**Dialogue on**

# *Restructuring of the Jute Manufacturing Sector of Bangladesh: Challenges and Policy Options*

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# Restructuring of the Jute Manufacturing Sector in Bangladesh at Cross-Roads: Challenges and the Way-out


***by***

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## 1. Introduction and Objectives

The jute manufacturing sector of Bangladesh, which is one of the oldest traditional manufacturing sectors of the country, has travelled a long way, witnessing many ups and downs and experiencing fluctuating fortunes. In 1960s and 1970s, the jute sector was considered the mainstay of the manufacturing industry (of East Pakistan and then Bangladesh, respectively) because of its significant contribution to the national income, export earnings and industrial employment. However, over the subsequent years the sector gradually lost its prominence and importance – in FY2008-09 the jute manufacturing sector accounted for a mere 2.7 per cent of the country's total export (compared to about 90.0 per cent in 1973). Though the ascendancy of the export-oriented readymade garment (RMG) sector was a major reason, such a diminished share was also the result of policies pursued by successive governments as also the secular decline in the demand for jute goods, in both domestic and international markets, over time.

One of the distinctive features of the jute manufacturing sector of Bangladesh has been the predominance of the public sector in terms of the production of jute goods and employment generation. However, the role of the public sector has come down over time as a consequence of successive government policies towards pro-private sector led industrial development. Since the early 1980s, the restructuring of state-owned enterprises has been overtaken as part of this policy shift; a total of 56 jute mills (out of 72) were privatised during the last three decades. Additionally, a number of new jute mills (mostly of spinning type) were established under the private sector initiative during this period. There is a longstanding debate in the country as regards the rationale and justification of privatising the SOEs. This debate has also been fuelled because of the evidence of a number of privatized SOEs, particularly jute mills, having closed down over the subsequent years. According to an earlier survey conducted by the BIDS (1995), of the 205 firms which were privatized, only 112 (50 per cent) were in operation at the time of survey. A large number of firms had discontinued production after privatisation. Among the 83 firms which were closed down, 28 units were engaged in other activities and 65 units were inactive. Of the firms privatised, 46 per cent were either making profits or were operating at break even prior to privatisation (Privatization Commission, 2008). About 39 thousand workers of 205 firms were laid off since the privatisation of the enterprises.

In the case of the jute manufacturing sector, although a number of initiatives were taken as part of support underwritten by the World Bank in early 1990s, no discernible positive change was observed with regard to performance. On the contrary, the performance of public and private sector jute mills worsened, to various degrees, especially in terms of capacity utilisation and level of production. As a move towards the restructuring of the jute mills, the previous caretaker government (CTG) decided to close down four jute mills and subsequently retrenched 14 thousand workers. It is to be noted that these initiatives were taken by the government at a time when the Indian jute sector, particularly mills operating under the private sector, was operating under a strategy of expansion towards higher production and, more importantly, higher exports.

The new government after assuming the power in January, 2009 has taken a number of initiatives in support of revitalising the jute manufacturing sector of Bangladesh. In the draft *Industrial Policy 2009 (IP 2009)*, a higher level of production of raw jute and jute goods has been encouraged through different strategies. Various strategies articulated in the *IP 2009* pertaining to the jute sector include: special preference for establishing labour-intensive industries and putting emphasis on diversification of the industrial base where jute manufacturing has been considered as an important sector; placing special focus on environmentally friendly products in view of a rise in global demand. Special focuses have been put in place in the case of public sector industrial enterprises, including jute mills operated by the Bangladesh Jute Mills Corporation (BJMC). These include, the revitalisation of loss-making public enterprises after detailed assessment, corporatisation of public sector industrial enterprises including public limited companies, and supporting sick industries either through reviving enterprises which are in a relatively better position, or by exiting those performing poorly by collecting all due payments. The *IP 2009* also contains strategies to undertake necessary reforms in the management of public sector jute mills in order to profitably operate those mills. The policy indicates maintaining transparency and accountability when making decisions regarding new, old or closed public sector enterprises. The Ministry of Textiles and Jute has recently announced its intention to revive the operation of four mills closed during the last Caretaker Government. The government's initiative to implement the 'Mandatory Packaging Act' is a welcome initiative which will enhance the domestic use of jute bags for packaging of food grains and fertilizer. The rise of global demand for jute goods in the first four months of FY2009-10 has yet to be reflected in the production of jute goods (growth was -0.19 per cent in August, 2009 on a point to point basis). In December, 2009 government decided to ban the export of raw jute with a view to reduce its price in the domestic market as well as to ensure its availability for local manufacturers.

Having gone through three decades of experience involving reforms and restructuring of the jute manufacturing sector, it appears that the time has come to examine its prospects with a fresh look. In view of undertaking policies for rejuvenating the jute sector, policies articulated in the draft *Industrial Policy 2009* need a critical assessment for setting an action plan for short, medium and long term perspectives. However, there is a dearth of information on the current state of performance of both public sector and private sector jute mills. The present study has attempted to address this lacuna by undertaking extensive field surveys and interviews with well informed stakeholders.

The objectives of the study are three-fold:

a) The study analyses the performance of public and private sector jute mills to understand the state of comparative performance of the two sectors with the objective of evaluating their relative contribution, level of efficiency, and productivity.
b) The study examines major weaknesses of public sector jute mills by undertaking survey of jute enterprises with a view to identify micro-level weaknesses.
c) Based on the aforemenitoned analyses, the study seeks to put forward specific suggestions taking into account the strategies set forth in the draft *Industrial Policy 2009*. The suggestions will cover three areas, including (a) overall

development of the jute manufacturing sector; (b) restructuring and reform of public sector jute mills; and (c) raising the efficacy of the process of privatization.

## 2. Methodology

It needs to be highlighted at the outset that the study is part of broader ongoing research project of the CPD titled "Performance of Jute Sector of Bangladesh: Constraints, Opportunities and Challenges". The present study is based on data generated from primary survey, conducted over a three-month period from November, 2007-January, 2008 of 45 jute mills (35 per cent of total jute mills in the country). Of the 45 sample jute mills, 14 jute mills belonged to the Bangladesh Jute Mills Corporation (BJMC), 17 to the Bangladesh Jute Mills Association (BJMA) members and the rest to the Bangladesh Jute Spinners Association (BJSA). Sample jute mills were located in 17 districts, of which, 9 were in Chittagong, 6 in Narsingdi, 5 in Khulna, 4 in Dhaka and the remaining mills were dispersed across the country. The primary survey concentrated on such areas as production and export; availability of technologies; work force; management; productivity and efficiency of labour and capital; management efficiency; procurement process (of raw jute); access to finance; cost and income; export market; and other relevant areas. The survey made an attempt to generate information for two specific periods (2002 and 2007) with the overarching objective to provide a better understanding of the intertemporal dynamics of changes experienced by the jute manufacturing sector of the country.

In order to appreciate various reform initiatives undertaken in India, a rapid perception survey was carried out in West Bengal through a week-long visit in March, 2009. During this visit, several key officials of the Indian government and private sector were interviewed. They included: Office of the Jute Commissioner, Indian Jute Mills Association (IJMA), National Jute Manufactures Corporation Ltd. (NJMC), Jute Manufactures Diversification Council (JMDC), Indian Jute Industries Research Association (IJIRA), Directorate of Jute Development, National Centre for Jute Diversification (NCJD), and Forward Markets Commission. As part of this visit, two jute mills were visited which were located in two districts of West Bengal (24 Pargana and Kolkata). Relevant sections of this report reflect an understanding about the distinctive features of the jute industries of the two countries, as was gleaned from field level visits. A separate section is dedicated to analysing various reform initiatives undertaken by the Indian government in the management of public sector jute mills under NJMC in order to gain insights with respect to possible policy directions in the context of Bangladesh.

## 3. An Overview of the Jute Manufacturing Sector of Bangladesh

According to the information of BJMC, BJMA and BJSA, there are 180 jute mills in the country, of which 151 mills are in operation. At present 16 of 27 jute mills of BJMC, 76 of 90 jute mills under the membership of BJMA and 59 of 63 jute mills under the

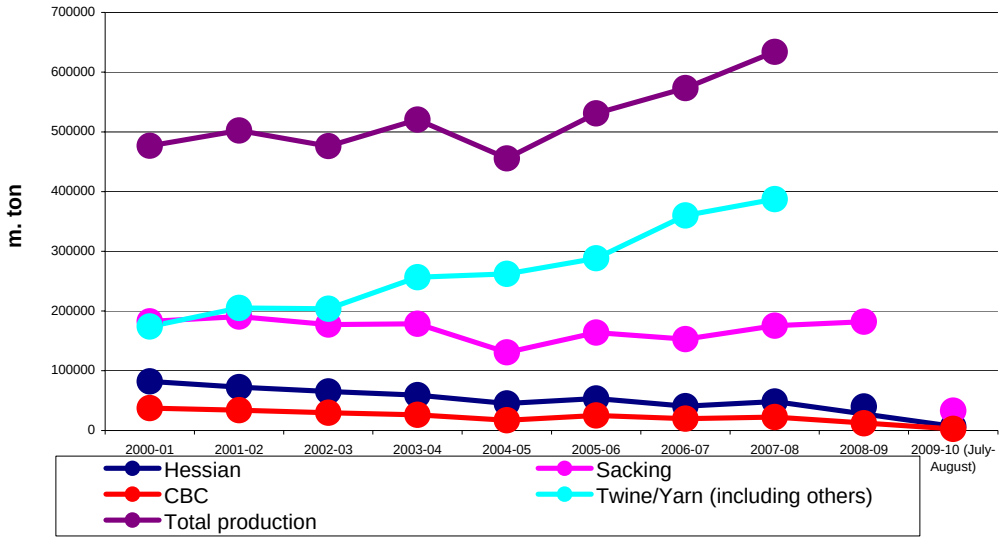
membership of BJSA are in operation. According to the available data of 30 June 2008, 88,956 registered workers were working in BJMC and BJMA mills, of which, 46,958 workers (52.8 per cent) were engaged in BJMC mills and 41,998 workers were in BJMA mills.

According to Figure 1, the production of jute goods had been on the rise over the past years, mainly because of the substantial rise of production of yarn/twine. Whilst production of most of the jute goods is attributed to either a deceleration or a negative rate of growth during 2001 to 2008, the production of yarn/twine registered a consistently high level of growth during the comparable period. As a result, overall production crossed the level of 6 lac m tons.[1] However, production of jute goods has experienced a decelerating trend in 2009 in view of the global financial crisis, although production has slowly picked up in July-August, 2009 with about 1 per cent growth compared to the same period of the previous year (Figure 1). The ongoing global economic crisis has had a negative impact on jute exports which constitute a large share of total jute production. Export of Bangladesh's jute goods decreased by 15.4 per cent during FY2009; similarly, export of raw jute also suffered a decline during the same period (-10.5 per cent) (Figure 2). However, export of jute goods has substantially increased during July-November, 2009 (27.3 per cent compared to the same period of the previous year). In December, 2009 the government decided to ban export of raw jute with a view to reduce its price in the domestic market as well as to ensure its availability for local manufacturers.[2] The decision to create an export restraint has several implications: first, the decision was expected to reduce the domestic price of raw jute, although this did not happen (the price of raw jute was 40.8 per cent higher in December, 2009 compared to the previous year); second, the ban covered exports of 'stable fibre jute' which is categorised as 'raw jute'. The government should review its decision with regard to banning exports of jute fibres; the government should also undertake a periodic review of the decision in order to avoid possible adverse affect on farmers.

[1] Production trend of the jute manufacturing sector can be broadly categorised into four periods: first phase (1950-1970); second phase (1972-1981); third phase (1982-1990); and, fourth phase (1991-onward). During these four phases, jute manufacturing sector had experienced various changes in policies, and also in the pattern of utilisation of jute and jute goods.

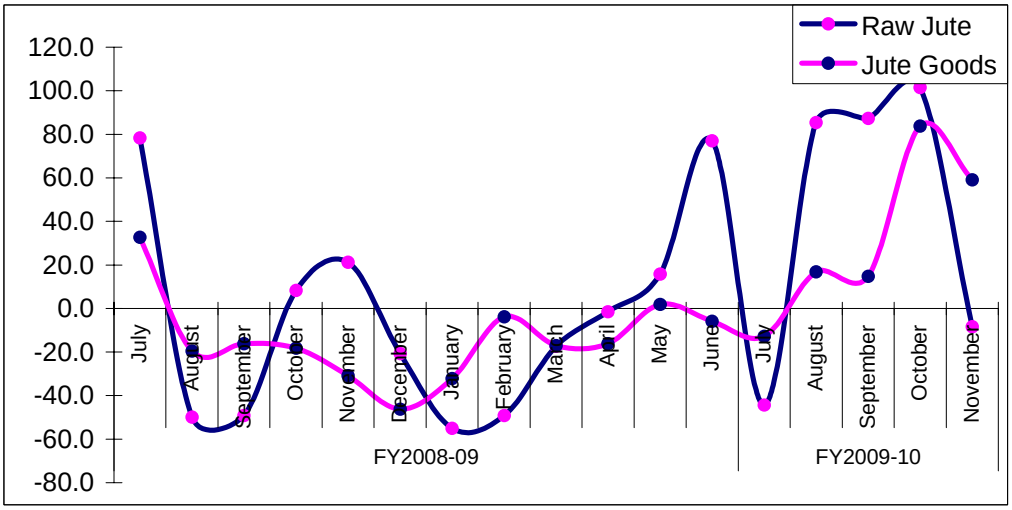
2 Following the poor yield in 2009, the domestic prices of raw jute jumped to Tk.1700 to Tk.1750 taka per maund (40 kg) from Tk.1200 to Tk.1250 per maund. On the other hand, a high price of raw jute in international market (US$600 per ton in 2009 vis-à-vis US$525-550 in 2008) caused a substantial rise of export of raw jute in July-October, 2009. However, the government on January 03, 2010 allowed traders to export only 1.68 lakh bales of raw jute, a shipment that was blocked due to the export restrains.

**Figure 1: Production of Jute Goods in Different Years**




Source: BJMC, BJMA and BJSA

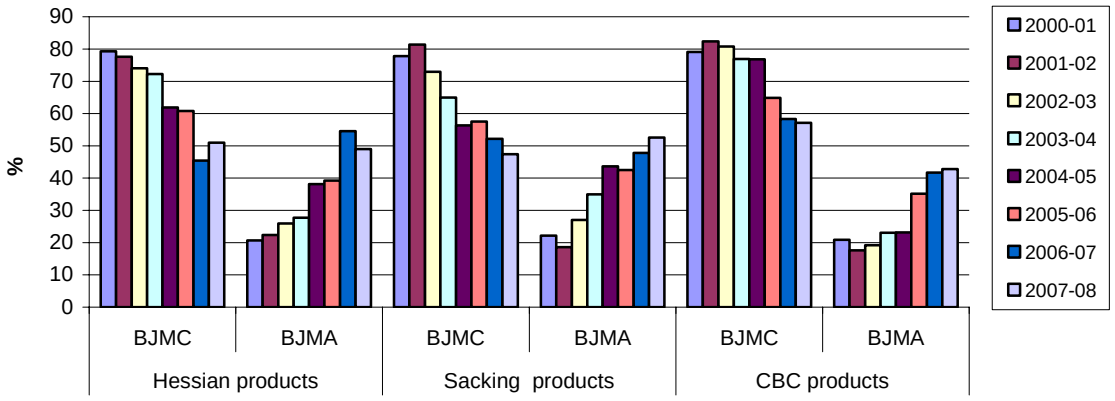
**Figure 2: Changes in Export of Raw Jute and Jute Goods**




Source: EPB

It should be noted that, between 2001 and 2006, the production share of private sector jute mills had nearly doubled - from 21 per cent to 39 per cent in case of Hessian products, from 22 per cent to 43 per cent in case of sacking products and from 21 per cent to 35 per cent in case of CBC products (Figure 3). This rise in share of private sector jute mills is accounted for *not* by increased production of various products by these mills, but rather by the sharp deceleration of production of those goods by the public sector mills. With this connection it needs to be remembered that the production of sacking and yarn accounts for more than 80 per cent of the country's total production of jute goods.

**Figure 3: Share of BJMC and BJMA Mills in Production of Different Types of Jute Goods**




Source: BJMC, BJMA and BJSA

# 4. Comparative Analysis of Performance of Public and Private Sector Jute Mills: Findings from the CPD Survey

In order to appreciate the factors responsible for the performance of public and private sector jute mills, an indepth analysis has been carried on critically important issues related to production and sales, technology, operation and maintenance, marketing and labour–management in the jute sector of the country.

## *4.1 Production and Sales of Jute Products*

Share of sales by the sample BJMC and BJMA mills in domestic and international markets were almost similar. This corroborates the general national trend (Table 1). BJSA mills, which mainly produce yarn/twine products, exported two-thirds of their products in the international market. One of the major features of Bangladesh jute industry has been the limited domestic market for the jute goods. On the other hand, India has a large domestic market where more than 95 per cent of sacking products are sold locally; sale of India's Hessian products follow similar trend as that of Bangladesh (about 49 per cent). Market structure is not the same for Bangladesh (yarn–based and export market oriented) and India (sacking-based and domestic market oriented).

**Table 1: Share of Sale in Domestic and International Markets of the Sample Mills, 2007**

| Association | Domestic Market | International Market |
|---|---|---|
| BJMC | 47% | 53% |
| BJMA | 49% | 51% |
| BJSA | 34% | 66% |

Source: CPD Jute Survey, 2007-08.

Major export destinations of products manufactured by the sample mills include the US, the EU, Asia, Africa and Australia (Table 2). About 38.7 per cent products of sample mills (mainly sacking and yarn/twine) were exported to Asian countries and 25 per cent

products (mainly yarn/twine and hessian products) were exported to the European market. Interestingly, public sector jute mills marketed their major products, hessian and sacking, mainly in Asian and African markets whilst private sector jute mills sold mainly in the European markets, as also in some of the Asian markets. Yarn was exported by the private sector jute mills both to the Asian and the European markets. It appears that it was mainly the relatively low priced markets of Asia and Africa that were targeted by the BJMC mills, while, private sector jute mills focused relatively more on high priced markets such as those of Europe and the US. BJMC should seriously think about revisiting its marketing strategies by putting more emphasis on expansion of its market base in Europe and North America. Expansion of market to Latin American countries should be set as target both by the private and the public sector jute mills. In this regard it is worth highlighting here that India has gradually increased its exports to Latin American markets over the recent past years.

**Table 2: Proportionate Export by the Sample Mills in Different Regions, 2007 (as % of Total)**

| | | US | EU | Africa | Asia | Australia | Other | Total (%) |
|---|---|---|---|---|---|---|---|---|
| Hessian | Public mills | 16.3 | 13.1 | 13.2 | 48.5 | 8.9 | | 100 |
| | Private mills | 23.6 | 64.8 | 3.8 | 7.8 | | | 100 |
| Sacking | Public mills | 5 | 3.8 | 25.7 | 60.9 | 4.6 | | 100 |
| | Private mills | 9.3 | 6.2 | 19.2 | 58 | 7.3 | | 100 |
| CBC | Public mills | 5.3 | 12.3 | 6.5 | 16.3 | 55.5 | 4.1 | 100 |
| | Private mills | 3.5 | 29 | | 26.5 | 41 | | 100 |
| Yarn/twine | Public mills | | 10 | | 90 | | | 100 |
| | Private mills | 11 | 43.8 | 7.1 | 38.1 | | | 100 |
| Diversified products | Private mills | 18.1 | 54.6 | | 24.2 | 3.1 | | 100 |

Source: CPD Jute Survey 2007-08.

Maintaining a strong marketing network is important for manufacturers to guarantee assured orders and to ensure better price for the products. A domestic market based marketing network led mainly by local buyers/buying houses is capable of offering only low price of jute products compared to the ones offered by international buying houses with international marketing networks. Most of the BJMC mills sold their products either through local buying houses (54 per cent) or international buying houses (35.9 per cent); on the other hand, private sector manufacturers sold their products mainly through direct buyers (Table 3). Private sector jute mills were likely to receive better price for their products not only because they targeted upstream markets, but also because they had better marketing techniques. BJMC should strive to come out of its traditional way of marketing with overwhelming dependence on a single local buying house such as Bangladesh Jute Goods Association (BJGA). BJMC central authorities and individual mills under the BJMC should try to sell more products directly through international buyers, which could ensure better price for products manufactured by BJMC. However, better price for jute goods is also correlated to quality issue and timeliness of delivery of the products, where BJMC mills suffer from serious weaknesses.

**Table 3: Sales of Different Products of Public and Private Sector Jute Mills through Different Agents, 2007**

(in percentage)

| Products | Public | | | Private | | |
|---|---|---|---|---|---|---|
| | Local Buying Houses | International Buying Houses | Direct Buyers | Local Buying Houses | International Buying Houses | Direct Buyers |
| Sacking | 64.5 | 32.5 | 3.0 | 71.3 | 16.1 | 12.6 |
| Hessian | 55.0 | 32.5 | 12.5 | 55.5 | 4.0 | 40.5 |
| CBC | 52.9 | 45.3 | 1.9 | 19.1 | 26.4 | 54.4 |
| Yarn/Twine | 23.0 | 77.0 | 0.0 | 45.8 | 17.8 | 36.3 |

Source: CPD Jute Survey 2007-08.

Although production of traditional items such as Hessian and sacking has registered a decline between 2002 and 2007, price of all types of jute products, on the contrary, indeed increased over this period. Both public and private sector jute mills have received higher prices for their products. However, BJMA mills received comparatively higher prices both in domestic (65 per cent) and international markets (55.6 per cent), against the ones received by the BJMC mills (54 per cent and 46 per cent respectively, please see Table 4). Similarly, BJSA mills received a high price for their specialised product (yarn/twine) in the international market. The rise of per unit price of jute goods can be partly explained by increasing demand for jute and jute goods in global market *vis-a-vis* jute alternates, polypropylene products.[3] However, the high price of jute products did not sustain for long; prices started to decline especially following the global economic crisis of 2008. As a consequence, Bangladeshi manufacturers suffered in two ways - through lower demand of jute goods and falling export prices.

**Table 4: Change of Selling Price in the Domestic and International Markets of Sample Mills**

| Associations | Domestic Market | | | International Market | | |
|---|---|---|---|---|---|---|
| | Average Selling Price in 2002 (Tk/m ton) | Average Selling Price in 2007 (Tk/m ton) | % Change of Selling Price Between 2002 and 2007 | Average Selling Price in 2002 (Tk/m ton) | Average Selling Price in 2007 (Tk/m ton) | % Change of Selling Price Between 2002 and 2007 |
| BJMC | 28881.4 | 44474.6 | 53.9 | 33646.3 | 49250.8 | 46.3 |
| BJMA | 30611.5 | 50422.8 | 64.7 | 33427.8 | 52031.0 | 55.6 |
| BJSA | 13866.7 | 25785.8 | 85.9 | 36548.4 | 49783.5 | 36.2 |

Source: CPD Jute Survey 2007-08.

### *4.2 Technical Aspects of Sample Jute Mills*

Noticeable difference is discerned between public and private sector jute mills in respect of use of modern machines and capacity utilisation, level of production, and level of productivity and efficiency. BJMC mills, which were traditionally large in size, had

[3] In some instances, manufacturers received better price for their products in domestic market compared to that in the international market.

larger number of looms in operation (403) compared to that of BJMA mill (191). However, their level of production did not match this advantage with the latter (only 5.6 per cent higher compared to that of a BJMA mill, please see Table 5). [4] Hence production per unit of machine in BJMC mills was lower compared to that in BJMA and BJSA mills. It is important to note that, production per loom in Indian jute mills is substantially higher (33 m. tons) than to that of BJMC jute mills (20 m tons), whilst it is marginally higher than that of BJMA jute mills (30 m tons).

**Table 5: Number of Looms and Market Value of Machineries, 2007**

| Institutions | Market value of machineries per unit (in crore Tk.) | Total no. of looms in operation per unit | Production per unit | Production per loom | Production per worker |
|---|---|---|---|---|---|
| BJMC | 54.72 | 403 | 6,085 | 20.1 | 2.5 |
| BJMA | 16.93 | 191 | 5,761 | 30.2 | 4.67 |
| BJSA | | | 6,823 | | 7.19 |

Source: CPD Jute Survey 2007-08.

Poor performance of local jute mills is attributed initially to unutilisation and underutilisation of the machine capacity. Capacity utilisation was lower in public sector jute mills compared to that in the private sector (Table 7). More importantly, rate of capacity utilisation had declined significantly in most of the sections in the production chain of BJMC mills between 2002 and 2007. Interestingly, it was found that private sector jute mills, over the same period, could ensure better use of their productive capacities in certain sections, though in other sections capacity utilisation fell. On the other hand, capacity utilisation of machines in different sections was higher in case of Indian jute mills. More importantly, capacity utilisation of machines of some sample mills achieved the maximum limit (100%) in case of carding, drawing, spinning and winding, as reported in a study (JMDC, 2002; please see Table 7 for more information). The high level of capacity utilisation in Indian mills was attributed to high demand of jute products particularly sacking products in the local market, better maintenance of machines and a continuing thrust to improve productivity of machines to achieve higher levels of efficiency. Capacity utilisation in private sector jute mills of Bangladesh was, on average, within the range of 70-80 per cent only in most sections.

**Table 6: Change in Capacity Utilisation of Sample Mills between 2002 and 2007**

*(percentage)*

| | Softener/Spreading | | | Carding | | | Drawing | | | Winding | | | Calendaring | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | FY 2002 | FY 2007 | % Change | FY 2002 | FY 2007 | % Change | FY 2002 | FY 2007 | % Change | FY 2002 | FY 2007 | % Change | FY 2002 | FY 2007 | % change |
| Public Sector | 61.5 | 49.8 | -19.13 | 62.3 | 47.7 | -23.37 | 67.2 | 53.5 | -20.39 | 65.3 | 53.9 | -17.41 | 65.2 | 59.3 | -9.09 |
| Private Sector | 79.3 | 74.9 | -5.56 | 77.4 | 81.8 | 5.73 | 77.9 | 82.1 | 5.48 | 74.6 | 73.1 | -2.07 | 61.4 | 62.9 | 2.36 |

Source: CPD Jute Survey 2007-08.

[4] Indian jute mills, on the other hand, are rather big (average number of looms in a mill was 617).

**Table 7: Machine Utilisation in Indian Jute Mills (2002)** *(percentage)*

| | Softening | Breaker carding | Intermediate carding | Finish carding | First drawing | Second drawing | Finish drawing | Spinning fine | Spool winding | Cop winding | Weaving hess | Damping hess | Calendering hess | Cutting hess | Sewing hemming |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Indian Jute Mills | 66.7 | 93.3 | 100 | 100 | 100 | 100 | 98.48 | 100 | 100 | 90.9 | 100 | 66.7 | 63.9 | 66.7 | 66.7 |

Source: JMDC (2002).

There was a significant difference in the level of productivity of different sections of public and private sector mills, especially in case of drawing, spinning and calendaring. Private sector was far ahead of the public sector in this regard. Productivity of machines in most sections in public sector jute mills had declined, barring the weaving and calendaring sections (Table 8). In contrast, machine-productivity in private sector jute mills has increased in most of the sections, particularly in softener, spinning, winding and weaving. Low level of machine-productivity in major operations in the public sector jute mills was indicative of low level of their technical efficiency. This could be related to inefficient use of raw jute as inputs, handling and maintenance of machines, time-use pattern for manufacturing goods etc. Operational inefficiency of the management appears to be the main reason for low level of productivity. Compared to Bangladesh, productivity of machines of Indian jute mills was relatively high (Table 9); in some sections, productivity was almost double even compared to that in private sector jute mills, such as carding, spinning and weaving (JMDC, 2002).

**Table 8: Change in Output per Unit of Machine (Kg/hour) of Sample Mills**

| | | Output (Kg/hour), 2007 | % Change in Output between 2002 and 2007 |
|---|---|---|---|
| Public | Softener/ | 586.2 | -2 |
| | Drawing | 95.3 | -2.5 |
| | Carding | 150.9 | -3.9 |
| | Spinning | 27 | -1.5 |
| | Weaving | 5.7 | 1.8 |
| | Winding | 93.5 | -4.5 |
| | Calendaring (meters/machine/hour) | 2300.1 | 1.8 |
| Private | Softener/ | 459.7 | 0.9 |
| | Drawing | 163.9 | -1.4 |
| | Carding | 167.1 | -4.1 |
| | Spinning | 33.2 | 1.8 |
| | Weaving | 6.7 | 34 |
| | Winding | 97.9 | 16.5 |
| | Calendaring (meters/machine/hour) | 2931.1 | -10.1 |

Source: CPD Jute Survey 2007-08.

**Table 9: Productivity of Sample Indian Mills (kg/hour)**

| Section | Softener/ Spreading | Carding (breaker) | Drawing (First) | Spinning | Weaving (Sacking) | Calendaring (Sacking) |
|---|---|---|---|---|---|---|
| Indian Jute Mills | 656.3 | 318.8 | 275 | 54.9 | 11 | 3914.3 |

Source: JMDC (2002).

### *4.3 Operational Aspects*

Procurement of better quality raw jute, in the amount required, was the most critically important activity of jute mills during the initial phase. On average, a total of 1.45 lac maund raw jute was procured by a jute mill. Raw jute procured by a spinning mill was relatively higher since they tend to use more jute for manufacturing export quality yarn/twine. However, major issue in case of procurement of raw jute was the availability of adequate funds at the disposal of public and private sector jute mills during the harvest season. A wide difference in the procurement price of raw jute between public and private sector jute mills was another issue of concern. However, the CPD survey indicated that variation was not wide in terms of time of procurement between the public and private sector jute mills. Resource-seeking public jute mills perhaps had better access by way of funds from the government.[5]

Interestingly, procurement price in public sector mills was low for some types of raw jute (deshi, tosha) compared to that in private sector mills, while in other types (mesta), procurement price was found to be relatively high in public sector jute mills (Table 10). Procurement price of raw jute has increased by 30 per cent between 2002 and 2007. This has positively contributed to jute farming in the country by providing stimulus to farming. It appears that rise of prices of jute and jute goods in international market in recent years have had positive impact by way of rise in price of raw jute at the farmer's level. Higher price of raw jute was also associated with escalating cost of production. In terms of amount of raw jute required for processing and manufacturing of one unit of hessian, sacking, CBC and yarn products, and also the time required for manufacturing those items, both BJMC and BJMA mills revealed similar patterns of performance.

Most of the mills, particularly BJMC mills, suffered from inadequate amount of capital during procurement season. Banks, in some cases, were reluctant to provide funds in advance since most jute mills had defaulted on earlier loans. Often times mills were found to be having a tough time repaying their debts because of lack of required net income from their current transactions. Because of the huge debt burden, majority of the mills were in a financially weak position. Raw jute procured with suppliers' credit was one of the major modalities for procurement by both the public and private sector jute

[5] BJMC is regularly receiving grant/subsidy from the government in order to operate its jute mills- in 2008 it received Tk.25.8 crore; in 2007 and 2006, these amounts were Tk.35 crore and Tk.100 crore respectively.

mills (Table 11). However, a huge amount of suppliers' credit had remained unpaid, which has continued to remain a headache for both concerned parties. In contrast, most of the Indian jute mills operating under private sector maintained strong financial position since debt burden of individual mills was rather small.

According to the Annual Report of a mill visited in March 2009 during the field survey undertaken for this study, out of the total Rs.1.3 billion in 2007, amount of bad debts constituted merely 0.01 per cent (Rs.152978).

**Table 10: Purchasing Price of Raw Jute of Sample Mills**

| | | Average Price in 2002 (Tk./maund) | Average Price in 2007 (Tk./maund) | % Change between 2002 and 2007 |
|---|---|---|---|---|
| Public sector | Deshi white | 667.9 | 783.1 | 17.2 |
| | Tosa | 671.2 | 881.8 | 31.4 |
| | Mesta | 589.1 | 848.9 | 44.1 |
| | Total raw jute | 580.4 | 746.6 | 28.6 |
| Private sector | Deshi white | 558.3 | 858.1 | 53.7 |
| | Tosa | 642.8 | 948.7 | 47.6 |
| | Mesta | 484.5 | 782.1 | 61.4 |
| | Total raw jute | 580.4 | 793.4 | 36.7 |
| Total | Deshi white | 624.1 | 831.3 | 33.2 |
| | Tosa | 653.6 | 930.0 | 42.3 |
| | Mesta | 547.3 | 807.8 | 47.6 |
| | Total raw jute | 580.4 | 768.2 | 32.4 |

Source: CPD Jute Survey 2007-08.

**Table 11: Sources of Working Capital of Sample Mills**

| | | Capital Available for Procuring Raw Jute (Lac Tk), 2007 | Capital Repaid to Different Sources (%) in 2007 |
|---|---|---|---|
| Public Sector | Financial institutions | 769.2 | 7.7 |
| | Own capital of the mill | 542.0 | |
| | Borrowing from other sources | 91.8 | 10.7 |
| | Borrowing (dues) from raw jute suppliers | 986.3 | 41.5 |
| | Others | 0.8 | 0.0 |
| | Total | 2390.1 | |
| Private Sector | Financial institutions | 706.5 | 31.7 |
| | Own capital of the mill | 819.4 | |
| | Borrowing from other sources | 49.3 | 12.3 |
| | Borrowing (dues) from raw jute suppliers | 87.0 | 30.1 |
| | Others | 12.5 | 1.7 |
| | Total | 1674.7 | 0.0 |
| Total | Financial institutions | 725.4 | 24.4 |
| | Own capital of the mill | 735.5 | |
| | Borrowing from other sources | 62.2 | 11.8 |
| | Borrowing (dues) from raw jute suppliers | 358.9 | 33.6 |
| | Others | 9.0 | 1.2 |
| | Total | 1890.9 | |

Source: CPD Jute Survey 2007-08.

### *4.4 Employment and Worker-related Issues*

Jute manufacturing has traditionally been a labour-intensive activity; however, the size of employment in public and private sector jute mills has varied overtime. BJMC mills, on average, employed more than twice the number of workers compared to the BJSA mills; the number was about 75 per cent higher when compared with BJMA mills (Table 12). Number of workers in the various sections of BJMC mills was higher then that of BJMA and BJSA mills and this difference ranged between 19 per cent and a whopping 167 per cent (in particular sections). It can be inferred that because of underutilisation and unutilisation of machineries in the BJMC mills, many workers, who are employed under 'permanent' contract, remains underemployed or unemployed. Since these workers were entitled to receive government-stipulated salaries and other amenities, to the fullest extent, cost of production in the BJMC mills has tended to remain high on a consistent basis undermining profitability, and overall sustainability of the units. Wage structure of BJMA mills, on the other hand, was different because of the 'contractual' nature of appointment; workers' wages were also found to be low. Excess number of workers in the public sector jute mills was mainly because of recruitment of additional workers and also 'non-workers' during different political regimes and also as a result of pressure from trade unions.

Since BJMC mills were unable to employ the workforce appropriately, their overall production was lower compared to other mills. Output per worker, which is a proxy variable for labour productivity, was found to be only half in sample BJMC units compared to that of a BJMA mill. While in case of a BJSA mill, it was almost three times higher compared to that of a BJMC jute mill. Low productivity in the BJMC mills has been, and continues to be, a serious cause of concern which demands further and more indepth investigation.

**Table 12: Types of Workers in Different Sections in Sample Mills, 2007**

| Name of the section | BJMC | BJMA | BJSA | Percentage of Workers Higher in a BJMC Mill Compared to a BJMA Mill | Percentage of Workers Higher in a BJMC Mill Compared to a BJSA Mill |
|---|---|---|---|---|---|
| Batching/softening/pilling /carding & drawing | 382 | 222 | 322 | 72 | 18.6 |
| Spinning | 420 | 231 | 262 | 81.8 | 60.3 |
| Winding, beaming | 206 | 156 | 315 | 32.1 | -34.6 |
| Weaving | 925 | 346 | NA | 167.3 | NA |
| Damping, lapping etc. | 298 | 145 | NA | 105.5 | NA |
| Others | 344 | 365 | NA | -5.8 | NA |
| Total | 2575 | 1465 | 1108 | 75.8 | 132.4 |

Source: CPD Jute Survey 2007-08.
Note: N.A.: Data not available.

Workers' wages are related to their skill and the types of operation they are engaged in. Survey carried out for this study showed that workers' wages in a typical jute enterprise ranged between Tk.2,600 and Tk.5,400, depending on level of skill and types of operation (Table 13). Workers' wages were significantly higher in BJMC mills as compared to BJMA and BJSA mills. Wages in the BJMC mills ranged between a minimum of Tk. 4,400 and a maximum of more than Tk.10,000. Survey revealed that wages of BJMC workers was more than double (even three times higher in certain operations) than the workers in BJMA and BJSA mills. BJMC workers received higher wage despite low productivity; the situation worsened since productivity has declined over time. Such a high expenditure on account of workers' wages in the BJMC mills led to a hike in overall cost of production in these mills. As a consequence, impact on their overall earnings was negative. In contrast, BJMA and BJSA mills were found to enjoy higher output with half the level of wages. Whether the wage paid to workers in private sector jute mills was adequate to meet workers' living expenses is an issue which merits attention; however, this has not been dealt with in this paper.

**Table 13: Workers' Wages in Sample BJMC Mills against Other Sample Mills**

| | BJMC | | | % of Wage Higher in BJMC Mill Compared to BJMA | | | % of Wage Higher in BJMC Mill Compared to BJSA | | |
|---|---|---|---|---|---|---|---|---|---|
| Name of the Different Section (code) | Ave. Monthly Wage of Skilled Workers | Ave. Monthly Wage of Semi-Skilled Workers | Ave. Monthly Wage of Unskilled Workers | Skilled Workers | Semi-Skilled Workers | Unskilled Workers | Skilled Workers | Semi-Skilled Workers | Unskilled Workers |
| Batching/softening/ pilling/carding & drawing | 6362 | 5349 | 4217 | 141.0 | 161.3 | 130.6 | 118.0 | 134.2 | 113.8 |
| Spinning | 7147 | 5740 | 4331 | 138.6 | 137.9 | 124.7 | 119.4 | 137.1 | 105.4 |
| Winding, beaming | 10131 | 5975 | 4573 | 235.2 | 147.7 | 133.0 | 202.7 | 144.5 | 107.5 |
| Weaving | 7263 | 6091 | 4413 | 74.1 | 87.4 | 112.0 | 102.1 | 83.2 | 308.2 |
| Damping, lapping | 6996 | 5736 | 4490 | 153.5 | 178.7 | 136.9 | 108.3 | 83.4 | 100.1 |
| Others | 9060 | 6972 | 4882 | 217.0 | 293.2 | 167.8 | 220.0 | 255.1 | 188.5 |

Source: CPD Jute Survey 2007-08.

Between 2002 and 2007, labour productivity, i.e. output per unit of labour, was found to have declined by 7.8 per cent. Labour productivity in BJMC mills declined by 33 per cent in the period under review. Whilst labour productivity in BJMA mills fell by 7.8 per cent, in case of BJSA mills, this has not changed (Table 14). Low labour productivity originated from the cumulative affects of low capacity utilisation, low productivity of machineries, inefficient use of time and raw materials, etc. Lower productivity in BJSA mills can also be possibly explained by higher growth in the number of workers which did not match growth of output. Field level information suggested that reduction of workers alone was not able to enhance labour and capital-productivity and removing inefficiency along a range of areas of operation and management was simultaneously required.

**Table 14: Changes in Labour Productivity of Sample Mills**

| | Percentage Change between 2002 and 2007 | | |
|---|---|---|---|
| | Number of Workers | Production (in metric ton) | Production Per Worker |
| BJMC | -15.6 | -43.4 | -32.4 |
| BJMA | 0.8 | -6.3 | -7.8 |
| BJSA | 24.1 | 22.9 | 0 |
| Total | -13.0 | -19.8 | -8.9 |

Source: CPD Jute Survey 2007-08.

Workers' wages in Indian jute mills were found to be relatively higher compared to that in Bangladesh. Workers received average wages of Rs.7,484 which was equivalent to Tk.10750 (Rs.1 = TK. 1.43642 as of 31 December, 2008). Higher wages paid to workers was stipulated by State Government's (West Bengal) regulations as regards payment of minimum wage to workers which included a basic pay, dearness allowance, HRA, EPF, ESI, bonus and other benefits. According to the regulations of the state government, basic payment of workers was usually revised in each quarter of the year on the basis of consumer price index (CPI). Though the public sector adhered to the government declared wage structure, private sector, according to comments of some entrepreneurs, did not make the necessary adjustments to the fullest extent in tune. It was found that cost escalation on account of higher wages was often balanced by other measures such as delay of expansion of scale of production. In an initiative which was still at an experimental stage, some private sector jute mills in India were found to implement productivity-based wage system for workers; however, this initiative was not acceptable to the workers.

### *4.5 Production Cost*

While production cost of jute and jute goods was in general high for Bangladesh's mills in general, it was extremely high in case of BJMC mills. Cost of production of BJMC mills was significantly higher compared to that of the BJMA and BJSA mills. For manufacturing one unit of hessian product, operating cost for BJMA mills was found to be Tk.54,603, while in a BJMC mill it was as high as Tk.120,220 (Table 15). High production cost was particularly associated with high cost for raw jute and high expenditure on account of workers' wages. It is to be noted that these two categories of costs covered about 60-70 per cent of the total cost of production. A significant share of costs was associated with payment of interest for the large amount of outstanding loan as also high expenses for repair and maintenance. High expenditure on maintenance of machineries in public sector jute mills against their low productivity was in many instances because of lack of appropriate maintenance of machineries. In all types of jute mills, particularly in case of BJMC mills, production cost had escalated for all items in 2007 when compared to the situation in 2002.

**Table 15: Operating Cost for One Metric Ton of Output in Sample Mills**

| Mills | Cost of Output (Tk/Metric Ton), 2007 | | | | | % of cost higher in BJMC mills compared to other mills | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Hessian | Sacking | CBC | Yarn/ Twine | Diversified products | Hessian | Sacking | CBC | Yarn/ Twine |
| BJMC | 120220 | 65155 | 116140 | 48660 | NA | NA | NA | NA | NA |
| BJMA | 54603 | 39232 | 60044 | 38752 | 56826 | 120.2 | 66.1 | 93.4 | 25.6 |
| BJSA | | 70719 | 56534 | 42222 | NA | NA | -7.9 | 105.4 | 15.2 |
| Total | 85685 | 50745 | 94295 | 41960 | 56826 | NA | NA | NA | NA |

Source: CPD Jute Survey 2007-08.
Note: N.A.: Data not available.

There are some basic differences in the cost structures of Bangladeshi and Indian jute mills (Table 16). Indian jute mills tended to spend relatively more on workers' wages because of the implementation of the Minimum Wage rule. However, some other costs were found to be lower in Indian Jute Mills compared to those in Bangladesh. These included interest charges on current loan, R&M cost, depreciation cost and other costs. Most of these costs were associated with core operational component of jute mills, which were related to better raw jute procurement, efficient use of machineries, better efficiency and higher machine-productivity. These helped reduce the average cost of production of Indian units.

**Table 16: Comparison of Cost of Production of Sacking Products between Bangladeshi and Indian Private Sector Jute Mills**

| | Bangladesh, 2007 | | India, 2007 | |
|---|---|---|---|---|
| | Sacking (Tk./m.ton) | % | Sacking (Rs./ m.ton) | % |
| Cost of raw jute | 20377 | 51.6 | 16269 | 53.1 |
| Cost of other raw materials | 1716 | 4.3 | 848 | 2.8 |
| Wages and salaries | 8278 | 21.0 | 9636 | 31.5 |
| R & M cost | 1505 | 3.8 | 360 | 1.2 |
| Power fuel | 1526 | 3.9 | 1424 | 4.7 |
| Depreciation cost | 1339 | 3.4 | 457 | 1.5 |
| Interest of current and earlier loans & other charges | 1668 | 4.2 | 273 | 0.9 |
| Others (including insurance, overhead, packing, return, store, tax) | 2953 | 7.5 | 773 | 2.5 |
| Work in process adjustment | 83 | 0.2 | 357 | 1.2 |
| Workers' PF, gratuity | 67 | 0.2 | 215 | 0.7 |
| Total cost | 39510 | 100.0 | 30612 | 100.0 |

Note: Cost of production of Indian jute mills has been adjusted for 2007 based on the data collected from a survey to Indian Mills (conducted in West Bengal) during March, 2009.
Source: CPD Jute Survey 2007-08 and JMDC (2002)

### *4.6 Debt Burden*

Huge debt of Bangladesh's jute mills has been a major concern over the past years, undermining the sustainability of the sector. Public sector jute mills were, on average, in debt of Tk.103 crore, while private sector jute mills had a debt burden of Tk.77 crore on average (Table 17). More importantly, these debt burdens, both in case of public as well as private sector jute mills, have been on the rise over the past years; almost doubling from Tk.53.6 crore in 2001 to Tk.103.3 crore in 2007 in case of public sector jute mills, while in case of private sector mills it showed some variations. It was a cause of concern that because of such huge amount of outstanding loans, both public and private sectors were having to pay a large amount of interest which added to their recurrent cost of production, and consequently led to huge losses and made the operation of jute mills unviable in many instances.

**Table 17: Outstanding Loan Situation of Sample Mills**

| Sector | | Total Outstanding Loan (Tk), FY 2001 | Total Outstanding Loan (Tk), FY2002 | Total Outstanding Loan (Tk), FY2006 | Total Outstanding Loan (Tk), FY2007 |
|---|---|---|---|---|---|
| Public | N | 11 | 11 | 11 | 13 |
| | Mean | 53,58,25,690 | 61,86,32,803 | 99,59,47,708 | 103,27,60,624 |
| Private | N | 17 | 18 | 19 | 25 |
| | Mean | 18,52,27,471 | 17,77,90,237 | 19,34,66,863 | 77,65,67,722 |
| Total | N | 28 | 29 | 30 | 38 |
| | Mean | 32,29,62,485 | 34,50,06,383 | 48,77,09,839 | 86,42,12,662 |

Source: CPD Jute Survey 2007-08.

Debt burden was not a major concern for Indian private sector jute mills though it was a concern for jute mills operating under the NJMC. One of the major operational strategies of private sector jute mills in India, as understood from conversation with managers of two large jute mills, was to operate on the basis of equity (own capital) to the maximum extent possible. This led to significant reduction in operating cost of production. Borrowings from commercial banks and other sources were relatively low. According to the Annual Report for the year 2006-2007, in case of a sample jute mill, major sources of working capital for procurement of raw jute in 2007, other than equity constituting 13.6 per cent, which included 6 per cent of total working capital through credit from commercial banks, 6.6 per cent through suppliers' credit and 1 percent through cash in hand. On the other hand, Bangladeshi jute mills procured more than 40 per cent of total raw jute through borrowing from banks. Consequently, expenditure on account of repayment of interest charges was higher, at 4.2 per cent of total cost in 2007 for a Bangladeshi mill in contrast to the 0.9 per cent in case of an Indian jute mill.

**Table 18: Sources of Working Capital of Sample Private Sector Jute Mills in Bangladesh**

| | Amount | (%) |
|---|---|---|
| Financial institutions | 70,647,330 | 42.2 |
| Own capital of the mill | 81,936,692 | 48.9 |
| Borrowing from other sources | 4,933,721 | 2.9 |
| Borrowing (dues) from raw jute suppliers | 8,697,017 | 5.2 |
| Others | 1,250,712 | 0.7 |
| Total capital available for procuring raw jute | 167,465,472 | 100.0 |

Source: CPD Jute Survey 2007-08.

**Table 19: Loan and Debt Position of a Selected Jute Mill in India**

| | 2007 (Rs.) as of 31 March, 2007 | 2006 As of 31 March, 2006 |
|---|---|---|
| **Loans** | | |
| Secured Loan | | |
| 1. Long term loan | 164,440,782 | 202443542 |
| 2. Short term loan | 103199694 | 124840009 |
| 3. Others | 589835 | 1303675 |
| Unsecured Loan | 615011914 | 476000077 |
| Total | 883242225 | 804587303 |
| **Debts** | | |
| Debts exceeding six months | | |
| Due over six month | | |
| Considered good | 67078895 | 29489619 |
| Considered doubtful | 13055631 | 13055631 |
| Other debt | | |
| Considered good | 276380329 | 355701718 |
| Total | 356514855 | 398246968 |

Source: Based on the Annual Report 2006-2007 of a Sample Jute Mill in India.

### *4.7 Revenue and Profit*

There was a serious mismatch between what a firm spent on production and what it received in terms of revenue through selling its products. Gross revenue earned by BJMC tended to be low since price of products which the mills produced was low. This was mainly because of their focus on low-end segment both in case of domestic as well as international markets. As mentioned earlier, BJMC received relatively lower prices in markets where they have traditionally concentrated - in Asia and Africa. The problem accentuated because the organisation sold their products through local buyers who usually offered low prices. Low price of products could be associated with low quality also which was often a problem for BJMC products. Profit estimated for sample jute

mills revealed a grim picture, especially for public sector jute mills, both in gross and net amount. In case of gross profit where operating costs and income are considered, public sector jute mills had negative profits across all items (Table 20). On the other hand, BJMA mills earned profit in 2007 on all products that they produced; this was particularly evident in case of hessian products and diversified products. This was accounted by marketing of those products in the high-priced markets of Europe, the US and also in Asia. BJSA mills earned high level of profits for their specialised products (yarn and twine).

**Table 20: Gross Profit of Sample Mills in 2002 and 2007**

(in Taka)

| | Gross Profit, 2002 | | | | | Gross Profit, 2007 | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Hessian | Sacking | CBC | Yarn/Twine | Diversified products | Hessian | Sacking | CBC | Yarn/Twine | Diversified products |
| BJMC | -14907.8 | -10272.8 | -6152.6 | -3096.9 | | -90478.8 | -19127.6 | -72711.4 | -31137.5 | |
| BJMA | 4334.1 | 186.6 | 3438.4 | -1213.2 | | 17768.9 | 2871.3 | 22255.5 | 2967.2 | 14690.6 |
| BJSA | 5800.3 | | -4393.9 | 2772.2 | 7097.9 | -12315.2 | | 6520.4 | 12338.6 | 46415.6 |
| Total | -7930.9 | -7054.5 | -4248.9 | 1079.72 | 7097.9 | -35210.2 | -6294.9 | -44701.2 | 4242.4 | 22621.9 |

Source: CPD Jute Survey 2007-08.

When net profit is considered, where all costs including workers' gratuity, overdue loans and their interests are taken into account against gross revenue, all types of factories operating under different categories of ownership were found to incur losses (Table 22). Because of the huge burden of debt, BJMC mills were found to have a large negative balance in case of all types of products. This was also true in case of both BJMA and BJSA mills.

**Table 21: Net Profit of Sample Mills, 2007**

(in Taka)

| Mills | Hessian | Sacking | CBC | Yarn/Twine | Diversified products |
|---|---|---|---|---|---|
| BJMC | -261944 | -78383 | -212210 | -93281 | |
| BJMA | -41481 | -33524 | -18210 | -30876 | -44223 |
| BJSA | -115227 | | -43872 | -29835 | -336461 |
| Total | -149975 | -52215 | -154491 | -36596 | -117283 |

Source: CPD Jute Survey 2007-08.

A case by case examination of the level of profit indicates that there were few firms in the sample which were able to enjoy profit both in cases on gross and net accounting estimation terms. A study of the experience of such firms could throw important insights which would be helpful in identifying factors contributing to their success. It was found that some of the firms, which were leased by the government to individual entrepreneurs, had seen cost escalation because of the statutory bindings which compelled them to adhere to certain government regulations with respect to workers' wages, number of workers, etc. This added to their operational costs and whereby it undermined profitability. However, some private sector jute mills which were operating under leasing

contracts were found to be performing well. Hence, the answer to whether leasing would be a possible way to make the loss-making firms viable was not a straightforward one.

On the other hand, most of the Indian mills were found to making profits both through sales in domestic as well as international markets. Sales in domestic market (a large part of it constituted sacking products) had built-in mechanisms to ensure a certain percentage of profit. The procurement price was fixed by the Jute commissioner India.[6] According to the Annual Report for 2006-07, of a sample jute mill in India, the company earned a gross profit of Rs.179 lac in 2007, though the profit was lower compared to the previous year when it was Rs.284 lac. Net profit in 2007 (profit after tax) was substantially low at Rs.73 lac which was Rs.165 lac in the previous year. A low level of profit in 2007, according to the report, was mainly because of low level of production and steep rise in the price of raw jute. Conversation with a number of jute mills' managers of India revealed that most of the mills enjoyed profit, to varying degrees, because of their domestic sales where a guaranteed profit has been ensured through price-fixation by the government. There was a tendency in the Indian jute mills to reduce the cost of production by taking various cost reduction initiatives in order to augment profit margin. Thus, even though Indian firms operate in a 'secured' local market, competition remains the key driver.

## 5. Major Issues and Concerns with regard to Public Sector Jute Mills of Bangladesh: A Disaggregated Analysis

The above analysis suggests that performance of public sector jute mills, in general, was poor compared to that of private sector jute mills, in terms of productivity, efficiency and profitability. However, there were variations in the performance of mills at individual unit level, which needs to be examined in a more indepth fashion in order to identify firm-specific strengths and weaknesses which could throw useful insights, and lessons could be drawn by the government from such an exercise. Based on the CPD-survey, a disaggregated analysis was carried out for 14 jute mills operating under the BJMC with the objectives of finding out micro-level determinants of performance and concerns related to technical, operational marketing and managerial areas and also financial and worker related indicators.

### *5.1 Large Unit of BJMC Mills was a Drag on Performance*

It was found that, in general, performance of large scale jute mill units (mills that had more than 500 looms) was poor when compared to that of the medium (which had 250-500 looms) and small (less than 250 looms) jute units. It was evident that a low level of productivity was associated with low level capacity utilisation of machines which was common in large size jute mills. Large-size jute mills (such as sample number 11, 16, 25

[6] The procurement price is fixed up based on the statement of cost of production submitted by the jute mills to Jute commissioners' office. The commissioner's office also fixes the amount of jute goods procured from different jute mills based on the available capacity of looms. The procurement price and distribution of orders to various mills have been revised on a regular interval in order to ensure the transparency of the mechanism.

and 40 in the survey) suffered from low capital productivity as also low labour productivity. At the same time, these mills have low capacity utilisation of machines (such as sample no. 11 and 40 except that of sample no.25). Detailed evidence has been provided in Table 22. Consequently, production per unit of machine in different sections of large size firms was low. Ensuring a higher level of productivity was one of the most essential steps for reducing the cost of production. Hence, rationalisation of size of jute mills could be one of the major strategical interventions for ensuring better capacity utilisation as well as better labour management in the mills. This would lead to productivity enhancement. Rationalisation of size in the jute mills should be pursued across all sections of operation.

### *5.2 Unutilisation and Underutilisation of Productive Capacity is a Major Concern*

Low level of capacity utilisation had adverse impact on both productivity and efficiency. This was indicative of underutilisation of productive capacity. Average capacity utilisation in BJMC mills was 52.4 percent, but it varied widely, with maximum capacity utilisation of 81% (sample no.25) and minimum of 20% (sample no.15). A majority of the mills possessed a large pool of machines which were often unutilised (a part of these machines also become obsolete because of lying idle over long period of those). Market value of these machines were found to range between Tk.554,000 to Tk.1,883,000. Low capacity utilisation of machines had negative effect on productivity of both machines and workers. Capital and labour productivity in sample BJMC jute mills was higher (as indicated by sample no. 5, 25 and 44), thanks to higher rate of capacity utilisation; jute mills for which capacity utilisation was lower (sample no. 4, 15 and 40) had lower productivity. There are some exceptions though. In an integrated value chain, as was in the jute sector, a low level of capacity utilisation for looms had knock-on adverse impact by way of lowering the level of use of machines in other sections (Table 23), leading to a fall in output manufactured per machine (Table 24). In initiating reform measures for the mills, the capacity utilisation situation needs to be thoroughly investigated in order to identify areas of rationalisation.

### *5.3 Mismatch between Capacity Utilisation of Machines, Level of Production and Number of Workers Employed*

There was a rationale for establishing large sized jute mills during 1960s, with large numbers of both machines and workers, owing to the huge potentials of the industry as was perceived at the time. However, declining demand of jute and jute goods over time has necessitated rationalisation of level of production of these oversized jute mills. This has not been the case for the BJMC mills. While a small BJMC mill has a workforce of about 300-400, a large mill often employed ten times more than that (about 3500-4500). However, this large size of the workforce did not equate to the performance in terms of level of production. This was mainly because productivity was low in these mills. If it is assumed that skilled and semi-skilled workers have worked under ‘permanent’ contract with higher remuneration, then less capacity utilisation and low labour productivity would mean that cost escalation alongside output decelaration would inevitably lead to

poor performance. Hence, there was scope for rationalisation of workforce and size of the factories.

Though workers' wages in the BJMC mills were set in accordance with the government-declared wages, these wage levels were relatively high compared to that in the private sector jute mills. Hence adjustment of workers' wages was critically important, especially to bring those in consonance with productivity of workers. Any rationalisation of workforce in BJMC mills should take into account not only the number of workers in the mill, but also the huge wage differential between different categories of workers under public and private sector jute mills.

### *5.4 Huge debt burden is a major concern*

Because of default on past debts, majority of the jute mills incurred substantial amount of interest charges on debt which undermined their credit worthiness. According to Table 26, public sector jute mills had an outstanding debt (to a sample nationalised commercial bank) of as low as Tk.20 crore to as high as Tk.116 crore. A large part of these debts were 'bad' debts – equivalent to a minimum of 11.89 percent to a maximum of 50.82 per cent of the total outstanding debt. Although most of these debts were mortgaged, there was no initiative from the lending banks to recover these huge debts from the jute mills. All jute mills are overburdened because of this huge amount of debt and the interest charge associated with these debts. Thus, any kind of restructuring focusing on the public sector jute mills need to focus not only on the short term requirement of capital, but also on the long term debt burden of these firms, which had a cumulative impact on the overall cost of production and performance.

The important issue in case of debt liabilities was the huge amount of interest burden which is being associated with the cost of production. It is found that interest payment on loans was equivalent to as high as 18.6 per cent of total cost of production (in case of sample 16, though for sample 44 this was zero). Average interest payment was equivalent to 7.5 per cent of total cost while interest payment in case of average public sector jute mills was 5.1 per cent. It was mentioned by BJMC officials that no bank was at present financing public sector jute mills, although a cash in credit (CC) limit was allowed to be opened by the banks which is only used for adjustment of banks' loans and interests when jute mills receives payment for their sales in the domestic and international markets.

According to a report prepared by a nationalised commercial bank which provided credit facility to eight BJMC mills, a total of Tk.5152.8 million was lent as of 31 October, 2008 out of which Tk.1691.2 was bad debt, which was 32.8 per cent of the total outstanding debt (Table 25). However, most of these advances made by the banks had adequate mortgage arrangements; in most instances, land, establishments, and machineries and in some instances government guarantees have been used as mortgaged assets. The majority of the mills had assets such as land which was not mortgaged. Although outstanding debt has been adequately covered by mortgaged assets, other liabilities were also significant,

including suppliers' credit, arrears of workers' wages and salaries, gratuity and other payments against which adequate amount of provision has not been made by the jute mills. Such a state of affairs often led to a situation when jute mills found it difficult to pay wages to their workers.

### *5.5 Management Structure of BJMC is not Favourable for Smooth Functioning*

BJMC jute mills are operated by project heads (Figure 4). Major decisions as regards operation of jute mills such as procurement of raw jute, recruitment of workers and job distribution, fixation of workers' salaries, and meeting the production targets, etc. are supposed to be decided by project heads in consultation with the Jute Board. The Jute Board is operating at firm level which, though considered to be the appropriate authority to oversee the operation at mill levels, in practical sense, was unable to function properly because of various limitations. Most of the strategic, policy related, financial, marketing related decisions are taken by the BJMC mills. Hence, project heads of jute mills and board operating at mill levels have very limited autonomy in terms of policy decisions. Moreover, decision-making process relating to procurement of jute, repair and maintenance of machineries was found to be cumbersome and time consuming. In case of issues such as arrears to workers, dues to suppliers and non-payment of debt, BJMC would need to take more responsibility and should take decisions in view of the peculiarity and uniqueness of the situation in case of each individual jute mills. Ministry of Textiles and Jute got involved in the decision making process, when decisions were made with regard to subsidy for operation of jute mills, handing over jute mills for privatisation etc; an inter-ministerial decision was also necessary in this regard. However, it was found that level of responsibility and authority to be exercised at different levels, starting from project head at the mill level to the level of chairman of BJMC at the central level, were often not well-defined. This created unnecessary complexity and hindering the decision making process. Consequently, overall efficiency of the mills has not been able to attain the desired targets.

Besides, short job tenure in particular projects often did not allow the project heads to acquire a comprehensive knowledge about their units. Lack of appropriate authority in making decisions as well as poor remuneration package often led to a situation where unit level officials did not have the incentives to undertake the necessary initiatives towards higher productivity and efficiency of jute mills. Decentralisation of authority along with well defined responsibility at each level in the BJMC mills was thus, urgently required.

**Table 22: General Features of BJMC Mills, 2008**

| Items | Sample Mills of BJMC | | | | | | | | | | | | | Average | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1 | 2 | 4 | 5 | 11 | 12 | 15 | 16 | 25 | 39 | 40 | 43 | 44 | **BJMA** | **BJSA** |
| **TECHNICAL** | | | | | | | | | | | | | | | |
| Market value of one unit of machine (Tk.) | 990,639 | 564,274 | 720,909 | 767,139 | 576,657 | 873,797 | | | 987,616 | 1,595,942 | 1,883,004 | | 553,575 | 517,261 | 808,297 |
| Capacity Utilisation (%) | 40 | 66 | 33 | 80 | | 33 | 20 | 67 | 81 | 34 | 47 | 67 | 81 | | |
| **PRODUCTION** | | | | | | | | | | | | | | | |
| Production per loom (m. ton) | 18.3 | 22.3 | 15.9 | 21.5 | 5.2 | 20.6 | 12.7 | 11.0 | 20.9 | 23.7 | 7.7 | | 18.2 | 30.2 | 3.3 |
| Production per worker (m. ton) | 3.0 | 4.8 | 2.6 | 3.9 | 1.2 | 2.7 | 2.4 | 1.8 | 4.4 | 3.2 | 1.4 | | 3.4 | 4.7 | 7.2 |
| **WORKER** | | | | | | | | | | | | | | | |
| Skilled (% of total) | 52.5 | 66.9 | 58.8 | 50.0 | 53.2 | 64.2 | 58.8 | 58.0 | 55.4 | 83.3 | 39.9 | | 74.0 | 59.1 | 46.7 |
| Semi skilled (% of total) | 22.6 | 23.5 | 23.8 | 30.0 | 25.7 | 15.5 | 23.0 | 23.0 | 7.4 | 7.6 | 60.1 | | 3.1 | 19.6 | 28.7 |
| Unskilled (% of total) | 24.9 | 9.6 | 17.4 | 20.0 | 21.2 | 20.4 | 18.2 | 19.0 | 37.3 | 9.1 | 0.0 | | 22.9 | 21.3 | 24.7 |
| Worker per loom | 6.1 | 4.7 | 6.1 | 5.5 | 4.5 | 7.6 | 5.3 | 6.1 | 4.7 | 7.4 | 5.6 | 7.0 | 5.3 | 6.5 | 0.5 |
| Production per worker (m. ton) | 3.0 | 4.8 | 2.6 | 3.9 | 1.2 | 2.7 | 2.4 | 1.8 | 4.4 | 3.2 | 1.4 | 9.1 | 3.4 | 4.7 | 7.2 |

Source: CPD Survey, 2008

**Table 23: Capacity Utilisation Rate of Different Sections of the Jute Mills 2007**

| | 1 | 2 | 4 | 5 | 11 | 12 | 15 | 16 | 25 | 38 | 39 | 40 | 43 | 44 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spinning Section | 40 | 98 | 36 | 78 | 5 | 46 | 30 | 63 | 89 | 50 | 30 | 39 | 59 | 88 |
| Weaving Section | 28 | 64 | 34 | 55 | 5 | 36 | 60 | 37 | 87 | 51 | 32 | 29 | . | 71 |
| Batching Section | 40 | 66 | 33 | 80 | 3 | 33 | 20 | 67 | 81 | 44 | 34 | 47 | 67 | 81 |
| Carding Section | 30 | 92 | 33 | 55 | 4 | 36 | 32 | 63 | 90 | 3 | 26 | 67 | 40 | 95 |
| Drawing Section | 40 | 94 | 33 | 80 | 4 | 33 | 34 | 67 | 90 | 50 | 30 | 67 | 40 | 87 |
| Winding Section | 40 | 95 | 30 | 70 | 4 | 36 | 33 | . | 85 | 50 | 34 | 67 | 67 | 90 |
| Damping Section | 66 | 83 | . | 70 | 4 | 37 | . | 51 | 82 | 45 | 50 | 66 | . | 98 |

Source: CPD Survey, 2008

**Table 24: Output per Unit of Machine (kg/hour) in Various Sections of the Jute Mills, 07**

| Jute mill serial no. | 1 | 2 | 4 | 5 | 11 | 12 | 15 | 16 | 25 | 39 | 40 | 43 | 44 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Spinning Section | 35 | 25 | 23 | 22 | 23 | 22 | 21 | 30 | 31 | 22 | 21 | 36 | 40 |
| Weaving Section | 5.1 | 5 | 6.2 | 5.94 | 4 | 8.75 | 6 | 4.63 | 8.72 | 4.95 | 4.6 | . | 4.16 |
| Carding section | 230 | 120 | 160 | 38 | 50 | 250 | 135 | 350 | 220 | 182 | 125 | 60 | 41.99 |
| Drawing section | 180 | 125 | 120 | 35 | 40 | 100 | . | 150 | 94 | 130 | 90 | 48 | 31.31 |
| Winding section | 130 | 150 | 110 | 52 | 120 | 123 | 100 | . | 116 | 40 | 5.8 | 80 | 95.75 |
| Calendaring section | 1800 | 1600 | . | 1800 | 1500 | 1800 | . | 2300 | 2200 | 1900 | 7500 | . | 600.63 |
| Batching section | 550 | 400 | 450 | 306 | 300 | 500 | 380 | 700 | 550 | 500 | 800 | 1200 | 984 |

Source: CPD Survey, 2008

**Table 25: Debt Liabilities and Possible Assets for Compensation (as of 31.10. 2008)**

| Jute mill serial no. | A (5) | B | C (16) | D | E | F | G (44) | H (2) |
|---|---|---|---|---|---|---|---|---|
| Outstanding Debt (million Tk.) as of 31.10.2008 | 417.919 | 905.998 | 1102.935 | 552.151 | 335.666 | 1163.762 | 471.737 | 202.634 |
| Bad debt (million Tk) | 37.191 | 292.934 | 425.613 | 149.150 | 90.799 | 591.504 | 79.921 | 24.104 |
| Mortgaged assets (million Tk.) | | | | | | | | |
| Land | 191.97 | 132.520 | 167.520 | 79.63 | 57.798 | 3656.0 | 1301.3 | 130.0 |
| Establishments | 226.59 | 457.850 | 210.260 | 149.734 | 152.967 | 171.97 | 297.519 | 18.78 |
| Machineries | 126.87 | 261.420 | 518.520 | 444.130 | 221.719 | 889.8 | 477.160 | 216.47 |
| Government guarantee | 52.0 | 322.20 | 384.800 | 39.0 | 32.0 | 346.7 | 21.0 | 20.0 |
| Total | 597.43 | 1173.990 | 1281.1 | 712.494 | 464.484 | 5064.47 | 2096.979 | 375.25 |
| Non-mortgaged assets | | | | | | | | |
| Land | 400.0 | 19.50 | 40.0 | 52.5 | 53.2 | 2432.3 | 660.9 | 116.9 |
| Establishments | | 24.2 | | | | | | |
| Machineries | | | | | | | | |
| Government guarantee | | | | | | | | |
| Total | 400.0 | 43.70 | 40.0 | 52.5 | 53.2 | 2432.3 | 660.9 | 116.9 |

Source: Data collected from a nationalized commercial bank

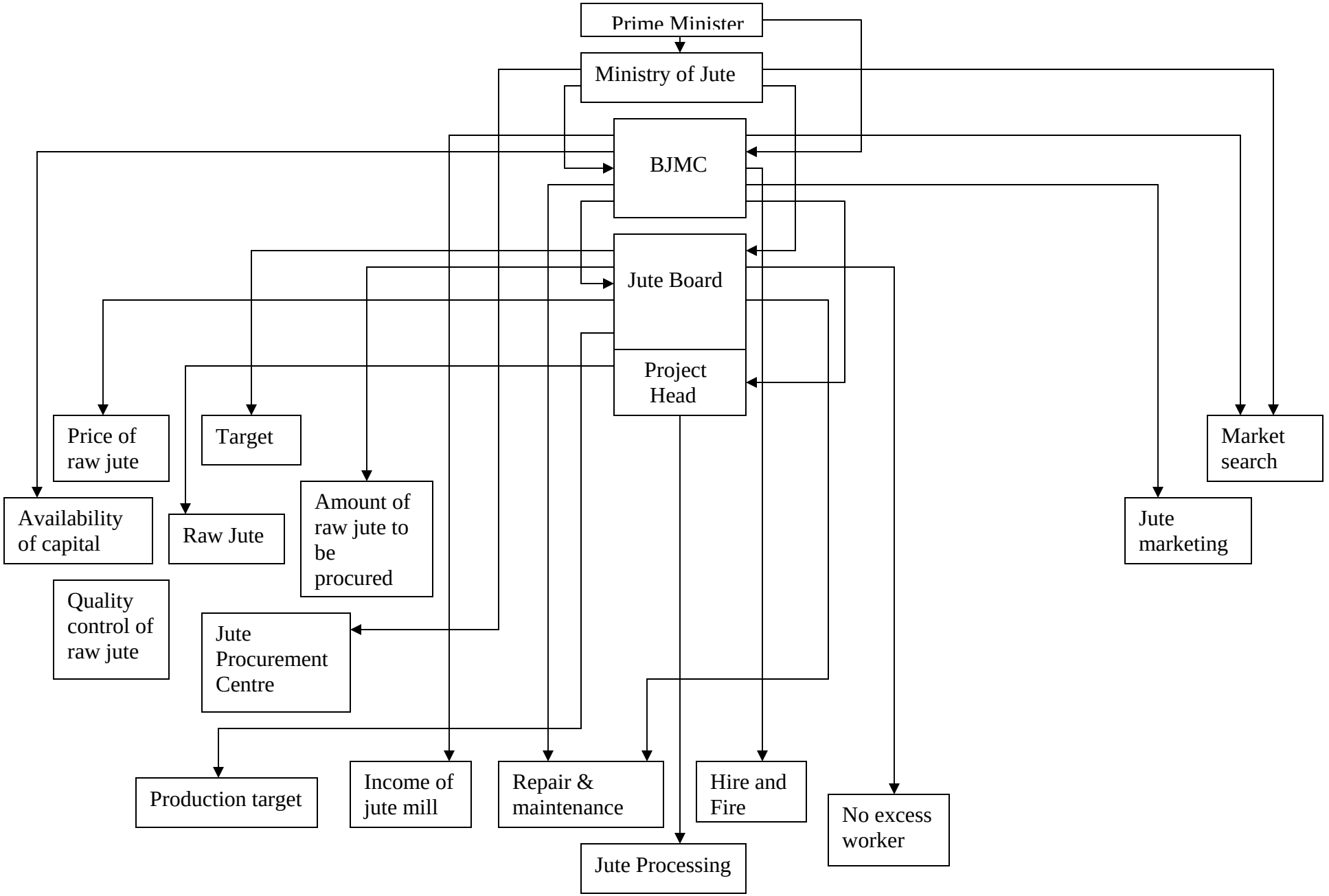



**Figure 4: Structure of Management of BJMC**

## *6. Restructuring of Public Sector Jute Enterprises in India: A Case Study*

Unlike public sector jute mills in Bangladesh, public sector jute mills in India accounted for a very limited share in the market. Since its establishment in late-nineteenth century, the sector has been led by the private sector. National Jute Mills Corporation (NJMC) was the statutory authority of six public sector jute mills in India. These mills are: Alexander, National, Kinnison, Khardah, RBHM and Union Jute Mill. It is important to note that NJMC never operated profitably since it took over control of the six jute mills from the private entrepreneurs in early 1980s. In 1992, NJMC was referred to the Board for Industrial and Financial Reconstruction (BIFR) to decide on its potentials in order to operate profitably. After assessing the performance of NJMC, BIFR declared NJMC as sick (non-viable), and the government started to consider reforming and restructuring the NJMC. According to the revival proposal approved by the Indian cabinet on March 24th, 2005, NJMC has taken the following actions[7]:

(a) Offering Voluntary Retirement Scheme (VRS) to all the employees of the Organisation, including the employees of Head office in order to reduce the manpower of NJMC Ltd.;

(b) Extending budgetary support to the extent of Rs.978 crore for providing VRS, liquidating statutory arrears, gratuity and securing liabilities of NJMC Ltd.

(c) The Cabinet while approving the proposal of the Ministry directed that:
   (i) The mills at Kinnison and Khardah will be referred to the Board for Reconstruction of Public Sector Enterprises for Rehabilitation, and
   (ii) VRS will be given to employees of other mills but these will be dealt under BIFR proceedings.

As per the decision taken by the Cabinet, NJMC has given VRS to all workers of the mills along with provident fund (PF), employees' state insurance (ESI), gratuity and other dues. NJMC has also settled dues of all secured creditors.

**Revival Plan for Public Sector Jute Mills in India**

It was decided that two out of six jute mills would be taken into consideration by the NJMC under the revival scheme. These two mills were: Kinnison and Khardah. Industrial Development Bank of India (IDBI) prepared a revival plan of financial restructuring taking into account cost of scheme and means of finance. According to the proposal of IDBI, the following strategies were to be pursued:

(a) Modernisation and upgradation of production facilities of two mills at Kinnision and Khardah would be undertaken
(b) Liquidation of all the secured and unsecured liabilities would be carried out
(c) Payment to be made to pressing creditors
(d) Sales of land and assets of closed mills and surplus land of mills to be revived
(e) Fresh workforce to be engaged as per industry norms

[7] Excerpts from Annual Report of NJMC 2008

West Bengal government has offered a number of relief and concession schemes as part of the revival plan which includes the following:

(a) waiver of electricity duty on the electricity consumed on restarting of production activities in the units taken for revival of a productive period of 5 years.
(b) Soft loan for liquidation of arrear sales tax liabilities of those industrial units that require such support for rehabilitation[8].
(c) Extension of revival efforts for sick industrial units under the provisions of the "West Bengal Relief Undertaking (Special Provisions Act) 1972.
(d) Disposal of surplus land assets held by the defunct/closed/sick industrial units of NJMC and BJEL to generate augmental resources for investment in the rehabilitation/revival of NJMC and BJEL.

Ministry of Textiles (MOT), Government of India (GOI) was to consider the following restructuring package for NJMC:

(a) To write off entire outstanding loans and liabilities of Rs. 2607.2 crore and interest of Rs. 3613.8 crore on those loan as on March 31st, 2008 against accumulated losses, which amounted to Rs. 6221 crore
(b) Infusion of additional interest free GOI loan to be refunded to GOI starting from 2009-10 till 2015-16, which amounts to Rs.310.3 crore

MOT is exploring the possibility of inducting one or more private partners to operate Kinnision and Khardah mills. Based on the report of assessment of the proposal, the MOT has proposed the revival of the three NJMC mills by leasing (subject to approval by the Cabinet).

Thus, revival of public sector jute mills in India was considered from the perspective of an integrated strategy with changes in the number of mills to be revived, necessary resources required for such revival, special budgetary support in terms of waivers etc. Changes in the management or ownership were also considered. The most important aspect in case of revival was that new mills would operate with a fresh start having no burden of debt and interest, arrears on workers' wages, PFD, ESI, gratuity and others. Since all workers of NJMC had been laid off with full payment of all their respective dues, there was no immediate challenge to the government's efforts to start these mills with new recruitment of workers as per requirement. There was thus no notable pressure on the government from the trade unions.

## 7. Way Out: How the Jute Industry of Bangladesh Can be Made Viable

The study has come out with a set of recommendations from three different perspectives: firstly, a set of suggestions has been put forward which is relevant in general for all categories of jute mills because of the commonality of the problems; secondly, another set of ideas has been put forward which is targeted at the BJMC jute mills mainly to

[8] Loan repayable over 11 years with moratorium on principal amount for 3 years; interest @ 8.75% pa with rebate of 2% for timely payment and payable from the 1st anniversary of actual disbursement of the loan.

address sector specific challenges, issues and concerns; thirdly, a set of proposals has been placed relating to privatisation of public sector jute mills, particularly with respect to the work of the Privatization Commission.

## 7.1 Overall

***a) Extended support is needed for jute industry in view of global economic crisis****:* It will be difficult to get back to the normal trend of production and export of jute goods in the near-future because of the low prospect of a rise in the demand for these products in developed and developing countries over the short run. On the other hand, because of the limited demand for yarn in the domestic market, there was limited scope to expand its usage there, at least in the immediate term. Since the flow of income for jute goods manufacturers is falling (in extreme cases it has stopped), they are facing problems in terms of loan repayments to banks and suppliers. Under the stimulus package government had announced an additional cash incentive of 2.5 per cent for jute and jute-made goods (which will now increase the incentive to 10 per cent from the previous 7.5 per cent). This would provide some cushion for jute goods manufacturers. However, in order to retain the flow of funds for continuing operation, jute mills will need the continuation of the 'CC' loan facility from the commercial banks. As has been stipulated by the Bangladesh Bank, exporters of jute goods enjoyed a longer time period to repay their down payment (this facility was available up to September, 2009).

It is also important that the jute industry be categorised as an 'agro-based industry' and thereby provided with equal facilities as those enjoyed by industries belonging to this category. The reduction of interest rates, both on term loan and working capital, is a major demand of the entrepreneurs. In view of the global financial crisis, it was the temporary workers who lost their jobs first since factories were closed down or operations were scaled down. These workers should be brought under social safety net progarmme in order to at least ensure their own and their family members' subsistence. It is hoped that there will be a significant and adequate allocation to social safety net programmes in the upcoming budget of FY2009-10 in order to ensure the concerns of retrenched jute mill workers are addressed.

***b) Improvement of productivity:*** Both labour and capital productivity need to be significantly improved in public and private sector jute mills. It was found in a recent study conducted by a Japanese team that targeted changes in the production process in the jute mills could contribute to substantial improvement in overall productivity. A number of reasons were identified which gave rise to low level of productivity. Poor maintenance of machineries was regarded as one of the major weaknesses in the jute mills sector particularly in mills that operated in the public sector. Although pubic sector jute mills spent significant amount of their resources on repair and maintenance works, there was hardly any reflection of these spendings on firm level capital and labour productivity. All categories of jute mills needed to follow appropriate and modern production methods and maintenance procedures and techniques, particularly with regard to use of raw jute, management of workers, and maintenance of machineries.

Improvement of productivity of machines will not be adequately ensured if the existing sets of machineries in the jute mills are not overhauled since a large number of those are outdated. Instead of using these machineries, jute mills should adopt an action plan as regards replacement of outdated machineries in order to replace those in order to achieve high levels of productivity. Jute mills should be allowed appropriate autonomy to make their own decisions for long term investment. A *Technology Upgradation Fund* should be put in place which would ensure distribution of credit to manufacturers at concessional rates of interest. This would allow the industries to undertake technological restructuring initiatives, modernise their plants through installation of new machines and adopt latest technologies.

***c) Reduction of cost of production***: In view of the low level of producers' profit margins in the sector, a renewed effort will be required towards cost cutting measures. However, as was seen, cost of production was high particularly in BJMC mills mainly because of low levels of productivity. High expenditure on account of workers' wages in the BJMC mills was one of the major reasons for high cost per unit of item. Rationalisation of the workforce in line with the current operational requirements and capacity utilisation status was required to reduce cost. Interest payment on bank loans was yet another major cost element. It was important to develop capital base of the jute mills perhaps through one-time infusion to enable the mills to start afresh on a sound financial footing.

***d) Encourage domestic usage of jute goods:*** Higher levels of domestic demand could be an important element of a sustainable jute industry in the Bangladeshi context. This has been the case for the Indian jute industry. In times of slack global demand, the domestic market could act as a buffer. Under the Jute Packaging (Mandatory) Act, the Indian government ensured use of jute bags for foodgrains to the tune of 100 per cent domestic use; in the case of sugar it was 90 per cent. Bangladesh could also think about pursuing such policies to encourage use of domestic jute. The government has now decided to introduce an Act to make the use of jute goods mandatory in the case of packing of foodgrains.

***e) Research, training, promotion and awareness building activities:*** Various national organisations (e.g. BJRI and JPDC) and intergovernmental organization (IJSG) are actively involved in research, training, promotion and awareness building activities in the country. Bangladesh Jute Research Institute (BJRI), under the Ministry of Agriculture, has developed a number of products which are suitable as raw materials and intermediate products for manufacturing better quality jute products. However, BJRI is suffering from a number of problems. This includes insufficient manpower, poor laboratory facilities, fund constraints, inadequate scopes for scientists to attend seminars, short term trainings/tours/symposiums/workshops at home and abroad to improve technological skills, frustration among qualified scientists for not having timely promotion, lack of interest of entrepreneurs to invest for new technology/projects. The lack of government patronization/subsidy for the commercialization of developed technologies has been mentioned as another important constraint. The International Jute Study Group (IJSG) has conducted several studies targeting commercialisation of jute products. A number of projects related to jute industries have been on going under the support of the IJSG. This

includes, among others, a project entitled "Development and Application of Potentially Important Jute Geo-textiles (CFC/IJSG/21)", which studies the development and application of jute-geo textiles. The Jute Diversification Promotion Center (JDPC) has undertaken a number of programmes, which include skill upgradation training programs for the production of diversified jute products, exhibitions and fairs, and training on marketing, training on dyeing & finishing. Overall, there is a gap between the various researches conducted and commercialization of research output because of a poor linkage between public and private sector industrial entities and the research organizations. Moreover, a lack of market intelligence and the problem of the branding' of jute products are also considered to be important constraints in this regard.

***f) Review of the 'Jute Policy':*** The 'Jute Policy' needs to be reviewed and revised in view of the current developments. In this context, the government's initiative to design a new jute policy is a well-timed initiative. However, the draft policy will need to be substantively improved to provide strategic directions to the jute sector. The policy should give guidelines for a realistic plan of action over short, medium and long term. Jute policy of the country needs to take into account the prospects and dynamics of global demand for jute and jute goods in the coming years, which is absent in the draft policy, and come up with a realistic growth target and set out the essential elements of the strategy to attain those targets. A comprehensive vertically integrated production chain needs to be considered for jute and the jute manufacturing sector in Bangladesh.

***g) Formation of an independent 'Jute Board':*** The idea of setting up an independent 'Jute Board' should be considered, which will have representations from major stakeholder groups. The Board will take all policy-related decisions pertaining to the jute sector. The Board will set out plan of action, offer guidance, monitor performance and provide support on an ongoing basis. One of the major tasks of the Board will be to establish 'rules of the game' so that all mills, private and public, will operate on a market-based approach. The proposed Jute Board will take measures to ensure production of high value added jute items that would enjoy benefits being derives from the international market. The Board would recommend policies for higher domestic use of jute goods, product and process diversification, and product and market diversification. The Board would also provide policy guide lines for fixation of price.

***h) Establishment of college for jute technology***: Establishment of academic institutions for preparing graduates, who will specialise in industrial engineering and industrial management, focusing on the jute industry, needs to be seen as an urgent task. Private sector organisations such as BJMA and BJMC should take proactive measures along with the government to establish such institutions under public-private partnership. It is to be noted that jute industry in India has reaped the benefits of the *Jute Technology College*, which produces fresh graduates each year who subsequently join Indian jute mills. In Bangladesh, both demand and supply side problems have created a gap in the area of availability of competent personnel for the jute sector. This gap will need to be urgently bridged.

***i) Market search for jute products:*** A joint initiative of BJMC, BJMA and BJSA is required for market promotion of jute goods. Products made in Bangladesh are targeted primarily to Asian, European and American markets, while only an insignificant share of the products are targeted to Latin American markets. It is important to note that market share of India is growing in Latin America, particularly in Brazil and Argentina. One of the major components in case of searching markets should be to identify country-specific various tariff and non-tariff barriers faced by jute goods when exported globally. Organisations associated with jute industries in Bangladesh and India could think about collaborating and taking joint initiatives in this regard. Promotion of jute as an eco-friendly item could also be a prospective area of such collaboration. Both the countries could take joint initiatives to introduce jute based products through organisation of joint trade fairs. A common basis of such cooperation would be to familiarise and popularise 'natural fibre' based products in the markets of developed and developing countries. Since Bangladesh and India are the major suppliers of jute goods in the global market and they do compete with each other, it is felt that there were synergies to be drawn from cooperation between the two countries.

***j) Periodic Review of Government Decision on Export Restraint over Raw Jute:*** The decision on export restraints has several implications: first, the decision was expected to reduce the domestic price of raw jute, but this did not happen (the price of raw jute was 40.8 per cent high in December, 2009 compared to the previous year); second, the ban has covered the export of 'stable fibre jute' which is categorised as 'raw jute'. The government should review its decision with regard to export ban on jute fibres; the government should also undertake periodic reviews of the decision in order to avoid possible adverse affect on farmers.

## 7.2 Reform and Restructuring of BJMC

***a) Rationalisation of public sector jute mills:*** As discussed earlier, size of firms matter in the jute industry. Large scale units were found to be less efficient, as a matter of record, for various reasons. There was a *prima facie* cause for rationalisation of BJMC mils, i.e. scaling down the large size mills to medium size units. Since half of the capacity of public sector jute mills remain unutilised or underutilised over protracted period, there was a rationale and for scaling down the operation of large-sized jute mills to ensure higher and more effective capacity utilisation. Size of the workforce as well as operation need to be rationalised. A medium sized mill with about 500 looms made more sense on the ground of limited financial involvement, better opportunity for worker management, more effective monitoring of operations and flexibility in mode of operation. Rationalisation of size will give firms an opportunity also to sell their machineries, which could be used to repay part of their outstanding debt.

***b) Rationalisation of number of workers:*** Rationalisation of number of workers is one of the most sensitive areas that need to be handled with care and passion as well by taking cognizance of logic of economics, bearing in mind social dimensions and implications. Type of rationalisation will depend, to a large extent, on the scale of rationalisation of the

size of mills. Since demand for skilled workers is likely to be high even following rationalisation, the strategy for retrenchment should start with less skilled/temporary workers. A special allocation is needed in order to pay all the arrears of retrenched workers. In this context it may be mentioned here that four jute mills, which were closed in 2008 with 14 thousand workers being laid off, are yet to receive their full arrears. BJMC should take measures to clear all dues to retrenched workers.

***c) Encouraging public-private partnership:*** In order to operate jute mills, BJMC should reexamine and revisit its ability and capacity to handle the challenges faced by these mills. However, there are alternative mechanisms to manage and operate jute mills that BJMC should also consider such as public-private partnership arrangements and adopting leasing out systems. Performance of jute mills which operated under public-private partnership was found to be better compared to those operating under single public ownership. BJMC may take initiatives to allow more jute mills to operate under public-private partnership. The government has already taken decision to lease out a number of jute mills to the private sector. Without taking adequate actions as regards huge amount of debt burden and workers' arrears, it will be difficult to run mills only by leasing these out. This will also be true in case of public-private partnership.

***d) Ensure adequate funds for repayment of all arrears of workers:*** Public sector jute mills had large arrears that they owed to workers on account of unpaid wages and various other statutory benefits. BJMC should take initiatives to resolve these issues on an immediate basis. A separate fund should be established with necessary allocations for the payment of workers' arrears. Any restructuring of the public sector jute mills should give ex-ante priority on payment of all arrears to workers.

***e) Payment of dues to suppliers:*** Jute mills have traditionally been dependent on raw jute suppliers to ensure smooth supply of raw jute under hire purchase contracts. A huge amount of suppliers' payment had remained unresolved with many jute mills, especially public sector jute mills. Jute mills should take necessary measures to clear all dues of the suppliers and if required, necessary allocations can be made from the proposed fund for making such payments.

***f) Amortization of debt:*** The huge amount of debt burden of public sector jute mills has made their operation financially unviable. In view of this it was necessary to make an audit to assess overall financial position of jute units, especially liabilities with financial institutions. It appears that without writing off these huge debts, it would be difficult for BJMC mills to undertake any initiative towards rationalisation of operation and starting afresh. Government will need to take responsibility to amortize these debt burdens and may adopt a plan of action with the primary objective of phasing out such debts in stages. It may be recalled here that, according to the *Bangladesh Economic Survey 2009*, BJMC had an outstanding loan of Tk.2255.8 crore as of 31 December, 2008, of which Tk.695.2 crore (30.8 per cent) was classified loan.

***g) Improving marketing strategies:*** Marketing of jute goods by BJMC mills is mainly targeted to low-priced markets, as was noted earlier. This has called for BJMC

management to review their marketing strategies. Currently, BJMC mills sell most of their products through BJGA members or other agents. BJMC mills need to explore other markets, especially high-priced markets in Europe and the US. Besides, timely delivery of jute goods as well as better quality of products is important factors that need to be assured to generate higher earnings through higher price. BJMC mills were found to be lacking in this regard. An aggressive marketing strategy is required on the part of public sector jute mills in such areas as market search, price offering, timely delivery of goods, etc. Adequate human resources for these specialised functions need to be developed on an urgent basis.

***h) Greater autonomy of jute mills required*:** Efficient operation and management of public sector jute mills will hinge critically on whether individual units can operate with adequate autonomy and flexibility in terms of decision making. Appointment of project heads of BJMC mills should be based on efficiency, competency, and experience in terms of managing crisis-prone industries. There should be options for recruitment of project heads from outside the government on contract basis, with offers of attractive remuneration package and service benefits. These appointments need to be reviewed on a periodic basis with opportunities for extension. The same process should be maintained with regard to appointment of other directors of the jute mills. Project managers should be able to function with adequate authority and be responsible to take all relevant decisions with regard to management and operation.

Project heads and their teams should enjoy full authority in decision making in such areas as procurement of raw jute, marketing of jute goods, recruitment, promotion, dismissal, sanctions, and disciplinary actions, financial issues and searching for buyers. BJMC head office and Board will extend their full support to the management at the unit levels.

### 7.3 Privatisation of Public Sector Jute Mills

***a) Privatisation of selected state owned jute mills:*** Reform measures in the jute manufacturing sector, as mentioned in the draft policy, envisages the gradual privatisation of public sector jute mills, and also mentions that those that remain in the public sector will need to operate efficiently. The operative word should be ‘efficiency’ and not whether it should be a blanket of privatisation or not. The proposed Board should make policy decisions within this in mind. In this same vien, the public-private partnership could be explored as a possible strategy. It is also worth repeating here that a number of sample jute mills which operated under public-private partnership were found to perform profitably.

***b) Expedite the process of privatisation***: In general, privatisation operations pursued by the privatisation commission did not gain momentum during FY2008-09 mainly because of the government’s ‘go slow’ strategy regarding privatisation. There were three (3) jute mills under the initial process of privatization, but the government has removed two (2) jute mills from the list and one (1) is facing a litigation problem. According to the information provided by the officials of the Privatization Commission, Monowar Jute

Mills, currently under the privatization programme, is facing litigation problems regarding its valuation of assets. Many have suggested that in selecting entrepreneurs, the 'highest bidder' should not necessarily be selected unless his/her technical and financial capabilities comply with the required standard. Hence, it is important to assess entrepreneurs' technical and financial ability to operate the jute mill. An entrepreneur's experience in jute manufacturing, their financial capacity to run outdated jute mills in a modern way by taking measures for modernization, etc., should also be taken into consideation. With regard to the SOEs which are marked for privatization, all liabilities ought to be borne by the government which will be a key step in the direction of hope. However, absorption of these debt burdens by the government will remain a recurring problem. There will have to be adequate budgetary allocations to underwrite the debts, so that once SOEs are privatised, the settlement of bills may be made in a speedy manner.

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