stocks in the sample using beta from 1954-1963. Lintner first performed the first pass regression and later developed the second pass cross-sectional regression. The results he obtained seem to violate the CAPM. The term representing residual risk was statistically significant and positive.

Douglas (1979) similarly found that returns on his sample of stocks were positively and significantly related to their variance. Douglas examined the relationship between average security returns and various risk measures on a sample of more than 600 stocks for various time intervals between 1926 and 1960. Using different five years intervals, Douglas calculated (1) each stock's average quarterly rate of return, (2) the variance of each stock's quarterly rate of return, and (3) the covariance of the stock's return with the quarterly returns of an index of all 600 stocks. Using annual and quarterly share price data Douglas regressed the returns from a large cross-sectional sample of shares against their own variance and against their own beta terms (Firth, 1977).

Douglas (1979) results showed that a security's return is positively and significantly related to its own variance but not to its beta. Thus, increased returns are being earned for bearing unsystematic risk. This clearly violates the CAPM which says that a security's variance should have no impact on its return once its beta values has been taken into account.

Problems in Methodology

Both the Douglas and Lintner studies appear to suffer from various statistical weaknesses that might explain their anomalous results (Radcliffe, 1994). In a subsequent study Miller and Scholes reviewed these statistical problems inherent in all empirical tests of the CAPM. They also conducted a series of carefully constructed simultaneous equations designed to measure the extent to which certain previous studies have produced results that were biased by these statistical problems (Elton and Gruber, 1991).

Miller and Scholes start with a discussion of possible biases due to mis-specification of the basic estimation equation. One of the first considerations is that, if returns are really generated by the simple form of the CAPM, then the time series equation used to estimate beta should be consistent with the CAPM. Miller and Scholes examined historical data and find a negative correlation.

A second possible source of equation mis-specification that could account for finding an intercept too high and slope too low is if the relationship between expected return and beta was in reality non-linear. Miller and Scholes test for nonlinearity and conclude that any nonlinearity that was present did not lead to the increased intercept and decreased slope.

A third possible source of distortion is the presence of heteroscedasticity. Heteroscedasticity is an often-encountered problem in econometric tests. It occurs when the variance of the error is large for higher values. In this case, it would imply that higher beta stocks have a higher variance of return than lower beta stocks.

Miller and Scholes finally demonstrate that return distributions appear to be positively skewed and, if there is skewness, that the cross-sectional regression will show an association between residual risk and return, even though there is no such association (Firth, 1977).

Tests on Portfolios

Because of statistical problems, most researchers concentrated upon portfolios of securities.

Tests of Black Jensen and Scholes (BJS) (1972)

Black, Jensen and Scholes (BJS) were the first to conduct an in-depth time series test of the CAPM. Instead of testing the prediction that the portfolio is on the efficient set, BJS concentrate on the security market line. They found that if the market is efficient, the relationship between betas and expected rates of return should be linear and positively sloped. When investors borrow and lend at a risk-free rate, then it follows that a zero beta stock or portfolio can be expected to produce a return equal to the risk-free rate. The main objectives of this study are to test of these properties the security market line.

BJS used all NYSE stocks for the period of 1926—1964 to form 10 portfolios of different beta levels. The exact procedure BJS employed was the use of five years of monthly data to estimate betas and ranking of stocks into deciles from highest to lowest. Each decile was then considered the portfolio in the next year i.e. sixth year. Then data for the second through sixth year were used to rank stocks and form deciles that were considered portfolios for the seventh year. This was done until deciles and the return for each decile was computed for 35 years. Then the return for decile one in each year was considered as a series of returns on a portfolio and so forth. Each of the 10 portfolios could be then regressed against the market and an intercept, with a beta and a correlation coefficient for the equation computed.

Their results conform with the CAPM in that a clear linear relationship exists between average excess returns and beta (Haugen, 1993). The positive value of the intercept that emerges from this analysis is powerful evidence in support of the two-factor model. The high percentage of the variation in returns 98% shows that a linear line describes returns very well as predicted by the theory.

Tests of Fama and MacBeth (FM) (1973)

Like Black, Jensen and Scholes (1972) Fama and MacBeth (1973) also concentrate on the properties of the security market line. This study attempts to predict the future rates of return to portfolios. They used a linear regression model which involved regressing portfolio returns against three independent variables (Firth, 1977). These independent variables were:

- the average of the betas calculated for each security in the portfolio using the market model;
- the average of the square of the beta for each security in the portfolio; and
- the average standard deviation of the least squares residuals from the market model for each security.

They tested their model on 20 portfolios of stock registered on the New York Stock Exchange over the period January 1935 to June 1968. Various sub-periods were also examined. Using the model they tested a number of hypotheses:

- that there is a linear relationship between expected return on a security and its risk in an efficient portfolio;
- that the systematic risk, beta provides a complete measure of the risk of a security in an efficient portfolio;
- that the higher risk is associated with higher returns; and
- that Sharpe's capital asset pricing model holds.

Fama and MacBeth (1973) found consistent results with the prediction of the CAPM model. The result shows that there is evidence that the relationship between expected return and beta is positive as linear, and the zero beta model is more consistent with equilibrium condition than is the single CAPM. The authors were unable to reject the first three hypotheses but the fourth left some doubt. They found that the model, Black, Jensen and Scholes provided somewhat better descriptions of expected returns. The bulk of the evidence regarding the relationship between rates of return and systematic risk for portfolios indicates support for the CAPM.

Still the evidence is not without question. The intercepts were generally higher than that implied by the risk-free rate, which is either consistent with the zero-beta model or a higher borrowing rate. Also, studies of the risk-return relationship for individual stocks have not been supportive, prompting more recent studies to employ portfolios of stocks. Finally beta generally does better than any other measures of risk and even better still when the tests cover the time periods in excess of ten years.

Roll's Critique of Tests of the Capital Asset Pricing Model

The controversy over the CAPM is not new. The most exiting work on the CAPM in recent years has occurred on the empirical front. Richard Roll (1976) criticized: (1) the empirical testing of the capital asset pricing model, (2) the use of beta as a risk measure, and measures of portfolio performance employing the security market line (Haugen 1993).

Roll has argued that general equilibrium models of the form of the CAPM are not amenable to testing or the tests are performed so far provide little attention in support or against the CAPM. Roll's critique can be divided into two sections (Haugen, 1993). First, roll considers the results of the tests of Black, Jensen and Scholes, and Fama and MacBeth as tautological. Second, Roll claims that the market portfolio mean variance efficiency should not be tested.

Roll's Critique of Earlier Works of the Capital Asset Pricing Model

Roll (1976) examined the three widely quoted empirical papers on asset pricing theory of Black, Jensen and Scholes (1972), Blume and Friend (1973), and Fama and MacBeth (1973). Their works refer to a portfolio m , which is on the ex-ante efficient frontier as seen by a single investor. Instead of testing CAPM's prediction- the market portfolio on the efficient set, BJS and FM examined the security market line (Haugen, 1993).

Fama and MacBeth's equation has three testable implications:

- the relationship between the expected returns on a security and its risk in any efficient portfolio is linear;
- beta is a complete measure of the risk of security in the efficient portfolio; and
- in a market of risk averse investors, higher risk should be associated with higher return.

Roll found that the efficient portfolio is assumed ex-ante efficient. If the market portfolio is known to be efficient, these are not independently testable and tautological. If the market portfolio is efficient then the relationship between beta and expected return must be linear and positively sloped. Conversely, if their first proposition is true, and ex-ante beta is an linear function of ex-ante expected return, then market portfolio must be ex-ante Mean-Variance (M_V) efficient.

Roll concludes that the only valid test of the CAPM would test whether the market portfolio is efficient. Roll goes on to show the disastrous consequences his conclusions have for measuring performance within a CAPM framework (Kolb, 1989). In any test it will be necessary to use a market index and that index can be efficient or inefficient. Whether the index is efficient or not does not matter too much because both efficiency and inefficiency of the index lead to disastrous results:

- If the index is efficient, the performance of every security examined will lie exactly on the market line as a matter of mathematical necessity.
- If the index is inefficient, any ranking of performance is possible and the particular ranking that an asset gives will depend only on the way in which the index is efficient.

Therefore, the CAPM provides a meaningful benchmark of performance. Either every security market line or every security can diverges in unpredictable ways from the risk/return relationship expressed by the CAPM.

Roll's Argument about Testability of the Capital Asset Pricing Model

Roll (1976) argued that CAPM is an unstable theory. The author stated that tests performed with any portfolio other than the true market are not tests of the CAPM. They are simply tests of whether the portfolio chosen as a proxy for the market is efficient or not. In the true market portfolio investors should include bonds, preferred stock, and other type of securities.

On the other hand, an inefficient portfolio may be chosen as a proxy for the market, and the CAPM rejected when the market itself is efficient. Roll stated that the high correlation that exists among most reasonable proxies for the market does not mean that the choice of a proxy is unimportant. Though they are highly correlated, some be efficient while others are inefficient.

Research After Roll's Paper

Roll's observations have raised fundamental questions about the CAPM's truth, testability, and use in evaluating investment performance (Radcliffe, 1994). Roll's critique is an important addition to the financial theory. There has been a great deal of debate in the profession since 1972. Roll raised some controversial issues whereas others support the CAPM.

V. Limitation of CAPM

Roll observed that the previous test results of the CAPM are tautological because of the procedure used to form a portfolios in the test, which shows a linear relationship between average return and beta irrespective of the relative efficiency of the market index (Haugen, 1993). Some authors argue that this may be true for BJS, but not for FM. BJS tests were related to average return to betas measured in the same period, while FM predicted future returns on the basis of betas measured over a past period. When there is a tautological

relationship exists between average return and beta measured in the same period there is a relationship between two variables.

FM estimated next month's returns on the basis of past beta because the beta of the past period helps as a proxy for average return in the past period. Fama and MacBeth (1973) found the significant relationship between the beta and future returns accurately on the basis of past returns.

Testability of Efficient Portfolio with Positive Portfolio Weight

Several explanations have been offered for why empirical tests of the CAPM are so poor. One is that the indexes used for the efficient market portfolios are not good proxies of the market (Ross, 1977). The S&P 500 do not represent the whole market. The market includes real estate, government bonds, corporate bonds, human capital and so forth, but the S&P 500 covers only large capitalization stock. CAPM could be rejected if there is no positively weighted portfolios in the relevant efficient set. The CAPM fails to predict that the efficient set based on NYSE stock (Haugen, 1993).

Testability of Capital Asset Pricing Model

Investors can contain a theory to apply a segment of the market and they could hypothesise that the NYSE is a segmented market with a pricing structure characterized by the CAPM. But investors can reject the contained theory because of the inefficiency of the market portfolio (Haugen, 1993).

Ross (1993) states that the theory is not true and the market is not efficient. An efficient market would be very useful in its own right. If investors knew that the market portfolio is efficient and that the CAPM is true, that knowledge would be a very powerful guide to investment management. Investors could buy the index knowing that it is efficient portfolio because nobody can construct a portfolio with lower risk and the same return.

Sensitivity Test of the Capital Asset Pricing Model

Stambaugh (1982) investigated the sensitivity of the tests of the CAPM to different sets of assets returns. His tests were conducted with market portfolios that include returns for bonds, real estate, and consumer durable in addition to common stocks. Even when stocks represents only 10 per cent of the total value, it remains possible that alternative market portfolios can reverse inferences about the model. Stambaugh states that inferences prove to be sensitive to the set of assets. Inferences based on the most inclusive set of assets common stock, bond and preference stock- reject the Sharpe Lintner version of the CAPM but do not reject the Black version; other set of assets provide different inferences. Result shows that sensitivity to construction of the market index could imply that the CAPM is less testable than other models, but no such sensitivity is found in his study. Kandel and Stambaugh (1987) found the similar results.

Recent Test of the Capital Asset Pricing Model

Shanken's (1987) Test

More recently Shanken (1987) has developed a framework in which inferences can be made about the validity of an equilibrium pricing relation. He suggested that the acceptance or rejection of the CAPM depends on how well the proxy for the market replicates the true but unobserved market portfolio. Shanken develops a joint tests that allows acceptance or rejection of the joint hypothesis that the correlation of the proxy with the market portfolio exceeds some limit and the CAPM is valid. He examines the joint hypothesis that the

correlation between the Centre for Research and Securities Prices (CRSP) equally weighted portfolio of common stocks and the market portfolio exceeds 0.7, and the CAPM holds with respect to the unobserved market portfolio. The joint hypothesis is rejected at the 10% level. Thus on the basis of this test one can conclude that either the unobserved market portfolio is efficient or its correlation with the CRSP equally index is below 0.7. Shanken's test is sufficiently flexible that it allows set of variation to be tested as proxies for market portfolio. Shanken repeats his tests using a combination of the CRSP equally weighted stock portfolio and returns on the long-term government bond a proxy for the market portfolio. He concludes that the funds are substantially the same with the more complex proxy rather than just the stock portfolio.

Fama and French's (1992) Test

Fama and French (1992) have extended the Fama and MacBeth (1973) model (Haugen, 1993). They use all nonfinancial firms in the intersection of the New York Stock Exchange (NYSE), American Stock Exchange AMEX) and National Association for Securities Dealers Automated Quotation (NASDAQ) returns file from the Centre for Research in Security Prices and merged COMPUSTAT annual industrial files of income and balance sheet data. FF found that the relation between beta and average return disappears during the 1963—1990 period, even when beta is alone to explain average returns. The results show that the simple relation between beta and average return is also weak in 50-year period from 1941—1990. Fama and French also examined the monthly slopes from the FM regressions for evidence of a January seasonal in the relation between book to market equity and average return. The average January slopes for BE (book equity)/ ME (market equity) are twice for those for February to December. So, there is a January seasonal in the book-to-market equity effect, but the positive relation between BE/ME and average return is strong throughout the year.

There results also suggest that size and book-to-market equity capture the cross-sectional variation in average stock returns associated with size, earning price, book-to-market equity, and leverage for the 1963—1990 period.

Roll goes on to show the disastrous consequences his conclusions have for measuring performance within a CAPM framework (Kolb, 1989). Kolb states that in any asset pricing it will be necessary to use a market index and that index can be efficient or inefficient. Whether index is efficient or not, does not matter too much because both efficiency and inefficiency or the index lead to disastrous results:

- If the index is efficient, the performance of every security examined will lie exactly on the market line as a matter of mathematical necessity.
- If the index is inefficient, any ranking of performance is possible and the particular ranking that an asset gives will depend only on the way in which the index is inefficient.

Therefore, the CAPM provides a meaningful benchmark of performance. Either every security market line or every security can diverges in unpredictable ways from the risk/return relationship expressed by the CAPM.

VI. Implications of CAPM in Bangladesh

Although the capital market in Bangladesh is small, and investors and corporate planners are rarely using the CAPM to quantify financial risk, there may be enough scope to use this tool. Whether the model CAPM can be used by the investors in Bangladesh depends on the efficiency of capital markets and accuracy of beta estimation. If these conditions are fulfilled-

investors, consultants, and financial analysis in the corporate decision making may use the model. CAPM will provide them with a useful benchmark for capital budgeting and cost of capital.

Recently, the Dhaka Stock Exchange (DSE) has implemented the automated on line trading system. This brings an end to an era where the trading was conducted by the out-cry system. By providing such a system, the DSE expects markets liquidity and confidence to improve dramatically, booster the capability of industry to rise capital for investment. The system has facilities for local area network (LAN) and wide area network (WAN) communication, which will allow traders to execute orders not only from Bangladesh but also from anywhere in the world.

This automated on line trading system may benefit investors, securities analysts, fund managers and other concerned parties by providing timely data to take investment decision through CAPM.

VII. Conclusion

The above discussion indicates that the model has strengths and weaknesses in terms of their testability. The CAPM is developed by the financial economist for pricing and quantifying risk. Many researchers have investigated the validity of the CAPM using empirical studies and these indirectly measure the impact of relaxing the various assumptions. Some of the studies broadly support the test.

Where a large body of evidence supported the early version of the efficient market hypothesis, but a growing number of studies raised questions about its validity (Roll, 1977; Ross, 1978). Many of the studies identified so-called anomalies, inconsistencies, in the efficient market hypothesis. These anomalies are hard to rationalize with any reasonable theory of equilibrium in the context of the CAPM (Blume, 1993).

Despite its problems, by the end of the 1970s, the CAPM was the most sophisticated pricing mechanism available to portfolio managers; it was widely used in investment analysis. The main advantage of the CAPM is that it gives us a rule for quantifying the risk in terms of return and helps managers in allocating funds properly in the strategic business unit measuring and pricing financial risk. The CAPM is intuitively appealing in that expected return logically follows from the risk a security adds to an overall portfolio. Because of its simplicity, the CAPM is widely used both in the security industry and corporate finance, it gives straight forward implications for market equilibrium and for required rates of return on risky assets (Vanhorne, 1990).

Therefore, it can be said that investors should understand the model in terms of the CAPM's strengths and weaknesses. It is better to say, "The controversy over the CAPM has many ingredients; some may be palatable, and some not. The CAPM is like a menu: You do not have to like everything in order to have a good meal", (Blume, 1993).

Using CAPM by the investors in Bangladesh is contingent upon the capital market efficiency and the measurement of beta accuracy. If these conditions are fulfilled investors and financial planners may use this model in measuring and pricing the risk.

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RELATING CORE COMPETENCE OF BUSINESS TO THE COMPETENCES OF INFORMATION TECHNOLOGY: THE EXPERIENCE OF RMG BUYING HOUSES IN CHITTAGONG

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Abstract: The paper attempts to assess the ways the core competencies of the business are related to the competencies of Information Technology. The way of exploiting IT by using the value chain analysis has been explored and the uses of IT competencies to build core competencies of the RMG sector are evaluated in the paper.

I. Introduction

Each business in every industry throughout the world is facing increasing and unrelenting competition. During the past decade, this growing competition has brought with it the associated threat of survival for so many enterprises. The causes of this significant increase in competition are manifold and involve the globalization of markets, deregulation and the ability to maintain business effectiveness through the exploitation of technology, in particular that created by information technology (Hunt, 1993). Both the manufacturers and traders have been trying to attain abilities to establish competitive advantages. Of course by establishing competitive advantages these business firms intend to outperform their rivals in the competition. Now the question is whether the competitors can imitate the competitive advantage is subject to erosion by competition. The essence of the competitive process is the imitation by rivals of the competitive advantage established by any one firm (Grant, 1991). When it is difficult or impossible to outstrategize rivals (beat them with a superior strategy) the other main avenue to industry leadership is to outexecute them (beat them with superior strategy implementation). Superior strategy execution is essential in situations where rivals have very similar strategies and can readily imitate one another strategic manoeuvres. Building core competencies and organizational capabilities that rivals can't match is one of the best ways to outexecute them (Thompson & Strickland, 1992). So, most of the success stories of today's business world have emphasized on competency building efforts in the critical activities. This growing emphasise on the building of core competency is the idea for a paradigm shift in strategic management.

A core competence is a basis for competitive advantage because it represents specialized expertise that rivals do not have and can't readily match (Thompson & Strickland, 1992). A competitive advantage can not be identified by looking at the firm performs (e.g. design, production, marketing, delivery, etc.). Each of these activities can contribute to the company's cost position and create a basis for differentiation. Porter's (1985) value chain model is a systematic way of analysing all the firms activities and evaluating how interact with each other (Jelassy, 1994).

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In the mid-1980s, information technology (IT) emerged as corporate resource like capital, machinery, people and raw materials, requiring to be thought of and managed accordingly (Jelassy, 1994). Once it is experienced that It had been used as competitive weapon to shape the leadership position of a business, firms should look for new technologies which can be exploited for their survival in the business (Earl, 1989).

Therefore, this paper is an attempt to assess the ways that the core competencies of the business are related to the competencies of information technology. The way of exploiting IT by using the value chain analysis has been explored in the study area and also the uses of IT competencies to build core competencies of the study sector are evaluated in this paper.

II. The Ready Made Garment Sector in Bangladesh

Bangladesh is predominantly an agricultural country and agriculture contributes nearly 38% to the GDP. The industrial sector contributes roughly 7% to the GDP. In the industrial sector, textiles occupies a pre-eminent position, as it is the largest manufacturing sector in terms of its contribution (5%) to the GDP and around 50% industrial employment (Huq, 1996).

The ready-made garments (RMG) industry experienced phenomenal growth during the last thirteen or so years. It has earned US\$2547 million during 1995-96, which is 65% of the export earnings of Bangladesh, while the figure for the year 1981-82 constituted only 0.5% of the total export earnings of the country. The sector's average growth rate during the last 15 years is roughly at the rate of 27% (Shiddiqi, 1996, Huq, 1996). In the RMG industry the country is a major exporter of woven and knitted shirts, trousers and jackets. Other major items include children's wear, coats, dresses, sweaters, nightwear, undergarments, hand gloves, socks and towels. Major markets are USA, the EU and Canada. The US imports over sixty categories of items. At present, Bangladesh is the sixth largest supplier of apparels in the US market. However, the 15 member European Union buys 49.67% of Bangladesh's apparel export making her the fifth largest supplier in that market and the country is the ninth largest supplier to Canada (Siddiqi, 1996, Li & Joe, 1995).

However, notwithstanding a decade of sustained growth, the value addition from RMG exports has remained as low as 25% to 30% of its total value with very little progress in evidence in the way of backward linkage. Virtually all intermediate inputs from fabrics, to accessories to design are imported so that the principal component of Bangladesh's RMG export earnings remains embodied in the wages, salaries, and profits locally derived from the processing of the imported intermediate input (Bayes et al. 1995).

The phenomenal growth of RMG in Bangladesh is due to the quota premium of the US market and recently introduced the generalized system of preference (GSP) of the EU market helps a lot to increase value added export earnings. While it is true that Bangladesh is one of the top ten exporters in this sector, the market segments where this country serves is the low and medium end markets. So, this country does not produce the fashion and other design based items that sell best in the European, North American and Japanese markets. This relatively narrow base of products may in future limit the market share and competitive edge of Bangladesh (Siddiqi, 1996).

The competitive strength of Bangladesh in the RMG industry is the low cost labour as the industry is a low technology based labour intensive industry. In the international market one can improve competitive position by producing quality items at the minimum cost. At this stage Bangladesh can beat all its competitors in the cost of production as in the case of apparel industry cost of production is greatly determined by the labour cost and the statistics (Table-1) show that wages in Bangladesh is remarkable low (Siddiqi, 1996).

Table - 1

Comparative Average Hourly Wages (including fringe benefits) in RMG industry

Japan	23.65
USA	16.00
Taiwan	5.76
South Korea	5.00
Hong Kong	3.9
Singapore	3.56
Turkey	3.5
Mexico	1.40
Brazil	1.50
Poland	1.40
Malaysia	1.20
Thailand	1.00
Philippines	0.78
Egypt	0.60
India	0.60
Sri Lanka	0.45
Pakistan	0.40
Indonesia	0.40
Vietnam	0.40
China	0.35
Nepal	0.22
Bangladesh	0.20
Myanmar	0.18

Source: Paper presented by Dr, Hafiz G.A, Siddiqi in the BATEXPO-95 international seminar sponsored by BGMEA

Prahalad & Hamel (1990) told about three tests to identify core competence in a business. First, a core competence provides potential access to a wide variety of markets; second, a core competence should have a significant contribution to the perceived customer benefits of the end product; and finally, a core competence should be difficult for competitors to imitate. It is true that the RMG of Bangladesh lacks core competence as the productivity of that low cost labour is not satisfactory at all. Secondly, until 1994 China is the biggest supplier having 14.7% of the total imports of the garments in the US market, whereas the figure of Bangladesh was 3.2% (Hyverien, 1995). On an average Bangladesh has got 2.5% market share of the total of the US and EU markets. After the phasing out of Multi-Fiber Agreement (MEA) in the year 2005, maintaining this world market share will be a challenging task for Bangladesh RMG industry as because the key players of this competitive market will fight on the equal opportunities in a quota free status. This means that Bangladesh will have to compete with a large number of established and powerful suppliers of ready-made garment, namely China, Hong Kong, Singapore, Indonesia, Malaysia, Sri Lanka, Pakistan, Egypt in the world market on equal terms. In addition, Vietnam, Poland, Brazil, and small countries of Caribbean region are likely to emerge as new competitors. Myanmar has recently shown high potentials to penetrate into world market. She can beat Bangladesh because labour is cheaper there (Siddiqi, 1996).

Therefore, the emerging competitive threats of this RMG sector need a new strategic decision making in the relevant functional areas of the business. That is if Bangladesh wants to maintain its leadership position in the market she needs to go for a wide variety of market at the minimum cost possible. Since it is serving only the medium and low cost items in the market, the new segments of the market e.g. wide variety of markets should be covered to face the challenges derived after the phasing out of the MFA. So, it should have a new paradigm shift in the strategic management which concentrates building core competencies in

the business by exploiting the IT competencies. More specifically the country can think about using its cheapest labour in the IT capabilities of the business to build core competencies, which will create some competitive edge.

Against this backdrop of the RMG sector of the country, the study has set the following objectives:

- i. to understand the role of RMG buying houses;
- ii. to identify the critical activities relevant to the strategic decision making;
- iii. to examine the possibilities of exploitation of IT in the RMG sector of the country;
- iv. to relate the IT competencies in building the core competencies of the RMG business.

III. Methodology

A large number of RMG manufacturers involve in the production of different garments as per the order specifications given by the buyers. This operation is very simple in the sense that, after receiving an order given by the buyers' agent these manufacturers start cutting and sewing operations on different production lines. A few big suppliers are doing the business on the F.O.B. pricing but most of the suppliers i.e. manufacturers simply do the sewing job only. For them price quotation, order procurement, raw material sourcing, some buyers agents do quality controlling and shipment supervision. Since the early 1980s this RMG sector has been booming in the country and therefore, so many RMG buying agents (popularly known as 'Buying House') started their operations in this country. This study covers the RMG buying houses working in Chittagong, the biggest port city of the country. The author interviewed 15 personnel working in different RMG buying houses of this city.

Each of the sample firms work as per the orders given by the buyers which have different item specifications, but the merchandising and quality assurance jobs are done for all of the orders. So, a total of 50 orders have been studied here in the light of the objectives of the research. The orders are in the operation of five RMG buying houses working in Chittagong while the items in these orders are different and the nature of operations for these orders are not same always.

As a framework suitable for the analysis of core competencies and to define the leverage points for information technology porter's value chain model (Porter & Miller, 1985) seems a suitable candidate (Lehman, 1992). Therefore, this value chain analysis has been done in the context of the study areas to explore the ways of exploiting IT in building core competence of the business.

IV. The Analysis of the Research

4.1 The RMG Buying House in Chittagong

The 'Buying House' is a service organization. It acts as an agent between buyer and supplier of the garment. So, a RMG buying house bridges the gap between the foreign buyers and local manufacturers in exchange of certain amount of commission. The main functions of this buying house are price quotation, order placement, quality assurance, and timely delivery of the goods and these function are performed by separate departments named merchandising and Quality Controlling.

Most of the buying houses in Chittagong are working for the US and the EU markets. The items included are shirts, trousers, jackets, children's wear, etc. The buyers from both the US and EU markets have their own agents working here and at the same time they have agents in some other neighbouring cities within and outside the country. Even though the nature of business is same for all of the samples of the study, the items and the way of performing the functions vary among them.

Two buying houses working for their own retail house in the US market and they are getting the orders directly from their Dhaka (the capital city of the country) offices, so they do not face any competition in the city. This two agents simply place orders to some selected manufacturers for the production and do the quality controlling jobs with the cooperation of the floor supervisors of the factories. The other three agents also working for the US and EU markets, but they have to compete with the agents working in other countries is Asia.

4.2 Critical Activities for Building Core Competence

Porter's (1985)-value chain analysis divides a company activities into the technologically and economically distinct activities it performs to do business. These are called value activities because they should add value for which buyers are willing to pay when they buy final product or service being supplied. A business is profitable if the value it creates exceeds the cost of performing the value activities. To gain competitive advantage over rivals, a company must either perform these activities at a lower cost or perform them in a way that leads to differentiation and premium price (Earl, 1989).

In the RMG buying house business, it is important that these firms have been facing intense competition in the international market as because the buying agents working other countries can supply quality garments at the minimum possible cost and the delivery time for those buying houses are better than the firms working here in Chittagong. As it is revealed that this sector also competitive in the factors such as price, quality and delivery time. In the context of these important factors of competition the study focuses the sample firms and their business.

These firms are trying to be competitive in the price quotation and it is true that still the firms are getting competitive strengths due to the cheapest labour of the country. But the RMG buying houses need the highest efficiency in the F.O.B. price quotation. Studying the orders it is understood that the price quotation has the jobs described in the Chart 1 below:

Chart 1
Jobs in the Price Quotation of the Orders

Sl. No.	Job
1	Receive an order sheet from the buyer
2	study the order sheet
3	Take Fabric prices from different sources
4	Estimate fabric consumption
5	Calculate accessories requirements & costs of the same
6	Take the cost of manufacturing from different factories

Source: Interview taken by the author in the sample firms.

From this chart it is clear that the buying houses can quote competitive price of the product when it is possible for them to so effectively the jobs mentioned here. But in most of the cases which is 80% (40 orders out of 50) here, the buying houses can not get efficiency and effectiveness in performing the jobs in this stage. The problems identified at this stage are as follows:

- Estimating fabric consumption is time consuming and lacks accuracy;
- Takes time to get prices of the raw material ;
- The manufacturer fails to give competitive price for the production;
- Accessories are not available at the competitive prices in the local market.

Secondly with the quality assurance activity the manufacturers have failed to use local sources for fabric and accessories. What they do now, simply follow the directions given by the buying houses for fabric importing from other countries and do the cutting & stitching jobs as per the pattern marking supplies by the buying houses. So at this stage, other activities

are support activities according to the value chain analysis where the buying houses can render services to the manufacturers and the primary activities are inbound logistics, operation and sales services e.g. delivery of the goods.

Therefore, the study identifies some critical activities where the buying houses can have some core competencies to be competitive in the business and these are:

- Procurement of key raw materials at competitive prices
- Support technology to the manufacturer of the product
- Ensure quality of the product as per the buyer's expectations
- Help the manufacturer to do prompt delivery of the products

4.3 Exploiting Information Technology

Esrl, J. Michael (1989) told that the scope for exploitation of IT in the value chain is fourfold, applying either technology directly or its information processing capability to either value activities their linkages:

1. The technology can physically automate and improve the physical tasks in any activity, e.g., computer controlled machine tools in assembly operations.
2. The technology can physically connect or control activities across linkages, e.g., communications linkages between production and distribution centres.
3. Information systems can help perform, support or manage value activities, e.g., inventory control systems.
4. Information systems can optimise or coordinate activities across linkages, e.g., CAD-CAM systems for computer integrated manufacturing.

From the study area it is revealed that the firms can exploit IT in some activities to get competitive advantages over the rivals. In the price quotation functions out of the 50 orders only 10 orders use E-mail/Fax facility to receive and dispatch the documents from and to the buyers. The respective section, which estimates fabric consumption, uses CAD (Computer Aided Designing) to do the job and here the percentage is 20% of using the CAD to estimate the fabric consumption.

All the calculations/estimations relating to the raw materials needed and the respective pricing jobs are done by the use of computers and the relevant information are put into the computers so that the networking within the firms help the Merchandising Department to get speed, accuracy and efficiency in the price quotation.

The second important area for competition is quality assurance. In all of the five sample firms have a separate Quality Control Department which does quality controlling function with the cooperation of the Quality Control Department of the manufacturer. Since, the whole operation in the manufacturing is labour intensive and low technology based, the quality control is done by the supervisors during the production and the buying house can check the fabric, accessories, thread, etc.

The same CAD section can produce pattern marking to do the cutting jobs at the factory. As it is known that most of the manufacturers do the cutting and sewing operations as per the orders given by the buying houses, so in case of 20 orders studied here the pattern markings of the items to be stitched are also given by the buying house itself from its own CAD section, whereas for all other orders the pattern markings are done by the manufacturers at the factories by annual operation. The CAD section of the buying house can draw pattern marking of any style to calculate fabric requirement and subsequently the same pattern marking is used to do the cutting job at the factory where the order will be placed. Such CAD produces pattern marking which is cost effective, saves man-hour, gives accuracy and finally provides efficiency of the fabric consumption. The Table 2 shows a comparative figure of the pattern.

Table 2

Comparative Figures of Pattern Marking and Fabric Consumption Estimation

	Done by CAD	Done by Manually
Services Rendered (per month)		
Pattern Markings	120	40
Estimating Consumption	60	10
Per Unit Cost	Tk.110	Tk.250
Accuracy	100%	50%-70%
Efficiency	92%-97%	Below 90%
Time Required (per unit)	3-5 minutes	60-90 minutes

Source: Interview taken by the author in the sample firms.

The above comparison makes it clear that by using the CAD the pattern marking and fabric estimation jobs can be done here in the RMG orders to get efficiency and it helps a buying house to quote competitive price since the CAD estimation gives the fabrics usage's in a particular order at the earliest possible time which is 3 to 5 minutes whereas the same job is being done by manual operation using minimum 60 minutes time. Another advantage of using this CAD at fabric consumption and pattern marking is its per unit production cost which is Tk.140 cheaper than the same done by manual operation. Therefore, for the orders where CAD and other computer facilities are used the buying houses can get competitive advantages in performing their merchandising and quality control function.

4.4 Relating the IT Competencies to Core Competence

From the orders studied here it is seen that the RMG buying house can exploit IT to get competitive advantages over their rivals. In their functioning today they can outperform other competitors in the market by the cheapest cost of stitching a garment in this country. But they have problems in material procurement, quality operation and in time delivery. It is experienced that for 20% of the orders studied here the IT exploitation can improve the situation. For these orders they are benefited in the following Ways:

- Receives the order specification at the earliest possible;
- Uses E-mail facility to know the prices of fabric;
- Estimates fabric requirement by the CAD at the maximum possible efficiency;
- Draw the pattern marking on the CAD;
- Use the CAD product to ensure quality product;
- Use on line communication facility to do the prompt delivery of the product.

The buying houses those who use the computer linkage communication network in their operations can render their services at the best possible ways, which give them competitive strengths in the market. Again the competencies of IT which is here the facility enjoyed by the buying house to estimate the fabric requirement at the maximum efficiency can work as competitive advantages to go for wide variety of market and product diversification. Since, there is no core competence in the RMG sector of the country, the IT competencies, which will ensure quality products at the minimum possible cost, should be used in the activities identified here. Once it is experience that the buying houses can reduce cost of production for wide variety of products in the RMG, the same IT competencies should be exploited to build core competence of the business.

V. Conclusion

The study in the RMG buying houses reveals that in its functioning the firm can outsmart its rivals in the marketplace where IT can play a role to build core competence. In this particular case, the IT exploitation help the firm to get the highest efficiency in terms of cost, accuracy and speed to do its merchandising and quality control functions. In the RMG business of the country the primary activities and support activities are the areas where IT can have some competencies to perform the jobs with maximum efficiency. The buying houses use CAD and other computer aided networking weapons to the merchandising jobs i.e. fabric requirement estimation, raw material sourcing and accessories pricing which help the firms in pricing and procurement of the business at the maximum benefits. So these businesses are getting some competitive advantages in this sector to outperform their rivals.

In the phasing out of MFA by the year 2005, the RMG of this country will have to compete with new paradigm shift of the strategic management. In that new situation, the rivals will be in a position to compete in the liberalized market and in facing that competitive position the idea of exploitation IT in building core competence will enable the country's RMG business firms to be competitive.

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FINANCIAL IMPACT OF PRIVATIZATION: A CASE STUDY

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Abstract: The present study measures the impact of privatization on a unit which was under BCIC but privatized within the overall framework of New Industrial Policy which emphasized privatization and reduction of state control. The comparative study shows that there is improvement in production, sales and profit position of the enterprise after privatization. But there is reduction in employment and tax payment by the sample unit after privatization. There is no change in solvency but fall in liquidity position after privatization.

I. Introduction

Bangladesh started its career with a large public enterprise sector. After liberation, because of the adoption of socialism as one of the state principles and also on pragmatic reasons, Bangladesh has built up a large public enterprise sector¹. The manufacturing industries under public ownership in Bangladesh are broadly grouped under five major public Industrial Corporations, namely, (1) Bangladesh Jute Mills Corporation, (2) Bangladesh Textile Mills Corporation, (3) Bangladesh Steel and Engineering Corporation, (4) Bangladesh Chemical Industries Corporation, (5) Bangladesh sugar and Food Industries Corporation.

Over the years, since 1971, it has been found that, in general, the manufacturing public enterprises have been incurring operating deficits in almost every year since liberation and as a result these enterprises have been placing a growing net financial burden on the government. It is continuing to incur a staggering loss around Tk. 2700 crore annually for subsidizing the loss making². This has, over the time, led to successful pressure for privatization of the public sector manufacturing enterprises with the aim of reducing the financial burden and giving more room to the private sector³. From Chile to Russia, from Indonesia to UK, privatization has proved to be extremely beneficial. In an assessment of the true value of privatization in several countries, a London based economic policy organization, the Adam Smith Institute, confirmed that privatized enterprises improved performance in terms of profitability, efficiency and investment. A major World Bank study on performance of privatized companies in nine developing countries came out with even more spectacular results. It observed that besides creating opportunities for profitability, privatization has removed constraints of new investment and access to capital⁴. As a result, a large number of enterprises were privatized under different sector corporations. But studies on the performance of such

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privatized industries are few and far between. A study was conducted covering the period between 1976-83, on the performance of enterprises, which have been privatized⁵. So there is a gap, which can be bridged by such a research work titled, "Financial Impact of Privatization: a Case Study".

II. Scope, Objectives and Methodology

The policy of privatization is implemented through three main approaches: (1) transfer of ownership, (2) liberalization or deregulation, and (3) franchising or contracting out of public services. Complete or partial transfer of ownership from the public sector to the private sector is perhaps the most widely used mode of privatization. Liberalization takes place by sale of general public of all or part of the equity through public offering. It is in this sense that the term privatization is used here. In this article we have selected a company which was under public sector corporation and later on privatized by selling 51% of its equity shares to the public.

The main objective of the study is to measure the impact of privatization on the sample enterprise. This main objective will be achieved by the following sub-objectives. So the objectives of the study are:

- a. To give a brief description of the privatization process adopted for sample enterprise;
- b. to present a comparative picture of financial performance indicators of the sample enterprise before and after the privatization;
- c. To highlight whether there is any change in social services of the sample enterprise between pre and post privatization period.

This is a desk research. All the information required for the study has been collected from the secondary sources. The published annual reports of the company for a period of eight years are used for the purpose. Out of them four annual reports is from pre privatization period and four-post privatization period. The study depicts a comparative picture between pre and post privatization period of the sample unit in terms of criteria like production, sale, employment etc. To make the study theoretically useful, various articles and research works completed on the relevant fields have been consulted.

The sample enterprise has a very old history. It started commercial production in 1974 and has been playing a vital role in the field of national development of Bangladesh by producing construction material. Following chart shows the owner/controlling body with the period of ownership.

Owner/Controlling body	Nature of ownership	Period of Ownership
EPIDC	Public Ownership	1962-1971
BMOGC	Do	1972-1973
BMEDC	Converted into public Ltd. Co. in 1978-79	1973-1982
BCIC	49% of shares were sold to the public and 51% retained by BCIC	1982-1993
Private Owner	51% of shares were transferred to private owner and 49% retained by BCIC	From 26 th June, 1993

II. Comparative Performance Measurement

One of our objectives of study is to show a comparative picture of performance of this sample unit in respect to key performance indicators like production, sales, profit, employment etc. Each of them is shown below.

Table 1

Production performance of the sample unit between pre and post privatization period

Particulars	Pre Privatization Period				Post Privatization Period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Target Production	2000	1400	1750	1500	1900	-	-	-
Actual Production	2082	1401	1745	1569	1840	1522	2193	2146
Percentage of achievement	104	100	99.71	104.6	96.84	-	-	-

Source: Annual reports of the sample unit

From the annual reports of the sample unit it is learned that the attainable capacity of the plant is 275000 M.T. But during our study period the unit could not achieve this target. However, it has achieved the production target determined for each year by considering the production facilities available and external factors. In the annual report of 1994-95 to 1996-97, no information about the production target is disclosed, so the percentage of achievement can not be calculated. However, one thing is clear from the table that production has reached the highest level that is 214600 M.T. in 1996-97. It is an indicator of increase in production efficiency.

Sale is another indicator of performance. But sales in Taka may show better performance from one period to another if price fluctuates. To show the comparative sales performance, sale in quantity is considered. The following table shows performance of the sample unit.

Table 2

Sales quantity of the sample enterprise between pre and post privatization period (Figures in '00 M.T.)

Particulars	Pre privatization period				Post privatization period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Sales	2079	1407	1720	1520	1885	1575	2085	2245
Production	2082	1401	1745	1569	1840	1522	2193	2146
Percentage of sale to production	99.85	100.4	98.54	96.9	102.5	103.5	95.08	104.6

Source: Annual reports of the sample unit

The above table shows that the sales in terms of quantity has no definite trend in the pre privatization period but that of post privatization period shows an increasing trend except in 1994-95 (which is described as abnormal year). Moreover the sales figure in 1996-97 is the highest in the series of sales data.

To test the marketability of the product, a comparison between production and sales is made in the above table. The percentage of sales to production show that sale was nearest to production. So there is no remarkable change. However the latest percentage of sales to production is the highest in the series of data.

Profit is an important indicator of performance measurement. No business can survive without it. In Bangladesh, privatization of private sector enterprise was made on the plea that they are losing concerns. So the following table is designed to show the comparative profit figure of the sample unit.

Table 3

Comparative profit of sample unit between pre and post privatization period

Particulars	Pre privatization period				Post privatization period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Profit before tax (in lac Tk.)	771.07	741.3	774.1	525.17	491.55	765.21	1423.72	1469.41
Percentage of profit in sales	14.56	17.04	14.1	10.59	8.28	14.21	17.49	16.91
Profit per ton of sales (in Tk.)	370.88	526.98	450.16	354.95	260.72	485.81	682.74	654.52

Source: Annual reports of the sample unit.

The above table shows an increasing trend in profit. The highest percentage of profit on sale in pre privatization period was 17.04 but that in post privatization period was 17.49. Again profit per M.T. of sales was highest in post privatization period which was Tk. 682.74. So the profit performance of sample unit has improved after privatization.

Now some important ratio relating to liquidity and solvency, activity, leverage and cost break down are arranged below to show the changes in performance before and after privatization. First the cost breakdown ratios are shown below.

Table 4

Cost breakdown percentage before and after privatization

Ratios	Pre privatization period				Post privatization period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Raw materials to cost of sales	70.89	73.65	72.27	77.10	75.11	73.71	84.03	71.6
Packing materials to cost of sales	11.10	10.13	9.78	7.40	8.02	8.69	8.68	9.74
Factory overhead to cost of sales	7.72	13.38	11.35	12.10	11.48	11.58	9.86	9.44
Factory overhead to cost of sales	3.44	4.31	3.39	3.40	1.64	2.16	1.81	2.91
Selling & distribution overhead to cost of sales	1.55	1.92	1.17	.80	.68	.87	.69	1.96

Source: Annual reports of the sample unit

The above table shows that there is no change in the percentage of material used to cost of sales before; and after the privatization. There is no remarkable saving in the cost of packing material. But the three other elements of cost are showing declining trend after privatization.

There is a common allegation that privatization has adverse impact on the government exchequer. The private owners try to evade tax payment. This aspect is highlighted here the following table.

Table 5
Percentage of tax payment (Figures in lac Tk.)

Particulars	Pre privatization period				Post privatization period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Tax paid	321.8	288.3	294.15	217.0	125.87	227.0	471.0	485.0
Profit	771.1	741.3	774.1	525.9	491.55	765.21	1423.7	1469.4
Percentage of tax to profit	41.74	38.88	37.99	41.25	25.6	29.66	33.08	33.00

Source: Annual reports of the sample unit

The above table shows that the percentage of tax to profit before pre privatization period ranges between 38% to 42%. However, these percentages have been dropped sharply after privatization. Post privatization percentages of taxes to profit ranges between 25% to 33%. So it is clear that after privatization, the contribution of taxes to government exchequer has reduced. Concerned authorities should keep watchful eyes on this issue so that the tendency of tax evasion, if any, by private enterprises may be prevented.

One of the big hurdles before the privatization process by the government is that privatization will create unemployment. The fear of unemployment in the minds of the workers creates strong resistance from the labour union to the privatization process. The following table will show the change in employment after privatization.

Table 6
Employment position before and after privatization.

Manpower Set-up	Pre privatization period				Post privatization period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Workers 207	151	151	151	143	133	119	118	112
Staff 179	161	157	157	138	113	121	117	111
Officers 45	57	63	63	35	24	24	23	38
Total 431	369	371	371	316	270	264	258	251

Source: Annual reports of the sample unit

There was an organizational set-up of employment, which was based on attainable production capacity. The factory however did not achieve that target during its history of production. As the actual manpower of the organization was always lower than the original set-up. Total manpower of the unit declined gradually from 1989 to 1997. In the pre privatization period, the number of officers was more than the set-up target. However, after privatization, the scene has changed. After privatization, there is fall in employment in all categories of workers.

To conclude the comparative analysis between pre and post privatization period of the sample unit, some important ratios not covered by the previous table are summarized below.

Table 7
Key ratios relating to liquidity, activity & leverage

Ratios	Pre privatization period				Post privatization period			
	89-90	90-91	91-92	92-93	93-94	94-95	95-96	96-97
Current ratio	1.33	1.36	1.41	1.65	1.58	1.26	1.01	1.43
Liquidity ratio	.94	.94	1.04	.98	.08	.63	.45	1.20
Stock-turnover ratio	5.69 times	4.51 times	5.4 times	4.48 times	5.75 times	4.16 times	4.31 times	4.60 times
Debt-equity ratio	55:45	52:48	50:50	47:53	43:57	24:58	35:65	23:77

Source: Annual reports of the sample unit

The table shows that the current assets were always more than the current liabilities and there was no general trend in the ratios. Regarding liquidity ratios, it is seen that the liquidity position has dropped suddenly after privatization and it has recorded the liquidity crisis 1997. So it is clear that it has suffered liquidity crisis after privatization.; There is no remarkable change in stock turn unit shows a dramatic change after privatization. Before privatization, the percentage of debt was 55% in 1989-90 and it has fallen to 47% in 1993. But the latest picture is that the percentage of debt to equity is 27%. So the sample unit is successful in developing a strong base of capital of its own after privatization.

III. Conclusion

The above analysis of performance of the privatized units supports that privatization has increased production, sales and profit of the company. But, the contribution of the sample unit in nation exchequer has reduced and employment opportunity has shrunken. So privatization of the sample unit has mixed impact on the economy. To measure the impact of privatization on our economy, extensive study is required to be made on all the units off-loaded by the sector corporations by transferring their 51% shares to the public. This paper is a snap-shot to that end.

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