

Chapter 4

Supply-side view of the industry

4.1. Introduction

On the demand side, since the 1950s, the industry has, as discussed above, been confronting a relatively stagnating demand for technological and various other reasons including competition from Pakistan (1955-'71) and Bangladesh (1971-'90). Keeping this in perspective, the present and the following chapter focus on the supply aspects of the jute industry in India and its stagnation. For analysing the supply-side issues, we mainly consider the organisational pattern of the Indian jute firms and the industry. As pointed out earlier, these firms are family-managed. Primarily two questions are raised. First, what are the responses of the jute manufacturing firms to cope with a stagnating demand condition, and whether the industry's capacity to supply its output is constrained by shortage of inputs. As we will see, jute firms have taken adaptive strategies consistent with a short run perspective. In a short period, there is no scope to change the supply conditions of the industry by changing its fixed capital structure and, therefore, the technological possibilities for production. Further, the demand condition facing the industry is unlikely to be influenced by the supply-side developments. In this situation, the industry extracts as much profit as possible only by minimising the components

of variable costs ¹. Also, there were no important raw material constraints in the Indian jute manufacturing industry during most of this period.

The second question, dealt in the following chapter, refers to why the industry apparently failed to act with a long-run perspective and adopt the innovative strategy of product diversification and technological upgradation to overcome the demand constraint in the traditional items.

The present chapter examines how the Indian jute industrialists responded to the relatively stagnant demand for their traditional products and gives a brief account of their strategies with respect to the cost of inventory, particularly the jute goods, raw material cost and wage cost. We examine below to what extent the fact and figures relating to the industry support our hypothesis. The frequent closure of jute mills, the changing pattern of labour-contracts and the variation in raw jute

¹ Alternatively, the near-absence of long-term investment in the jute industry may be explained with reference to the unstable export markets for the primary products and manufactures of primary products. Myint (1974) argued that world demand facing the primary exports from the underdeveloped countries were not only unstable in the short run as compared to the manufactured products but were inelastic and stagnant in the long run. This short-run instability dissuaded the industrialists engaged in the processing of primary exports from upgrading their technology and fixed capital equipments. The cheap labour policy of colonial governments also discouraged use of capital-intensive technology. This alternative view is perhaps more relevant for mines and plantations owned by foreign capital in colonial countries (a situation Myint was analysing rather than in the context of post-independence jute industry of India).

Table 4.1
Government's purchases of jute goods
(quantity in thousand bales)

Year	Quantity purchased										
	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Month											
January	69.59	4.89	NIL	NIL	16.87	67.00	75.50	100.21	NIL	26.31	79.81
February	72.56	39.31	NIL	10.25	NIL	66.00	69.25	42.85	40.23	31.41	78.27
March	75.14	NIL	NIL	17.63	NIL	4.00	54.06	47.00	44.27	64.61	109.89
April	75.40	33.03	67.01	77.32	59.23	NIL	52.56	47.73	51.58	91.00	132.97
May	100.36	67.88	62.32	14.79	80.17	10.00	46.00	NIL	44.47	20.44	54.87
June	75.62	29.69	8.90	44.00	50.98	10.00	37.40	NIL	27.29	1.19	NIL
July	73.35	38.19	116.78	5.28	50.00	30.00	12.59	35.90	36.23	NIL	45.26
August	74.35	7.20	NIL	52.03	50.00	100.00	67.00	35.58	28.21	10.38	45.74
September	30.95	9.92	NIL	85.00	40.28	75.70	67.93	2.65	20.43	24.02	63.49
October	72.00	39.88	74.90	50.73	30.00	85.00	34.41	NIL	5.82	32.40	46.00
November	63.57	43.12	76.62	60.00	71.67	70.00	44.06	7.56	23.22	3.08	77.57
December	57.87	16.99	69.89	83.05	83.33	75.00	45.67	34.23	NIL	20.12	91.94
Total	840.79	330.12	371.32	500.10	531.54	592.70	606.44	353.71	321.75	324.98	825.82

Source : Indian Jute Mills Association
(Official Documents)

prices can be related to this process. Section 4.2 discusses the inventory aspect, while section 4.3 discusses the raw jute prices and section 4.4, the wage cost issues. In section 4.5, we draw our conclusions based on our analysis of supply side issues.

4.2. Reducing the inventory cost

Demand for jute goods is not uniform throughout the year. Since Indian jute goods are used mainly for packaging agricultural commodities, their demand moves cyclically with the quantum of harvests and also with the harvesting seasons. Fluctuation in the demand for jute bags is, thus, reflected in the pattern of purchases of the Directorate General of Supplies and Disposals (Government of India) which buys jute bags for packing agricultural goods (Table 4.1). The jute industrialists responded to this seasonality of demand for jute goods by restricting production through the periodic closure of mills.

As roughly 80 percent of the Indian jute mills is situated within West Bengal, we limit our study to the jute mills in West Bengal only to get a representative view of the industry in India. Annual data, as published by the Government of West Bengal, Department of Labour, relating to the closure of jute mills due to lock-outs in West Bengal, have been used for this purpose. Table 4.2 demonstrates that as many as 38 jute mills (roughly 70 percent of the private mills that was operative in West

Bengal during 1985-1990) faced lock-outs at least once during the period 1985-'90. One important reason for such large-scale prevalence of closure in jute mills may be the unprofitability of jute manufacturing.

If this is true, one would naturally expect the lock-outs of all mills under the ownership of a particular jute baron in a given jute year. But our data tell an altogether

Table 4.2

Frequency of lock-outs of jute mills in West Bengal

Year	Lock-outs in jute mills by code	Total number of mills of owner X	Total number of mills of owner Y
1985-'86	[18],19,25,(37)	9	7
1986-'87	1,2,(3),4,5,6,18,19, [24],25,26,27,28,[30], 31,[32],33,(35)	9	7
1987-'88	1,4,6,7,8,9,10,11,12, 13,[15],[18],19,[24], 25,27,29,[32],33,34, (35), (37).	9	7
1988-'89	(3),13,14,[15],24,25, 34,[32],35,36,(37), [38].	9	7
1989-'90	4,6,[8],[15],[16],17, 18,19,20,21,22,23, [24], 28,[30],34.	9	7

Note : () - Bracketed mills and [] - Bracketed mills belong to owners X and Y respectively.

Source : Government Of West Bengal, Department Of Labour,
Labour In West Bengal (various Issues).

different story. A close look at the data indicates that some 16 jute mills (roughly 30 percent of the operating private jute mills in West Bengal) are owned by only two jute millowners. It is further evident that they declared lock-outs in their different mills in different years during 1985-'90 (Table 4.2).

There seems to be a deliberate attempt on the part of these two owners to restrict production for higher profits. This is, therefore, quite unrelated to the declining profitability of manufacturing of jute goods. Besides, there were another 22 jute mills (representing about 50 percent of the operating jute mills in west Bengal during 1985-90) who declared lock-outs during our study-period. But their owners are supposedly different. They are, therefore, likely to restrict output in response to the declining demand for the industry's products. But this is quite unlikely in view of the monopolistic nature of the industry. It is well-known that the Indian Jute Mills Association operates as a single block in negotiating with labour and also in regulating the purchase price of raw jute to its advantage. It is also well known that the major part of the shares of individual jute mills as well as the controlling interest lies with a handful of families. One then, under this situation, expects a tacit agreement among them on the restriction of output through periodic closure of their individual mills. They thus behave as members of a cartel and are able to manipulate their production deliberately in their respective jute mills to maximise profits.²

²It has generally been argued that the phenomenon of deliberate restriction of output by the jute industrialists is intimately linked with the degree of the monopoly power of the industry. Lerner's measure of the degree of monopoly power may give an idea about the degree of monopoly power of an industry. This is as follows: $P = MC(1 - 1/e_p)$... (1), Where P denotes the product price, MC, the marginal cost of production of the product, e_p , the price-elasticity of demand.

Equation (1) refers to a particular firm under the industry. Since all the firms do not have the same product-mix, the elasticity of demand for products differs as between firms. Hence, as we do not have firm-level data, it is found to be impossible to calculate the degree of monopoly power of each firm. Further, a determinate aggregation procedure for many jointly dependent P/MC ratios is not possible. It has, however, been found empirically fruitful, following Kalecki, to interpret pricing decision as a mark-up above average cost, i.e., $P = (1 + R) AC$... (2), Where P represents the price of the product, R the mark-up ratio, and AC, average cost of production of the product.

We can estimate the values of R by using the Annual survey of Industries data on the value of output and total cost of production, as published by the Government of India Central Statistical Organisation, Department of Statistics. The values of R, reflecting the producers pricing decision were not rising over the period from 1973-'74 to 1985-'80. Table 4.3 summarises the relevant information and also indicates that even in the first half of the 1960s when India's relative

Table 4.3
Estimated values of R

<u>Year</u>	<u>Values of R</u>
1961	0.0877
1962	0.2393
1963	0.2461
1964	0.1924
1965	0.1608
1966	0.1078
1968	0.2198
1969	0.1870
1970	0.1859
1971	0.2241
1973-'74	0.0897
1974-'75	0.1918
1975-'76	0.1387
1976-'77	0.0668
1977-'78	0.0781
1978-'79	0.0855
1979-'80	0.2076
1980-'81	0.1505
1981-'82	0.0636
1982-'83	0.0432
1983-'84	0.0443
1984-'85	0.0744
1985-'86	-0.6364

Note : 'R' denotes the mark-up ratio.

Source : Government of India : Central Statistical Organisation, Department of Statistics, *Annual Survey of Industries*.

Equation (2) also seems to contain certain problems. The industry produces different types of products. It is very difficult to calculate an average price for all these types of goods. The problem becomes acute when separate prices are charged at home and abroad. Further, the time-series data on average cost of production for all these types of goods-both traditional and non-traditional at the industry level - are not available. Thus, for empirical purposes we multiply equation (2) by Q (Where Q denotes the aggregate output of the industry) on both sides and get as follows, $PQ = (1+R)TC$ Or, $PQ/TC = 1+R$ $\therefore R = PQ/TC - 1$... (3) [where R is the mark-up ratio, PQ represents the value of output and TC, the total cost of production].

export share in the global market was found to be high, the values of R demonstrated a declining tendency over the period from 1961 to 1965. Our data do not, therefore, agree with the hypothesis of deliberate restriction of output by the jute industrialists for higher profits.

4.3. Curtailing the raw material cost

At the time of the division of the country in 1947, nearly 70 percent of the cultivable jute land went to Pakistan (Singh, 1964). They were also the best jute lands, in terms of the relatively high yield and the superior quality of the fibre grown (Nayyar, 1976). Consequently, in the 1950s India began to confront the problem of shortages of raw jute-both in quantity and quality for her industry. Faced with it, the Indian jute industry was simply unable to meet the entire foreign demand for jute manufactures (Singh, 1964).

Some efforts have, given the situation, been made by the Indian Government in the 1950s to step up the production of raw jute (Dasgupta, 1975). The result was near self-sufficiency in raw jute production in India in the early 1960s. Hence, the Indian jute industry was primarily dependent on the domestic production of fibre and in the first half of the 1960s, managed to retain her export share in an expanding world market (Nayyar, 1976).

But in terms of quality there was problem, and the problem still remains. India is deficient in the production of superior grade of raw jute which accounted for only 7 percent of the total raw jute production in 1991-'92 (United Nations Development Programme, 1993). This obviously limits high value-added decorative fabrics production, but not the production of the industry's traditional items, especially sacking which is the country's main item of jute products.

We now discuss various alternative possibilities through which the jute mills can reduce their raw material

costs. Some of them are : (a) the improvement in the per-acre yield of raw jute, (b) the manufacture of lighter products which require relatively smaller amount of the fibre, and (c) the reduction in the purchase price of raw jute. The jute industry owners did not adopt the first two options. For, they are long-run measures and related to technological improvement respectively in raw jute cultivation and jute goods' production. Rather they have shown their utmost interest in raw jute trading. This is why, they limit their activities to the reduction in the purchase price of raw jute to minimise raw material costs.³

The reason for the mills' choice of the later possibility is rooted in the organisation of the raw jute trade and its links with jute mills which had emerged historically over the years.⁴ The cultivation of jute reflects, as available evidence suggests, the preponderance of relatively small jute farmers.⁵ But its ultimate buyers are a few jute mills who can exercise their monopsonistic influence in fixing the terms and conditions of transactions made in the raw jute market. The forces of monopsony are getting further deepened, for, the Indian jute manufacturers are essentially the jute traders who later on made their way into jute manufacturing, and the

³ In fact, the share of raw jute cost to the total cost of production of jute goods (sacking) declined from 69.18 percent in 1960 to 52.32 in 1975-'76 and further fell to 38.60 percent in 1986 [Singh, 1964; Sarkar, 1989; Jute Manufacturers Development Council (Official documents)].

⁴ Sengupta, A.K. *Economic and Political Weekly* Bombay, 10-17 July, 1982, pp. 1149.

⁵ Mitra, Ashok: *Terms of Trade and Class Relations* —
Frank Cass, 1977.

interlocking of these trading and manufacturing interests continues vigorously even to-day. Usually the mills finance the intermediaries in raw jute trade to collect raw stocks for them. These intermediaries, in turn, finance the jute growers well ahead of the harvesting season for getting an assured supply of raw jute for the mills. The system of 'dadan' or hypothecation of raw jute much before its harvesting provides the intermediaries associated with raw jute trade a secure and uninhibited command over its supply at a relatively low grower-level prices.

This helps the mills to control the buying and also the price of raw jute in the villages through these intermediaries in raw jute trade. This finds support in the various reports of the Committee on Public Undertakings of the Indian Parliament (1978) that the production of the jute industry is dominated by a few big business houses (16th Report) and that these houses through intermediaries control the prices of raw jute (3rd report). Hence it is possible for the mills to keep the raw jute prices depressed. Further there are indications that the millowners have colluded to close their mills periodically and this is likely to effect an even greater fall in the prices of raw jute. The Committee (Government of India : 1978) also notes that the jute millowners, on the eve of the raw jute marketing season, regularly manage to bring about the closure of mills for the purpose of creating glut conditions in the raw jute market. Our study also corroborates this. Table 4.4 indicates that mills are usually closed before the immediate harvesting period.

Table 4.4
Timing of lock-out in jute mills of West Bengal

Jute Years 1985-'90	Number of mills locked-out	Number of mills locked-out during January-February	Number of mills locked-out during May-June	Number of mills locked-out during July-October	Number of mills reopening during periods in the same jute year of lock-out			
					April-June	July-October	October-January	February-June
1985-'86	20	2	11	2	2	12	1	NIL
1986-'87	20	NIL	6	3	2	4	1	2
1987-'88	28	NIL	10	4	2	9	1	2
1988-'89	26	NIL	4	NIL	4	NIL	NIL	NIL
1989-'90	26	NIL	13	1	3	10	1	NIL

Notes : (1) In this Table, we are concerned only with those mills who are locked-out and re-opened during any given jute year. Hence, the number of mills that are locked-out in a given jute year does not agree with the number of the jute mills that are locked-out and re-opened during the same period, because, all the locked-out mills do not re-open in the year of lock-out.

(2) During 1985-'89, the number of jute mills operating in West Bengal was 56 and in 1989-'90, it came to 59.

Source: Government of West Bengal, Department Of Labour:
Labour In West Bengal (Various Issues)

Through this closure the industry is able to depress prices as far as possible. Other things being unchanged, this reduces the mills' raw material costs. Given the price of the product, this ensures a profit to the industry.

What is important to note is that these profits of the industry are subjected to taxes. This reduces its post-tax profits. The millowners, being profit-maximising elements,

responded to it by showing a minimum pre-tax profit in their mills' annual accounts. They have managed to do it because of their links, as has already been pointed out, with the trade in the raw jute. The report of the Committee on Control and Subsidies (Government of India : 1979) corroborates this situation. It notes as follows:

"A large number of jute mills have established their own agencies at various secondary markets. It is widely alleged that these agencies are usually 'benamis' of the mill-owners and top - executives of the mills and they control the buying in the villages through the farias. These agencies buy the jute on behalf of the mills at low prices and later sell the same jute to the mills at higher prices (pp. 200).

Thus, the difference between the buying and sale price of jute is obviously a source of trading profit that the jute mill-authorities are likely to appropriate. But its estimation is somewhat difficult because of non-availability of relevant data on prices at which the mill-agents buy jute for their mills. However, to get a rough estimate, we use the harvest price of raw jute ⁶ as the purchase price of the mill-agents and the minimum grade (w₅) average prices ruling in the Calcutta Wholesale market ⁷ as the sale price of the mill-agents.

⁶. Government of West Bengal, Directorate of Marketing.

⁷. Government of India : Jute manufactures Development Council.

Table 4.5
Price spread of raw jute between its harvest price
and its price reported in Calcutta.

Year	Harvest price of raw jute(Rs./quintal.)	Average (mill) price of raw jute at Calcutta(w ₅)(Rs./quintal.)	Price spread as percentage of harvest price of raw jute
1973-'74	139.72	139.64	0.08
1974-'75	151.31	175.83	16.20
1975-'76	146.39	187.92	28.36
1976-'77	144.89	200.47	38.36
1977-'78	181.26	222.91	22.97
1978-'79	183.40	216.44	18.01
1979-'80	186.81	212.44	13.71
1980-'81	169.47	216.56	27.78
1981-'82	181.86	241.29	32.67
1982-'83	202.33	272.56	34.71
1983-'84	303.03	384.84	26.99
1984-'85	741.17	812.99	9.69
1985-'86	272.31	314.87	15.62
1986-'87	236.68	308.50	30.34
1987-'88	274.93	341.63	24.26
1988-'89	381.19	449.73	17.98

Sources : Government of West Bengal :Directorate of Marketing;
 Government of India:Jute Manufactures Development Council.

The gap between the two is substantial (Table 4.5), When we allow for the fact that the qualities of raw jute are not specified at the growers' level and that the mills' purchase price is taken for the minimum quality of raw jute. Some part of this gap may be explained in terms of the transport costs, handling charges and other costs associated with its marketing. Nevertheless, the abrupt jump in the gap between the maximum and the minimum price indicates that the trading gains accruing to the mills is large enough.

This is further confirmed when we take into consideration the mills' purchase price of raw jute, as reported in the Annual Survey of Industries (Government of India) which are computed from the annual accounts submitted by the companies. We consider this as their estimated mills' purchase price of raw jute and the prices

of raw jute ruling in the Calcutta wholesale market as the supposed purchase price of raw jute by the mills. Comparing these two prices, it seems that the mills are inclined to report a higher raw jute purchase price in their annual accounts compared to the wholesale prices at Calcutta (Table 4.6). This shows that the jute industry's reported profit from manufacturing is under-stated.

Therefore, our analysis demonstrates that the industry, through controlling the marketing of raw jute, has been able to keep raw jute prices low and thereby, to reduce its raw material costs. Further, the millowners use

Table 4.6
Price of raw jute (grade W₅) at Calcutta (Rs. per quintal).

Year	Maximum	Minimum	Average	*Average raw jute price paid by mills as per A.S.I. data
1961-'62	147.40	72.36	88.60	117.37
1962-'63	84.42	71.02	76.78	81.62
1963-'64	85.76	73.70	80.80	82.01
1964-'65	132.66	84.42	104.90	89.09
1965-'66	183.58	112.56	146.11	91.72
1966-'67	195.64	117.92	143.84	141.01
1968-'69	210.38	134.00	183.26	146.37
1969-'70	198.32	112.56	142.31	145.81
1970-'71	171.52	132.66	153.38	126.21
1971-'72	166.16	128.64	147.51	160.05
1973-'74	158.12	128.98	139.84	145.81
1978-'79	236.00	200.00	216.44	240.34

*Note: Average raw jute price as per Annual Survey Of Industries data is estimated by dividing the value of raw jute, as reported in the Annual Survey Of Industries data, by the quantity procured, also reported in the Annual Survey Of Industries data. Data on these variables (i.e. value of raw jute and its quantity) for the years 1967-'68, 1974-'75 to 1977-'78, 1979-'80 to 1989-'90 are not available. Hence, a comparison between wholesale prices of raw jute at Calcutta and the mills' purchase prices of raw jute, as recorded in the Annual Survey of Industries data, is not possible for these years.

Sources : Government Of India : Central Statistical Organization, Department Of Statistics, *Annual Survey Of Industries*; Government of India; Jute Manufactures Development Council.

this link to conceal some of their industrial profits also. Thus, although the demand for the industry's products is declining, the margin of profit is likely to have been protected to a large extent.

4.4. Reducing wage cost

Various attempts have been made by the captains of the industry in recent years to keep labour cost depressed. They are:

a) Attempts have been made by the millowners to raise workload. Consequently, the average man-loom ratio declined, as has been estimated by the Committee (headed by D. Bandopadhyay) from 3.1247 in 1972 to 2.5475 in 1979. And workload at the industry level rose, according to this Committee, by around 20 percent during the period 1972-'79 and the consequent reduction in labour complement was above 46 thousands during this period. This tendency continued even in the 1980s.

b) More than 50 percent of the installed capacity is more than 70 years old (Government of India : 1980). Under the circumstances, more labour-effort is now required, other things remaining the same, to complete a piece of job. For a piece-rated worker, it is not possible to achieve the standard work norm, and the failure to achieve the norm results in reduction in wages. This explains why a significant proportion of workers are piece-rated (roughly 41 percent to 63 percent of the total workers in different mills). They are employed in those mills and in

those stages of production which have not been technologically modernised since the inception of the industry. From Table 4.7 it is observed that in 1983, a

Table 4.7
Percentage of workers covered under piece-rate system in jute mills of West Bengal (1983)

Sl.No.	Mill-code	Percentage of workers covered under piece-rate system	Percent of piece-rated workers engaged	
			In spinning	In weaving
1.	Mill A	41.47	Nil	23.07
2.	Mill B	55.41	4.09	27.36
3.	Mill C	63.18	11.18	23.79
4.	Mill D	18.06	Nil	3.31
5.	Mill E	43.00	Nil	21.50
6.	Mill F	50.20	9.28	19.92
7.	Mill G	41.00	Nil	21.77

Source: Indian Jute Industries Research Association (Official Documents).

significant proportion of the jute workers (roughly 44 percent on average) worked as piece-rated labour. Their employment is found to be very high in those stages of production where the percentage of man-days required is high. The piece-rated workers are mostly engaged in weaving rather than in spinning. The jute mills derive substantial economies in labour costs through this route.

c) It is found that the jute mills employ a significant portion of 'badli' workers and the proportion has increased over the years. In 1960-'61, the percentage of 'badli' workers at the industry level was 20 but the

percentage declined marginally to 19 in 1970 ⁸ In 1983, the 'badli' workers reached a level as high as 44 percent of the total jute workers ⁹. This sharp rise in the number of badli workers is due to the fact that they are denied of certain financial benefits like bonus and leave benefits. The larger the proportion of 'badli' workers in the given size of workforce, higher is the opportunity for the jute mills to economise labour costs.

d) Man-days lost in strikes were insignificant, whereas the man days lost in lock-outs were substantial in the 1980s (Table 4.8). The mills have re-opened, it is

observed, after each closure with reduced workforce and hence, reduced wage bills ¹⁰

Table 4.8

Strikes and lock-outs in jute mills in West Bengal

Year	Strikes		Lock-outs	
	No. of cases	Man-days lost(Lakhs)	No. of cases	Man-days lost(Lakhs)
1984	2	154.03	11	31.01
1985	NIL	NIL	21	86.51
1986	1	0.16	20	82.25
1987	1	4.01	25	115.81
1988	2	11.98	20	98.71
1989	NIL	NIL	24	18.52

Source: Government of West Bengal: *Labour in West Bengal, 1989*, Department Of Labour.

⁸. Government Of India : *Report On Survey of labour Conditions in Jute Fabrics In India*, Labour Bureau, Ministry Of Labour, 1971.

⁹. Sen, S: *Economic And Political Weekly*, February 26, 1983, pp. M-42.

¹⁰. Government of West Bengal, *Labour In West Bengal, 1987*, Directorate of Labour.

Quite a number of mills lying closed for prolonged periods have recently opened with new ownership, and these owners pay reduced wages as compared to the industry-wise agreed wage rate. The extent of reduction is 30 percent to 40 percent of the wages prevailing at the industry level ¹¹

c) In recent years, some jute mills are getting certain operations (sack-sewing, finishing, etc.) done by others through sub-contract. For these operations, it is not necessary for the mills to maintain their own work force. This explains the large-scale retrenchment of workers in the jute mills in recent years. Moreover, these operations previously constituted about 25 percent of the wage-cost. By sub-contracting, it was possible for the mills to derive economies in labour costs, the amount of economy being 10 percent to 15 percent of the total wage cost in many mills. ¹²

The net result of all these attempts made by the millowners with respect to labour cost reduction is that

¹¹. According to some jute labour unions in Calcutta. No firm estimate of such sub-contracting exists.

¹². Rough estimates of jute labour unions in Calcutta. Firm estimates are not available. There are also wide inter-firm differences in this as in other matters.

Table 4.9
Wage costs as percent of total cost of production of jute goods (ex-factory) (1988-'90) in jute mills in West Bengal

Sl.No.	Mill code	Wages as percent of total cost of production	
		1988-'89	1989-'90
1.	Mill A	15.8	14.1
2.	Mill B	40.4	34.6
3.	Mill C	25.1	22.7
4.	Mill D	31.9	27.5
5.	Mill E	32.8	29.7
6.	Mill F	34.2	30.1
7.	Mill G	33.7	25.9
8.	Mill H	33.2	30.0
9.	Mill I	34.2	28.9

Source: *The Economic Times*, Calcutta, August 23, 1991; pp. 7.

wages as percent of total cost of production declined in 1989-'90 over 1988-'89 (Table 4.9). It is, therefore, concluded that even if the wage cost is rising¹³ and constitutes a more significant portion of the total cost than in earlier decades, as is evident from the company balance sheets, still the jute barons are able to minimise it through various routes, and ensure a profit to them.

4.5. Conclusions

The Indian jute industrialists, as the above discourse suggests, acted with a short-term perspective. This has been reflected in their attempt to earn a

¹³ The percentage of wage cost to total cost of jute manufacturing rose from 12 percent in 1960 to 33 percent in 1986 [Singh, 1964; Jute Manufacturers Development Council (Official Documents)].

handsome profit from the industry which still employs a large part of its resources and capacities to produce its traditional products and is facing a demand constraint, just by reducing various components of variable costs as far as possible. In other words, the firms in the jute industry depended essentially on the adaptive strategy to make adjustment within the limits of a given technology and organisational set-up. They relied only on minimising variable costs and abstained from developmental investment on product as well as process innovations. This leads us to consider the factors that explain the failure of the jute industrialists to adopt a long-term perspective. This has been dealt with in the next chapter.