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# INTRODUCTION

- 1.0 Prelude
  - 1.1 Role and Importance of Textile Sector in Bangladesh
  - 1.2 Historical Development of Textile Sector
  - 1.3 Bangladesh Textile Mills Corporation (BTMC)
  - 1.4 Bangladesh Textile Mills Association (BTMA)
  - 1.5 Statement of the Problem
  - 1.6 Review of Related Literature
  - 1.7 Direction and Significance of the Present Study
  - 1.8 Objectives of the Study
  - 1.9 Research Questions
  - 1.10 Hypotheses of the Study
  - 1.11 Methodology and Coverage of the Study
  - 1.12 Limitations of the Study
- References

## 1.0 PRELUDE

Bangladesh is primarily an agricultural country. It has an area of about 147570 sq km and a population of 111.4 million<sup>1</sup> making it the most densely populated country in the world, but in per capita income she is one of the poorest of the developing countries. Over half of her gross domestic product comes from agriculture. But the industry sectors though small and contributes only 8.8 percent to the GDP, plays an important role in the economy of Bangladesh. It provides essential consumer goods and key inputs for agriculture and accounts for about 70 percent of foreign exchange earning from export. In an agrarian economy where the prospect of agriculture is largely dependent on the technological development, industry will assume increasingly bigger role in the years to come to supply agricultural inputs and process agricultural outputs. Industrial sector will also be required to supply essential goods for meeting the basic needs of the people for better nutrition, clothing, housing, minimum health care, education and mass communication. It is expected that with the growth of industries in the country, the industrial enterprises would ultimately occupy a rightful place in the national economy and contribute to the economic growth of the country by increasing industrial production, national income and employment opportunities. It is because of their unique position in the national economy, a measure of efficiency at all levels assumes a great importance. But unfortunately, like all other developing countries, the industries in Bangladesh suffer from low productive efficiency and high cost of production<sup>2</sup>. This low level of efficiency has been considered as a serious warning to the programme of rapid industrialisation through her various five-year plans. Besides this, scarcity of foreign exchange in importing plants and equipments, paucity of capital, lower rate of profits—all are responsible for present day problematic situation with respect to industrial growth in the country. But in recent years industrial operations in Bangladesh have begun to find way to get rid of present situation. Particularly, the cotton textile industries

have generally diversified their operations to offer services to the various segments of the society.

Cotton Textile has been historically the path blazer for industrialisation. From times immemorial, until the British rule, the then East Bengal was self-sufficient in textiles and was reputed globally for producing high textured superfine "MUSLIN", "JAMDANI" and "SILK FABRICS"<sup>3</sup>. The textile and clothing sector occupies a very important position in Bangladesh. It is the largest manufacturing sector which contributes 5% to the GDP and around 50% of the industrial employment comes from this. It accounts for 40% of the manufacturing value addition. It contributes to about 70% of the total foreign exchange earnings<sup>4</sup>. At present textile sector is considered as the most potential sector capable of generating new employment and creating scope for foreign exchange earnings. The strong desire of the government to increase per capita income to \$500 from the present level of \$200 by the year 2005, may be feasible through development of the textile industries.

## **1.1 ROLE AND IMPORTANCE OF TEXTILE SECTOR IN BANGLADESH**

The cotton textile industry is the second largest industry in Bangladesh next to jute and it is the most significant of the important substituting industries. Bangladesh with a population of 111.4 million with a growth rate of about 3% requires a very large quantity of cloth to clothe the total population. In these sense the effective management of the existing textile mills, development of new textile mills and the handloom sector is of prime importance. The role of this sector can be summed up as under :<sup>5</sup>

- i) The textile sector is concerned with providing cloths which is a basic necessity of life.
- ii) Textile industry is labour intensive and it plays an important role in providing employment opportunity to the unemployed and under employed work force. Employment in textile industry is more than 35 lakh, which accounts for 45 percent of the total employment of the industrial sector. The successful implementation of the investment programme made for the period 1995-2005 will create new employment opportunities for 25 lakh people.
- iii) The contribution of the textile sector is more than one third of the total value addition of the industrial sector and about 5 percent of national income.
- iv) The contribution of the textile industry both in terms of earning foreign exchange through exports as well as savings due to import substitution is increasing rapidly. The total export earnings from the textile industry of Bangladesh rapidly increased to Tk.9085 crore in 1994-95 from Tk.0.10 crore in 1977-78. The textile industry contributes about 65 percent of the total export earnings of the country.
- v) With the expansion of textile industry, medium and small scale engineering industry is being developed to meet the requirement for machinery and spares required for the textile industry.

In the Fifth Five-Year Plan (1997-2002) <sup>6</sup>, the total demand for fabrics in the year 2001-2002 is projected to be 5,265 million metres, including 3,228 million metres for export. And the demand supply gap of fabrics will increase from 2,633 million metres in 1996-97 to 3,917 million metres in the year 2001-2002 out of which 2,960 million metres will be on account of readymade garments

(RMG) industries. Again the excess demand for yarn over the local production in 1995-96 was 390 million kg which is expected to increase to 639 million kg in 2001-2002. About 67% of the total demand will be for cotton yarn, while the rest 33 percent will be on account of yarn from man made fabrics. The possibility of attaining self-sufficiency in fabrics and yarn can only be made by improving the management of the existing textile mills and handloom sector and by establishing new textile mills.

A comprehensive programme for the creation of new capacity in all the sub-sectors of textile industry will be set in order to attain self-reliance in fabrics for domestic market by the year 2002 and to meet 50 percent of the fabric requirements of export oriented RMG industries. The establishment of new units in different sub-sectors of textile will not only help industrial development programme of Bangladesh and create employment opportunities but will also save extra foreign exchange.

Considering the importance and bright prospect of the textile industry, the Government of Bangladesh declared textiles as "Thrust Sector" in 1992. The importance of an effective "Textile Policy" for overall development of the textile industry can hardly be over emphasised. With this perspective in view the "Textile Policy-1995" has been formulated for harmonious development of the textile industry within the framework of an open market economy. The main objective of the "Textile Policy-1995" is to achieve self-reliance in textiles for meeting local demand as well as for supplying fabrics to the RMG industry through establishing backward linkages and to ensure direct export of textile goods by expanding production of quality fabrics at competitive prices. For achieving the above objectives, the main strategies to be adopted were: i) The private sector will be given the scopes for being the focal point role for developing the textile industry of the country; (ii) for the overall development of the textile industry, production

capacity of different sub-sectors would be increased through balancing, modernisation, replacement and expansion (BMRE) of the existing old units<sup>7</sup>.

## 1.2 HISTORICAL DEVELOPMENT OF TEXTILE SECTOR

### Cotton Textile Industry in Bengal—A look into Its Glorious Past

Cotton culture started in the then British India which now constitutes the geographical boundary of Bangladesh from a very long time back. The high reputation of quality “Dacca Muslin” was a matter of pride and honour for Bangladesh during the time of ancient civilisation—the Egyptian, the Babylonian, the Phoenician, the Greek and the Roman. “During the period of ‘Kautilya’ in the 4<sup>th</sup> century A. D., the cotton textile industry had been assumed to play a prominent role in producing quality products”<sup>8</sup>. It is believed that in the early part of the 17<sup>th</sup> century, the industry could achieved its optimum efficiency.<sup>9</sup> “The industry had finally gained its supremacy in the early part of the 19<sup>th</sup> century when it had been regarded as the greatest industry of the world”<sup>10</sup> During the golden time the cotton textile products, especially the ‘Dhaka Muslin’ gained name and fame in every corner of the world. The main material of Dhaka Muslin was not foreign made yarn, rather most of the yarn used was obtained from indigenous hand spinners. During the period, the art of hand spinning reached at extreme in producing fine and super-fine quality of yarn varying between 150 to 200 counts for weaving this famous muslin<sup>11</sup>. “One grain (1 grain equals 1/100th tola, 1 tola = 11.66 gm) of muslin thread could be stretched to the full length of 500 yards”<sup>12</sup>. The weavers could produce muslin cloth of various designs and colour combinations, which not only could meet the simple and revealed demand of the rural and urban masses of the people but also could attract the then people of the aristocratic society, especially the emperors and princes. The ladies of the western world particularly

those of imperial Rome and its princes had craze for this fabric with golden and silver embroideries<sup>13</sup>.

The then Bengal earned the larger part of foreign exchange by exporting the cotton textile products. "In 1772, cotton goods amounting to £ 7 lakh had been exported to England for the purpose of re-exportation to different countries"<sup>14</sup>. These cotton products had been usually exported at a profit of 60% to 70%.<sup>15</sup> In those days, in fact there was no dearth of employment, no marketing problem, no cut-throat complication, and weavers were indeed in a Golden Age of plenty and prosperity<sup>16</sup>. But the Industrial Revolution in England and the selfish commercial policy of the then British Government had affected the external and internal markets of the then Bengali textile products to a great extent.

In 1821, when English machine made yarn started entering into Bengal's market, the then British Government started physical torture to the weavers of the finest quality of cloth. Even the thumbs and index fingers had been chopped off in order to make them disable from twisting finer count yarn<sup>17</sup>. To keep the tendency of exportation under control a duty to the tune of 70% to 80% had also been imposed on the hand woven cloth exported from the then Bengal<sup>18</sup>. On the other hand, British textile products had usually been allowed to enter into India with a nominal import duty at the rate of 2.5% in 1815.<sup>19</sup> In this way at the end of 19<sup>th</sup> century the Cotton Textile Industry of Bengal had almost ruined and most of the weavers had been compelled to give up their hereditary occupations and they started cultivation and boating.

#### **Growth of the Cotton Textile Industry During Pre-Partition Period (1818-1947) :**

Among various large-scale industries of Bangladesh, the cotton textile happens to be the oldest. In British-India Sub-continent, the first cotton textile mill

was established as early as 1818 at Ghosary of Hooghly district in West Bengal<sup>20</sup>. The real development in Indian Cotton Textile Industry came after 1851 with the establishment of Bombay Spinning and Weaving Mills in Bombay.<sup>21</sup> By the end of 19<sup>th</sup> century, the total number of cotton textile mills in India reached at 144. But up to this period not a single mill was setup in the region now comprising Bangladesh. The first unit, the Mohini Mills Ltd. started its production with only 8 looms at Kushtia as far back as in 1908, whose founder was Babu Mohon Chakravarti. The second oldest mill in Bangladesh is Luxmi Narayan Cotton Textile Mills Ltd. which was established at Narayanganj in 1927.

Among the inter-war years, the most rapid growth occurred during the year 1930 owing to favourable commercial policy and six more mills were set up in Narayanganj, Khulna and Chittagong. It can be argued that the Indian Political Movement laid down the foundation stone for the real growth of cotton textile industry in Bangladesh. The last mill (set up) in Bangladesh before the partition of India in 1947 was Adarsha Cotton Textile Mill which was set up in 1944. By the year 1947, when India was partitioned, Bangladesh possessed 8 mills with installed capacity of 109,700 spindles and 2,717 looms.<sup>22</sup>

### **Development of Cotton Textile Industry during Pakistan Regime (1947-71)**

After the departure of Britishers, Bangladesh became a province of Pakistan. During Pakistan period the growth of cotton textile industry in Bangladesh was impressive because of a ready home market and some government incentive through various policy measures. During the pre-plan period (1947-1955) 10 new mills were established in this province where as 29 new textile mills were set up during this period. During the First Five Year Plan period (1955-1960) no textile mill was established in Bangladesh (then East Pakistan) while 16 new mills were set up in West-Pakistan. Substantial increase in

capacity of textile industry was achieved particularly after 1960. During the second plan period (1960-65) 24 new mills were set up in this province where as 14 new mills were established in West Pakistan; but in case of expansion of old mills West Pakistan got the major shares. At the end of Third Five Year Plan (1965-70) the total number of cotton mills in Bangladesh were 43 against the total of 106 in West Pakistan<sup>23</sup>.

### **Growth of Cotton Textile Industry during Post-Liberation Period (1972-83):**

Before independence of the country in 1971 the total number of textile mills were 44 having a capacity of 8,36,000 spindles and 7,000 looms. During the post-liberation period a drastic policy changes had occurred. On March 26, 1972, all the large scale cotton textile mills were nationalised with the promulgation of Bangladesh Industrial Enterprises (Nationalisation) order, 1972 (President's Order No. 27, 1972) and handed over to Bangladesh Textile Mills Corporation (BTMC), established for the purpose of management and control of the textile mills. The first and a subsequent schedule of nationalisation order brought the total number of enterprises under the BTMC to 74. Among them only 72 mills were actually capable of providing textile goods and the rest 2 had no tangible assets. In 1975-76, the BTMC brought another mill under its control<sup>24</sup>.

The Government, however, started disinvesting and a number of mills were disinvested to their former owner up to 1976-77. The number of running spinning mills were increased to 31 and composite mills to 25 and 4 specialised mills and 5 under construction mills making the total of 65 which were brought under the control of BTMC, by June 30<sup>th</sup>, 1981. Government announced the New Industrial Policy (NIP) in June 1982 which opened up most of the industries to private investment. In presence of the NIP during 1982-83, 27 cotton textile mills with 4.97 lakh installed spindles and 4,771 looms were transferred to private

sector in order to create more confidence among private entrepreneurs for boosting private investment in this sector<sup>25</sup>.

The policy of disinvestment was due to the ideological shift of the new Government as well as the result of the pressure from the aid giving agencies, particularly the World Bank. In the strategy and policy planning for the growth of cotton textile industry, the privatisation policy got high importance.

### **Position of Cotton Textile Industry during the Study Period (1987-97) :**

The textile industry which initially emerged in the late sixties had been set back in the process of development due to nationalisation in 1972. There was no prospect in the textile industries under the control of BTMC during the nationalisation period up to 1982. It was only after denationalisation in 1983, the textile industries made rapid stride. At the beginning of the year 1985-86, 33 textile mills and 5 specialised mills were in operation under BTMC.<sup>26</sup> In the Third Five Year Plan (1985-90), the new capacity generation for both fabrics and yarn were almost entirely earmarked for private sector. During this short period the number of mills in private sector had increased almost double with corresponding increase in both spindles and looms. In 1989-90, there were 77 textile mills including 27 composite mills both in public and private sectors having 16.20 lakh spindles and 8,707 looms in the country. Besides there were 27,793 power looms and 5.3 lakh handlooms in the country<sup>27</sup>. During May'92 to June'93, 10 heavily loosing mills of BTMC with average 1,61,075 spindles and 601 looms had been laid off under denationalised Industrial Policies of the Government. In 1996-97, 27 spinning mills with average installed capacity of 5,90,820 spindles and 2,945 looms and 3 specialised mills were in operation under BTMC. On the other sight, 72 spinning and weaving member mills of Bangladesh Textile Mills Association (BMTA) were in operation during 1996-97 as reported in Annual Report 1996-97.

There has been a sharp growth of textile spinning mills having modern machinery. During the last ten years 54 textile spinning mills have been enrolled as member of BTMA but only during the year 1996-97, 21 mills have been enrolled so far and total spindles stood at 2.4 millions. Moreover, as many as 22 weaving mills, 18 dyeing-printing units had also been enrolled during this year.

### **1.3 BANGLADESH TEXTILE MILLS CORPORATION (BTMC)**

The Bangladesh Textile Mills Corporation (BTMC) was established on the 26<sup>th</sup> of March, 1972; consequent upon the promulgation of the Bangladesh Industrial Enterprises (Nationalisation) Order, 1972 (President's Order No. 27 of 1972). The corporation actually started its formal functioning from the 1<sup>st</sup> of July 1972. The corporation is entrusted with the responsibility of management and control of the nationalised textile mills of the country and listed 64 textile units were placed at the administrative control of the corporation. The number of running textile mills was 44, with installed capacities of 8,31,000 spindles and 6,500 looms. The number of specialised mills was 13. Later government disinvested 10 specialised textile mills during 1977 to 1979. Another 4 textile mills with installed capacities of 82,440 spindles and 2,046 looms were put under liquidation by the government in 1982. In pursuance of the new industrial policy 24 operating units having 4,63,816 spindles and 3,059 looms were transferred to Bangladeshi shareholders during 1982-83 to 1984-85.

### **1.4 BANGLADESH TEXTILE MILLS ASSOCIATION (BTMA)**

The Association was incorporated under section 26 of the Companies Act, under No. T. O. 163 of 1983-84, dated 20<sup>th</sup> December, 1983. The main objective of the association is to encourage friendly feeling and unanimity amongst Textile

Mills owners on all subjects connected with their common interest next to promote and protect the trade, commerce and manufactures of Bangladesh in general and of the cotton trade in particular. 22 textile mills of private sector were listed as the members during the formation of this association. As per the Annual Report of BTMA 1996-97, 105 spinning mills, 22 weaving mills and 20 dyeing-printing-finishing mills of private sector have been listed as member of BTMA.

## **1.5 STATEMENT OF THE PROBLEM**

It is an admitted fact that any development strategy which aims at raising output and generating adequate employment opportunities, needs to address the rapid industrialisation move. The process of industrial development in the territory now comprising Bangladesh had been started only in the late 60's under direct patronisation of the then Government, which ensured various types of incentive under different policies to the private sector entrepreneurs, mainly non-Bengalis. As a result of this move, the textile industrial sector started to develop in this part of the country as it is to supply the second essential item for consumption of the large population of the country. During pre-liberation period the textile mills in the private sector earned a good profit as there was almost a guaranteed and protected market for their products and more over they enjoyed various privileges extended to them by the monetary credit and fiscal policies of the then government. Under the present day national and economic situation, the development of the import substituting textile sector is essential to save the drainage of the country's hard earned foreign exchange and to meet the demand of the country's large handloom sector. A total of 30 textile mills were running under BTMC and 72 textile mills were running in private sector as on 1996-97.

But unfortunately the financial performance of this industry was not satisfactory especially of public sector textile mills, which act as a stumbling

block to the process of economic development of the industry. There may be a number of reasons, which are responsible to this poor performance. The Planning Commission of the country in the First Five Year Plan (1973-78) has pointed out that the most important problems faced by the industry are— a) lack of adequate and timely supply of raw cotton and yarn, and b) the need to cut down idle loomage. Eminent economists of the country have indicated some loopholes in the working capital management of the cotton textile industry. These are— working capital gap, defective policy relating to the procurement of raw cotton and spare parts and so on. The corporation incurred an average annual net loss of Tk. 19.4 crore during the Two Year Plan period (1978-80) and Tk. 16.3 crore during the Second Five Year Plan period (1980-85)<sup>28</sup>. The performance of the textile mills during the Third Five Year Plan and Fourth Five Year Plan was not also encouraging both in terms of profitability and production. From 1972-73 to 1990-91, the corporation incurred a total loss amounting to Tk. 63.89 crore. During 1991-96 the mills under BTMC incurred losses of Tk. 548.98 crore \$ of which Tk. 135.00 crore was only during 1995-96. The total loss incurred by the corporation during 1972-73 to 1995-96 was Tk. 612.87 crore. “The poor performance of the primary textile sector provides a sharp contrast to a vigorous and sustained growth maintained in the export oriented RMG-industry. In the large mill segment, there is very little weaving capacity, which is really suited to producing export quality fabrics. Much of the capacity that does exist lies with the public sector- BTMC mills which suffer from unique problems of their own and are not in a position to cater to any demand from the RMG industry.”<sup>29</sup>

Planning Commission<sup>30</sup> in its Fifth Five Year Plan document mentioned as “at present there are 31 textile mills under the public sector most of which are very old and technically outdated to produce good quality yarn and grey fabrics. All the public sector mills are running at loss due to some inherent problems like low capacity utilisation, irregular repair and maintenance, lack of managerial efficiency, excess manpower, high cost of production, etc. Thus replacement of

machinery to increase production and to meet the requirements of the export quality fabrics are essential for increased value addition and employment generation for Ready Made Garments (RMG)". The situation however seems to be relatively better in private sector mills.

## 1.6 REVIEW OF RELATED LITERATURE

*Loqman, M.*<sup>31</sup> in his study of financial analysis of 135 Jute and Cotton Textile Industries in Bangladesh for the period of 1975-1980, pointed out that the average profit margin ratio of cotton textile industry is lower than the standard norm (some author consider that a profit margin ratio with 4 percent to 6 percent). The author also stated that the cotton textile industry showed negative return on capital employed recording 9.51% as compared to the standard norm of 11.00 percent to 12.00 percent as considered by the Fourth Five Year Plan of India. The study further presented that cotton textile industry having significantly lower breakeven points (BEP) than actual revenue (not exceeding 100 percent) recording 95 percent showed low profit margin to the extent of 2.35 percent. The author concluded that the present analysis of financial statements of the selected industries revealed that on the whole, the financial position of the concerned industries appears to be unsatisfactory during the period under review, thus affecting the very efficiency i.e., the productivity and profitability of the concerns.

*Haque and Hossain*<sup>32</sup> conducted a comprehensive study on 5 spinning mills under the control of BTMC. They found that materials control had not been effective in the selected mills because of – a) inadequate physical control of materials; group control of stores and visual control techniques had not been used in almost all the selected mills; b) materials control techniques were inadequate in that budgetary control of materials turn over ratios, materials in terms of months value of consumption etc. had not been used. The authors arrived at a conclusion that the

materials management had been poor and thus ineffective in the selected mills during the study period leading to overstocking especially in stores and spares, which in turn blocked scarce working capital of the mills.

*Hossain*<sup>33</sup> in his work stated that none of the techniques of inventory control was being followed by the 5 selected mills under BTMC in the truest sense of the term. By analysing the actual position of inventory, he observed that the size of inventory widely varied from year to year in all the selected units during the period 1975-76 to 1984-85. The study indicates that there has generally been over investment in inventories in all the selected units for most of the years under study. This over investment in inventories affects the cost of production and profitability very adversely. The study further unfold that in practice over investment in almost all the components of the inventories for the period under study has become a general rule rather than an exception. Peculiarly, in certain years there are stock-out situations for certain items. The whole process of inventory management in the selected units appears to be not in order, resulting in blockage of capital and loss of profit.

*Islam*,<sup>34</sup> presented a study based on 20 randomly selected cotton textile mills to look into the performance of the mills in terms of certain selected financial ratios and the analysis of labour and capital productivity with the help of a regression model. The study found that the mills made profits as well as losses. The highest amount of loss was about Tk. 46.7 million, while maximum profit recorded for the sample for the year was about Tk. 24.0 million. Another important findings was that the production cost over sales ratios varies from 59 percent to 129 percent, the ratio above 100 percent indicates inefficiency in the production process. The author also found that in the case of capital productivity, labour intensify demonstrates the expected positive sign and significance. But in the case of labour productivity, capacity has a positive sign indicating scale effect, while capital intensity has an unexpected negative sign, indicating unutilised or unbalanced

capital investment. Though the sign in capacity is as expected, they are not significant. The author concluded that most of the textile mills operate inefficiently. Thus it is necessary to take measures to improve their efficiency and productivity, otherwise, the viability of the mills and the corporation will be threatened.

*Saha*<sup>35</sup> while analysing the nature of the financial management techniques in the Rajshahi Textile Mills, found that various types of budgets were prepared by the mills. Financial analysis was done by Bangladesh Textile Mills Corporation (BTMC) from time to time. Cash management and inventory management techniques were applied at the mill level, while capital budgeting techniques were used at corporate level. The use of proper financial management techniques was limited by the shortage of technical manpower and uncertainly with respect to production. There was ample scope to strengthen the application of financial management techniques at the mill level.

*Hossain and Chowdhury*'s<sup>36</sup> study was restricted to 6 composite mills aiming at to critically examine the existing pattern of cash management as practised by the selected units of the BTMC. It was appeared from their analysis that there was a deficiency of cash in all the sample units except one for the study period ranging from 1985-86 to 1989-90. While analysing the size and percentage of cash to current assets, the authors found that both the size and percentage are considered to be abnormally low in all the selected units except one, which affected very adversely the liquidity and solvency position of those units. They identified that the non-implementation of the techniques to regularise cash flows, absence of adequate policy in determining the optimum cash balance and non-introduction of the techniques to maximise the availability of cash were probably responsible for such an unhappy situation.

*Sobhan and Mahmood*<sup>37</sup> undertook a work study focusing on the economic performance of denationalised industries of Bangladesh. Their major findings

were that the annual average yarn and cloth production decreased by 8.7% and 11.6% respectively in the 21 private sector mills following denationalisation. In the case of spinning mills, the running efficiency level on an average were seen to be lower in the denationalised mills relative to public sector mills. Regarding financial performance, the authors remarked that as was the case with other indicators of performance, financial performance was also seen to have declined in the textile mills following denationalisation.

*Ather's*<sup>38</sup> study aimed at analysing the under utilisation of capacity in 8 cotton spinning mills under BTMC for the period 1974-75 to 1983-84, to identify the proximate causes and reasons for the capacity remaining idle. This study exhibited that the percentage of the idle capacity of the sample mills was the lowest (9.78%) in 1977-78 while it was the highest (21.10%) in 1975-76. The average percentage of the idle capacity for the entire period was 14.64%. This means 85.36 percent of the installed capacity was attained. The study further pointed out that among a plethora of factors, just four, viz., power failure, load shedding, absenteeism of workers, shortage of spare parts and maintenance together accounted for 76.61 percent of idle capacity. The highest percentage of average idle capacity was caused by power failure and load shedding (30.28%) followed by absenteeism (21.46%), shortage of spare parts (14.24%) and maintenance (10.93%).

*Hye and Ather*<sup>39</sup> summarised their surveyed data of an empirical study on public cotton textile mills. Their study reveals that four tools viz., the break-even points analysis, profitability ratios, net profit analysis and information reports, have been applied practically in profit planning and control of PIEs of Bangladesh. Analysing enquiry responses as to the frequency of use the authors presented that 33.33 percent respondents opined in favour of frequent use of break-even points analysis, profitability ratios, and net profit analysis, while 66.67 percent of them reported infrequent use of these tools. Information reports were reported to be frequently used by 66.67% respondents while the rest reported about their

167776

14 MAY 2004

infrequent use. They also added that none of the modern tools and techniques was used in profit planning and controlling of public cotton spinning enterprises. Lack of resources and facilities and lack of support and follow up from government and top executives were reported to be the main reasons for such state of affairs in PIEs.

*Rashid and Karim's*<sup>40</sup> study revealed that there had been over capitalisation in the sample mills in respect of fixed capital both during initial period and selected operating periods. Of the many factors responsible for such over capitalisation in the sample mills, inflation leading to rising prices, difference between book value and real worth of fixed assets, shortage of working capital, high rate of corporate taxes, inequitable provisions for depreciation, obsolescence or maintenance of fixed assets, under estimation of capital rate and delays in procurement of imported equipment are the major ones. As a result of over capitalisation there had been inefficient use of fixed and working capital. The authors came to a conclusion that such over capitalisation had adversely affected the profitability and capacity utilisation of the sample mills.

*Saha*<sup>41</sup> studied six denationalised spinning mills to evaluate privatisation policy of Bangladesh. Comparing their performance during the five years prior to disinvestment with the same during five years after disinvestment, the author observed that the average production of the selected mills decreased by 6.28% during the period after disinvestment while the installed capacity and its utilisation rate in these mills increased by 23.53% and 37.26% respectively. The author remarked that as per the change in the utilisation rate, the production figure should have increased much. A better picture was shown by the author in case of sales. Comparative analysis of profit and profitability done by the author also revealed that the average ratio of loss to total assets employed was 18.37% in the year 1981-82, the year before denationalisation but in 1986-87, the year after disinvestment, the average rate of profit to total assets employed came to 6.12% which was an encouraging sign in favour of privatisation.

*Rashid and Karim's*<sup>42</sup> study is limited to 8 textile mills operating under BTMC. They looked over the impact of idle capacity on performance of the sample mills and they released their results that there had been higher degree of idle capacity in the sample mills varying from 25 percent to 54 percent during 1985-86, 1988-89 and 1989-90. The main causes for such higher degree of idle capacity were power failure, labour absenteeism, machinery breakdown and maintenance, shortage of cotton, shortage of working capital, labour strikes and low demand and market restriction. Such higher degree of idle capacity had produced adverse impact on labour productivity in terms of value of output per worker per week, cost of production per kg of yarn and profitability in terms of Return on Investment (ROI).

*Rahman*<sup>43</sup> found that like many other enterprises of the textile sector, Rajshahi Textiles Ltd. had been facing a serious problem of stock piling of cotton yarn especially after 1990-91. The entry of the smuggled yarn into the domestic market, availability of foreign cotton yarn at a comparatively lower price and poor marketing capability as identified by the author have resulted in the creation of huge stock piling situation in this manufacturing concern. Consequently the mill had to suffer recurring losses for a number of years.

*Bhuyan et. al.*,<sup>44</sup> demonstrated the international competitiveness of Bangladesh's cotton yarn. Their investigation indicates a clear comparative advantage of Bangladesh over her major competitors viz., India and Pakistan and also over all other countries. In comparison with Bangladesh, conversion cost of yarn is 20% higher in India and 8% higher in Pakistan. Their study made it clear that while the manufacturing cost of yarn in Bangladesh was 17% and 9% lower than that of India and Pakistan respectively, the total yarn cost in Bangladesh was 4.5% and 6.2% higher than in India and Pakistan respectively. This is essentially due to relatively higher raw material cost in Bangladeshi mills by 25.5% and 17.7% than in India and Pakistani mills respectively.

## 1.7 DIRECTION AND SIGNIFICANCE OF THE PRESENT STUDY

As the textile industry is the most significant import substituting sector and it has ever present large domestic market, development of this sector is necessary to save the drainage of the country's hard earned foreign exchange and to meet the requirement of large handloom sector as well as the domestic markets. But most of the cotton textile mills in public sector have been sustaining heavy losses since after 1975. The performance worsened seriously during the six years from 1991 to 1997 and BTMC mills sustained losses of Tk. 712.20 crore during this period in which the increased loss of the corporation was Tk. 163.20 crore only in 1996-97 making the total of Tk. 776.07 crore in this year. However, the mills under BTMC have failed to contribute positively to the national economy. Rather they have turned out to be a burden on the national budget due to continual huge amounts of subsidy. On the other hand, the private sector textile mills have been showing relatively better performance. All most all the mills in this sector are making profits and paying a handsome amount to national exchequer each year.

In view of historical and economic importance of cotton textile industry of Bangladesh as well as the problems with which it has been beset with now, it is worthwhile to undertake an indepth study on the operational and/or financial performance of public and private sector textile mills.

*Bhattacharjee and Karmaker*<sup>45</sup> in their article emphasised on researches on various dimension of performance evaluation by identifying the performance indicators for inter-sectoral, inter-industry, inter-national comparisons of organisational effectiveness.

Many of the research studies reviewed so far have highlighted the different aspects of textile units in Bangladesh, but very few of them dealt with inter-sectoral comparison of performance. Hence it is expected that the present study would unfold the inherent causes leading to different problems and complexities arising on the way of performance effectiveness of the cotton textiles in Bangladesh. In addition, this study would present the results of such comparative analysis for researchers, policy makers, industrial managers and owners and also at the same time for the government, who in its turn would be able to assess the degree of success or otherwise of its privatisation policy and adjudge the performance of public sector in the light of its wide-scale criticism at home and abroad.

## **1.8 OBJECTIVES OF THE STUDY**

The present study aimed at the presentation of comparative evaluation of operational and financial performance of public and private sector textile mills in Bangladesh. The comparison was restricted to a review of data on production and productivity, profitability, sales, cost of production and working capital. The specific objectives of the study were:

- a) To highlight the operational performance and efficiency of textile mills in both public and private sectors during 1987-88 to 1996-97 and compare the same between the two sectors and also present the trend of production and productivity between the sectors.
- b) To make the comparative analysis of cost of production in relation to study period in the mills under two sectors in order to find out the magnitude of variations in different elements of cost in relation to changes in volume of

production from year to year and to understand the trend of the cost as per different elements.

- c) To find out the reasons for variations in different elements of costs among the mills under public and private sectors.
- d) To measure the sales performance and efficiency of the selected mills in order to make a comparison between the two sectors pointing out the limiting factors and to understand the trend of sales between public and private sectors.
- e) To evaluate the financial performance in terms of profitability of the textile mills in both public and private sector during the period under study, and to find out the actual reasons for poor performance (where applicable), especially in case of the mills under BTMC.
- f) To assess the position of the working capital and examine the liquidity and efficiency of working capital in the selected mills during the period pointing out the major problem areas encountered there in.
- g) To provide suggestions for improving overall performance of this industry.

## **1.9 RESEARCH QUESTIONS**

In view of the above objectives this study considered the following research questions:

1. How efficiently and effectively are the material, human and monetary resources being managed in the production process of the textile industry in Bangladesh both in the public and private sector?
2. What factors are affecting the production, productivity and sales of the textile industries in both sectors?

3. To what extent the direct costs are varying with the volume of production in public and private sector mills?
4. What techniques are being used to control costs?
5. What factors are affecting the profitability of the textile industries in the public sector?
6. What are the major threats, problems and weaknesses faced by the textile industries in Bangladesh?
7. To what extent the textile industries under public and private sector possess liquidity to meet their current liabilities?
8. To what extent the performances of private sector mills differ from that of the public sector mills?
9. What measures should be taken to improve the overall performance of the industry?

### **1.10 HYPOTHESES OF THE STUDY**

The present study took the following hypotheses for validation, arrived at empirically or by logical deduction regarding the behaviour of one or more performance indicators, used in carrying out the comparative analysis :-

1. *Private sector textile mills are far better in operational performance as compared of public sector textile mills.*

The factors leading to formulation of this hypothesis are better production efficiency, higher productivity, lower cost of production and greater sales achievement in private sector textile mills because of their

inherent characteristics (viz. social commitment, excessive governmental control, overstaffing, adoption of out dated techniques etc.).

2. *Financial performance in terms of profitability of public sector textile mills is extremely poor than the private sector mills.*

The reason leading to formulation of this hypothesis is that profitability ratios are either very low or negative in most of the cases. However, it is also true that profitability cannot be the sole yardstick for measuring public sector efficiency. Yet profitability is a more comprehensible and well-understood yardstick accepted by public and the parliament.

3. *The crucial factor hampering the performance of public sector textile mills is the poor management.*

Better efficiency of private sector in cost and working capital management leads to formulate this hypothesis.

4. *Individual performance indicator has the ability to discriminate the performance between public and private sector textile mills.*

The rationale for formulating this hypothesis is that the mean differences of the performance indicators for public and private sector are supposed to be statistically significant at 0.05 level of significance.

## **1.11 METHODOLOGY AND COVERAGE OF THE STUDY**

### **a. Sample Selection**

The textile mills under BTMC are of two types, (i) spinning mills, which produce only yarn, and (ii) composite mills, which produce both yarn and cloth.

The private sector consists of three categories of mills viz., (i) spinning, (ii) weaving and (iii) dyeing-printing-finishing. As almost all the composite mills under BTMC are now laid off, in selecting the samples only the homogeneous spinning mills of public and private sector have been considered in order to make them comparative between the two sectors. Out of 27 spinning mills of public sector (as on 1996-97) 10 mills forming 37 percent of the total have been selected as samples. In order to facilitate comparison with the performance of the public sector mills a set of 10 private sector mills forming 18 percent of the total of 56 including a large number of new units (as on 1996-97) have been selected on the basis of availability of data. The study covers a period of ten years ranging from 1987-88 to 1996-97. The primary details of the selected textile mills along with unit codes are provided as under in Table 1.1.

**b. Nature and Sources of Data**

The study is mainly based on secondary data. But the area has also been extended to the primary sources. In order to collect quantitative and qualitative primary data and information a relevant interview schedule was designed in the light of the research objectives after conducting a pilot survey (Annexure). Opinion of the General Managers/Deputy General Managers of the selected mills in case of public sector and in case of private sector opinions of the Senior Executive/ Company Secretary of the selected mills were collected through interview schedule and the Annual Accounts and Official records of the selected mills were consulted to gather other primary data. The secondary data were collected by the researcher through personal visit from the following main sources,

- i) BTMC Head Office;
- ii) BTMA Head Office;

**Table 1.1 : Primary Details of the Selected Cotton Textile Mills Under Public and Private Sector (as in 1996-97)**

Sector	Name of the Mills	Code used for mills	Year of Commencing Production	No. of installed spindles	Man-power	Turn over (in lakh Tk.)	Total investment (in lakh Tk.)	Net operating profit (in lakh Tk.)
PUBLIC SECTOR	Sundarban Textile	A <sub>1</sub>	1983	39360	1222	776.39	4708.77	-824.74
	Darwani Textile	A <sub>2</sub>	1980	25056	723	513.10	1375.80	-462.50
	Dinajpur Textile	A <sub>3</sub>	1979	25056	845	309.84	668.95	-477.54
	Dost Textile	A <sub>4</sub>	1964	12800	441	373.37	669.78	-291.73
	Orient Textile	A <sub>5</sub>	1965	12400	396	117.93	166.28	-217.64
	Quaderia Textile	A <sub>6</sub>	1963	16800	651	247.91	1338.67	-591.46
	Bengal Textile	A <sub>7</sub>	1963	37488	1333	1292.74	3100.76	-991.30
	Rajshahi Textile	A <sub>8</sub>	1979	25056	810	229.80	630.56	-449.77
	Kurigram Textile	A <sub>9</sub>	1986	12528	527	168.69	1157.28	-537.13
	Magura Textile	A <sub>10</sub>	1985	25056	893	95.68	1697.05	-759.70
PRIVATE SECTOR	Quasem Cotton Mills Ltd.	B <sub>1</sub>	1973	44728	556	3733.78	7251.53	-324.30
	Alhaj Textile Mills Ltd.	B <sub>2</sub>	1964	28080	987	1130.76	5214.09	57.34
	Eagle Star Textile Mills Ltd.	B <sub>3</sub>	1973	30440	1133	3028.76	4148.84	200.93
	Ashraf Textile Mills Ltd.	B <sub>4</sub>	1963	50320	2453	5183.42	6516.62	166.22
	Quasem Rotar Spg. Mills Ltd.	B <sub>5</sub>	1990	15000	317	836.78	2078.96	-161.85
	Dullamia Cotton Spg. Mills Ltd.	B <sub>6</sub>	1990	25056	923	1967.77	3369.68	-423.94
	Padma Textile Mills Ltd.	B <sub>7</sub>	1990	119520	3239	17534.19	36511.01	2209.02
	Tallu Spg. Mills Ltd.	B <sub>8</sub>	1989	26308	1035	3065.91	3324.78	92.54
	Sonargaon Textiles Ltd.	B <sub>9</sub>	1992	27840	864	3079.50	3873.36	194.76
	Prime Textile Spg. Mills Ltd.	B <sub>10</sub>	1992	24960	1169	4412.47	24138.78	226.49

Source : BTMC and Member Mills of BTMA.

Notes : i) Mills B<sub>1</sub>, B<sub>2</sub>, B<sub>3</sub> and B<sub>4</sub> were denationalised during 1982-85 as per denationalisation policy of the government.

ii) In case of Mills B<sub>1</sub> and B<sub>5</sub>, 5400 and 3000 rotors respectively has been converted into spindles (1 rotor = 5 spindles).

- iii) Head Offices of the Member Mills of BTMA;
- iv) Ministry of Textiles;
- v) Privatisation Board,

The other secondary data are the publication of Planning Commission, Bureau of Statistics, Consultative Committee of Public Enterprises etc.

Moreover, a comprehensive library work has been done at different libraries in Bangladesh as well as India. This library work includes literature review on the subject and going through the relevant data and information relating to various aspects of cotton textile industry in Bangladesh and in India as are available from the various documentary evidences.

#### **c. Pilot Survey**

A pilot survey was conducted in Rajshahi Textile Mills (public mill), Bengal Textile Mills (public) and Alhaj Textile Mills (private) to ensure the validity and reliability of the interview schedule. Necessary changes have been made accordingly.

#### **d. Techniques of Analysis**

- i) Time series data of the 20 textile mills for a period of 10 years has been presented in the comparative format.
- ii) Comparative picture of the operational efficiency of the selected public and private mills for the period has been presented.

- iii) The cost of management efficiency of the textile mills has been examined by way of analysing cost mix i.e., the proportion of various elements of cost in the total cost.
- iv) Differences in the financial performances of the textile mills belonging to public and private sector have been shown by way of ratio technique.
- v) Accounting ratios have also been used to measure the efficiency of the working capital of the individual sample mills.
- vi) Statistical tools, like mean, range, standard deviation, variance, coefficient of variance, correlation, annual average growth rate, trend analysis, graphical presentation etc. have been used.
- vii) The averages of the sample mills belonging to each sector have been computed (as the number of mills varied in different years in case of private sector) and the performance of individual mills for the period of study has been compared with the sector average and then a comparison between sector averages has also been made.
- viii) With view to avoid frequent mentioning of the name of sample mills in evaluating the performance code numbers have been used against the respective mills under study.
- ix) The 't' test has been applied to measure the statistical significance of the differences between the mean values of the performance indicators and to test the individual discriminating power of the indicators between the performance of public and private sector textile mills.

- x) To calculate co-efficient of co-relation, Karl Pearson's formula has been used.
- xi) Trend values of production and sales have been calculated by the method of Least squares.
- xii) Considering the objectives of the present study and depending upon the available data we have selected the following sub-indicators relating to main performance indicators viz., production and productivity, sales, profitability, cost of production and working capital.
  - a) Production trend, per spindle per shift production and capacity utilisation.
  - b) Labour productivity in terms of output, value of output and value added.
  - c) Capital productivity in terms of value of output and value added.
  - d) Sales trend and sales per employee.
  - e) Profitability ratio viz., gross profit ratio, net profit ratio, operating expense ratio, return on total investment, return on capital employed, return of shareholders equity, return on net worth and return on paid up capital.
  - f) Cost mix i.e., the proportion of various elements of cost in the total cost.
  - g) Level of working capital, liquidity of working capital, i.e., current ratio, quick ratio and ratio of cash to current assets, and efficiency of working capital i.e., inventory turnover, debtors turnover and working capital turnover.

## 1.12 LIMITATIONS OF THE STUDY

It is needless to say that no investigation is free from limitations. Hence, this study being no exception to this, has, however the following limitations:

- a) Due to time and cost constraints, the researcher had to restrict this study to 20 sample mills taking 10 from each of the sector.
- b) Form of presentation of accounting information is different in the different mills under private sector. In the absence of uniformity and comparability of data among the private mills as well as public mills, some performance indicator could not be used in our analysis.
- c) Some private entrepreneurs were very much reluctant to furnish primary data on operation as well as some relevant data which are not presented in Annual Report (such as wastage percentages, budgeted production, budgeted sales, credit sales, total debts etc.). Moreover, difficulties were also faced in collecting very old data as the organisations lacked in storing such data.
- d) Value of output, value added, sales value etc. have been shown in current prices as the price indices for the relevant years could not be gathered from the concerned offices.
- e) Till the completion of our field work, the Annual Reports for the years 1994-95, 1995-96 and 1996-97 were not published by the BTMC and that is why all the data relating to these years have been taken from provisional accounts of the public mills.
- f) Our plan of study were extended to measuring social performance of the textile mills under public and private sector and a broad section was designed in the interview schedule to collect necessary data for this

purpose. But we could gather very insufficient information from a few mills despite repeated visit and request. More or less all the sample mills are spending on some social activities but they are not clearly showing the same in their accounts, as there is no legal binding on the business industries to report the social accounts in their financial accounts. Thus, the non-availability of social performance information restricted us to undertake an assessment of social performance specially in case of public sector mills as the same would have facilitated justification of public sector units at least in the context of social rationale.

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