

CHAPTER-III

AGRO - BASED CRAFTS

A systematic survey of spread of various crafts into the different parts of rural Bengal exhibits that proto-industrialization was a widespread phenomenon. Writing of crafts in the late 18th and early 19th century, Ghosal observed that most of the crafts of Bengal were organized on a domestic basis, although some state kārkhānas did exist¹. There were similarities as well as diversities in the organization of different crafts of Bengal. Hence, it would be pertinent to study the various crafts separately in order to bring out their specificities and the changes that might have occurred during the period under study. It might help us to identify the factors which caused these changes. Since the manufacture of cotton textiles was the most important source of livelihood only next to agriculture and most widely spread of all industries in India, an attempt will be made to discuss various aspects of the mode of production of cotton textile industry first.

Agro-based proto-industries had deep rooted and wide spread in the 'pull', 'pull corridor' and some of the parts of 'neutral' areas of rural Bengal. Minor agro-based proto-industries were also found in the 'push' and 'push corridor' areas of rural Bengal. Some of the parts of the 'pull' and 'pull corridor' areas of rural Bengal were specialized in some agro-based proto-industries while other parts specialized in some agro-based proto-industries depending on the availability of raw materials. In 'neutral', 'push' and 'push corridor' areas of rural Bengal, agro-based proto-

1. H.R.Ghosal, Economic Transition in the Bengal Presidency, (Calcutta, 1966), p.1.

industries were sparsely established because of the non-availability of raw materials, difficulty in transportation, sparse population, etc.

The proto-industrial producers of these regions had double occupations during most of the parts of the year. During sowing and harvesting seasons they had to work in agriculture for their livelihood and during off times they worked in different agro-based proto-industries for an extra earning.

COTTON INDUSTRY

HISTORY

The birth place of cotton manufacture is India.² The origin of the cotton craft can be traced back to the Harappan Civilization in the finding of numerous spindle whorls from the houses of Mohenjodaro which attest to the practice of spinning by the rich and poor alike. Fragments of finely woven madder-dyed cotton fabrics were discovered at Mohanjodaro. Recent excavations at Alangirpur (Distt: Meerut, U.P.) produced important evidence regarding cloth.³

2. Edward Baines, History of the Cotton manufacture in Great Britain, (London, 1835), p.9.

3. For a detailed examination of the evidence see Indian Archaeology, 1958-1959, p.52. Also see M.K. Pal, Crafts and Craftsmen in Traditional India, (New Delhi, 1978), p.61. These evidences were provided by impressions on a trough. The yarn used in producing clothes seems to have been fairly fine, though not of uniform section. The technique applied was of plain weave, few scraps of cotton were found out sticking to the side of a silver vase. Chemical examinations of these silver vase show that the coarser varieties of cotton was utilised. Marshall maintains that "this discovery which is one of the most interesting of their minor discoveries made at Mohanjodaro, disposes finally of the idea that the fine Indian cotton known to the Babylonians as Sindhu and to the Greeks as Sindon was a product of the cotton tree and not a true cotton." For this see, S.P. Gupta (ed.), Costumes, Textiles, Cosmetics and Coiffure in Ancient and Medieval India, (Orient Publishers, Delhi, 1973), p.3.

For warmer textiles wool was utilised while for lighter one the cotton. The reference of cotton textiles as the customary wear of the Indians was repeatedly made during the time of Herodotus, the father of History, around 445 B.C.⁴ Nearchus, the Admiral of Alexander the Great (327 B.C.) the observant navigator of the river Indus, whose memoirs have been substantially preserved in Arrian's History of Alexander, mentioned a kind of garment which was manufactured by the product of a tree much more whiter and finer than flax. This, he, probably recognised as cotton. Strabo, in his account of the Indians, referred to the flowered cottons or Chintzes and also celebrates the various and beautiful dyes with which their clothes were figured on the authority of Nearchus. It was Arrian who for the first time mentioned cotton as an article of trade in his valuable record of ancient commerce, called The circumnavigation of the Erythrean Sea.⁵ In 73 A.D. Pliny was aware of the trade and manufactures of India.⁶ The muslins of Bengal were then of superior quality and the Greeks named it as gangitiki after the sacred Indian river the Ganges.⁷

Ralph Fitch who visited Bengal in 1583, mentioned that the best and the finest quality of cotton cloth was produced at Sonargaon. Abū-l Faḡl also describes the manufacture of a very fine specie of muslin in great quantities at Sonargaon.⁸ Bengal

4. Edward Baines, loc.cit., p.17.

5. Ibid., pp.18-22.

6. Milburn, Oriental Commerce, Vol.2 (London, 1813), p.229.

7. Edward Baines, op.cit., p.23.

8. Abū-l Faḡl, Ā'in-i Akbarī, Vol.II, p.124. (Jarret's edition) Moreland has also quoted Abū-l Faḡl. See his, India at the Death of Akbar: An Economic Study, (Sunita Publication, Delhi, 1987), p.170.

calicoes formed a considerable part of the Portuguese exports to Europe during the 16th century.⁹ The cargo of the Carrack taken by the English in 1592 consisted of calico lawn, broad white calicoes, coarse white calicoes, brown broad calicoes, canopies, towels, quilts and calico carpets etc.¹⁰ Robert Orme in 1752 regarded the cotton manufacture of Bengal almost as a national industry in which man, woman and child participated considerably.¹¹ John Crawford talking of the muslin production of Dacca in 1830-31 maintained that the fine variety of cotton was produced in the neighbourhood of Dacca in the vicinity of the River Meghnā and its growth extended to about 40 miles along the banks of the Meghnā and about 3 miles inland.

CULTIVATION, VARIETY AND QUALITY OF COTTON IN BENGAL

The cotton plant described as Gossipum herbacium differs from the common cotton plant of Bengal.¹² Its different qualities are known as Phootee or Photā, narma, and biretta. In Bengal most of the districts produced different kinds of cotton.¹³

9. Dibendra Bijoy Mitra, The Cotton Weavers of Bengal, 1757-1833, (Calcutta, 1978), p.9.

10. Milburn, op.cit., p.230.

11. Robert Orme, Historical Fragments of the Mughal Empire, (London, 1905), p.409.

12. James Taylor, A Sketch of the Topography and Statistics of Dacca, (Calcutta, 1840), p.130. It is different in respect of branches more erect, with fewer branches and the tubes of the leaves more pointed, its radish colour even the petiole and nerves of the leaves are less pubescent, longer peduncles etc. The staple of the cotton is longer, much finer and softer.

13. N.K.Sinha, The Economic History of Bengal From Plassey to the Permanent Settlement, Vol. I, (Calcutta, 1956), pp.103, 104-109. In Malda and in the aurang attached to it three sorts of cotton were produced: barrabunga, biretta and narma. The barrabunga was soft and excellent. The biretta was inferior to the narma. Three kinds of cotton were produced at Birbhum called the narma, the muhree and bogga. Narma of Birbhum was the best quality. At Radhanagore also three types of cotton were grown called Kaur, the muhree and the bhogee. The shape of the first was the best as it united strength with softness. In Hariyal Dessy, byratty and bhoga were produced.

In a whole year two crops were raised and they were gathered in April and September. The produce of the first season was the finest and is chiefly cultivated. The high lands were considered appropriate and were selected for this crop.¹⁴ The cotton yielded on the high lands in the month of April were not considered so good as that of the vernal one and its inferiority was attributed to the vegetation of the plant being more rapid and, therefore, more weak.¹⁵ Its fibre was warty and swelled on bleaching. The average price of undressed cotton in the district had been Rs. 3 per maund of 80 lbs. in the year 1789 and the net profit was meagre. In 1789 the price of cotton at Dacca was from 4.5 to 6.5 rupees per maund.¹⁶

Mr. Bazley postulated that the "Indian cotton is always of a rich creamy colour, and for its colour it is frequently used as a mixture to improve the colour of the worst or low American

14. James Taylor, A Sketch of the Topography and Statistics of Dacca, (Calcutta, 1840), pp. 131-132. Such lands were ploughed from 8 to 12 times, upto September and October when the seeds were sown. This was done in parallel rows, distant about a cubit from each other and thereafter they were moistened with water. The seeds for sowing were picked up carefully, dried in the Sun and were preserved in earthen pot well oiled, with its mouth stopped up, so as exclude the external air, were generally hung up to the roof of the hut where the fire was usually kindled. It impoverished the soil and the same field never produced successively more than two crops of good cotton. That was why land was required and allowed to lie fallow every fourth year. The northern division of the district produced the best cotton and was said to swell less than the produce of other parts of the country.

15. James Taylor, A Descriptive and Historical Account of the Cotton manufacture of Dacca in Bengal, p. 14.

16. J.F. Royle, On the Culture and Commerce of cotton in India and elsewhere, (London, 1851), p. 40.

cotton.¹⁷ It was better in dye, its thread swelled in the process of bleaching, hence the cloth produced out of this cotton became more substantial in appearance. The value and quality of cotton depended on the length, strength, fineness, softness and equality of the fibre; which were modified by colour and cleanliness, that is freedom from knots and impurities, so that there may be less waste in spinning.

The quality of the cotton might be divided into four qualities - ordinary, middling, fair and fine. It was subdivided into the following categories: inferior, ordinary, middling, good middling, middling fair, fair, good fair, fine or good and fine.¹⁸ By mixing different short together, and by careful management in preparing the mixture for spinning, the manufacturers could make

17. See J.F. Royle, *Ibid.*, pp. 22, 23, 127. While the fibres of cotton were drawn out of the mass, it demonstrated many irregular twists to give them a jointed appearance. Under the microscope the fibre appeared to be continuous, moderately twisted, flat, ribbon-like, clear and transparent in the middle, and opaque towards each margin. The finer and more uniform the fibre and more inclined to twist, the better is suited for spinning into fine yarn. But if the fibre were short, broad and formed of flimsy ribbon, they were less suited for machine production, though they yet, be twisted into thread by the delicate fingers of the Hindu. Also see, Letter from the Secretary to the Court of Directors to the Secretary to the India Board, dated the 5th Sept. 1828, Reports and Documents connected with the Proceedings of East India Company in regard to the Culture of cotton wool, silk and indigo in India, (London, 1836), p. 350. Those cottons were produced in the neighbourhood of Dacca to the eastward covering the areas of Sonargang, Shitalbarry, Bajitpur and Junglebarry etc. The thread made of cotton produced to the South-east by Narayanpur, and Kanpur, swelled in bleaching but less than the Hindustan cotton. The thread of the produce of the country west and northwest from Dacca which covered the areas of Dimroy, Attya, Cogmaria, Harriyal, Radeshyr and Boosney, swelled much in bleaching, more especially if it be hard twisted. Also see W.N. Hunter, A Statistical Account of Bengal, Vol. VI, (London, 1876), p. 240. The Chittagong cotton was supposed to have possessed the facility with which it took colour in dyeing.

18. J.F. Royle, loc.cit., p. 128.

a substitute for almost any particular kind of cotton, except the very best. The long shaped cottons were generally used for the twist or warp, and the short shaped for the weft.

The Indian cottons appeared under microscope as less spiny, few flattened cylinders, with many flimsy ribbons and warty excrescence varying in diameters from $\frac{1}{600}$ th to $\frac{1}{1000}$ th of an inch, some are even $\frac{1}{1500}$ th to $\frac{1}{2000}$ th of an inch. In length differing from $\frac{17}{20}$ ths to $\frac{11}{10}$ ths of an inch.¹⁹ The strength of attachment of the fibre to the seed determined the quality of cotton.²⁰ In the same variety of the cotton the percentage of clean cotton varied depending upon the season, the time of picking, the mode of cleaning and other accidental causes.²¹

IMPORT OF COTTON INTO BENGAL

The quantity of cotton grown in the Bengal province did not equal 1/8th part of the quantity worked up there into piece goods.²² The weavers during our period depended upon the supply of

19. Ibid., p. 131.

20. See Dr. Forbes Watson, Report on Cotton gins and on the clearing and quality of Indian Cotton, part I, Summary and Conclusions, (London, 1879), p. 2. The strength of the attachment of the fibre to the seed is the fundamental element in determining the degree and magnitude of injury. Actually, it is well noticed that the strength of the individual filaments varies in different as well as same varieties of cotton. The more tenaciously the fibre adheres to the seed, the greater must be the strain to which these weak fibres are subjected and finally, the greater their liability to injury. The leaves of the native plant are smaller and more friable.

21. Dr. Forbes Watson, Report on Cotton gins and on the cleaning and quality of Indian Cotton, Part II., (William H. Allen and Company, London, 1879), p. 199.

22. Letter from the Secretary to the Court of Directors to the Secretary to the India Board dated the 5th Sept., 1828, Quoted in the Report and documents connected with the proceedings of the East India Company in regard to the culture of cotton wool, silk and indigo in India, (London, 1836), p. 122.

cotton from different areas of the country into Bengal which formed, 7/8th of the quantity used in their various manufactures.²³ Bengal including Benaras imported 4,50000 maunds of cotton. 1,80000 maunds were contributed by the produce of the Deccan whereas 2,70000 maunds from the northwards, principally from the Raja of Calpee. Out of this Benaras required 40,000 maunds annually for the manufacture of finished commodities.²⁴ The remainder i.e. approximately 4,10,000 maunds were required for Bengal, Bihar and Orissa. Cotton was also imported from Sūrāt, Baroch, Mirzapur, Arakan, Garrow and Tipperah Hills.²⁵

23. Extract Report of the Import and Export trade of Calcutta, 1st June, 1799 to 31st May 1800, Ibid., p.17.

24. Extract summary report on the cotton trade of India. Fort William, 30th April 1802, Ibid., p.22.

25. See N.K.Sinha, The Economic History of Bengal, Vol. I, (Calcutta, 1956), p.103. Malda produced 40,000 maunds of biretta and nama kind of cotton of which about 10,000 maunds were exported. The import cotton in the district from Mirzapur amounted to 6,000 to 8,000 maunds and the rate varied from Rs.12 to Rs.15 per maund which increased to Rs.22 and Rs.24 per maund in 1788. In the Maldaur aurang at the foot of the Bhutan hills, at a place called Raniganj the hill people brought about 1500 maunds of kapās of the quality inferior to barrabang and superior to biretta and nama and cost sonaut Rs.7 - 8 or Rs.8 per maund of 92 sicca weight. The import of hill cotton from Bhootany Assam and Rangamatty amounted to about 18,000 maunds. Other districts of Bengal province also imported cotton from different parts of the country. Also see Extract summary report on the cotton trade of India, Fort William, 30th April 1802, Ibid., p.22. Also see James Taylor, A Sketch of the Topography and Statistics of Dacca, (Calcutta, 1840), p.165. The cotton imported from Mirzapur yielded the thread for the baftās, hammāms and other assortments of cloth of an inferior quality. The Arakan cotton ranked next to Mirzapur and was imported in small quantity. Bogha cotton produced at Garrow and Tipperah Hills was utilized for the manufacture of the coarsest description of cloths.

ORGANISATION OF THE COTTON WEAVING INDUSTRYMUGHAL PERIOD

Most of the crafts in India were caste-occupations, based on the law of Karmā²⁶. However, in respect of cotton weaving, things were somewhat different. The caste system was not the 'decisive determinant'²⁷ of the shape of production organisation in the cotton industry. There were other factors as well which played a role in shaping the production organisation in the cotton industry.

The Sultāns of Delhi brought about various crafts techniques and practices with them and introduced them into Indian soil. These newly established crafts and increased demand for cloth manufacture were accompanied by, firstly, the immigration of artisans and merchants from the Islamic east to India and secondly, by large scale of enslavement²⁸.

It was the Sūfism that played a vital role in the process of peaceable and forcible conversion²⁹. The converts mostly came

26. A man's status in this life is determined by his action in past life. Caste was thus supposed to be a divinely ordained social system, under which every individual was born to a fixed status of existence, to which were assigned a fixed occupation and a fixed status. See B.B. Misra, The Indian Middle Classes - Their growth in Modern Times, (Oxford University Press, Delhi, 1983), p. 50. The concept of purity and pollution included both acquired and inborn pollutions. The latter determined the rank and accounted for the differences among human beings. See Gerald D. Berreman, Caste and other inequalities: 'Essays on inequality', p. 319.

27. Dibendra Bijoy Mitra, The Cotton Weavers of Bengal, 1757-1833, (Calcutta, 1978), p. 38.

28. Irfan Habib, "Non-Agricultural Production and Urban Economy", Tapan Raychaudhuri and Irfan Habib (eds.), The Cambridge Economic History of India, Vol. I, C. 1200-C. 1750, pp. 76-96.

29. There were 12 Sūfī silsilas in India: Chisti, Shuhrawardi, Firdausi, Suhudi, Shattari, Mahadavi, Raushanuyah, Qadiri, Isra'īlī, Mujaddidis and Naqshbandi.

from the various artisan class, craftsmen, the village menials and the peasants. Further stimulus was provided to the process by Bhakti movement of the 15th and 16th centuries.

The early system of production of cotton textile was based on small independent producer, working with his own capital and labour and directly dealing with customers in his village. In the presence of direct dealing the possibility of fraud was very small. The craftsman was, of course, a master craftsman and had apprentices under him who were paid small sums as wages. Such a system was also functioning in urban centres.³⁰

Two types of workers can be traced in such production system: first, the highly skilled, rich artisans who manufactured luxury goods; second, comparatively poor artisans not specialized artisan who catered for the demand of the local markets. The former craftsman was essentially a master craftsman, employed apprentices and journeymen on small wages, possessing two or three looms.³¹ Before the 1st half of the 18th Century the craftsman as an independent figure, combined in himself the various functions of employee, merchant, foreman and even workman. These goods were

30. Debendra Bijoy Mitra, The Cotton Weavers of Bengal, 1757-1833, p.39. He quotes Baines in opining the processes of cotton production who believes that cotton production were not divided among different groups. In the earliest stage of cotton industry i.e. in the earliest stages of the guild, there was little division of labour. But this system of production organisation was changed with the change in demand and market conditions. Also see Ishwar Prakash, "Organization of Industrial Production in Urban Centres in India during the 17th Century with special reference to Textile," B.N. Ganguli (ed.), Readings in Indian Economic History, Proceedings of the First All India Seminar on Indian Economic History, 1961, (New Delhi, 1964), p.48.

31. See Iswar Prakash, Ibid, p.48. Also see Debendra Bijoy Mitra, loc. cit., pp.39-40. In Dacca for example production was carried by small master weavers. These weavers employed boys of 14 years of age as apprentices, as said by Taylor. See Taylor, A Descriptive and Historical Account of the Manufacture of Dacca in Bengal, p.78.

then transported to urban centres and sold to merchants. Here, the role of intermediary merchants gained importance, which appeared during the reign of Alā'u'ddīn Khaljī (i.e. 13th Century). "Some of these merchants might themselves be engaged in trade in these goods, while others bought them on inventory for sale to other merchants."³²

In course of the 16th and the later half of the 17th Century this production system was changed and only a small proportion of the total marketed output was produced in this manner. Now, the bulk of the production was organised on the basis of agreements among the European Companies and other merchants, merchant-middlemen and weavers, specifying details such as the quantity to be produced, the price and the date of delivery. A substantial part of the final value of the contract was usually offered in advance to the weavers to purchase raw materials and to maintain his family expenditure during the period of production. Advances were made either in cash or in raw materials. The

32. The System of brokerage (dālāl system) appeared first during Ala'u'ddin Khaljī's period. The brokers operated between merchants and customers and raised prices unduly. It was against this class of people that Alā'u'ddīn Khaljī took severe actions. See for details Irfan Habib, "Non-agricultural Production and Urban Economy" Tapan Raychaudhuri and Irfan Habib (eds.), The Cambridge Economic History of India, Vol. I, C. 1200-C. 1750, (Delhi, 1982), p. 86. Om Prakash believes that several varieties of 'comparatively coarse cloth were produced in the district of Malda for eventual sale to merchants engaged in trade with Pegu, North India (Hindustān) and Persia, traditionally important markets for these varieties. See his, The Dutch East India Company and the Economy of Bengal 1630-1720, (Princeton University Press, 1985), p. 98. D. B. Mitra believes that 'about 1700 A.D. when the demands for foreign market was limited, which is a futile generalization because Portuguese, Dutch, English, French, Danes and other Asian merchants had already established their trading relationships with Bengal, See his Ibid, p. 40.

artisans had nothing to do with the capital involved in the business.³³ This production organisation involved three important elements: first, the weaver's need of finance; second, the relative lack of access to market and finally, a desire on his part to avoid risks arising out of his inability to forecast correctly the behaviour of the demand for a given variety of textiles. It were the proliferation of the aurangs and the emergence of new markets with increased demands for varieties of patterned, designed and coloured cloths, that increased importantly the operation of contract system.

The contract system replaced the independent producers by a superior called mahājan, who was more a merchant rather than the producer and who provided part of the necessary working capital. The mahājans used to make advances to the weavers for the supply of cloths at a fixed rate. Before the arrival of the English, Dutch, etc. in Bengal, the Asian and the Portuguese merchants never fixed a definite price of the commodities, they ordered at the time of advances and fixed the prices of the products only at the time of delivery. It were the European Companies, who fixed the price on basis of samples at the time of giving dāñī.³⁴ The

33. The Contract System through merchant middleman was intensified in Bengal only during the later half of the 17th Century. Manrique said that Patna alone contained over 600 brokers and middlemen engaged in commerce. See Ishwar Prakash, "Organization of Industrial Production in Urban Centres in India during the 17th Century with Special reference to Textile," B.N. Ganguli (ed.), op.cit., pp.48-49. Also see Om Prakash, The Dutch East India Company and the Economy of Bengal, 1630-1720, p.98. Sushil Chaudhari also talks about Contract System in his, "Textile trade and Industry in Bengal Subah, 1650-1720," IHR, Vol. I, No. 2, (Sept, 1974), p.273.

34. Sushil Chaudhari, "Textile Trade and Industry in Bengal Subah, 1650-1720", IHR, Vol. I, No. 2, (Sept, 1973), p.275.

mahājan was assisted by pāikārs, the travelling agents, who went about the country advancing money to weavers. The pāikār was assisted by mukeems, who specialized in inspecting the making of cloths. The mahājan also extended money on loan at varying rates of interest depending on the nature of business. The mahājans exploited artisans because of their stern poverty.³⁵

The contact system of organization of cotton textile production, sometimes equated with European putting out system markedly differed with each other. The differences between the two can be recognised in following terms: in the European case it was the merchant capitalist who provided the necessary raw materials, and the money payment made to him was only an advance on his wages. In case of Bengal, the artisans retained their independent status, buying his own raw materials and exercising formal control over his output until it changed hands. He for the most part remained as 'price worker' and was not reduced to the status of 'wage worker'. The merchant could have a claim on the output and debt obligations, that was subject to coercive control by the merchants.³⁶ In the contract system, therefore, the merchant middle man had little control over the quality, size and quantity of production; whereas in putting out system merchant capitalist had³⁷ full control over the production organization, quality and quantity. Here the proto-industrial system of Bengal lagged behind the

35. D.B.Mitra, op.cit., p.40.

36. Om Prakash, The Dutch East India Company and the Economy of Bengal, 1650-1720, (Princeton University Press, 1985), pp.98-99.

37. Sushil Chaudhari, loc.cit., p.273.

European proto-industrial system in terms of control over the production organization, which was undoubtedly a major stimulant factor in the direction of technological innovations, its application to production process etc. Actually, in putting out system it were the merchant capitalists who bore the responsibility for all the risks and the production in a given time, its delivery to the purchasers in a given time, etc. Thus, it was the supply factor on the part of the putter-out capitalists that made transition to a centralized production system which in turn led to industrial capitalism. In the contract system labour cost was very low that made the textile manufactures of Bengal highly competitive in the world market. If the cloths were purchased directly from producers rather than through intermediary the cost advantage in case of coarse cloth from Māldāh town in 1670 would be between 12% and 15%. The mark-up by the merchant would, of course, be substantially greater under the contract system to compensate him for the additional risks borne, which were not inconsiderable.³⁸ The appropriate evidence regarding 'weavers costs' and the 'merchants' 'mark-up' is certainly so meagre that it is very difficult to draw any conclusion from it. As a result³⁹

38. On Prakash includes following risks into it. "For example, a sudden rise in the cost of living in wake of a Famine, or the appointment of a particular tyrannical official in a given area, might lead to a mass migration of the poor weavers to a more convenient location, to the great discomfiture of the merchants who had entered into contracts with them and given them advances." See his, op.cit., p.99.

39. Ibid, pp.99-100. He takes examples from Van Rheed's data of 1686-1687 for three grades of khāsas, an important variety of muslin. About 2/3rds of the price obtained by the weaver covered the costs of the raw materials, and the remainder was the reward of his labour. The mark-up by the merchant was 35%, 55% and 142% in case of grade I, II, and III respectively. The Dutch factors recorded the great quality differential among the three grades.

of all these, it seems that merchants and intermediaries in contract system took least interest in production organization, technological innovations, its application in industrial production, etc. That in its turn, made the highly developed proto-industrial system of Bengal stagnant, and in the course of late 18th and early 19th centuries even the de-industrialization of Bengal's proto-industries.

The cotton manufacturing industry was wholly organised on a domestic basis. Every weaver's cottage was a little workshop and there was hardly any important village without such cottages.⁴⁰ A particular piece of cloth required the labour and skill of an entire family of eight or nine persons, from the head of the family to the little child who supplied for the different stages, the skill and strength necessary for the purpose.⁴¹ The women generally participated in the production process by spinning the thread designed for the cloths and then delivered it to the man.

The Bengali baniās worked as negotiator with authorities, as contractors with merchants, as contacts with petty producers and as experts with different professional groups. It were Europeans, who encouraged Bengali baniās and appointed them to carry on their business with different Companies in local markets and with primary commodity producers and were often termed as the

40. H.R.Ghosal, Economic Transition in the Bengal Presidency, (1793-1833), (Calcutta-1966), p.1.

41. Sukumar Bhattacharya, The East India Company and the Economy of Bengal from 1704-1740, (London, 1954), p.183.

merchant of the company.

The intermediate merchants were the essential instrument of the total investment machinery. They placed advance orders by advancing capital to weavers, dyers, cleaners and bleachers. The company employed a number of Indian merchants for providing financial assistance. The procurement system in different regions of the country functioned on a contractual arrangement between the merchants and the company by keeping a long document containing names of merchants, types of commodities, dimensions, prices and quantities, etc. The total number of such merchants dealing annually with the company varied from 20 to 40. The contract was always a collective one but each merchant was entitled to receive a share of investment according to their financial standing.

There were also established broker families to cope with the expanding demand for business deals and search for untapped centres of production and market on the part of the European companies and other merchants. This in its turn, contributed to a further development in the organisation and working system of brokerage in two respects: (1) the chief brokers adopted a new strategy by employing persons other than kinsmen for assisting their works as subbrokers and (2) there originated the institution of partnership between two or more reputed brokers. The

42. It was the handicap on the part of the Europeans in regard to local language, local production system, psychology of the rural craftsmen, behaviour of craftsmen towards Europeans, location of raw materials, lack of funds and approach to Mughal State and Bengal's nawābs, in the initial phase that undoubtedly compelled (European(s) to rely on Bengali baniās. These baniās also functioned as the agents of different companies and merchants simultaneously.

rapid expansion of market introduced a degree of specialization in the broker's functions: first, those who were the regular employees of the merchants and companies; second, who worked under more than one client simultaneously, third, those who took business on an ad hoc basis and might be called broker-contract.

It is evident from the following analysis that especially in Bengal during 17th and 1st half of the 18th century, even in embryonic form industrial middle class did not develop as had happened in this period in Western Europe. The Bengali baniās and other intermediary merchants, though instrumental to handicrafts production, did not contribute to the transition from proto-industrial capitalism to capitalism proper because they had no interest in the production process. They did not have to bear the risk due to production process, incapability in supplying the promised commodity in a given time, etc. They even did not own productive forces, building for production etc. Actually, their commission from both the parties were fixed and their income due to brokerage was sufficient. But they did not invest these vast fortunes in industrial enterprises. This, although in part, contributed to the stagnation of Bengal's highly developed proto-industrial systems.

On 28th April 1679, the Bay Council laid down some rules for providing privileges to the company. This included the following elements: firstly, the Company's investment must come first; it prohibited the private traders or any other business person to contact those weavers who usually worked for the Company, or in prohibited goods; secondly, no English man, nor his agent, should keep a particular house outside the factory for

private trade. They had to do all the business, including the receipt, packing and despatch of goods within the factory, and finally, money should be invested in places inhabited by the company's weavers without first acquainting the chief of the factory for his directions as to the weavers to be employed.⁴³ On the contrary, the chief was not to impede this business, it being a just privilege of the company's servants in Bengal, the chief had to assist all fair and just private trade.⁴⁴ But some of the high officials did not abide by the rules and regulations formulated by the company. For these officials, money making was supreme.

It were the weavers who had to bear the risks in the production process. They had to buy the raw materials, to transform it into finished commodities and finally, to supply it to merchants. If the finished products were not up to the point, they had to suffer. If the supply was delayed, their risks further aggravated. Artificial decrease in the quality of their products were made in the factories of the European Companies. The balance due to this reason on the part of weavers were great, which made them highly dependent on European companies. In this dependence servitude condition, they were bound by rule and regulation to finish first goods promised to the English East India Company. In

43. Sir Charles Fawcett, The English Factories in India, Vol. IV (New Series, Oxford at the Clarendon Press, 1955), p. 198.

44. Ibid., p. 198. In November 1681 the Company was writing a dispatch of Bengal in which they condemned Vincent for having extracted for brokerage, 2.5% of what was paid him by the buyers of all the company's silver and 2.5% on all the goods which he had bought for company. In total he yielded 5% for his personal use. He likewise interfered in the investments of Dacca, Balasore, Qassimbazar and Hughli factories.

this condition, technological innovation from below was just impossible, which is evident in the case of Bengal's proto-industrialization.

Any marked increase in the demand of Bengal's cotton products were satisfied by increasing the working hands and not the machines. This led to shortage of particular varieties and weavers failed to fulfil their contracts. As a result, weavers geographical mobility increased,⁴⁵ that stagnated the proto-industrialization of Bengal.

In Bengal, during the Mughal period a number of state kārkhānas existed for manufacturing various kinds of commodities. The craftsmen in different fields of industry were assembled in a kārkhāna which was placed in charge of a mālik over whom there was the 'State General Superintendent of Arts and Crafts'. The French Traveller, Bernier has referred to the state kārkhānas for the artisans in 1666.⁴⁶ Such kārkhānas were maintained at Dacca, Sunargong, Junglebaree and Bazatpore for the manufacture of the mulboos khās Muslin for the royal wardrobe at Delhi. These state kārkhānas were in charge of darogāh who exercised uncontrolled authority and power over all members employed in the kārkhānas. The immediate duty of darogāhs was to inspect the manufacture of all the cloths made for the Emperor's use.⁴⁷

45. Om Prakash has taken the data presented by Director de Haze. He notes that weavers were coming to Balasore from the uplands to settle down there. They were experts in making good malmals, khasās etc. of which the merchants have shown us some samples. 'See Om prakash, The Dutch East India Company and the Economy of Bengal, p.101.

46. Bernier, Travels in India, (Oxford, 1914), p.259.

47. This point has been borrowed from Dibendra Bijoy Mitra who has taken from Proceedings of Board of Trade, 1st Dec., 1806, Vol. 156, op.cit., p.41.

Most of the weavers appointed to these state kārkhānas were the most experienced and expert weavers in the province; their names were registered and they were bound to work at the scheduled hours until the different tasks assigned to them were finished. Inspectors called mokeems were employed to carefully examine the proper standard of thread allowed to weavers to bring about with them to the kārkhānas for their looms and none was permitted to be utilised until it was properly compared and approved of.⁴⁸ These practices must have highly sharpened the skill of the weavers and effectively prohibited the weavers from committing any improper practices while manufacturing cloths. Consequently, the malmal khās manufactured for the emperor was probably of superior thread and consisted throughout the warp and woof, as nearly as possible of thread of one quality.

There were besides daroghās and inspectors, guards who were placed over any weaver, showing an unwillingness to work and corporeal punishment was inflicted on them if they attempted to abscond. The weavers were also the subject to be defrauded of a considerable portion of the wages as the share of officers and servants of the mulboos khās kutees at the rate of 25%.⁴⁹ The manufacture of jāmdāni muslins was a monopoly in the hands of the government and subsequently finest of these fabrics were reserved for the use of the nobles at Murshidābād. These fabrics were made exclusively by the weavers of the Dacca aurang. It was Nūrjahān who patronised these Dacca muslin, provided every promotion to it,

48. James Taylor, A Descriptive and Historical, op.cit., p.82.

49. Ibid., p.83.

and after whose days it was adopted as the fashionable dress of the Mughal nobility.⁵⁰ The weavers were advanced by the darogāh of the sudder mulboos khās kootee at Dacca. The merchants were obliged to purchase indirectly through intermediary appointed by the Government. These agents had to pay a regulated sum annually to the government for these privileges and in return they charged a percentage on all sales made by them. A tax recognised as chappa jāmdāni was also levied on the weavers of this sort of muslin and continued to be collected till the year 1792 when it was abolished.⁵¹ One other form of exploitation of the weavers was in vogue in the form of the mulboos khās investment which formed a part of the naẓr presented by the governor of Bengal to the emperor at Delhi.

In the state kārkhānas repair work were also undertaken. The artisans in the state kārkhānas worked with raw materials supplied by the state into fully manufactured goods fit for use. They were the salaried servants of the state and were paid directly from the state treasury.⁵² The artisans who accumulated capital through any means had, in course of time, opened up their own kārkhānas where other artisans were working on the wage basis. These kārkhānas functioned on the pattern of royal kārkhānas.⁵³

In the state kārkhānas also there was little prospect to technological innovations. These kārkhānas were established to

50. S. Bhattacharya, op.cit., p. 184.

51. James Taylor, Descriptive and Historical, op.cit., p. 84.

52. Dibendra Bijoy Mitra, op.cit., p. 42.

53. Shiv Chandra Jha, Studies in the Development of Capitalism in India, (Calcutta, 1963), pp. 36-43.

satisfy imperial as well as elites needs, the production cost in these kārkhānas was very low, risk factors were negligible, supply factor was not very important as most of the workers were working on part-time basis and hence, the chances for technological innovations was very little. Here, also the prospect of centralized system of industrial production for transition to industrial capitalism proper was meagre or negligible.

NAWAB PERIOD

The term 'factories' in English, or the Dutch 'factorijen; with and without fortification were descended from the Portuguese trading agencies or feitorias, which were scattered along the African and Asian sea coasts', beginning with the castle erected at Argium in Morocco in 1445 and ending with the feitoria at Nagasaki in Japan in 1570! The feitorias had much in similarities with the medieval Fondachi, the Geneose and Venetian merchant's residential quarters in the Muslim sea ports of North Africa and Ottoman harbours. But, in India it is quite possible to associate this tradition with a mound called Farangi dibba (the foreigners mound) at Pedda Ganjam in the Krishna district of Andhra Pradesh with Geneose or Italian traders who had established a settlement there in A.D. 1224.⁵⁴

54. Owen C. Kail, The Dutch in India, (Delhi, 1981), p. 101. From the ancient times, the rulers and princes of the maritime states in the South were familiar with the institution of what has been called, 'mercantile extra-territoriality' and had permitted Arabs, Iranians, Malaysians, Indonesians and Chinese to live in separate residential districts, each under the administration of their own headman. Such settlements were ruled by a especial agreement with the local rulers. The position of these merchants and artisans was determined by the terms of the convention and not by ordinary laws of the land. In many Asiatic sea-ports including India, from Persian Gulf to the South China Sea etc. foreign traders resided in these more or less autonomous residential quarters. Some attained great wealth and influence, others were at the mercy of the ruler or his governor, local officials.

The First Portuguese settlements in India did not conform to the traditional institution of extra-territoriality, because they were more than commercial. The early Portuguese commanders in India insisted on obtaining territorial concessions, or they seized territory, not as merchants but in the name of Portugal with exceptions in case of their settlements at Hughli and San Thome. But, within a little span of time they assumed sovereignty due to their formidable naval power.⁵⁵ Factory system in India on an intensified scale commenced in the later half of the 17th century.

The factories and aurangs were scattered throughout the province. These were no better than agencies or mere establishments for securing supplies.⁵⁶ The Council in Calcutta exercised direct control over the chiefs and subordinate officers of these factories and compelled them to furnish securities for their good conduct.⁵⁷ Generally, at the commencement of each year the Council at Calcutta despatched to the respective factories lists of investments, samples of cotton piece goods to guide them in selecting goods and also bullion and money for the payment. The Company always attempted to keep the merchants under effective control by applying various measures. This consisted of obtaining securities for the money advanced to them, imposed penalties

55. Ibid., p.102.

56. H.R.Ghosal, Economic Transition in the Bengal Presidency, (1793-1838), p.1.

57. Dibendra Bijoy Mitra, op.cit., p.45.

in case of deviation from honouring the contracts in time, warned them against the supply of inferior quality, insisted on settlements of accounts in the English factories not admitting any arbitration in this and sometimes even holding the securities responsible for payment of the dues in arrears.⁵⁸ Sometimes, on failure of contracts, the merchants were put in confinement.⁵⁹

In spite of all these, the merchants often failed to supply the full quantity of goods according to the terms of contracts and usually demanded larger advances.⁶⁰ That was why, the Court of Directors about the year 1746 instructed the members of the Council in Calcutta they should make very little advances by procuring goods at ready money.⁶¹ The merchants replied in negative terms. They held that without 'dādān', they were unable to provide goods. They received dādān only on some selected articles and they had to provide most of the commodities for ready money. They further postulated that in absence of dādān it would be impossible for the Company to get cloths for investment. Since there were certain qualities of cloths which did not yield profit rather caused losses even when full dādān was advanced upon them, for example, for the coarse cloths, the Company was not willing to advance dādān. The dādānī merchants were willing to accept $\frac{1}{2}$ part of the investment in ready money, the remainder they

58. Letter to Court, 11th Dec., 1741, Quoted in K.K. Datta's Studies in the History of Bengal Subah, pp. 123-124. Also quoted in the Introduction of Fort William - India House Correspondence (Public), Vol. I, 1748-1756, (ed.), K.K. Datta, (Indian Record Series, Delhi, 1958).. p. XL.

59. Letter to Court, 19th Nov. 1748, Quoted in K.K. Datta's Studies in the History of Bengal Subah, p. 124.

60. Letter to Court, 11th Dec, 1741, See Fort William-India House Correspondence, Vol. I, 1748-1756, (ed.).. K.K. Datta, p. XL.

61. Letter to Court, 30th November, 1746, Quoted in K.K. Datta's book, op.cit., p. 116.

demanded in the form of dādnī⁶².

Till 1753, the French Company's investment was accomplished in Bengal by the same dādnī merchants who also provided, the investment of the English East India Company. But the French were offered more favourable terms because they were less scrupulous in prizing the assortments and consequently had less difficulty in procuring their investment. That was precisely the reason that dādnī merchants were less interested in conducting business with the English Company. The terms of the French and the Dutch were more lucrative to them and in many cases they refused to accept the terms of the English Company.⁶³ Many of them refused to supply the promised quantity of goods to the Company and preferred to work for the French and the Dutch.

The prizing of cloths consisted of comparing them with original samples on the basis of which contract was made. The cloths were brought to the factory where these were arranged in a chronological order according to their qualities of texture. Four classes of cloths were identified by certain alphabet. Those cloths which were admitted in fourth class were rejected. Then the Commission was admitted. The Commission was

62. Letter to Court, dated 10th January, 1747-48, Fort William-India House Correspondence, Vol. I, (ed.), K.K. Datta, (New Delhi, 1958), p. 192. Later on 13th June, 16 merchants of which 7 were new men proposed to undertake a part of the investment to the amount of Rs. 7,70,000 on the following terms. They demanded 50% to be advanced on dādnī basis and interest to be also allowed till it was paid from the time of signing the contract. 35% more to be paid them when their goods were prized and interest to be allowed thereon from the 1st October. This meant that they demanded only 1/3rd of their investment in the form of ready money.

63. Dibendra Bijoy Mitra, op.cit., p. 47.

varied according to whether the cloths were advanced for or were purchased ready made at the fairs. At the former about 8% and on the latter about 4.5% were allowed to dādnī merchants excluding various other expenses amounting in aggregate to an additional charges of 7%.⁶⁴

From the above survey it is possible to postulate that the system of issuing advances to the weavers through dādnī merchants from Company's economic point of view undoubtedly provided the most important mode of securing their investment. This system was advantageous to the English East India Company because it ensured the supply of a required quantity of goods of a standard quality within the given time. It prevented fluctuations in prices. But the system left the weavers in a state of complete economic dependence upon the Company and in many cases they lost the incentive to work.⁶⁵ The Company's servants were at liberty to reject any number of pieces by assorting them below the contracted standard and the price of such pieces were either deducted or set off as outstanding balance against the weaver concerned.⁶⁶ The rates at which the agreement was made between weavers and dādnī merchants were extremely low. Although the price of labour steadily rose during the 20 years from 1793,⁶⁷ the proportional increase in the price of cloth was really meagre.⁶⁸ In settling the prices with the weavers, dearness of grain or of raw materials,

64. James Taylor, Descriptive and Historical, op.cit., p.88.

65. H.R.Ghosal, Economic Transition in the Bengal Presidency, (1793-1833), (Calcutta, 1966), p.8.

66. Bengal Board of Trade (Commercial) Cons., May 7, 1793 and May 8, 1818.

67. Bengal Board of Trade (Commercial) Cons., May 7, 1793. Quoted in H.R.Ghosal's, 'Economic Transition in the Bengal Presidency, (1793-1833), p.8.

68. Bengal Board of Trade (Commercial) Cons., June 1793 and also Bengal Board of Trade (Commercial) Cons., March 13, 1794.

was not taken into consideration.

Some kinds of manufacturing activities were performed in the European factories. In the Dutch factories of Bengal European as well as Indian artisans worked under the supervision of a Dutch foreman. Similar activities were followed in the English factories as well. The manufacturing activities in the factories were related to axillary trades. Dyeing, bleaching, printing etc. were practised in these factories. Frames, printing blocks, looms etc. were produced. Sample production checked and inspections carried out to ensure that the cloth made in Bengal was of the same standard as the material required.⁶⁹

Through this manufacturing method again the possibilities of making transition from a highly developed proto-industrial system to industrial capitalism were extremely meagre or completely absent. The explanations are many and varied.

The factors noted in 1690, "The increase of our revenue, is the subject of our case as much as our trade; it is that must maintain our force when twenty accidents may interrupt our trade; it is that must make us a nation in India ... and upon this account it is that the wise Dutch, in all their general advices that we have seen, write ten paragraphs concerning their Government, their civil and military policy, warfare and the increase of their revenue, for one paragraph they write concerning trade."⁷⁰ If this

69. Owen C. Kail, The Dutch in India, pp. 110-111.

70. From this passage Sir Alfred Lyall deduced that Englishmen's purpose by now became quite clear, was to establish "Such a politic of civil and military power and create and secure such a large revenue, as may be the foundation of a large, wellgrounded, sure English dominion in India for all time to come." See letter to Fort St. George, Dec. 12, 1687, quoted in Sir Alfred Lyall, The Rise and Expansion of the British Dominion in India, (London, 1913), pp. 48-49.

was precisely the innate aim of the Britishers in India from the late 17th and early 18th centuries, they would not think of promoting indigenous inventions and its application in indigenous industries. They did use up-to-date techniques in their factories in Bengal in regard to colour, dye, packing and baling etc. Even these techniques in these trades were kept as top secret. The European foremen in their factories did not teach their fellow men to innovate such machines rather they taught them how to use these machines. They, therefore, were least interested in indigenous inventions and its applications to Bengal's industries thereby hindering the transition from proto-industrialization to industrialization.

The sizes, texture, pattern, designs and colour combinations of the textiles were adjusted. European Companies and private merchants normally demanded considerably larger sizes of cotton textiles which had a high demand in European markets and then was unusual in Bengal. This required resetting the looms and using new matrices. The patterns and designs that would have quite wide market in Europe were also often quite different. Initial resistance to such innovations was generally overcome by the offer of higher prices and an assured purchase of the entire output thus produced. The Europeans generally recognised Indian artisans as good imitators rather than good inventors; the Companies brought in expert weavers and dyers from Europe just to prepare samples.⁷¹

71. One such unit was opened up by the Dutch within the precincts of their factory at Hughli where experiments in new designs and colour schemes were carried out. "There were occasions when the cost of the new product turned out to be prohibitive, and others when the Indian artisans were simply unable to imitate the samples!" See Om Prakash, The Dutch East India Company and the Economy of Bengal, 1630-1720, pp. 101-102.

Not all the innovations resulting from these experiments were adopted. It was the lower cost of living in Bengal, that enabled the Companies to start manufacturing certain varieties of textiles, traditionally produced in Gujarat, the Coromandel Coast in Bengal. These attempts were hardly a success because of the unwillingness of the Gujarati and other craftsmen to share their skills with artisans in Bengal. But, in the absence of improvement in the main industry there was again little possibility to a transition from proto-industrialization to industrialization proper. In course of the later half of the 18th century these characteristics became more apparent.

COMPANY'S PERIOD

Since the dādnī merchants often failed to meet the demand of goods according to the terms of contract, the Company in 1753 abandoned this method and introduced the system of dealing directly with the weavers and artisans through the medium of her gunāshṭās.⁷² In order to keep a careful watch over the conduct of the servants, a supervisory committee was founded in 1755 with Roger Drake, the President, Charles Manningham, Richard Becher, William Frankland as its members.⁷³ The servants of the Company

72. Dibendra Bijoy Mitra, *op.cit.*, p.47. Also see J. Talboys Wheeler, Early Records of British India: A History of the English settlements in India (Vishal Publisher, Delhi, 1972), p.300. Also see Letter to Court, 18th Jan., 1754, K.K. Datta (ed.), Fort-William-India House Correspondence, Vol.1, p.762. The dadni merchants had also failed to procure the promised quality of cloths. Repeated complaints for those (bad quality) and great advance in price of the most considerable articles were recorded. They complained the bad quality of Seerbeties, alliballie, malmals, terrindams, nainsukh and Seerha-ndconnens etc.

73. Letter from Court, dated 31st Jan., 1755, p.179. K.K. Datta (ed.), Fort-William-India House Correspondence, p.85.

employed gumāshtās in like manner to carry on the inland trade.

This new method did not produce satisfactory results. The power provided to the gumāshtās and Company's agents was frequently abused for their own monetary gain.⁷⁴ That was why the Council in Calcutta had to restore the old method of entering into contracts solely with the merchants in different parts of Bengal. This necessitated the employment of various gumāshtās, pāikārs and dālāls at every factory or aurang in order to compel strict observance of the contracts by the weavers. By the year 1757, the indigenous group for whom the weavers had woven had nearly disappeared. Between 1757 and 1772, the servants of English East India Company with the help of agents and gumāshtās formulated such proceedings that prohibited the different regional merchants to have commercial intercourse with Bengal or to come to Bengal.⁷⁵ Hence, the entire economy of Bengal from 1760s to 1780s was dominated by foreign needs especially European needs.⁷⁶ The gumāshtās were working on the basis of monthly wages.⁷⁷

74. Verelst, A View of the rise, progress and present state of the English Government in Bengal, p.85.

75. Dibendra Bijoy Mitra, op.cit., p.48.

76. N.K.Sinha, The Economic History of Bengal, Vol.I, (Calcutta, 1956), p.110.

77. Dibendra Bijoy Mitra quoted it from Progs. Board of Trade, 3rd May, 1791, Vol.92. He (gumāshtā) was also given a residence in the aurang at his arrival there called cutchery. The aurang consisted of following persons: One head gumāshtā, one clerk, one cash keeper and some peons. It was in the cutchery where the gumāshtās summoned his brokers called pāikārs or dālāls with his peons and weavers. The gumāshtās made the weavers and their subordinates to sign a bond for the delivery of a certain quantity of goods at a given time and place on given rate with particular quality and then paid them a part of money in advance.

To do away with exploitation, each of the pāikārs was separately given their outstanding balances if any, with the particularities of the advance last made. It was the responsibility of the Company's officials to examine whether the pāikārs actually had received the amount for which they are debited or not.⁷⁸

The finished cloths were collected in a warehouse where it was kept marked with the weaver's name till it was convenient for the gumāshtā to assort and fix the price of each piece. The person entrusted with this work was known as assorter.⁷⁹ Here the gumāshtās and the assorter fixed the prices of the goods in all places at least 15% and in some cases even 40% less than the goods so manufactured.⁸⁰ This compelled the weavers to attempt frequently to sell his cloths privately to the Dutch and French gumāshtās who were always ready to accept it. At Dacca, the weavers fetched 20 and 30% more by working for the agents of French Company. This "occasions the English Company's gumāshtās to set his peons over the weavers to watch him and not unfrequently to cut the piece

78. Bisheshwar Prasad, (ed.), Fort-William-India House Correspondence, Vol. VI, 1770-1772, (Delhi, 1960), p. 19. This mode of the proceeding might play a central part in abolishing those frauds and oppressions formerly practised by the sarkār paymasters or their baniās in detaining parts of the advances in their own hands and obtaining from the pāikārs receipts for the whole.

79. Dibendra Bijoy Mitra, op.cit., p.50.

80. William Bolts, Considerations on Indian Affairs, (London, 1772-1775), p. 193.

out of the loom when nearly finished. " 81 Added to this, they were subject to various imposition on account of rusum demanded by the dālāls to the amount of 4 annas in the rupee. In addition, force was exerted to make the weavers to undertake the Company's business, which the weavers were unwilling to undertake. The Company also invested through foreign companies and monopolized the whole manufactures of the country. This ultimately reduced the weavers to slave status to the English.

The Famine of 1770 ⁸² had a terrible adverse effect on the total economy of Bengal in general and on the cotton weaving industry of Bengal in particular. The spinners, the weavers and the cotton cultivators of Bengal were depopulated in large numbers. ⁸³

81. Ibid., p.50. Their transaction through the dālāls of Chittagong did not fetch even the subsistence to the weavers because their loom remained idle for 10 months out of a year. And in this two months they had to produce only two pieces of cloth. Working for the others was productive of confines and fines. This oppressed state of weavers was corroborated by the letter of Director, which had occasioned many of the weavers to fling up their looms. For details see, Translation of a petition of Luckum, Mucktaram, Subram and other Jeagees, inhabitants of Chittagong, Board of Trade (Commercial) Proceedings, 1st June 1784. J.Kumar, Select Document on India Trade and Industry, (New Delhi, 1981), p. 163. Also see Letter from Court, dated 11th Nov 1768, N.K.Sinha (ed.), Fort-William-India House Correspondence, Vol.V, 1767-1769, (Delhi, 1949), pp, 138-139.

82. Letter to Court, dated 3rd Nov, 1772, Bisheshwar Prasad (ed.), Fort-William-India House Correspondence, Vol.VI, 1770-1772, p.418.

83. N.K.Sinha, The Economic History of Bengal, Vol.I, p.149. The price of cotton thread in Malda rose from 4-6 as per seer fine to 6-8 as per seer fine and Rs.2-4 per seer coarse to Rs.3-2-9 per seer coarse. Demand for Bengal cotton goods were steadily rising. In a petition at Shantipore in 1773 it is stated that "the price of yarn has been gradually rising for many years past. The number of spinners being greatly reduced by the Famine, it is now 25% dearer than formerly."

As the result of the depopulation at Dacca due to the famine of 1770, the total output of cotton goods was reduced to 1/3rd than that existed ten years before.

For saving the weavers from stern oppressions of the Company's gunāshtās, the Company's trade was thrown open from the 12th April 1773 onwards. It was declared that the weavers of the provinces of Bengal and Bihar should enjoy perfect liberty in dealing their business with persons in whom they had full faith.⁸⁴ Since the privileged inland trade in salt, betelnut and tobacco was abolished in 1768, the Company's trade in cotton piece goods could not be sustained. That was precisely the cause, that the commercial residents repeatedly complained of the adverse effects of the 'free trade' on the public trade of the Company.

For suppressing the free trade system, the company for the first time adopted the coercive major by implementing the regulations in 1775.⁸⁵ The regulation was formulated to control the

84. C.J. Hamilton, Trade Relations Between India and England, (Calcutta, 1919), p. 198. Also see, Letter from Mr Francis to Lord North, (London, 1792-93), pp. 62-64. Mr Francis opined that regulations, pretending to control the misconduct of individuals might not bear any fruit. He suggested that the investment must be made by contract, "as it was heretofore, until the general increase and improvement of the manufactures will admit of its being provided by ready money purchases." He further suggested that the employment of Europeans in the district in any form whether with or without authority or even gunāshtās with authority, must be stopped at all events. He regards it as an indispensable measure to end these malpractices in the investment and procurement process of cotton finished goods in Bengal. Also see Proceedings Board of Trade, 9th May, 1775, Vol. 3, Part II. No force should be entertained by the weavers to accept the advances. This declaration undoubtedly reduced the oppression of the weavers to some extent. This is evident from following example. The weavers at Dacca refused to work for the company, some of them refused to deliver goods and would not abide by the summons of the gunāshtās. For this see, Progs. Board of Trade, 23rd June, 1775, Vol. 3, Part II.

85. Progs. Board of Trade, 5th Sept, 1775, Vol. IV.

weavers. If the weavers had agreed to work for the Company and accepted the advances, he was to be bound with his words and had to deliver cloths accordingly. Secondly, the weavers who had balances on their account, had to fulfil those balances. Thirdly, the Company's agents had the right to place peons after those weavers who failed to deliver the cloths to the Company according to the stated period and had the right to compel them to work. And lastly, failing in performing these duties was productive of punishment through the judicial court. This system failed to produce the result for which it had been introduced. Therefore, the Board of Trade reintroduced the contract system in 1775 through the 'Agency system' which continued to be general mode for the greater part of the cloth investment till the year 1782, although the investment by contract with Indian merchants was followed in few cases. The re-introduction of contract system for providing the Company's investment was largely concerned with a change in the mode of making advances to the weavers.

Previously, half of the total amount was advanced in the first kist and the rest was given to two equal kists. In the former case, the amount was advanced with the object to enable the weavers to purchase the raw materials but the weavers showed laziness in the delivery of the goods, if delivered then not upto the mark in quality, eventually large balances began to accumulate against the weavers⁸⁶. To prevent this evil, 'monthly advances' was adopted as the effective method, with strict help from the chiefs and residents⁸⁷.

86. D.B.Mitra, op.cit., pp.56-57.

87. Progs. Board of Trade, 3rd June, 1776, Vol.7.

This was not an effective method and adversely affected both the weavers and the Company. The weavers demanded a 50% advance because the smallness of the first advance had an adverse effect on the weavers. The weavers usually purchased the essential raw materials for manufacturing cloths throughout the year out of this first advance and were deprived of the privileges of purchasing raw materials in large quantities when the prices were low with better quality. Under the new system of making the advances on 12 monthly instalments basis, they failed to avail the cheapness of the market to purchase the materials. This also prevented the intermediaries to enter into engagements with a large number of weavers simultaneously because it required large amount of capital to be invested. Thirdly, this also played an important role in delaying the delivery of cloths. Thus, large advances were extremely necessary at the commencement of the

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season.

Thus, the system of providing monthly advances was introduced in 1776 for 2 to 3 years (i.e. from 1776 to 1779), but without solution to the problem involved. Therefore, larger advances at the commencement of the season became compulsory.

During times of war, the Company was compelled to reduce the amount of investment. Under such compulsions, as in 1781, the advances to the contractors were made by issuing certificates

88. D.B.Mitra, op.cit., p.59. Also see Progs. Board of Trade, 6th July, 1779, Vol. 20. Realising these difficulties the Board of Trade repeatedly informed to the Governor-General in Council to direct them with some rational proposals. Later, the Governor-General and Council agreed to consider the proposal of quarterly payments of advances, and later agreed to the quarterly advances.

for the Company's bonds bearing 8% interest. The system of payment for investment in goods by interest notes on the treasury had been adopted since 1769⁸⁹. By April 1772, it stood at Rs.1.5 crores when Warren Hastings took charge. By 1776 the government was able to pay off completely its bonded debt. Hastings had stopped the system.⁹⁰

Under the compulsion of bonded debts, many cloth contractors felt difficulty in having the cloths without making advances into cash to the weavers and hence, they borrowed money from the bāzār at the high rate of 12% to 15% interest.⁹¹ The result was that after paying interest and meeting the discounts on Company's bonds, they had very small profit. This further made them unwilling to work for the Company. The exorbitant discount on the Company's bonds, was one of the important reasons for the low level of profit. The rate of discount was only 3% at the time of making the contract which gradually went up to 15% and the resident wanted the discount to be debited to the Company's account. Thus the weavers were without advances with engagements to the Company.⁹²

89. R.P. Patwardhan (ed.), Fort-William-India House Correspondence, Vol. 7, 1773-76, (Delhi, 1971), Introduction P. XXXII.

90. Ibid., p. XXXII.

91. Such complaints were made by Durga Charan Mitra, Ramneady Sumah, Sreemanto Ghose, Greedur Mitra, Ramkishen Halder and Radhabenode Halder etc. This is quoted in Progs. Board of Trade, 10th April, 1781, Prog. No. 17, Vol. 27.

92. Greedur Mitra, Contractor at Serampore wrote about his losses. Mr Kingley followed his example and wrote about his sufferings and difficulties at Bauleah prayed for the grant of indulgence. Dibendra Mitra quoted from Prog. Board of Trade, 1st May, 1787, Prog. No. 24, Vol. 31 in his op.cit., p. 62. During these years Company's economic position deteriorated immensely and it had no provision of investment for the year 1782-83 in cotton cloths, silk and silk piece goods. The effect of all these were that the weavers on many occasions were seeking permission to be released from the engagements to the Company and permitted to manufacture bāzār assortments.

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The weavers were not given a fair price for their labour. They were obliged to work against their will at prices arbitrarily imposed upon them. Even the English Company's men admitted that their European counterparts were prepared to pay 20% to 30% more. This attracted the weavers to work for them. Again, the prices given by the English Company remained unchanged for a fairly long time. Despite a certain rise in production cost, prices of cotton and increase of rent, the prices of finished goods remained unchanged.⁹³ It was only in 1788 that the first attempt to raise the prices of cloths was made. The commercial residents also cheated the weavers by prizing their cloths into inferior letters. The assortments consisted of six categories, and few pieces could reach the first two A and B. The English Company presumably gained by it whereas the weavers suffered, because a piece little inferior to A was prized to letter C and was paid accordingly. This system of prizing of cloths enhanced the balances against the weavers. The extortions by collectors of cloths from aurangs, gumāshtās and appraisers greatly reduced the actual receipts of the weavers.⁹⁴ The receipt of the weavers were further reduced by introduction and collection of three taxes called

93. D.B.Mitra, op.cit., pp.62-63. John Bobb increased the rate by one rupee per piece on each of the superfine, fine and broad tanjibs. There were other examples of the same nature. But in most of the cases, however, the primary producers did not achieve the enhanced price. When cloths were brought to the factory, these were compared with the musters and if found to be the same quality, it was rated and marked as A. Inferior to A was regarded as B, inferior to B rated C, inferior to C recognised as D and inferior to D rated as E. Mr Barwell reversed this method and began to prize from the lowest letter E.

94. Ibid., pp.63-65.

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Buttah, Kurtchā and Gundāh imposed upon the cloths.

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The natural reaction against all these was that the weavers showed carelessness in fulfilling the contracts with the Company. They kept the Company's interest of free advances for longer time and purchased threads of inferior quality and wove cloths for sales in market and to private merchants. Secondly, the weavers concealed company's transactions by weaving their cloths in other houses and sold them through persons who were without Company's advances. Furthermore, after serious delay, they delivered the low quality cloths unsuitable for the Company's 'investment'⁹⁶

To do away with this malpractice, in July 1786, 21 regulations were passed, while another set of regulations was issued on the 23rd July, 1787.⁹⁷ The regulations were of two types : (i) regulations relating to the obligations of the weavers to the Company and (ii) penalties for non-fulfilment of the contracts. All the weavers were given tickets specifying their names, place of residence and the issues of the contract from the government.⁹⁸ The government ticket holder weavers, in most cases, were forbidden to work for private merchants. Since the weavers were accustomed to work for both Company and individuals, the weavers according to

95. From John Cheap, Commercial Resident of Sonamukhi to Board of Trade, 29th June, 1794, Board of Trade Commercial Proceedings, 1st August, 1794, See J. Kumar, Select Document on Indian Trade and Industry, (N. Delhi, 1981), p. 182. The kurtchā was a species of tax to the servants of the contractors and gundāh was imposed by a parwanāh from Mr. Aldersy with the consent of the weavers. From an inquiry set up by John Bobb privately, it became obvious that a system of speculation was functioning continuously in combination with the gumāshtās, the inferior aurang servants, and the principal weavers of the district and latter the receipts were divided among themselves. For this see Progs. Board of Trade, 3rd Sept, 1790, Prog. No. 66, Vol. 88.

96. Prog. Board of Trade, 15th July, 1783, Prog. No. 38, Vol. 37.

97. D. B. Mitra, op. cit., p. 67.

98. Petition of American, Greek and Muhammedan Merchants at Dacca, Board of Trade (Commercial) proceedings, 1787. See J. Kumar's, Select Document on Indian Trade and Industry, p. 170.

the rules of the regulation, must deliver the cloths of the Company with specified standard fixed by the Company in the tickets. They had to serve a fortnight's notice if they did not like to take the Company's advance. Again they were prohibited from new engagement unless and until their previous contracts were fulfilled. They were also not allowed to sell in the open market.⁹⁹

In case the weavers failed to deliver cloths according to the specified period, the Company's men were empowered to keep peons after the defaulting weavers. The freedom of the weaver to sell cloths to English Company and other merchants was restricted.

This critical exploration of the organisation of cotton textile industry during the Company period comprehends that the harassment by the Company's gumāshtās or British agents in charge of investment and procurement after Plassey was continuously increasing with the exception at Dacca, Shāntipūr, Māldā and other places where Company's investments faced competition from European, Asiatic rivals and private merchants. But at these places also after 1778, the condition of the weavers became deplorable.¹⁰⁰ This circumstance compelled the weavers to make transition to some other kind of proto-industrial activities available in some other areas generally in iron, coal and mica mining during later half of the 18th century and first half of the 19th century. From the last

99. D.B.Mitra, op.cit., p.67. Also see, Petition of American, Greek and Mohammedan Merchants at Dacca, Board of Trade (Commercial), Proceedings, 1787, J.Kumar, op.cit., p.170.

100. N.K.Sinha, (ed.), History of Bengal, 1757-1905, (University of Calcutta, 1967), p.113. For sometime, during the years 1771-1773, there was some talk of providing full freedom to all weavers and manufactures but without any practical change. The Company's servants, who were engaged in private trade, exploited their position as investment agents. Interlopers were not outbid. Therefore, some kind of discretional authority was vested in the Company's agents.

two decades of the 18th century, we trace the process of decline of cotton industry; one of the most ancient industry of Bengal. Some of the weavers also migrated to the commercial agriculture generally to be observed as hired or quit-rent labourers in native as well as European indigo and jute plantations in late 18th century and in tea in the 19th century. Therefore, during these years in Bengal, highly developed proto-industrialization made transition to de-industrialization rather than industrialization proper.

SPECIALIZATION OF PRODUCTION

One of the most glaring and dominant characteristics of proto-industrialization process was the regional specialization of production. Intensification of international, coastal and internal demands together with widening of markets, enabled a progressive regional division of labour¹⁰¹ in the 17th and 18th centuries Bengal.

The court traditions based on the changing demands of rulers and courtiers were reflected within its creative expression. With the change of the rules, the court traditions changed to some extent, which had some sensitive, generative and degenerative influences on the overall pattern, texture, delicacy, quality, decoration and style of cloths. This trend has been established early in the history of Indian textiles.¹⁰²

The coming of the Muslims into India, introduced a new lease of life in fashion, art and designs. The Muslims injected a new vitality and creative desire, a fresh impetus into fabric art, by

101. M.P. Gandhi, The Indian Cotton Textile Industry, Ist Part, Present and Future, (Calcutta, 1930), p. 19.

102. Monroe Wheeler (ed.), Textiles and Ornaments of India: A Selection of Designs, Texts by Pupul Jayakar and John Irwin, p. 21.

patronising craftsmanship and infusing new ideas that they had brought with them from their homelands. The synthesis of the Hindu and Muslim cultures, both inherently decorative, reached its peak during the great Mughals.¹⁰³ This is observable in the production of cotton cloths of different varieties during the period under review.

The great Mughals were great lovers of flowers of gardens which inspired many of the cloth producers of the period to adopt floral motifs for decoration. Floral motifs were most commonly used and were spaced across the length of a cloth. These floral motifs were shaded in various forms and tones of madder red to produce effect of great delicacy and beauty.¹⁰⁴ The borders generally constituted of broad bands of running floral scrolls. Occasionally, figure subjects like ghorsawar, hamsas and mayurpankis were glided down in the borders. The Dacca weavers had adopted the outline of their design to the straight lines and right angles of their weaves with admirable skill.¹⁰⁵ The commonest motifs were noble men or a lady holding a flower or smoking hookah, a lady riding a horse, and two ladies in conversation etc.

Another type of folk fabrics were derived from alpanas. The patterns of this fabrics was to show village women of Bengal drawing rice paste on the threshold of their dwellings. These drawings were symbols rather than ornament which demonstrated the enactment of rituals performed by women of the village at times of crisis for the promotion of rains, success of the harvest, and

103. Rustom J. Mehta, The Handicrafts and Industrial Arts of India, (Bombay, 1960), p. 17.

104. Pupul Jayakar and John Irwin, op.cit., p. 22.

105. Dr. S. K. Saraswati, Indian Textiles, (Faridabad, 1961), p. 26.

safety of village against epidemics.¹⁰⁶

The geometric decorative motifs like rings, dots, zig-zag ornaments with clearly defined symbols were applied within panels arranged both horizontally and vertically. The advent of Europeans in Indian commercial intercourse introduced new elements in decorative art of textiles. For this they sent musters appropriate to home taste to train the Indian craftsmen in art of copying or adopting. "These musters were themselves often tinged with the only brand of orientalism familiar and acceptable to Western taste, which was kind of chinoiserie sent to him as a guide, the Indian craftsman created his own variations of Indian chinoiserie."¹⁰⁷ This decorative art was further hybridized by the infusion of Persian influence and by the incorporation of many purely Indian features. Thus birds, butterflies, squirrels and various other fauna were seen in the panels of Bengal cotton cloths.¹⁰⁸

Consequently, there was great craze for Indian chint in Western Europe which lasted till the last quarter of the 18th century, although protective legislative measures to control their supply were employed without positive results. This was particularly observable in fine grades of Indian chint (chintz), which was in great demand in Europe during the early period of the East India Company's trade. Indian chint were sought mainly for room hangings, that were made in lengths to be cut up by the buyers according to the size and dimensions of the walls they were required

106. Pupul Jayakar and John Irwin, op.cit., pp. 30-31.
107. Irwin and Hall, Indian Painted and Printed Fabrics, Vol. I, Historic Textiles of India at the Calico Museum, (Ahmedabad, 1971), p. 36.
108. Ibid., p. 36.

to cover. This was an end piece; colour utilised in these had the exceptional quality to preserve the colour well. By 1680, orders were being sent to India for large numbers of ready sets of bed hangings. Each set included large and small pardās (curtains), a taster, a bed spread.¹⁰⁹ These freshly coloured and easily washed fabrics naturally attracted Europeans. In the second half of the 18th century, furnishing fabrics were sometimes produced in a purely European style in the set of chair-seat covers.¹¹⁰ That was why, it was in the middle of the 17th century that the potentialities of textile trade directly with Western Europe began to be recognised. It was the brilliance and fastness of Indian dye colours which were produced in combination with mordants, which when washed, retained its brightness, appealed the European buyers in particular.¹¹¹

These influences on design, pattern, panel, colour, style, fashion and texture of cotton cloths from varieties of sources considerably contributed to the process of localization of manufactures¹¹² in Bengal and elsewhere in India. The tendency towards

109. Ibid., p. 37.
 110. Ibid., p. 37.
 111. Ibid., p. 36.
 112. See T. Raychaudhuri, "European commercial activity and the organization of India's Commerce and industrial production, 1500-1750" B.N. Ganguli (ed.), Readings in Indian Economic History, Proceedings of the First All India Seminar on Indian Economic History, 1961, pp. 70-71 and "Non-Agricultural Production: Mughal India", T. Raychaudhuri and I. Habib (eds.), op.cit., pp. 282-283. The first example of this process had been traced at Broach near Surat in the production of specialized textile goods, at least as early as the 16th Century which was followed by a group of villages around the centres of export in Bengal. During the first half of the 17th Century the Company's servant's procurements of their investments 'by shopping around the required items in the emporia, appear to have been relatively unimportant as sources of supply. This means that the process of localization of manufacture has not diversified till the first half of the 17th century.

localization of production witnessed an intensification in Bengal, Coromandel Coast and to a lesser extent in Gujarat in the 17th century. By the mid 18th century, these specialized regions alone supplied their (different merchants) requirements.

In Bengal, in and around factory towns, weavers, spinners and middlemen settled down. These settlements of the proto-industrial producers were deliberately promoted and facilitated by various European Companies to facilitate their purchases or 'investment'. Thus, centres like Dacca, Shāntipūr, Māldā, Hughlī, Qāsimbāzār, Chander-nagar, Chinsura, Bānkipur, etc. had their own specialized products. In some instances, availability of the relevant raw material was the determining factor.

In some of the families the production of cotton yarn formed an independent manufacturing activity, in other families like peasant households, yarn was produced by a subsistence oriented system and yarn production was recognised as a second occupation in weavers families. Coarse yarn was produced and supplied from Qāsimbāzār, Balasore etc.¹¹³ The finest yarn, utilised in the muslin of Bengal was produced in the Dacca district by the families, whose members specialised in manufacturing a particular quality of cloth, their fine sense of touch possessed by a 'differentiate people; their patience and gentleness and the hereditary continuance of a particular species of manufacture in families through many generations.¹¹⁴ The spinning of the finest yarn of the Dacca muslin required such a delicacy of touch that it was confined to the women of a

113. Tapan Raychaudhuri, "Non-Agricultural Production: Mughal India," Tapan Raychaudhuri and Irfan Habib (eds.), op.cit., p.271.

114. S. Bhattachary, The East India Company and the Economy of Bengal from 1704-1740, (London, 1954), pp. 182-183.

few families of Dacca and its neighbourhood. These women acquired this standard of perfection by culture through generations. The finest thread was spun by women by hand, while the coarser were produced by charakha or charakhi.¹¹⁵ The best spinners were the Hindu women from 18 to 30 years of age and after that they began to fall off; after 40 their sight was generally impaired and they became incapable of spinning very fine thread.

Another branch of cotton manufacture in which the regions around Dacca specialized and acquired world-wide fame was weaving muslins of various quality. Baines had the impression that some of the Bengal's muslins should be regarded as the work of the fairies or of insects rather than men, because of its softness and delicacy.¹¹⁶ These products of Dacca acquired the poetic names: abrawān (running water), baftā hāwā (woven air), and shabnam (dew).

One other branch of industry in which Dacca acquired prominence was the manufacture of the tinsel work. This branch of Dacca industry received no promotion from the European markets and continued because of the demands of local Hindu people and consequently,

115. Ibid., p. 183.

116. Edward Baines, History of the Cotton Manufacture in Great Britain, (London, 1835), pp. 56-58. William Ward asserted that at Sonargōan and Vikrampur, muslins were woven by a few families of a superfine quality and required 4 months to weave one piece which sold at Rs. 450-500. When this muslin was laid on the grass and the dew has fallen upon it, it was no longer discernible.

it retained the purity of its artistic style.¹¹⁷ Tinsel-printing was also practised in Calcutta.¹¹⁸

The art of embroidery was one of the most important industries of Dacca, dominated by the Muslims. Embroidery was either worked in loom or wrought by needle work.¹¹⁹ The fine needle work or embroidery had its origin in Egypt and the celebrated art of Egypt.¹²⁰ It seems probable that the art of embroidery was first introduced into Bengal from the banks of the Euphrates.¹²¹ This origin of embroidery in Bengal is further strengthened by the tradition at Dacca that the needles previously in operation were procured from Bassora. This was precisely the reason that Bassora and Jiddah were the marts for the embroidered goods of Bengal. Silai afforded the employment to a large body of dārji of Dacca.

117. Dyes were used in the manufacture of tinsel work, which is a very old established industry at Dacca. The exact antiquity of this industry is very difficult to trace, but it is very important on account of her retention of all the purity of its artistic style. The tinsel decoration was largely used at Hindu wedding and sacred festivals. Sheets of tinsel were pressed into the dyes, and the raised ornament. In the vigorous design and excellent drawing of the ornament it followed the best tradition of Indian art. This was traced by E. B. Havell. Technical Art Series, 1902 Plate XII, Two wood dyes, from the collection of the government Art Gallery, Calcutta. Indian Art: Technical Art Series of Illustrations of Indian Architectural Decorative Work for the use of Art Schools and Craftsmen, (Delhi, 1977).

118. T. N. Mukherjee, Art and Manufacturing, (Calcutta, 1881), p. 350.

119. Ibid, p. 363.

120. James Taylor, A Descriptive and Historical Account of the Cotton Manufacture of Dacca in Bengal, (John Mortimer, London, 1851), p. 100.

121. Ibid, p. 101. Also see J. Forbes Watson, op.cit., p. 114.

The largest group of Bengal embroideries surviving from 16th and 17th centuries were those commissioned by the Portuguese at Satgaon. The embroidery of this school commonly consisted of bed spreads of large dimensions, small numbers of hangings, shawls and mantles.¹²² The designs which covered almost every square inch of the ground were worked in yellow monochrome silk (Muga, Tasar or eri silk).

Designs were of the pictorial type, usually incorporating hunting scenes of the Portuguese Soldiers, European figures, drinking and marine scenes with ships, fishes, etc. Sometimes the embroiderers depicted scenes from the old Testament and from Greece-Roman repertoire. Hindu themes were also depicted, a favourite one being the Vaiṣṇava legend of the great flood.¹²³ These scenes were outlined in chain stitch and usually completed with fillings of back stitch. Sometimes details of the design were first embroidered on pieces of cloth and then applied to the ground. Another feature of style was the way in which the figured compositions were divided into self contained narrative panels, without logical sequence, organised within a strictly symmetrical plan. In the treatment of individual figures, the leading characters were enlarged by abandoning the proportion of axillary characters. Perspective and depth were hardly used, the general effect being one of flat patterning, characteristic of Bengal folk art.¹²⁴

122. John Irwin and Mr. Hall, Indian Embroidery, Historic Textiles of India at the Calico Museum, Vol. II, (Bombay, 1973), p. 35.

123. Ibid, p. 35.

124. Ibid, p. 36.

Lace, as it was understood in Europe, was not known and practised in India in general and in Bengal in particular. Lace manufacture had lately been introduced in India among the native Christians of Madras.¹²⁵

The industries associated with the bleaching, dressing and packing were also flourishing around the suburbs of the city of Dacca. Abū-l Faḥal referred to Catarashunda in Sonargong as the most celebrated centre of bleaching. Naraindih and Tezgong in the vicinity of Dacca during the late 18th and early 19th century were famous bleaching centres for British, Dutch and French factors.¹²⁶ Next to bleaching was the nurdeah who arranged the threads of cloths that were displaced during bleaching. Then, the need of rafugārs was realized, who repaired cloths that had been damaged during bleaching by joining broken threads and removing knots from threads. Rafugāri is a branch of needlework in which Muslims acquired a degree of manual dexterity and

125. T.N. Mukherjee, op.cit., pp. 362-363.

126. J.F. Watson, The Textile Manufacture and the Costumes of the People of India, (London, 1867), p. 70. Catrasunda in the 17th century was prominent for its water, which had the capacity to provide a peculiar whiteness to the cloths washed in it. Similar property had been traced in the water found in the vicinity of Dacca extending from Naraindih, the place where bleaching was principally practised during the Company's period, to Tezgong, about four miles distant from it. The water was brought to bleaching grounds from the wells but this was not the case during rainy season.

perfection.¹²⁷ Dhobās or dāgh-dhobees were washerman who were involved in removing spots and stains from muslins.¹²⁸ Ironers and bustabunds (Piling Cloth) also flourished in and around Dacca.

Malmals and Khāsas (cossas) were produced at Nadia.¹²⁹ Māldāh and Shāntipūr, Qāssimbāzār, Hughli, and later Chinsura and Chander-nagar became important centres of cotton and silk manufactures.

C A R P E T S

Indian carpets were of two kinds: cotton and woollen. Generally they were classed as cotton darīs and satranjīs and woollen rugs and carpets but in reality dari is the native word for rug and satranjī¹³⁰ for a carpet.

Woollen pile carpets, known by the name of kālin, kālichā or galichā, originally manufactured in the wild north of Persia - Kurdistan, Kāmrān, Khoorasan and Feraham were introduced into India by the Muslims.¹³¹ The wet climate of India was inappropriate for the yield of soft wool suited for the production of best carpets. These carpets were made in previous centuries around the deserts of Central Asia.¹³² The moist atmosphere of India was unfavourable for the preservation of this magnificent product of art.

127. An expert rafugars could extract a thread 20 yards long from piece of the finest Muslin of the same dimensions and replaced it with utmost care in the finest quality called Chuna or 'Picking out a thread' see, Ibid, p.72.

128. The spots and stains were removed from Muslins by using the juice of anroola plant, which yielded an acid like called Sorrel. To remove iron marks, the stains and discolourations a compound of ghi and mineral alkali was used. Ibid, p.72.

129. Shafaat Ahmad Khan (ed.), John Marshall in India, 1668-1672, Notes and observation in Bengal (1668-1672), Vol.V, (Oxford University Press, 1927), p.66.

130. George C.M. Birdwood, The Industrial Arts of India, Part II (Piccadilly, 1880), pp.284-285.

131. T.N. Mukherjee, Art and Manufacturing, p.389.

132. Ibid, p.388.

Darīs and Satranjīs were perfectly distinct in style and made from the usual Indian pile carpets and rugs. These (Darīs and Satranjīs) were made of cotton and in pattern, these were usually striped, blue and red, or blue and white, or chocolate and blue and often of square and diamond shapes. Sometimes, gold and silver were introduced in producing picturesque designs like these observed on the bodies and apron worn by Italian peasant women.¹³³ Striped satranjīs of very superior texture were made at Rāngpur in the Rajshahi division. This was made of a peculiar design in blue on white ground which resembled in shape the foot of an elephant, hence called philpāyā.¹³⁴

The manufacture of pile carpets was introduced into India by the Saracens or Musalmāns, who not only encouraged the indigenous arts but also brought the handicraftsmen with them from Baghdad, Shiraz and Samarcand to introduce Persian craftsmanship in pile carpet manufacturing in India.¹³⁵

Velvet carpets were made at Murshidābād.¹³⁶

T E N T A N D S A I L

The necessity and importance of the tent and sail in the Medieval period compelled the state to found a separate department called Farrāsh-Khāna (Tent House).¹³⁷ Besides their unavoidable utilisation in military establishments, they were widely required by the imperial courts especially when they moved from one place

133. George C.M. Birdwood, op.cit., p.285.

134. Ibid, p.285. Also see T.N. Mukherjee, op.cit., p.307.

135. Ibid, p.285. Also see T.N. Mukherjee, op.cit., p.389.

136. Ibid, p.289.

137. N.S. Gupta, Industrial Structure of India during Medieval Period, (New Delhi, 1970), p.114.

to another as also by the moving business qāfilas. Qāfilas preferred to have a large bundle of tents always ready with them to meet emergency. It was also the need of the European community in India which encouraged the production of tents. Numerous vessels which plied between the different eastern parts encouraged the production of sails.¹³⁸ Namūnās or specimens used in the construction of the tents and sails were made on the canvass of cotton. The strength, lightness and other good qualities of the cotton were always kept in mind, while selecting the fabrics for these purposes. The quantity of cotton annually consumed in India for the production, manufacture of sail and tent cloth was very large. Abū-l Faḥl mentions 12 types of tents generally produced and used in imperial establishments.¹³⁹

OTHER MANUFACTURES OF FIBRES

The hemp, flax, sunee, chonch and isbund, were some of the fibre producing plant during our period.¹⁴⁰ A demarcation line was distinguished by Roxburg, then the Superintendent of the Company's

138. J. Forbes Watson, op.cit., p.85.

139. N.S. Gupta, op.cit., pp.114-115. On the top was the bārga when enlarged was able to contain more than a 1000 people. A plain bārga cost Rs.10,000 while the price of one full of ornaments was unlimited. The other types were: chubin, rāwati, do asigana māṅḍal, zamīndoḥ, māṅḍal, athkhamba, khargāh, the shāmīānā, sarparda and gulabar of different design and make. According to Abu-l Faḥl, to erect barga tent, 1000 specialized workers worked for a week with the aid of machines. This shows the vastness and system of erecting the tents and advanced level of technique and skill. The state expended huge money on the maintenance and the production sight of this department.

140. J.F. Royle, Essays on the Productive Resources of India, (London, 1840), p.333.

Botanical Garden in Calcutta between the species of hemp and jute in his letter to the Governor General in Council dated the 23rd December, 1794.¹⁴¹ The main difference between pāt and sunn hemp was that the fibres of the former were far more softer and finer than the later which appeared coarse and tough. Fibres of sunn-hemp were utilised in rope making.¹⁴² The malghumbihul, kumbhee, dhak, bhabhar, dab, surkura, masia, michat and bidasundi were other fibre yielding plants, though not jute.¹⁴³ Tapan Raychaudhuri has traced the earliest available references to jute cloth in the reign of Alivardi, whereas K.K. Dutta observed the prevalence of the weaving of jute cloths in Calcutta and at several other places in Alivardi's time. This is attested to by references to gunnies in the East India Company's investments from Bengal as well as in the list of articles sold in the Calcutta market. J.C. Sinha recognised that hand woven jute was a subsidiary industry of Bengal in the First half of the 18th century and by the middle of the 18th century there developed a fair export

141. H.R. Ghosal, Economic Transition in the Bengal Presidency, 1793-1833, p.150.

142. W.W. Hunter, A Statistical Account of Bengal, Vol. III, (Delhi, 1973), pp.334-335.

143. J.F. Royle, Essays on the Productive Resources of India, p.233.

trade in gunnies. Reference of the gunny was made in a letter dated 22th April 1681.¹⁴⁴

Cloth made of jute fibre was called tānt. The reddish variety of jute was called bon-pāt. It was employed for making the coarse kind of cloth called megillā in Bengal and another tānt was called choti.

It was the intense proto-industrial activities throughout the 18th century which intensified cultivation of commercial agriculture in late 18th century and the need to supply proto-industrial products to various international markets increased the need of packing materials. Added to this was the unavoidable need of jute as raw materials in many proto-industrial products like, gunny bags, jute cloths, rope, cotton jute mixed cloths, paper, carpets, chātee sometimes in shipping, in making fish nets, twine, cordage and canvas increased its cultivation to various parts of rural Bengal in the late 18th century.

144. Tapan Raychaudhuri, "Non-Agricultural Production: Mughal India," Tapan Raychaudhuri and Irfan Habib (eds.), The Cambridge Economic History of India, Vol. I, C. 1200-C. 1750, (New Delhi, 1982), p. 272. Sann-hemp was undoubtedly found in all Mughal provinces. Cordage from coir to meet the requirements of local shipping in particular was also prevalent in Bengal. Ropes for packing silk-bales became a local specialized industry of some repute at a Qasimbazar suburb but in totality, information on packing material available in the contemporary sources is of scanty nature. Also see K.K. Dutta, Alivardi and his times, (Calcutta, 1963), p. 184. Jute was produced in Bengal during late 17th and early 18th centuries even in the absence of any large export trade. For early and middle 18th century information about jute see, J.C. Sinha, Economic Annals of Bengal, (London, 1927), p. 37. London, the 22th of April, 1681, our Chief and Council at the Bay quoted in the copies of letters from Court to Bengal, Fort St. George and Hughli.

Two species of jute were cultivated in India, C. Capsularis and C. Olitorius. The varieties of C. Capsularis were more numerous than those of C. Olitorius, the former being conspicuously wanting in permanency.¹⁴⁵

Jute fibre was called pāt or koshtā while the plant was called naliā in Dacca and Mymensing districts, the best variety producing jute regions of East Bengal. The jute cultivation in these two districts of Bangladesh was introduced in the last quarter of the 18th century. At that time, jute was sold at these places at 8 ānas per maund and its fibres were mainly employed for making ropes. Little latter, sack cloths were manufactured for packing rice, salt and sugar and also for exporting to Calcutta market.¹⁴⁶

In 1792 Atkinson, commercial Resident of Jangipur observed four kinds of fibre plants grown in the Murshidābād districts called ghore sunn, sanchipāt, coochmundan pāt and Anleah pāt. Jutes of various quality and variety were produced in almost all

145. The fruit of the former had a small rounded capsule while that of the later was elongated. The fibre of C. Olitorius was inferior to that of C. Capsularis, but the superior varieties of both species produced excellent fibre if properly extracted. The differences between the varieties had been precisely because the local conditions of soil and depth of water. Some of the races of each species had purple-red stems other green stems. The red-stemmed races gave inferior fibre than that of the green stemmed varieties. See, The Imperial Gazetteer of India, The Indian Empire, Vol. III Economic, (New editions, Oxford at the Clarendon Press, 1908), pp.46-47.

146. Jute was a rainy season (kharīf) crop. Its sowing begun in February and it was harvested upto September. See, Syed Muhammed Taifoor, Glimpses of Old Dhaka, (Dacca, 1956), p.8. Jute was cultivated in whole of Mymensing district, but in particularity in alluvial soil, formed by the 'Brahmaputra in the South-Eastern tract between Ghafargaon and Bairab bazar in the north of Dacca. 'The best time for harvesting was when the plant was in the flower and just before the appearance of the pods when the fibre was of very superior quality. See W.W. Hunter, A Statistical Account of Bengal, Vol. V, (Delhi, 1973), p.421.

the regions of Bengal.¹⁴⁷

Therefore, in the last quarter of the 18th century jute cloths, tāts (jute carpets) were manufactured at Ghoraghat.¹⁴⁸ Ropes of many variety and quality was also manufactured during the last

147. See J.C.Sinha, "Jute in Bengal", JASB, (New Series), XXXVII, pp.152-153. In Dinajpur district ghore sunn was produced. In Nadia, Bogra and Mymensingh, sanchipat was cultivated. Amleah pat was largely utilised in gunny bags. The jute cultivated in Karimganj were superior in fibre, colour and length, Bhawan jute was good in length but inferior in other respects. Other variety were called Amrah sun, chandan sun and patua sun. See J.F.Royle, Fibrous Plants of India fitted for cordage, clothing and paper, (London, 1855), p.244. In Rangpur parbati and jat pāt were produced. The former was of superior quality, strong textured and of a light reddish colour whereas the later was of inferior quality of fibre and of a whitish colour. See W.W.Hunter, A Statistical Account of Bengal, Vol.VII, (London, 1876), pp.242-243. The desi jute was cultivated in Hughli district. The light alluvial soils were admirably suited for jute cultivation. Jute was chiefly grown on land which was liable to be submerged when the plants had made some progress. Good quality of jute, however, had been grown on fairly high land in Bengal, provided the cultivation was liberal and there was sufficient water and dampness during the whole period of its growth. See, The Imperial Gazetteer of India, The Indian Empire, Vol.III, Economic, (New edition, 1808), p.47. Some jute was sown in March and cut in July and was called aus or early jute which was inferior in quality. The other variety was sown in April and May and was cut in August and September and was called aman or late jute.

148. K.K.Dutta, Studies in the History of Bengal Subah, Vol.I, 1740-1770, (Calcutta, 1936), p.430.

quarter of the 18th century¹⁴⁹. Further, during the last quarter of the 18th century the local, international and coastal needs of packing raw cottons, raw silks, organzine, sugar, indigo, opium, saltpetre and many other proto-industrial products and other items of export increased the supply of jute products. During the early 19th century Royle recorded the export of Indian Jute from Calcutta to many countries amounted to 14,565 maunds. These needs must have encouraged the production of a cloth called chatee during the last decade of the 18th and

149. Royle believed that the length of fibres was largely obtained by twisting fibres together. By this method a certain degree of compactness was also obtained although the break was more frequent than slip out from the mass. This process also prevented the infiltration of water and the rope was preserved. Certain amount of twist was essential, any excess was injurious. Therefore, great precautions was required in twisting the fibres. First operation in making rope was the twisting of certain fibres into a thick thread which is called a yarn. These yarn vary in size, from 1/12th to a little above 1/9th of an inch in diameter. These yarn were then warped so that they may bear any strain equally. The next process was to twist a number of yarns (say from 15 to 25) into a strand in an opposite direction to that of the yarn so that any tendency in the yarns to untwist may be counteracted by an opposite tendency in the strand. Three of these strands formed a rope which Tomlinson called a hawser laid rope. The second laying was consisted of four strands and was called shroud hawser laid rope. The third laying was consisted of three hawser laid rope and called a gigantic rope or cable.

first decade of the 19th centuries.¹⁵⁰

Very scanty or little or no recorded information is available in the contemporary sources regarding the organization of jute industry in Bengal. In the first half of the 19th century the cultivation of jute was carried under the system of advances by the capitalists who had made the advances at high rate of interest on their money advanced. Transactions between these petty dealers and the actual purchasers were carried on by means of trained brokers. In other places, the mahajan made the advance on terms that he was to be repaid in jute at the market rate of the day with a stipulated sum of money in form of commission. In other places the whole produce of the field was made over to mahajan, who deducted the amount of his advance and interest from the proceeds of the sale of the jute. Where jute was not grown under advances, the cultivators

150. J.F. Royle, Essay on the Productive Resources of India, (London, 1840), pp. 114-115. Here Royle recorded the quantity of jute export from Calcutta Port. For the production of chatee in Bengal, see J.F. Royle, Fibrous Plants of India fitted for Cordage, Clothing and Paper, pp. 246-247. Two kinds of spindles were used in preparing chatee called takur and dhara. The dhara was a reel, on which a thread when sufficiently twisted was wound up while the takur was a kind of spindle which was turned upon the thigh or the sole of the foot. The ghunghuree, a kind of spinning machine was also used. The pieces were consisted of three or four narrow cloths sewed together. The pieces of four or five cubits long and from two to three cubits wide cost two to eight anas. Some of the pieces were sewed with red and black borders. Such cloths were more durable than the cotton. The chatee was also made from the same stuffs in three different qualities. This was always woven in pieces from 3 quarters to one cubit wide of which two or three pieces were sewn together into one piece before it was sold. The first was required and prepared for bedding purposes in the size from four to five cubits long and from $2\frac{1}{4}$ to 3 cubits wide and sold at about Rs. 8 per 100 pieces. The second was prepared for covering bales of cloth was of the same dimension but more thicker than the former. 100 pieces cost Rs. 6. The third was intended for packing rice. This was about the size of 4 cubits long and $1\frac{1}{2}$ cubits wide. 10 such bags cost Rs. 4 or 5. These were produced at Mālda.

151. W.W. Hunter, A Statistical Account of Bengal, Vol. 5, (Delhi, 1973), pp. 87-434.

took the raw produce of his crop in bundles, to the nearest hāt and sold it to petty traders called pāikārs bepāris and baniās etc. The petty traders, after buying the fibre, either disposed of on their own account or made over to the mahājans from whom they may have received advances.

From this it can be assumed that above systems of organization of jute cultivation also existed in most of the regions of Bengal in the later half of the 18th century. The organization of jute proto-industry in Bengal is still unknown. Therefore, the chances of transformation of jute proto-industrial system into capitalist industrial system proper was meagre in absence of any input provided to jute proto-industrialization from governmental and administrative apparatuses. In the course of 19th century when the jute proto-industry became more profitable, the process of industrialization in jute proto-industry was controlled by British Capitalists. This was because of enhanced requirements of packing materials.

I N D I G O

Indigo had a long history of its production in India. Pliny called it Indicum, and in the 'Periplus' it was 'Indian Black' exported from Barbaricon on the Indus. The word 'Black' may be instructive to its association with nīla. Indigo Fera,

as genus of herbs belonged to the Leguminous.¹⁵²

Before the discoveries of new commercial route to India in the 1498, Indian indigo reached Europe through the Persian Gulf and Alexandrin. Even in the beginning of the 17th century, the English manufactures sent their white cloths to be dyed in Holland. The deterioration in the relation between Dutch and Portugal, forced the Dutch to explore new methods for the procurement and the supply of indigo directly from India. The skill of the Portuguese stopped short of utilising in home industries the materials which their maritime trade brought to their coastal shores. Hence, Indian indigo first exported to Holland and from there to whole of Europe. In 1631, Dutch East India Company exported enough indigo directly to Holland.¹⁵³

In course of time, the colonialists (the Portuguese, the Dutch, the English and the French) accepted Indigo cultivation. Indigo cultivation spread very soon and later European skill and capital in Indigo cultivation killed the Indian trade in Indigo. Further, it was the growing demand of West Indian Indigo early in the 18th century in the British market that reduced Indian Indigo

152. Indigo comprises some 250 or 300 species, distributed throughout the tropical regions of the globe, India having about 40 species. Of these 40 indigenous species 10 were occured throughout plains, and the Himalayan Hills of India upto the altitudes of 3000 ft to 5000 ft. About half of that number were temperate and widely occured between 6000 ft to 8000 ft. Bombay and Sind possessed 29 species in all and it had about 10 to the local forms, some of these were widely distributed to Madras and Ceylong, the Punjab and the North Western provinces possessed 2 local species, Madras 3 local species while Bengal had not possessed any species that was confined to Bengal. For this, see, George Watt, Pamphlet on Indigo, (Shilong, 1890), p.1.

153. Ibid, p.9.

early in the 18th century in the British market that reduced Indian Indigo in the British market. And finally, in 1724, Indian Indigo was omitted from the list of Company's investment.¹⁵⁴

In 1747, most of the British colonies in West Indies abandoned Indigo cultivation for growing more profitable plantation i.e. sugar and coffee. As a result, Indigo supply to British market during the next few decades was reduced considerably. This reduction in Indigo supply was fulfilled by Indigo supply from the American colonies. It was also stopped owing to the American War of Independence. Now, the demand of Indian Indigo was revived.¹⁵⁵

Therefore, European indigo planters were brought from the West Indies and were established in select districts of Bengal.¹⁵⁶ Louise Bonnard (1777) and Carel Blume (1778) were the earliest pioneers among European planters in Bengal who could equal the quality of their manufacture with West Indian Product. Louise Bonnard started a small factory at Taldanga in Hughli district and later he shifted his sphere of activity to his factory at Gondalpara near Chandernagar. Many West Indian slave planters were also encouraged to apply their experience in Bengal.¹⁵⁷ Other engagements of the same nature were successively made until the year 1788.

The early efforts of the Company to encourage the industry did not, however, yield satisfactory results. During the initial

154. J.C.Sinha, Economic Annals of Bengal, p.178.

155. H.R.Ghosal, Economic Transition in the Bengal Presidency, (1793-1833), pp.73-74.

156. George Watt, Pamphlet on Indigo, p.11.

157. Chittabrata Palit, Tensions in Bengal Rural Society, (1830-1860), (Calcutta, 1975), p.96.

period of its production, the high cost of its production at home and fluctuations in demand made indigo an unprofitable export.¹⁵⁸

First contract was made between Board of Trade and Mr. Princep in the year 1779-80. Princep introduced indigo into Hughli district in 1780 and the industry was well established by 1793.¹⁵⁹ From a contemporary account of the losses from Indigo industry, it appeared that there were losses with contractors which can be shown by the following statistics.

Cost and charges	£	30,207
Produced only	£	21,596

Loss £ 8,611, this is equal to 23%.¹⁶⁰

These frequent losses compelled the Company to cease to purchase the production of private persons for atleast three years and opened up the trade in indigo to individuals and Company's servants under Company's protections, upon payment of freight, companies duties and charges.¹⁶¹ This was aimed at creating competition and improving the quality of indigo as high as possible. Added to this was a reduction in the cost of manufacture. It might also afford the Company's servants a mode of

158. H.R.Ghosal, op.cit., p.74.

159. Amiya Kumar Banerjee, West Bengal District Gazetteer, Hooghli, (Calcutta, 1972), p.287.

160. "Extract letter from the Court of Directors to the Governor General in Council Bengal dated 28th March, 1788." See, Report of the proceedings of the East India Company in regard to the Culture and Manufacture of Indigo, (London, 1838), p.8.

161. See, Report of the Proceedings of the East India Company in regard to the culture and manufacture of Indigo, (London, 1836), P.IV-V. Also see H.R.Ghosal, op.cit., p.74.

remitting their fortunes to Europe, which would be legal, advantageous and adequate. This flourishing industry was further encouraged by the Company by making large advances of money, secured on the indigo, on a plan of remittance to London and this course of action was followed for many years.¹⁶²

During these years, the Board of Trade realised the necessity of improving the cultivation and manufacture of indigo as a staple product of Bengal of a quality fit for European markets.¹⁶³ The rapid decline of indigo cultivation in St. Domingo proved favourable to Bengal's indigo industry and trade. Mr Robert Heaven was sent to Bengal for bringing about improvement in Indigo cultivation and stayed there for 5 years.¹⁶⁴ Mr. Boyce was sent to Bengal for 3 years.¹⁶⁵ Qualitative improvement in Bengal indigo was traced out with satisfaction in 1792 by Court of Directors. Bengal indigo had already surpassed the American and French indigoes, but the Company's trade in indigo on the whole, was still unfavourable.¹⁶⁶

162. Report of the proceedings of the East India Company in regard to the culture and manufacture of Indigo, (London, 1836), p.V.

163. Bengal Board of Trade (Indigo), Proceedings, December 6, 1811.

164. "Letter to Bengal, 27th March, 1787." See Report of the proceedings of the East India Company in regard to Culture and Manufacture of Indigo, p.6.

165. Extract letter from the Court of Director to the Governor General in Council Bengal, dated 28th March, 1788;" in Report on Indigo, op.cit., p.10.

166. H.R.Ghosal, op.cit., p.74. That was why the Board of Trade in their minute of the 20th October, 1790, opined that until the indigeneous manufactures were able to produce superior quality of indigo, the trade in the commodity, could not be considered decidedly established.

In Bengal proper indigo manufacture appeared to have flourished best in Pabnā, Farīdpur, Nadiā and Jessore and many factories were established in these districts. The early records of the Company referred to indigo works also in Murshidābād, the 24 Parganas, Midnapore, Burdwān, Dinājpur, Rāngpur, Rajshāhi and Mymensing. During the later half of the 18th century indigo plantations were extended to other parts of the province. The manufacture of indigo in Birbhūm district was commenced in 1795 by John Cheap, Commercial Resident of Sonāmukhī and made considerable progress afterwards.¹⁶⁷

In the last decade of the 18th century, indigo plantations and preparations considerably increased. It was not sufficient from the Bengali point of view yet it formed an important part of English indigo import from India as compared to its import from other European countries. This is evident from the following statistics:

Quantities of Indigo imported into England in the year 1789 from the under mentioned places:

Spain	-	318,782 lbs	
Portugal	-	96,647 "	
America	-	846,414 "	
East Indies	-	871,469 "	
Ostend	-	240,339 "	
Other parts	-	79,906 "	168

This statistical comparison demonstrated the magnitude of British industrial demand for raw materials from different European

167. H.R.Ghosal, op.cit., p.77. Also see W.W.Hunter, The Annals of Rural Bengal, (London, 1868), p. 357.

168. Letter to Bengal, 6th May, 1791, Report of the Proceedings of the East India Company in regard to the culture and manufacture of Indigo, p.23.

and Asian countries during the last decade of the 18th century, the period of first industrial revolution. Thus, the British industrial need for raw indigo hindered the full blown development of proto-industrialization in indigo craft and its transformation in capitalist industrialization.

SUGAR - CANE AND SUGAR

On basis of available proofs and documents, the best authorities of ancient and modern times have opined that the original home of the culture and manufacture of sugar-cane and sugar was in China.¹⁶⁹ China practised the culture and manufacture of sugar-cane well before 2000 years when it was known and adopted in Europe. No mention was made in the pre and proto-histories of Egypt, Judea etc. It were the Greek physicians who for the first time have spoken of it under the name of Indian salt.¹⁷⁰ Strabo also referred to sugar-cane.¹⁷¹ Dioscorides and Pliny assigned to it the sweet taste and other characteristics which compelled us to denominate it as sugar-candy.

It is not possible to provide a date of sugar-cane cultivation in India together with its adoption from China. It is assumed that India practised the culture of sugar-cane atleast from the time of the Buddha or little later. This is certified

169. George Richardson Porter, The nature and properties of the Sugar-Cane with practical directions for the improvement of its culture and manufacture of its products, (London, 1830), pp.1-2.

170. Ibid, p.2.

171. D.D.Kosambi, An Introduction to the Study of Indian History, (Bombay, 1973), p.192.

from the fact that the Indian salt was brought to Greece and Rome from India within the Ganges and Arabia, but it was not cultivated or manufactured in these countries. ¹⁷² Marcopolo in 1250 spoke of Bengal sugar.

Although sugar-cane can be cultivated successfully in several sorts of soils but the most appropriate soil for the culture of sugar-cane is the mixture of clay with sand. ¹⁷³

The district of Burdwan may be considered as one of the most productive and highly cultivated and probably one of the most ancient sugar-cane growing districts of Bengal. ¹⁷⁴ Many

172. George Richardson Porter, op.cit., pp.2-3.

173. S.H. Robertson, The Bengal Sugar Planter; Being a treatise on cultivation of the sugar-cane and Date tree in Bengal and the manufacture of Sugar and Rum therefrom, (Calcutta, 1849), pp.21-27. Also see, The Imperial Gazetteer of India, The Indian Empire, Vol. III, Economic, (Oxford, At the Clarendon Press, 1908), p.41. Manuring was most important in Bengal sugar-cane husbandry. Ploughing was constantly practised for properly preparing the lands to plant sugar-cane. In some regions ploughing was in operation from January to March and thus ploughed the land from 8 to 12 times previously to planting in April; while in other areas only two ploughing was in operation in March before the planting. Then land was watered. The ground so prepared was planted in Jan, Feb or March and even in April. Digging by kodal, lying up, weeding and watering were required for the proper growth of sugar-cane within a regular interval of time depending on weather and rain. The sugar-cane is fairly ripe never before than January under native cultivation and their usual time for cutting may be considered from the 13th of that month to the 13th March. The ripeness of the cane is determined by a trial boiling. If so many measures of juice gave a satisfactory weight of jaggery, harvesting operation was proceeded with. The produce from a bigha in clean canes, with a fair crop, varied from 130 to 160 bāzār maunds: 150 maunds per bigha may be considered to be a good average.

174. Ibid, p.16.

varieties of Sugar-cane were cultivated in almost every part of Bengal.¹⁷⁵

It appears obvious from the testimony of the writers of Sultānate and Mughal periods that first class white sugar was manufactured from gur throughout Northern India, Burdwan and Murshidābād division in Bengal upto Gorakhpur in Oudh before the advent of the British.¹⁷⁶ The manufacture of sugar in India throve fairly well up to the time of Napoleon i.e. upto the beginning of the 19th Century and a large quantity of sugar was exported to European countries even then.

Milburn quoted the following passage from the petition of Calcutta Merchants to the government, dated 1776, "the annual exportation (of Bengal Sugar) was 50,000 maunds, which yielded a profit of about 50%".¹⁷⁷ But, afterwards for a decade or so, there was slump in the sugar trade precisely because of an exorbitant increase in the price of the article and to an increase in the charge of transportation. Consequently, Bombay

175. George Richardson Porter, loc.cit., pp.217-218 and also see S.H. Robertson, loc.cit., p.14.

i. Cadjodee, in purple coloured and yields a sweeter and richer juice than yellow or light coloured, but in less quantities and it is harder to press.

ii. The Pooree, light yellow coloured, including the white, but assumed a deeper yellow when it ripens or the soil is rich.

iii. Cullerah, grown in swampy grounds, light coloured and grows to a great height. Its juice was more watery and yielded a weaker sugar.

iv. The China cane, is most valuable kind, from its very hardy character, with standing attacks of white ants, jackals and other enemies. Punsaree, reonda, newar and kewahee etc. were other sorts of sugar-cane produced in Bengal.

176. M.P. Gandhi, The Indian Sugar Industry, its past, present and Future, (Calcutta, 1934), p.2.

177. Milburn, Oriental Commerce, Vol. II, p.270.

received her sugar supply from China, Manila and Java. Actually, Bengal imported 'candied sugar' from China.¹⁷⁸

To remedy this state of sugar production in Bengal, Calcutta merchants suggested in their petition that Europeans should be encouraged to undertake sugar manufacture in Bengal on West Indian lines. The Company's government accordingly allotted a plot of land for sugar plantation. But the plan was not a success because of the infestation of white ants. In 1776, Mr Joseph Hodgson rented out a piece of land which he had planted with sugar-canes and erected sugar works on West Indian lines. He, likewise, established a distillery for rum which was productive of benefit to Bengal as well as to the Company. Finally, Mr. Hodgson was provided with all suitable encouragement towards perfecting this scheme.¹⁷⁹ In 1790, it was suggested that the export of sugar from Bengal might be augmented by partially taking of the duties levied on the article in other British settlements in the East.

Since, the demand of sugar during late 1780s and early 1790s increased owing to increased tea consumption from 1785, the price of sugar in England rose very high. Added to this, there was a deficiency in sugar's supply from the French Colony of St. Domingo. The crisis in course of time reached to such a magnitude that the British Public requested East India Company for relief. This request was accepted in the General Court of Proprietors of the East India stock, which made on the 15th

178. Ibid., p.270.
179. Letter from Court, dated 5th April, 1776, R.P. Patwardhan (ed.), Fort-William: India House Correspondence, Vol. VII, p. 149.

1792.¹⁸⁰ From then onward the Company regularly was importing sugar into England that fetched a profit of 53%.¹⁸¹ The sugar merchants of England in consequence, applied to Parliament for a reduction of duties which was not finally granted. But this, however, did not appear that this denial prevented the Company from further providing stimulus to the culture and manufacture of the sugar-cane and its products in India.¹⁸²

Another attempt in the direction of improving sugar-cane cultivation was made at this critical time by introducing the West Indian method into Bengal. In 1791, the Directors of the East India Company made an agreement with Lieutenant Paterson, granting him 600 bīghas of land of 100 cubits each, rent free, for a term of 12 years for the plantation of sugar-cane and engaged to sale the whole of its produce on favourable terms to the Company!¹⁸³ He worked on his project in Bīrbhūm districts. But, soon, he removed his area of activities from Bīrbhūm to Champaran, where some sugar was produced under his supervision.

Fine sugar was manufactured out of the juices of khajūr (date tree), nārkul (coco-nut) tree and other species of Palm.¹⁸⁴

180. Commercial General letter from Court, September 11th, 1811.

181. Bengal Board of Trade (Commercial), Cons., Dec 23rd, 1793.

182. G. Richardson Porter, The nature and properties of the Sugar-cane with Practical Directions for the improvement of its culture and the manufacture of its products, (London, 1830), pp. 212-213.

183. Ibid, p. 213. Also see Home Deptt. Public Cons., May 2nd, 1796, No. 12.

184. H. R. Ghosal, Economic Transition in the Bengal Presidency, p. 66. Also see J. F. Royle, Essays on the Productive Resources of India, p. 231. Also see his, Fibrous Plants of India Fitted for Cordage, Clothing and Paper, pp. 105-108.

Khajūr was found almost in every part of Bengal proper, but it flourished most congenially, in portions of Dacca, Mymensing, Sunderban districts.¹⁸⁵ Jessore, Faridpur, Bakerganj, some portions of Nādia, Barasat, Pabnā¹⁸⁶ and in 24 Parganas.¹⁸⁷

Nārkul (Cocoa-nut) flourished on the coast of the southern provinces of the Indian Peninsula. It was also found on many parts of the western coast of the Bay of Bengal as well as in the southern parts of Bengal.¹⁸⁸ The cocoa-nut tree was valued for the sap procured by cutting the spathes of the flower-stalks, which was either drank in its fresh state, boiled down to coarse sugar or jaggery or allowed to ferment into spirit and vinegar.¹⁸⁹

Early in 1793 the Commercial Resident of Shantipur proposed that engagements for procuring sugar from primary producers living

185. S.H. Robinson, The Date Tree: Aprizing essay on its cultivation and the manufacture of its juice into sugar, p.4. Only in the alluvial soils which cover its south eastern portion excepting only such tracts as suffer entire submersion annually from the overflow of their rivers, as is common. The land best suited for the proper cultivation and growth of date tree was laying within an area stretching east and west about 200 miles and north and south about 100 miles covering in total an estimated (rough) area of about 900 square-miles-within an irregular triangular space.

186. S.H. Robertson, The Bengal Sugar Planter: Being a treatise on the cultivation of the Sugar-cane and Date tree in Bengal and the manufacture of Sugar and Rum therefrom, p.45.

187. W.W. Hunter, A Statistical Account of Bengal, Vol. I, Districts of 24 Parganas and Sunderbands, (London, 1875, reprinted in India, 1973), p.140.

188. J.F. Royle, Fibrous Plants of India fitted for Cordage, clothing and Paper, p.105.

189. Ibid, p.106.

in the rural regions be made with the indigenous traders and pāikārs for specific quantities of gur (raw sugar) which, when received, should be paid at the market rate.¹⁹⁰ This provision was viewed by Board of Trade as exclusive dependency of the Company at the mercy of merchants and pāikārs, who would purchase the whole of the available quantity of gur and raise its price according to their choice.¹⁹¹ Another suggestion by Commercial Resident of Rāngpur was made, who recommended direct advances were to be made to these people for the annual supply of the commodity.¹⁹²

This system did not directly benefit the cane-growers. Complaints were made to the Commercial Resident of Sonāmukhī against the pāikārs who generally entered into contract with the cultivators "late in the season, long after the crops had been planted." Cane-growers, therefore, were provided little or virtually no incentive or encouragement to extend their cultivation.¹⁹³ The Company also failed to dictate the prices of the commodity with the contractors.

The Company and other foreign merchants exported some sugar to the markets of England, Europe, Africa, America and Asia. The quantity exported by foreigners was not negligible.

The date sugar as an article for foreign export was hardly in existence previous to the first inroads of the East India Company's trade monopoly in 1813. But it was manufactured locally

190. Bengal Board of Trade (Commercial), Cons. June 24th, 1793.

191. Ibid, p.

192. H. R. Ghose, Economic Transition in the Bengal Presidency, p. 67.

193. Letter to Board of Trade, Nov. 17th, 1793, (Bengal Board of Trade-Commercial-Cons., Nov 21, 1793).

only to satisfy the wants of the native consumers in and around the few places of its production principally in Jessore and Fareedpore districts and for occasional transport to the principal markets of the adjacent districts like Murshidābād, Dacca etc.¹⁹⁴

In 1792, it was recorded in an old minute of the Government, Board of Trade at Calcutta that the total production of date sugar in Bengal was then estimated at 15,000 maunds. Within a period of 31 years i.e. from 1792 upto 1813 - the total quantity of all sugars imported into England from the East Indies was estimated in the range of 1,000 to about 6,000 tons per annum except in the year 1801, in which it reached the level of 11,327 tons. In those days most probably all the sugar was exported from Bengal excepting an 'occasional small shipment from Madras'.¹⁹⁵

Therefore, the possibilities of growing sugar industry as an industrial concern throughout the 18th and in the first half of the 19 century was essentially negligible. The steps towards organising Bengal's sugar production on West Indian lines, if not continuously and whole-heartedly yet haltingly, was a hindrance on the path to develop capitalism in sugar production. Even, the most modern invention connected with sugar-cane pressing, the process of sugar production, and most sophisticated chullahs were not introduced in Bengal's sugar production. Iron cylinder started to be imported from England and found its application in sugar industry only during the first two decades of the 19th century and that too on a very limited scale.

194. S.H. Robinson, The Date-Tree: A Prizing Essay on its cultivation and the manufacture of its juice into sugar, (Calcutta, 1858), p.5.

195. Ibid., pp.5-6.

Primitive techniques were employed in sugar production.¹⁹⁶

The methods utilised by Bengali manufacturers of sugar was very time taking which was evident from the following survey report of Major Moody undertaken in 1826. This survey report mentioned a comparative number of days, labour etc. required in different countries for the production of equal quantities of sugar viz.,

i.	In Guiana	- 206 days
ii.	Barbados	- 406 days
iii.	Tortola	- 653 days
and	iv. Bengal	-1200 days

Here labour power remained equal in each country.

O I L S

Large numbers of plants yielded oils by expression of their seeds. Of these sesamum, poppy and linseed etc. were most important. These oils substituted mustard and rape oils. The seeds of sunflower, safflower etc. also yielded oils in large quantities.¹⁹⁸

196. George Richardson Porter held that "Iron cylinders have been brought from England. But the expense attending them caused their use to be dropped. It is found that a number of Bengal mills sufficient to express the same quantity of juice, did the business cheaper than the West Indian Mill."

Near Calcutta the mills utilised two small wooden cylinders placed horizontally and turned by two men with levers and cross-bar handles. See, George Richardson Porter, The Nature and Properties of the Sugar-Cane with practical Directions for the improvement of its culture and the manufacture of its products, p.219. In these wooden mills the cane was passed through the screw several times to extract properly the juice of sugar cane. This method of pressing sugar-cane was much more time-taking because sugar-cane (akh) was pressed many times. The chullahs on which sugar was boiled was also of primitive nature and much more heat was wasted. This was precisely the reason that the process of sugar production during the later half of the 18th century and the first half of the 19th century became very lengthy.

197. George Richardson Porter, loc.cit., p.227.

198. J.F. Royle, Essay on the Productive Resources of India, p.231.

O P I U M

The cultivation of the opium is believed to have been introduced in India during the 15th century. By the middle of the 17th century, India emerged as a major producer of the drug. Bihār including Banāras, and Mālawa, together with other parts of Central India were the principal opium producing regions of India. Some parts of Eastern Bengal were also famous for poppy cultivation of which Rāngpur was on the top. Poppy cultivation had been practised in Rāngpur, Mymensingh, Dinājpur, Bīrbhūm and various remote parts of Chittagong.

Opium was largely consumed by the people of southern, eastern and hilly areas of northern Bengal. It was largely consumed in Midnapore, Hijli, Balasore and Calcutta. Opium was consumed in large quantity by peasants living under the Garo Hills and by Garos themselves. A considerable quantity of opium was consumed by Assamese. Opium was also in demand in Bhutan and Tibet.

The production of alcoholic drinks from toddy sap, mahuwā and molasses were practised in Bengal. In Medinipur (Midnapur) valuable odoriferous oils from flowers and other scented substances' were manufactured for exportation.

It is, therefore, quite clear from this comprehensive analysis that agro-proto-industrial system in rural regions of 'pull areas' in some rural regions of 'neutral areas' and rural

199. Om Prakash, "Opium Monopoly in India and Indonesia in the 18th Century," IESHR, Vol. 26, No. 1, (Jan-March, 1987), p. 64.

200. B.C. Barui, "The Smuggling Trade of Opium in the Bengal Presidency," Proceedings of Indian History Congress, (1974), pp. 286-287.

201. Ibid., p. 287.

202. Tapan Raychaudhuri, "Non-Agricultural Production: Mughal India," Tapan Raychaudhuri & Irfan Habib (eds.), Cambridge Economic History India, Vol. I, C. 1200-C. 1750, (Delhi, 1982), p. 275.

203. Ibid., p. 275.

regions of 'Pull Corridor areas' of Bengal proper (West Bengal + Bangladesh) had its dense and far and wide network throughout the period under review. Important industrial crops like indigo-sugar-cane (akh), opium, tobacco, etc. were introduced and cultivated in the rural regions of 'neutral areas', 'push corridor areas' and 'push areas' only in the late 18th century. The rural regions of 'push areas', 'push corridor areas' and some of the parts of 'neutral areas' had to develop associated agrarian proto-industries dependent on the demand from outside these areas. Therefore, the proto-industrialization in agricultural products in these areas had made its road only haltingly. But this trend in the development of other branches of proto-industrialization is not traceable with certain possible short-term exceptions in the cases of iron and coal industries in the later 18th century.

This high watermark in the development of agro-proto-industrialization in whole of the rural Bengal in the 18th century did not offer an opportunity to make a transition to industrial mode of production rather proto-industrialization stagnated or transformed into de-industrialization. Sharp controversies have arisen around the question of de-industrialization among nationalist economic historians and modern Marxist

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historians of India and abroad (Europe). A.K. Bagchi maintains that the mature phase of capitalist industrialization is accomplished by firstly an increase in the proportion of national income generated by the secondary (industrial) sector, secondly, by an increase in the proportion of the population engaged in the secondary sector and finally, a continual increase in the degree of mechanization in industry. The mere lack of fulfilment of any of these pre-conditions can be envisaged as non-industrial or stagnation and in most of the cases, India witnessed the reversal for the 19th century. Bagchi blamed to the British exploitation of India 'through an exclusive royal monopoly but also through a collective, heirarchical, monopoly of which the major constituents were the European businessmen in collaboration with

204. The political economists who have done some commendable works in the conceptual frame-work of de-industrialization and backwardness in the third world countries in general in the 19th century, Bill Warner, Gary C. Anders, J. R. Mandle, Nicos Poulantzas, Paul A. Brown etc. are most important. These political economists recognised the colonization of third world countries by metropolitan countries as the major cause for the de-industrialization and backwardness of the third world countries. Among the nationalist historians who have worked out the causes of de-industrialization in India in the 19th century, Dada-bhai Nauroji, Ranade, R. C. Dutta and later R. P. Dutta became important. Modern historians like Bipin Chandra, Tapan Raychaudhuri, A. R. Desai, Irfan Habib, A. K. Bagchi, M. A. Zaidy, Vic Zainy, L. Chakrabarty, Kuznets, M. Mukherjee, D. P. Bhatt, R. D. Gupta, Morris D. Morris, C. P. Simon, Arun Bose, R. P. Masani, J. Krishnamurty etc. have done some critical works directly or indirectly related the question of de-industrialization and backwardness of the Indian Economy in the 19th century. The nationalist and modern historians have viewed that the drain of wealth was the main cause of de-industrialization in 19th century India. It is very difficult for serious historians to view that the pre-colonial Indian Economy had been on the eve of an industrial revolution, only interrupted by the establishment of colonial rule! Recently Frank Perlin has given a new impetus by providing a view direction to the de-industrialization debate. See his "Proto-Industrialization and Pre-colonial South Asia, "Past and Present," No. 1, (1983), pp. 51-98.

some Indian comprador elements and the Indian Landlords and money lenders in the countryside' for the non-development of industrialization. In one of his papers Bagchi has taken pains to demarcate the processes responsible for the evolution of these factors. Only recently Frank Perlin has made some relevant suggestions with partial solution to the problem.

Perlin has replaced the concept of proto-industrialization by the broader notion of 'proto-capitalism within which,

205. A.K. Bagchi, "De-industrialization in India in the 19th Century: Some theoretical Implications," The Journal of Development Studies, Vol. 12, No. 2, (Jan. 1976), pp. 137-144. Also see his "Some characteristics of industrial Growth in India," Economic and Political Weekly, Annual No. Vol. X, Nos. 5, 6, 7, p. 157. For further study of de-industrialization of India also see his, "Reply by A.K. Bagchi," IESHR, Vol. 16, No. 2, (1979), pp. 149-151. In most of the papers he dealt with de-industrialization of Bihar. And all of his studies are based on statistical analysis. He has recognized certain processes responsible for the development of de-industrialization in India in general and in Bihar in particular. One of the important exponent of his argument is that the absolute numbers of the population dependent on industrial sector decreased from 18.6% to 9.5% between 1809 to 1901. While Marika Viczainy refuted Bagchi's thesis on basis of qualitative evidences for the early 20th century. See his, "The de-industrialization of India in the 19th century. A methodological critique of A.K. Bagchi," IESHR, Vol. XVI, No. 2, (1979), pp. 105-137.

206. He (Perlin) has recognised the term 'proto-capitalism' as general and unspecific because he 'intended to avoid implying too much about the detailed character of such pre-colonial orders at a time when we still know far too little about them.' The use of the term 'proto-capitalism' according to him has two further advantages: first, "it avoids the dualist assumption that India, or any other region, must have possessed economics of a different order from those in which capitalism was generated, or India itself should similarly be divided into structurally discordant capitalistic and pre-capitalistic sector! Secondly, and more specifically, "Commercial capitalism" may thus be retained for the commercial and financial developments associated with towns, ports, traders and manufacturing regions, while at the same time being incorporated as an essential motor of the wider changes proto-capitalism intended to suggest. See his "Proto-industrialization and Pre-colonial South Asia," Past and Present, No. 1, (1983), p. 59.

institutions of commercial capitalism emerged which provided ground to examine the development of de-industrialization process in South Asia. He has employed 'proto-capitalism' to avoid some of the basic questions related to de-industrialization without coherently comprehending the basic tenets of 'proto-capitalism! Perlin, therefore, offered a different and broader perspective to analyse the question of de-industrialization or change in India not as the product of foreign colonial rule but also 'as one of a frame-work of relevance escaping national or continental boundaries, and instead including European traders, Asian commerce and Bengali agriculture as part of a single set of processes, developments and changing structures."

The fundamental defect of Perlin's thesis is the rejection of 'proto-industrialization' and the introduction of rather loosely the model 'proto-capitalism' to study the process of industrialization proper in South Asia; although regional and local monographs based on micro-level industrial investigation show the proto-industrialization during late 17th and 18th century India in general and in Bengal in particular was a well and wide spread phenomenon. This highly developed proto-industrialization made transformation to de-industrialization because of the defective mode of organization of manufactures in the 17th and 18th centuries where demand rather than supply played significant role, production cost was very small, merchant controlled the primary producers rather than the production process, risks involved in production was borne by the petty producers, Commercial rather than the industrial capitalists encouraged

the handicrafts, merchants did not control the productive forces, etc. These factors encouraged the circulating capital to penetrate more into the production process than fixed capital. Therefore, centralised manufacturing workshops based on private ownership did not develop. Although, there existed many state owned centralized manufacturing workshops, where thousand of workers worked to satisfy the needs of state functionaries. These state kārkhānas were managed and supervised by state appointed functionaries whose aim was to yield private income for themselves. Supply in a given time was not a problem to these state kārkhānas. Therefore, the chances of innovation and application of time saving devices in these state kārkhānas was an impossibility. European Company's factories were altogether different centralized organization.

Mobility in any form—beyond the movement of rural producers to the localized centres of production was actually strictly limited. Occupational mobility was negligible. The major example of occupational mobility was from agriculture to weaving. The evidence relating to artisanal mobility from one region to another was few.²⁰⁷

Finally, and most significantly, it was the Company's administration that deepened the speed of de-industrialization process by firstly introducing a monopoly in different branches of trade during late 18th century, by opening the trade to India for different merchants, by allowing a remission of export duties causing an immediate loss of £ 100,000 per annum during 1790s,

207. Tapan Raychaudhuri, "Non-Agricultural Production: Mughal India," op.cit., p.285.

by employing artificial scarcity of market (demand) for Dacca
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Muslins throughout Europe except London etc. Therefore, English
colonial exploitation of Bengal's economy through various means
was only a late comer in the domain of de-industrialization of
Bengal.

208. For details of the exploitation of weavers see, Despatch to Court August 24, Para 59, 1750, For the rise of the prices of raw cotton in 1738 see consultations, Dec. 11, 1752. and proceedings, April 29, 1767, Dutch Complain of English Monopoly of the Weavers are quoted in R.J. Long, Selections from Unpublished Records of Government, 1748-1767, Social Condition of Bengal, Vol. 1, (1869), pp. 23, 40, 503. For laying open the trade to India, see Charles Maclean, A view of the consequences of laying open the trade to India and C., (London, 1813), p. 8. For the restriction on fine Muslins see, Letter to the Right Honourable Henry Dundas, one of his Majesty's Principal Secretaries of State and C. from the Committee of buyers of East India Piece goods for Home Consumption, (London, 1792-93), pp. 6-7. But there were certain exceptions in regard with the proposed prohibition, they could not publicly exposed and they would nevertheless essentially be accepted by the private assortment of every retail dealer.