

### CONCLUSION

From this politico-socio-economic, cultural and historical study, it becomes quite clear that proto-industrialization in 'pull', 'pull corridor', 'neutral', 'push corridor' and 'push' areas of rural Bengal throughout the period under review had been deep rooted. The development of different proto-industries in these areas of rural Bengal was slow, steady and systematic. The penetration of different modes of production in proto-industrial system at different levels of its development were not upto the point from where proto-industrialization makes a move towards its transformation into capitalist-industrialization. The Bengal's contract system lagged far behind the English putting-out system in promoting the technological innovations. The centralized manufacturing system occurred throughout the proto-industrial phase in England had no match to its Indian counterparts in regards with management, organization, utilization of modern knowledge and machines, supervision and regulations of work and leisure.

This high phase of proto-industrialization was not sufficient to make transition from proto-industrialization to industrialization proper. For making such transition some inputs were required to be provided by the government, merchant capitalists and proto-industrialists. These inputs were not provided by the English government in India and especially in Bengal or local nobles or merchants. Instead, in Bengal, specially after 1750s, efforts were being employed to discourage the steady and rapid development of proto-industrialization by Company's

administration for their own interests through different administrative, political, social, cultural, economic and technological means. Resultantly, while proto-industrialization in England made transformation to capitalist-industrialization, in Bengal, it made transition to a devolutionary process, called 'de-industrialization'!

In case of British industrialization Deane and Habakkuk have questioned the validity of the hypothesis of Rostow and Lewis that assigned a strategic importance to capital in the 'take off' period. Deane's empirical findings have been supported by the researches of Kuznets, Solow and Cairncross who maintain that 'changes in capital investment proportions in any economy during industrialization were gradual'.<sup>1</sup> Improvements in productivity can be obtained mainly through using more efficiently the existing capital stock and through the 'centralization and disciplining' of a growing supply of wage labour.

More recently, Feinstein has challenged the Deane and Kuznets thesis by statistical, calculative and figurative estimates. He concluded that fixed capital formation in Britain

1. Pat Hudson, The Genesis of Industrial Capital: A Study of the West Riding Wool Textile Industry.C.1750-1850 (Cambridge, 1986), pp.4-5. The view that growth does not invariably, or even largely depend on a high level of capital formation gained strength from stressing the negligible results of extensive economic aid to the Third World Countries since the Second World War. Since then onwards, political and cultural dimensions of development theory were getting prominence.

2. The term 'fixed capital' includes factories and farmsteads, mines and machines, irrigation and drainage works, roads and sewers, canals, ships, stock of raw materials, semimanufactured products, finished goods held by manufacturers and traders and the work in progress and the net acquisition of foreign capital both physical and financial. See C.H. Feinstein, "Capital Accumulation and the Industrial Revolution," R. Floud and D. McCloskey (eds.), The Economic History of Britain since 1700, Vol. 1, (London, 1981), p.182.

increased at a rate more than double that previously suggested by Pollard for the period 1770-1830. For 1830-5 Feinstein's calculations are close to those of Pollard.<sup>3</sup> This change according to him led to a major alteration in both the 'organisation of industrial production' and in the 'methods by which finance was raised'.<sup>4</sup> The period before 1850 saw a little or virtually no improvement in the ratio of fixed to circulating capital investment in British industry and commerce together which was at 1:1(c.1760) to more than 3:1(c.1860). And even the timing for this transformation differed from industry to industry. This delay was not due to the shortage of sufficient funds, but due to the lack of willingness on the part of landlords, merchants, religious and educational institutions and banks to invest in industrial concerns.<sup>5</sup> The pioneers of the factory system had to invest their private savings in the industry.

These indications of the overriding importance of circulating capital are very relevant because the sources of long- and short-term capital were often quite separate and distinct. Then the changing ratio of fixed and circulating capital required for competitive industrial enterprise has important implications for the raising of finance and its social and economic

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3. Pat Hudson, op.cit., p.5.

4. C.H. Feinstein, op.cit., pp.128-142.

5. Sidney Pollard, "Fixed Capital in the Industrial Revolution in Britain," Francois Crouzet(ed.), Capital Formation in the Industrial Revolution, (London, 1972), pp.148-149.

6. M.M. Postan, "Recent Trends in the accumulation of Capital," F.Crouzet(ed.), Capital Formation in the Industrial Revolution, (London, 1972), p.71.

costs. A new approach is wanted involving a much less rigid distinction between the two. Fixed and circulating capital were often interdependent and, to some extent, interchangeable. If the elaborate credit network that evolved in the different trades eased the manufacturers need to tie up large sums of money in stocks, this obviously released funds for productive investment. If the domestic outworking system was gradually usurped by more centralised forms of production, partly because of the travel time and delays involved, the saving in circulating capital could be used to finance increased plant and equipment outlays. If bill-discount and short-term accommodation by banks expedited the purchase and sale of commodities, so the manufacturer could divert finance from circulation to production. Since circulating capital played a major determinant role in financing the investment in the expansion of plant and equipment, fixed and circulating capital sources must be studied as an integral relationship both in the long-term and through cyclical fluctuations.

The previously accepted view of the minimal relationship between banks and the medium-and long-term finance of industry in the 18th and early 19th centuries is in process of revision by most modern writers like Pressnell, Cameron and Methias. The English banker's role in financing the expansion of productive capacity is now being recognised.

In their short-term and credit dealings too, banking activities released the manufacturer's own capital for fixed investment. By discounting bills, granting overdrafts and short term

loans, banks financed the movement of goods as well as the production of commodities. Banks played even more dynamic role in the economy of the 18th century England by creating currency.<sup>7</sup> The rise of the London discount market at the beginning of the 19th century stimulated banks in industrial areas to have bills discounted in London via the agency of bill brokers that considerably enlarged the credit facilities available to their manufacturing clients.

More upto-date publications on the dynamic role of banks in Industrial Revolution in England have demonstrated that banks were ready to finance longer term investment in industry.<sup>8</sup> A short-term loan could become a medium and instrument of long-term investment by being renewed by agreement or unwillingly from the bank's point of view when the borrower failed to redeem. Examples of such relationships are found in Yorkshire and elsewhere, where finance capital and industrial capital were integrated, where bankers established industrial enterprises or where industrialists became bankers.<sup>9</sup>

Diverse sources of capital became frequently operative in a sizeable new industrial undertakings. In England during late 18th and early 19th centuries, the need of capital for

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7. Pat Hudson, op.cit., p.20. "As in Lancashire, the Yorkshire textile entrepreneurs in their relationship with local banks can be said to have constituted a mutual credit source each endorsing the activities of other."

8. Ibid, p.20.

9. Ibid, p.20.

financing industrial enterprises was attracted from mercantile credit, land mortgage, family friends etc. In time of emergency due to heavy burdens for the resources of a single entrepreneur, the finances were undertaken by a partnership which was usually a combination of a few friends. Early joint stock forms of organization as source of capital finance for the establishment of centralized production was subscribed only rarely.<sup>10</sup> But the predominance form of financing industrial enterprises during the initial phase of Industrial Revolution was the 'self finance.' The pioneers of the factory system self financed their industrial enterprises by ploughing back regularly and almost automatically, the greater part or even the whole of their private profits or savings.

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10. See M.M.Postan, "Recent Trends in the Accumulation of Capital," Francois Crouzet (ed.), Capital Formation in the Industrial Revolution, (London, 1972), p.71. Also see Pat Hudson, The Genesis of Industrial Capital:A Study of the West Riding Wool Textile Industry, C.1750-1850, (Cambridge University Press, 1986), p.21. For the different and diversified functions of capital see, P. Dean, "The Role of Capital in Industrial Revolution," Explorations in Economic History, Vol. 10, No. 4, (Summer, 1973), p. 353. Dean maintains that capital has two functions: the investment function and the savings function. The investment function increases the rate of growth of output whereas saving function releases the resources for further investment. Thus, capital becomes stock asset at a point of time for generating a flow of economic output. Capital accumulation, then, is the annual flow of additions to these assets which comes either out of failure to consume all of current income or out of borrowing abroad. Also see John Caville, "Primitive Accumulation and Early Industrialization in Britain," Socialist Register, (1969), pp.247-271.

A systematic survey of significant secondary and contemporary sources shows that throughout the 17th and 18th centuries, proto-industrial producers in most of the trades, in most of the rural regions of Bengal, were very poor cottagers<sup>11</sup> who were least or not bothered to arrange circulating and fixed capital for their proto-industries. It, therefore, would be pertinent to suggest that 'self-finance' from the side of proto-industrial producers or from below through ploughing back 'regularly and almost automatically' the greater part or even the whole of their private profits or savings for financing status of the proto-industrial producers, to finance centralized manufacturing kārkhānas through 'partnership' basis by undertaking finances from partners even in emergency or in rare cases was also an impossibility.

Finance for funding different industrial enterprises from other sources like from Mughal and Company bureaucrats, merchants, usurers, commercial bourgeoisie etc. was possible to make operative but these men of fortunes were hardly willing to invest their

11. Tapan Ray Chaudhuri, Non-Agricultural Production: Mughal India," Tapan Ray Chaudhuri and Irfan Habib(eds.), The Cambridge Economic History of India, Vol. 1, C. 1200-C. 1750, (Delhi, 1982), pp. 261-264. A Karim quotes J.A. Taylor's report of 1800 to show the annual and monthly wages of cotton weavers of Bengal in his, Dacca, The Mughal Capital, (Dacca, 1964), pp. 84-103. Taylor, the Company's commercial resident at Dacca observed in 1800 that a weaver with two assistants to produce a piece of the best muslin working for a whole year yielded Rs. 250. Yarn cost 100 rupees. If the weavers were not cheated, they earned 150 rupees a year or 8 rupees a month for the master weaver and 2 rupees a month each for his assistants. Also see, V.I. Pavlov, Historical Premises for India's Transition to Capitalism, (Moscow, 1979), pp. 117-127.

hoarded capital or private profits in more productive enterprises like proto-industries, centralized manufacturing concerns etc. They invested greater part of their hoarded capital or private profits to trade and to the acquisition of landed property.<sup>12</sup> Finance through hundi was never made operative in centralized manufacturing concerns before high proto-industrial phase, during high proto-industrial phase and immediately afterwards.

Finally, and most importantly, banks could finance proto-industries of Bengal and could catalysed its promotion by extending loans to proto-industrial producers and by establishing industrial enterprises. But the history of banking system in India is obscure. A.K.Bagchi is of the opinion that the first attempt to establish a bank by the officers of the Company seems to have occurred in Madras, in 1683.<sup>13</sup> It was a bank of deposit and discount, managed by the members of the council and most probably, it did not issue notes.

Between the 18th and the first half of the 19th century, European controlled banking, primarily under the auspices of European Agency houses was gradually growing up. In some cases a single Agency house or two or three Agency houses found it useful to float a bank as a separate entity; in other cases, an Agency House simply carried on the functions of a bank alongwith

12. Ernest Mandel, Marxist Economic Theory, (trans.), Brian Pearce, (Marlia Press, London, 1977), p. 114.

13. A.K.Bagchi, The Evolution of the State Bank of India, Part-1, The Early Years: The Roots; 1806-1876, (Oxford University Press, Calcutta, 1987), p. 32.

its other business. Agency houses accepted deposits, lent money to merchants, shipowners, ship managers, planters and governments and generally helped finance external trade. They issued bank notes which were sometimes accepted even for public payments, particularly in periods when the government finances were embarrassed. But such banks were almost never real joint-stock banks, the capital was not subscribed by a large number of independent persons.<sup>14</sup> The oldest bank of this kind was the Bank of Hindustan established and managed by Alexander and Co. from the 1770s but the exact date of its foundation cannot be ascertained. In 1773, Warren Hastings floated the General Bank for Bengal and Bihar with two main offices-in Calcutta and Murshidabad-and 14 branches besides several subagencies. It was a private establishment but under the patronage of the Company's government with Hazari Mal and Dayal Chand as its managers.<sup>15</sup> Bengal Bank was operated during these period. The General Bank of India was floated in 1786.<sup>16</sup>

Following were the main objectives of these banks:

(i) to regularise the batta or rates of conversion between the different types of coins circulating in the Company's territory; (ii) to regulate the hundian or internal rate of

14. Ibid, p.32.

15. Ibid, p.45. Also see Parmathanath Banerjee, Indian Finance in the Days of the Company, (London, 1928), p.69.

16. Ibid, p.46.

exchange for transfer of funds from one place to another; and  
(iii) to limit the extreme seasonal variations of the supply  
of coin by persuading district collectors to deposit the revenue  
in the branch houses of the bank and take out bills on the head  
office payable in sicca rupees at a fixed rate of batta and  
hundian.<sup>17</sup>

From the brief description of history, aims and functions  
of banks in Bengal, it is possible to postulate that most of  
the officials of different banks of Bengal were most interested  
to finance those enterprises which were meant for yielding high  
profits. Their interest in financing proto-industrial and cen-  
tralized industrial enterprises was negligible. Hence, these lack  
of finances from different financial channels available to in-  
vest in varieties of proto-industrial and centralized industrial  
enterprises, contributed significantly to the stagnation or de-  
industrialization or backwardness of Bengal.

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17. Ibid, pp.45-46.

The drain of wealth through various channels is alleged by political economists and economic historians as the major cause of deindustrialization or backwardness of Bengal's economy. It is a well documented area of economic history to be repeated here.<sup>18</sup> The drain of wealth, undoubtedly, had an adverse effect on industrialization in Bengal, employment opportunities, standard of living of the proto-industrial producers, national income, capital formation, etc.

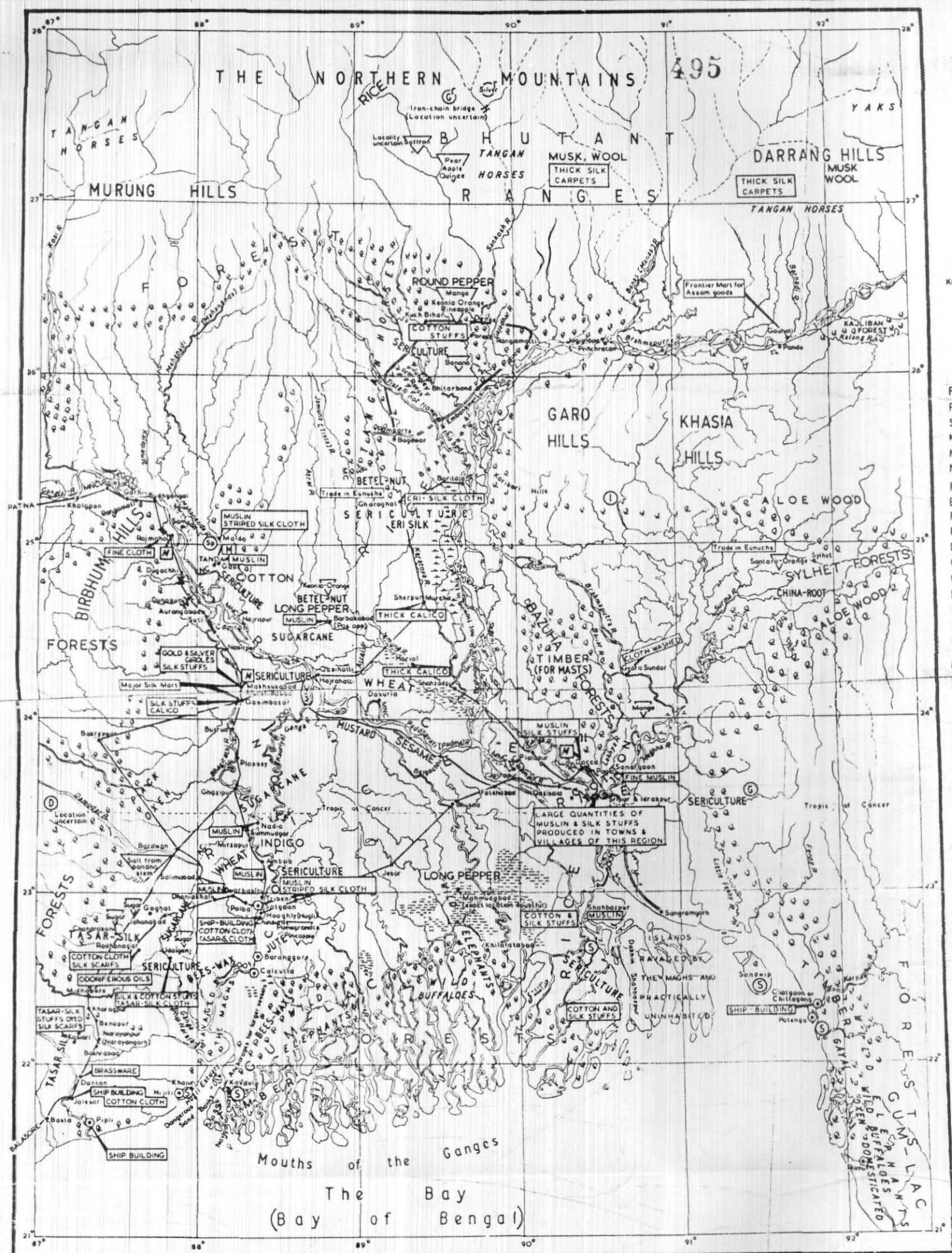
18. For a detailed description of drain of wealth see Morris D. Morris, "Towards a Reinterpretation of 19th Century Indian Economic History," IESHR, Vol. 5, No. 1, (Jan., 1968), PP. 1-15. Toru Matsui, "The Nineteenth-Century Indian Economic History: A Review of a Reinterpretation," IESHR, Loc. cit, pp. 17-33. Bipin Chandra, "Reinterpretation of 19th century Indian Economic History," IESHR, Vol. 5, No. 1, (Jan. 1968), PP. 35-75. Tapan Raychaudhuri, "A Re-interpretation of Nineteenth Century Indian Economic History", in the same Volume, PP. 77-100. Sourindra-nath Roy, "British Connection with India as a factor in pre-industrial capital Accumulation in England", India, Past and Present, Vol. 1, No. 1, (1984), PP. 72-78. Also see, K.P. Misra, Banaras in Transition 1738-1795: A Socio-Economic Study, (Delhi, 1974), PP. 95-154. Parmathanath Banerjee, Indian Finance in the Days of the Company, PP. 22-122. Irfan Habib, "Colonization of Indian Economy, 1757-1900", cyclostyled. S. Bhattacharya, "Industrial production, Technology and Market Structures in Eastern India, 1757-1857" cyclostyled, Irfan Habib, "Process of Accumulation in Precolonial and Colonial India", IHR, Vol. XI, Nos. 1-2, (July 1985-January 1986), PP. 76-77. Romesh Dutt, Economic History of India, Early British Rule, (London, 1906), PP. 18-24. Lajpat Rai, England's debt to India, (N. Delhi, 1967), P. 32. V.B. Singh, Indian Economy: Yesterday and today, (PPH, Delhi, 1970), PP. 8-22. ect. According to S. Bhattacharya, the Company's acquired domination in the industrial field was of three kinds: "(a) domination of the market as the biggest single buyer; (b) extra market means, when supply of export goods and terms on which such goods were obtained were controlled; restrictions were imposed, informal or legal on the freedom of the producers; (c) in order to reinforce the above controls, a machinery for the procurement of export goods was devised so as to either subjugate or exclude Indian trading capital from spheres chosen by the Company."

Technologically, Bengal was far behind compared to the later 18th century England. In Bengal, demands of various commodities played an important role in shaping the degree and level of industrial production, whereas in England it was primarily the supply. In Bengal, supply of various commodities was not a difficult problem on the part of the merchant capitalists. It was the proto-industrial producers who carried all the risks of supply of the commodities demanded by European Companies, European, Asian, African and India private merchants. That was why, while European putting-out capitalists in general and English putting-out capitalists in particular, explored appropriate and pertinent means to speed up the production process, merchant capitalists in Bengal did not promote the proto-industrial producers or educationists to explore the new areas of technological innovations and the time saving devices.

The raw materials for manufacturing mechanaries were of inferior quality and could not be utilised industrially. Coal, too, was of bad quality and could not be utilised for producing high energy to be used in manufacturing machineries.

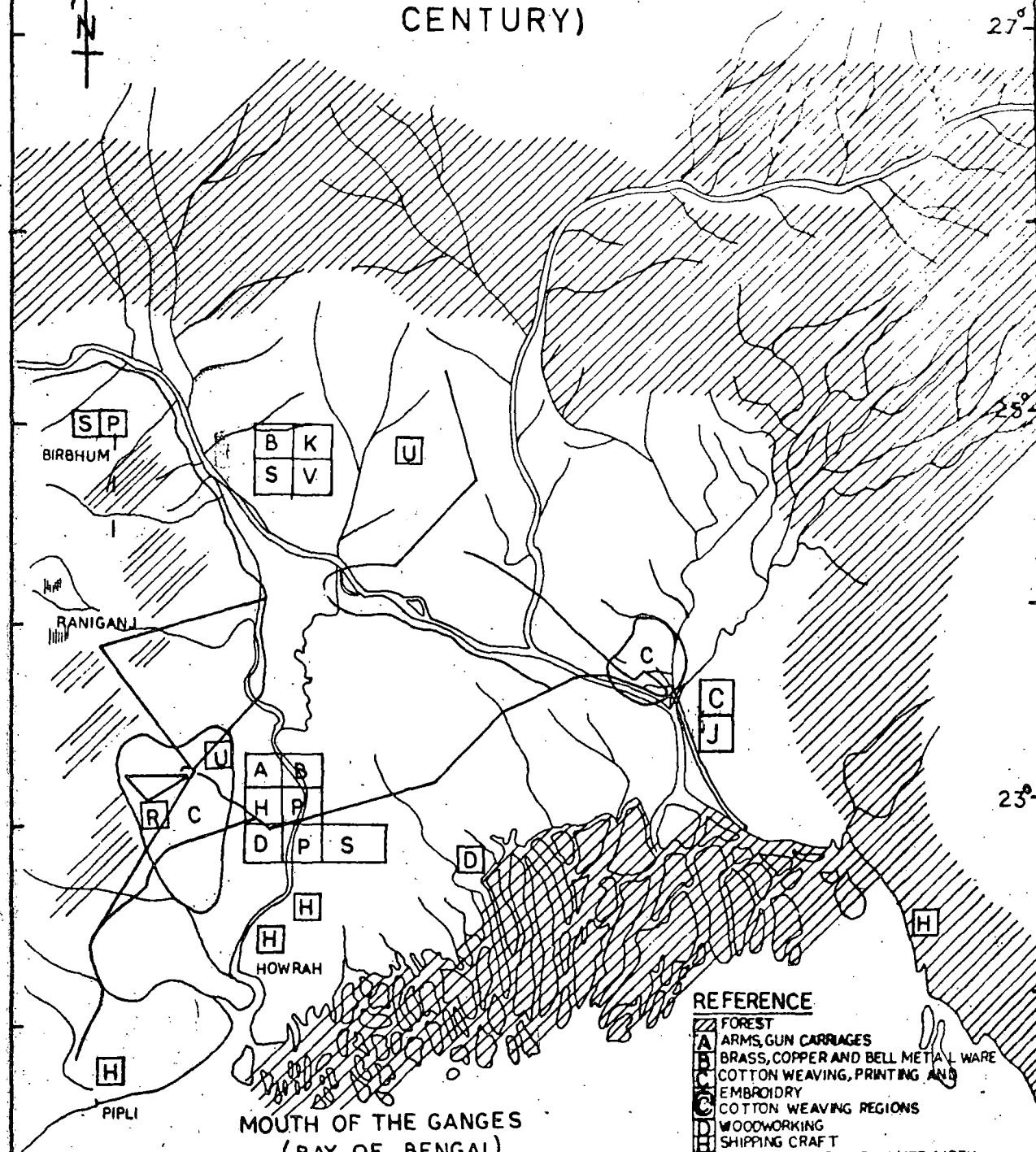
Britain was far ahead of India so far as the decentralization of centres of learning and technology was concerned. London played relatively an insignificant role as an administrative and cultural centre compared to Agra, Delhi, Murshidabad and later Calcutta. India, during our period, did not establish local academic institutions like Britain's the Manchester Literary and Philosophical Society or the Universities of Glasgow

and Edinburgh, Cambridge and Oxford, that were situated near centres of industry. Hence, Delhi and Agra drained large number of talent from provinces and local centres of learning and technology. Since, the modern industries of manufacturing were situated in the sural regions, although some manufacturing activity definitely developed around the capitals, a highly centralized state capital city like Delhi and Agra and later Calcutta is at disadvantage compared to a de-centralized state like Britain. This was a major cause in the de-industrialization of Begal.



MAP. 11. PROTO-INDUSTRIES OF BENGAL (17TH & 1ST HALF OF THE 18TH CENTURIES)

88° 90° 92°  
PROTO-INDUSTRIES OF BENGAL (LATE 18TH  
CENTURY)



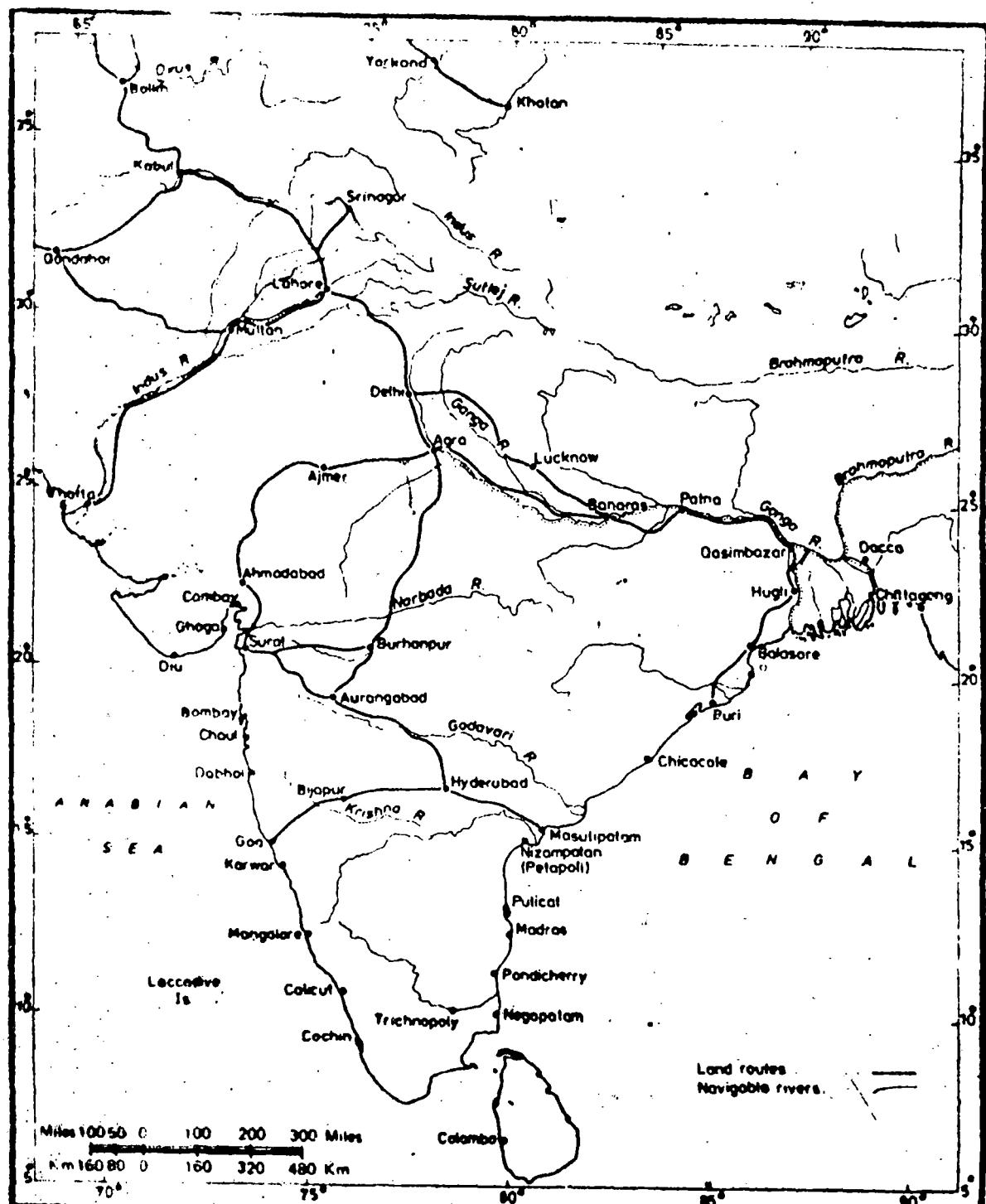
MOUTH OF THE GANGES  
(BAY OF BENGAL)

SOURCE:

- IRFAN HABIB - AN ATLAS OF MUGHAL EMPIRE, (OXFORD, 1982)  
J.E. SCHWARTZBERG - A HISTORICAL ATLAS OF SOUTH ASIA,  
(LONDON, 1978)  
G. BARRACLOUGH - THE TIMES CONCISE ATLAS OF WORLD HISTORY,  
(TIMES BOOK, 1982)  
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REFERENCE	
A	FOREST
B	ARMS, GUN CARRIAGES
C	BRASS, COPPER AND BELL METAL WARE
D	COTTON WEAVING, PRINTING AND EMBROIDERY
E	COTTON WEAVING REGIONS
F	WOODWORKING
G	SHIPPING CRAFT
H	JEWELRY, GOLD AND SILVER WORK
I	CARPETS
J	GLAZED POTTERY, TILES AND CERAMIC SPECIALTIES
K	PAPER
L	SILK
M	JUTE
N	IVORY CARVING
O	COAL
P	IRON

20 0 20 40  
KM



MAP. 13. MAJOR ROUTES AND PORTS, 17TH CENTURY

MAP. 14. ASIA AND THE INDIAN OCEAN : MAJOR TRADE ROUTES AND PORTS, 17TH CENTURY

