

Chapter VII

Summary of observation and conclusion

The earlier chapters have discussed various aspects of jute industry in Bengal. In addition to analysing different features of growth and development of the modern jute industry during 1855-1914, we have sought to bring out its genesis in this province. We have found that although the domestic jute manufacturing in Bengal is the genesis of the modern jute industry at the global scale, its origin in Bengal is traced at Dundee. This chapter seeks to summarise these various observations and conclusions that the earlier chapters contain.

I

Among various observations and conclusions of Chapter II the more important ones are as follows.

1. Jute is a native plant of Bengal from the time immemorial. It was cultivated both for direct consumption and industrial usages. In points of its quantitative variances, the fibre got various nomenclatures in the trade. Some of them were of superior quality while others were inferior. But all of them were used for industrial purposes. The fibre was also used for various industrial purposes, such as a) cordage and rope

making, b) paper making and c) manufacturing of gunny cloth and bags.

2. A district-wise analysis of jute cultivation in Bengal has shown its predominance in the eastern half of the contemporary province. The cultivation was concentrated mainly in Pubna, Dinajpur, Rangpur, Dacca, Backerganj, Mymensing in East Bengal, and Darjeeling, Coach Behar and Jalpaiguri in West Bengal. Both in respect of area under jute and yield rate, East Bengal were ahead of its Western counterpart. As a proportion of total land under plough, the jute acreage was four percent in East Bengal and 1.88 Percent in West Bengal with their yield rates at 15 maunds per acre and 13 maunds per acre respectively.
3. The district-wise production of jute fibres and its local uses reveal the following aspects of the contemporary features of jute processing and its trade; a) three-fourths of the production of jute in Bengal were exported outside the province while only one-fourths of it were used domestically, b) the districts like Birbhum, Midnapur, Hugly, and 24 Parganas entirely exported their manufactured goods to outside markets. Possibly their location near the Calcutta Port enabled the industry to have been developed there to cater exclusively to the global market, c) these districts did not top in the list of jute exporting zones, which Rangpur,

Dacca and Mymensing occupied. In fact, the spatial distribution of jute cultivation and its manufacturing activities suggest that the industry was not localised nearby the raw material zones, d) the handloom jute industry flourished in the districts of the present jurisdiction of Bangladesh, particularly, Dacca, Rangpur, Backerganj, Dinajpur and Bogra, e) jute was also cultivated extensively in Mymensing, Chittagaon, Noakhally, Bhalpore and Murshidabad, but its entire products were consumed locally, f) certain districts like Burdwan, Jessore, Rangpur, Pubna, Dinajpur, Darjeeling, Malda, Backerganj and Sylhet partly used up jute products locally, and partly exported them to outside markets and g) the handloom industry became developed mainly in those districts where it got the support of domestic market.

4. Bengal's handloom jute industry occupies monopoly in the global market before the development of the modern jute industry at Dundee. Even after the emergence of Dundee mills, it grew apace in the global trade. By the early 1850s, it diversified its market to various countries.
5. There was a three-tier marketing network in the internal trade of jute. It was constituted of primary markets at the village level, secondary markets at the district level and a province level market at Calcutta. While both bullock carts

and boats were used at the district level transportation, large boats and steamers were employed for transshipment to Calcutta. The transportation cost in the internal trade has been worked out at Rs.0.42 per maund on average in the direct routes and an additional cost of Rs. 0.20 per maund for circuitous routes. This study has also estimated a cost of Rs. 1.02 per maund for intermediate transactions in the internal trade.

II

An analysis of the development of the modern jute industry of Dundee is of topical interest in this study from two viewpoints; first, it grabbed the market from Bengal's handloom jute industry, and second, it paved the way for the development of the modern jute industry in Bengal. Major observations in this regard in Chapter III are as follows:

1. In view of import dislocations for flax and hemp, Dundee mills experimented with several alternative fibres in the early years of the nineteenth century, and finally found solutions in the use of jute in 1836. This enhanced the U.K's intakes of raw jute from Bengal, replacing the other fibres like hemp.
2. The rapid growth of jute mills at Dundee was explained by the supply-side factors like the easy availability of raw jute from Bengal at cheaper prices, and the development of railway network between Dundee and London, as also by

series of demand-side factors like the Crimean war which accelerated the demand for sand bags.

3. On the basis of the raw jute consumption and the sale of finished goods abroad, this study has shown that there has been a rapid growth of the modern jute industry at Dundee from the 1840s through the late 1880s. Its major foreign outlets were consisted of the U.S.A in North America, Germany in Europe, and Argentina in South America. Available evidences indicate that Dundee mills took away significant market-share from Bengal handloom jute industry in the U.K, North America, Strait settlements and Ceylon. They also significantly penetrated into India's domestic market like Bombay and Madras including Bengal.
4. Dundee could not, however, retain its jute monopoly for long as the industry was subsequently developed in the U.S.A, Germany, Belgium and Austria. Those subsequent developments were nurtured by the state patronage. Those developments severely hurt Dundee's interest.
5. Though Dundee pioneered in the modern jute industry, we have found that Bengal enjoyed enormous comparative advantages in connection of this industry. In this respect, we have found a) that in respect of raw jute prices Bengal had a cost advantage of Rs. 1.89 per maund, b) the labour cost was

cheaper by 58 percent as compared to Dundee, c) in respect of transportation cost Bengal enjoyed a cost advantage of Rs. 1.48 per maund in India's domestic market and also in the markets of the Far East, and Rs.0.98 per maund at London. These competitive advantages anticipated the emergence of the modern jute industry in Bengal.

III

Major findings of chapter IV are as follows:

- 1) Having started in 1855 the modern jute industry witnessed a slower pace of growth in initial years. Its growth rate was accelerated during 1871-75 when 13 new mills were set up. By 1892 there were 24 jute mills in Bengal with a total investment at Rs.18.74 million.
- 2) One of the basic features of the industry was the managing agency system under which it flourished. Because of such an organisation, the industry enjoyed the following benefits: a) that adequate funds could be mobilised smoothly, b) that the over-head cost was minimised because of the scope economics as the managing agents undertook a number of businesses together and c) there were substantial scale of economics as the agents managed a number of jute mills together.

- 3) The industry also enjoyed cost advantages because of a) the abundance of land and water in this province, b) lower transportation cost, both on water and rail routes, owing to the industry's specific locations, and c) easy availability of coal from the nearby Asansol-Raniganj coal field.
- 4) Although a little of capital flew from Dundee to Bengal jute mills, its significant contributions were noticed in a) the supply of plant and machineries, b) the supply of managerial and technical man-power and c) the entrepreneurial support.
- 5) The industry suffered from serious teething problems, which were reflected in repeated failures of several pioneer firms. Those failed firms were re-commissioned time and again as Bengal's comparative advantages ensured good promises of profit for them.
- 6) Although Bengal's traditional jute industry dominated the market over its modern counterpart, with their respective shares at 59.54 percent and 40.46 percent in 1869-70, the scenario was reversed thereafter. In 1870-71 Bengal mill's came to occupy 50.42 percent of the aggregate export outside the province, and it increased to 95.84 percent in 1890-91.
- 7) Destination-wise, however, we have found that India's domestic ports occupied a lion's share of Bengal's jute product market till 1877-78. The foreign ports came into

dominance thereafter. The shares of these markets became 31:69 in 1878-79 but 33:67 in 1884-85. It further rose to 9:16 in 1890-91.

- 8) The course of market penetration by Bengal mills were as follows: They first captured India's domestic market from the traditional industry, and then proceeded to the markets lying in the Far East before finally entering into other continents. In the markets of Far East and other continents, Bengal mills encountered competition mainly from Dundee mills who had earlier captured those markets from Bengal's traditional industry to a good extent.
- 9) Bengal mills defeated their counterparts of Dundee not only in the latter's foreign markets but also in their domestic markets. As a result, Dundee mills were forced into a phase of decline around the concluding decade of the nineteenth century.
- 10) Product-wise, however, the gunny bags dominated over cloths (gunny and sacking, taking together) till 1889-90. Export of cloth underwent a rapid rate of growth thereafter. It grew from Rs.1,501,999 in 1888-89 to Rs.3,138,163 in 1891-92.

IV

Chapter V has generated the following major observations.

- 1) Bengal's modern jute industry witnessed a very high rate of growth during 1892-1914. From 24 mills in 1892 the industry grew to accommodate 67 mills in 1914. The number of mills, spindles as well as employment opportunities rose up proportionately. During 1892-1914, the number of looms increased 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 .
- 2) Rapid growth took place in all the three product lines in the industry, viz, 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 on account of high rates of growth in jute spinning and weaving in the modern industry. The highest growth of cloth export has, however, been accounted for by the product's low base figures. In fact, the industry consolidated its export activities in cloth in later years.
- 3) 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.

- 4) The market analysis of gunny bags have shown that the industry exported mainly to the destinations of the U.S.A, the U.K, Australia and Strait Settlements. In 1914, these markets absorbed respectably 73.64 percent, 7.15 percent, 6.04 percent, and 3.30 percent.
- 5) In respect of cloth, this study has found the U.S.A market to be the most dominant followed by the U.K, with their respective in-takes at 66.79 percent and 6.40 percent in 1914. Among other countries, Germany, Australia, China, and South America were also regular buyers of this product.
- 6) This study has underscored an overwhelming importance of Indian Jute Mills' Association in the development of the modern jute industry in Bengal. Although this association was originally intended to abate competition among existing jute mills, its activities in later years indicated its thrust for opening of new markets and the solution of labour disputes in the industry. Among other associations, the Calcutta Jute Fabric Shippers' Association helped to safeguard the interest of overseas consumers, and the Jute Fabric Brokers' Association played important roles in the development of the brokerage activities in the jute trend.

The development of jute industries had a far-reaching impact in the labour market of the contemporary Bengal. In addition to augmenting the demand for labour, it led to a series of qualitative changes also. We summarise the major findings in this respect as follows:

- 1) Since the jute pressing technology was more labour intensive, a large number of jobs were created in Bengal. We have found that the average daily employment was as high as 236,294 in jute mills in 1914-15. The number of employment in jute presses was to the tune of 14,000 in 1911.
- 2) Both skilled and unskilled workers were employed in the industry. While unskilled workers were deployed as porters, skilled workers were employed for the running of machines. Jute presses also employed a large number of unskilled workers as porters, and also skilled workers as sorters and packers.
- 3) The employment structure of jute mills was heavily dominated by male workers. The male and female ratio has been worked at 78:22, as against of 29:71 at Dundee mills.
- 4) Owing to the fast growth of the industry, the local labour market could not meet the demand for labour, inducing the immigration of workers to take place from far-away places

like Moghyr, Patna, Arrah, Chapra, Gazipur, Mirzapur, Cuttack and Orissa. In 1905, the ratio of migratory and local workers was found at 2 : 1.

- 5) The industry also witnessed various labour movements from the early 1890s. An analysis of those movements has shown that while, in the initial years, the industrial relation was broken down several times on the issues like disputes relating to working hours, wage rate and holidays, the trade union movement was actually started in 1905.