

## **Chapter V**

### **Modern Jute Mills in Bengal:**

#### **Drive to Maturity during 1890-1914**

In the previous chapter, it has been discussed how the modern jute industry suffered in Bengal from teething problems in the initial decades, and also the story of its market victory by the close of the 1880s in a triangular competition from the domestic traditional jute industry and Dundee's modern jute mills. The period from the early 1890s through the outbreak of the World War I was a phase of its development towards maturity. In this period it grew rapidly in every respect, continuing its march towards newer markets and newer product-mix. This chapter seeks to analyse this phase of the industry's development from three viewpoints. First, we describe the industry's growth during this period in terms of the number of firms, their capacity creation in respect of looms and spindles, as well as the levels of investment and employment. These form the subject-matter of Section I. Secondly, we seek to analyse in Section II the growth of its market, both in India and abroad, as also the changes in the product profile of the industry. The industry's development in this phase was, however, carefully nurtured by Indian Jute Mills Association (IJMA). Apart from acting as a pressure group for streamlining various government policies, it played the role of a cartel where the mills' representatives sat together to put voluntary restrictions on their own working hours so as to acquire monopoly power in the

output market and monopsony power in the market of raw jute. Section III outlines these stories. Section IV, however, sums up the major findings.

## I

The modern jute industry had already achieved phenomenal progress in Bengal by the beginning of the 1890s. In 1889-90 there were only 24 jute mills in this province with an aggregate capacity of 8,104 looms and 158,326 spindles (vide Table 5.1). Since their paid-up capital was aggregated to Rs. 30.22 million, each firm was built up on average with a nominal capital of Rs. 1.12 million. This surely speaks of a very large-scale size of contemporary firms in the industry.

Table 5.1: Growth of modern jute mills in Bengal, 1889-1914

Particulars	1889	1890-94	1895-99	1900-04	1905-09	1910-14
Jute mills	27	28	32	37	49	61
Nominal capital(Rs.)	30,215,000	33,703,160	46,353,400	43,070,800	59,895,000	77,876,625
Spindles	158,326	182,696	264,255	357,366	561,769	713,229
Looms	8,104	9,103	12,874	17,409	26,489	34,088
Average daily employment	60,630	68,140	92,876	120,406	180,866	218,596
Capital per mill	1,119,074	1,220,276	1,464,776	1,158,128	1,346,604	1,267,197
Spindle per mill	5,864	6,613	8,342	9,594	11,526	11,614
Looms per mill	300	329	407	467	547	555
Capital/labour	498	499	497	358	360	359

Source: a) For 1889-05 are from Statistical Abstract for British India, various issues, b) for 1905-14 from Annual Reports of the I.J.M.A, various issues and 'Government Administrative Report', various issues.

We have taken five years average for 1890-1914.

A steady-state growth was evident since then. One new mill was set up during 1890-94, four mills during 1895-1899, and five mills during 1900-04. The following quinquennia witnessed further acceleration in the growth rate with as many as 12 new mills coming up during 1905-09 and during 1910-14. The industry thus housed 34 new mills during 1889-

1914, undergoing an average growth rate of 6.07 per cent per annum over a period of a quarter of century. This was indeed a remarkably high rate of growth that gave rise to an aggregate of 68 large-scale jute mills in this province by the end of our study period.

Entry of new firms, also as the expansion and diversification of existing ones, obviously extended the industry's base of capital. From Rs. 30.22 million in 1889 the paid-up capital of the industry is seen to have increased to Rs. 33.70 million in 1890-94, Rs. 46.35 million in 1895-99, Rs. 43.07 million in 1900-04, Rs. 59.90 million in 1905-09 and finally to Rs. 77.88 million in 1910-14. The annual growth rate in this series has been worked out at 7.35 per cent on the average for the period 1889-1914. The accretion of the nominal capital was reflected in its productive capacity, both spindles and looms. The number of spindles that had been 88,000 during 1879-84 rose to 158,326 in 1889-90, 317,348 in 1900-01, 633,120 in 1910-11 and further to 789,236 in 1914-15, showing an annual growth rate of 15.94 percent (see Annexure 5.1). Since there is a technical relation between the number of spindles and the number of looms, the latter also grew at about the same rate, namely 14.53 per cent per annum, during that period. In absolute number, the number of looms increased from 5,500 during 1879-84 to 8,104 in 1889-90, 15,340 in 1900-01, 31,755 in 1910-11 and further to 37,541 in 1914-15 (see Annexure 5.1).

That the industry's growth in this period crucially hinged on the expansion of existing mills is learnt from Table 5.2. It shows that out of

13 mills existing in 1878-79, five mills expanded their loom capacity by more than 100 per cent by 1897, and another five mills by 75-99 per cent. Among the comparatively newer ones, two firms also increased the capacity by more than 100 per cent. In this respect, mention should specially be made of the Shibpur Jute Mills, the Gouripur Jute Mills, the Titagarh Jute Mills and the Hastings Jute Mills, where the capacity expansion was in the order of about 240 per cent, 197 per cent, 172 per cent and 161 per cent. These statistics underscore a state of prosperity for Bengal's modern jute sector.

Table 5.2: Number of looms in Calcutta jute mill during 1878-1897

Name of the mill	1878	1889	1890	1891	1892	1893	1894	1895	1896	1897
Chamdany	358	358	358	358	358	358	430	430	430	480
Wellington	260	260	260	260	260	260	276	277	277	277
Howrah	275	500	500	500	500	500	551	646	646	646
Shamnagar	313	458	458	458	458	458	560	560	560	560
Hastings	200	515	515	515	515	515	521	521	521	522
Baranagar	516	769	769	769	769	769	799	809	944	1023
Clive	150	150	150	150	150	150	162	162	272	272
Shibpur	250	300	300	300	300	300	500	500	735	850
Ganges	300	403	403	403	403	403	413	413	550	550
India	200	300	300	300	300	300	300	300	300	354
Gouripur	224	286	286	286	286	286	415	415	415	665
Fort Gloster	252	253	253	253	253	253	397	397	500	500
Budge Budge	320	460	460	460	460	460	460	460	762	780
Titagarh	-----	260	260	260	260	260	400	435	600	707
Victoria	-----	168	168	168	168	168	340	374	374	374
Kamarhati	-----	320	320	320	320	320	320	459	459	508
Kankinara	-----	310	310	310	310	310	420	420	420	436
Union	-----	350	350	350	350	350	351	375	375	390
Hoogly	-----	----	----	-----	-----	-----	815	815	815	829
Gorden	-----	----	-----	-----	-----	-----	-----	1848	1848	1280
Anglo-Indian	-----	----	----	-----	-----	-----	-----	----	352	352
Alliance	----	----	-----	----	-----	-----	-----	-----	300	320
Standard	-----	-----	-----	-----	-----	-----	-----	----	240	240
Khardah	-----	-----	-----	-----	-----	-----	-----	----	300	300

Source: Report for 1878-79 is from Government Administrative Report and Report for 1889-97 are from Indian Jute Manufactures Association.

N.B: (---) represents year when mill did not come up

Returning back to Annexure 5.1 we find that in terms of nominal capital the mills' average size remained virtually stagnant between the period 1879-84 and 1914-15, notably at Rs. 1.28 million, although fluctuations occurred in between. The average size increased to Rs. 1.42 million during 1884-89 but reduced to Rs. 1.16 million in 1891-92. It rose slowly thereafter to Rs. 1.57 million in 1899-1900 with a falling trend coming to prevail upon since then. Two additional aspects should be emphasized to this end. First, although the average firm size remained virtually stagnant between the early 1880s and 1914-15 with alternative upward and downward trends through 1899-1900 and thereafter, the loom and spindle capacities of the mills underwent a secular rise. From 262 during 1879-84 the number of looms rose to 300 in 1889-90, 425 in 1899-1900, 548 in 1910-11 and further to 560 in 1914-15. In corresponding years, the number of spindles increased from 4,190 to 5,864, 8,885, 10,916 and 11,780 respectively. This signifies that the industry grew in such a way that while more investment was made towards the installation of looms and spindles, other investments (such as those on land and land development, buildings etc.) were economised so that total investment per mill remained virtually static. Such a practice reflected an effort on the part of the firms to undertake more labour-intensive production, especially from the fag-end of the nineteenth century. The static (or falling) capital per mill in the phase of a rising production certainly indicates rising intensity of labour in technology. The number of looms and spindles could not, however, be economised greatly since more employment of workers required a greater provision for

looms and spindles. Indeed, rising labour intensity is the second aspect of the industry that Table 5.1 highlights. Although the amount of capital per mill remained virtually static in our study period, the number of average daily employment per mill increased steadily. It rose to 60,630 in 1889, from 68,140 to 92,876 during 1890-99, from 120,406 to 180,866 during 1900-09 and further to 218,596 during 1910-14. More precisely, Column 10 of Table 5.1 shows that the industry's capital-labour ratio decreased steadily during the period under study. It was Rs. 698 per worker during 1879-84 but Rs. 648 per worker during 1884-89, Rs. 499 per worker during 1890-94, Rs. 358 per worker during 1900-04 and Rs.359 per worker during 1910-14. Thus, compared to 1884-85, the labour intensity was increased by 51.86 per cent in 1910-11. Chapter VI will seek to explain the rising trend of labour-intensity in Bengal's modern jute sector during the study period.

## II

Bengal's jute mills manufactured three broad categories of products, namely raw jute, gunny bags and cloth. Of them raw jute was certainly primitive. From the early days of Dundee mills, Bengal used to export this product to Great Britain, and the export was later diversified to many countries in the Continent, as also in North America, when the modern jute industry took its root in those countries. The technical activity in this process involved simply packaging, rather than

manufacturing<sup>1</sup>. Drawing supplies of jute fibres from agriculture, a number of jute presses, as we have seen, came up in and around Calcutta to hydraulically press and screw them in the form of bales. The second important item in the product-mix was the gunny bags which the Calcutta mills manufactured from their beginning. In view of the extensive market for bags that Dundee mills had created globally, Bengal mills got a ready market for it from their beginning. The production of cloth was, however, insignificant at the outset but it picked up later on. The product-mix of Bengal jute industry and its change in the latter part of our study period is shown in Table 5.3.

Table 5.3 Product-mix of Bengal jute industry during 1892-1914  
(Annual average)

Year	Raw jute (bales)	Bag (million pieces)	Hessian cloth (million yards)
1892-96	2,771,058	182.02	92.73
1897-1901	3,069,174	243.10	303.65
1902-06	3,475,629	281.48	570.03
1907-11	3,853,496	392.31	869.57
1912-14*	4,015,229	410.90	1034.34

Source: I.J.M.A, Statement VII., various years

N.B. \* The average for 1912-14 for three years.

A significant change is thus found to have taken place in the product-mix during 1892-1914. Though all product series increased during the period, different rates of growth prevailed therein so that their respective importances in the product-mix were changed. The table shows that the export of raw jute increased from 2.77 million bales per annum during 1892-6 to 3.48 million bales per annum during 1902-06, and further to 4.01 million bales per annum during 1912-14. In the corresponding periods, the increments were from 182.02 million pieces to

<sup>1</sup> Wallace, Romance of jute, p. 5

281.48 million pieces and further to 410.90 million pieces respectively for gunny bags, and from 92.73 million yards to 570.03 million yards, and further to 1.03 billion yards respectively for cloth. These series thus underwent the average annual growth rates of 2.03 per cent, 5.72 per cent and 46.16 per cent respectively. In the absolute terms, these growth performances appear more impressive. Compared to the period of 1892-96, the market of raw jute expanded by about two and a half times by the close of our study period, that of gunny bags by more than three times, and that of cloths by more than twelve times. Slower growth rate in the export of raw jute could indeed be explained by the rapid development of the jute industry in Bengal, which certainly increased the domestic absorption of raw jute, and accordingly left lesser amount as exportable surplus<sup>2</sup>. Between the finished products of bags and cloths, however, the market for the latter expanded faster<sup>3</sup>. Presumably this was due to the fact that the industry explored the bag market in the beginning, whereas its entry into the cloth market was a later development<sup>4</sup>. Bengal exported hessian cloths only by Rs. 3,914,806 in the early 1890s as against an export worth of Rs. 23,192,555 for gunny bags. The low initial value for this series of hessians might explain the high rate of its growth. After achieving a rate of 45.59 per cent during 1892/6-1897/1901 its annual growth decelerated to 17.55 per cent, 10.51 per cent and 4.73 per cent respectively in the following periods. Because of these asymmetric growth

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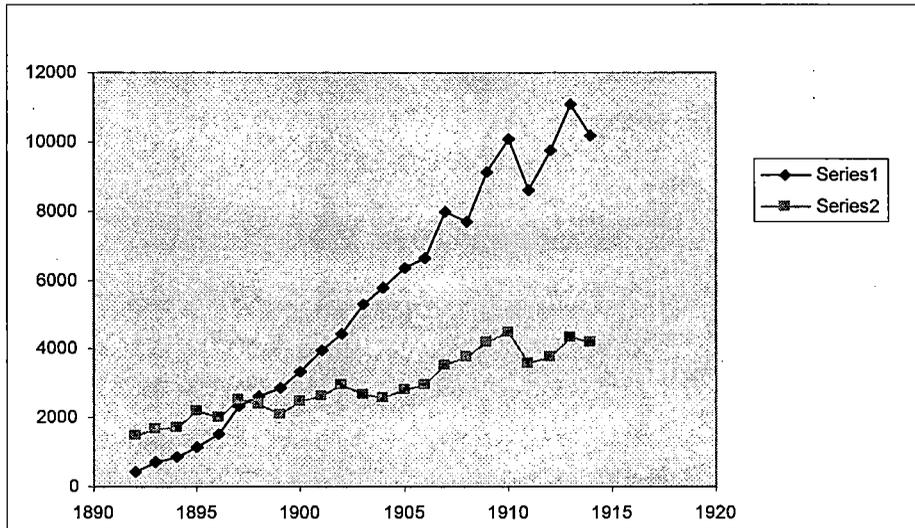
<sup>2</sup> The Govt. administrative report stated that the total exports of raw jute decreased by 16% in 1893-94, p.164 and by 33.6% in 1898-99, p.158

<sup>3</sup> The administrative report in 1900-01 also noticed the remarkable increase in the exports of cloth. It pointed out that volume of this trade having more than doubled in five years. P. 118

<sup>4</sup> Annual Administrative report (1875-76), p.203

rates in different series, hessian cloths gained much importance in the product-mix whereas gunny bags were relegated behind. Unequal growth performances of hessian cloth and gunny bags are demonstrated in Figure 5.1.

Figure 5.1 Export of hessian cloth and gunny bags from Bengal during 1892-1914



To get precise ideas about the relative growth rates of these exports we estimate the time trends of cloths and bags during 1892-1914. Table 5.4 reports the results.

Table 5.4: Estimated Year-Quantity Relationships and Their Relevant Statistics

No	Regression Equation	R <sup>2</sup>	F (sig. level)	DW
1	$Y^{\text{hessian}} = -960,000 + 507.273t$ (S.E=30779) (S.E=16.174) t=-31.183 t=31.363 (0.0001) (0.0001)	0.979	983.634 (.0001)	1.811
2	$Y^{\text{bag}} = -237497 + 126.338t$ (S.E=17971) (S.E=9.444) t=-13.215 t=13.378 (0.0001) (0.0001)	0.895	178.967 (.0001)	1.358

The trend co-efficient is highly significant for both the estimations, that is, 0.0001, and also, their slope coefficients are positive. Given that

the series for hessian has a mean value at 5340.405 lakhs and that for gunny bags at 2924.857 lakhs, the estimated slopes indicate an annual growth rate of 9.50 percent for cloths and 4.39 percent for bags, relative to their respective mean values. The former thus underwent twice a higher rate of growth than what the latter achieved.

There were remarkable changes in the market composition also. Table 5.5 reveals such changes between the domestic and foreign markets for gunny bags.

Table 5.5: Market destinations of various jute bags from Bengal, 1904-14  
(in percentage)

Year	Foreign port	Indian port	Local consumption	Grand total
1904	83.55	13.81	2.64	100
1905	86.40	11.85	1.75	100
1906	88.96	10.19	0.85	100
1907	88.32	10.93	0.75	100
1908	89.07	10.49	0.44	100
1909	89.93	9.22	0.85	100
1910	89.21	9.77	1.02	100
1911	88.58	9.84	1.58	100
1912	88.31	10.09	1.60	100
1913	90.59	8.54	0.87	100
1914	91.94	7.33	0.73	100

Source: Estimated from I.J.M.A, Statement XI, various years.

It is clear that the foreign outlets heavily dominated the market. Out of their total sale of about 852 million pieces in 1904 (vide Annexure 5.2) the foreign markets took as much as 83.55per cent while only 13.81per cent of it went to domestic markets. The rest 2.64 percent was consumed locally in Bengal<sup>5</sup>. Even this lion's share of foreign ports was further increased in the years to follow, marginalising both the local

<sup>5</sup> For the detail of the total market, see Report of the marketing of jute products, p. 5

market and other domestic markets in the country. The table shows that foreign markets share increased to 89.21 per cent in 1910 and further to 91.94 per cent in 1914 while the share of domestic markets (excluding that in Bengal) was reduced to 9.77 per cent and further to 7.33 per cent in corresponding years, and the share of local consumption to 1.02 per cent and 0.73 per cent respectively. The industry's gunny bag division had thus become almost exclusively export-oriented by the close of our study period.

Table 5.6: Distribution of hessian cloths between foreign and domestic market

Year	Foreign outlets	Domestic outlets	Total
1905	97.81	2.19	100
1906	97.52	2.48	100
1907	97.97	2.03	100
1908	98.00	2.00	100
1909	98.30	1.70	100
1910	96.96	3.04	100
1911	97.18	2.82	100
1912	98.49	1.51	100
1913	98.24	1.76	100
1914	97.40	2.60	100

Source: Estimated from I.J.M.A, statement VII, and statement XII, various years.

Still more export-orientation took place in the cloth division. The aggregate sale value of this product increased steadily from Rs. 62.98 million in 1905 to Rs. 83.43 million in 1911 (vide Annexure 5.5 ). It then jumped up to Rs. 130.52 million in 1912 and further to Rs. 155.83 million in 1913, showing moderate correction thereafter. Much of these rises were thanks to foreign buyers who absorbed more than 96 per cent of Bengal's hessian cloths during 1905-14 (vide Table 5.6). In certain years – such as 1909, 1912 and 1913 – their share crossed the bound of

98 per cent. In fact, the steep upswing in the series since 1912 was also due to higher foreign in-takes.

Since market destinations outside the country underwent rapid changes for both bags and cloths during 1890-1914, we divide the requisite series in two sub-periods, 1890-1904 and 1904-14, and present them in different tables. The respective series are reported in Tables 5.7 and 5.8 for gunny bags, and in Tables 5.10 and 5.11 for hessian cloths. From the former set of tables we gather that the sale of gunny bags abroad rose from 106.35 million pieces in 1890-1 to 197.36 million pieces in 1903-04 and further to 1.25 billion pieces in 1914. The underlying rate of growth is worked out at 45.09 per cent per annum for about a quarter of a century. This was certainly very impressive. Much of these progresses took place at the debut of the twentieth century. As against a meagre rate of 5.66 per cent per annum in the closing decade of the previous century, the annual rate of growth was 46.77 per cent per annum during 1900-14.

The structure of bag market abroad, as it appears in Table 5.7, was dominated by Australia, the United Kingdom, Strait Settlements and the United States of America in order. While they jointly accounted for about 60 per cent on average during 1890-1904, their individual shares were 18.39 per cent, 15.95 per cent, 12.57 per cent, and 12.55 per cent, respectively. Among other buyers, we should speak of China, South America, Egypt and Germany cutting market shares at 7.21 per cent, 5.68 per cent, 4.21 per cent, and 3.20 per cent, respectively. Also, Cape colonies and Turkey shared this market by about 2.50 per cent during 1890-1904. On the whole, as many as ten countries used to regularly purchase gunny bags from Bengal during this period.

Table 5.7: Export of bags from Bengal to foreign countries during 1890-1905

(in number)

year	United Kingdom	Egypt	United States	China	Strait Settlement	Australia	Germany	Cape Colony	South America	Turkey	Other countries	Total
1890-91	19,540,052	2,709,500	13,442,400	7,288,850	12,384,968	22,889,117	972,340	1,916,850	5,111,600	1,735,650	18,358,042	106,349,369
1891-92	14,461,500	4,317,775	19,513,106	10,103,185	13,871,700	18,772,515	1,327,100	3,529,890	6,671,700	22,549,750	22,768,444	137,886,665
1892-93	21,727,780	4,958,020	19,213,800	12,323,050	15,795,864	23,826,306	1,919,250	4,226,075	8,228,950	1,939,700	23,769,575	137,928,370
1893-94	21,373,044	6,646,550	24,538,500	9,375,750	19,929,540	20,097,685	1,546,506	4,763,150	9,638,775	2,921,725	27,159,506	147,990,731
1894-95	27,950,790	4,495,300	25,881,800	6,481,400	15,611,940	27,958,900	2,366,400	3,770,950	12,053,650	2,260,850	31,987,040	160,819,020
1895-96	23,881,650	5,336,750	30,821,460	13,801,725	21,884,072	24,377,080	4,786,050	7,227,513	14,634,200	366,630	14,544,567	161,661,697
1896-97	27,885,157	7,658,700	22,910,400	8,987,650	20,229,750	21,852,174	8,467,650	5,953,900	15,050,850	3,856,985	20,451,025	163,304,241
1897-98	39,370,445	7,281,550	39,004,800	1,0062,600	16,008,450	30,336,450	1,2838,550	4,852,450	11,689,750	3,323,550	21,214,280	195,982,875
1898-99	38,448,995	8,874,750	23,793,050	4,216,000	24,231,100	31,724,685	6,852,175	3,136,500	1,5273,218	3,015,454	19,712,443	179,278,370
1899-1900	32,101,030	5,697,750	15,075,400	9,279,500	21,336,786	35,795,315	2,786,538	5,074,450	1,8675,250	1,804,350	18,572,012	166,198,381
1900-01	32,666,710	7,740,750	13,069,950	1,601,400	31,380,100	42,789,827	5,979,450	3,930,350	3,950,300	1,459,200	17,793,587	132,961,624
1901-02	28,677,216	8,102,850	25,322,600	24,061,000	23,730,770	48,447,580	9,806,200	3,931,500	5,335,000	2,807,400	18,573,587	198,795,703
1902-03	34,759,200	9,096,050	13,580,500	26,287,400	33,208,650	29,739,355	1,0315,850	5,702,600	4,447,700	3,937,650	24,621,748	195,696,703
1903-04	30,108,860	9,925,236	7,816,300	18,343,600	17,671,550	38,903,864	4,245,500	2,719,390	4,953,200	2,842,733	59,828,015	197,358,248
1904-05	24,454,702	9,729,850	11,339,300	13,106,600	18,599,550	29,806,450	3,600,600	3,796,600	2,472,800	1,874,380	30,483,753	149,264,585
Average	25,867,142 (15.95%)	6,838,092 (4.21%)	20,354,891 (12.55%)	11,687,981 (7.21%)	20,391,653 (12.57%)	29,821,154 (18.39%)	5,187,343 (3.20%)	4,302,144 (2.65%)	9,212,462 (5.68%)	3,779,733 (2.33%)	24,239,562 (14.95%)	162,098,438

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, 1894-95, 1899-1900 and 1904-05, Vol-1

N.B. \*The figure within the braked is indicated the relative share.

Table 5.8: Exports of power loom bags from Bengal to different foreign countries during 1904-1914 (in number)

Year	United States	U.K	Australia	Strait Settlement	Egypt & Levant	China	West Indices	New Zealand	Cape & Mauritius	Japan	Grand total
1904	558,319,800 (78.46%)	39,735,600 (5.58%)	21,711,900 (3.05%)	24,252,200 (3.40%)	16,013,400 (2.25%)	17,858,800 (2.50%)		7,399,600 (1.03%)	5,684,100 (0.79%)	1,314,400 (0.18%)	711,553,700
1905	578,302,900 (76.71%)	40,859,100 (5.42%)	38,650,400 (5.12%)	27,805,700 (3.68%)	19,177,700 (2.54%)	19,244,200 (2.55%)	11,760,000 (1.56%)	5,645,300 (0.74%)	11,394,500 (1.51%)	997,500 (0.13%)	753,837,300
1906	623,882,600 (73.55%)	81,753,600 (9.63%)	42,856,600 (5.05%)	30,332,600 (3.57%)	22,502,800 (2.65%)	13,080,900 (1.54%)	13,868,200 (1.63%)	6,152,500 (0.72%)	12,610,200 (1.48%)	1,117,700 (0.13%)	848,157,700
1907	742,460,900 (74.99%)	87,944,500 (8.88%)	46,618,500 (4.70%)	33,617,400 (3.39%)	23,000,600 (2.32%)	23,251,200 (2.34%)	12,226,200 (1.23%)	6,615,100 (0.66%)	13,609,100 (1.37%)	657,500 (0.06%)	990,001,000
1908	715,903,400 (73.69%)	78,954,400 (8.12%)	51,274,400 (5.27%)	33,719,200 (3.47%)	27,796,500 (2.86%)	25,364,100 (2.61%)	12,061,700 (1.24%)	8,453,800 (0.87%)	16,461,000 (1.69%)	1,482,200 (0.15%)	971,470,700
1909	837,211,700 (73.73%)	74,819,200 (6.58%)	68,014,400 (5.98%)	29,870,300 (2.63%)	26,641,600 (2.34%)	42,807,600 (3.77%)	17,226,600 (1.51%)	12,463,100 (1.09%)	20,650,000 (1.81%)	5,774,100 (0.50%)	1,135,478,600
1910	906,796,900 (73.50%)	89,074,900 (7.22%)	88,291,800 (7.15%)	38,658,500 (3.13%)	27,601,500 (2.23%)	30,200,800 (2.44%)	15,767,000 (1.27%)	10,727,000 (0.86%)	23,519,700 (1.90%)	2,969,300 (0.24%)	1,233,607,400
1911	767,392,000 (74.03%)	88,194,000 (8.50%)	58,058,200 (5.60%)	26,310,600 (2.53%)	27,637,900 (2.66%)	28,235,200 (2.72%)	10,799,500 (1.04%)	9,215,800 (0.88%)	19,430,000 (1.87%)	1,276,100 (0.12%)	1,036,543,300
1912	888,138,100 (76.88%)	77,753,200 (6.73%)	55,700,800 (4.82%)	32,889,000 (2.84%)	24,525,600 (2.12%)	32,366,900 (2.80%)	12,462,900 (1.07%)	9,964,300 (0.86%)	20,730,200 (1.79%)	606,000 (0.05%)	1,155,137,000
1913	996,133,400 (75.24%)	86,545,500 (6.53%)	82,583,000 (6.23%)	47,016,400 (3.55%)	25,883,800 (1.95%)	37,173,300 (2.80%)	17,095,500 (1.29%)	9,855,400 (0.74%)	20,749,400 (1.56%)	796,200 (0.06%)	1,323,831,900
1914	922,762,700 (73.64%)	89,611,300 (7.15%)	75,738,400 (6.04%)	41,404,900 (3.30%)	23,621,800 (1.88%)	47,687,200 (3.80%)	14,042,400 (1.12%)	11,348,400 (0.90%)	22,831,500 (1.82%)	3,999,400 (0.31%)	1,253,048,000
Average	776,118,582 (61.93%)	83,850,067 (6.69%)	57,227,127 (4.56%)	33,261,527 (2.65%)	24,036,655 (1.91%)	28,842,745 (2.30%)	13,731,000 (1.09%)	8,894,573 (0.70%)	17,060,882 (1.36%)	1,908,218 (0.15%)	1,253,048,000

Source: I.J.M.A, Statement XI, various years. N.B. \*The figure within the braked is indicated the relative share of the total quantity in each year

The following period, however, witnessed market consolidations in two respects. Firstly, there were concentrations of sale in a few markets. While, in the previous period, four major markets accounted for 60 per cent of Bengal's foreign exports of bags, such markets now shared more than 90 per cent during 1904-14. Secondly, market importance had also been significantly altered in the later period. While Australia had previously been at the top of importance, it was now relegated to the third position with a share of only 5.51 per cent, and the US market became the primary destination that absorbed as much as 75 per cent of Bengal's bag consignments abroad. The UK, however, retained its second position and Strait Settlements were slightly downgraded to the fourth position. On average, their market shares are worked out at 6.97 per cent and 3.80 per cent respectively.

Table 5.8 also enables us to comprehend the growth dynamics in individual markets. While, in the absolute term, all the markets grew up during 1904-14, the United States of America took a definite lead<sup>6</sup>. The US in-take is seen to have rose from about 558 million in 1904 to 837 million in 1909 and further to 923 million in 1914, signifying a 6.58 per cent annual rate of growth over the decade. Almost similar rate of annual growth, notably 6.92 per cent, prevailed in the market of Straight Settlements also, where the volume of sale went up from about 24 million in 1904 to 30 million in 1909 and further to 41 million in 1914. The British and Australian markets, however, grew at faster

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<sup>6</sup> The quantities shipped being the highest on record in 1901-2 as referred in the administrative report, 1901-02, p.246

rates in this period<sup>7</sup>. The annual rate of growth was 12.55 per cent in the former (from about 40 million in 1904 to 75 million in 1909 and further to 90 million in 1914) and 24.85 per cent in the latter (from about 22 million in 1904 to 68 million in 1909 and further to 76 million in 1914). Because of these asymmetric growth performances, the market shares of the USA and Straight Settlements deteriorated to some extent while the UK and Australia excelled. For the former two countries, the market sharing percentage deteriorated from 73.86 per cent to 73.64 per cent and from 3.40 per cent to 3.30 per cent, respectively. In contrast, the share of the UK increased from 5.58 per cent to 7.15 per cent and that of Australia from 3.05 per cent to 6.04 per cent in the same duration. A regular sale also took place in Egypt and Levant, China, Japan, West Indies, New Zealand, the Cape of Good Hope and Mauritius, and their absolute in-takes surged contemporaneously. But these were overshadowed by better market performances in totality, and their individual market shares remained virtually stagnant. It was above two per cent for China, and Egypt and Levant taken together, above one per cent for West Indies and less than one per cent for other countries.

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<sup>7</sup> The striking features of the trade in jute manufacturing was the large expansion in exports to South America as stated in the administrative report, 1903-04, p. 80

Table 5.9: Exports of Bengal gunny bags to different Indian ports, 1904-1914  
(in '000 pieces)

Year	Bombay	Madras	Karachi	Ceylon	Other Indian ports	Burma & other ports	Local consumption	By rail	Grand Total
1904	28,018 (23.82%)	3,746 (3.18%)	-----	-----	5,488 (4.66%)	32,301 (27.46%)	22,480	25,575	117,608
1905	21,424 (20.72%)	1,604 (1.55%)	4,733 (4.57%)	1,208 (1.16%)	4,954 (4.79%)	34,735 (33.60%)	15,247	19,450	103,356
1906	22,889 (23.54%)	7,859 (8.08%)	6,452 (6.63%)	1,726 (1.77%)	103 (0.10%)	31,419 (32.32%)	8,110	18,650	97,209
1907	30,228 (24.68%)	8,918 (7.28%)	11,725 (9.57%)	2,157 (1.76%)	125 (0.10%)	39,700 (32.41%)	8,368	20,650	122,470
1908	33,174 (29.00%)	13,632 (11.91%)	7,050 (6.16%)	3,415 (2.98%)	311 (0.27%)	38,367 (33.54%)	4,823	13,600	114,372
1909	32,841 (28.20%)	9,584 (8.22%)	8,096 (6.95%)	2,598 (2.23%)	318 (0.27%)	35,671 (30.63%)	10,698	16,650	116,456
1910	44,239 (32.75%)	8,102 (5.99%)	10,565 (7.82%)	2,437 (1.80%)	136 (0.10%)	39,407 (29.17%)	14,039	16,150	135,076
1911	25,336 (21.99%)	7,365 (6.39%)	7,751 (6.73%)	2,619 (2.27%)	234 (0.20%)	33,435 (29.03%)	18,452	19,975	115,167
1912	28,382 (21.65%)	9,400 (7.17%)	7,155 (5.45%)	2,323 (1.77%)	995 (0.75%)	37,692 (28.75%)	20,936	24,200	131,084
1913	28,596 (22.92%)	10,573 (8.76%)	6,052 (4.85%)	2,981 (2.38%)	250 (0.20%)	44,747 (35.86%)	12,761	17,900	124,761
1914	16,733 (16.74%)	5,524 (5.52%)	6,095 (6.09%)	2,665 (2.66%)	64 (0.06%)	40,714 (40.74%)	9,965 (9.97%)	18,175 (18.19%)	99,936

Source: I.J.M.A, Statement XI. various years.

N.B: \*the figure within the bracket is indicated the relative shares of the total quantity in each year, (---) indicates an insignificant amount.

Domestic markets for gunny bags were constituted largely of Bombay, Bengal and North Indian states<sup>8</sup> with lesser contributions of Madras, Karachi and Ceylon (Vide Table 5.9). For the period 1904-14 as a whole, Bombay shared this market by about 24.67 per cent, Bengal by 11.41 per cent and

<sup>8</sup> Since north Indian states were supplied on railways, transshipments on rails are taken to represent in-takes in north Indian states.

North India by 16.51 per cent. The market share was, however, only 6.75 per cent for Madras, 5.89 per cent for Karachi and 1.88 per cent for Ceylon.

Bengal's export of hessian cloths had also a chequered progress since the early 1890s (vide Tables 5.10 and 5.11). From 29.67 million yards in 1890-1, their exports rose to 306.26 million yards in 1899-1900, 409.11 million yards in 1904-05, and further to 1.06 billion yards in 1913-14. Most interestingly, in this long time-series of quarter of a century, there is not even any significant downward cycle. The rate of growth was, however, spectacularly high for the period 1890/1-1904/05, notably 85.25 per cent per annum. Possibly this was due to a low base value and also for the vast unexplored market where Bengal hessian cloths just began to enter by the 1890s. The rate of market penetration, however, subsided later on, and a 15.84 per cent annual growth rate prevailed for the period 1904/05-1914/15.

We have pointed out elsewhere that Bengal's exports of cloth stood for 1875-76 at Rs. 1.11 million for the USA and at Rs. 0.22 million for the UK. These figures grew respectively to Rs. 10.26 million and Rs. 2.43 million in 1896-97 (vide Annexure 5.4) so that an annual growth rate of 39.25 per cent prevailed in the US market and 47.83 per cent in the British market for more than two decades. Such a high rate of growth in the long-run consolidated the position of Bengal cloths in those markets. Table 5.10, however, shows that the

US market share rose above 75 per cent for the period 1890/1-1904/05<sup>9</sup>. The British market, the second in importance, had a share of about 9.60 per cent during 1890-1905. It should be noted that the latter market expanded rapidly till 1900-01 but a declining trend came to prevail thereafter. The table shows that the export level rose there from 2.27 million yards in 1890-1 to 75.82 million yards in 1900-01 but it was depressed to 20.11 million yards in 1904-05. South America also emerged as an important market place for Bengal jute cloth drawing about 9.54 per cent of the export during 1890-1905. In the Far East, China remained a steady market for this product though high volatility prevailed in its market share. It was around or above five per cent in most of the years. In the Continent, only Germany was the regular buyer but its market share hovered mostly below three per cent.

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<sup>9</sup> The U.S market took larger quantity of cloth, because of the lower tariff rate on cloth as compared with that on bags, Administrative report, 1910-11, p. 74

Table 5.10 Export of jute cloth from Bengal to foreign countries, 1890-1905 (in yards)

Year	United Kingdom	United States	China	South America	Germany	Other Countries	Total
1890-91	2,266,750	22,058,400	-----	-----	-----	5,346,566	29,671,716
1891-92	303,300	32,317,429	-----	-----	-----	4,551,831	37,172,560
1892-93	2,883,600	32,754,180	-----	-----	-----	4,307,067	39,944,847
1893-94	10,684,950	45,704,200	-----	-----	-----	4,192,917	60,582,067
1894-95	15,693,708	80,247,694	-----	-----	-----	7,052,020	102,993,422
1895-96	16,956,900	81,783,876	4,025,900	3,422,000	4,521,500	3,292,062	114,002,238
1896-97	23,826,381	111,603,731	3,779,100	26,574,900	555,800	2,945,897	169,285,809
1897-98	18,676,281	179,118,500	4,804,500	34,046,000	677,700	5,420,720	242,743,701
1898-99	20,414,900	195,657,400	3,985,000	48,484,800	3,590,900	8,113,200	280,246,200
1899-1900	29,242,100	194,539,749	14,122,886	56,801,300	2,111,779	9,445,990	306,263,804
1900-01	75817137	194,017,535	20,686,325	-----	30,374,300	17,880,350	338,775,647
1901-02	52145200	273,308,600	21,482,892	10,000	12,616,000	15,058,066	374,620,758
1902-03	16368400	353,873,300	22,324,600	10,000	736,000	17,711,400	411,023,700
1903-04	14117505	365,481,700	12,585,825	5,000	624,000	17,508,478	410,322,508
1904-05	20112800	352,048,890	14,021,625	-----	2,874,000	20,056,252	409,113,567
<b>Average</b>	<b>21,300,661</b> <b>(9.60%)</b>	<b>167,634,346</b> <b>(75.58%)</b>	<b>12,181,865</b> <b>(5.49%)</b>	<b>21,169,250</b> <b>(9.54%)</b>	<b>5,868,197</b> <b>(2.64%)</b>	<b>9,525,521</b> <b>(4.29%)</b>	<b>221,784,170</b> <b>(100%)</b>

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, Vol-1, 1894-95, 1899-1900 and 1904-05,

N.B: (---) indicates an insignificant amount.\* The figure within the bracket is indicated the relative average share of the average total quantity during these period.

Table 5.11: Export of jute cloth from Bengal to foreign countries, 1905-1915  
(in yards)

Year	United kingdom	United States	Australia	Germany	Other countries	Total
1905-06	3,909,100	419,531,400	14,117,400	3,917,000	441,474,900	658,188,949
1906-07	62,044,580	479,387,950	13,324,160	4,791,000	559,547,630	695,444,582
1907-08	35,986,300	514,167,054	17,049,970	8,478,500	575,681,824	789,545,292
1908-09	23,25,700	499,802,344	18,204,678	4,450,000	524,782,722	769,569,849
1909-10	32,788,618	657,432,703	18,127,741	2,759,000	711,108,062	939,531,920
1910-11	41,647,472	664,273,202	24,746,353	5,221,000	735,888,027	954,318,177
1911-12	45,618,350	595,875,500	21,124,780	9,097,900	671,716,530	870,963,770
1912-13	40,847,225	663,293,316	22,881,749	2,775,400	729,797,690	1,021,475,989
1913-14	50,654,742	735,230,187	27,656,832	7,235,340	820,777,101	1,060,663,637
1914-15	67,715,454	705,999,139	29,797,250	2,448,000	805,959,843	1,056,969,335
Average	38,353,754 (4.35%)	593,499,279 (67.31%)	20,703,091 (2.34%)	5,117,314 (0.58%)	657,673,433 (74.59%)	881,667,150 (100%)

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, Vol-1, 1909-10 and 1910-11 to 1914-15  
N.B.\*The figure within the bracket is indicated the relative share.

Two major changes are found to have taken place in later years. First, although the US market retained its distinctive position, followed by the UK, both of these markets lost their respective shares<sup>10</sup>. The reduction in the market share was from 75.58 per cent during 1890-1905 to 67.31 per cent during 1905-14 for the former, and from 9.60 per cent to 4.35 per cent in the same duration for the latter. Among other countries, Germany reduced its market share from 2.64 per cent to 0.58 per cent in those periods while the markets in China and South America were reduced to insignificance. Second, Australia emerged as an important buyer for this product, purchasing about 2.34 per cent. Although this country had a regular presence in Bengal's bag market for long, it was conspicuously absent in its cloth market.

<sup>10</sup> The advance was especially marked in case of U.S, Hong Kong, and Australia for the shipment of bags among all the foreign markets, The administrative report, 1882-83, p.294

It thus appears that the US market was the main outlet of Bengal jute mills for both gunny bags and cloths. Of their total export consignments, this market took about 75 per cent of the former and 67 per cent of the latter during 1904-15. Since these were the basic packaging materials for the agricultural and industrial goods alike, the development status of the US economy in the contemporary world explains why it emerged as the single-most important buyer for those products of Bengal.

It should be noted that the domestic markets like Bombay, Madras and Burma were not at all significant for Bengal's jute cloths. In 1884-5, Bengal mills supplied those markets only by Rs. 440,000, Rs. 43,000 and Rs. 11,000, respectively. Although available statistics show that these markets were doubled by 1900-01 in terms of quantity (especially Bombay and Madras; for Burma, there had been a 50 per cent rise), they remained insignificant in terms of values. But the home market of Bengal and its northern states (contemporaneously known as the up-country markets), which were supplied through railways, were quite extensive for both bags and cloths. Table 5.12 reports the extents of these markets during 1905-14. It appears in the table that in 1905 these markets absorbed bags worth of Rs. 16.51 million and cloths worth of Rs. 1.47 million, aggregating to about Rs. 18 million. This was quite significant in view of the fact that in 1905 Bengal exported these products by about Rs.46.64 million and Rs. 35.97 million (vide Annexure 5.3 and 5.4), i.e. Rs. 82.61 million in aggregate. Thus, the home markets in Bengal and its northern states were almost a quarter of the foreign markets for jute products.

What was more, a rapid growth prevailed in these outlets through 1912 whereby the sale proceeds became Rs. 30.55 million for bags and 2.09 million for cloths. These market dynamics signify that economic activities in and around Bengal must have been buoyant in the contemporary period.

Table 5.12: Sales of bags and cloths in Bengal and up-country markets, 1905-14

Year	Gunny bags		jute cloths	
	Number	Value (Rs.)	Number	Value (Rs.)
1905	68,701,777	16,513,532	13,957,803	1,466,158
1906	51,666,350	14,334,992	16,477,588	2,182,892
1907	58,920,830	17,587,297	16,229,094	2,189,200
1908	43,657,566	10,557,694	15,487,994	1,682,908
1909	56,790,696	12,289,248	15,596,967	1,519,219
1910	78,945,448	17,117,417	30,717,087	2,930,697
1911	90,390,164	23,567,417	24,273,697	2,520,222
1912	99,491,551	30,545,945	14,713,907	2,085,545
1913	68,732,494	21,707,077	19,638,310	3,008,432
1914	67,105,896	21,392,166	26,566,740	3,416,188

Source: Annual report of I.J.M.A , Statement XII, various years.

In view of such a rapid penetration of Calcutta mills in the local markets it is only expected that Dundee's jute mills must have lost their markets in Bengal. We report in Table 5.13 the import of bags and cloths from the UK to Bengal during 1880/1-1899/1900.

Table 5.13: Quantity and value of imports of bag and cloth from U.K to Bengal.

Year	Bag		Cloth		Year	Bag		Cloth	
	Piece	Value (Rs.)	Yards	Value (Rs.)		Piece	Value (Rs.)	Yards	Value (Rs.)
1880-1	1,000	100	3,120	411	1893-94	1,762	603	43,510	12,874
1881-2	300	501	531	124	1894-95	209	35	6,418	1,008
1882-3	500	100	21,896	5,180	1895-96	300	60	47,143	8,701
1883-4	1,200	150	48,775	3,070	1896-97	421	124	36,298	7,896
1884-5	1,000	120	3,210	10,232	1897-98	16,762	3,259	151,966	25,802
1890-1	450	91	75,209	14,832	1898-99	14,700	2,396	88,942	14,351
1891-2	-----	-----	1,210	226	1899-1900	300	280	44,031	7,105
1892-3	400	137	31,085	9,506					

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, 1884-85, 1894-95 and 1899-1900.

N.B: (---) indicates an insignificant amount.

It thus appears that Bengal received only trifling amounts of jute bags and cloths from Dundee at the fag-ends of the nineteenth century. The aggregate import of these products was worth less than Rs. 8,000 in 1899-1900.

### III

As an industry belonging to the organised sector, Bengal jute industry gave rise to various cartels in the form of association at different stages of the business. One of its most important associations that greatly influenced the course of the industry's development for a couple of decades to come was the Indian Jute Mills Association (IJMA). It came up around the mid-1880s when the industry had been passing through its toughest phase of development. We have already seen that after a humble beginning through 1870, the industry grew apace with as many as 18 mills coming up during 1871-5 and four more mills in the next decade. As a result, the loom capacity of the industry became more than 5,300 by 1885. Operating at a triangular competition in the contemporary packaging market, it was very difficult for those nascent jute mills to find out profitable vents at full capacity utilisations. Such a market environment expectedly gave rise to keen competition amongst them, often leading to the price war and a serious dent on profitability. The emerging market was surely oligopoly in character, and as a natural tendency in such a market, frequent attempts were made to form informal cartel to abate the ensuing competition. But since deviation from any restrictive practices under such agreements is as

a rule always profitable to an individual firm, violations of agreements at individual ends were routine affairs, which frustrated those thrusts to re-establish fierce competition again. In such circumstances, the jute mill-owners and managing-agents of Calcutta met informally in March 1884 at the behest of Maitland Herriot of the Barnagore Company, to discuss the possibility of a formal association in the industry. This was followed by a formal meeting on 23<sup>rd</sup> April 1884 at the office of the Bengal Chamber of Commerce, where the participants decided to draft the articles of association for presentation to the general body of jute mill-owners and agents. Finally, the Indian Jute Manufacturers Association was duly formed on 7<sup>th</sup> July 1884 with 19 founder-members who constituted more than 80 per cent of the contemporary industry. The first general meeting of the Association was held on 10<sup>th</sup> November, 1884. It should be noted that later on (25<sup>th</sup> July, 1902) the name of the Association was changed to Indian Jute Mills Association (IJMA).

The objectives of the Association, as laid down in its original articles of association, were as follows:

“to encourage and secure united feeling and action, to collect and classify facts and statistics, to open out new markets, to fix points of custom, to work on one form of contract, to obtain the removal of grievances, to arbitrate on matters of dispute, to communicate with public authorities or kindred associations, generally to promote and protect the interest of those engaged in the industry in all matters

relating to it, specially in matters touching the interests of the members of the association and to do all such other lawful deed as are incidental or conducive to the attainment of the above objectives or any of them.”<sup>11</sup>

The underlying spirit of these objectives was certainly to take various decisions in unison so that the industry could function smoothly. While it sought to resolve various disputes and grievances that individual mills confronted - such as labour disputes or grievances against government policies - the industry’s development aspects were well on the agenda. In the latter respect, the collection of trade information, its dissemination among the member-mills, as also the thrusts for new markets, provided such boosts as the industry called for at that critical juncture of its development. Another important thrust area where the Association was interested from its inception was to regulate the industry’s production level by various agreements such as restrictions on working hours, fixing up of the output quota for individual mills and so on that remunerative prices could be obtained. Although implicit in the original set of objectives, these were duly accommodated in later amendments.

The amended objectives of the Association, as adopted later on, were as follows:

- I. (a) To protect, forward and defend the trade of members of the Association.

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<sup>11</sup> Cited in Indian central jute committee, Report of marketing of jute ,pp. 31-32

- (b) To impose restrictive conditions on the conduct of the trade.
  - (c) To adjust the production of the mills in the membership of the association to the demand in the world market.
  - (d) To arbitrate on matters in dispute.
- II. (a) To protect the members of the Association against competition.
- (b) To secure the enactment of legislation to the trade.
  - (c) To secure the repeal of any legislation or prevent the passing of legislation which is damaging or may in any way damage the trade.
- III. To secure by collective bargaining, or otherwise, advantageous terms of transport.
- IV. (a) To collect, classify and circulate statistics.
- (b) To encourage and finance technical developments in plant and machinery necessary for the manufacture of jute products.
  - (c) To encourage and finance the scientific exploration of new uses to which jute could be applied and the discovery of by-products.
  - (d) To open out new markets.
  - (e) To fix points of custom.
  - (f) To adopt common forms of contract.

- V. (a) The establishment of a fund or funds.
- (b) The giving of legal assistance in connection with all or any of the above objects within the limits allowed by law.
- (c) The assistance of, or amalgamation with, other associations or societies or federation of associations or societies, having for their objects or one of their objects the promotion of the interests of the jute trade orchestra
- VI. To do all such other lawful things as are incidental or conducive to the attainment of the above objects or any one of them.

Well-orchestral objectives were thus set on motion from these objectives. The Association's primary thrust-areas, as appeared, were i) to economise the cost of production by reducing, for example, transport cost and labour cost (often, it also bargained in the raw jute market on behalf of the mills), as also by technological up-gradations, ii) to ensure remunerative prices by way of regulating supply in the market, opening up of new markets, and, of course, by dissemination of information, and iii) to act as a pressure group for conducive government policies.

Among its various activities, however, the more important one seems to be the restrictive production policies that the Association promulgated time to time among the member-mills whenever the industry suffered from a supply glut in the market. Initially, the Association had sought to fix the product prices so that the profitability could not slide below the remunerative level. 'But

price fixation was soon abandoned, and the Association thereafter concentrated on a working time agreement for the regulation of output.<sup>12</sup> One such policy was the voluntary agreement for the curtailment of working hours that was adopted for the first time on 15<sup>th</sup> February, 1886, under the signature of all member-mills excepting one at Hoogly and another at Serajgunj. The agreement was initially supposed to be effective for six months but it was renewed at intervals for the following five years (up to 15<sup>th</sup> February, 1891) without any break. Under this agreement the working period varied time to time between four or five days a week, or nine days a fortnight. In addition to this agreement, the Association promulgated for a short period in 1890 that every mill should shut down 10 per cent of their respective loom capacities for sacking, and also imposed a ban on the expansion of spinning capacity (excepting the cases where the work was incomplete). In another agreement on 1<sup>st</sup> April, 1899 the Association stipulated to keep idle 25 per cent of the capacities of their machinery at all member-mills. Though the agreement was meant for six months, it continued only for two months.

Similar restrictions were introduced during 1900-14 also. In 1906, for example, the working hours were confined to the sunrise-to-sunset for the period 1<sup>st</sup> January- 30<sup>th</sup> June. In respect of working days also, there were restrictive practices. The working days were reduced to five days for 15<sup>th</sup> March, 1908 - 30<sup>th</sup> September 1909, four days a week for May-August, 1910 and again five days per week for 1<sup>st</sup> September 1910 to 30<sup>th</sup> June 1912. These

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<sup>12</sup> Tyson, Bengal Chamber of Commerce, p.67

restrictive policies of the Association helped the industry 'to maintain equilibrium between supply and world demand for jute goods.'<sup>13</sup>

Two more associations, viz. the Calcutta Jute Fabric Shippers Association and the Jute Fabric Brokers Association, came up during our study period to cater to the needs of the contemporary business environment in Bengal. The former was established at the fag-end of the nineteenth century when the rapidity of market expansion strained the supply-chain of Bengal jute products, and put their reputations at stake. The overseas consumers then frequently complained about the irregularity of weights and the inferiorities of product quality, including excessive moisture content that made finished goods unfit for use. Buyers of gunny fabrics for shipment often represented individually to the mills to redress those problems but at vain. Also, the attempts of the overseas consumers to ban the products of certain mills failed to yield any redressal as it was virtually a seller's market undergoing excess demand. In such circumstances, about seventy per cent firms representing gunny shipping interests met on 26<sup>th</sup> April 1898 at the office of the Bengal Chamber of Commerce to initiate concerted actions against the irregular practices of jute mills. It ended up with the establishment of The Committee of Gunny Bag Buyers comprising of six members with G.C. Scaramanga of Ralli Brothers as the chairman. Through a meeting on 2<sup>nd</sup> May 1898 the Committee represented to the Indian Jute Manufacturers Association about the poor quality of exported goods causing the loss of their reputation. They also

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<sup>13</sup> *ibid*, p.68

requested to settle the demurrage claims of consumers abroad. When remained unheard, they decided at a meeting on 4<sup>th</sup> January in the following year to form the Jute Fabric Shippers Association, which was duly constituted on 16<sup>th</sup> January<sup>14</sup>. Initially 16 firms joined the Association but within a year the membership strength increased to 21.

According to the original articles of association, the objectives of the Association were: “to encourage and secure united feeling and action amongst shippers, to collect and classify facts and statistics, to fix points of custom, to adopt uniform forms of contract, to obtain the removal of grievances, to arbitrate on matters in dispute other than those provided for in the rules of the Chamber of Commerce, to communicate with public bodies and authorities, or kindred Associations, and generally to promote and protect the interests of those engaged in the jute fabrics export trade of the Port of Calcutta, and especially in matters touching the interests and firms directly connected with the export of jute fabrics from Calcutta.”<sup>15</sup> Thus, the main objective of the Association was to settle the scores with jute mills regarding their irregularities in packaging, product quality and delivery schedule. Thanks to the continuous endeavour of this Association there were significant improvements in the industry in respect of packaging, delivery system as well as the settlement of claims for inferior quality.

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<sup>14</sup> Indian Central Jute Committee, Report of marketing of jute, p. 35

<sup>15</sup> *ibid*

The Jute Fabric Brokers Association (JFBA) was, however, set up in 1893 'to guard the common interests of its members and also in their relation to buyers and sellers and otherwise'<sup>16</sup>. The background for this setting up of the association is thus: The jute brokerage service had been thriving in Calcutta since 1875 in the wake of the steady growth of mills in and around the city, and by 1890 there were as many as 17 firms in this service sector, all belonging to European enterprises. These intermediaries had great contributions to the smooth functioning of the industry since they reduced, on the one hand, the mills' task to find out the buyers, and helped, on the other, the buyers to source requisite products. But the relation between the brokers and the manufacturers began to deteriorate since 1890 when IJMA entered into an agreement for the member-mills to fix up minimum selling rates for fabrics at the domestic market. When certain mills sought to evade the agreement in connivance with the brokers, the member-mills of IJMA reduced the rate of brokerage in protest from one per cent of the value of sales to one-half per cent, and this served as the immediate cause for the establishment of the Jute Fabric Brokers Association on 23<sup>rd</sup> August 1893.

Initially the Association had 35 members belonging to 17 firms but it steadily rose to 91 members belonging to 28 firms in 1908. Although the Association was established to settle the scores with IJMA, there emerged in course of time a close relationship between these two associations. IJMA approved certain rules and regulations of JFBA and also agreed not to deal

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<sup>16</sup> Ibid, pp. 38-39

with any European broker who was not a member thereof. In turn, JFBA considered a broking firm for membership only when it was proposed by two members of IJMA. These two associations thus used to go hand in hand in view of the mutual interests of their respective member-firms.

#### IV

We thus find that Bengal's modern jute industry witnessed a very high rate of growth during 1892-1914. During the period, the number of mills increased from 27 to 67, the number of looms from 1,100 to 37,541, the number of spindles from 144,625 to 789,236, and the average daily employment from 56,240 to 236,294. The industry's growth was, however, reflected in all its product lines raw jute, gunny bag and cloth. During 1892-1914 the annual growth rate of these products have been worked out at 2.03 percent, 5.72 percent, 46.16 percent respectively. The lowest growth of raw jute export has been explained by its greater domestic absorption where as the highest growth of cloth export has been accounted for by the product's low base figures.

Our study has shown that the industry became increasingly export oriented during 1893-1914. In 1914, its export outlets accounted for 92.61 percent whereas India's domestic ports absorbed only 7.38 percent and the local market less than 0.73 percent. The market analysis of gunny bags has shown that the industry exported mainly in the destinations of the U.S.A, the U.K, Australia and Strait Settlement. In 1914 these markets absorbed

respectably 73.64 percent, 7.15 percent, 6.04 percent, and 3.30 percent. In respect of cloth, this study has found the U.S.A market as the most dominant one followed by the U.K with their respective intakes at 66.79 percent and 6.40 percent in 1914.

This study has underscored the importance of Indian Jute Manufacturers Associations in the development of modern jute industry in Bengal. Although this association was originally intended to abate competition among jute mills, their activities in later years indicated its thrust for opening up of new markets and the solution of labour disputes in the industry. Among other associations, the Calcutta Jute Fabric Shipper's Association helped to safeguard the interest of overseas consumers, and the Jute Fabric Broker's Association played an important role in the development of the brokerage activities in the jute trade.

Annexure 5.1: Growth of modern jute mills in Bengal, 1879-1914

Year	No. of mills	Nominal capital (Rs.)	Spindles	Looms	Average daily employment	Capital / mill	Spindle/ mill	Looms/ mill	Capital/ labour
1879-84	21	27,070,000	88,000	5,500	38,800	1,289,048	4190	262	698
1884-89	24	34,160,000	138,400	7,000	52,700	1,423,333	5767	292	648
1889-90	27	30,215,000	158,326	8,104	60,630	1,119,074	5864	300	498
1890-91	27	31,320,000	164,245	8,204	62,739	1,160,000	6083	304	499
1891-92	27	31,320,000	174,156	8,695	66,333	1,160,000	6450	322	472
1892-93	27	34,344,500	181,172	8,976	67,291	1,272,019	6710	332	510
1893-94	28	34,724,300	192,688	9,590	69,179	1,240,154	6882	342	510
1894-95	29	36,807,000	201,217	10,048	75,157	1,269,207	6939	346	502
1895-96	29	40,309,000	216,139	10,579	78,889	1,389,966	7453	365	490
1896-97	32	43,958,000	258,154	12,784	91,389	1,373,688	8067	400	481
1897-98	32	46,050,000	274,907	13,615	95930	1,439,063	8591	425	480
1898-99	32	49,550,000	278,858	13,371	94,540	1,548,438	8714	418	524
1899-00	33	51,900,000	293,218	14,021	101,630	1,572,727	8885	425	511
1900-01	36	40,950,000	317,348	15,340	111,272	1,137,500	8815	426	368
1901-02	36	43,508,000	331,382	16,119	114,795	1,208,556	9205	448	379
1902-03	38	43,908,000	352,214	17,189	118,904	1,155,474	9269	452	369
1903-04	38	40,308,000	376,718	18,406	123,896	1,060,737	9914	484	325
1904-05	38	46,680,000	409,170	19,991	133,162	1,228,421	10768	526	350
1905-06	39	50,680,000	453,168	21,986	144,879	1,333,684	11620	564	350
1906-07	42	58,200,000	520,40*	23,561	165,692	1,385,714	N.A	561	351
1907-08	54	74,828,556*	562,274	27,244	187,771	1,385,714*	10412	505	398*
1908-09	51*	71,561,230*	639,882*	28,971	203,730*	1,385,714*	N.A	568	351*
1909-10	57	70,805,000	633,120*	30,685	202,258	1,242,193	12547	538	350
1910-11	58	70,805,000	633,120*	31,755#	210,547	1,220,776	10916	548	336
1911-12	58*	80,802,188*	722,513*	32711#	230,039*	1,385,714*	12457	564	351*
1912-13	60	76,305,000	682,300*	32,632#	199,725	1,220,776	11372	544	382
1913-14	64	78,671,000	738,977	35,803	216,377	1,229,234	11547	559	363
1914-15	67	85,725,500	789,236	37,541	236,294	1,279,485	11780	560	362

Source: For 1879-05 are from Statistical Abstract for British India, various issues, for 1905-14 from Annual Reports of the I.J.M.A, Calcutta, various issues and Government Administrative Report, various issues.

N.B. #it was included extensions in progress. \*This figure is estimated to take 1906-1907 as a base year. In 1906-07 the figure for spindles is calculated from 1905-06.

Annexure 5.2: Market destinations of various jute products from Bengal, 1904-14

Year	Foreign port	Indian port	Local consumption	Grand total
1904	711,553,700	117,608,700	22,479,900	85,16,42,300
1905	753,837,300	103,355,600	15,247,400	87,24,40,300
1906	848,157,700	97,208,800	8,109,900	95,34,76,400
1907	990,001,000	122,470,300	8,367,800	1,12,08,39,100
1908	971,470,700	114,372,500	4,822,800	1,09,06,66,000
1909	1,135,478,600	116,456,200	10,698,000	1,26,26,32,800
1910	1,233,607,400	135,075,900	14,039,100	1,38,27,22,400
1911	1,036,543,300	115,166,600	18,451,600	1,17,01,61,500
1912	1,155,137,000	131,084,300	20,935,900	1,30,71,57,200
1913	1,323,831,900	124,760,600	12,761,300	1,46,13,53,800
1914	1,253,048,000	99,935,900	9,965,300	1,36,29,49,200

Source: I.J.M.A, Statement XI, various years.

Annexure 5.3: Export value of bag to foreign ports from Bengal during 1890-1905

(in Rs)

Year	United Kingdom	Egypt	United States	China	Strait Settlement	Australia	Germany	Cape Colony	South America	Turkey	Others	Total
1890-91	3,942,491	1,096,307	1,589,670	827,057	2,464,079	7,421,606	169,103	672,409	902,629	151,401	3,994,922	23,231,674
1891-92	3,212,656	1,465,719	2,324,711	1,206,291	2,728,679	5,504,330	229,379	1,020,993	1,230,305	84,574	4,973,861	23,981,498
1892-93	5,250,808	1,863,399	2,413,439	1,723,630	3,237,314	7,554,468	457,407	1,267,011	1,770,592	320,469	5,945,222	31,803,759
1893-94	4,902,384	2,407,899	3,114,270	1,241,698	4,033,301	6,316,556	317,232	1,409,582	1,777,554	361,203	6,211,160	32,092,839
1894-95	6,404,300	1,581,589	9,382,976	944,055	3,131,386	8,898,519	528,255	1,069,870	2,127,025	467,980	6,957,496	41,493,451
1895-96	5,512,119	1,972,851	4,077,463	1,902,435	4,275,003	6,950,145	856,950	2,032,408	2,830,245	1,028,553	3,230,767	34,668,939
1896-97	5,902,472	2,612,235	3,102,545	1,249,494	3,919,906	6,558,285	1,481,206	1,833,577	2,754,576	1,022,816	4,272,531	34,709,643
1897-98	7,575,466	2,303,739	4,868,345	1,361,059	3,267,006	7,494,174	2,036,596	1,267,442	1,916,338	758,926	3,948,444	36,797,535
1898-99	7,157,360	2,822,286	2,499,616	567,193	4,609,980	7,568,542	1,143,843	796,774	2,205,292	657,921	3,533,228	33,562,035
1899-00	6,786,302	1,908,725	1,904,461	1,192,416	4,108,603	9,783,443	547,752	1,347,030	3,113,320	551,631	3,533,596	34,777,279
1900-01	7,139,551	2,820,458	1,855,000	1,940,909	6,390,098	11,752,742	1,107,038	1,131,958	608,185	398,628	4,904,492	40,049,059
1901-02	6,209,160	2,676,284	3,262,783	3,403,816	4,787,860	12,016,612	1,742,003	1,097,350	821,673	714,897	6,841,680	43,574,118
1902-03	8,880,949	3,774,337	1,838,644	3,438,485	6,969,756	7,207,373	1,820,059	2,275,594	737,434	927,075	6,462,208	44,331,914
1903-04	6,330,973	3,613,861	1,127,033	2,481,596	3,663,023	10,843,735	813,722	845,751	808,489	765,112	16,609,578	47,902,873
1904-05	5,473,993	4,122,808	1,600,250	1,832,280	4,385,416	9,349,372	777,716	1,020,582	394,023	514,099	17,173,978	46,644,517
Average	6,045,399	2,469,500	2,997,414	1,687,494	4,131,427	8,347,993	935,217	1,272,555	1,599,845	581,685	6,572,878	36,641,409

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, 1894-95, 1899-1900 and 1904-05, Vol. 1

Annexure 5.4: Export value of cloth to foreign ports from Bengal during 1890-1905 (in Rs.)

Year	United Kingdom	United States	China	South America	Germany	Other Countries	Total
1890-91	203,576	2,005,276	--	--	--	619,150	2,828,002
1891-92	25,831	2,635,572	--	--	--	476,760	3,138,163
1892-93	294,494	2,996,481	--	--	--	494,370	3,785,345
1893-94	1,080,392	4,036,613	--	--	--	513,180	5,630,185
1894-95	1,575,532	7,448,615	--	--	--	826,180	9,850,327
1895-96	1,774,863	7,727,564	444,351	342,173	469,343	380,706	11,139,000
1896-97	2,430,908	10,261,033	423,694	2,748,755	55,549	365,446	16,285,385
1897-98	1,775,766	15,102,291	490,877	3,360,049	66,832	592,021	21,387,836
1898-99	1,838,510	16,015,326	362,788	4,161,316	343,190	820,512	23,541,642
1899-00	2,847,113	16,444,237	422,717	5,082,924	210,419	1,019,192	26,026,602
1900-01	6,812,689	17,147,365	2,192,872	--	2,754,431	2,448,423	31,355,780
1901-02	4,789,678	24,388,662	2,212,231	1,000	1,363,279	1,592,208	34,347,058
1902-03	1,717,800	29,559,539	2,178,991	1,000	69,544	1,818,567	35,345,441
1903-04	1,419,151	30,691,968	1,184,290	500	54,314	2,849,095	36,199,318
1904-05	1,974,900	30,198,833	1,348,109	--	269,801	2,181,404	35,973,047
Average	2,037,414	14,443,958	1,126,092	1,962,214	565,670	1,133,148	19,788,875

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, (1894-95), (1899-1900) and (1904-05), Vol. 1

N.B: (--) indicates an insignificant amount.

Annexure 5.5: The export value of cloth to foreign ports from Bengal during 1905-1915 (in Rs.)

Year	United Kingdom	United States	Australia	Germany	Other countries	total
1905-06	4,286,835	37,790,750	1,700,129	395,612	18,809,652	62,982,978
1906-07	8,125,489	53,948,419	2,100,994	546,978	17,782,046	82,503,926
1907-08	5,109,158	58,484,563	3,065,927	989,536	29,222,453	96,871,637
1908-09	2,930,172	46,889,156	2,641,615	472,498	25,934,668	78,868,109
1909-10	3,675,218	56,074,106	2,341,150	249,443	21,871,279	84,211,196
1910-11	4,244,133	55,716,650	2,950,175	475,772	20,044,072	83,430,802
1911-12	5,405,816	53,008,736	2,802,808	983,294	21,191,020	83,391,674
1912-13	6,091,852	78,711,759	3,710,448	398,187	41,605,302	130,517,548
1913-14	8,365,669	102,240,687	5,124,473	1,306,583	38,793,323	155,830,735
1914-15	8,172,603	85,656,755	5,501,849	382,315	31,313,003	131,026,525
Average	5,640,694	62,852,158	3,193,956	620,021	26,656,681	98,963,513

Source: Annual statement of the sea-borne trade and navigation of Bengal presidency with foreign countries and Indian ports, 1909-10 and 1910-11 to 1914-15, Vol.1