MUGHAL ECONOMY: Organization and Working

Jagadish Narayan Sarkar

NAYA PROKASH
206 Bidhan Sarani
Calcutta 700 006
India
To

Dr. Subimal Chandra Sarkar

My teacher, Professor and Head of the Department of History, Patna College, who entrusted the teaching of Polity and Economic conditions during Mughal Rule in India to me in the Post-graduate classes there since 1932.
Till recently economic history in India has been, comparatively speaking, a neglected fringe of Indian historiography. Even the *Cambridge History of India*, vol. IV dealing with the Mughal period (1937) may be said to contain no chapter on economic history as such if we regard the only one chapter on the Revenue System approaching our subject as one on administrative history. True, there are several standard works based on deep research on economic conditions during Mughal rule in India. But these have now become either old, rare or out of date. Edward Thomas's *Chronicles of the Pathan Kings of Delhi* (1871) and *Revenue Resources of the Mughal Empire in India* from A.D. 1593 to 1707 (1871) are more than a century old and deal with only a few aspects of administration with an economic bearing. For Mughal India it was W.H. Moreland who made his pioneering studies on its economy up to mid-seventeenth century more than sixty years ago in his two volumes, *India at the Death of Akbar* (1920) and *From Akbar to Aurangzeb* (1923), while his *Agrarian System of Moslem India* (1929) spans the Turko-Afghan and Mughal periods. Notwithstanding the wealth of information and critical scholarship displayed by him, his works, especially the first two, were written with a professed motive, namely to prove the superiority of the British rule over the Mughal. Apart from individual facts, his whole approach was vitiated because he had a point of view to establish, viz., that India's economy under British rule in the beginning of the twentieth century, though still poverty-stricken, was better than in the age of Akbar as regards per capita production and consumption. Further researches by other scholars have shown their weaknesses though some aspects of these still continue to be valuable. Only a few names may be mentioned here. Radha Kamal Mookerji (*The Economic History of India*, 1600-1800), Brij Narain (*Indian Economic Life, Past and Present*, 1929) and Irfan Habib (*Agrarian System of Mughal India*, 1963) sought to correct some of the omissions and commissions of Moreland, but that only in certain aspects. The publication of the monumental series of *English Factories in India* almost up to the end
of the seventeenth century (1684 to be exact) has revealed an unexplored mine of information on the subject to the English-knowing readers. The researches of C. R. Boxer (on the Portuguese maritime trade during 1953-69), of K. Glamman (Dutch Asiatic Trade, 1620-90, 1958), of K. N. Chaudhury (The Trading World of Asia and the English East India Company, 1660-1760, 1978), Tapan Raychaudhuri on Dutch trade (Jan Company in Coromandel, 1605-99, 1962) and A. Dasgupta (Malabar in Asian Trade, 1740-1800, 1967) have not only yielded new information but changed our older conceptions of India’s foreign trade during this period. Very recently other scholars from U.S.A., the U.S.S.R. and Japan and our own country are also making valuable contributions to the subject. Among recent studies must be mentioned the work of a band of a few Soviet scholars, Mrs. K. A. Antonova, L. B. Alaev and V. I. Pavlov and A. I. Chicherov (India : Economic Development in the 16th-18th Centuries, 1971) and others, too numerous to be mentioned. The latest work on the subject is the Cambridge Economic History of India, vol. I (c. 1200-c. 1750), edited by Tapan Raychaudhuri and Irfan Habib (1982). They have candidly acknowledged that our knowledge is limited by gaps, arising from the nature of the sources.

The subject bristles with problems and controversies. Moreover, there is hardly any single handy book dealing with a broad but clear survey of economic conditions in Mughal India in plain and simple language, based on a critical study of different classes of sources and making a synthesis of the results of modern researches. The present book seeks to describe the essential features of the economy of Mughal India, its organization and working. In dealing with agricultural organization, however, agrarian relations involving land tenure and connected matters have not been discussed. This has been exhaustively treated by Irfan Habib in his Agrarian System of Mughal India as well as in the Cambridge Economic History, vol. I. Moreover, the subject is mainly administrative. However, as its impact on the country’s economy was profound, it has been touched upon briefly. The importance of studying the industrial history of the country by dwelling on its principal industries has been emphasized. The author feels that this is a fruitful field of further research.
The intricate subject of commerce has been discussed in its different aspects more from the point of view of the country than from that of the European companies.

As regards the period covered by the book it is to be borne in mind that no hard and fast date lines can be fixed in socioeconomic history, for developments here are often independent of political changes. The period covered here is roughly from sixteenth to mid-eighteenth century, i.e., from the advent of the Mughals in Northern India and of the Portuguese in the South to the rise of the British as a political power in Bengal, leading eventually to a new order in India.

The book was planned and written out several years before but its publication was delayed owing to various problems, pre-occupations and difficulties, including my failing health. It has now been modified in certain particulars. Notes and references have been given for each chapter or section at its end. The book will, it is earnestly hoped, be found to be helpful not only to the advanced students of our universities but also to the general reader.

My thanks are due to Dr. Surendra Gopal, now Professor of History, Patna University, Dr. Amalendu De, Guru Nanak Professor of History, and now Head of the Department, Jadavpur University, and Dr. Dilip Haldar, Reader in Economics there for the trouble they took in going through the ms. and making valuable suggestions for improvement. Dr. Ashin Dasgupta, Director, Mrs. Kalpana Dasgupta, Chief Librarian and Sri B. Maiti, Assistant Librarian, National Library, Calcutta, also deserve my thanks for their valuable help. I have to sincerely thank Srimati Krishna Neyogi and Srimati Madhumita Goswami and Dr. Phanindra Nath Chakravarty for taking keen interest in making the book free from typographical errors and for helping me in preparing the Index. Messrs Naya Prokash are entitled to my sincere thanks in undertaking the publication of the work. I am, however, responsible for the imperfections of the book.

Calcutta - 700 075
1st January 1987

J. N. Sarkar
CONTENTS

PART I : INTRODUCTION 2—5

CHAPTER 1 THE LAND AND THE PEOPLE  
Forests and Arable Lands—  
Villages and Towns—Population

PART II : AGRICULTURAL ORGANIZATION 8—24

CHAPTER 2 CULTIVATION AND CROPPING 8-12  
Agriculture—Irrigation and Manure

CHAPTER 3 AGRICULTURAL PRODUCTION 13-21  
Foodgrains—Industrial crops : Fibres, Indigo, Sugarcane,  
Spices, Drugs

CHAPTER 4 HORTICULTURAL PRODUCTION 22-23  
Vegetables—Betel leaf—Fruits

CHAPTER 5 ANIMAL HUSBANDRY 24

PART III : INDUSTRIAL ORGANIZATION 25—106

CHAPTER 6 AGRO-MANUFACTURES 26-31  
Cottage Industries : Foodgrains, Cane-sugar,  
Oil-pressing, Tobacco, Coffee, Opium, Indigo, Wines

CHAPTER 7 NON-AGRICULTURAL PRODUCTION 32-106

Section I : Handicrafts 32-37  
Household Utensils : Metal Industries—Furniture-wood—  
Hides, Skins and Leather goods—Tailoring and Perfumery  
—Writing Material : Paper—Pottery—Building Industry—  
Glass—Soap—Manufacture of Means of Transport : On  
land, On water (shipbuilding)

Section II : Textile Manufactures 38-57  
Silk—Mixed Goods—Wool—Sann-hemp and Jute—Cotton

[ ix ]
CHAPTER 8 COMMERCE, INTERNAL AND EXTERNAL

Section I : Preliminary Remarks 107
Categories of Trade—Internal and Foreign

Section II : Transport and Communications 108-120
A. Water Transport : Northern and Southern India
B. Land Transport
C. Bridges
D. Rest Houses
E. Means of Transport

Section III : Marketing Organization 121-140

Section IV : Internal Trade 141-148
A. Some Features of Inland Trade
B. Routes and Centres
C. Coastal Trade
D. Inland Security
E. The Carrying Agency in Internal Trade

Section V : Foreign Trade 149-200
A. General Distribution
B. Trade Routes and Means of Transport
C. Nature and Patterns of Asiatic and African Trade—International Trade Emporiums in Asiatic Seas—Indian settlements abroad
D. Trade with Europe: 16th-18th century
E. General Course of Foreign Trade: 16th century
F. Changes in Foreign Commerce: 17th century
   1. Articles of Trade
   2. Problem of Providing Purchasing Power
   3. Effects of the Advent of the Dutch and the English on Trade
      (i) On Old Established Trade—(a) Import trade (b) Asiatic export trade (c) Shipping industry
      (ii) New Direct Trade: Export Trade to Western Europe—establishment of new markets—volume of export trade to Western Europe
G. Chief Sea-ports of India
   1. Western or Arabian Sea-coast Littoral
      (a) Indus Delta (b) Gulf of Cambay ports (c) Konkan ports (d) Kanarese ports (e) Malabar ports (f) Ceylon
   2. East Coast Littoral: Bay of Bengal ports
      (a) Coromandel coast ports (b) Gingelly coast (c) Orissa sea-ports (d) Bengal ports (e) Pegu and the Archipelago—Far East
H. Organization of Commerce—Internal and International
   (a) Cosmopolitan Body (b) Role of Ruling Classes (c) Organization of the Europeans and their Methods of Trade
I. Balance of Trade
J. Volume of India's Foreign Commerce

PART V: SOCIOECONOMIC ASPECTS 201—266

CHAPTER 9 URBANIZATION 201-224
      Categories of Urban Centres, Population of Towns
   II. Historical Aspects
   III. Economic Aspects

CHAPTER 10 INCHOATE DEVELOPMENTS TOWARDS CAPITALISM 225-234
CHAPTER 11 SOCIAL STRATIFICATION AND STANDARD OF LIFE 235-266
1. Social Stratification: General Remarks 2. The Upper Classes 3. The Lower Classes 4. The Middle Classes

PART VI: DISLOCATION AND DECLINE 267–316

CHAPTER 12 ECONOMIC DISLOCATIONS: FAMINES 267-295

CHAPTER 13 SEEDS OF ECONOMIC DECLINE 296-313
Economic decline began long before Plassey
A. Baneful Economic Influence of Administration: Revenue System, Fiscal Policy, Naval Weakness, Absence of Consistent Commercial Policy, Chaotic Currency
B. Political Disorders in India and Asia
C. Presages of Economic Decline before Plassey
D. Responsibility of European Companies—Decline of Indian Shipping
E. British Commercial Policy
F. Neglect of Science and Technology

CHAPTER 14 SUMMARY AND CONCLUSION 317-331
Selected Bibliography 332–354
Index 355–373
I

INTRODUCTION
Land and the People

Throughout history political India hardly corresponded with the India of geography. Even the term ‘Mughal India’ had different connotations at different times during the period under review. It took the Mughals just a century to extend their sway from Kabul to Bengal (1504-1608) and nearly a century more to conquer the Deccan except the far South. For the purpose of the present survey, India would roughly mean the area between the Himalayas in the north and the Indian ocean in the south and from Afghanistan and Baluchistan in the west to Chittagong and Arakan in the east but excluding Assam. Politically this included the Mughal Empire, parts of Vijayanagar and the Deccan Sultanates with their shifting boundaries. The empire included directly administered areas (Khalsa) as well as regions of those known variously as ‘zamindars’ or ‘bumis’, ranas, rajas, etc.

Forests and Arable lands

Naturally it was not a homogeneous unit, including both wild (forests and deserts) and settled country. During this period the Indo-Gangetic plains, a very old zone of settlement and culture, were largely unoccupied and covered with extensive forests, protruding far downwards from the Himalayas, inhabited by numerous beasts, destructive of men, cattle and crops alike.¹

It is not very easy to assess the extent of the cultivated area, as contemporary authorities make vague, inconsistent and hence unhelpful statements. Apart from forests, pastures and barren areas, and all cases of unmeasured land, there was also considerable measured land, including the area cropped or sown, fallow and cultivable land. Under Aurangzeb the total number of villages in the empire was 4,01,567. The proportion of unmeasured (2,01,564) and measured villages (200,003) was roughly equal, the area of the latter being 29,57,42,337
bighas *daftari*. We may generally hold that cultivable land was enough and to spare, though it must be admitted that cultivation has increased since the Mughal age in different degrees in different areas.²

**Villages and Towns**

The country included both villages and towns. The village (*gaon, mauza*) was surrounded by arable fields or plots marked by raised boundaries (*āl*). The villages were not uniform in size. From the standpoint of habitation, these were of two types: (i) the inhabited (*asli*) and (ii) the deserted (*dakhili*), recognized in official records but coming within the nearby villages.³

Geographically it comprised four divisions: the mountainous region encircling the country in the west, north and east; the Indo-Gangetic plains; the Deccan plateau; and the two coastal plains on the east and west.

It must not be supposed that the rural organization remained uniform in all villages, stagnant or stationary throughout the period. Villages sprouted without least difficulty, as Babur observed. Methods of tenure or social or plough relationships might differ but the common grain heap remained in both headman-ruled and *panchayet*-administered villages. The pattern changed in Mughal *jagirs*. Administratively the villages were generally speaking, either (i) *raiyyati*, i.e., ‘peasant held’ villages or (ii) *zamindari* or *talluqa*, or landlord type, the cultivators (or unprivileged peasants) being designated *asami* or *raaya* or *mazara*. But there were several divisions, according to the internal organization of the villages. To take a few instances only. Villages were partitioned on the basis of ancestral shares as in district Eta under Akbar. But sometimes the partition of shares was incomplete. Again there was the tribal village (e.g., Jats, Rajpūts, Rohillas). Agricultural oppression under Shahjahan and Aurangzēb and abandonment of cultivation came to be accompanied by loss of status or displacement. On account of the growing political and social instability under the later Mughals, the tendency towards formation of landlord villages (*Zamindari Mushtarka*) grew.³...

The economic organization of the village community with its hereditary division of labour and caste cohesion of the peasants, agriculture and non-agricultural crafts was ‘complex and contradictory’¹. At first agriculture was combined with domestic or community
crafts, catering only to family needs. This imparted self-sufficiency and stability to the rural economy. Later on the surplus village produce was carried to and sold in the urban market. The crafts separated from agriculture, the self-sufficiency of the village crafts was affected, as illustrated in cotton, silk and various other industries. Nevertheless these two contradictory features, rural self-sufficiency and commodity production with money economy continued to co-exist.4

Towards the end of our period various political and economic disorders, wars, increasing grants of jagirs, and establishment of virtually independent principalities by ambitious adventurers, migration of chiefs, agricultural tribes and changes of original land owners and tillers of land, all combined to account for the decay of the village communities in northern India.5

The Mughals were essentially city dwellers. Under their aegis a large number of new towns grew or old ones developed, as will be explained later. We may refer in particular to the imperial capitals of Agra and Delhi, and the provincial capitals of Multan, Lahore, Allahabad, Patna, Ahmadabad and Ajmer and the Deccan capitals of Aurangabad, Bijapur and Golkonda.

Population

The establishment of Mughal peace and administrative consolidation was followed by expansion of agriculture and population, which was sometimes sporadic and confined to some centres. But there was no census in Mughal India. In the absence of any demographic statistics of the period during the 16th-18th centuries one has to depend on the unique administrative and statistical gazetteer of Abul Fazl, the Ain i Akbari, and scattered and incidental references in foreign travellers’ accounts and contemporary chronicles and memoirs for an idea of the number of the population. The observations of foreign travellers have to be interpreted in the background of the standards in their own countries. These seem to indicate that density of population in some regions like Bengal, the north-western plains, Gujarat and Southern India was thick or very thick. Nikitin wrote of 15th century Deccan that ‘the land is overstocked with people’. Babur found the country ‘full of men and full of products’. Manucci found some areas to be ‘extremely populous’, due to early marriage and plurality of wives. Against this must be offset the loss of population
due to famine, pestilence, floods and wars, which caused heavy mortality. But the famines were often localized and the mortality figures were confined to some regions only.6

The subject of the total size of population has been discussed by different scholars during the last six decades and a half. Moreland (1920) guessed India’s population in 1605 to be about 100 millions. R.K. Mookerji estimated it at 130 millions. But K.S. Lal, who has recently sought to make a demographic study of the total population from A.D. 1000 to 1800, estimated that it was about 140, 175 and 170 millions in 1600, 1700 and 1800 respectively. Moreland’s estimate has now been found to be defective on different counts. Irfan Habib (1982), without being dogmatic, estimates it to range between 107 and 115 millions and for India as a whole between 140-150 millions. The population did not remain static, rising to 200 millions by 1800. As regards the distribution of the population into urban and rural (c. 1600) the former was about 15% of the total and the rural 85%. Indeed the number of population has an important bearing on the economic position of the country for it affects the consuming classes, comprising the courtiers and imperial servants; professional or producing classes (including labour—those engaged in agriculture, industry and commerce, artisans and labourers); religious classes (together with ascetics and mendicants); and domestic servants and slaves.7

NOTES AND REFERENCES

1. Moreland, IDA. Ch. I ; Habib, Ag. Sys, Ch. I.
2. Habib, pp. 22.4 (statistics). He has dealt with the question of extent of cultivation exhaustively in Ch. I. See also CEH. i. Ch. VI, 163-5.
3. Siddiqi, L. R. Adm. under Mughals, 8-9 ; Srivastava in Mughal Empire.
4. Chicherov, 15, 21-43 ; Habib, Ch. IV.
6. Nikitin in Major, 14, Babur’s Memoirs (op. cit.), 450 ; Storia, ii, 51.
7. The subject is highly technical and scholars have applied various tests to arrive at firm conclusions. But the nature of evidence is too elusive to permit this. Among the scholars are Moreland (1 DA. Ch. 1) ; R. K. Mookerji (Ec. History, 1967, Ch. 2) ; K. Davis (Population of India and Pakistan, 1951). Ashok V. Desai (IESHR. ix. (1), 1972) ; S. Moosvi (IESHR, x (2), 1972, 2, P. C. Mahalanobis and D. Bhattacharya (1969) ; Morris D. Morris, (IESHR xi. Nos 2-3, 1974) ; K.S. Lal (Growth of Muslim Population in Med. India. Ch. 6, pp 73, 90-1) ; 1 Habib. Camb Ec. Hist. i. 163-71.

LAND AND THE PEOPLE
II

AGRICULTURAL ORGANIZATION
Cultivation and Cropping

In the Mughal age, as in the past and even at present, India had a predominantly agricultural economy. More than 75% of the people lived in villages and were intimately connected with the land, directly or indirectly. Again, no revolution took place in agriculture since Akbar’s days, in implements, grains, products (e.g., oil-seeds, etc., except maize and tobacco), methods and traditions.¹

Agriculture

Agricultural production or output of raw materials depended then, as now, on climate including rainfall, soil, the system of land tenure, state policy of agricultural improvement, irrigation facilities, supply of improved seeds, livestock, transport facilities, and general peace, including absence of foreign invasions and absence of internal oppression. Two opposing trends were discernible in administration. On the one hand, the government sought to persuade the peasantry to extend the cultivated land. A policy of agricultural development was followed from the time of Sher Shah. Akbar’s amalgazar well illustrated this policy. On the other hand, there was the mounting tendency towards agricultural oppression, as illustrated during the reigns of Jahangir, Shahjahan and Aurangzeb.² Yet agriculture tended to develop side by side with the increase in population. Moreland attempted a quantitative estimate of increase in farming from the days of Akbar (c. end of 16th century) to the beginning of the 20th century. Irfan Habib, after an exhaustive and critical discussion of province-wise details, concludes that ‘an increase in cultivation since Mughal times has taken place everywhere, though in varying degrees’.³

It is interesting to note that the peasants of the period were not wholly conservative. The agricultural implements and methods of the medieval Indian peasant might seem to be primitive as compared
with modern improvements, but were not really so in the contemporary situation. The traditional wooden plough, corresponding to the 'foot-plough' of Terry, yoked to oxen sometimes had iron teeth, depending on lightness of ground. In methods drill-sowing and dibbling (as with a peg or mekh in cotton) were well known. Cultivators knew intensive ploughing as well as rotation of crops, raising two crops annually (kharif and rabi) and even three in some areas. The fertilizing qualities of some crops were well-known. Agricultural specialization existed to some extent in some articles, like sugar in Bengal, rice and indigo in Agra and Gujarat. But generally the distribution of crops was guided by conditions of climate, e.g., rainfall and soil. Custom did not always dictate arrangements for cropping and the peasants sought to follow the market. Besides ordinary crops, special or high grade cash crops (jinsi kamil or jinsi ala) like cotton, sugarcane and indigo were also grown. With the advent of the Dutch and the English merchants who needed indigo, cotton and silk, the peasants also extended the production of these articles. They were also willing to accept new crops, e.g., tobacco and maize in the 17th century. Thus did the Indian peasant respond to the changing situation and new needs of the market.

In the settled country land was cultivated by innumerable peasants in small individual holdings; the fields were, as now, generally unenclosed, described in contemporary English accounts, as 'champion country'. Only in Gujarat thorn-bush hedges were set up for their protection.

Irrigation and Manure

Land in the Mughal empire was, as Tavernier tells us, well-irrigated and well-manured. Apart from natural factors—rains, rivers and inundations—artificial irrigation was done by wells, tanks and canals.

Fields were irrigated in the upper Doab and in some areas of the Deccan by wells. Babur has referred to the use of the sophisticated and costly Persian wheel (arhat or rahat) in the Punjab and of the tiresome and 'filthy' way of using leather buckets (charas) by yoked oxen to lift water near Agra and to its east. Abul Fazl, Manucci and Sujan Rai also wrote of well irrigation in major part of Lahore province, in regions east of the Jhelum (Lahore, Dipalpur and Sirhind), though Abul Fazl underrates its importance in some areas. Pelsaert
and Bernier found the area round Agra and Delhi to be full of (Kuchcha) wells, often dug every summer, by a class of professional well-diggers. Where the level of water was near the surface the easiest way was to apply the lever principle in a wooden scoop (dhenkli).

Tank irrigation was a hoary system in India, especially Central and Peninsular India, intended to relieve the peasants from dependence on rain. Golkonda was 'full' of tanks, constructed by raising dams across natural depressions. Bidar had its famous Kamthana dam. In 15th or 16th century Vijayanagar engineers created the Madag Lake on the Kumudvati by closing the gap in the hills through which it passed to the Tungabhadra. Sometimes peasants collectively built reservoirs. There was, a proposal during Shahjahan's reign to advance 40-50,000 rupees to peasants in Khandesh and Berar (Painghat). Mewar's three lakes encouraged wheat cultivation around, the Dhebar Lake; the impressive and strong 16th century tank Udaisagar and Rajsagar (17th century). Jahangir's water works in Burhanpur, a military base in the Deccan, were perhaps primarily intended for the army.5

Apart from seasonal river inundations and changes in river-courses, offering natural facilities of irrigation, the rivers were sought to be utilized for irrigation purposes. The network of modern canals was, of course, absent in the Mughal age. But Moreland's thesis that canals were few has to be taken with a pinch of salt. In the Deccan small canals were dug by co-operative effort (phad system) from rivers for helping cultivation as in Bagiana. In northern India, however, there were some long canals. The eastern Jamuna canal, usually attributed to the reign of Shahjahan, was perhaps completed during that of Muhammad Shah. To the west of the Jamuna, the 30-kos (78 miles) long Khizrabad-Safidun canal, adapted by Firuz Shah from an earlier channel, then in a state of disrepair, was not only re-excavated (temp. Akbar) by Shihabuddin Ahmad Khan (then Governor of Delhi) to fertilize his jagirs and again by Nuruddin Muhammad Tarkhan, but it was further reopened and extended by Shahjahan by another 78 miles from Safidun to Delhi (Nahr i Bihist, Nahr i Faiz, Shah Nahr). The canals in the Punjab included those from the Ravi to Lahore (84 miles long Shah Nahr in Upper Bari Doab) in the time of Shahjahan, and also to Pathankot, to Batala and to Patti Haibatpur, i.e., throughout the Indus plains up to the

MUGHAL ECONOMY
delta. Multan Sarkar had a Mir-i-ab (Canal Superintendent) who had to dig new channels, clear the old ones, set up bunds on flood torrents (band-i-sail) and distribute water equitably among the peasants. Sind also had some canals, constructed during 16th-18th centuries, the Khanwah and the Naulakhi, while another was excavated in Upper Sind with forced labour (and hence called Begari Wah). Sometimes artificial channels (Kariz or Kalis or Khal) were cut from the river or canals. Such irrigational facilities accounted for high grade crops in the Punjab and Sind. The supply of water from the Mughal canals was, however, limited in quantity.

For manure the peasants generally used animal dung, the supply of which was abundant as the per capita cattle was larger than at present. Where firewood was also abundantly available it was not necessary to use the dung as fuel. If bone manure was not in vogue, fish manure was used for sugar cultivation in Gujarat.

NOTES AND REFERENCES

1. Moreland, IDA, 101 ; Srivastava in Mughal Empire, 713. Forests N W F, Prov. Punjab, UP, Bihar, Bengal, Orissa, Modern M. P. Rajasthan, Gujarat, S. India : Foster, ETI. 24-28 (Fitch, Bengal), 174 ; Finch, Jaunpur to Allahabad.

2. Moreland, FAA. 7 ; Mookerji, 4-5, 11 ; Ain ii ; Srivastava op.cit.


4. Terry (Foster, ETI, 298 ; Fryer ii, 108 ; rotation, in Elliot, Memoirs &C. ii. 342 ; Ain J. S. ii, 134 (Bengal), 283 (Delhi) ; Black Cotton Soil. I.G. iv, 66 ; Habib 25-6. see Husaini in CEH. i. 214n.

5. Tavernier, Ch. 3

Persian wheel and Charas (technically known as Saqiya) : Babur’s memoirs (Mrs. Beveridge). ii. 486-8 ; 496 ; iii. 478 ; Sujan Rai, 79 ; Fryer ii. 94 ;

Wells : Ain ii (JS). 316, 283, incidental reference in Acctt. of Twelve Subahs ; Storia ii, 186 ; Sujan Rai, 11, 79 ; Pelsaert, 48 ; Bernier, 226, 454, (Kalis) ; B.L. Bhadani, in PIHC, 1975.

Digging (Badauni li. 243) ; Thevenot (Passim) ; Sewell.

Dhenkli (Fryer ii. 94) ; Habib thinks that the number of wells grew in the 17th century. CEH I. 215.

Tanks : Bombay Gaz. xxii. 261 (Madag lake) ; A’in. Dhebar (Tod) ; Tavernier, i. 121-2 ; Maasir i ‘Alamgiri, 308-9 ; Adab, 53a ; Tod (1914). i. 619.

Habib, 25, 26, 28 ; also CEH. i. 214 ; Moreland, IDA. Ch. 4 ; FAA, 188 ; 195 ; Mookerji, 5-6.

CULTIVATION AND CROPPING
6. Report, Royal Com. Agr. 325; IG. iii, 316 ff; Sadiq Kh. quoted in Habib, 31; Shahajahanama, E.D. viii. 86; Moreland FAA. 196; Habib 31-36.

7. Thevenot, 36-7; Garcia da Orta (308) says that in the uplands behind Goa 'they do not till the land with manual labour as we do. They sow on the face of the earth with very little tillage'. Habib 25; Moreland, IDA, 102. For backward farming technology and manuring methods as compared to China and Japan, see T. Ray Chaudhuri, in CEH. ii. 15-16.
Agricultural Production

A striking feature of Indian agriculture was the multiplicity of crops, both food and non-food. The Indian peasants not only knew more crops than their counterparts elsewhere but also accepted two new crops of the New World, tobacco and maize, in the 17th century. Not many new crops have been introduced since then. Another significant factor was the mobility of the agriculturist as referred to by Babur in his Memoirs. For virgin land was abundant then and settlement of new lands after leaving the older was generally made by organized peasant communities. Sometimes the pahikasht or paikasht peasants cultivated land in others' villages, a process known as shifting their cultivation.

Agricultural raw materials were of six categories: Food-grains; fibres; indigo; sugarcane; spices; and drugs.

Food grains

India grew abundant food grains including wheat, rice, millets, pulses, grain, barley and oilseeds. Their geographical distribution was practically the same as today, some areas producing rice, others wheat and millet. Maize (maka, makka, bhutta) was once believed to have been acclimatized only in the 19th century. But it was cultivated in Maharashtra and eastern Rajasthan as early as the 17th century.

Wheat, a spring crop as at present, depending on moderate rainfall and irrigation wherever possible, was commonly grown in its natural home—the provinces of Agra, Allahabad, Awadh, Delhi, Lahore, Multan, Sind (Thatta), Gujarat, Malwa, Ajmer (and Kotah in modern Rajasthan). Records show a general increase in cultivation. That grown in Kabul was black but Qandahar variety was extremely white. The Ain-i-Akbari is silent on the production of wheat in Bihar and
Bengal. The heavy rainfall in Bengal would militate against production of wheat there. But Roe’s observation that the Mughal court got wheat from Bengal is somewhat intriguing. The Surat factors admitted (1616) that Bengal wheat went to ‘Indya’ (India which might mean either the west coast or the East Indies). That Bengal produced wheat in the second half of the 17th century is attested by Bernier and Streynsham Master (who found it round Hughli), though it might have been of low quality, as Habib suggests. But the question arises was the supply from nearby Uttar Pradesh and other areas to the Delhi court so insufficient as to require replenishment from distant Bengal? It seems likely that both Roe and the Surat factors used ‘Bengal’ in a vague or general sense, as was common then. To them Bengal included the hinterland of Bihar, which climatically was more suitable than Bengal for producing wheat. Possibly therefore at least a part of the imperial court’s supplies went from Bihar. Wheat was also grown in Kashmir-Tibet border. According to Nuniz it was grown in the Deccan as well.1

Rice: This tropical crop requires much water, high temperature and water-logging, conditions best fulfilled in Assam, Bengal, Orissa, the Coromandel coast, the narrow west coast littoral and Kashmir. It was also grown in Bihar, Allahabad, Awadh, Agra, Delhi, Ajmer, Lahoré, Malwa, Gujarat, Khandesh and Berer. Its cultivation could intrude into the dry north-west. Thanks to the irrigation channels from the Indus and its branches, it became the principal crop of the delta, and high grade rice grew in Lahore and Multan provinces. Abul Fazl refers to certain special varieties, e.g., kur, shali, munji and sukhadas (highly prized for flavour and quality). Bengal grew rice of ‘numerous kinds’ in abundance, sometimes raising three crops a year, and feeding deficient areas like Cochin.2

Next to Bengal came Bihar. Its rice ‘for its quality and quantity is rarely to be equalled’. Awadh grew sukhdas, madhkhar and jhanwar rice, ‘which for whiteness, delicacy, fragrance and wholesomeness are scarcely to be matched’. Gujarat and specially the area between Surat and Broach also yielded rice. It was also the principal food of the people of the Deccan and South India. Women used to sell rice-khichri in Ootacamand.3

Among low grade crops were millets, pulses, gram and barley. Millets included the cheaper kharif crop (autumn) grains: jowar,
bajra, kodon, sawan, mandua, etc. These were grown in wheat areas and on poorer and drier soils with deficient rainfall. The first two were cultivated in Malwa, Gujarat, Ajmer, Khandesh, Delhi, Lahore, Agra, Allahabad (?) Awadh, Multan, Rajputana, West Punjab (Dipalpur) and West Doab. The Deccan also mostly consumed millets which formed the main support of the people.5

Pulses (e.g. moong, moth, mash, arhar, lubia, gram, peas, and Khesari or vetch, etc.), forming the autumn harvest, were mostly cultivated in Bihar, the Doab, Allahabad, Awadh, Delhi, Lahore, Multan and Malwa. Gram was also grown in the Deccan. Containing vitamins these were a chief item of vegetarian diet.6

Barley was grown practically everywhere except in Bengal and Orissa, Kanara, Tamilnad and Kashmir.7

Oil-seeds : The geographical distribution of these has not changed much now as compared to the Mughal period. These were of four principal varieties : linseed (flax seed or kattan) ; mustard rapeseed or sesame (til) ; safflower and torya. These were generally grown in all provinces from Allahabad to Multan including Agra, Awadh, Delhi, Lahore, Ajmer, Malwa, Bengal (mustard, castor, sesame), Gujarat (rapeseed and castor). The oil-seed ‘gingelly’, grew abundantly in Orissa which was therefore known as Gingelly. Flax was grown in Awadh, Agra, Lahore and Ajmer. Its quality and output was better than in “Rum and Farang”, i.e., Ottoman empire and Europe, but linen was not produced much here. The price of oil-seeds was lower than at present compared to food-grains.8

Industrial crops

Besides food grains India also produced voluminous quantities of several industrial or market crops, and so far-flung overland and overseas trade in articles like cotton, silk, indigo and opium grew.

Fibres

The chief agricultural fibres were cotton, silk, hemp, jute and rhea.

(a) Cotton : Best quality cotton was rare as the ideal conditions for its growth were lacking. Nevertheless it was a very widespread agricultural crop, depending mostly on the volcanic black cotton soil, which required only one ploughing a year and hardly any manure. It was grown in the Bombay cotton tract (e.g., in Malwa and the Deccan,
viz., Khandesh and Berar). Besides these, it was grown abundantly throughout Northern India, not only in the provinces of Agra, Allahabad, Delhi, Lahore, Awadh, Multan and Ajmer, Bihar and Orissa but even in Bengal, where it has now disappeared. The country was self-sufficient in cotton, which was extensively grown mainly for local consumption. Yet the total acreage and yield was less than at present. Being relatively scarce it was more valuable than other crops. The commercial demand for it grew during the first half of the 17th century as a result of the advent of the Dutch and the English. Raw cotton was also much in demand under Shahjahan for preparing candle wicks and fustians (cloths with flaxen warps and cotton wafts).

(b) Silk: A large part of the silk handled was produced by domestic worms feeding on cultivated mulberry. Sericulture was not known in Bengal before 15th century. But it became famous for it, as the commercial demand for it grew during the first half of the 17th century.

(c) Hemp, (d) Jute and (e) Rhea: Among coarser fibres grown as field crops were hemp, jute and rhea. Sann-hemp was grown and assessed for revenue over a large area in all the zabti provinces, and it supplied the fibre fulfilling the need of jute. Jute, which became important only in the British period, was grown in Ghoraghat district of Rangpur (now in Bangladesh) for local use. Moreland thinks that both these were grown in small quantities for domestic needs (e.g., rope-making) and not used for industrial purposes, as in the last century. Rhea or China grass was also grown in Bengal and Orissa.

Indigo

Originally dyes constituted a small-scale commodity craft. But during the first half of the 17th century indigo (al, Morindationtaria), yielding a blue dye, rose to great importance for dyeing and bleaching cloth and paints and was grown throughout India.

(A) The Gangetic Plain: (a) Agra-Biana (in modern Bharatpur dt) and its environs, produced the best and costliest indigo,—Khanwa, Bisaur, Hindaon (Jaipur State), Toda Bhim, Pichaoures; the Doab area - Aligarh (Koel), Khurja (Gorsa); Delhi, Mewat and Ajmer; Gwalior; Allahabad and Oudh; (b) Bihar (Patna) produced indigo of moderate quality. Bengal indigo became prominent in 17th century and was exported.
(B) Punjab : Lahore and Multan,
(C) Rajputana : Lalsot and Mozabad near Sambhar in Ajmer and villages on Biana-Merta route produced coarse indigo.
(D) Sind : Sehwan, Bubak and Sann in Lower Sind : Derbella, Sikandra and Behrallah in Upper Sind. Sehwan indigo was sometimes considered to be better than that of Sarkhej. But it was not as good as that of Biana. The English East India Company vainly tried to secure indigo by advancing money to the poor cultivators. But the local dyers gave liberal advances to them and took all available supply (1645).
(E) Gujarat : The chief places of production were Sarkhej (Cikel), Ahmadabad, Dholka, Cambay, Jambusar, Surat, Rander and Broach, besides Baroda and Malwa. Sarkhej indigo ranked second to Biana.
(F) The Deccan : Khandesh, (esp. Aravad in east Khandesh), Burhanpur, Golkonda, Masulipatam and the Coromandel Coast.
The villages round the Krishna Delta produced most of indigo purchased by European merchants. Telingana indigo was of medium quality.

Early European travellers like Finch (1608-11) and Pelsaert (1620-7) have left detailed descriptions of how indigo was grown, collected and manufactured. It used to be sown with the first rains in June. The first crop (nauti) was cut when ripe by September or October, being very susceptible to cold. The stumps remained for two years.
The second crop (jarhi), cut next August, yielded the finest indigo. The third crop (Katel) was the worst.13

A natural red dye (chay of English records, tesheri-vello in Telugu, Saya-ver in Tamil), produced in the Coromandel Coast yielded the unique scarlet colour which made the local fabrics of Nizampatam famous. Another red dye (al) was produced in Bundelkhand and lower Doab in the time of Akbar.

The dye-yielding crops have diminished in importance now-a-days with the preparation of chemical dyes.14

Sugarcane

It requires enough heat and moist soil, but not much attention. As its roots grow up automatically it is not sown every year. Though worked by cheap labour, it was a superior and costly crop and sold
at double the price of wheat. It was grown more extensively than cotton—in all the zabti provinces of Akbar—Agra (Bayana and Kalpi), Allahabad, Awadh, Delhi, (Maham in Sarkar Hisar Firoza), Lahore, Multan, Sind, Gujarat, Malwa and Ajmer. Two varieties of it used to be grown in Akbar’s time, viz., ordinary and thick, paunda. Ajmer with its dry climate, used to grow excellent paunda and it fetched the highest price. According to Steel and Crowther and De Laet the whole country from Agra to Lahore was ‘well cultivated and produced abundance of sugar’. During the seventeenth century its cultivation extended to other places like Kotah in Rajputana, Khandesh, Malwa, Bundelkhand, some places in Bihar, Bengal and Assam as well as Berar, Baglana, Aurangabad and Konkan. The black canes of Aurangabad province were so juicy that each yielded 5 seers of juice.¹⁵ The cultivation of sugarcane has declined in Bengal.

Spices

Spices made history. The revolution in culinary tastes in European countries stimulated a search for these, leading to the Portuguese discovery of the sea-route to India. Of the different varieties of spices, ginger, cardamoms, cinnamon, pepper, nutmegs, cloves, some were grown in India and others were imported. Ginger was grown throughout India and exported from Orissa and Bengal, Bijapur produced the costly cardamom, priced at 52-80 dams a seer, and consumed by the princes and the richer classes in India and in Asia. Indian cinnamon was coarse and the Ceylonese brand was the best. Though growing among bushes, collected and dried in the sun, without much labour, pepper was the most important commercial item. Long pepper was grown in the forests in Hijli ports and Mahmudabad district in Bengal, Kuch Bihar, Assam and Champaran in Bihar, Pegu and Java. It was transported to Surat and thence exported to Ormuz, Basra and Red Sea. But the best, round or black variety of pepper came from Bijapur and beyond the Mughal empire from the Western Ghats in Malabar, Kanara, Calicut and Cochin in Kerala. It was very costly and hence used only by the rich. The Portuguese also exported shiploads of this pepper from Goa, Cochin and Masulipatam. It was highly prized by the Dutch, who, as Tavernier says, purchased Malabar pepper in lieu of cotton, opium, vermilion and quicksilver and sent it to Europe. They also collected cloves (coming from
Moluccas) and nutmegs and maces (from Banda islands) at Surat and exported these to Europe. Abul Fazl has given prices of the different spices.

Kashmir, as now, monopolized the production of the fragrant and costly saffron crop. It was used to colour and flavour rice and some other dishes and also to dye cloth. The plant was cultivated during March or April to September at Pampur south of Srinagar and Parashpur (near Indrakol) and yielded flowers for six successive years. But it was a costly crop, which was heavily taxed (up to 50% under Jahangir) and sold at Rs. 10/- a seer. Its annual output (from Akbar to Shahjahan) was 400 mds.\textsuperscript{16} Chili (capsicum) was not known then and came to India from South America in mid-18th century. It was cheap and the poor could leaven their humble food with it.

Drugs

Poppy, an important commercial or superior crop, twice as costly as wheat, yielded opium, a much coveted intoxicant. Sown in November and harvested in February-March, it was extensively grown almost everywhere in India both for local consumption and for export. In northern India it was included in almost all \textit{dasturs} of \textit{zahti} provinces of \textit{Ain}. It was grown in the provinces of Agra, Awadh, Allahabad, Delhi, Lahore, Multan and Ajmer. But Malwa and Bihar were specially reputed as long-standing centres of opium. Large consignments were transported to Rajputana, Berar and Khandesh and Bihar opium to Bengal and other parts of eastern India by water, and even exported to Pegu. In the Deccan, it was grown in Ahmadnagar, Bijapur and Golkonda. In the 16th century Akbar taxed it heavily. In the 17th century its production extended to Bengal, Sehwan, Marwar, Mewar and Berar.

True hemp (\textit{siddhi} or \textit{bhang}), cultivated widely, was banned by Aurangzeb (1659).\textsuperscript{17} The production of both these has fallen off in modern India on account of administrative regulations.

Recent research has established that (i) the yield per \textit{bigah-i-Ilahi} in major food grains like wheat and barley remained practically the same during approximately 1540-1 (Sher Shah) and 1870 or 1900 (in Agra and Delhi), though there was a decline in some other crops like gram and jowar; and (ii) the average productivity of the land
also remained the same, though productivity per head was greater in Mughal India.\textsuperscript{18}

The Indian agriculturists, be it said to their credit, achieved this record in the teeth of several serious forces of agricultural instability. Mother nature was not always kind, for monsoon rain, the mainstay of agriculture, might be untimely, deficient or excessive. Famines, accompanied by pestilence, dislocated the economy of the affected area and often outside. Human nature also added to the misery of the peasants. Owing to agrarian exploitation of the rulers they had to remain under constant pressure which sometimes reached such proportions that they abandoned their lands.

NOTES AND REFERENCES

1. Ain. ii (Tables of harvests of Subahs) : 16 crops for \textit{rabi} (spring) and 25 for \textit{Kharif} (autumn) harvests; Agra grew 41 crops in a year, Delhi 43; other provinces also several; for maize, Gode, \textit{Studies in Cultural Hist.} 1. 446-7; Nurul Hasan and others : PIHC. Mysore, 1966. \textit{Letters Recd.} iv. 327; Bernier, 438; Master (II. 81-2): Habib, 37, suggests that the Bengal wheat was of low quality and that more wheat was then grown in Bengal than now. He also agrees as regards the confusion re: the term ‘Bengal’. Moreland, IDA, 120; Mookerji, 6. Mobility, Habib, in CEH. 218-9; \textit{Ag. Sys. ch. iv.}

2. Ain. ii. 134, 353, 69-122; Fitch (Foster, ETI, 43); Habib, 36 (based on various sources)

3. Ain ii. 164 (Bihar); 181 (Oudh); also \textit{Khulasat} (probably Gorakhpur rice).

4. Tavernier, ch. vi. 97; Roe, 5; Mookerji, 7.

5. Ain. ii. 98-117, 246; Mirit, i. 14; \textit{Khulasat}, 26; Tavernier, ii. 51; For the Deccan, Nuniz, in Sewell, 386; Khafi Khan, E.D.viii. 328; Mookerji, 7; Habib, 37.

6. Ain ii. 76-93, 98-117; Price (48 \textit{dams} a md), 76; Habib 38n.

7. Ain. ii (Tables of harvests); Habib, 37.

8. Ain. ii, 76-112 (\textit{passim}); Fryer, i. 397; Habib, 41 (quoting an Ind. office MS.)

9. Ain. ii. 98-117, 76-93; Thevenot (grown everywhere); Mundy (cotton fields in West Patna); Habib, 39-40; Price, K. S. 94-95.

10. Moreland IDA 105; Habib, 40.

11. F.A.A. 189; Chicherov, 46-8.

12. Ain. ii. J. 91 ff. 121-123, JS. 123; For \textit{Rhea}, Linschoten, i. 95-6; Fitch (ETI 26); Moreland, IDA. 119; Habib, 41-2; 46-7.

13. Ain. ii. 76-117, 192, 248. Finch in ETI, 151-4; See also ETI. 148, 190-2; Pelsaert, \textit{Remonstrantie}, 13-14; De Laet, 26, 45-6, 62, Moreland, \textit{Relation of Golconda}, 16, 79; Tavernier, ii. 7; IDA. 102-3; Habib, 42-4, estimates output in 3 areas at 1-8 millions lbs; Raychaudhuri, \textit{Jan Co.}... (for S. Coromandel); Details of indigo as a form of commercial agriculture in my \textit{Studies in Econ. Life in Mughal India}, ch. 3.

20

MUGHAL ECONOMY
14. Moreland, IDA, 102—3 ; Habib, 44, Chicherov. 50.


16. Ain (J & S) ii. 135 (Mahmudabad), 165 (Champaran); Fitch, ETI, 46; Dutch trade, Tavernier, ii. 129; Portuguese trade, Fitch, 14, 16, 41; Habib, 46-7; KS. 126-9.

Prices, Ain (Bloch). i. 67; ii. (J & S). 76.

For Bijapur, and Malabar, Linschoten i. 66-67, 71-74; Fitch, ETI, 45, 46, EFI. 1622-23 (p. 51); 1624-29 (p. 2-3); 1636-36 (p. 212); 1637-41 (p. 93); 1668-69 (112, 224-5). Tavernier ii. 11; Fryer i. 139; ii. 42.

Saffron; Ain i. 89-90; ii. 358-9 (account differs); Jahangir says that the produce was equally divided between the government and the cultivators, and that the pickers were remunerated by half of the weight of the flours in salt which was very scarce in Kashmir, Tuzuk, ii. 117; i. 92, 177, 178.

17. Ain i. 410, 417; ii. 78-117; Monserrate 214; Tuzuk; ETI (Fitch), 18, 24, 34; (Hawkins) 71; 116, 142; (Finch), 142; Pelsaert, 31; Thevenot, 77; Marshall, 414; Extension, Bernier, 446, Master, ii, 81-2; EFI, 1634-6 (129); Mundy, ii, 247, 429; Storic ii. 432; Linschoten i. 60.

Horticultural Production

From ‘the emperors to rich peasants’ everyone developed horticulture.

Vegetables

Vegetables of various kinds as at present, spinach, turnip, cabbage, Kachnar, chaulai, bethuwa, ginger, boi, peas, garlic, onion, carrot, radish, lettuce, lemon, etc., were grown for the market by a specialized caste (malis) in orchards especially near towns in all parts of the country, like Agra, Delhi, Allahabad, Lahore, Malwa, Bengal, Bihar, Multan, Khandesh, etc. About potato there is an element of doubt, foreign travellers equating yams (a kind of fruit, tarri, pindalu, kachalu, very popular in the Deccan and perhaps in Hindustan also) with potatoes. In fact potato (sweet or ordinary) and tomato came to be introduced after the Mughal period.¹

Betel leaf

Betel (pan) leaves were grown as now in most parts of India, especially Bengal, Bihar, Orissa, Benares (Kapurkant), Allahabad, Awadh, Agra, Malwa, Khandesh and Berar.²

Fruits

Apart from wild fruits gathered by the poor, there were various others like water-melon, Khirni, mango, banana, berries, singharas, coconut, dates, tamarind, fig, etc., cultivated seasonally in different parts of the empire like Kashmir, Lahore, Delhi, Agra, Allahabad, Awadh, Bengal, Bihar, Malwa, Gujarat, Multan and Ajmer, Khandesh and the Deccan, etc. This was done in groves or orchards, owned by the Emperor, by the rich nobles or officials and by the peasants themselves and let out to cultivators or fruitsellers. About coconut
Caesar Fredericke said, ‘In the whole world there is not a tree more profitable than it’.

There were some striking developments in the Mughal period. First, three new species of fruits were introduced by the Portuguese from America—papaya, cashew nuts and pineapple (ananas from Brazil). Secondly some Central Asian fruits, e.g., musk-melon (khurbuza) and Iranian vines were introduced by Babur and became throughly acclimatized near Agra by the time of Akbar. Thirdly, the technique of grafting came to be adopted by the Mughals. Cherries and apricots were first transplanted from Kabul to imperial gardens in Kashmir under the supervision of Central Asian gardeners. Later the practice of grafting was thrown open to the public, leading to improvement of oranges (sangtara, kola, narangi) and mangoes. It is doubtful if guava was cultivated during the period under review. The term amrud, referred to in the Ain, referred to pear and not guava.³

NOTES AND REFERENCES

1. Ain i. 62, 66 ; ii. passim (desc. of subahs) ; Terry, ETI, 297 ; Linschoten ii. 42 ; References on malis given, Habib, 47-8 ; Watt. iii. 115-22 (potato).
2. Ain. i. 77-78 ; Mookerji, 7 ; Habib, 49.
3. Babur’s Memoirs (Mrs. Beveridge) ii. 686 : Purchas x. 91 ; Storia, iii 185-6 ; Ain i. 68-78 ; ii. 135, 138, 164, 169, 190, 192, 246, 249, 283 ; Tuzuk (R & B) i. 5, 116, 270, 350, 397, 422, 435, 439 ; ii. 145, 159 ; Stuart, Gardens. . . ., 14-15 and passim : Habib, 48-51 ; see K.S. 113-6.

Though the reputed Alphonso mango was produced by the Portuguese through grafting, northern India learnt mango-grafting in the 18th century, C.E.H. i. 218.
Animal Husbandry

No account of the economy of the medieval Indian peasant will be complete without an idea of animal husbandry. He was much wealthier in his cattle and draught animals, in comparison with contemporary Europe and also with present times in India. Abul Fazl tells us that two cows and one buffalo was the tax-free number of live-stock per plough. Manrique found in Bengal large 'pasturages' and 'enormous herds'. The robust, savage buffaloes of Tirhut were able to attack a tiger. The cattle of Purnea formed an important item of live-stock. There were special castes of nomadic professional breeders. Tirhut was especially famous for its milk curd which used to keep long without any change. Milk of Bihar was found by Abul Fazl to be 'rich in quality and cheap.' Clarified butter or *ghi* was so plentiful that it not only formed a principal item of food of the 'common people' in Agra and Bengal but was even exported.¹

Different animals (e.g., deer, antelope, hare) and fowls or birds (e.g., geese, ducks, pigeons, patridges, quails, etc.) were found in abundance and could be purchased for consumption throughout the land at a very cheap price. A sheep or 8 hens cost 1 shilling, a hare or 3 patridges only 1 penny.²

NOTES AND REFERENCES

1. Ain. i. 287 ; J. Xavier, tr. Hosten, JASB N. S. xxiii. 1927. p. 121. Pelseart, 49 ; Manrique ii. 123 ; Bernier 438, 440, Report, Royal Commission on Indian Agriculture, 201—2 ; Moreland, IDA. 106-7 : My Glimpses of Medieval Bihar Economy ; 67-68.

2. Terry (ETI, 296-97), 'easy rates' ; 'varieties of fish and fowl'.
III

INDUSTRIAL ORGANIZATION
Agro-Manufactures

Cottage Industries

The production of agro-based industries, representing a combination of agriculture with handicrafts or cottage industries, constituted a characteristic feature of rural economy of those days, which was destroyed during British rule.

(i) Food grains: Corn was threshed as at present by the peasant either by hand alone or with stick, or by yoked oxen in 'open fields'. Rice-husking and flour-milling were essentially domestic processes, usually done by women with hand mills. Sometimes grain merchants made arrangements for milling for larger supply (e.g., to ships at ports like Surat or some big inland towns or travellers).

(ii) Cane-sugar: The manufacture of cane-sugar in its various forms, a small-scale peasant industry, grew to be a special but important trade. Produced from the juice of sugarcane and palm trees by peasants with hand mills and at times with large wooden (and later iron) rollers worked by bullocks, it was, according to Abul Fazl, of five principal kinds:

(a) Jaggery (gur, qand-i-siyah, molasses) i.e., juice boiled in iron vats on a special furnace with 'clay roof or ceiling with holes. It was consumed by poorer classes and confectioners. Every cane-growing peasant had his own cane-press and furnace.

(b) Red or brown sugar, modern bhura.

(c) White sugar, i.e., powdered, fine grained, refined modern dobara, manufactured chiefly in Bengal, Orissa, Agra-Bayana, Multan, Ahmadabad and Cambay. But Bengal sugar, to which Abul Fazl indirectly refers, ranked first in production. It was taken by sea (e.g., from Hughli) to Malabar and by river to the imperial capitals, where it cost 128 dams a maund. De Laet refers to sugar
production in Bengal, the area between Agra and Lahore and Golkonda. According to Bernier (1656-58) 'Bengal sugar in large quantity is supplied to Golkonda and Karnatik where very little is grown, to Arabia and Mesopotamia through the towns of Mecca and Basra and even to Persia by Bandar Abbas. Bengal is famous for sweetmeats, specially in places inhabited by the Portuguese, who are skilled in the art of preparing them and these are articles of considerable trade'. Abul Fazl praises the whiteness of Bayana sugar, which was consumed locally. In the 17th century the production of Bengal sugar possibly increased with the establishment of new markets for it in Europe and Persia by the Dutch and the English.

(d) White candy (crystals), was manufactured at Lahore, Kalpi and some other places, was expensive, costing 220 dams a maund. Kalpi candy (near Jalaun) was praised by Abul Fazl for its whiteness. It was exported by Surat factories to England.

(e) Nabat, best refined sugar balls.

Considering the prices it may safely be assumed that the ordinary people used gur or molasses. Sweet making with gur and sugar became a principal occupation of rural and urban people, by mid-18th century.

(iii) Oil pressing: Originally a domestic peasant-handicraft, it grew to be a professional occupation of semi-itinerant oil-men (telis, 'assar), who extracted oil from the seeds with bullock-driven primitive stone-presses in Sind, Gujarat, Golkonda, Mysore, Orissa, and Bengal. Vegetable oils, sold in the market or to special oil merchants, formed a chief item in domestic and foreign trade. Valuable perfumed oils were prepared at Medinipur (Bengal) from flowers and scented articles and exported to various regions. Gwalior was reputed for Chameli oil.

(iv) Tobacco: The seventeenth century witnessed a significant and remarkably novel feature of Indian cropping, the introduction of the new commercial crop of tobacco and extension of its cultivation as a commercial or cash crop. Unknown almost till the end of Akbar's reign it was made known to his court by pilgrims from Mecca, brought by the Portuguese from North America into Gujarat early in the 17th century. But it had entered the Deccan earlier. A hookah or chilim was presented to Akbar by the imperial envoy to Bijapur. It became so popular, even among the peasants that its cultivation
quickly spread from Surat during Jahangir’s reign to other parts of India—the Deccan, Burhanpur, the Coromandel Coast, northern India and Bengal. Jahangir’s prohibition of smoking (1617) had no effect in Gujarat, the Deccan and northern India. When the ban was removed by him its cultivation grew by leaps and bounds within fifty years even as far inland as Burhanpur, Berar, the Coromandel Coast, Bengal, Bihar and Sambhal. Its use, which was confined to aristocratic circles in the reign of Shahjahan, spread to the poorer classes under Aurangzeb. That this widespread use of tobacco throughout the Mughal empire swelled the state revenue is clear even if we assume that Manucci’s statement that early in Aurangzeb’s reign the tobacco farmer at Delhi paid Rs. 5,000 daily as tax (sair duty) to be exaggerated. Aurangzeb remitted taxes on many articles including tobacco and might have discouraged it as an intoxicant. But it had hardly any effect. The dried tobacco leaf was exported from Surat in 1623 and from Coromandel Coast to Mocha, Arakan and Pegu.\(^7\)

(v) Coffee (Qahwa) : Like tobacco coffee, too, finds no mention in the Ain. It was imported from Arabia and Abyssinia (through Mocha) for use as a costly beverage by high society. But unlike tobacco it did not become popular before the second half of the 17th century and was not yet acclimatized, but south Maharashtra grew an unsatisfactory variety (e.g., area around Khelna). Tea was unknown, even in Assam.\(^8\)

(vi) Opium : The milky juice of the poppy heads, dried in the sun and air used as an intoxicant and as medicine, was manufactured in Akbar’s reign in Malwa, Berar, Ghazipur, Khandesh and Benares and later on in Bihar (Patna), Bengal and Rajputana. Malwa opium was rated very high, and even children (up to three years) of all classes were given it in some parts there. It was exported to Pegu, Java, Malay Peninsula, China, Persia and Arabia.\(^9\)

(vii) Indigo : In the 16th century it was a commercially unimportant industry. It was used for internal consumption within India principally for dyeing, washing or bleaching cloths crystal white and for paints. Used as a dye and for bleaching of cloths, indigo was locally demanded in all cotton manufacturing centres, especially near Agra, Masulipatam, Dacca, Kasimbazar, Ahmadabad (from Khandesh), etc. But in the 17th century on account of the demand of the European companies, it became a principal item of international

MUGHAL ECONOMY
commerce, and its demand so grew as to figure prominently in commercial records. It became a substitute of woad grown around the Mediterranean in the woollen industry of western Europe. The profits of the import of western Indian indigo by the Portuguese led Spain to monopolise it in 1587. Then the Dutch imports of Indian indigo threatened the woad trade in western Europe and England. England, however, soon learnt the art of indigo dyeing. Sir Thomas Roe described it as a ‘prime commodity’ of East India Company’s trade.

There were two methods of manufacture: wet-leaf or soak-pit process and dry leaf process, involving co-operative enterprise among the cultivators. In Gujarat the peasants often sold the leaf to middlemen, who had the dye extracted and sold in the market. In 1646 the English at Ahmadabad and Surat who toed the line of the middlemen and experimented with manufacture with hired labour. Indigo could be tested: the pure grain would be of violet colour, glossy in the sun, dry and light, floating in water. The dealers used some tricks to adulterate it, by mixing the three crops together, mixing indigo with dirt and sand or earth and pouring oil. Production would suffer from accidents: scanty, heavy and late rains, bitter cold and locusts.

Of the principal centres of production of indigo, arranged in order of excellence, Biana (Agra), now an unimportant town in the present Bharatpur district, was the first, Sarkhej in Gujarat was second and Golkonda (along the Coromandel) third. The English and the Dutch used to get their supplies either in cash or barter from Gujarat and Agra-Bayana, but the latter also drew from the Coromandel-Golkonda area. It was a costly article. Price of indigo depended on various factors: rainfall, famine, quality, manner of procurement, season, competition among buyers, transport, administrative interference, inland tolls and customs. The best Bayana indigo cost about 50% higher than the other varieties. In Akbar’s time it sold at Rs. 10-12 a md. and in Tavernier’s time at Rs. 36-40 a md. of 60 seers as against Rs. 15-20 a md. (of 42 seers) of Gujarat indigo.\(^\text{10}\) The fortunes of indigo illustrates that India’s agricultural industries were extremely sensitive to price and flux in demand. On account of the Gujarat famine (1630-32), when prices of food grains rose and growers of non-food grains (including indigo) switched over to food crops, indigo production declined. The same shift to subsistence agriculture

ÄGRO-MANUFACTURERS 29
followed decline in demand for non-food crops in the Coromandel area.

Indigo was highly prized and became an object of keen competition among merchants of different countries and nationalities, among the Europeans, the English, the Dutch, the Portuguese and the French; among the Asiatics, the Armenians, the Persians, and ‘Moguls’ and the Hindu banians, etc.

Indigo (especially of Bayana) was taken to Europe by the English, the Dutch and the Portuguese, and much of it was re-exported to eastern Europe and the Mediterranean region. It was the indigo of Aleppo which determined the price and quality in the London market. It was also carried to some countries in Asia,—the Levant (by overland and sea routes), Turkey, Persia (a principal importer), Basra, and Red Sea, Central Asia, South-East Asia (Bantam), Africa (Congo). Srivastava writes that the trade declined after the reign of Aurangzeb on account of accidents of seasons and uncertain political conditions. But indigo trade began to decline about mid-17th century (1646-7) when its demand lessened in Europe, on account of competition of West Indian indigo (and manufacture of indigo in Barbados), and heavy adulteration. Demand for Indian indigo declined in Persia, Basra and Mocha, (before 1647).11

Besides indigo, two dye-producing shrubs, -al and safflower were cultivated on a fairly large scale and taxed by the government probably during the Mughal rule. The latter was cultivated during Akbar’s reign in the provinces of Agra, Allahabad, Awadh, Delhi, Malwa, Lahore, and Multan.12

For washing, the cotton cloths were sent from their places of origin to some central spots, e.g., Agra, Ahmadabad, Masulipatam and some places in Bengal probably Dacca and Kasimbazar.13

(viii) Wines: As in modern times intoxicating liquors were produced from the sap or juice of the palm and the date trees (toddy or tari, tadi), arrack made from mahua flower, fermented rice and molasses. Their production was officially discouraged, though all the Mughal emperors (except Aurangzeb) were drunkards: Akbar drank arrack, a heady wine of palm, and also post (or opium and spices mixed). But he ordered the kotwals to limit the manufacture of liquors as far as possible. A heavy drunkard himself, Jahangir prohibited it altogether, but did not enforce it. It was more strictly enforced
under Shahjahan. But the prohibition was not universal. Spirits and fermented liquors including country liquor or tari were easily procurable everywhere. Even the Governor of Surat farmed out the tari trees.¹⁴

NOTES AND REFERENCES

1. Moreland, IDA. 157 ; Habib, 57 ; Fryer ii. 108, 118 ; Linschoten i. 246, 261.
2. Ain. ii. 131 ; Mirat. i. 287 ; Barbosa, 346 ; Linschoten ii ; Careri, 169 ; Thevenot, 219 ; Moreland, IDA, 157-8 ; JRAS 1918, 379 ; Chircherov, 50, 76 ; Habib, 58 ;
3. Bengal : Barbosa, 362 ; Linschoten c. 16 ; Fitch, 44 ; De Laet 54-5, 71, 73 ; Bernier, 435, 439 ; Ahmadabad & Cambay. LR. i. 302 ; Thevenot ; Bayana : Ain ii. 192 ; On an average the Dutch shipped to Persia annually in the 1640s 400,000-450,000 lbs. The English, however, did not long retain their interest in it. CEH. i. 274. Method of Manufacture (c. 1766) in Stavronikus i. 140.
4. Ain. ii. 181, 192 ; LR iv. 291 ; Linschoten c. 7 ; Prices, Ain, 63.
6. Varthema, 158, 212 ; Linschoten, i. 56-60 ; Manrique, ii. 56 ; Bowrey, 59, 128, 132 ; Mirat i. 260 (itinerant in Aurangzeb’s farman) ; Habib, 59 ; Chicherov, 50, 76 (References) : Moreland, IDA, 158.
Oil-makers paid a special tax. South Indian Inscr. i. 88-89, 108 ; Ep. Carnatica (Coorg) ii. 66 CEH. i. 274-5.
7. LR. i. 298-300 ; Terry 96 (Foster ETI, 299) ; Golkonda (before 1618-22), Moreland, Pelations, 35-36 ; Storia, ii. 175 ; Fryer, i. 266 ; Alex. Hamilton ; Waqae or Halat i Asad Beg, E&D. vi. p. 189 (process of manufacture) ; Khulasat ut Tawarikh. Date of introduction 1604 or 1605, according to Smith Akbar, 407, 409 but 1613 in Moreland, IDA. 158. 81 ; FAA. 80, 81, 189 ; even children of 3-4 years near Masulipatam smoked tobacco, acc. to Bowrey. Two revenue manuals of 17th century, in Habib, 45-6.
8. Even Bayaz-I-Khushbui (temp. Shahjahan) does not refer to it (Habib, 46) ; Ovington 180 ; Tavernier ii 20 ; EFL. 1655-60. p. 241 ; Khafi Kh. ii. 501. For growth of coffee trade, K.N. Chaudhury, TWA. 359ff ; Tea trade, ibid. 385ff.
9. Ain. i. 410, 417 ; ii. 78-117, 207 ; Fitch (ETI, 18, 24, 34) ; Hawkins (ETI. 17, 116, 142) ; Moreland, IDA. 103 ; CEH. i. 275.
10. My Studies in Econ, Life of Mughal India, ch. 3 ; EFL. 1634-6. 292 ; 1646-50, 77-78, 189, 202-3 ; (1655-60), 76 ; Habib, 59 ; Tavernier ii. 9. CEH. i. 273.
11. De Laet, 21-23, 45-6 ; My Studies... ch. 3.
13. Sarkar, Studies in Aurangzib’s Reign, 275
14. M.A. 159, Bartoli in Smith, Akbar, 114 ; Ain. ii. 42 ; Tazuk (R&B) i. 8 ; Purchas I. iii. 222 ; Barbosa, 346 ; Purchas I. iv. 424 ; Jourdain, 124, 132 ; Terry, 271, 197 ; Ain i. 75 ; (ii. 97, 134) ; (ii. 32) ; De Laet, 24 ; Mundy, ii. 97-8 ; Ovington, 142 ; CEH.i.275.
Non-agricultural Production

I Handicrafts

The needs of the royalty, the nobility, the rich trader and the foreigner created an increasing demand for a large variety of goods ranging from household articles, furniture, tailoring, perfumery, leather work, jewellery, writing materials, pottery, building, glass, soap and means of transport, which were partly utilitarian and partly comfort or luxury goods. The commonality or the masses could hardly exercise any effective demand on such goods except a very few. Some idea of these as used by the imperial household can be obtained from the Ain. But neither the imperial nor the nobles' karkhanas could produce more than a small section of these goods. The major portion was manufactured by independent artisans in their humble cottages, scattered in different regions of the empire, and of different categories,—blacksmiths, coppersmiths, carpenters, tailors, druggists, perfumers, jewellers, goldsmiths, silversmiths, workers on ivory, coral, amber, shell, glass, potters, masons, soap-makers and shipwrights, and others, who produced costly works, of a varied and highly skilful and artistic merit.

Household Utensils : Metal Industries

The needs of the imperial and aristocratic households specially cooking and storage required big metallic utensils. Owing, however, to high or prohibitive price of copper and iron, heavy articles of copper and its alloys or of iron were generally beyond the reach of poorer sections, though small articles (like baking pan or taoa) might have been in common use. Cutting instruments for domestic use, swords and other arms were, however, in much demand.¹
Furniture-wood

Wood was comparatively cheaper than metal but supply was limited by transport difficulties. However, with extensive forests and uncultivated lands wood was easily available for construction of houses, and agricultural implements. Owing to scarcity of demand furniture was sparse those days: chairs and tables were used by the Portuguese, Dutch, English or Moslem merchants on the coast (e.g., Rander near Surat). The principal wood manufactures (of teak, sesum, babul, and mango), included bedsteads, chests, stools, ink-stands, boxes (some ornamented) and articles of common use, Kashmir and Gujarat were reputed for woodwork. The latter manufactured ink-stands, engraved boxes and durable lacquerware. Sandal wood articles were costly.2

Hides, Skins and Leather goods

These were manufactured in small quantities. Lahore was famous for boots and shoes, harness and saddlery and Multan for leather works. India was self-contained on the whole but there was not much demand, for boots, shoes, well-buckets. It is difficult to agree with the view that even as regards harness and saddlery, not much leather was needed. For the numerous items of dress, harness for animals in the imperial and aristocratic stables and weapons must have required leather.

The sale of shoes in Bihar villages and towns and of shoes, harnesses, drums, etc., in Bengal on the market illustrated the break-up peasant community craft.3

Tailoring and Perfumery

Tailoring was an important craft for preparing various dresses of the civil and military population. Perfumes followed dress and clothing. These came from different parts of the empire to refresh the Mughal royalty and nobility and upper classes.

Writing Material—Paper

The use of paper was very gradual. Palm leaf was used for writing as late as 1625. But paper was needed for large scale use in official work as well as private purposes by merchants, scholars and calligraphists. Its production rapidly grew during 16th and 17th centuries.

NON-AGRICULTURAL PRODUCTION
Hand-made paper was manufactured from wood pulp of trees of forests in northern India, as at Lahore and Awadh (during Aurangzeb's reign). Paper was exported from Shahzadpur near Allahabad 'to other parts'. Bihar was famous for its paper. It was produced at Rajgir (Patna dt.), Bihar Sharif (kaghazi mahalla), Meshi (Motihari dt.) and Arwal (Gaya dt.). 'Arwali Kaghaz' was used for writing mss. When carried to Cambay, North Indian paper was known as Cambay paper. The Portuguese at Goa imported European and Chinese paper as well as Cambay paper.4

Pottery

This was fairly extensive. As metal vessels were costly, earthen vessels were commonly used. Besides coarse earthen ware for the masses there was reputed superior ware. But the industry was not progressive. Chinese porcelain was used by the Muslims.

In the 17th century Bihar (Patna) produced fine pottery including cups described by Manucci to be 'finer than glass, lighter than paper'. and perfumed. Used by the nobles, these were sent to princely courts as 'a rarity' and as curiosities were 'carried all over the world'. Rural potters were remunerated in cash in Malabar in early 16th century. Karnataka potters got remuneration and also sold pots in bazar and paid taxes; Bengal potters (18th and early 19th century) sold their wares for money to retailers and on the market—all showing disintegration of community crafts.5

Building Industry

True, the domestic use of bricks, stone and timber was small; the masses had their houses of mud or reeds, thatched or tiled; industrial constructions were non-existent; public works were spasmodic. But there were numerous professional artisans in the villages and towns—'house-builders, canal-diggers, stone-cutters, brick-makers, masons, timber-sawers, wood-carvers, manufacturers of bamboo-articles, varnishers, glaziers, roofers, lime-makers, well-diggers, and cleaners, etc'. Their services were needed for building several forts and fortifications, palaces, houses, temples, bridges, roads, ships, etc. Every artisan got a remuneration, and sometimes also food. European observers admired their skill but deplored their under-developed techniques and low output.6

34

MUGHAL ECONOMY
Glass

Essential materials for manufacture of glass, rooted in peasant craft, were found in Lonar in Berar. Gilded glass was manufactured at Patna. Various glass ornaments (bracelets, rings, etc.) were manufactured in Bihar.7

Soap

Essential materials for manufacture of soap were found in Lonar in Berar.8

Many of these handicrafts were of much artistic merit. Their value depended on the cost of materials and skill applied. Their market was determined by the needs of an extravagant ruling class and of the fluctuating demands of the foreigners. As such this class of manufacture had little opportunity of expansion.9

Manufacture of Means of Transport

Judged by numbers, variety as well as by value, this was a very important enterprise. Adequate supply of timber was then an essential pre-requisite of manufacture of ships, boats and carts. The forest wealth of India was both sufficient and useful. The forests of Bengal, Agra, Allahabad, Sind (Thatta), Lahore, the Western and Eastern Ghats including Malabar and Nilgiris supplied the raw materials for these both for the means of internal transport on land and water alike. Centres of production were therefore generally located near sources of timber supply.

On land: Generally speaking heavy goods were transported by pack animals, and valuable goods (treasure or indigo) by carting. Wheeled traffic, though difficult, was possible in northern India but entirely absent south of Golkonda. Passengers ordinarily used palanquin or light carts drawn by oxen (not horses or ponies).10

On water: The Ganges, the Jamuna and the Indus were extensively used for internal navigation. Travelling by boats (Bengal, Bihar, U.P. Punjab, Sind and Gujarat) was common. Abul Fazl says of Bengal: 'Travelling is by boat, especially in the rains, and they make them of different kinds for purposes of war, carriage or swift sailing. For attacking a fort they are so constructed that when run ashore, their prow overtops the fort and facilitates its capture.' Of Gujarat he writes: 'Vessels sail from and trade to Ghogah. The cargoes are put
into small ships called *Tawari* which transport them to ‘Kambhayat’ (Cambay). In Thatta ‘the means of location is by boats of which there are many kinds, large and small, to the number of 40,000’.

About the close of the 16th century Ralph Fitch sailed from Agra to Bengal with a fleet of 180 vessels. During the 17th century, also building of boats and ships from timber of Indian forests continued to be in progress. Ships and boats were built in the province of Thatta according to Sujan Rai. 4200 big and 4400 small boats were used for navigation in Bengal according to Chhattarman. Similar fleets plied for traffic on the Indus, the Ganges and other rivers.

As regards construction of sea-worthy ships the position was naturally more complicated. Here also the determining factor was the availability of timber. India had a long tradition of building ocean-going vessels. Nicolo Conti (1420) has left an interesting and striking description of India’s ships. ‘The natives of India build some ships larger than ours, capable of containing 2,000 butts, and with five sails and as many masts. The lower part is constructed with triple planks, in order to withstand the force of the tempests to which they are much exposed. But some ships are so built in compartments that should one part be shattered, the other portion remaining entire may accomplish the voyage.’ That tradition survived down to the seventeenth century.

The most important ship-building centres were the coastal regions of Gujarat,—Bassein, Surat, Goa and Malabar on the West Coast; Masulipatam and Narasapur on the East Coast; Satgaon, Dacca and Chittagong in Bengal; Agra, Allahabad, Thattah (or Tattah) and Lahore. Since the 16th century the Portuguese domination of the trade of the Indian waters from the Cape of Good Hope to the straits of Malacca was rendered possible on account, among other factors, of the frustration of their enemies, especially the Turks, to have naval construction bases on the coasts of the Red Sea (where timber was lacking), of East Africa, Pegu and Sumatra. The Portuguese tapped Tenasserim and Sumatra of course. But with their monopoly of commerce on the West Coast of India they had European-type ships built in India. Pyrard says that all ships of the Spanish King in the East Indies were built at Bassein, which was to the Indies what Biscay was to Spain, as ‘no country yields such timber’. Moreland rightly observes that (apart from Portuguese trade to Europe) the ships
constructed in India carried the major part of the commerce in the Indian seas, that most of these and invariably the big ones were built at different ports and inlets along the West Coast with easy access to the forests and that all such vessels needed for the coastal trade from Sind to Bengal were also built in India. He concludes that 'the aggregate volume of shipping was, therefore, very great when measuring by contemporary standards'. Ordinarily the sea-going and coastal vessels were small (40-200 tons) but some passenger ships were quite large (1000 tons), larger than Mediterranean craft (Conti). Some in western India (pilgrim ships to the Red Sea) were even larger, second only to Portuguese carracks but these were of poor manœuvrability and were not good sea-boats. In the 17th century the efforts of the European companies and the Indian shipowners to procure European type ships from the Portuguese failed because of excessive prices. So the English began to produce these at Surat and later at Bombay, the Dutch giving up the experiment in the East Coast for uneconomic costs.

NOTES AND REFERENCES

1. Moreland, IDA, 160.
2. De Laet, 58-9; Khulasat; Pyrard. ii. 245 (Hakluyt); Barbosa, 287 (Hakluyt); Moreland, 161-162; Chicherov, ch. 2; KS. 110.
3. Ain (B) i. 126-53; Moreland, 162-3; Chicherov, 78. Early in 19th century Bihar shoe-makers (Chamars) earned about Rs. 3 in villages and Rs. 5 to 6 in towns and Bengal shoemakers sold shoes, harness, drums in markets. Martin, E.I. ii. 252, 938; Ward. iii. 140.
4. Della Valle (palm leaf) 291; Pyrard, 175, 211, 245 (Hakluyt); Ain. ii. 164; Mundy ii. 98 (Shahranpur); Moreland, 163-4; KT (Sarkar), 35; Khulasat 26 (Awadh); Pant, 92; See my Glimpses of Medieval Bihar Economy, 78.
5. Storia, ii. 426, 484; Marshall, 414; Moreland, IDA, 164; Chicherov, 77.
6. Ain. ii. 122, 235-6; Pelsaert, 60-1; Moreland, IDA, 164-5 and 272-3; Buchanan, Journey from...i. 133, 303, 310; ii. 24; Chicherov, 78.
7. Ain, ii. 164; M.E. 725; Buchanan, Martin, ii. 250-2; Chicherov, 77.
8. M.E. 725
10. Moreland, 166-171; See Section (Transport & Communications).
11. Ain. ii. 134 (Bengal), 24 (Gujrat), 339 (Tattah); Akbar built many boats among which a few could carry elephants. Srivastava, Akbar, i. 159; Fitch, ETI. 18.
12. Fitch, op. cit; Khulasat 36; Chatterman, 80, in Srivastava, Mughal Empire, 722.
13. Pyrard, iii. 182; Pavlov (Gujrat); Mookerji, 128; Moreland, op. cit. 170-71; CEH. i. 276.

It is necessary to grasp the influence of wind system and the risks of storms, etc., in those days of sailing ships on design and construction of ships. See K.N. Chaudhury, TWA. 201f. This involves also the question of technology.
Textile manufactures (silk, wool, jute, hemp and cotton) then constituted the most important of Indian industries. Of these, again, cotton manufacture formed the foremost item. Moreland, in his eagerness to disprove the charge of the decline of the industry as a result of British policy, argues that silk weaving was a minor industry about A.D. 1600. The total output as well as the export of manufactured goods was small; the use of costly cotton and silk goods was confined to the upper classes only; even foreign articles had to be imported for internal use. Hence imported silk goods from the Far East, Central Asia, Persia and eastern Mediterranean coasts competed with the Indian goods. It was the production of raw silk, which expanded after Akbar's death as a result of European demand, rather than the weaving industry that was affected by British policy.¹

Silk

Moreland's thesis contains only half-truths. Sericulture was an old industry in India. Even if it were a minor one in the 16th century, it was in such a flourishing state in certain centres like Ahmadabad (Gujarat), Kashmir, Bengal and Bihar including Patna that considerable silk was exported to foreign countries. Derived from the cocoons of domesticated silk-worms feeding on cultivated mulberry plant which requires warm summer, each silk worm drew 1 mile long thread.

First, as regards output, silk was an old industry in India. It is referred to by Mahuan, a Chinese traveller of early 15th century. Akbar evinced great interest in the production of silk and encouraged foreign artisans to improve silk-weaving. About 1600 the raw material was partly imported and partly produced in India. China was the most important supplier of about 400,000 lbs (3000 quintals). The import of Persian silk through Ormuz was not much, the total being about 1 million lbs.² Silk amounting to $2\frac{1}{2}$ million lbs was produced as a small-commodity peasant industry. It progressed considerably during 16th and 17th centuries. Earlier silk was produced in Assam in small quantities, Kuch Bihar, Kashmir and Bengal (eastern district of Bakla). But Gujarat (West Coast), importing Chinese raw silk was the chief supplier of finished silk. However, Bengal where
sericulture was unknown before the 15th century, came to have the distinction of producing the maximum quantity in the empire in the 17th century and ousted China as source of supply (and export). The cultivators (chassars) grew mulberry plants, bred silk worms, reared and wound cocoons at Kasimbazar, Murshidabad and Malda in Bengal. In Bengal the mulberry leaves were harvested three (sometimes four) times a year, and the yarn obtained from the cocoons was manually twisted into thread or skeins (called khammu, khangru or putney in Bengal). Raw silk was reeled (on a latai or natai) from the worm-pod swiftly and dexterously by women during leisure periods at the homes of the cocoon-rearers and weavers. Sometimes the coarse silk thread was used to manufacture coarse stuffs (matka). Re-winding was needed to separate the superior from the inferior yarn, so as to produce fine silk. Both the varieties were then sent to the village market or purchased by merchants. Silk yarn (or thread) was also found in abundance in Kashmir, besides Bengal. The silk of Kasimbazar was yellowish like Persian and Sicilian silk, but when bleached white by the manufacturers it was like Palestinian silk. Gradually the occupations associated with the different processes came to be differentiated on a caste basis. Bengal alone came to export annually 22,000 bales of silk each weighing 100 lbs (i.e., 2,200,000 lbs) at the end of the 16th century. In the 17th century raw silk amounting to 2.3 million lbs was produced in Kasimbazar alone. Gujarat took $\frac{2}{3}$rd of it and the rest was worked on in Bengal.

The industry progressed much under Jahangir and Shahjahan. Peter Mundy found the sale of skein silk to have been a monopoly of the governor and it had to be purchased from the kotwal of Patna. Indian silk found a new market in Japan through the Dutch and Bengal raw silk was exported to Europe by the English. Tavernier (mid-17th century) tells us that many thousand bales of silk yarn went out of Kasimbazar annually. The Dutch usually exported six or seven thousand bales of this silk ($\frac{1}{4}$ millions) through Hughli and were prevented from carrying more by the competition of 'the merchants of Tartary (Central Asia) and the Mughal Empire (Gujarat), who bought up as much as the Dutch (303 millions) ; and the local merchants utilized what was left (about 1 million pounds)$^3$. In the 17th century Allahabad, Delhi, Kashmir, Sialkot, Benares, Bengal and Gujarat supplied not only raw but also manufactured silk.$^4$

NON-AGRICULTURAL PRODUCTION
During the 17th and 18th centuries professional spinning and winding developed along with silk manufacture. The technology of the spinners and winders underwent a change. Instead of the earlier primitive manual method the winders (nakads, nacauds in Bengal) now used a special country-made machine (ghai or bank, so called from the ghai or basin where the cocoons were boiled), worked by two artisans (katani, reeler, spinner and pakdar, winder), and equipped with a device for uniform twining of silk into a single thread, even prior to the introduction of Italian techniques (filature) by Europeans in Bengal in 1770. The skill of the spinners was highly praised by the Europeans. The silk-winders supplied the expanding markets in Bengal, Bihar, Gujarat and elsewhere in India.5

The silk-weaving industry was, as Moreland observes, localized. But he has evidently under-estimated its importance in the 16th and 17th centuries, and omitted many centres like Patna, Benares and Veetapur (about 18 leagues from Agra). A comparison of the accounts of Barbosa and of Linschoten in the beginning and end of the 16th century respectively would show the development of the industry in Gujarat at centres like Cambay, Surat, Ahmadabad, Pattan and Chaul, the raw material coming from China and Bengal. Surat and Ahmadabad badly needed silk to manufacture carpets, velvets, satins, and taffetas mixed with silk and gold threads. *Patoles*, a thin silk stuff painted with multicoloured flower designs, costs Rs. 8 to Rs. 40 a piece. It was the fabrics of Gujarat that made the Indian silk goods reputed. As regards Bengal, Moreland speaks of only local consumption here and implies that its importance grew up by mid-17th century as it is not referred to by Caesar Frederick or Fitch but by Tavernier. He has not referred to weaving of silk fabrics in Bengal and Bihar (including Patna even during the reign of Akbar). Moreland again refers cursorily to Agra and Lahore. But he has not mentioned Veetapur near Agra which was a flourishing centre of silk industry in the 17th century. It is to be remembered that Agra was the metropolis of northern India and that Akbar took interest in the industry, encouraged it (even against the orthodox Muslim practice elsewhere) so much that the demand in court circles was stimulated considerably and large quantities of silk cloth were requisitioned not only for royal karkhanas and wardrobe but also by nobles and upper classes in the empire. In fact Akbar sought to improve the output by his
patronage: the production of foreign stuffs was studied: foreign workmen were encouraged to settle in India: silk-spinning was perfected: silk-weaving expanded and imperial workshops at Lahore, Agra, Fatehpur, Ahmadabad and Gujarat manufactured the materials that were imported from foreign countries. Moreland states that the silk fibre locally produced in Kashmir was not large. But Abul Fazl tells us that both silk yarn and manufactured articles were available in abundance in Kashmir and the Punjab. Again throughout the period, Banaras was (and is even now) an important centre of manufacture of fine and costly silk products.6

The internal consumption was more important than the export trade. The upper classes used silk stuffs extensively. It was the fashion in good society, as we know from Abul Fazl (in Akbar’s court) and Barbosa (in Vijaynagar). But even the home market was limited, as silk goods were largely imported from the Far East, Central Asia, Persia and East Mediterranean areas.7

Moreland seeks to prove that the export of Indian silk goods was small, from the general silence of the travellers, Caesar Frederick, Fitch and Balbi. Barbosa mentions only East Africa and Pegu which took Gujarat silk goods. Varthema mentions Persia, Tartary, Turkey, Syria, Barbary, Arabia and Ethiopia and some other places but fails to differentiate between ‘the silk and cotton stuffs’. But in the 17th century there was a remarkable expansion of the export trade as the report of the First Commercial Mission of the English to Patna (1618-21) and the accounts of Tavernier and other travellers amply illustrate. Tavernier says that the manufactures of Veetapur were carried by the Dutch to Philippines, Borneo, Java, Sumatra and other neighbouring islands.8

Sericulture declined in the 19th century.

Besides silk, there were other comparable materials, produced in Bengal:

(a) Silk-herb, according to Pyrard, (whose stay at Chittagong was short);

(b) Cloth spun from herb, according to Linschoten (who did not visit Bengal);

(c) Cloth of herba (a kind of silk growing in forests) mentioned by Caesar Frederick—now called tasar

NON-AGRICULTURAL PRODUCTION 41
(d) Cloth made of grass, yerua, muga like silk (according to Fitch, either 'wild' silks of Assam or of Chotanagpur (due to plant, not insects).

(e) rhea, produced locally. The manufacture of this fibre was, however, of local importance.9

Mixed Goods

Moreland opines that 'a substantial proportion of the raw silk consumed in India was used for the production of mixed goods which are still a feature of the hand-weaving industry.' But he has not substantiated this. A perusal of the Ain would indicate several varieties of stuffs mixed with silk,—brocades, baftas, mayan shawl (silk and wool mixed) manufactured at Lahore, qutni (stuff made up of silk and wool), tassar, alcha, etc. Stuff with gold and silk thread (zardoz, kalabatun, kashida, qalghai) were manufactured in Kashmir. Thattah used to produce, says Alexander Hamilton, cabulleys (silk mixed with carmenia) besides cuttenee (jamawars) of silk.10

Wool

Wool was obtained from different animals like sheep, camels, goats and angoras. But it was the fleece of domestic sheep that supplied the commercial demand of wool. It was an old cottage industry and continued to be important in the 16th century but the internal production was inadequate, being limited to some specified sources only, like Kabul, Kashmir and western Rajasthan. Indian wool was not of superior quality: it was coarse, suitable for blankets only. Fine wool had to be imported from Tibet and Himalayan areas. Woollen goods, therefore, were costly.11

Wool was usable both by the rich and the poor. But the latter used it very little: a foreign visitor hardly refers to the use of woollen garments or blankets by ordinary men. Common blankets, however, existed, as we know from Abul Fazl's prices. Blankets were not used even for Akbar's best horses. Woollen goods imported from Europe or broad cloth (i.e., Scarlet, Sakarlat) were used by upper classes in 16th and 17th centuries. Woollen clothing was hardly used in South Indian courts but used in the North. Fashions in Agra and Lahore were influenced by Akbar's preference for woollen dress.

But as in silk, imported goods (from Italy, Turkey, Persia) supplied the needs of upper classes. Importers found the market unsatisfactory.
The pioneer merchants of the East India Company were disappointed, as there was no prospect of a steady off-take. The local artisans were quick in learning the foreign patterns. But their number was not large. Supply of material was limited,—as sheep did not figure prominently in agriculture and Tibetan trade in raw wool had not been established. That wool was very coarse is known from Terry.¹²

As in silk Akbar’s influence was also felt in the shawl and carpet weaving industries. According to Abul Fazl skilful masters and workmen settled in India to teach the people improved methods of manufacture; Akbar himself acquired a practical knowledge of weaving; hair-weaving and silk-spinning were perfected. To create a demand for these goods Akbar prescribed the use of locally produced woven coverlets by certain rank-holders, as a result of which many shawl manufactories were established in Lahore. Foreign carpet-weavers were induced to settle in Agra, Fatehpur-Sikri and Lahore and weave carpets competing with imported Persian ones. The imperial karkhanas produced carpets worth Rs. 1800, besides numerous jajims, shatranchs, baluchis and silk mats. Such a Lahore carpet was presented by R. Bell to the Girdler’s Company of London. Persian carpets continued to be imported and except for the stimulus given by Akbar’s personal encouragement there was not much progress.

Woollen manufacture was done in four principal directions, shawl-weaving, carpet-weaving, rough woollens and blankets.

(i) Shawls were woven mainly from hair. Formerly the goat’s hair for Kashmir shawls was imported from Tibet and Ladakh. According to Bernier the most important industry of Kashmir was shawls and other costly woollens, which gave ‘occupation even to the little children’. These were also produced in Kashmir, Punjab and other parts. Under the keen interest and patronage of Akbar who used double the size of usual shawls, it was established at Lahore in ‘more than 1000’ workshops and perhaps elsewhere, too. Those manufactured at Agra and Patna were not as good as at Kashmir, which was specially famous for its excellence in dyeing water. Tus shawls deriving their name from tus animal which supplied fine, soft and warm wool of red, black and white colours, were reputed for lightness, warmth and softness and priced at Rs. 50-150 a piece. Lahore specialized in a shawl of mixed silk and wool (mayan) used for turban (chiras) and loin-bands (fotahs). Most of woollen shawls, blankets, loin-bands,
turbans, etc., used in the country came from Lahore, Gujarat and Kashmir. The industry continued to flourish throughout the period under review.13

(ii) Weaving of carpets in different colours and varieties was encouraged by Akbar at the imperial karkhanas of Agra and Lahore, On the basis of the evidence of the English merchants who found the industry to be unprogressive and the craftsmen to be ill-off, Moreland says that the output was not much, imported Persian carpets holding the market, and that weaving of superior goods of wool or hair was a ‘fancy goods’ business, with a very limited market. But Abul Fazl mentions that fine Persian-type carpets, woollen coverlets (takya masnads) were produced in Agra, Fatehpur-Sikri, Lahore, Jaunpur and Zafarwal. ‘A race of Persians’ produced fine carpets in the South (in modern Andhra Pradesh).

(iii) Rough woollens, manufactured at Agra, Fatehpur-Sikri and Bengal were used by the upper and middle classes.

(iv) Ordinary coarse woollen blankets were manufactured on Indian looms at different places throughout the country, costing 10 dams or ¼ of a rupee in Akbar’s time when wheat sold at 15 dams. Hence it was not very cheap. Not much is known about the woollen industry of Jaisalmer, Marwar and Bikaner.14

Sann-hemp and Jute

All Mughal provinces grew Sann-hemp. But Bengal grew jute. The ‘silk-like’ material of Varthema must have reference to this. Ropes were prepared from these for local shipping while Kasimbazar specialized in ropes for packing silk. Moreland suggests that sacks of hemp and jute were used for packing locally. This might have been so at first. But with the increase of trade the demand for sacks must have grown. Moreland holds that cheap or coarse sack cloth of jute was generally used by the poor as dress in eastern Bengal (Ghoraghat). But this was due to ‘a misrendering, of the word tatband used in Ain’, which meant eri silk, not jute; while the earliest available reference to jute cloth is during the reign of Alivardi.15

Cotton

Here the different operational processes—collecting the cotton crop or picking up the seeds from the field; cleaning the raw cotton
and ginning, beating, carding (combing); spinning, twisting, winding the yarn; and weaving; and, if necessary, also bleaching, dyeing, patterning and printing—were at first combined or performed by the same hands, in the peasant's household for his domestic needs and not for any commercial purpose. Gradually commodity production developed when the processes grew into specialized professions, carried on by professional artisans including women of weaver families living either in villages or towns. For example, some specialization grew when ginning came to be done, as at Ahmadabad, by a specialized group of homeless mobile labourers (dhunyas, naddef). Again, the goods, yarn or thread or the cloth itself, came to be produced not only for domestic needs but for the market or the town. In fact spinning and weaving constituted the two most important domestic handicrafts or small-scale industries in India's traditional peasant economy, characterized by a combination of agriculture and crafts. It is a matter of sheer wonder how with extremely simple tools, worked by hand, often described by foreign observers as 'ill-constructed', the hand mill, spindle (takli), the traditional wheel (charkha or charkhi), and the wooden loom, India's millions of peasant families, spinners and weavers, could produce cloth which, in quantity, was adequate to meet the needs of the domestic as well as the distant markets and clothe 'every one from the Cape of Good Hope to China', in the picturesque though somewhat exaggerated account of Pyrard, and in quality, proved to be the despair of the civilized world and the object of the envy of industrialized Britain.

(a) Spinning yarn: Usually spinning was done in rural peasant families, spinners and weavers, for about five hours a day by women, often assisted by children. It was a separate activity, and a subsidiary occupation. The finest yarn, needed for fine muslin of Bengal, could be produced only by specialized spinners, women (aged 18-30 years) possessing special skill, quick eye-sight and nimble fingers, not stiffened by domestic chores, with the spindle (takli). The coarser varieties were produced with the wheel (charkha). With lapse of time, spinning came to be done not only by peasant women but also by women of higher castes (e.g., impoverished Brahman widows) as in Dinajpur in Bengal or Bhagalpur in Bihar. But in Mysore, Vizagapatam and Ganjam, where professional spinners were abundant, women of all castes except the Brahmans, took to spinning.
This domestic industry was gradually transformed into commodity production in two stages: first, when the peasant women spun the thread from home-grown cotton not for domestic use but for the market; second, by the beginning of the nineteenth century the peasant women purchased cotton in the market to spin it at home and then again to sell the thread in the market.\(^{16}\) The principal sources of supply of yarn were Broach, Kasimbazar and Balasore, while it was exported by the English from Gujarat, Burhanpur and Bengal. Such yarn was coarse because European artisans were not skilled enough to use the finer variety.

During Jahangir’s reign the prices of finer quality of yarn varied from Rs. 6-7 (12-14 shillings) a lb. Under Shahjahan so much cotton yarn was produced that much of it had to be exported. But other countries could hardly compete with India in charkha spinning.\(^{17}\) Yarn was increasingly imported from Surat to Bengal (1680-1710) and its price declined (1650-1710) by 30%.

(b) Cloth manufacture: After spinning the next stage was weaving or the manufacture of cloth, which was the principal industry in India during the period under review, judged from the numbers engaged therein as well as its trade influence. Like professional spinners, the professional weavers were small-scale commodity producers, inhabiting every village, which used to have looms for manufacture of cloth. Slowly but silently the rural agriculturist tended to become an urban weaver-craftsman, but perhaps the separation could never be always complete.

Usually centres of spinning and weaving would be the same. But cotton manufactures would never be completed unless weaving processes, bleaching, dyeing and printing were fulfilled. Each was performed by a specialized class of small-scale commodity producers or artisans.

Bleaching was done by dhobis or washermen by boiling the cloths in a special solution of water (mixed with soap, lime juice, etc.) in Bengal (Sonargaon, Dacca), Bihar (Patna), Gujarat (Surat, Broach, Ahmadabad), Golkonda (Masulipatam) and then beating the pieces. The Europeans were not satisfied with this. Sometimes the cloth bleached were not owned by the artisans and they were paid for their labours according to an elaborate and complicated method.
Dyeing was a subsidiary industry done by dyers (rangef) in black, red (with chay of English records, best of which was produced at Nizampatam, yielding a unique scarlet colour, and with lac) or blue (with indigo). Various other articles like al, safflower, madder (majetha), tum, patang (sappan wood), babul, catechu, etc. The indigenous vegetable dyes used were not always fast (1613). Coloured goods were much in demand in Burma.

Cloth could be patterned on the loom by using coloured yarn. Usually, however, printing of cloth was done by applying the colour on the cloth with a pen or brush by hand (qalamdar) or qalamkar as in Golkonda or imprinting it with engraved wood blocks dipped in paint (chintz, chhit or prints) as in Gujarat and western India. The quality was adjudged by the customer’s sense of artistic beauty.

Printed cloth was widely produced in Golkonda near Masulipatam, Nizampatam, Narsapur, Armagon, Madras and other places. The artisans of Golkonda were specially famous. They created a local school on ‘Masulipatam Chintz’. Sometimes whole families were engaged in printing with children as helpers. Ahmadabad had printers’ streets (according to Mirat). Buchanan records the existence of ‘houses’ of printers at Bhagalpur in Bihar towards the end of the 18th century. The printers and dyers not only worked independently but at times processed the customers’ cloths for money as in Gujarat, Golkonda and Bihar. Gradually the process of printing exhibited growing division of labour when the component operations (preparing the cloth, drawing of muster, transferring the pattern, painting, etc.) came to be performed by different artisans and their families.\textsuperscript{18}

Space does not permit any exhaustive listing of the places here. Suffice it to say that the centres of production were widely diffused. The distribution was not, however, uniform. Special varieties were localized. Ordinary everyday needs were manufactured in almost all towns and villages throughout, as recorded by foreign travellers. Abul Fazl has praised the quality of muslin of Sonargaon (predecessor of Dacca) and cloths of places like Benares, Mau, Agra, and of Malwa, the Deccan and Gujarat. Similarly travellers and merchants generally spoke highly of manufactures of Lahore, Multan, Burhanpur, Golkonda, etc. Moreland rightly comments that ‘there was something approaching to a general market for superior qualities of cloth, though it must have been limited by the high cost of transport.\textsuperscript{19}
The principal centres of cotton manufacture in India may be briefly mentioned in a circle, starting from Delhi and ending with Lahore and Kashmir.

(i) Delhi province: Sīrhind produced red salu and chintz, purchased by Persians and Armenians; Samana, now in Patiala, chintz and piece-goods called semianos by the English factors and Sultanpur chintz. All these suffered on account of Mughal-Sikh conflicts. The chintz and quilts of Delhi attracted the Persians and Armenians. Panipat fabrics used to feed Sīrhind and Lahore, Gokul near Mathura produced guzees.20

(ii) Agra and Fatehpur-Sikri: The best variety of cotton goods and cotton carpets, were highly prized by the Dutch and English. Such goods continued to be produced towards the end of the 18th century. Shahjahanpur was reputed for superior cotton goods, and Shaharanpur for chautars and khasa since Akbar's reign. Najibabad, Bareilly and Farrukhabad became famous in 18th century.

(iii) Awadh: Lucknow was a chief centre of linen as well as coarse goods, mercools or mercoolees (also manufactured at Nawgaon or Nygome or Nayagaon in Hardoi district) and guzees. Daryabad and Khairabad respectively produced cloths, daryabadi or derriabads and khairabadi or kerriabads named after them, while Akbarpur and Jalalpur in Faizabad district, became famous in 18th century as respectively manufacturing Akbaris or Echbarrys and Jalalpuris or Gelalpores.21

(iv) Jaunpur produced white calicoes (e.g., jhona), carpets, turbans, girdles.22

(v) Allahabad was noted for its piece goods: jhona, mihrkul, etc., Jalalabad and Mau for the thick stuffs (needed for tents and similar purposes) and chintz and guzees of Shahzadpur and the white cotton goods of Mirzapur.23

(vi) Benares specialized (besides silk goods) in fine cotton cloths of different kinds, continuously woven on 7000 looms of the town and its suburbs. It produced 'shashes for the Moor', turbans with borders variegated with gold, silver and coloured silks, worn in Turkey, Persia and Khorasan, saris and gangajal. The output and excellence of these, which largely accounted for its riches, drew encomiums from foreign travellers like Fitch, Pelsaert, Manrique, Tavernier, Mrs. Kindersley as well as Ghulam Muhammad Khan.24

48

MUGHAL ECONOMY
Bihar: Patna was a centre of production of cotton goods and of cotton trade, as known from the accounts of Fitch, Hughes and Parker, Pelsaert, Mundy, Bowrey, Manucci and others. Besides the ambertees (ambertress, ambati or ambarti) which were both of inferior (e.g., kamsukha) and superior quality (including razai, zafarkhani, Jahangiri), there were other varieties, coarse and fine, thick calicoes, chautaha or chautare, including sahan, hamham, coarse cloth (rahmouts or rawat), cassa (khassa, coarse muslin, Rs. 4-5 each) and qaimkhani (fine muslin, Rs. 2-3 each), a thin cloth like calico lawn (in early 17th century), coarse painted calicoes, carpets of various sorts (satrankh, galicha, and mercool).

The localities round Patna within a radius of nearly 30 miles were important centres and markets of cotton goods: Lakhawar (Lackhoure 30 m. south of Patna), Nundownepore (? Nundun), Salimpur (? Islampur), Baikatpur (near Futwah), and Bihar Sharif. In fact the cotton industry of Patna, as of Bengal, was a national industry, as every village (gonges or ganj) every town near it was a centre of cloth production.

Patna continued as such in the 18th century for what was called, in Fort William-India House correspondence, ‘Patna cloth’ or Patna piece-goods, mulmuls, amberty, calicoes, mahmudis, baftas and cassa, besides chintz. After 1765 this flourishing industry suffered as Bolts says when the English established a monopoly over the cotton trade of Patna.25

Bengal: Robert Orme found the cotton manufacture to be a national industry of Bengal about mid-18th century as there was hardly a village near large towns and on the principal roads where every inhabitant, man, women or child, was not engaged in manufacturing cloth. But this distinction had not grown in a day. It had a tradition of at least several centuries. Besides Tanda, Maldah, and Satgaon, Sonargaon (the old Muslim capital, of eastern Bengal, now represented by an insignificant village Painam in Dacca district) was noted for the production of ‘a species of muslin very fine and in great quantity’ in the time of Akbar, while Terry found it to be ‘as fine, if not purer then our best lawne’. Pelseart, the Dutch factor at Agra (1620-6), wrote that the people of Chabaspur (Shahbazpur) in South Ganges Delta), Sonargaon and ‘surrounding villages and indeed as far as Jagannath all live’ by the weaving industry and the produce has

NON-AGRICULTURAL PRODUCTION 49
the highest reputation and quality’. In view of this Moreland’s comment that these muslins were not so reputed as those enjoying Shahjahan’s patronage would appear to be an understatement. The successor of Sonargaon, Dacca, had clusters of village settlements around (150,000-200,000) according to Manrique, and produced a prodigious quantity of fine white cloth muslins (besides silken stuffs) which were not only supplied to Indian courts, royal and provincial, and sold throughout northern India, but were exported, according to Manrique, to Khorasan, Persia, Turkey and many other countries via Lahore and by sea to Gombroon in Persian Gulf from Masulipatam, Goa and Surat. Bengal was reputed for embroidered quilts, bed hangings, tents, etc. Manucci corroborates this by saying that several ship loads of these were carried away every year by ‘the nations of Europe and elsewhere’. The Dutch regularly exported Dacca mulmul, Malda cassas and fotahs (turban cloth). The sarkar of Barbakabad produced a fine cloth (Gangajal) in the time of Akbar.26

(ix) Orissa : As in Bihar and Bengal, weavers’ settlements surrounded Orissan towns also during the period under review. Weavers around Balasore produced sana, sannee, sanah, sanu or salu, a specially cheap fine cotton cloth, generally dyed red with morinda. Hariharpur had 3000 weavers according to Bruton.27

(x) On the Coromandel Coast and in Golkonda also populous and thriving weavers’ settlements grew in the 17th century round large commercial and industrial towns and villages like Narasapur, Masulipatam (with 7000 weavers) Nizampatam (Petapalli), Vetapallam, Madapallam, Viravasaram (Virasharoon), Armagon, and Madras which were stimulated by the trading activites of the Dutch and the English. The East Coast goods were known as ‘Salompores’ ‘Moorees’ (muhris), and perculles or percalles (parkalas)’. The chief centre of the specialized industry of pintados or ‘painted’ goods was near Pulicat and San Thome. This area largely exported cotton goods to Pegu, Malacca and the islands but not to the Arabian Sea.28 The area was noted for sail cloth.

(xi) Malabar : It was from the cotton goods of Calicut that the term ‘Calico’ came to be applied to cotton cloth generally, the difference between ‘calico’ and ‘muslin’ being one of degree.

(xii) Western India : Gujarat was noted in the time of Akbar for the excellence of its cotton and silk goods : Abul Fazl writes of ‘Stuffs
worked with gold thread and of the kinds *chirah* (a partly coloured cloth for turbans), *Fotah, Jamahwar* (flowered woollen stuff) *khara* (undulated silk cloth), and velvets and stuffs from Turkey, Europe and Persia are also produced*. Other sources speak of *kinkhab, dopatta, badla, kurta*, embroidered cloth, *kinari, pagri*, and *tazeb* of Gujarat and *khasa* of the Deccan. Ahmadabad was noted for its gold and silver-worked cloths and painted cloths (besides flowered silks). Pattan in Gujarat manufactured "good cotton cloths", which were carried to "distant parts as gifts of value". The weavers of Broach produced *baftas* which were "famous all over India, the country producing the best cotton in the world." Baroda (Brodera of factory records) was also noted for its cloths. Broach, Navapura near Surat, and Baroda were famous for gold-and silver-worked cotton cloths. Gujarat used to supply 'all Persia, Tartary, Turkey, Syria, Barbary, Arabia, Ethiopia' besides other places, with 'silk and cotton goods'.

(xiii) *Khandesh* was noted for "good cloth stuffs woven there, *siri saf* and *Bhiraun* coming from Dharamgaon. Burhanpur was famous for its fine white and coloured or painted cloths, belts and gold or silver-embroidered turbans. These were in much demand in Persia, Turkey, Arabia, Cairo, and even in Muscovy and Poland, as we know from Tavernier and used for various purposes,—women's veils and scarves, nobles' scarves, handkerchiefs and bed-spreads.

(xiv) *Bidar* was reputed for cotton cloths embroidered with gold and silver.

(xv) *Malwa* ranked next to Gujarat industrially. Abul Fazl speaks approvingly of the "cloth of the best texture" that was woven there, and refers to the white muslin (*mahmudi*) of Sironj, an important centre of manufacture of gold-and silver-embroidered cloth. It was also reputed for fine 'see-through' or transparent muslin (*ab-i-rawan* or flowing water) *saris* for use in the seraglios of the emperor and the nobles, but its export was banned. Armenians and Europeans traded in *chintz* of Malwa, priced at about Re. 1 to 3 a piece.

(xvi) *The Indus basin* (from Sind to Lahore): The Indus plain was inhabited by large weaver communities at Tattah, Sukkur, Multan, Sialkot and Lahore. Sind produced a kind of cloth called *birotungeers*. Cotton carpets, bedcovers, pillow cases, handkerchiefs and mattresses. Lahore city was well known for its fine cotton goods and *ormesins*, Machhiwara for fine *baftas* (from 1646), Sialkot for tray...
covers and embroidered articles worth rupees one lakh a year; other places of cotton manufactures being Gujarat and Bajwara (end of 18th century).  

The internal consumption of cotton goods related to clothing, beddings, coverlets, carpets, rugs, furnishings, ropes, bed tapes including niwar, packing and lighting. Canvas camps, tents, were widely and frequently used by the emperor and the nobles for military or camping and housing purposes. Closely woven cloth (sometimes hemp also) supplied their basic material, though silk and velvet were often used for ceremonial or decorative needs. So besides cloth there were miscellaneous cotton goods, woven everywhere, of which the aggregate outturn was substantial.

The products of the Indian handlooms were of various types. Mrs. Naqvi has recently collected the names of only 49 kinds with reference to five leading cities of the empire in Upper India. Lahore, Delhi, Agra, Benares and Patna. Moreland collected over 150 different varieties of cloth produced in India in the 17th century, based on 10 volumes then published on English Factories in India. These cotton goods were in much demand not only for internal consumption in India but also external use, in other parts of Asia, Europe and even some parts of Africa. On the land routes Lahore and Agra served as the entrepots. Therefrom the goods were carried to Kashmir and beyond and through Bahraich to the north and through Kabul and Kandahar to Persia and further west and north.

Four areas served as centres of export:

(i) The Indus region with Lahari Bandar as the port, exporting goods of North Indian hinterland in the Punjab and Sind to Arabia and the goods were purchased by the Portuguese; the overland route carried the Punjab goods to Afghanistan, eastern Persia and Central Asia.

(ii) The Gulf of Cambay (as far as Dabul) was the centre of the largest trade. Surat and Cambay and the ports of Gujarat were the principal outlets of the products of the hinterland, Malwa, Gujarat, etc., and also of North India. The Cambay cloth was exported to the south (Ceylon), east (Pegu, Malacca, the Islands and China) and west (the Persian Gulf, the Red Sea, Adén, Arabia and the African Coast as well as some parts of Europe). Gujarat owed its industrial

MUGHAL ECONOMY
pre-eminence in India to its ability to supply cheaper and larger quantities of textiles to the Red Sea than other parts—the Coromandel Coast and Bengal.

(iii) The ports on the entire Coromandel Coast largely exported to Pegu, Malacca and the Islands but not to the Arabian Sea.

(iv) Bengal seaports did the same. But among the Europeans, first the Portuguese, and then the English and the Dutch served as the carriers of the cotton trade. 35

Though the cotton industry was the most important handicraft in India, it is, however, not possible to assess the total outturn, the actual volume or frequency of the export of cotton goods nor specify their variety, either on land or sea. 36

India’s handloom products were of five types:

(i) White ordinary cloths, produced in Sind, Bengal and Orissa, and exported to South Asia, the Archipelago and (slightly to) Japan;

(ii) Coloured ordinary and plain in texture or calicoes, bafias or cotton cloths dyed red or blue—exported to Mozambique, Abyssinia, the Phillipine Islands, Sumatra and Far East.

(iii) Flowered: Fabrics worked in gold and silver from Benares, Ahamadabad, Bihar and Agra, and exported to Asian and European countries from both coasts of India;

(iv) Chintz or printed: used locally and also exported to Asian and European countries; and

(v) Muslins: highly prized export. 37

Rightly does Moreland observe: ‘Cotton weaving was by far the most extensive industry in India; the aggregate production was one of the great facts of the industrial world of the year 1600’. Pyrard’s picturesque observation that ‘every one from the Cape of Good Hope to China, man and woman, is clothed from head to foot in the products of Indian looms, may be exaggerated and is subject to the variations in the extent of its use. It may be said that every Indian wore India-made cloth, though the vast majority of the people wore scanty clothes. The Indian looms not only monopolized the internal market for cloths but exported cloth largely to most known parts of tropical world during the 16th century:

(i) Arabia, Egypt and the Mediterranean regions; (ii) Burma, (iii) Malacca, the straits and the Archipelago islands; and on a smaller

NON-AGRICULTURAL PRODUCTION
scale to (iv) the east coast of Africa between Cape Gardafui and Cape of Good Hope, and (v) still smaller to China, Japan, the Philippines and Mexico.

The cotton industry, already well-established in Akbar’s time continued to flourish under Jahangir and Shahjahan. It was stimulated by the activities of the Dutch and the English merchants through whom India came into direct contact with European markets. By 1627 the Gujarat export trade in calicoes came to be established by the English. Madras calicoes became a principal item of the eastern coast exports by the end of Shahjahan’s reign. Increased production followed from this new European demand for cotton goods. The profits were confined to some specific areas. The changes consequent on this establishment of trade with western Europe by foreign merchants will be discussed under ‘Commerce’.

Textile industries, particularly silk and cotton, required certain ‘associative processes’ like reeling, bleaching, dyeing, printing or painting, as already noted. These were at first combined but gradually grew to be specialized separate occupations. The proliferation of new centres of production, the growth of long distance trade and the devising of measures for increased productivity would indicate that production increased in Mughal India. But any estimate of its volume is not possible. Gujarat continued to be a principal centre for silk production but found rivals in Bengal and the east coast which rose to importance. As regards export of cotton goods to Europe, Gujarat suffered in the 17th century after the famine of 1630, and declined in the first half of 18th century due to the Maratha raids and the disorders in the Persian Gulf.38

NOTES AND REFERENCES

2. Centres in A’in ii. Acctt. of Twelve subahs. For calculation, Moreland (based on García da Orta, 95 and Linschoten c. 23) ; China silk trade controlled by the Portuguese ; Srivastava in Mughal Empire (ed. RCM) 717 ; Silk production, CEH. i. 271-2.
3. Production and occupational differentiation : Mahuan, JNAS (1895), 531 ; Ain (B & P) i., 99 ; Fitch (ETI. 28) ; Tavernier. ii. 2; N.K. Sinha, Ec. Hist. Bengal i. 19, 182, 184 ; S. Bhattacharya 153-4 ; 185-6 ; Master (8.11.76). ii. 6, 10, 28 ; Storia. ii. Mundy ii. 371 ; EFI. 1618-21, p. 230 ; Nolan, Hist. of British Empire, iii. 404 ; CEH. i. 217 ; 271. For Bihar see my Studies in

MUGHAL ECONOMY
Economic Life in Mughal India: The Chassars or rearers of silk worms, wind off the cocoons in earthen basins (with the aid of cow dung as fuel instead of wood) upon common Bengal nuttahs or reel made of bamboo; the thread so reeled called putney. Fine and coarse threads are wound in the same skuin indiscriminately". Report of the Proceedings of E.I. Co. 1836 quoted in Chicharov, 46-48; Reeling by women, Orme. Hist. Frag. 412.

Bleaching by a dye made of ashes of 'Adam's Fig Tree' in Tavernier, ch. X;

Hereditary silk worm-breeders belonged to the pundah caste in Bengal, but the Brahmanas and Kayasthas did not take to this. Chicharov op. cit.

4. Chahar Gulshan, 27, 39; Khulasat, 22, 30, 34.

5. Linschoten i. 64; EFL (1618-21), 194-8; Ind. Ant. (1914), 70-5. 100; Forbes, Or. Mem. ii. 95-6; Letter Copy books of Resident at...Murshidabad (1769-70) x-xi, referred by Chicharov, 54; KK Datta, Survey, 87; My Studies (silk Trade); N.G. Mukherjee, Silk Fab. of Bengal 24-8; Bolts, 194; N.K. Sinha, Ec. Hist. i. 191-6.

6. K S 97-98; Srivastava in M.E. 717; Ain ii. 247, 169; Tavernier, ch. x; Storia ii.

7. See E & G. 182.

8. Moreland, 172; Barbosa 233, 366; Varthema, 111; Purchas II. x; Tavernier, ch. X.

9. Moreland, 175-6; Srivastava, 717-8; Hobson-Jobson (Herb silk-under Grass-cloth, Moonga).

10. Moreland IDA, 172; Ain (B & Ph) i. 97-102; Pinkerton's Voyages, viii. 306-7; See my Studies on Economic Life in Mughal India (Silk Industry & Trade)

11. Ain. ii. (J) 183, 285; Terry ETI, 297; ME. 716, KS 96: Price (1617) was 3 mahmudis a man & taffetas 2-4 m, a piece (Connock & Barber to Surat 19.1.1617); L. R. vi. 200; Forster (Journey) (for end of 18th century) ii. 18.


13. Ain. i. 90-97; ii. 97-101, 356, 402; Bernier, 402-3; Khulasat (for Aurangzeb), 49b, 50a; Habib, 55; K.S. 98.

Johangir on Kashmir woollens:

"The woollen cloths are well known. Men and women wear a woollen tunic (kurta) and call it pattu... The shawls of Kashmir, to which my father gave the name of parum-narm are very famous:... Another kind is taharma (possibly naharma, like a river; for it is said to be mauj-dar, 'having waves'); it is thicker than a shawl and soft. Another is called darma. It is like a jul-khirsak (jul, a coverlet khirsak means a little bear but is applied to a rough woollen coverlet—a drugget). With the exception of shawls they make other woollen materials better in Tibet. Though they bring the wool for the shawls from Tibet they do not make them there. The wool for shawls comes from a goat which is peculiar to Tibet. In Kashmir they weave the pattu shawl from wool, and sewing two shawls together they smooth them into a kind of sagarlat (broad-cloth), which is not bad for a rain-coat" Tuzuk (Beveridge) ii. 147-8 and n.

14. Ain. i. (B & P). 66, 101; ii. JS. 169; Khulasat (for Aurangzeb) 49b-50a; see E & G 182-3; Master. ii. 171 (Andhra).

15. Ain J. ii. 91f (hemp); ii. 123 (jute); Varthema, 165; Master, ii 298. IG. iii, 204; Buchanan, Dinajpur (Martin, ii, 961, 975-6); Moreland, IDA, 179; Chicharov, 21; Mrs Naqvi, chs. 4 & 5. To wrap merchandise before packing
a sort of matting (called toti) was found at Vengurla by Tavernier. CEH i. 272 ; 1 Habib. S C Sarkar Felicitation vol ; K K Datta, Alivardi, 230.

16. Production : Ain, ii. (Jarrett) : Acctt of 12. Subahs :
Processes and Tools described with plates in Mrs. H. K. Naqvi.
Urban Centres & c. pp 148-150, based on Forbes, Buchanan, Baines, Kindersley, Hoey & others; Chicherov. 45 ; Martin, E. i. ii. 960 ; see CEH. i. 269-71.
Use of foot-peddled wheel in some European countries (16th-17th centuries) increased the output of woollen and cotton thread and foreshadowed the revolution in spinning in 18th century in England, Chicherov. 52-54n.
Importance : Pyard, ii. 245 ; comments by Moreland, IDA. 179-81.

Specialisation : A large number of sources refer to this during 16th-18th centuries : Barbosa, ii. 145 ; Salbancke, iii. 92 ; EFI (1634-6), 196 ; Further, iii. 52, 90 ; Thevenot, 10, 21; Mirat, i. 260 ; Forbes, ii. 223 ; Buchanan, Journey, i. 218 ; ii. 263 ; iii. 217 ; Martin, ii. 959, 267 ; Wilks, l. 118 ; Baramahal Rec. iv. 59 ; Sinha i. 183-4 (procedure of spinning) ; 172-3 ; Bhattacharya, 183 ; Habib, 58 ; Chicherov, 20, 46, 51-4.

17. Court Min. ii. 179 ; Pant, CP. 210 ; Sushil Chaudhuri, Trade and Ccommercial ..... 173 (14000 mds in 1701-2) ; CEH. i. 271.

18. Weaving : Taylor, 76, Tavernier, 168, 174 ; Bernier 258-9. Mrs. Naqvi, 153-6 based on Kindersley, Hoey, Buchanan, Hodges, Orme and others ; Artisan Settlements : Schorer in Moreland, Relations, 63, 80-1 ; Bowrey, 72 ; Salbancke iii. 85.

Bleaching : Ain ii J. 137 ; EFI. 1618-21, 1622-23, 1630-33, 1634-36, 1642-5, 1646-51, passim ; Tavernier, ii. 24, 238 ; S. Bhattacharya, 186-7 ; Chicherov, 67-68 ; Mrs. Naqvi. 156-8.

Dyeing : Moreland, Relations, 18, 35, 55, 77 ; Bowrey, 105 ; Tavernier, i. 5, 27, 72 ; Alex, Hamilton, i. 370 ; EFI, 1634-6, pp. 46-47 ; Irwin in Gol. Cott. Paintings, Lalit kala 1958, 18-19 ; Chicherov. 50 ; Mrs. Naqvi, 158-172, based on various works.

Printing : Ain i. 95 (Price of chintz 2 dams a yd) ; ii. J. 485-6 specialization) ; Moreland, Relations, 35 ; Barbosa ii. 125 ; Linschoten i. 91 ; L.R. i. 302 ; Storia. ii. 431 ; Master i. 257 ; Olafsson, 142 ; Tavernier, ii. 4 ; Technique, in Havart's account (end. 17th c), quoted in Irwin, Ind. Tex. Tr. 17th c., JITH. Pt. 2. 1956. p. 31 ; Gol. Cott Pr. Early 17th c. Lalit kala. 1960. I. ii. 24-30 ; Bowrey 106 ; Mirat, 9-10 ; Martin, ii. 268 ; Fryer i. 90 (children) ; Printing for customers, EFI, 1624-9 p. 234 ; Martin ii. 268 ; Chicherov. 68-72 ; Mrs. Naqvi, 172-5, based on Buchanan, T. Mukherji, Hoey and others.

19. Moreland, IDA. 182 ; K.C. Chaudhury, TWA, 240-53, has very illuminating remarks on the location of Textile industry.

20. Withington (ETT), 227 ; Roe ii 447 ; Manrique, ii. 180, 182 ; EFI. 1618-21, pp. 58, 93, 161, 168, 178, 337 ; 1622-23, p. 9 ; 1624-29, pp. 93, 149 ; 1637-41, pp. 134, 34 ; 1642-45, p. 98 ; 1646-51, pp. 335-6 ; Ajaib i Dunya and Hadilqu il Aqalim, in Mrs. Naqvi, 138 ;

21. Ain(B) i. 55, 94 ; (J) ii. 292 ;
Fitch (Ryley), 99 ; Finch (ETT), 176 ; Pelsaert, 7 ; Storia ii. 424 ; EFI. 1618-21, pp 61, 76, 83 ; 1624-29, p. 93 ; 1634-6, p. 206 ; 1637-41, pp. 51, 278, 312 ; 1642-5, p. 204 ; 1646-51, pp. 299, 2, 78 ; 1651-4, pp. 52, 9, 10 ; 1655-60, p. 70. Mercol, a variety of coarse cloth used as a wrapper or quilt.
22. EFI. 1618-21, p. 195; Pelsaert, 7; Hadigat in Mrs. Naqvi 140.

23. Ain (J) ii. 169; Khulasat, 30; Hadigat in Mrs. Naqvi 140-1.

24. Ain, op.cit; Fitch (Ryley), 103; Pelsaert, 7; Manrique, ii. 146 Tavernier i. 118; Ajalb and G. Md. Khan, Travels in Mrs. Naqvi 141.

25. My Glimpses of Medieval Bihar Economy, 73-76, 91-94 for details and full references. For mercool EFI. 1651-4, p. 9; Ajalb in Mrs. Naqvi 141; see Kindersley 101, Bolts, Considerations, ch. XIV.

26. Orme, Hist. Frag. 409. Ain. JS. ii. 136; Terry, 301; Pelsaert, 8; Manrique, i. 33-4, 47; ii. 239; Tavernier ii. 4 Moreland, IDA. 182n; Master, ii. 14; Storia, ii. 430; Mookerji, 120; Sinha, i. Chicherov, 58-60.

27. Master, ii. 86; Forbes, i. 406-7; My article on Balasore in JBRs. XXXVI (1950); Bruton, Hakluyt. v. 55.

28. EFI. 1630-33, pp. 256, 309; 1634-6, p. 45; Bowrey, 100; A. Hamilton, 381; Olafsson, 158; Sherwani, Qub. Sh. Dyn. sections on Economy; Love, Vestiges, passim; my Mir Jumla (2nd edn.). ch. I; ch. 2 Sec. B; Chicherov. 59-60; Moreland, FAA. 32; CEH. i. 270.


The view, based on travellers' and merchants' accounts, that both in Gujarat and on the Coromandel coast the bulk of the cloth exported was woven in the immediate hinterland is not, however, always correct. Moreland op. cit, 183.

30. Ain J. S. ii. 232, Tavernier i. 29; Mookerjee, 90; Sarkar, SAR. 276.

31. Ain. JS. ii. 232, Tavernier, i. 46, 59; Master, ii. 9-15.

32. Halil Iqilim i. 146a; Khulasat, 95, 110; Haqiqat 61a, Hadigat, 147, 149, quoted in Mrs. Naqvi. 137; Pelsaert 9; Mookerjee.

33. Moreland, IDA. 183; Mrs. Naqvi, 190-200; internal trade 200-208. Abul Fazl refers to 11 types of tents. Ain, i. 21. ii. 55-7; the 'plain' one (? of cotton); the barga, priced at Rs. 10,000/- and more.

The organisation of the industry will be discussed under "Industrial organisation".

34. List of some varieties of fine cotton cloths given with prices in Ain (B & P) i. 100; 685; Burnell's letter, EFI. 1651-4, p. 9 and Mundy ii. 154-6 give many quaint names.

35. Moreland, IDA. 182-3, Mrs. Naqvi 212-28 (export trade); K.N. Chaudhuri, 243-5.

36. Mrs. Naqvi 212, 216.

37. Sarkar, Studies; Storia, ii. 83, 125.

38. CEH. i. 272-3.
III Forests and Fisheries

Forest Produce

Untilled land was usually covered with extensive, dense and inaccessible forests. Besides the principal forest produce—timber (e.g., teak of the Western Ghats) suitable for shipbuilding and furniture and fuel (or firewood)—there were various other minor produce which were marketable and met the local needs of the people,—leaves, barks, grass, fibres, fruits and bamboos and resin, etc. Babul bark for tanning leather came from Lahore, Rajputana and Agra. The bamboos of Bengal were in great demand for ship-building.¹

Lac-culture was an important occupation. As at present, gumlac, a kind of wax, yielded a red dye which was used for manufacture of women’s bangles, varnishing toys, furniture, doors and windows, preparing scarlet colour and painting cloth. Sealing wax was manufactured from its refuse. It was extracted from barks of some trees, especially in forests of Bengal, Bihar, Orissa, Assam, Gujarat, Malwa (Dhar), Bijapur and Malabar. Bengal lac was the best, cheapest and most abundant. Gujarat (and especially Surat) was famous for its lac bangles and toys (other places also). Gumlac sold at 7½ mahmudis (dam) a maund, (temp. Shahjahan), Sticklac at 40-60 mahmudis a maund. The lac of Pegu was cheaper but not clean. The Dutch and the English annually exported 150 chests at 10 d. a lb., especially to Persia for cloth painting in red.² As a dye it is now superseded by chemical preparations.

Fisheries

This yielded a small revenue. The consumption of fish as a staple article of food was perhaps less than now, in Bengal, Orissa, Bihar and Sind. It was, however, commonly used in South India. Fish was dried and salted as provision for ships. Sind manufactured fish-oil used in boat building, while Gujarat used fish-manure (1666).³

The location of pearl-fisheries engaging about 60,000 men, changed occasionally in South Indian waters or off-Ceylon Coast.⁴

NOTES AND REFERENCES

1. Babur's Memoirs 490-1 ('thorny bush-wood' sheltering rebels); Pyrard, i. 338; ii. 180; Moreland, IDA, 7, 143-4; KS. 106-7, 109-10.

MUGHAL ECONOMY
2. Ain. i. 236, 237; L.R. i. 30; EFI. 1624-29, p. 258; 1630-33, p. 323; 1634-5, p. 146; Tavernier, ii. 18, 221; Bernier, 440, (Bengal & Pegu lac high priced); Bowrey, 121-2, 132; Mundy ii. 151, 153; Commissariat. Mandelso, 16-17; Linschoten, ii. 90; Sarkar, SAR. 281; Nawazish Letter Bk. 29b; R. Sinh, Malwa in Transition 8; KS. 112.

3. Ain, J. ii. 124, 126, 134, 138, 338-9 (fish-oil); Linschoten c. 48; Thevenot, 77; Moreland, IDA. 145-7.

IV Metals and Minerals

Though figuring largely in Abul Fazl's *Ain*, the exploitation of minerals was then one of the weakest features of India's economy. There were two reasons for this: one human and the other natural. Indians were unfamiliar with the technology of deep-mining. The sources of availability of minerals and of fuel were not contiguous.

Gold and Silver

Thus as regards gold and silver, their production was not sufficient in the absence of their scientific exploration. Among precious metals, these were used for currency, and for images, ornaments, furniture, utensils of richer classes and in some other industries like embroidery. But their production was negligible and India had to import these.

Mines and soil or sand washings were the only two methods of getting gold known during the 16th as well as the 17th centuries. A comparison of the accounts of Abul Fazl, Sujan Rai and Chatarman would suggest that there was some progress of the exploitation of gold resources in the 17th century, besides continuation of older centres. However, these accounts, informative in their own way, are not very helpful in getting an adequate picture of production. Abul Fazl's remark that gold was abundant in the northern mountains is at best vague. The hills of Kumaon, constituting a part of the northern mountains of Delhi province, we are told, contained mines of gold. He further informs us that soil washings in parts of Lahore province (i.e., the Punjab) and in Gilgit and straining the gold dust from the water of the river at Pakli there, both in Kashmir province, yielded gold. In the 17th century Sujan Rai refers to mining of gold in the provinces of Shahjahanabad (Delhi), Awadh and Bengal, and washings on the banks of some rivers in the Punjab especially the Beas. Chatarman corroborates Sujan Rai but mentions Allahabad, Agra, and Kashmir in addition as centres of gold mining. De Laet mentions that gold mines existed near Patna. Gold seemed to have been obtained by sifting the earth round the city of Awadh and by washings of river-sand in some parts of northern India, e.g., at Soumelpur, Lohardaga district now in Chotanagpur, Bihar, as Tavernier says. The silence of this meticulous observer militates against the working of the Kolar gold fields in Mysore during the Mughal period.
Like gold, silver was obtained both in mines and from soil-washings. A silver mine existed at Bairat (near Alwar, formerly in Narnol, now in Jaipur) in Agra province. But it had ceased to be a paying concern in Akbar’s time. Silver was also mined in Kumaon hills in Delhi province. It was also procured by river-bed washings in Lahore. But these accounts are vague.\(^2\)

Gold and silver were purified and assayed by experts and sarrafs.\(^3\)

Generally speaking, goldsmiths in Gujarat, Golkonda, Bengal and Bihar and other places were paid for their labours and had become small commodity producers.\(^3a\)

Copper

It was needed from olden times for various purposes, state and private. The government required it for currency, artillery and for recording grants and decorating buildings with copper plates. The people needed it not only for occasional jewellery but for daily use as vats in some industrial operations but mostly for domestic purposes. Copper vessels were more popular in Muslim households than Hindu and were tinned to prevent oxidisation. Abul Fazl mentions various alloys of copper for making vessels and articles and tells us that a maund of copper was sold to the imperial mint at 1044 dams (or at 1\(\frac{1}{4}\) srs. to a rupee). It was thus a costly metal, costlier than most other goods but not such a costly luxury as Moreland presumes.

Copper does not seem to have been imported to Northern India from outside. From what Tavernier says about exchange rate variations between copper and silver, Moreland infers that the sources of supply of copper then were ‘nearer to Agra and Delhi than to the coast’. This is supported by Abul Fazl’s account of those sources. Besides what was obtained by soil washings in Lahore province, some copper came from mines located, as he says, in the Himalayas, Rajputana, Chotanagpur, Bundelkhand and the area between Pegu and Arakan (then outside the empire). Thus it was locally mined in northern India in the Kumaon hills (Delhi province) and also brought from the northern mountains to Awadh. In Agra province mines existed at Toda Bhim, Bapai, Singhana, Udaipur, Kotputli (Bhandhaorah village), Raepore near Narnol and Bairat (sarkar Alwar). If Abul Fazl found the mines at Toda Bhim unprofitable, those at Chainpur and other dependencies of Mandal in Ajmer province were ‘extremely
profitable’. That at Bairat, too, was so profitable that it yielded 35 seers of copper out of one maund of ore. In Lahore province Suket Mandi had mines in Akbar’s reign, which perhaps deteriorated in the 18th century. But the Central Indian and Rajputana mines probably failed even before Jahangir’s accession. The consequential rise in prices was not eased as imports proved to be inadequate. Dutch efforts to import Japanese copper from 1635 suffered owing to ban on its export during 1640-48, when Swedish copper was imported. But imported supplies were insufficient and the war of succession among Shahjahan’s sons reduced the output of the northern mines on account of shortage of workers. No wonder Bernier found Hindustan to be ‘in want of copper’. The situation could improve in the 18th century with larger imports by the Dutch and the English from Japan. As far as southern India was concerned copper was imported in the 16th and early 17th centuries by the Portuguese from Japan. 4

There are references to urban copper smiths, constituting an important section of artisans in the 16th century at Ahmadabad, and Goa (where they were localised in one street) and Golkonda. 5

Iron and Steel

Iron was an essential raw material of satisfying some of the basic or elementary needs of the people, agriculturist or non-agriculturist, civil or military. Sharp, hard and heavy, it was also comparatively cheaper than many other metals and popular both with men and women. Iron and steel were used for manufacture of agricultural implements, and tools for various professions (blacksmiths, carpenters, tailors, sculptors, butchers, gardeners, barbers, cobbler, etc.), for building industry and small tools like nails, hooks, screws, fencing, horse-shoes, for cooking, and for manufacture of various arms and armour (e.g., swords, helmets, arrows, etc.), including cannon balls or gun shots.

Fortunately, for her substantial demands, India was self-sufficient as regards supply of iron. Its production was more widely diffused than copper and the output was also larger. Abul Fazl tells us that iron of frequently high quality was produced in the provinces of Bengal (Bazuha), Allahabad (Kalinjar), Agra (Gwalior), Delhi (Kumaon), Ajmer (Beermahal and other districts), Multan (sarkar
Thattah), Kashmir (village of Khriu), Lahore (Suket Mandi) with abundant deposit of superior ore), Gujarat (Chikhali in sarkar Surat) Berar (Indur and Nirmal). Qandahar had an iron mine and an iron foundry for smelting the ore, an old working. In the South, Golkonda was famous for extensive production of iron (and steel) which was transported to many places in India.6

The production of both copper and iron required smelting from ore, which in turn depended on supply of fuel. As coal was not mined then, the only fuel available was forest wood near the location of the ore. Moreland concludes that the supply of both these metals was limited and these could not be organized on a large scale and came to be ‘diffused rather than concentrated, inefficient when judged by modern standards and altogether unsuited to attract capitalist enterprise…..’ This judgement is somewhat unfair. In the first place both cannot be placed in the same category; the output of iron was certainly greater than that of copper. Secondly, the diffusion was a natural result of the location of the ore. Thirdly, modern standards of large scale production or efficiency or capitalist enterprise could hardly be expected then. The mining and smelting were done by the peasants, as smelters and small commodity producers. They had perforce to use charcoal in primitive furnaces, sometimes with their whole families or with employees, hired for a wage, and got grain from merchants who took the iron. Bowrey remarked that the ‘best iron’ along the east coast was mostly sold by the blacksmiths and iron founders (c. 1670) at Narsapur shipyard at ‘reasonable rates’ and that all sorts of ironworks like spikes, bolts, anchors were ‘ingeniously performed by natives’. Export of iron goods from Coromandel to Batavia began in the sixties of 17th century. The author of Ibrat-namah (c. 1826) refers to manufacture of thousands of maunds of iron by smelters in Lahore. In fact, the production of iron was so extensive that there was no need of importing it, and the only instance of sale of imported iron by the English East India Company, during a temporary scarcity at Surat was not repeated afterwards. Moreland himself admits that ‘it formed in the aggregate an important item in the production of the country’.

Generally speaking, the smelters sold the ingot to merchants who in turn, sold it to blacksmiths, scattered in villages, parganas and towns. They retailed their manufactures at markets. Big towns

NON-AGRICULTURAL PRODUCTION
seemed to have earmarked certain areas for sale of different wares, e.g., Agra had two or three marts of blacksmiths and a specific lane for them (loha gali).7

Steel was manufactured in southern India especially Golkonda in early 17th century and largely exported from the western ports but a quantitative estimate of production is not possible. Golkonda steel, famed throughout the world for its high quality, was used in manufacture of Damascus swords. It was also ‘transported into many places of India’. The weapons of Gujarat were reputed throughout India. As Abul Fazl remarks: “They make.....excellent swords and daggers of the kinds jamdhar and Khapwah, and bows and arrows”.

Moreland says that steel was not much used in shipbuilding. But shipyards (specially at Narsapur) badly needed the iron and steel accessories (spikes, bolts, anchors, etc.), of blacksmiths and iron founders. Balasore produced ‘coast anchors for ships in moulds’ at the end of the 17th century. Steel was, however, dear. Though not a luxury it was a costly necessity.8

Diamonds

Diamond (hirak in Sanskrit, iri in South India, almas in Persian and Arabic), the most precious of all stones, was a rare commodity. It excited the cupidity of crowned heads and the wonder of all and sundry. But it was not of much consequence for India’s economy as a whole. Unlike copper and iron its working needed no fuel. It was found near or just below the surface of the ground, mixed with clay or sandy soil or carried down by some streams. Hence it required only some search, sifting or washing the earth. Diamond mines were located in several regions, as we know from Abul Fazl, Jahangir’s memoirs, and the accounts of foreigners like De Laet, Tavernier and Alexander Hamilton. Most of these represented older workings. Some probably were not in continuous working except perhaps those in Golkonda.

(i) The diamond mines of the Deccan always excited the greed of the imperial Mughals. Golkonda was then world famous for its diamonds which were the most productive in the country. The Kullur mines (Coulour of Tavernier) on the river Krishna constituted the biggest mine in Golkonda. Mir Jumla became the owner of

64

MUGHAL ECONOMY
20 maunds of diamonds by working these mines. He owned the mines of Vajrakurur in Guti taluqa. Bijapur was reputed for the mine at Raolkonda. Tavernier also mentions Watragiri.

(ii) Khandesh and Berar: The mine of Biragarh in Berar was rated by Jahangir to be the best in India then. Its diamonds were 'superior in kind and beauty to all other kinds of diamonds, and much esteemed by jewellers. They are of good shape, and larger and superior'.

(iii) Central India: Pannah (then in Allahabad Subah) now in Madhya Pradesh.

(iv) Eastern India: In Bengal, Harpah in Mandaran district yielded small stones. The Arakan-Pegu border contained diamond mines. But Bihar was more favoured by nature than Bengal. Kokra- or Gokra-desh in the sub-Himalayan areas of Purnea was famous in Jahangir's time for its valuable mines but these fell into disuse after 1612. However, there was another more important source of supply. Jahangir refers to the conquest of "Khokhara" or Kukra-desh with its diamond mines situated along a river from the sandy bed of which diamonds were procured. Ibrahim Khan Fath Jang, the Governor of Bihar and conqueror of the place, successively presented to Jahangir one diamond valued at half a lakh rupees in 1615 and nine diamonds from the State mine there and from the collections of the zamindars of Bihar, one of which weighed 14 tangs and was valued at rupees one lakh (1617). The country is to be identified with Chotanagpur and the place was Soumelpur, situated on the bank of river Koel, in the Lohardaga district. It was a large town where diamond mining was carried on, according to Tavernier.

Space does not permit even a summary account of the first hand observations of Tavernier, a jeweller himself, on the details of the industry and trade which are highly interesting. But some general remarks are made below. The industry, including mining, transporting the soil in baskets, refining and chiselling, was a most lucrative one and constituted a principal source of revenue. There was some sort of uniformity as Golkonda followed the model of Raolkonda. The merchants used to select a spot on the advice of expert miners, dig the ground, set up a mill with iron machines and normally did flourishing business. The Sultan farmed the mines at 30 lakh pagodas a year and got royalty for permission, 2% ad valorem on purchases.
besides 2 pagodas daily for the duration of the working of the mine. A diamond weighing more than 60 carats became royal property.

As regards labour we are told that a merchant at Raolkonda would start work with 50 or 100 miners according to the haste with which he wanted the work to be done. De Laet refers to a mine worked by 30,000 men. Mir Jumla first employed 12,000 conscript agricultural labourers but he stopped ‘further mining’ as the enterprise was not paying and ‘sent all these poor people back to tillage’. But his Kullur mines, which he farmed out to his relatives and friends, were worked by 60,000 men, women and children. De Laet refers to a mine where 30,000 men were employed. Tavernier found 8,000 workers at Soumelpour. As a business undertaking, the industry was unique, as such large bodies of workers worked in a particular field on cash wages. The regular wages were small. Even skilled labourers, who understood ‘their business extremely well’, were paid 3 pagodas or huns a year. At the current rate of exchange of a (new) pagoda to vary between Rs. 3—3·50, this would yield less than a Rupee a month or barely a subsistence allowance. True a fortunate worker, finding a valuable stone of 14-16 carats, was rewarded with a bonus of one pagoda, but it is doubtful how far this tended to mitigate the hardship. A worker was tempted to dextrously steal a stone by hiding it below his eyelids or by swallowing it, being unable to conceal it beneath their scanty dress, limited to a loin-cloth. Such pilferings were sought to be checked by having 12-15 guards for every 50 workers. Moreland has taken pains to conclude that the workers flocked to the industry, in spite of the low wages, because of the lure of a ‘fortunate theft’ or of ‘fortunate chance’. But he has not mentioned what Tavernier has said about our low-paid lapidaries that they would cut the knots of the stone to do which their European counterparts found great difficulty. The polish of the Indians was, however, inferior to that of the Europeans. Masulipatam, Goa, Chaul, Surat and Bombay were important centres of diamond trade.9

Salt

A less striking but of far greater economic importance than diamond was salt. Throughout the world and through the ages salt has been an indispensable article of food and of farm fodder, and an occasional item of medicine. It is sometimes used for its preservative
properties and also as an ingredient for certain manufactures like soap or tanning. Hence manufacture of salt was then, as now, an important industry and an article of internal trade. It was carried on by two processes, mining and evaporation, familiar even today. Of the ten sources of supply, mining operations were carried on in four centres mentioned below:

(i) Punjab rock salt (or Lahori namak or sendori) was excavated in large quantities by skilled miners after a strenuous process from the mines in Sind Sagar Doab near Shamsabad town and the shrine of Balnath Jogi in the Gurudaspur district at the foot of the 40-miles long Salt range (namaksar, called Koh-i-Juda by Abul Fazl), measuring 800 sq. miles, interspersed with arable land. The salt was of superior quality and the stocks were considered to be ‘the most massive in the world’ (Spate).

(ii-iv) Mines also existed, according to the Khulasat, at Thatta, Ayodhya and Multan. But the yield from these sources was not substantial.

The evaporation method was relatively simple and followed in the following six places:

(v) The Sambhar Lakes in Ajmer subah (now in Rajasthan) measuring 8 miles by 4 miles (according to the Khulasat ut Tawarikh), interspersed by arable plots, constituted a very old centre, going back to more than 1400 years. An area was divided into several plots, the soil loosened by digging and filled with lake water, which evaporated in about a fortnight’s time, leaving the entire land full of salt, which, then adapted for use, proved to be excellent.

(vi-x) Sea salt, was obtained in Sind, the Rann of Cutch, Gujarat (Patri salt pit in Great Jhalawar), Malabar, Mysore and Bengal. In Bengal salt-manufacturing artisans used to extract the salt-earth and wash it with water in clay reservoirs. The resultant brine was either dried in the sun or boiled, as a more advanced method. The salt, obtained by solar evaporation, was called Kurkutch, and that by boiling pungah. Pyrard refers to salt pans in Malabar.

Full contemporary accounts of the organization of the industry and output are lacking. But near contemporary and later sources like the Khulasat, the Chahar Gulshan, the Hadiqat ul Aqalim, Ibratina-mah and the works of Ghulam Muhamad Khan and Buchanan yield valuable information. The output of the rock salt from the Shamsabad industry, carried on under state supervision, was not only adequate
but prodigious, enabling the miners to manufacture articles of orna-
ment or decoration. As regards Sambhar lakes, if in the period of political disorder its revenue was estimated by Tod to be Rs. 715,000 a year, the yield must have been higher earlier and Sujan Rai's estimate of several lakhs of rupees was not an over-statement. After satisfying local needs these two centres together exported the surplus by means of **banjaras** with their bullock caravans to Bengal and Kashmir, Bihar or other parts of India. Subsequently about the seventies of the 18th century salt from Bengal and Madras came to be exported westwards. In the 16th-17th centuries salt was very rare and costly in Bengal and in some parts there and in Assam people had to use burnt banana stocks for a kind of salt. Taking all sources, however, during the period under review the output was adequate, the volume of internal traffic in salt was substantial. There was no need of import from outside.

Prices would depend on several factors,—cost of production, including wages of the workers and porters, government duty, and the charges of transport. In Akbar's time the government took Re 1/- for every 17 mds. The earliest information about wages is about 1630 when a miner (along with wife and son) were paid Re 1/- for every 20 maunds extracted during two days, i.e., the three earned about $6\frac{2}{3}$ dams a day. Abul Fazl says that the extracted rock salt was carried to the bank of river where it was sold, the price being divided between the miners and the carriers in the proportion of $\frac{3}{4}$ and $\frac{1}{4}$. Merchants bought the salt at prices ranging from $\frac{1}{2}$ to 2 dams a md., and exported it. The landlord took 10 dams or $\frac{1}{4}$ R. for every porter. At Agra, however, the salt sold at 16 dams a man (c. 1595). Moreland's view that salt was relatively much dearer about 1605 and that there was less consumption per head than in the first quarter of the present century is not borne out by facts. Then salt was definitely cheaper than now. It must, however, be noted that prices were not uniform throughout. Merchants often used to exchange salt for corn and sold it by heaps, not by weight.

The miners (**numias**) of the Punjab, known as **Alashah**, were permanent workers living in the neighbouring villages, and working as a family unit. Skilled by long experience and fearlessly descending into the pits with a torch and the hatchet, they took out chunks of salt (or, dragging them tied to ropes, as in the 19th century). They
were helped by their wives and sons. The Bengal artisans were called *malangis* or *molungis*, divided into two groups, (i) *ajurah* or *ajjorah*, whose lands and houses were adjacent to the salt works (*khalaris*) and who considered the process as a “family” occupation; (ii) *thikas* or contractors who worked the owners’ deposits for a weekly wage. Salt manufacture continued as a family occupation in Bengal and Mysore till end of 18th century and beginning of 19th according to Buchanan.  

**Saltpetre**

In the 16th and 17th century saltpetre was used internally in India for cooling water and as an ingredient of gunpowder, in preparing explosives and fireworks. It was also used by the Europeans as ‘kintledge’ or ballast in ships. But international trade in it as an ingredient of gunpowder originated in the military needs of Europe during the 17th century. Hence it came to be highly prized by the Portuguese, the Dutch, the English and the French, for export to their respective countries, at first through Gujarat (from Ajmer) and then from Coromandel and Bengal (Patna).

The natural facilities of formation of saltpetre were found in a marked degree in different districts of Indo-Gangetic plains, especially Bihar. But other areas less favoured by nature also came to be worked up by their rulers for political exigencies. In Peninsular India saltpetre was found both in the east and west coastal regions with their hinterlands. Masulipatam, Armagon and Pulicat were its principal outlets on the East Coast. The Malabar Coast, the Konkan Coast (Rajapur), Bijapur (Raybag), Berar (Lonar), Burhanpur (but not Surat) in the Deccan, Gujarat (the area round Ahmadabad and the neighbouring Malpur), Agra (Shergarh) and Sind (Tattah, Nasarpur and Kandiaro) were important sources of supply of saltpetre in the 17th century. To the Europeans, however, the best place for procuring ‘cheap and of the best quality’ saltpetre during the mid-17th century was Bengal, which was described as a ‘rich’ province. But it was really the saltpetre of Bihar (Patna and Saran) that was carried to Bengal, as we know from the accounts of Bernier, Manucci, Tavernier, Bowrey and Alexander Hamilton. If Patna was the chief source of supply of saltpetre from neighbouring parts (e.g. Singhiya near Lalganj in Hajipur sub-division, Nanagar, Nanagarh or Naungar, east of Patna), Hughli, Balasore, and Pipli were the chief ports for export.
The increased demand for saltpetre was the most striking development in non-agricultural production in the 17th century. It gave employment to numerous workmen. Saltpetre, now a principal commodity craft, was prepared by peasants of different castes (e.g., Muslim peasants or Bohras in Gujarat, nuniah or lunia in Bengal) by an ingenious process from three varieties of earth, black, yellow and white, the black yielding the finest variety, free from brackishness or salt. The powdered earth was soaked in water, dried, bleached with whey and refined by boiling in three stages (cutcha, qalmi and sithi), the last yielding the best quality. Refining was essential for commercial use. Several persons in the same family or two families were engaged in collecting the earth and boiling. Good gunpowder, demanded by the Europeans, could be manufactured only from well-refined saltpetre in the imperial karkhanas and European factories. But refining had its difficulties in all areas. Job Charnock (1664-80) sought to improve matters in Patna. The Dutch who had a considerable trade in saltpetre, set up a warehouse near Patna. After refining it, they transported it to Hughli. In northern India (Agra and Patna) the relative price of refined and brown saltpetre was 3:1. It cost at Patna (Dec. 1650) only Re. 1/- a md., at Hughli Rs. 1-12 and at Balasore Rs. 2-10. Saltpetre was a State monopoly. In the 16th century Akbar monopolized it and had a godown at Ahmadabad to store several thousands of mds.¹¹

Other Minerals

Of other minerals quicksilver and tin were imported. Lead was mined in Kumaon hills in Delhi province. In Lahore province both lead and zinc were obtained by soil washings. Jast (or ruh-i-tutiya or pewter), which is also called zinc, resembling lead, was mined in Jalor within Ajmer province (in modern Rajasthan). But the local supplies of both lead and zinc were so small that these, too, had to be supplemented by imports.¹² Orpiment and borax were mined in Kumaon hills.¹³ Naptha and sulphur were also mined between Pegu and Arakan and near Tipperah in Bengal on Arakan border, while sulphur was also found at Sohra (15 miles south of Gurgaon city).¹⁴ But the output of minerals like borax, alum and ochres, found here and there, was small and imports had to be made to supplement these for meeting the country’s industrial needs.¹⁵ Brass (pital)
and rui were obtained in the Punjab. Bronze was brought from Kabul to Hindustan.

Jewels

The turquoise mine in Toda Bhim (Agra province) was unprofitable. Rubies were available in the region between Pegu and Arakan. Pearls were found in Kazor in the Machhukhanta pargana of Gujarat. Lapis lazuli was mined in Kabul district.

Stones

Building stone, where available, was quarried for local consumption. Red sandstone (sang-t-gulal) was available from the hills of Fatehpur-Sikri. Limestone (gaj-i-shirin) was quarried at Bahirah (Bhera). There was a mine of yellow stone 12 miles from Thatta, from where slabs were chiselled for building purposes. Near village Dhakamun in Kashmir there was a quarry of ‘Solomon’s stone’ (sang-t-sulaimani), which might refer to agate, onyx or jade. But transport difficulties must have militated against growth of larger markets. Bassein stone was carried to Goa by sea.

The average per capita income from mineral production in Akbar’s reign as Moreland estimates, was very much lower than in modern times. This opinion, however, ignores the existence of numerous metal workers like blacksmiths, founders, coppersmiths, etc., whose skill was highly praised by European travellers even at the end of the 18th century.

NOTES AND REFERENCES

1. Gold : Ain, i. (B & P), 38 ; ii. J.S. 182, 183 (Oudh) ; 285 (Kumaon), 317 (Lahore), 365 (Kashmir), 132 (Arakan) ; iii. 10 (exaggerated).

Abul Fazl describes how gold was obtained from Pakli and Gilgit. ‘The skins of long-haired goats are spread in the fords of this river, with stones placed round them that the current may not bear them away. They are taken up after three days and left in the sun. When dry, they are shaken, yielding their three tolahs weight of gold dust. ... (At Gilgit) gold is obtained by soil washings’. Ain. JS, ii. 365.

Seventeenth century : De Laet, 75-77 ; Khulasat, 22, (Delhi) 26 (Oudh), 30 (Bengal), 49b (Beas) ; Chahar Gulshan, 11 (Delhi), 27 (Allahabad), 29 (Agra), 37 (Kashmir) ; 39 (Bengal) ; for Chotanagpur, my Glimpses of Med. Bihar Economy, 68.
The manner of getting gold from rivers was as follows: "Gold may also be obtained by the Saloni process from the Ganges and the Indus and several other rivers, as most of the waters of this country are mixed with gold; however the labour and expense greatly exceeded the profit". Ain. i. (B & P) 39.


3. Technical processes of refining, assaying, etc., ibid, 19-23, 26-7 (saloni process explained), 40-2.

3a. Moreland, Relations, 27; Linschoten, i. 229; Martin, El. ii. 260-1; iii. 125.

4. a. Uses: P. C. Roy Hist. of Chemistry...93; alloys & price; Ain (B & P) i. 39, 42, 62; Watt, CP. 402.

b. Sources: Ain J.S. ii. 317 (Lahore); 132 (Pegu); 285 (Kumaon); 183 (Oudh; also mint for coinage); 192-3 and 205 (Agra; also mint at Raepura); 273 (Ajmer); 321 (Lahore); Ibratnamah i. 47; Pelsaert, 29n; Bernier, 449; Khulasat 110 (mountainous regions) and Hadiqat, 151 (other parts) are quite vague: No information about Singbhum mine during our period. No idea of working of mines or processing ore. See Mrs. Naqvi, 233-8; Moreland, IDA. 148-149, FAA 184-5. Imp. Gaz. Index to Copper for locations.

5. Ep. Ind. Mos, 1933-4, p. 59; Linschoten i. 229; Olafsson, 142-3 (itinerant business at Golconda described).

6. Ain. JS. ii. 136 (Bengal); 170 (Allahabad); 192 (Agra); 285 (Delhi); 339 (Multan); 359 (Kashmir); 321 (Lahore); 262 (Gujarat); 238 (Berar); 400 (Qandahar). For Ajmer Storia ii 432 and Tod. See Khulasat 22, 26; Chahar 11, 26, 43: KS. 123. De Laet, 76, 78; Olafsson, 144; Ibratnamah i. 46 for processing at Suket Mandi, quoted in Mrs. Naqvi 229; Moreland, Rel. of Golconda, 34-7. Imp. Gaz. Index Iron for locations.

7. Moreland, IDA. 148-51; Processes, Martin, EI. ii. 261-3; Relations of Golconda, 27; Barbosa ii. 58 (Malabar); Bowrey, 102 (Narsapur); Ibratnamah i. 46; L.R. i. 23 (Import); Rural and urban workers, Delhi Akhbarat 1761-88 p. 185, in Mrs. Naqvi, 230 and ch. 2. Moreland’s view of giving up working (IDA. 148), criticized by Mrs. Naqvi. In 1667 exports of iron included nails (105,000 lbs), cannon balls (188, 000 lbs), iron bars (189,000 lbs), and iron bands 10,000 bands) CEH. i. 275.

8. Pyard ii. 180; Ain J.S. ii. 247; Moreland, Relations 34, 36-7; Tavernier, i. 124; Bowrey, 102; Hamilton, i. 393; Olafsson, 144; Hobson-Jobson S.V. Wootz. In 1657 exports of steel came up to 10, 109 lb, CEH. op. cit.


The Deccan: Ball’s Tavernier, i. 287 (map); ii. 42, 59, 86; 135-8; ch. 17. App. 1 & 2; Irving Brook’s Bernier, 24; Muhammadnama 248-50: Modern Rev. Sept. 1942. Roulkonda is Ramalikota in Kurnul dt; Kullur is in Guntur dt, both now in Andhra Pradesh: History & working of mines in Tavernier (Cal.ed. 1905), 109, 320-32; Methwold in Relations, 7, 30, 31; Sherwani, Qutb. Sh. Dyn. 473-4, 575n: My Mir Jumla 2nd ed. 77, 139. For Chankora diamond of Berar, changing hands to Ahmadnagar, Bijapur and the Mughals, see Tuzuk i. 400.

MUGHAL ECONOMY
Ain. J.S. ii 132 (Arakan) ; 138 (Bengal) ; 238 (Berar). Sarkar S.A.R. 280 (Purnea).

The Tuzuk (RB ii 21-22) speaks of the diamond mine of Barakar (?) under Panju, a zamindar of Khandesh. Beveridge thinks that it is to be identified with Biragam of Jarrett's Ain. ii. 230. But from the revised edition of Sarkar (ii. 238) it is to be identified with Biragarh.

For Chotanagpur, Jahangir's description of the mine (Tuzuk ii. 22, 37, 38 ; i. 3146, 379, 373) exactly corresponds to Tavernier's description. Ball. ii. 84-6, 89.

De Laet remarks (75-6) that 'very rich' mines were accidentally discovered in Golconda near the R. Krishna at the foot of a mountain, 108 m. from Masulipatam. These were let out by the Sultan at 30 lakh pagodas a year, on condition that all diamonds weighing more than 10 carats should be brought to him. In 1628 the digging was prohibited either to prevent fall in price due to over-production or because the merchants stopped work as a protest against high royalty.

Jahangir's assessment of the relative importance of the diamonds of the different centres is interesting. He gives the first place to Biragarh in Khandesh, the next to the 'mine of Khokhra', i.e., Soumelpur, and the third to the province of the Karnatik near the frontier of Quutbul mulk' with four mines within a space of 50 Kos. This would imply that the relative position had changed completely by the time of Tavernier, the third becoming the first then.

10. General : Watt, CP; Terry (ETI), 297; Moreland, IDA, 153-4; Habib, 72-3, 92-3 and passim; Mrs. Naqvi, 238-43.

Centres : (a) Salt Range. Ain. J.S. ii. 319; B.P. i. 525, 525n. 625n; Khulasat, 101: Chahar Gulshan, Sarkar, Ind. of Aur. LXXVII;

Length differently given by G.M. Khan, 29a and Hadigat, 149 (100 m. by 8 m) quoted in Mrs. Naqvi : Spate, 450. Centres of working (19th century): Khawah (below Mukhaliyah fort; another below Kushk Chan Taraan; Mukhraj and Siahwal. (Ibratnامah i. 47, in Mrs. Naqvi 241.)

(b) Other mines : Khulasat 26 (Ayodhya), 36 (Thatta), 34 (Multan).

(c) Sambhar : Badaoni ii. 46; Storia ii. 425; Watt, CP (antiquity); Process : Khulasat (earliest description) 59; Tod 484; Chahar Gulshan. Sarkar, op. cit. 59;

(d) Sea : Ain JS. ii 249, 255 (Rann and Gujrat); 339 (Sind); ii. 139 (Bengal); also in N. K. Sinha i. 217-8; Pyrard i. 359, ii. 257 (Malabar);

(e) Organisation : State Supervision in Khulasat 101, and Mirat ul Istilah 325, quoted in Mrs. Naqvi 241; Output : Khulasat, 57, 101; Tod. 484; Spate, Ind. & Pakistan, 450: Surplus : Fitch (Ryley), 100; Baharistan i. 5 (Bengal); Tuzuk ii, 147 (Kashmir); A.K.N. iii. 586 (Bihar); other areas, Jourdain, 162; see Mrs. Naqvi, 241-2.

Prices : For Punjab, Ain, B. P. i. 525n; JS ii 319 : no information about Rajasthan. Moreland, IDA. 153-4 also JRAS. 1918. p. 379.

Workers : For Punjab, Khulasat 101, Ibratnамah, i. 47-8; Hadigat, 149; For Bengal, N. K. Sinha, 217-9; K K Datta, Survey, 99-100; For Mysore, Buchanam, Journey, i. 35; ii. 480; Martin, El, i. 552; Chicherov, 77.

NON-AGRICULTURAL PRODUCTION
11. The account here given is a very brief summary of the subject in my *Studies in Economic Life in Mughal India*, ch. 2 which may be consulted for details and references, see also Chicherov, 49-50. 'Lonar in Berar was the largest supplier of saltpetre in the 16th century and it yielded 'a considerable revenue' (*Ain JS*. ii. 239) Agra and its neighbourhood produced 5-6000 mds. (Pelsaert, 46) About 1688 Patna yielded 226,200 mds. of unrefined and 127,238 mds. of refined saltpetre. S. Chaudhuri, *Trade and Com. Org. in Bengal* (1650-1720), 161. For prices see *Ain*. i. 58.


15. Moreland, IDA. 154.

16. For prices and other details of jewels and stones, *Ain* (B & P) i. must be consulted. *Ain. JS*. ii. 317. Rui or ruy called *bhanger* in India, is an alloy of 4 seers of copper and 1½ seers of lead. It was abundant in Kabul dt. and imported to Hindustan. *Ibid.* 412.

17. *Chahar Gulshan*, 43.


20. *Ain. JS*. ii. 339 and n. See *Chahar Gulshan* 27, 30 (marble at Patna)


22. Moreland, IDA. 154-5 ; Chicherov, 72-5 ; Ives. 52-3 ; Ganguly (*Vic. Mem. Doc.* i. 411-413 ; Crawford, ii. 98-99 ; Rennell, 109-11.
V Nature of Industrial Organization

A. Nature and Forms of Industrial Production

There has been an attempt in recent years by some scholars to interpret the economic development of India during the period under review on Marxian lines. It has been maintained that India had a feudal economy, very similar to that in Russia, passing through certain well-defined stages of natural village sufficiency, 'domestic industry' of Marx, combining non-agricultural crafts like hand-weaving, hand-spinning with hand-tilling agriculture; break-up of traditional community land-holding and handicrafts, new agrarian relations, with artisans producing consumer goods in return for payment, selling the surplus outside the village, and becoming 'a commodity producer'; dependence of the small producer on merchants' capital; and ultimately growth of embryonic capitalist relations.¹

The comparison is not wholly correct. Moreland long ago pointed out that Mughal society and economy could not very well be described as feudal.² The mansabdars and jagirdars and the nobles were not really feudal. Some of the features of village economy, of course, corresponded to the above analysis. Thus agriculture and handicrafts were combined in the households of the peasants in self-sufficient and autonomous village communities. The peasants processed the raw materials themselves in their households as domestic crafts for domestic consumption. Gradually there was increasing division of labour and growing differentiation between agriculture and crafts. In place of artisans maintained by the autonomous village, artisans, following different occupations, came to be paid for their work and began to produce consumer goods for markets outside the village. Nevertheless the separation between agriculture and craft never became complete, or as water-tight, as Marxian economists seem to think.

Moreland, again, thinks that in Mughal India industrial organization in the modern sense of the term was non-existent. But such a comparison is hardly fair. A more reasonable test would be comparison with contemporary countries. It would appear that the varied arts and handicrafts, outlined above, indicated the existence of an organization that was more advanced than that of contemporary Europe. As R. K. Mookerji observed long ago: 'The seventeenth century saw India as the agricultural mother of Asia and the industrial
workshop of the world’. It is, however, safe to remember that in technology India had certain deficiencies, which will be discussed later.

**Specialization-cum-coordination**: In the first place the review of the handicrafts made in the previous sections would clearly show that the degree of specialization and integration or coordination of distinct processes in production by groups of artisans in several handicrafts in India had not been attained in the case of handicrafts in Europe. Such excessive specialization worked through a proliferation of castes and sub-castes. Not only was there minute specialization in the luxury market, but even in the South-East Asian market for textiles particular varieties came from only particular villages. According to Orme each principal variety of cloth was manufactured by one sub-caste in Bengal. Palsaert’s apparent denigration of the efficiency of India’s craftsmen, ‘for a job which one man would do in Holland here passes through four men’s hands before it is finished’, corroborated by Hawkins and De Laet, indicates the extent of specialization and coordination in handicraft production.

**Localization of industries**: In the second place, localization of industries developed as a result of various contributory factors:

- Industries came to be localized where the raw materials were available. Cloth went to Agra and Ahmadabad from the rest of India for being dyed blue and black, as excellent indigo was available nearby, *Baftas*, requiring lemon juice for bleaching brought from Agra, Lahore and Bengal, came to be localized in Gujarat as lemons were abundant at Broach and Navsari. Blacksmiths and cannon-ball manufacturers concentrated in 10 villages around Golkonda with its iron mines.

- Production was market-oriented. An entire village or *mahalla* of cities and towns produced specialized articles, like cotton or silk goods, metallic manufactures, ivory work or *bidri* work which were in demand both in Indian and foreign markets. To take a few examples only. Cotton goods were often known by the names of places of production, e.g., Calico (Calicut), Lakhori (Lakhwawar), *daryabadi* (Daryabad), *khairobadi* (Khayrabad), *semian* (Samana), etc. Production of *muslin* was localized in Sonargaon and Dacca; silk and silkgoods in Saidabad, Murshidabad and Kasimbazar; sugar in Delhi and Bengal. In the 17th century Bihar supplied the
best saltpetre, and Agra-Biyana region the best indigo. Benares and Gujarat were noted for the silken stuffs and gold and silver-worked brocades; Broach for bafias; Masulipatam for printed calicos; Lander for oils and perfumes; Kalpi for sugar candy; Jaunpur for woollen carpets; Lahore and Kashmir for shawls and woollens and Alwar for glass.

Increase in trade, inland and foreign, accelerated the trend. At first in the 17th century the European Companies had to collect their 'investments' in different aurungs, rural and urban, or specialized centres of production, where the artisans concerned were already concentrated lowering the price of cloth. Gradually by mid-18th century their importance grew. And with such increased concentrations of artisans the market grew in commercial centres, ports, important European settlements and rich cities, fostering localization.

Further the trend was also stimulated because the skilled artisans were allergic to shift. The Gujarat silk artisans worked on the raw silk and yarn from Kasimbazar but never took to sericulture. Nor did Bengal take to manufacture silk fabrics. The Bengal silk-reelers declined the English Company’s offer of higher wages to migrate to Madras, perhaps for social inhibitions.

Not only were industries localized but even the markets where their output were disposed of were also localized. Thus there were nil katra (for indigo) at Delhi, Sabun katra (for soap) at Agra. The residential quarters of the craftsmen were also similarly known after them, e.g., Loha gali (blacksmith’s lane) the cheeni sola (sugar ward) at Agra. Specialization was discernible even in packing when fabrics of an aurung with 'its peculiar qualities' were not packed in the same bale.

Pattern of subsistence-oriented manufacturing system—the jajmani system: Thirdly, Mughal India exhibited a feature, characterizing all agricultural communities, the lack of a hard and fast differentiation between agrarian and industrial activities. The peasants themselves manufactured various articles to meet their own needs. They also often enlisted the rural artisans, the hereditary servants of the village communities, for auxiliary agricultural work. Again, the subsistence farmer also produced several manufactures e.g., agro-manufactures, dyes like indigo, chay, cane sugar, raw silk production, salt and salt-petre. Gradually different processes of finished silk became specialized, while the last two also came to have specialized castes respectively.

NON-AGRICULTURAL PRODUCTION
nuntas and malanghis. Iron smelting and charcoal production being peasant activities in Bihar according to Buchanan (late 18th century) represented continuance of earlier practice.

In fact the hereditary artisan castes, who used to produce the bulk of the manufactures in the villages, were closely connected with the major agricultural caste. The former were collectively maintained by the village community according to tradition, i.e., maintained by fixed shares of village produce, occasionally supplemented or substituted by cash payments or rent-free land grants. This was really subsistence-oriented manufacturing system. Such was the pattern of the self-sufficient rural economy, based more on a reciprocal system of subsistence production and customary distribution of goods than on cash nexus of production for marketing. Its rationale was that it ensured economic security and hence survival in periods of famine. Those, like the Surat weavers who left the village community for profit outside suffered starvation in the Gujarat famine of 1630-32.

Modern anthropologists call it the jajmani system. It was widely current in southern and western India, and, by inference from the data of early British period, also in northern and eastern India, i.e., throughout the country. But it was more developed in regions like Maharashatra than Bengal.

Decline of jajmani system—the advance payment or dadni system: However, through the operation of the market forces, the need for production for an expanding market grew and the village artisan also began to respond to it, with additional cash receipts for newer work. There was also a growing differentiation between artisans working for the village exclusively and those responding to the market outside. To the first category belonged weavers, blacksmiths, producers of means of transport, etc., concentrated in exclusive villages. In the second were oilpressers, dairymen, potters, etc., with no such villages. So the jajmani system decayed by the 18th century, if not earlier. By mid-18th century the exigencies of increasing long and medium distance trade and of the growing market required capital which was beyond the dream of the poor artisans (who only had their labour), so long maintained by the jajmani system. So they began to take advances (dadan) in prices, i.e., cash and at times in kind or raw materials as well from the middlemen or the buyers. The artisan's primary objective was, of course, to overcome their lack of capital. But they wanted
to insure themselves against the risk of loss if the foreign companies rejected the products of their looms.

As regards the merchant buyers if they agreed to finance the producers under this advance payment system they got a down payment at the time of the contract. For them it was also an advantage to tie up the artisans into delivering the goods to them alone and not to their competitors, Indian or European. For the European merchants the system ensured some measure of standardization. India’s economic life thus came to be marked by credit relations. So, besides being a source of capital to the poor workman, it was also an instrument of social control, merchants’ increasing control over the producers. As a kind of ‘forward dealing’, it was a means of reducing price changes as well as risks connected with spot bargaining in commodity markets and hence minimizing market instability caused by disparity in demand and supply.

It is not quite correct to equate the advance payment (dadni) system with the European verlaggsystem or the ‘putting out’ system of production, as some writers have done. Advances in raw materials were customary in Europe, but exceptional in India (as in Gujrat). The Indian merchants were more interested in contracting for the services of the workers so as to get firm and quick deliveries of goods at agreed prices. In other words, the transactions were virtually sales; the artisans were still independent except in costly raw materials like silk and jewellery in Gujarat. Sometimes, however, the dadni artisans were reduced to the position of wage-earners when they were paid daily wages and supplied raw materials, e.g., the weavers supplying cloth to Kasi Viranna, the chief order supplier of the East India Company on the East Coast; and the silk reeleeers in Kasimbazar factory. The origin of the advance system in Mughal India has been traced to the Islamic law of Sillim or Salam sales based on the Quran. K. N. Chaudhuri has shown that notwithstanding their appalling poverty the weavers enjoyed a fairly ‘strong bargaining position’ and that they were ‘highly responsive to supply prices’, while the operation of competitive market forces tended to save their economic position and benefit the merchant.

Patterns of Industrial Organization

Fourth: Notwithstanding the pre-eminence of India in the contemporary industrial world and the excellence of her manufactures, it
must be admitted that the forms of industrial organization in Mughal India were limited. Under the Ming and Chi’ng rule medieval China had graded artisans. Rich merchants made large-scale use of wage labour by lending looms and raw materials to artisans of graded wealth. While a few were rich enough to employ others, some could not even afford to have their own looms. Mughal India lacked such dynamism during 16th and 17th century. Instances of graded artisans became frequent mostly about mid-18th century as we will see later on.5

Incidental references in various contemporary accounts of foreign travellers and factory records would show that in the 16th and 17th centuries industrial organization was broadly organized on two patterns, representing two different stages or forms of production, the artisans occupying different positions in each. One was the artisan or domestic or cottage system of production. The other was the karkhana system.

(a) Artisan or cottage system:

In the traditional village community agriculture and crafts were combined in the self-sufficient peasant households. Gradually crafts tended to separate from agriculture, though not wholly. Two tendencies were at work here. (i) Along with agriculture for domestic purposes the peasants combined small-scale handicraft production for the market (e.g., commodity agriculture, marketing his surplus products especially in industrial crops like cotton, oilseeds, jute, etc.). (ii) Again, some professional artisans became commodity producers in villages and towns. The artisan’s workshop was his home and his family the work unit. In this artisan or cottage system6 the work of manufacture and management of business were in the same hands. Independent artisans or master-artisans, weavers, carpenters or other entrepreneurs, lacking superior capitalist direction, carried on production of their fine, delicate and valuable goods on their own account and also disposed of their goods. If the cities had their artisans, the villages had their craftsmen catering to the local needs. It is natural that when the resources of the artisan were small, the output also would be on a very small scale and marketable within a limited area.

There were only two sources of supply of capital to the artisans,—by advances from the government and the European merchant companies. In case of government purchases the artisans received the advances from the amlas, according to a detailed procedure, as we
learn from *Muraqat i Hasan*: ‘The officers of the Imperial Government have reports that 210 kudi of cloth, of the *sahan*, *barabarah*, *dosuti* and *thati* varieties and 300 maunds of mustard oil (yellow oil) etc., are required. Urge the officers of Jaipur, Bhadark and other mahals in your *fauidari* to get them ready quickly. The price of these things will be deducted from the amounts due from the *Amlas*. The *Amlas* should advance to the weavers, artisans, oil vendors, etc., money for the things ordered. First, settle the price with the help of the brokers. Then, take bonds with the attestation of the brokers for the delivery of goods in time’. Even in the time of Jahangir ‘it was an established custom that the sellers of manufactured goods of the city (i.e., Agra) should bring and expose them for sale’ in the palace courtyard, where ‘jewels, inlaid articles, implements and all kinds of cloth and stuffs sold in the bazars’ were displayed. Sale during night was introduced by Jahangir in lantern light, which made ‘a pretty exhibition’. Sometimes the arrangement was unsatisfactory as they were tardy, slow and poor. Nevertheless this system did not preclude large enterprises being undertaken, e.g., construction of Allahabad fort or Fatehpur-Sikri or of big Portuguese carracks. The various little processes of construction or manufacture involved had to be organized and coordinated.

But very much greater quantitatively than the needs of government were those for purposes of trade, national and international. This increased production was rendered possible because there was an elaborate organization of financial credit worked out by a chain of itinerant intermediaries or dealers. The latter used to give advances of money (or *dadan*) against promise of delivery of scheduled goods and to collect these also in time. True, this situation tended to encourage the exploitation of the artisans by the middlemen. This could have been obviated if the nobles and the high officials had either encouraged the producers by their patronage. But the richer classes were more interested in foreign goods or costly novelties than in the handicrafts of the country.

The foreign merchants, too, requiring the products of Indian looms of cottages or other handicrafts, realised early the necessity of following the same indigenous procedure of giving advances and taking delivery of the goods ordered according to their own specification well ahead of shipping. Jādunāth Sarkar writes: ‘They (European
merchants) followed the universal system of giving dadan or advances to individual workers and looking them in their cottages and securing deliveries of the goods at the proper time by means of an army of agents”. With the growth of business the European merchants appointed a host of subordinate staff of gunashtas and peons to give advances and take delivery of goods. The need of procurement of costly and specialized articles of trade in this fashion and stocking them before embarkation necessitated the establishment of factories by European companies in different parts of the country. Indian brokers, working under the supervision of European factors purchased silk and cotton goods at important weaving centres. Sometimes the competition among the Europeans and the Indian merchants raised the prices of the manufactures—the weavers making a higher income, as in 1752 in cotton goods due to Anglo-French competition.\[6b\]

(b) Karkhana system

If the artisan system represented in a way independent, single artisan’s labour, followed by decentralized cooperation, the karkhana system was characterized by compulsory labour, centralized control over numerous wage-earning artisans of various crafts and controlled cooperation. The karkhana system differed from the artisan system in several ways. It not only marked a different stage of production but it also constituted an important and novel development, and it exercised a significant influence on economic life. In the first place, the karkhanas were examples of collective and large-scale employment or artisans or craftsmen in different industries in a big manufacturing organization. The potentialities of future development were immense. The biggest was the imperial karkhanas. However, others also had their own karkhanas.

(a) Imperial karkhanas: The emperor issued instructions to governors, officers and jagirdars in the provinces to induce the best master artisans and workers in various arts and crafts from all over India to join the karkhanas. Even foreign workers were invited by Jahangir from Turkey, Persia, China and European countries to these. Secondly, there was a certain amount of coercive regimentation of labour. After recruitment, it was like conscript labour, as explained later. The workers had to work under the direction of a malik on a wage basis. Thirdly, the raw materials for the workshop
were not obtained through open purchases in the market by the artisans but these were supplied to them by means of monopoly purchases by the State. Fourthly, though the workmanship belonged to the artisans, the initiative for designs rested not with them but with the State-officials guiding them according to imperial desires. Under Akbar, who took special interest in these karkhanas, there were possibilities of improved designs and workmanship. Fifthly, the manufactured articles were not intended for sale in the market but for meeting the needs of the State in the court and the camp and for distribution among the nobles, constituting the elite, and among the foreign ambassadors for presentation to brother rulers. Lastly, the karkhanas, in turn, served as radiating centres of skill. Abul Fazl remarks that skilful masters and workmen settled here to teach the people an improved system of manufacture, and that intelligent workmen soon improved. The workshops furnished all stuffs made in foreign countries.7

State factories were an ancient institution in India. These existed under the Mauryas, under Alauddin Khalji and Firuz Tughlaq. The Mughal Government itself became a producer of almost all the goods it required as well as choicest articles of quality taking, in the words of Jadunath Sarkar, 'a somewhat patriarchal attitude in dealing with its servants and subjects'. In the absence of large-scale production, the markets would not supply the varied and vast needs of the government. Thus in Mughal India the State was 'the largest manufacturer or rather the only manufacturer on a large-scale in respect of several commodities.' It established workshops (karkhanas) not only at the capitals but also in the provinces. Under Akbar there were imperial workshops at Agra, Fatehpur-Sikri, Lahore, Ahmadabad, in Gujarat and some other places. Under Shahjahan and Aurangzeb Delhi also came to have its imperial workshops. State factories were also maintained in the provinces at Burhanpur, Aurangabad and Kashmir.8

Akbar: Abul Fazl refers to 'more than a hundred offices and workshops, each resembling a city or rather a little kingdom' all under the diwan-i-buyutat. Each workshop was concerned with the outturn of a particular article and was supervised by one expert of the article concerned besides two officers, an accountant and a mushrif and various other persons. Each was virtually animated by Akbar's
personal interest, the range of which extended to different articles. Monserrate, an eye witness, says that Akbar did not ‘shrink from watching and even himself practising for the sake of amusement, the craft of an ordinary artisan.’ To take a few examples only. In the karkhanas for cotton-weaving, dyeing, and printing, silk and shawl manufacture, Akbar is said to have introduced new designs or varietes, but even acquired ‘theoretical and practical knowledge’ in some of the trades. In the arms workshops, where “many workmen (were) always engaged in the manufacture of muskets and swords.” Akbar introduced improvements in guns and matchlocks. In the mint, constituting a distinct karkhana craftsmen belonging to trades exceeding twenty, were engaged.⁹

Jahangir: He had a sword, dagger and knife manufactured by Ustad Daud from a 160 tola meteorite stone by mixing it with common iron. The sword turned out to be very sharp, ‘equal to the best tempered swords’. Islam Khan, Mughal Governor of Bengal, after transferring the capital from Rajmahal to Dacca, organized State wharves, warehouses and karkhanas, with carpenters, blacksmiths, armourers and other artisans.¹⁰

Shahjahan: He presented a gorgeous amber candlestick within a gold mesh and inlaid with gems and diamonds prepared by royal artisans worth 2½ lakh rupees to the holy shrine at Mecca. Bernier (in mid-17th century) has left a graphic eye-witness’s account of these karkhanas at Delhi, then in a more developed form than before. “Within the fortress, large halls are seen in many places, called karkhanays or karkhanas or kharkhanahs or workshops. In one hall, embroiderers are busily employed superintended by a master (cf. Firuz’s system). In another you see the goldsmiths, in a third, painters; in a fourth, varnishers in lacquer work; in a fifth, joiners, turners, tailors, and shoemakers; in a sixth, manufacturers of silk, brocade, and those fine muslins of which are made turbans, girdles with golden flowers, and drawers worn by females, so delicately fine as frequently to wear out in one night. This article of dress which lasts only a few hours, may cost 10 or 12 crores, and even more, when beautifully embroidered with needle work’.¹¹

Where karkhanas did not exist, the government sought to procure goods through State overseers appointed for the purpose or by establishing a monopoly.
(b) *Karkhanas maintained by provincial governors*: Besides the imperial *karkhanas*, there were those maintained by provincial governors, sultans and nobles. The governors of some provinces (e.g., Lahore, Agra, Fatehpur, Ahmadabad, Burhanpur and Kashmir) also patronized local products so that they could duly perform the administrative etiquette of offering the choicest selections therefrom to the emperor. As Manucci writes: 'the King and the princes keep officials in every one of these provinces, whose business it is to put in hand the best goods that can be fabricated in each place. With this object in view, they keep an eye continually upon what is being done in that respect'.

The Sultan of Golkonda had a *karkhana*.

Some nobles of the Mughal empire maintained their private palace workshops where skilled artisans manufactured articles of luxury not only for their own use but also for purposes of presentation to the emperor and fellow nobles as a matter of administrative practice or social etiquette. This corroborates Moreland's suggestion that private workshops existed in some handicrafts. Local rulers, e.g., the Maharaja of Benaras at Ramnagar also had his palace workshop.

(c) *'Karkhanas of the European companies'*: Sometimes the European companies, too, felt the need for centralized production and control and tried to organize *karkhanas* (or workshops) of their own. Their object was not to effect 'economies of scale' or use capital equipment of power but supply their own needs, viz., to guarantee regular supply of standard goods and to exclude or limit the competition of others. The early attempts of the English in this direction in silk at Patna (1618-21) were not very profitable. However it was a reasonable procedure and the European companies followed the usual method to have the goods produced for the market with hired artisans working on raw materials under proper control. The largest known factory was the silk factory of the Dutch at Kasimbazar with 700-800 weavers. The saltpetre refineries of the Dutch (at Hughli and Pipli) and of the English (at Ahmadabad) substituted the inferior local pans by imported copper kettles and pans. Similarly experts were imported to train local artisans in different processes in textiles like silk.

(d) *Private factories of artisans*: During the hey-day of the Mughals, however, private factories or workshops owned and managed...
by skilful independent artisans on their own behalf seemed to have
been non-existent, as Bernier observes.

(e) *Decline of imperial karkhanas by the 18th century*

The imperial *karkhanas* numbered 69 in the *Zawabit-i-Alamgiri*
towards the end of the 17th century but only 36 according to Shakir
Khan’s memoirs in mid-18th century, indicating the decline in produc-
tion under the Later Mughals. These lasted till the eighties of the
18th century.

However, the imperial tradition survived in the 18th century among
some local rulers. Jai Singh II of Jaipur not only settled weavers
there who were expected to outdo the Ahmadnagar textiles but also
provided tools of special varieties of wood in his workshops. Again,
the *nawabs* of Bengal had special establishments (*mulboos khas kootee*)
in Dacca, Sonargaon, Jangalbari and Basetoore for production
of first grade *muslins* (*mulboos khas*) as yearly *peshkash* to the Mughal
emperor. The workshops were supervised by the *darogha*, having
‘uncontrolled authority’ over all employees, ‘the most expert weavers
in the province selected.’ They were registered and had to attend
daily for scheduled hours till the completion of the tasks. The thread
used was carefully examined by inspectors and had to conform to the
standard masters and approved. In the time of Siraj ud daula half
of wages of the weavers was deducted as perquisites of the officers
and servants. The Nawab of Awadh and the Nizam of Haidarabad
also had similar *karkhanas* for supplying their own needs.

The eighteenth century witnessed certain interesting trends in
industrial organization, thanks to the expansion of the market by the
middle of the century. While the artisan system continued as before,
the practice of paying wages to artisans became widely prevalent.
If the 16th and 17th centuries were marked by absence of private
workshops owned by private artisans, the 18th century was characterized
by the advent of artisans as ‘capitalist entrepreneurs’. Traders,
including Armenians in contemporary Bengal employed winders (*nakads*)
as wage-earners in silk reeleries. Rich weavers began to emerge in
Bengal with their own capital who sold their goods freely. A few
carpenters in Bengal and Bihar hired others for working in their
workshops. Wealthy artisans, master craftsmen or textile printers
themselves, of Lucknow having their own equipment engaged poorer
artisans or apprentices numbering as large as 500. In Kashmir master
shawl craftsmen engaged poorer workmen for their looms numbering up to 300. Economically the best instance of advanced or large-scale industrial organization now was shipbuilding. The Parsee master-carpenter or shipwright engaged hired labourers to meet orders for ships for European companies on contract. Thus arose the graded artisans.\(^{17}\)

The *karkhanas* exercised considerable influence on urban life and the relations between the village and the town. These helped mobility of labour from village to town. Country artisans of proved technical ability were drawn, either voluntarily to the *karkhanas* or forcibly (as during Aurangzeb’s Deccan viceroyalty, from Masulipatam, famous for calico-printing). Thus occupational specialization helped the artisan to acquire status. Further, the *karkhanas* reinforced the organization of exclusive castes and guilds. As Bernier notes: ‘The embroiderer brings up his son as an embroiderer, the son of a goldsmith becomes a goldsmith and a physician of the city educates his son for a physician. No one marries but in his own trade or profession, and this custom is observed almost as rigidly by the Muhammadians as by the Hindus’. The construction of architectural edifices naturally encouraged stone workers, sculptors, carpenters, etc. At the same time this led to the growth of a nascent middle class, consisting of such classes as shopkeepers, traders, bankers, brokers, shipbuilders, etc. Pelsaert observes that ‘the shopkeeper was held in grater respect than the workman and some of them are well to do but they must not let the fact be seen’. Again, the example of the crown infiltrated downwards and tended to diffuse talent. The provincial governors and nobles also encouraged local artisans and workmen, either for their own needs or for offering presents to the great. Thus it is not surprising that cotton and silk weaving became widespread in every household and was pursued during the vacation from agriculture.\(^{18}\)

With the lapse of time changes took place in the industrial organization. But these were too slow and limited to cause any break with the past or usher in an industrial revolution. Increase in production to meet the exigencies of a growing market was effected not so much by centralized production and application of superior technology as by the older processes of localization and advances (*dadan*). The artisan system was still pre-eminent. An industrial society was yet to come.

**NON-AGRICULTURAL PRODUCTION**
Notwithstanding the quantitative output and the qualitative excellence of India’s staple industries, her industrial organization was limited. The workers used cheap instruments. Their fixed and working capital was low. Their technology was elementary. The traditional social system with its hereditary castes generally resulted in a somewhat uniform family-centred production under the head, who was also the master craftsman, though exigencies of demand and nature of goods (e.g., monuments, sea-going ships) occasionally modified it. ‘The social system regulated the impact of market forces.’ The difference between skilled and unskilled labour was so small that a superior artisan class could not grow. Increasing specialization in production led to proliferation of castes. Again, social or caste traditions (and the ruling class) prevented diversity in organization by tying the artisan to a lower social and economic status (Bernier). Conversely higher caste men could hardly ever hope to own or even control work units. Thus unlike Europe neither the artisan could be an entrepreneur nor did the high caste men would take to manufacturing activity.¹⁹

Application and nature of technology in Industry²⁰

The broad question to be considered is: was medieval India’s industrial organization ‘weak and backward’? In certain respects that organization and the technology on which it rested was relatively ‘stagnant’ as compared to China and some countries in western Europe. India’s textile industry lacked China’s multi-spindle wheels (since 14th century) as also the water-powered throwing mills with 200 spindles of Italy’s silk industry. Among modern nautical instruments India’s oceanic ships had only the astrolabe but no compass or telescope. The use of coal as fuel, of cast iron and the deep mining technique and even the manufacture of glass were unknown. Elementary, too, was her chemical industry. Such weaknesses retarded all prospects of far-reaching technological developments. Hence, no sign of an industrial revolution was visible. So profound was the non-mechanical bias of the Indian artisans that no labour-saving devices were even thought of. Extremely simple were their tools. A rudimentary loom and a mere takli (disc and needle) sufficed for the yarn of the finest muslin, though for coloured weaves complex
draw-looms might have been needed. Fryer marvelled at the fine jewellery produced with simple tools. Without any lathe to cut screw grooves the blacksmith could still join two pieces with elementary methods. The masons, who built the mammoth Mughal monuments, were unaware of elementary labour-saving devices like the wheelburrow.

However, there were certain exceptional features which may be said to have countered her technological stagnation or weakness. Some crafts had fairly advanced technology, the most advanced being the production of cannon, the single example of ‘heavy industry’. The muskets and fowling pieces of India were praised as ‘excellent’ by Bernier. Indian rockets (ban), of bamboo or iron cylinders, were the precursors of 19th century European rockets. Latitudes could be fixed by the astrolabe alone even without other precision instruments. In ship construction the Indian method of rivetting planks proved to be superior to the European caulking; and the coating of lime compound (chunam) protected the wood from sea worms. Water and wind power was not commonly used but the water-mills were known in the Deccan, while rice milling and cotton ginning used water power in Hazara district in the north-west. As against the simplicity of textile technology the level of excellence in textiles was high and the Indian method of confining colours to patterns was superior to the European. The Indian technique of bayonet-proof lacquer work and soldering gold on stone was then not known in Europe.

Again, in some fields technology could not be said to be ‘stagnant’ or inactive, as the artisans showed their ability in ‘imitative innovation’, e.g., in ship-building, arms manufacture, cast-iron anchors, textiles, steel goods, etc. Roe, Ovington and Tavernier testify to the imitative capacity of the weavers and tailors. In other words, technology was growing fast to meet the needs of the State and the growing overseas commerce. But the history of it is not yet known fully.

It is, however, necessary to bear in mind that it is easier to create wholly new systems of production than to adapt the established ones with technical improvements, even if available. In our country while we have to admit the absence of advanced instruments and technology, we have also to note the unbelievable manual skill of our artisans. European travellers, like Bernier, Fryer and Ovington, wondered at their ‘matchless ingenuity’. Though ‘destitute of tools’, the artisans

NON-AGRICULTURAL PRODUCTION
could 'outdo all the ingenuity of Europe'. Yet the level of production was not high and manufactures suffered from two weaknesses,—lack of standardization and lack of emphasis on quick production of cheap goods.

What were the causes of India's technological deficiency? To a large extent the reason may be found in her 'social and economic structure'. Notwithstanding the presence of highly ingenuous workers the level of production was low. This was because of institutional hindrances and economic factors. Notwithstanding some services rendered by caste to industrial efficiency through hereditary skill and specialization, as explained before, caste has been held largely responsible for India's technological deficiency, for it was behind rigid hereditary occupations both among Hindus and Muslims. Its inhibitions again, tended to restrict mobility of labour. It must, however, be admitted that the Indian artisan was at least free from the restrictive guild regulations as in Europe. India's technology had grown through the ages through hereditary and empirical knowledge and not scientific knowledge, and then reached its limit, especially in cotton industry in 17th and 18th century. This lack of progress in science was paralleled by absence of proper arrangement for recording of technical skills. Irwin and Schwartz have shown this with reference to the dye-fixing on multi-coloured pintados. Dyers failed to produce certain colours (glossy black) in silk piece goods and the East India Company arranged for their training by importing English craftsmen. When this import of experts ceased by end of the 17th century the new colour experiment also stopped in Bengal.

More serious was the lack of incentive for increasing the outturn of workers. In England the Industrial Revolution came, besides other reasons, because there was a compelling economic motivation to save the economic interests of her textile manufacturers from the external threat of Indian textile imports, by creating an import substituting industry and overcoming the comparative advantage of cheaper wage rates possessed by India. But in India there was no such parallel economic motivation to search for new techniques of production; she had no competitor for her manufactures because of caste system at home and no external threat because of monopoly in the foreign market. India also lacked the intellectual curiosity of medieval China.
in learning the mechanism of clocks and manufacturing them, though 
admiréd.

Again labour was surplus and wages were low. So with cheap 
labour, labour-saving devices became superfluous. Hence entre-
preneurs had no incentive to invest more capital on machinery. Thus 
the increased cotton production in the 17th century to meet the new 
demand in Europe was due not so much to technological improvements 
as to larger numbers of labourers and increase in *per capita* output. 
In other words technology remained stagnant.

Further in that age neither the State nor the aristocracy came 
in the picture except in a few limited cases like the armaments or 
the shipping. The adoption of new technical or mechanical devices 
was both costly and risky. This was beyond the reach of the poor 
Indian artisan, concerned more with security than profit. Free in 
name, he was virtually a slave. Unlike his European counterpart, 
he could neither aspire to buy land or office for himself and his family, 
as Bernier acutely noted.

But besides the social and economic factors we have also to refer 
to some highly baneful administrative factors in our search for causes 
of technological deficiency. An oppressive and exploitative adminis-
tration kept labour under its thumb. The tell-tale comments of the 
Dutch Factor at Agra, Pelsaert, that the Indian workmen suffered 
from two scourges, low wages and the oppression of the ruling classes 
have been corroborated by the thoughtful observations of Bernier 
which have been examined in detail in the next section. The traditional 
social values might instil the virtue of stoical patience among the 
oppressed to bear this oppression. But the fleecing or appropriation 
of the producer’s labour operated inexorably by drying up the wells 
of economic incentive of technological advance.

Moreover, technological and mechanical innovations were some-
times opposed or avoided to ensure security of employment. Acord-
ing to Ovington the cause of printing lost for the sake of the scribes' 
jobs. Similarly a mechanism to speed up the production of cannon 
balls and nails which the Dutch had adopted in 1672 was disallowed 
by the local authorities in Coromandel. Thus it was not merely 
the contemporary socio-economic atmosphere but the political and 
administrative system also that was unfavourable for any techno-
logical advance.

**NON-AGRICULTURAL PRODUCTION**
There is, however, one aspect of the matter that must not be overlooked. Even if we admit technical stagnation and any economic backwardness that went along with it, we have to remember that this was not always synonymous with weakness. In the race between human skill and machinery the latter is sure ultimately to win. But in the times under discussion India’s cotton industry exhibited a very remarkable example of stability and a balance between implements and human skill. Her weaving technique was not in any way inferior to other countries to need any change. While the machine (i.e., charkha or wheel) had replaced the spindle (takli) for spinning, there were special types of fine, luxury fabrics like Cossa Jura and Dacca muslin which could be woven only with hand-spun yarn. This was harder, finer, better twisted and more durable. Here at least manual skill had a premium on implements. The Indian artisans’ tools might be simple and their looms crude but the account of John Taylor, the Commercial Resident in Dacca towards the end of the 18th century, would show that the various processes of cotton manufacture were not quite simple and required the workmen to possess microscopic skill and specialization. They could not easily alter their work-styles and methods without ‘great incentives’ and, as explained earlier, incentives they had none.

India’s technology had grown through the ages and even though somewhat comparatively stagnant, it supplied a basis for an industrial organization, which could supply not only her large but almost stationary internal market (as population grew very slowly) but also for the initially not heavy newer demand of the foreign market of the 17th century. Weavers were responsive to the new needs. To cope with its subsequent growth only some minimal changes were made in organization and technology (e.g., changes in looms). It kept her population of millions self-sufficient in essential goods and luxuries, met the demands of her state and the army and also those of the foreign companies.

Thus we find that stagnation at times implied stability rather than weakness. Hence India’s industrial organization, in spite of her stagnation and associated deficiencies, cannot be held to have been ‘weak and backward’. Yet her technology must be held to be relatively unprogressive.
Industrial Labour: Economic Position of Artisans

Information about the economic position of artisans is extremely scanty. We get a few incidental details from the memoirs of Babur and the *Ain-i-Akbari* and some observations of a few foreign travellers but no connected account in contemporary chronicles. Babur alludes in his memoirs to the 'unnumbered and endless workmen of every kind', infinite number of artisans in different crafts and industries as one of the advantages of Hindustan. Abul Fazl speaks of 'skilful masters and craftsmen' having settled in the country. He also mentions the wages of unskilled and skilled labourers of different cagertories. Except such isolated bits of information there is no 16th century account of the condition of industrial labour. But in the absence of any economic revolution, the condition in the 17th century might be considered to be equally applicable to the 16th century as well.

Broadly speaking the industrial workers or artisans may be divided into two categories, corresponding to the forms of industrial organization described in the preceding section: the 'free' artisans, working on their own, under the artisan system; and the 'regimented' workers working to order under the 'karkhana' system.

In the domestic industry stage, a peasant, working alone or with family, worked as a unit, remunerated by the community. With growing specialization and separation of agriculture and crafts, the peasant-artisans began to cater to the market. Under the artisan system the artisans, possessing little resources, worked at home on their own initiative, from the raw material to the marketing stage. At times they worked to order of foreign merchants or their brokers with advances of money, but could not always deliver finished goods. Even Delhi had no private workshops of skilled, independent artisans.31 Most artisans sought to improve their lot by joining the State *karkhanas*. Under the State 'karkhana' system the artisans seemed to exchange freedom for security. They worked under strict regimentation and to dictation as day labourers from morning to evening, as we know from the accounts of Pelsaert (1626) and Bernier. The latter writes: 'The artisans repair every morning to their respective *karkhanas* where they remain employed the whole day and in the evening return to their homes'.31a The accounts of Hawkins, Pelsaert and De Laet to the effect that a work done by a single European worker would be
done by three or four Indian labourers might mean either that the efficiency of the latter compared unfavourably with the Europeans or that there was excessive specialization. The absence of private factories by artisans in the 17th century was not due, to ‘want of genius’ among Indians, as according to Bernier there were ‘ingenious men in every part of the Indies’.

In fact there were serious disadvantages operating against the artisans:

(i) Low wages: Pelsaert, chief of the Dutch factory at Agra observes on the basis of his seven years’ experience (1620-6) that ‘there were three classes of people who were indeed nominally free but whose status differs little from voluntary slavery: workmen, peons, or servants and small shopkeepers’. Again, ‘For the workmen there are two scourges, the first of which is low wages. Goldsmiths, painters, embroiderers, carpet-makers, weavers; by working from morning to night can earn only 5 or 6 tackas; or about ¼th of a rupee’. This is also corroborated by De Laet and ‘some other foreign travellers.

These conditions in the 17th century can be verified from the rates of the daily wages of workers in Akbar’s time (c. 1595) as given in the Aina-Akbari. These have been equated in modern currency (1920) by Moreland as follows: ordinary labourers, 2 dams/5½ annas; superior workers, 3-4 dams/8½-11 annas; carpenter, 3-7 dams/8½ annas-Rs. 1½; builder, 5-7 dams/14 annas-Rs. 1½; slaves (lowest grade) in imperial court got 12 annas a month; some foot-soldiers or menials drew more than Rs. 3 a month. Moreland attempted to compare the purchasing power of the lowest wages of c. 1595 with those of c. 1920. On the basis of Radha Kamal Mookerji’s study of the money wages and real wages from c. 1955 to c. mid-18th century, three tables are placed below to illustrate the low wages of workers, unskilled or skilled. The latest scholar is Srimati Shireen Moosvi who has compared the purchasing power of lower wages in Agra in 1595 and 1886-95. But the crux of the matter is, of course, not the money wages but the real wages which depends on the purchasing power of the wages. For it is bound up with the question of standard of living which is discussed in a subsequent chapter.
Table A

DAILY WAGES FROM AKBAR TO PRE-PLASSEY PERIOD

<table>
<thead>
<tr>
<th>Jahangir</th>
<th>Akbar (c. 1595)</th>
<th>Shahjahan (1637)</th>
<th>Fort William (1703-11) Monthly</th>
<th>Fort William (1729)</th>
<th>Mid 18th c. (1751-52)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slaves</td>
<td>1 dams</td>
<td>or</td>
<td>2\frac{1}{2} - 3 dams</td>
<td>Halalkhar 1-1\frac{1}{4} pice</td>
<td>Coolie, 2 puns 12</td>
</tr>
<tr>
<td></td>
<td>1\frac{1}{2} pice</td>
<td>or</td>
<td>as 8-12</td>
<td>Kahar Re. 1/-</td>
<td>gunadas of cowries or 6 pice a day</td>
</tr>
<tr>
<td></td>
<td>3-4\frac{1}{2} pice</td>
<td>5-6 pice</td>
<td></td>
<td></td>
<td>10 pice</td>
</tr>
<tr>
<td>Ordinary</td>
<td>labourers &amp; lowest grade workers</td>
<td>6-7 dams</td>
<td>5-6 tackas</td>
<td>Koyal</td>
<td>3 pice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or</td>
<td>or</td>
<td>Rs. 2/8/ to</td>
<td>1 anna</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9-10\frac{1}{2} pice</td>
<td>10-12 pice</td>
<td>Bookbinder</td>
<td>Rs. 1/8/</td>
</tr>
</tbody>
</table>

Re 1/=40 dams or 80-90 pice = 1 tacka = 2 pice Pelsaert (1626) Diary & Cons Fort William Consultations Fort B & P i. 235-6 Dutch Accounts Fort Agra William (Wilson, 220 ff)

References
Ain (1626)
B & P i. 235-6

NON-AGRICULTURAL PRODUCTION
Table B

MONEY WAGES & REAL WAGES ON BASIS OF PRICES OF FOOD GRAINS
(Quantity available in seers)

<table>
<thead>
<tr>
<th>Food grains</th>
<th>Akbar (Unskilled 2 dams, Skilled 6-7d)</th>
<th>Jahangir (Unskilled 5-6 p, Skilled 10-12 p)</th>
<th>Fort William (c. beg. 18th century) (Unskilled 1-1\frac{1}{2} p, Skilled 3 p-1 a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rice</td>
<td>2.71 8.13</td>
<td>5.01 10.02</td>
<td>2.39 7.16</td>
</tr>
<tr>
<td></td>
<td>-9.48</td>
<td>-3.58</td>
<td>-9.56</td>
</tr>
<tr>
<td>Wheat</td>
<td>4.52 13.56</td>
<td>8.3 16.60</td>
<td>2.05 6.14</td>
</tr>
<tr>
<td></td>
<td>-15.82</td>
<td>-3.07</td>
<td>-8.20</td>
</tr>
<tr>
<td>Barley</td>
<td>6.78 20.34</td>
<td>12.5 25.00</td>
<td>4.37 13.00</td>
</tr>
<tr>
<td></td>
<td>-23.73</td>
<td>-6.56</td>
<td>-17.50</td>
</tr>
<tr>
<td>Jowar</td>
<td>5.42 16.27</td>
<td>10.23 20.46</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-18.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bajra</td>
<td>9.04 27.12</td>
<td>16.7 33.40</td>
<td></td>
</tr>
<tr>
<td></td>
<td>-31.64</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gram</td>
<td>6.78 20.34</td>
<td>12.5 25.00</td>
<td>2.66 7.98</td>
</tr>
<tr>
<td></td>
<td>-23.73</td>
<td>-3.99</td>
<td>-10.64</td>
</tr>
</tbody>
</table>

Table C

INDEX NUMBER OF REAL WAGES

<table>
<thead>
<tr>
<th>Year</th>
<th>Unskilled Workers</th>
<th>Skilled Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1600</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>1650</td>
<td>123.36</td>
<td>184.51</td>
</tr>
<tr>
<td>1729</td>
<td>53.48</td>
<td>62.04</td>
</tr>
</tbody>
</table>

The inferences from Sm. Shireen Moosvi’s table generally agree with those from R. K. Mookerji’s as regards the comparative cheapness of wheat, rice, barley, jowar, bajra and gram in 1591, though her figures are somewhat different. She has, however, given new figures of purchasing power of lower wages (man-i-Akbari) at Agra as follows:

<table>
<thead>
<tr>
<th>Articles</th>
<th>1595</th>
<th>1886-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sugarcane</td>
<td>1.70</td>
<td>1.19</td>
</tr>
<tr>
<td>Salt</td>
<td>3.75</td>
<td>2.15</td>
</tr>
<tr>
<td>Cloth (gaz-i-Ilaahi)</td>
<td>20.00</td>
<td>76.59</td>
</tr>
<tr>
<td>Ghi</td>
<td>0.57</td>
<td>0.34</td>
</tr>
</tbody>
</table>
From this it would appear that while sugarcane (and so gur) and cloth were costlier, ghi and even salt were cheaper in Akbar's time. Many do not agree with her regarding: salt.

(ii) Oppression of officers and forced labour (begar): With regard to urban labour in Mughal India, European factory records and accounts of foreign travellers illustrate the extent of coercion, official or non-official, on the artisans, skilled or unskilled. After referring to the first scourge of low wages, Pelsaert writes, 'The Second (scourge) is (the oppression of) the governor, the nobles, the Diwan, the Kotwal, the Bakhshi and other royal officers. If any of these wants a workman, the man is not asked, if he is willing to come, but is seized in the house or in the street, well-beaten if he should dare to raise any objection and in the evening paid half his wages or nothing at all'.

Bernier (1670) writes: 'If the artists and manufacturers were encouraged, the useful and fine arts would flourish; but these unhappy men are condemned (condemned), treated with harshness and inadequately remunerated for their labour. The rich will have every article at a cheap rate. When an Umara or Mansabdar requires the services of an artisan, he sends to the bazar for him, employing force if necessary, to make the poor man work, after the task is finished, the unfeeling lord pays, not according to the value of the labour, but agreeably to his own standard of fair remuneration, the artisan having reason to congratulate himself if the korrah (lash) has not been given in part payment. How then can it be expected that any spirit of emulation should animate the artist or manufacturer? The artists, therefore, who arrive at any eminence in their art are those only who are in the service of the King or of some powerful Umara, and who work exclusively for their patron'.

Again, writing to Colbert, Bernier wrote, 'No artist can be expected to give his mind to his calling in the midst of a people, whose grandees pay for a work of art considerably under its value and according to their own caprice, and who do not hesitate to punish an unfortunate artist or tradesman with the korrah, that long and terrible whip, hanging at every Omrah's gate. Is it not enough to damp the ardour of any artist, when he feels that he can never hope to attain any distinction; that he shall not be permitted to purchase either office or land for the benefit of himself and family, that he must at no time make it appear he is the owner of the most trifling sum, and that he may never venture to indulge in good fare

NON-AGRICULTURAL PRODUCTION
or to dress in fine apparel, lest he should create a suspicion of his possessing money?"28 Instances of practically forced labour were found when skilled calico-painters and artisans were conscripted from Masulipatam to work in the State factories at Delhi or Agra. The 'great distress' of the artisans in 'the city and villages of the province of Gujarat' caused by the exaction of forced labour by the officials is testified to by Aurangzeb's farman of 1665, which abolished it.29

Some of the European companies not only employed slave labour but also resorted to forced labour. A few examples, of the latter may be noted. The Dutch and the English hired many Indian artisans in various capacities in different places, e.g., as weavers of cotton and silk, bleachers, printers, joiners, coopers, blacksmiths, etc. Early in 17th century the Dutch resorted to forced labour by engaging 200-300 cloth printers and bleachers at Pulicat. In the seventies of the 17th century the Dutch engaged in their workshops at Hughli the Indian weavers manufacturing sail cloth or producing ropes, who were paid 'small wages', from 1 to 2 annas daily (C. 1670). Early in the 17th century the Patna factor Hughes (1620-1) had to give advance of money to the silk-winders to work in the company's karkhanas.30 Probably they were unwilling and had to be given some material inducements to work there. But there is no hint to their unwillingness in the records. So it may be that the winders insisted on prior payment, in order to save their position by taking advance wages. That this apprehension was not groundless is clear from the prevalence of forced labour or begar. During the sixties and seventies of the 17th century the English hired on a monthly wage basis, Indian yarn-twisters, weavers, printers, dyers, etc., besides brokers (paikars) and treasurers (potdars) through whom advances (dadan) was given to artisans or local merchants. In 1679 the monthly wage system was replaced by remuneration per piece for greater effort, and the brokers were to get a commission of one-fourth in a rupee of the Company's recouped investments in the particular articles.31

(iii) The middleman's share: Another adverse factor was the middleman's share. Mandelslo found (1638) that the craftsman had to surrender to the middleman a considerable portion of his profits as the same piece of work passed through several hands before reaching the consumer.32 This seems to be corroborated by Bernier when he continues his observations on the artisan: 'He never can become rich,
and he feels no trifling matter, if he have the means of satisfying the cravings of hunger and covering his body with the coarsest garment. If money be gained, it does not in any measure go into his pocket but only serves to increase the wealth of the merchant. 33

(iv) Bad environment: All this created an uneconomic outlook on the part of artisans. The masses could, because of poverty, exercise no effective demand on production of goods of superior workmanship. They wanted cheap necessaries of life. Fear of oppression led to concealment of wealth and permanent inurement to a low standard. Bernier writes: 'No artist can be expected to give his mind to his calling in the midst of a people who are either wretchedly poor or who, if rich, assume an appearance of poverty, and who regarded not the beauty and excellence but the cheapness of an article...'. The reaction of this low standard (as testified to by Pelsaert, De Laet and others) and uneconomic position of the artisans is mutual and the two were related as cause and effect. Hence there was no or little incentive or effort to endeavour to raise this economic standard by additional work besides their daily routine. As Bernier remarks, 'In this quiet and regular manner their time glides away, no one aspiring after any improvement in the conditions of life, wherein he appears to be born.' 34

(v) Division of labour: Rigid caste rules: Lack of aspiration was partly caused by the division of labour and rigid caste rules both among the Hindu and Muslim artisans. Pelsaert, De Laet and Bernier bear this out. Pelsaert writes: '....scarcely anyone will make an effort, for a ladder by which to climb higher is hard to find, because a workman's children can follow no occupation other than that of their father, nor can they intermarry with any other caste.' In a similar strain De Laet, remarks, 'The artisans can never rise to a higher station, for fathers generally teach their children the same handicrafts which they themselves practise'. In a classic passage Bernier observes: 'The embroiderer brings up his son as an embroiderer, the son of a goldsmith becomes a goldsmith and a physician of the city educates his son for a physician. No one marries but in his own trade or profession and the custom is observed almost as rigidly by the Muhammadans as by the Hindus.' 35. Caste constituted a rigid economic steel frame which tended to discourage economic mobility of groups or individuals.

NON-AGRICULTURAL PRODUCTION
(vi) Mobility of labour was strictly limited. Rural producers might go to the local production centres. Occupational mobility would take place when agriculturists took to weaving. Horizontal mobility would occur if artisans of the same castes group (e.g., carpenters, braziers, goldsmiths, blacksmiths, coppersmiths, masons, stone-cutters, etc.) would change their crafts. But rare indeed was regional mobility as skills did not easily move regionally. The English faced difficulties in the mid-17th century in bringing weavers from Kasimbazar to Hughli and completely failed to induce them to go to Madras for fear of losing their caste in crossing the sea (Kalapani). The Dutch failed to get Gujarati weavers to come to Bengal. Again as the corporate organization of the artisans had a caste and not economic basis, all outsiders were debarred therefrom. Lastly there was no upward mobility of the artisans of Mughal India as there was no encouragement of commercial profit as in Europe. India’s impressive industrial network was woven by men and women, pursuing, notwithstanding exploitation by rulers and merchants, hereditary avocations. There were, however, occasional protests. The weavers of Broach mutinied against the English buying cotton yarn in 1630 and left the city as a protest against the governor's tyranny. In 1686 all the Indians of Madras went on strike to protest against a tax levied by the English under order of caste heads. But such rare protests did not imply any dynamic sustained move.36

(vii) Cost of raw materials: If the cost of materials was excessive (e.g., metals, raw cotton) the worker without sufficient capital would be at the mercy of the middlemen or financier or mahajan, providing these. This encouraged exploitation, which, according to Bernier, was the rule.36a

(viii) Burden of taxation: There is little direct information regarding taxation on handicrafts. There are, however, references to occasional State remissions of taxes as by Akbar, Jahangir, Aurangzeb (1665) which suggest that such remissions were not permanent and were counteracted by exactions of subordinate authorities. Akbar sought to relieve the workers by remitting several imposts, cesses and taxes, e.g., tax on artisans on particular products (e.g., blankets) or occupations (e.g., tanning, manufacture of lime, etc.). But his good intentions were set at naught by local officials. From the Mirat-i-Ahmadi we learn that Aurangzeb abolished various forms of License tax on
artificers. Every class of artificers throughout the Mughal empire was subject to exaction of a poll-tax (*muhtarfa*) by officials, though it was repeatedly condemned by Aurangzeb. Again, cotton-dressers and sugar-cane-pressers coming to a new place in Gujarat to start business had to pay Rs. 1½ to the officials for permission to start their trade. Further, an artisan, wishing to learn any branch of the weaver’s or embroiderer’s art, had to pay a ‘craft learning’ fee to the local officers on completing his training. Specific statements of official exactions have been made by Terry and Tavernier. According to the first officers in different parts of the Mughal empire exacted money from those who made curious manufactures. According to the latter the weavers of Benares had to get every piece of cloth stamped by the ‘farmer’ (tax-contractor) before sale. There are general statements by foreign visitors that the people paid taxes according to their means. It may be inferred that the artisans were liable to miscellaneous cesses and taxes which affected their economic position. This threw them at the mercy of the middlemen and financiers. They could not overcome periodic crises of scarcity and famine which made them destitute. Again the market of chief handicrafts and artistic handicrafts being confined to the limited class of Mughal aristocracy, there was little scope of expansion for this class of crafts.37

*Favourable conditions*: Notwithstanding the combination of such a dismal array of adverse conditions, the standard of excellence attained by individual artisans was very high. Bernier approvingly writes: ‘Numerous are the instances of handsome pieces of workmanship made by persons, destitute of tools, and who can scarcely be said to have received instruction from a master. Sometimes they imitate so perfectly articles of European manufacturing that the difference between the original and copy can hardly be discerned. Among other things the Indians make excellent muskets, and fowling pieces and such beautiful gold ornaments that it may be doubted if the exquisite workmanship of those articles can be exceeded by any European goldsmith. I have often admired the beauty, softness and delicacy of their paintings and miniatures and was particularly struck with the exploits of Akbar painted on a shield by a celebrated artist, who is said to have been seven years in completing the picture. I thought it a wonderful performance. The Indian painters are directly deficient in just proportions and in expression of face but these defects would
soon be corrected if they possessed good masters and were instructed in just proportions and in expression of face but these defects would soon be corrected if they possessed good masters and were instructed in the rules of art.\textsuperscript{58} It may reasonably be held that the standard would have been much higher under more encouraging circumstances or that the high standard would have been limited not to a few individuals but become general.

In fact there were some favourable conditions for the artisans. Of these the first was royal encouragement. Akbar directed some ranks of nobles to wear special kinds of local fabrics. He also persuaded the carpet-weavers of Persia to settle in Agra, Fatehpur-Sikri and Lahore. Such patronage directly helped the development of silk, carpet and shawl industries in the country and tended to improve the condition of workers in such crafts. Abul Fazl writes: ‘Through the attention of His Majesty, a variety of new manufactures is established in the country; and the cloths fabricated in Persia, Europe and China have become cheap and plenty. The skill of manufacturers has increased with their number’. Again Kashmiri shawls, formerly costly and used by nobles, became cheaper and came to be ‘worn by people of all degrees’. Lahore alone had more than 1000 manufactories of shawls. Akbar had intelligent artisans deputed to Goa to ‘examine and bring to the Emperor’s knowledge the various productions of art and skill to be found at that time’. Such artisans after gaining knowledge there returned and were applauded for their skill.\textsuperscript{59}

The second favourable factor was the encouragement of some powerful or influential nobles. But these were not such as to neutralize the bad effects of the adverse ones. Bernier remarks that the degradation of artistic handicrafts was retarded by (i) the influence of the imperial workshops and by (ii) the protection of a few powerful patrons which resulted in (iii) the payment of rather higher wages. To quote him, ‘the arts in the Indies would long ago have lost their beauty and delicacy if the monarch and principal Omrahs did not keep in their pay a number of artists who work in their houses, teach the children, and are stimulated to exertion by the hope of reward and the fear of the korrah. The protection afforded by powerful patrons to rich merchants and tradesmen who pay the workmen rather highr wages tends also to preserve the arts. Bernier continues: ‘I say rather higher wages, for it should not be inferred from the goodness of the manufacturers,
that the workman is held in esteem or arrives at a state of independence. Nothing but sheer necessity or blows from a cudgel keeps him employed, he never can become rich and he feels it no trifling matter if he have the means of satisfying the cravings of hunger and covering his body with the coarsest garment. If money be gained it does not in any measure go into his pocket, but only serves to increase the wealth of the merchant, who, in his turn, is not a little perplexed how to guard against some act of outrage and extortion on the part of his superiors. This is corroborated by Thevenot about the state of the arts in Delhi.

The imperial workshops helped to diffuse talent and raise the cultural level of the country. All the skilled trained artisans or apprentices, finishing their technical education (e.g., painters and musicians) were not absorbed there. The surplus were employed by the nobles and the rajahs. Again, in conformity to the accepted rules of court etiquette, the nobles had to present the rarest or best articles, natural or manufactured, to the king, princes and ministers. Hence the former had to get presentable and worthy goods manufactured by local craftsmen after supplying them with money and materials. This encouraged arts and crafts.

But by and large the condition of artisans, craftsmen and industrial workers was portrayed in contemporary sources as bad during 16th and 17th centuries.

Moreland has summed up the position, saying that the artisan in mid-17th century was substantially in the same position (at least as bad) as about 1923. He worked mainly for the benefit of merchants, purchasers and middlemen, depended on them for current expenses and had no reserve left to face a period of stress or crisis. Judged by the familiar test or resistance to the stress of famine, (e.g., the Gujarat famine of 1630-1) his economic position was unsatisfactory. The only prospect of improvement lay in the influence of a rich and powerful patron. But only a few individuals could expect such enlightened patronage. The vast majority of workers lived on the bare margin of subsistence. We may conclude with Sir Jadunath Sarkar that 'the lot of the labourers was not happy, nor conducive to the true economic development of the country'.

NON-AGRICULTURAL PRODUCTION
NOTES AND REFERENCES

A. Nature and Forms of Industrial Production.


2. Moreland’s article in JIH.

3. Moreland, IDA ch. (IX) ; Mookerji, Ec. Hist. India, Intro ; Specialization : Orme, Indostan, 412 ; Pelsaert, 60 ; (ETI), 120 ; De Laet, 88-9 ; Abdur Rahim Khan i Khanan mentions 66 castes ; Ardha Kathanak (of Banarasidas Jain) 36 ; and Pelsaert, 100, Localization : Tavernier, i. 66 ; ii. 6 ; Division of labour between men and women in textile industry by early 19th century writers. see T. Raychaudhuri in CEH. ii. 22.

3a. CEH. i. 278, 282-83 ; Ain. ii. 169, 192, 248, 356 ; Mrs. Naqvi, chs. 1 & 2 passim ; packing, Fort Wm. Consult. 17.11.1752.

4. Jajmani System and its decline : dadni :

(a) The literary compositions of Mukundaram in Bengal and of Srinath in Andhra (15th century) refer to manufacture of goods by peasants for their own needs. T. Roychaudhuri, Bengal under Akbar and Jahangir ; Chicherov, 20. This medieval trend evidently continued to the early 19th century when Buchanan found peasant women producing cloth not only for domestic needs but also for the market.

(b) Peasants engaging artisans, Chicherov, 37-8 ; See CEH. I. 279-81 ; ii. 9-10, 20-24.


Stillim : In law it meant a contract for sale, with immediate payment of the price, subject to delay. The Hedaya specifically states that the contract is not only a promise, but a sale. (Charles Hamilton, The Hedaya 2nd ed. 1870. pp. 299, 302, 308).

5. Patterns, CEH. i. 284

6. Artisan System : Moreland, IDA. In the 17th century the painter of the Coromandal pintados was helped by his family and even children. Fryer. i. 90 ; Olafsson, i. 142 ; CEH. i. 278.

6a. Khan i Dauran to Md. Jan in Orissa, SAR. Waqiat i Jahongiri 361

6b. Sarkar, SAR.

“For two years past a French factory continually emulating the Hon’ble company’s trade have advanced the price of all cloths, both coarse and fine, and obliged them to be less severe with their dalals in pricing their cloth. They have frequently told them that they were quite indifferent at their ferreting or rejecting their cloth, being sure of disposing of it advantageously to the French”. Fort William Consultations, Dec. 11, 1752, quoted in K. K. Datta’s Bengal Sudah, 470.
7. The word *karkhana* was used in a very wide sense in contemporary sources, both Persian and Marathi, treasuries, animal stables, stores of articles of food and drink besides true manufactories or workshops, where raw materials were converted into consumable articles.

IDA. 186 ; CEH. i. 286-7 ; Chicherov, 182-185 ; *Tuzuk* R. I. 215 (foreign workers) ; Ain B. i. 91-93 (Akbar’s interest) :

8. U.N. Ghoshal, HRS. 283 ; Afff, E & D. iii 578 ; Ain. B. i. 12, 93-7 ; Bernier, 258-9 ; Sarkar, *Mugh. Adm*. Ch. x.

9. *Ain. op. cit.* ; *Ain.* i. 115-6, 18-27, 272 ; Monserrate. 201, refers to karkhanas for chiselling of stones into shape, ‘Studios and work-rooms for the finer and more reputable arts, such as painting, goldsmith work, tapestry making, carpet & curtain-making and the manufacture of arms.

10. Tuzuk ; *Baharistan-l-Ghaibl*.

11. Bernier, *op. cit. Storia* ii. 431 ; Sarkar, M.A. ch. X.

11a. *Storia* ii. 405.


13. Manrique

14. Master ii. 173-4 ; CEH. i. 287 ; ii. 23.

15. Sarkar, M.A.

16. *Mirlat* (Supp) p. 11 ; Taylor *Desc. & Hist. Acctt*. 82-84. According to Chicherov certain features of the Mughal workshops were similar to those of the state manufactories in France at the class of the 17th and the beginning of the 18th centuries as well as with the imperial manufactories in Czarist Russia in 17th century, employing mainly serfs as handicraftsmen. Lenin, *Dev of Cap. in Russia*, Coll. works vol. 3. 484-6 ; CEH. i. 287.

17. Bernier, 254 ; CEH. i. 284 ; ii. 24 KK Dutta, *Survey* . . . . 109-10

18. Bernier. 259, Pelsaert, 61 ;
Storia ii. 431 ; Orme, *Indostan*, ii. 4 ; *Hist. Frag.* etc. 409 ; Forster, *Journey* etc. i. 1-4 ; Sarkar, *M.A.* (1963) 168.

19. C.E.H. i. 287 ; 277-8.

20. Joseph Needham’s monumental work, *Science and Civilization in China*, 4 vols, (1954-71) contains valuable materials for Indian technology. Not much research has been made in this subject in our country and the pioneering studies of Irfan Habib since 1969 form its fountain head. His ‘Technology and Economy of Mughal India’, Dev Raj Chanana Lectures, Delhi, 1970 has been admitted to be the source of the paragraphs on the subject in the *Camb. Econ. History*. i. 291-8. see also ii. 18-20. K. N. Chaudhuri, has an illuminating note in TWA, 272-5.

For the non-mechanical bias of Indian artisans in the period under review the remarks of Buchanan (in *A Journey from Madras through the Countries of Mysore, Canara and Malabar*, Madras, 1807) are equally applicable: "In India it is seldom that an attempt is made to accomplish anything by machinery that can be performed by human labour". See also Fryer i. 284 and Thevenot, 66 for the simple tools of the artisans.

NON-AGRICULTURAL PRODUCTION
Examples of advanced technology, in CEH. i. 292-95. Bernier's praise (p. 254) for excellent fowling pieces and muskets of India; Ovington 167 (lacquer work); Thévenot 55-6, for soldering; Examples of 'imitative innovations' in CEH. i. 293-4; of matchless ingenuity of artisans, Bernier, 254; Fryer. i. 122; Ovington, 167.

B. Industrial Labour.

21b. Hawkins (ETI), 120; Pelsaert, 60; De Laet, 88-9


25. Moreland, IDA. 191-2; Moosvi, IESHR. xiv (3), 391-401. see ch. 12. post.


28. Ibid. 228.

29. Mirat i Ahmadi, i. 260, quoted in Sarkar, Mugh. Adm. Ch. V.

30. Slave labour by Portuguese, Linschoten, i. 187-8; by Dutch, TC Roychaudhuri, Jan Co. etc. 150.

Forced Labour: Dutch, T.C. Raychaudhuri, 145; EFI (1630-33). 231-5; English, EFI (1618-21), 197-8; IA (1914), 100; My Studies in Econ. Life in Mugh. India.

31. Wilson, Early Annals etc. i. 396; Chicherov, 227-9.

32. Mandelslo, in Oaten, European Travellers in India, 181

33. Bernier, op. cit.

34. Bernier, 228.

35. Pelsaert, 60; De Laet, 88-89; Bernier, 258.


36a. Moreland, IDA. Raw Cotton was costlier than wheat (rates in A'ln); Bernier.


39. A'ln, B & P. i. 79; AKN.

40. Bernier, 228-9.

41. Sarkar, Mugh. Adm.
IV
COMMERCIAL ORGANIZATION
Commerce, Internal and External

I Preliminary Remarks

Categories of Trade—Internal and Foreign

India's commercial organization during the 16th and 17th centuries may be studied broadly under two aspects: internal trade and foreign trade. Internal or domestic trade implies distribution of goods produced within the country and comprises both inland and coastal trade. Foreign trade includes trade with Asiatic (and Indonesian), African and European countries. Quantitative assessment of the volume of the former is hardly existent as compared with the latter, in which case factory records of different companies throw light. Both were, however, of considerable volume according to European pioneers, travellers and merchants. The smooth working of this vast internal and foreign trade of India required not only a fairly adequate system of communications but also an organized land and water traffic,¹ as well as a complex mechanism of the marketing organization with banking and credit facilities² and mercantile establishments in her industrial centres, inland emporiums and ports.³ So, before we dive into the depths of internal trade, we will first have to discuss the system of transport and communications and then the marketing organization.

NOTES AND REFERENCES

1. See Section II post Transport and Communications.
2 & 3. See Section III post Marketing Organization.
II Transport and Communications

The importance of a sound and well-ramified transport system in economic life cannot be gainsaid. It 'transforms the organization in industry, creates great cities and raises the standard of living, promotes culture and unites politically.' True, anything like modern transport organization can hardly be expected in ancient and medieval India. Nevertheless it is to be borne in mind that from hoary antiquity India had extensive commercial intercourse with western Asia, Africa and Europe on one side (and also colonial with) the East Indies and the Far East on the other. For transporting cargo-laden ships, the famous Indian sea-ports necessarily depended on inland emporiums and centres of production for continuous supply of goods. In fine, judged by prevailing standards, India's vast inland and international trade was kept a-going by satisfactory facilities of internal transport and communications, both by water and by land, however limited or primitive these might be, when compared to modern times. Tavernier found these to be 'not less convenient' than arrangements, for comfortable travel prevailing in France or Italy.\(^1\)

A. Water Transport: Northern and Southern India

Boat traffic flourished on rivers, subject to floods, winds and state of security. Water transport on inland rivers or along the coast, being comparatively cheaper, was used mostly for inter-regional or cross-country traffic in cheap, bulky goods (food grains, salt and saltpetre) or costlier ones. Northern India had three chief natural waterways,—the Indus, the Ganges and the Brahmaputra. The first two and the channels in Bengal were fully used. Southern India also had several river systems, the Narmada, the Tapti, the Godavari, the Krishna and the Kaveri, though their navigability was limited.

Akbar's Admiralty department (Mir Bahri) had four principal objectives: (i) building of ships and boats for inland navigation: (ii) the supply of experienced sailors; (iii) watch and ward over the rivers; and (iv) imposition, realization and remission of duties.\(^2\) While boats abounded throughout the empire, Bengal, Kashmir and Thatta were, in Abul Fazl's words, 'the centre upon which all commerce moves'. To these we must also include the Punjab. The boats of the imperial nawwara were strong enough to carry elephants.
Agra-Bengal: Accounts of successive foreign travellers throw light on the nature of the water traffic between Agra and Bengal. These make it clear that any talk of the navigability of the Ganges throughout is a myth. As a matter of fact it was navigable even in winter between deltaic Bengal and Patna and earlier since the monsoon from Allahabad down. Thus the Ganges connected Allahabad, Benares, Patna and Rajmahal for purposes of trade and thence along its many branches with Malda, Hughli and Dacca. In the west, the Jamuna connected Allahabad with Agra and the various branches of the Ganges enabled trade contacts with the interior. Fitch (1583) sailed from Agra to Satgaon in Bengal with 180 boats (barges) laden with salt, opium, hinge, lead, carpets, etc., each weighing 400 to 500 tuns. He referred to the numerous, large haturia boats (with 24 to 26 oars but without any covering), which frequented the periodical markets (hats) of Bengal to purchase rice and other goods. Manrique saw more than 2000 boats anchoring at Rajmahal. Peter Mundy (c. 1632) refers not only to pleasure boats (bajra or mayurpankhi) but also to ‘great lighters’ or barges (Gabares, gabbarts or patellas), each of 300 or 400 tons plying regularly between Agra and Dacca in Bengal, specially during rainy season, stopping at important inland riparian towns like Etawah, Allahabad, Patna, etc., and carrying salt and varieties of goods. These boats with houses in the middle for women, transported ‘great men with their household and staff’. Some were so huge that they had ‘several rooms able to carry a pretty village with all their inhabitants and goods’, a report seemingly exaggerated. Bowrey (1669-79) also found large and very strongly built, flat-bottomed boats (Patellas) sailing between Patna and Hughli carrying goods weighing 4 to 6 thousand Bengal maunds. While the barges on the Ganges measured usually 400-500 tuns, those on the Jamuna only 100 tuns.

Kashmir, Punjab and Sind may be taken together as forming the Indus system. The tradition of boats being the principal means of transport over the Punjab waters continued from the time of Nearchos to that of Akbar. Abul Fazl tells us that the Thatta Sarkar of Sind alone had 40,000 boats of various kinds, large and small. In 1636 a storm at Thatta destroyed about 100 ships laden and unladen. The Indus remained navigable to Thatta in the delta till mid-17th century and Multan was also a busy trade centre then. But owing to

COMMERCE, INTERNAL AND EXTERNAL
silt ing in the 17th century Thatta declined and goods came overland to Surat. Towards the end of the 17th century and beginning of the 18th, there were 4200 big and 4400 small boats.\textsuperscript{7} In Thatta boats were used for purposes of communication. It took 18 days to move down from Lahore to Thatta but the journey upstream took 6-7 weeks.\textsuperscript{8} According to Alexander Hamilton (1688-1723) flat-bottomed boats on the Indus could not only load 200 tuns of goods in their hold, let out in apartments for freighters but were also provided with cabins possessing incomparable amenities ‘from stern to stem’, which were hired out to passengers. Kashmir was also negotiable, had about 30,000, some sailing along a branch of the Indus even to the province of Kabul.\textsuperscript{9} Large boats, 60 tuns and above, built at Lahore, Multan and Allahabad, were sent to the coast.\textsuperscript{10}

Along the West and South coasts even big sea-worthy vessels were constructed. There was improvement of harbours and seamen grew in experience. The best sea-men came from Malabar. Regarding internal water transport, however, the peninsular rivers were not much navigable except near their mouths. The manchoue at Goa, comparable to a gondola, perhaps the same as the ‘baloon’ of Fryer, was very comfortable. The junks of Surat carried 1000 to 1200 tuns of goods. The massoola and cattamaran, as Bowrey says, were used in the Coromandel Coast.

Some areas, including deltaic Bengal, however, were deficient in boats owing to scarcity of timber. Big earthen jars were used near Tamluk to cross rivers. In Vijaynagar basket-boats, made of osier or cane and leather, of 10-12 feet in diameter, were used.\textsuperscript{11}

B. Land Transport

This depended on certain pre-requisites : means of transport—carts and coaches; animal carriers—beasts and men; construction and maintenance of highways—roads, bridges and rest-houses.

(i) During the period under review the chief means of transport were carts and animals. Carts were drawn mostly on level country by slow-moving bullocks, buffaloes, camels, elephants and less by horses. Some carts and coaches were said to have been invented by Akbar, including a travelling bath, carriages with cover (chatridar), generally used by women, or without, usually drawn by oxen.\textsuperscript{12} Horse-drawn carriages were called ghurbahals. Sir Thomas Roe introduced
an English coach (costing £ 151.11s) which he presented to Jahangir, who derided it as ‘little and poor’. It was imitated by ‘curious artificers’ of India, but did not become popular. The four-wheeled coaches were rare in western Deccan, being used, according to Dr. Fryer, by European merchants.

(ii) The usual beasts of burden were oxen, buffaloes, asses, mules, camels and elephants to a small extent. Camels, were the usual draught animals after oxen, in Rajputana and Sind (where these were most abundant) : these were very useful in transporting goods and men in caravans (cavila). Elephants could be used only by the very rich and for transporting artillery and heavy goods. Horses were rarely used, being in short supply ; the imported ones were very costly. Even the coach of the Bombay Governor was ox-drawn. Pietro della Valle (1623) found oxen running and galloping like horses. Fitch also confirms this as he found the oxen attached to silk covered coaches ‘running with any horse’. Ovington attributed the ‘great facility and speed of foot’ to ‘constant and long exercise’. The traditional two-wheeled bullock-cart was the most common carriage used both for passengers and goods. There were human carriers also. About the palanquin (palki), described by Abul Fazl, Ovington wrote that their carriage was ‘as easie and pleasant as that of our Chairs in the streets of London, but far surpasseth them in point of state and quick dispatches of a Journey’. In hilly areas transport of men and goods was attended with special problems. Here elephants, mules, hill-ponies and porters, male and female, had to be used.

(iii) Building and maintaining roads for commercial and military purposes was a recognized function of the State in ancient and medieval India. But the principles of road construction were also understood. Before Akbar’s time, Ghiyasuddin Balban, Firuz Tughlaq and Sher Shah were famous for it. Sher Shah’s roads were specially famous, flanked by trees and dotted with wells and sarais at every two kos (or about 4 miles) : (a) Sonargaon in Bengal to Rohtas in the Punjab, known as the Badshahi road (precursor of Grand Trunk Road), admired by European travellers of the 17th century; (b) Agra to Burhanpur; (c) Agra to Jodhpur and Chitor. Akbar ordered the Khaibar Pass to be made negotiable for wheeled traffic.

COMMERCE, INTERNAL AND EXTERNAL 111
There were also highways linking the main cities in a province:

Bengal:
(a) Chittagong-Noakhali-Comilla-Dacca-Mymenshingh;
(d) Rajshahi-Bogra-Rangpur, probably extending south via Malda and Murshidabad to the Sundarbans.\(^{20}\)

Assam: The rulers had extensive roads within:
(a) Kamal Ali (between Cooch Behar and Narainpur, 300 miles)
(b) Tengra Raj Ali (between Rangpur and Namrup, over 400 miles).\(^{21}\)

In Peninsular India rivers not being very navigable, inland trade to the sea ports was carried mostly by land. The Cholas built trunk roads from Kottaru near Cape Comorin to the Mahanadi (if not the Ganges). Tipu was also reputed for his 'road-engineering', especially from the left bank of the Kaveri to Hosur and Dharmapuri taluks, and from Krishnagiri to Budi-Kota ('Army Road').\(^{22}\)

The main highways were generally well maintained. These were measured and marked by Kos posts for marking distance as well directions, and whitened by villagers for the benefit of letter-couriers in dark and rainy nights. Except a few paved roads, the great majority of highways and city roads were Kuccha, i.e., not paved with brick or stone. Where the roads were in a bad condition, a cart had to be prevented from overturning by two peons or soldiers on either side with ropes. Waggon traffic was liable to be suspended during rains.\(^{23}\)

C. Bridges

Bridges over rivers were needed to ensure continous cart or peddlar traffic or military movements. Those of stone or masonry were an index of engineering skill. While these generally spanned the smaller rivers, the larger ones were crossed by bridges of boats or by ferries. Where there were neither bridges or boats one had to wade through the water. There were also wooden and stone bridges during the Turko-Afghan period.\(^{24}\)

During the Mughal period we have only a few references to arched bridges: (i) over the Gumti (at Jaunpur), 654 ft long, built by Munim Khan under Akbar, costing 30 lakhs of rupees in three years; (ii) over the Mahi (in Malwa), 140 yds long and 4 yds wide, built by Abul Hasan Mir Bakhshi under Jahangir in three days; (iii) 'Bara Pul'
(Great Bridge) near Delhi of 11 arches built about 1612; (iv) at Ahmadabad with many arches; (v) two over Sindh river at Narwar near Gwalior, each with 22 arches (c. 1660); (vi) over the Jajwar at Mandu near Dholpur; (vii) on the Musi at Bhagnagar or Golkonda, resembling the Pont Neuf at Paris in beauty; (viii) of 36 arches at Goa; (ix) at Mohan in U.P. built by Raja Nawal Rai, minister of Safdar Jang.25

**Stone bridges**: Pratap Singha, Ahom King (1603-41) built a stone bridge over the Darika river, besides many wooden bridges.26

**Wooden bridges**: A few instances were (i) in Kashmir, many permanent; (ii) on the Jhelum, in Srinagar; and (iii) two long ones at Masulipatam.27

**Masonry bridges**: Rudra Singh (1629-1714) of Assam built masonry bridges over the Namdang and Dimau rivers, many roads and set up an extensive trade with Tibet.28 Mir Jumla built a brick bridge over the Pagla river (c. 1660).29

**Boat bridges**: Humayun invented a moving bridge (jasr-i-rawan). Boats were tied with hooks and chains and covered with wooden boards firmly with nails, allowing riders or passengers to cross from bank to bank.30 Bridges of boats were thrown on rivers at short notice when needed. Such bridges were very common in Kashmir. Bernier describes these while accompanying Aurangzeb’s army to Kashmir. In absence of any bridge, boats were used to cross rivers.

### D. Rest Houses

State construction and maintenance of rest houses (Sarais, caravansarais, choultries, dharmasalas, inns) was regarded as an act of public welfare or utility. The tradition was at least as old as the Maurya period. Usually built of brick or stone, along highways and in towns, the rest houses were then not only necessary for merchants, travellers and pilgrims for shelter and rest but also for security. This was provided either by watchmen and guards or, in their absence, by the staff of the establishment. The 15th century Russian traveller, Nikitin, wrote: ‘In the land of India it is the custom for foreign traders to stop at inns.’ Evidently he forgot to mention about the indigenous traders who also needed these inns badly. Firuz Tughlaq is credited with building about 100 sarais and Sher Shah 1700. The latter, in particular, is said to have made separate arrangements for Hindus.
and Muhammadans as regards lodgings, mosques, and wells for water, bed, food or raw provisions (like wheat or flour) and even fodder. Islam Shah was equally solicitous.

In the Mughal period not only the emperors and members of the royal family—queens, princes, princesses, but ‘rich and powerful men’, nobles and eminent men, considered it to be an important duty of theirs to undertake such buildings and made bequests for the same. Even neighbouring villages contributed to their erection at times. Nizamuddin refers to some State-controlled sarais and these were endowed with land in the neighbourhood. Foreign travellers like Fitch, Finch, Hawkins, Withington, Manrique, Mundy, Mandelslo, Tavernier, Bernier, Thevenot, Manucci and others testify to the condition of the sarais though the sum total of information is scanty, and their assessment was not unanimous. The facilities offered by these, frequency, nature of services, were not uniform. On Agra-Patna and Lahore-Multan routes, there were sarais almost at the end of a day’s journey. But on Agra-Surat route via Rajputana sarais were scarcely found even in a journey of 8 or 10 days. The excellent accommodation on Agra-Patna highway was rarely approached, while Orissa, not on any highway, had hardly any sarai. But even when sarais were rare, food was available in plenty. Hence conditions were neither intolerable nor inadequate to the average merchant or traveller.

Generally speaking the inns were of two broad kinds: those for the comparatively poor consisting of 50-60 thatched huts enclosed within walls or hedges: and those catering to richer sections. The latter were located in large towns and were fortified, spacious with ‘different rooms, halls and verandahs with trees inside the courtyard, and many provision shops.’ The inns supplied cots though not keepers. Cooking was sometimes done for one paise or at most two; Manrique complimented them for their honesty as ‘unlike inn-keepers and stable men of Europe’, they did not fleece the travellers. According to Manucci each such big inn had proper security arrangements with one officer (¿Kotwal) closing the gates at sunset. Next morning the watchman warned all inmates, thrice to report all suspected thefts for recovering the goods and punishing the culprit before the gates were opened. Some of these were not only spacious but had gardens and courtyards round or inside them. Withington and Mundy refer to female attendants (bhatyārans) of lodgers. Delhi, according
to Mandelslo, had 80 *sarais* for foreign merchants, most of which were three stories high with commodious lodgings, storehouses, vaults and stables. The ‘Arban Sarai’ built by Haji Begum in 1560 had an accommodation of only 300. Bernier, who had scant praise for the eastern inns, waxed eloquent over the *Begum Sarai* built by Jahanara at Delhi, for its excellent residential and security arrangements and compared it with the *Place Royale* in Paris. But Agra with its 90 *sarais* surpassed Delhi and Lahore not only in numbers but also in their quality. These, according to Thevenot, made the ‘beauty’ of Agra. The biggest *sarai* of the empire was the Nurmahal *ki Sarai* at Agra, built by Nur Jahan and accommodating 2000-3000 people besides 500 horses.

The rest houses impressed the foreign travellers differently. Bernier was highly critical. According to him inns were like large barns, with ‘hundreds of human beings, mingled with their horses, mules and camels;’ ‘In summer these are hot and suffocating and in winter nothing but the breath of so many animals prevents the inmates from dying of cold’. According to Manucci, however, the routes between Agra and Dacca were much frequented and full of villages and *sarais* each accommodating about 800-1000 men besides horses, camels, and carts and the food was good and cheap. Tavernier says that Benares had several large and well-built *sarais*, for the benefit of merchants, travellers and pilgrims. Patna, a centre of international commerce, ‘offered all kinds of amenities’ to its local citizens and itinerant visitors, according to Manrique. Among its *sarais* one was situated near Jafar Khan’s garden on its eastern environs, while the city itself had the famous Saif Khan’s *Sarai*, where rooms were hired on a monthly basis. It is not clear to which one Mundy refers as ‘the fairest *sarai* that I have yet seen or I think is in India.’ Centres of trade also had strong and beautiful *sarais* as at Chaparghata, Hughli and Dacca (*Katra*, 1645), etc. Bishop Heber paid a glowing compliment to the *sarais* in northern India, even in their ruins.

In Peninsular India also there were inns (*chatras*, *sarais* or choultries) in important commercial marts like Calicut, Aurangabad, Golkonda, Tenara, Surat and Chiknayakanhalli. Reference may be made to *sarais* and *dharmasalas* built by generous Marwari benefactors, e.g., *sarais* bearing the names of Jagadis, Mulchand, Mulukchand and Badridas (cf. *Chahar Gulshan* c. 1720).31
E. Means of Transport

Before the days of mechanical transport, land transport was carried on the bullock-carts and pack animals (especially the ox and the camel) in large caravans (cafílas) of 10 to 20,000 and coaches under heterogeneous nomadic tribes of merchants (banjaras), Baluchis, Jats, etc., carters and camelleers over long distances from Bengal to Agra and therefrom to Multan, Lahore, Bucker on the Indus as well as to Surat. A banjara camp (tanda) had its king, while the camelleers had a muqaddam (chief). For security against thieves and robbers both of these were usually armed and sometimes special guards were provided. The accounts of the foreign travellers of the period throw light on the part played by these nomadic carriers in contemporary socio-economic life in regulating the system, nature and extent of land transport. Peter Mundy (1628-34) found these itinerant banjaras to be ever on the move along with their camp (tanda) including men, women and children and oxen (14-20,000) each with a load of 4 mds.), which they owned or hired to merchants, buying grain where it was cheap and selling it where it was dear and also re-loading the animals with articles like salt, sugar and butter.32 Tavernier was astonished to behold caravans of 10-12,000 oxen each carrying a load of rice, corn and salt weighing 300-350 litres. Besides the banjaras there were the banias and the khatris, who also moved in small companies or large caravans (cafílas) over long distances.

But sometimes troubles arose. The carters were not under any strong control but were masters of their activities and movements, dictated prices, struck work or even fled to escape heavy burdens. There might be mutual bloody clashes and plunder within, and fierce confrontation for right of passage on a narrow road. Journey was delayed by damages to carts (as in sandy Rajputana) and consequential repairs. Traders hiring draught animals had to suffer loss in case of their death (especially on Agra-Surat route), or if the damaged cargo was written off. The supply of animals also was short during war and famine.33

Land transport was subject to various factors:

1. **seasons**: Four months of rain suspended traffic, while four months of hot weather made fodder and water scarce.
(ii) Peace and security: War conditions disturbed the normal flow of traffic. Roads were not always safe. Of the two highways from Agra to the Gujarat ports, the Malwa or Central India route was generally less secure than the Rajputana route.

(iii) Difference in level of prices.

(iv) Bulky goods (grain) were carried by banjaras with 10-12,000 pack oxen.

Information about demand is essential for marketing transactions. But no integrated market could develop for lack of public postal system, though the Mughals had organized an efficient state postal system. The people had to hire private runners (pattamars) and at Patna messengers (bazar qasids).44

An idea of the duration of journey and rates of transport from Patna to Agra in the 17th century may be gathered from the reports of Robert Hughes (1620), Tavernier and John Marshall (1668-72).

(a) It took 30-35 days (according to Hughes), 25 days (Manrique) and 30-40 days (according to John Marshall) for the overland journey of 544 miles between Agra and Patna, while messengers could take only 11 days and sometimes 15-25 days. It took a runner 9 days to go from Medinipur to Hughli and back. For the journey between Surat and Agra (550 miles) a cart took on an average about 40 days via Burhanpur (according to Marshall) and 35 days (and sometimes even 70 days according to Tavernier, while laden carts and camels took 50 days. He took 29 days from Belgrade to Constantinople. Such journey time cannot be held to be excessive in the circumstances of the period.

(b) Throughout the year (except 4 months of rainy season), oxen, carts, wagons or horses could be hired. Judged by weight, a cart costs Rs. 153 (for 81 mds. and Rs. 8 extra for punctuality) and Rs. 80 (for 44 mds. drawn by 6 oxen), and Rs. 22 (drawn by 2 oxen and carrying 4 men). Throughout India, says Tavernier, the daily rate of a cart with 2 oxen was ordinarily one rupee (Surat to Agra, and Surat to Golkonda, both about 550 miles cost Rs. 40 to 45). The journey from Agra to Lahore took 15 days (Bernier) and 21 days (Manrique).55

Long-distance travel was generally confined to merchants and pilgrims. Boats on water and carts, carriages and litters (doolis, chowdoolis, palkis) or animals on land were used. Della Valle found 'abundance of coaches' in India, for travel not only in cities but also

COMMERCE, INTERNAL AND EXTERNAL
in the country. For both Tavernier and Thevenot, a coach with two oxen could be hired at about a rupee a day: the Surat-Agra or Surat-Golkonda journey (35-40 days) costing about Rs. 40-45. Abul Fazl’s sukhasan resembled the palanchino or palanquin of Europeans, the modern tanzam and the manchal (muncheel) in Madras. The Kahars, numbering at least four and eight or twelve for long distances, and paid Rs. 4-5 a month, were faster and moved at an easier pace than the chairman of Paris. Court ladies used the palki, chaudol and the mikdember (corresponding to the howda) on the elephant. The latter was also used by kings and princes. The Mughal emperor used the takht-i-rawan or singhasan, borne on men’s shoulders. From Golkonda to Cape Comorin carriages were rare; while the rich used palanquins and litters, ordinary people had to depend on oxen and pack horses. However primitive these might appear to a moderner, such means of travelling were praised by Tavernier to have been as convenient and comfortable as in France or Italy, then the most civilisec countries in Europe. In fact, though insignificant as compared to modern age, India’s internal transit system, like her maritime trade, was ‘a remarkable achievement’.

NOTES AND REFERENCES

1. T.C. Bigham, Transportation, Principles and Problems, p. 11; B. Sarkar, Inland Trade and Communication, in J.L. Dept. latters, C.U.

1a. Tavernier, i. 32.

2. Aín (Bloch) i.

Details about boat hire and ferry rates in Akbar’s time, ibid, 36; salaries, tolls, etc., ibid. 289-92, 389; CEH. i. 337-9.

3. Purchas x. 175; Mundy, ii. 158, 224, 87-8; Bowery, 225-9; Manrique, i-433, ii. 135; Tavernier, i. 101; CEH. i.337-9; Other varieties were Olocko, Budgaroo (Bajra), Purgoo (Pericose of Fitch, or frigate, firkat in Persian); and Boora.


6. E & D. vii. 61

7. Navigability, CEH. i. 337; Chahar Gulshan, Tr. Sarkar, Ind. of Aur. 68, 71.


10. Moreland, op. cit.

148

MUGHAL ECONOMY
11. *Ain*, i. 289-92, 389; Sewell (old ed), 259; Pyrard de Laval, i. Pt. i. 42-3; Fryer, i, 182, 79; Mundy ii. 30; Bowrey, 42-43. Manrique lay on stomach on the jar covering its mouth and paddled with his hands and feet at Tamluk (ii. 151). CEH. i. 352 for relative charges. EF 1637-41. 135-6.

12. *Ain*. B. i. 150. These perhaps correspond to the modern *tonga* (covered) and *ekka* (uncovered) respectively.

13. *Embassy*, i. 67, 118; ii. 320, 322, 347; *Tuzuk*.

14. Fryer iii. 157-8; KT. in Sarkar *op. cit* 83.

15. Marco Polo (Yule) ii. 340; Fryer. i. 178, 295; Ball’s Tavernier i. 39, 385. Mundy refers to use of horses of Cutch (*kechees or kachis*) in only two out of twenty imperial coaches (ii. 193). *Ain* B. i. 132 ff. 215, 234 (for dearness of horses). For discussion on the use of horses, see CEH. ii. 350.

16. Fitch, 17-18; Della Valle, i. 21; Ovington, 151-2.

17. *Ain* 254-7; Finch, 170; Mundy, ii. 283; Ovington, 151; Bernier 392; Tavernier, ii. 245-7; see my Glimpses of Medieval Bihar Econ; CEH. 350-1.


23. Babur, ii. 629; Finch (ETI); Ain B. i. 289n; Della Valle, i. 95; Mundy, ii. 83-4, 122; Bernier, 284; *Storia*, i. 164; Ball’s Tavernier, i. 96, 292, 152, 43.


25. (i) IG. xii. 135; xiv. 83;
(ii) E & D. vi. 363
(iii) Finch; Arch. Sur. Ind. i. 222
(iv) Della Valle, i. 102;
(v) Arch. Sur. Ind. ii. 325-7;
(vi) & (vii). Ball’s Tavernier, i. 65, 151
(viii) Fryer, i. 81.
(ix) IG. xvii. 383.

26. Gait. 117

27. Bernier, 380, 398; Fryer, i. 81

28. Gait, 175.

29. Ball’s Tavernier, i. 128; Taylor, *Dacca*, 97; *My Mir Jumla* (2nd edn.)

30. AKN (Dev.) i. 648n; Khwandamir Tr. 44.

31. Major, 10 (Nikitin); E & D iv. 417 (Sher); *Ain* (B & P). i. 232; J & S. ii. 39 (sarais among ‘pious foundations’); Nizamuddin ii. 175 (State-controlled Sarais); *Tuzuk J (R)*. 8; E & D vi. 284; Aurangzeb’s farman to Md. Hashim (‘a pious act to endow sarais’), Sarkar, *Mugh. Adm.* ch. xi; Fitch 225 (Withington); *Storia* i. 68; ii. 96; Bernier, 233, 281; Manucci, i. 68; Christopher Farewell (1614). *An East India Collation* quoted in Embassy i. 90n;

*COMMERCCE, INTERNAL AND EXTERNAL*
CEH. i. 354-6. Names Collected by Mrs. Naqvi. 80-1. Delhi. A few other Sarais named after Ruhulla Khan, Qazi Khan, Farid Bukhari, Khwajah.

Agra-Akbari Sarai, Bhore ki Sarai, Jalal Khan ki Sarai, Itibar Khan ki Sarai, Lahore-(Abdur Rahim) Khan i Khanan ki Sarai.

Benares, Tavernier, ii. 118; For Patna, Manrique, ii. 98, 105, 140; Mundy ii. 159; my Studies in Econ. Life in Mughal India, 253; my Glimpses of Medieval Bihar Economy; Heber, Journey...ii. 26-7.

Southern India: Pyard, i. 41; Ball's Tavernier, i. 32-3; 146, 152, 173; Jourdain, 147; Bowrey, 117; Rice, Mysore and Coorg from Inscriptions, 178-9; Forbes, Oriental Memoirs i. 250; Stavorinus, Voyages...ii. 477.

32. Mundy. ii. 95-6, 98, 115; Manrique wrote of the Great Caravan of 60,000 camels carrying pilgrims and goods from Damascus to Mecca. ii. 180.

33. Tav. i. 32-3; Mundy, ii. 282f, 287, 293, 367-8; Dagh Reg. (16331-4) 87, 146; CEH. i. 354.

34. CEH. i. 356.

35. Mundy, ii. 368; Fryer, i. 279; Ovington, 149; Tavernier, i. 37-8, 120, 95; ii. 29; Bernier, 358; Manrique, ii. 179, 221; i 424, 36-7. Time for other routes, CEH. i. 353. see also ibid, 352, 356; Khan, JMI. 425; Tavernier, i. 45.

36. Della Valle i. 21, 31, 183-4; Tav. i. 44, 45; Thev. 53.

37. Description and its convenience, Ain J. S. ii. 134. 'most convenient and honourable carriages'. Della Valle. i, 183; Bowrey, 86; Mundy ii. Fig. 12.

38. Tav. i. 45, 175; Nuniz in Sewell, 389.

39. Tavernier, i. 32-3, 39; his remark would evidently apply to the well-maintained imperial highways or better class of roads with avenues of trees and flanked occasionally by rest-houses, markets and wells. Earlier, Mundy had the sad experience of journeying on even the neglected and 'very bad' imperial highway between Allahabad and Benares (August, 1632). The ground was 'uneven' and the rains made wheeled traffic out of question, necessitating the use of oxen and porters. Sometimes the roads were narrow and delays took place when these were blocked by caravans of pack oxen. CEH. i. 353-4.

40. Moreland, IDA. 243.
III Marketing Organization

The Medieval Market: its categories

Broadly speaking the marketing organization in India during the 16th and 17th centuries conformed to the general economic organization in villages and towns and pulsated with the developments in those areas. In the previous sections we have examined the self-sufficient, domestic, agrarian economy of the village, the growing proliferation of crafts or commodity products of peasant industries, and still later, of artisan-handicrafts which catered to the needs of wider circles of neighbouring villages or of surrounding, and distant towns and even distant countries.

But to say that there were both local rural and urban markets in the country does not much help in forming a clear picture of the marketing organization.

The medieval Indian market scene cannot be understood by merely applying J. C. Van Leer's classic description of 'the trading world of Asia' in early 17th century, stressing the importance of 'the small trader and the pedlar' and comprising extremely fragmented and multiple markets marked by unstable prices, refurbished recently by Niels Steensgaard. For the structure was more sophisticated and complex. True, there were different systems of weights and measures, currency and taxation in the country and there were inland toll barriers. True also the small trader and pedlar were there, but there was also other, bigger merchants, all constituting a part of a wide network responding to the demands of internal and international trade.

The pre-modern market, though undoubtedly small, judged by modern standards, had great economic, spatial and sociological importance. By performing a two-fold service, of attracting commodities for local consumers and distributing these for distant ones, it involved some exchange at a given place, giving rise to diverse social relationships.

The Indian markets, rural and urban, can be graded into several categories according to their function and area served, varying from the tiny village hat to international commercial emporiums, 'primary nodal markets' of Adam Smith's connotation. In other words the market network had multiple tiers, usually but not invariably interlinked.
Rural Markets: (i) To the village markets, usually called the hat, held weekly or more frequently, according to need, now in one village, now in another, the local peasants brought the surplus products of their fields or farms, the local artisans or those of artisans' settlements in the neighbourhood came with their handicrafts, while rural merchants (beoparis or chettis, etc.) also brought various goods, all for exchange. The last two also had their small shops. In these hats and shops were available various articles of common household consumption,—grain, vegetables, fruits, salt, butter, pepper, cotton thread, coarse cloths, iron goods, etc.

Rural markets were inseparable adjuncts of villages in India's economic life. During 14th century Ibn Batutah, in sailing along the Bhagirathi (Hugli), felt that he was 'going through a market'. In the 16th century similar conditions continued. Mukundaram found merchants peddling household articles at the hats or rural markets. Both the banks along the river Saraswati near Satgaon were studded with villages where fairs were held on different days of the week so that the local farmers and artisans could move from village to village to dispose of their wares in daily markets to merchants who cruised on boats. The Venetian merchant, Caesar Fredericke, also followed their example to purchase the articles he needed. Early in the 17th-century weavers sold their cloths to 'great store of buyers' in the rural markets in the environs of Patna. In the sixties of the same century weavers sold cloth in rural markets of Kasimibazar. Epigraphic sources of 14th-16th centuries bespeak of a liberal taxation policy of rulers. In North Arcot (1569), no tax was charged on goods sold on two days, Tuesday and Wednesday (probably weekly market days), but charging some taxes only on certain articles. The local merchants, however, had to pay a money tax on their shops. Early in the 17th century Salbancke (1609) found peasants, weavers and artisans of artisans' settlements bringing their products to rural markets of Sobay, a village in Gujarat. A similar situation was witnessed in early 19th century by Buchanan and Colebrooke in Bihar, Mysore, and Bengal. Such markets would conform to Leur's idea of the 'isolated' rural market with peddling trade.

(ii) Next, were the periodic fairs, the melas of India, where 'specialized traders' assembled to sell and fill their stocks and consumers could also come. A striking example of such a mela was the fair held
on the *purnima* (full moon day) of Kartik (October-November) at Sonepur opposite Patna at the junction of the Ganges and the Gandak. An interesting account of it has been left by John Marshall. It is even now the biggest cattle fair in India and considered to be second to that at Nijni Novgorod in Russia.  

(iii) Even some villages had *ganjes* or *gunjes* and *mandis*, or regular wholesale markets, or marts.

*Urban markets*: The peasants, artisans and merchants sometimes carried rural products as well as urban crafts to the urban markets for local consumption. With increased output, increasing numbers of direct producers, the village farmers and artisans, brought their goods for sale in the markets of neighbouring industrial and commercial centres, while more and more merchants also brought their wares collected from various places for greater profit. The markets might either be small-scale (*bazaars*) or wholesale *mandis* or *ganjes*. Thus through these urban markets some big industrial towns developed as regional marketing centres linking up several villages, smaller towns as well as big towns of one region economically. In plain language, some towns grew to be important trade emporiums, as later discussed in the section on urbanization.

After the *hat* and the *fairs* the next higher category of markets was the fully specialized ‘single producing market’. It was not centred at one place or town but it was a conglomeration of small villages and towns constituting a single unit and producing one commodity like indigo (as Biana and Sarkhej), saltpetre (as Chapra district in Bihar) raw silk (as Kasimbazar), muslin (as Dacca), etc. Traders flocked there as these offered many advantages in price.

Then there were inland emporia, regional or provincial commercial towns, serving as entrepots for the hinterland for redistribution, inland markets like Patna, Benares, Agra, Burhanpur, Lahore, Multan, etc. These grew because of geographical or political factors,—their location at crossroads of inter-regional trade or position as administrative centres and hence as vast markets attracting traders. These constituted ‘secondary interior markets’ and were ‘more sensitive to catchment areas and the configuration of trade routes’ than the seaports, though performing similar functions.

*At the apex were the great seaports*, international emporiums for long distance trade, corresponding to the concept of ‘primary nodal
markets' of Adam Smith, offering numerous services and goods to local and foreign merchants. Such were Surat, Masulipatam and Hughli in India, along with Jeddah, Mocha, Gombroon, Malacca, Achin and Canton. Here the merchants served as intermediaries between the widely distant producing and the consuming markets. Here came imported and coastal trade goods, and therefrom were exported inland produce. The merchants' carrying trade or 'multilateral trade' was a 'secondary development of their purely bilateral trade'.

Each of the last three emporia, again, included three types of market: (a) a local market for the resident population; (b) a 'wholesale spotmarket', for retail trade, the bazar and inter-regional trade; (c) growing out of it, a 'wholesale forward market'.

Here the role of the urban markets may be illustrated by a few examples. In northern India, the markets (bazar) of Lahore, Delhi, Agra, Jaunpur, attracted goods of various kinds from the surrounding areas. The Sikandra Bazar of Agra was the point of disembarkation of provisions and grain coming across the Jamuna. Patna became the central market centre of silk and cotton products of surrounding places within a radius of about 25-30 miles. Bhagalpur, had a gunj or grain market named after Shuja that still survives today in an altered form. Similarly in Bengal, the urban markets of Gaur, Rajmahal, Dacca (Sonargaon), Kasimbazar and Hughli became important, while silk fabrics of Malda district were supplied to other towns like Dacca, Rajmahel and Murshidabad. In Orissa, besides Puri and Cuttack there was Balasore; the market for the fabrics of places like Hariharpur, Jaleswar, etc. In the east coast besides Ganjam, Vizagapatam and Madras, there was Masulipatam in Golkonda, which attracted the wares of South Krishna delta (Vetapellam) and Godavari delta (Polakkollu). Narsapur was the centre of villages within a radius of 20-30 miles and the use of a lead coin (picans) was the index of its economic influence. In Maharashtra, Goa, and Belgaum were the marketing centres of goods of respective hinterlands. Sehwan was a local trade centre in Sind, while the smoked fish of Thatta was sent to ports and other cities there. In Gujarat, Cambay, Surat and Ahmadabad were the emporiums of articles of the hinterlands. For an idea of the 'great bazars' of Surat and Ahmadabad, etc., we are indebted to a few 17th century European travellers. Pietro della Valle (1623)
spoke of the ‘handsome street, strait, long and very broad, full of shops of various trades’ of Ahmadabad (Bezari Kelan, Bazar i-Kalan, the great market). Fryer described the crowded cloth market and pedlars’ stalls of Surat.

This tendency to the establishment of a domestic market within one region was more apparent in Bengal, Gujarat and Golkonda than in Orissa, Maharashtra or Rajputana.

We do not possess much information about the organization of the town markets. The main bazars of Delhi, Agra, Lahore, Patna, etc., were known as chauks. Delhi had chandni chauk and Sadullah Khan chauk, several gunjes (enclosed markets) besides other bazars for special goods. The Delhi bazar was well-planned, each article having a special arrangement. The bazars of Delhi and Lahore were paved. Curiously enough the main bazar of Agra was not so well planned.

Bernier, however, was not well satisfied with the bazars except the fruit market. His description of Delhi did not differ much from Linschoten’s description of Goa under the Portuguese at the end of the 16th century.4

Merchants and Middlemen

The marketing organization, including the commercial scene of India, was then dominated by a heterogenous body of merchants and financiers, great and small. As K.N. Chaudhury observes: ‘........... the Asian entrepreneurial structure included both great and small merchants........’. The small traders and pedlars of Van Leur’s connotation co-existed with great merchants who compared favourably with princes and ‘most successful merchant of London and Amsterdam’ in both wealth and power. The European companies’ records show that the commercial community of India engaged in marketing and distribution was prosperous and enterprising. Hierarchically the merchants may be categorized into four classes according to their wealth and functions. Socially, again, this community comprised both groups and individuals. The groups belonged to a small number of specialized castes or races, the Muslims of the sea-board, Persians Mughals, Pathans in different parts of the Mughal empire; the Baniyas and Parseis of Gujarat; the Chettis and Komatis of the east coast and the south; the Marwaris (Hindu and Jain) in Rajasthan; and the Khatris in Hindustan and the Punjab.
Combining their economic status (‘functional distinction’) and ‘social affiliation’, we may group the merchants as follows. First, the great merchants were exceptionally able and wealthy, dominating the commercial emporiums and owned not only big mercantile marines but also vast commercial domains. With their far-flung network of dealers and agents they virtually controlled internal trade, not only the entire wholesale trade but also inter-regional trade of the country; conducted the market through a monopoly or quasi-monopoly; and also regulated its foreign trade, and some were rich enough to purchase the total imports of the European companies. If Europe had her Medicis, Fuggers and Tripqs, India had Baharji Bohra (Virji Vora of English factory records), Abdul Ghafur and his descendants, Kasi Viranna (Cassa Verona), the Jagat Seths and others.

Such great merchants were either members of a few merchant communities or organizations or individual merchants or bankers or tax-farmers with vast capital accumulations and in the unstable mid-18th century situation had considerable political influence. The history of the Marwari banking house of Murshidabad, ‘Jagat Seths’ (‘Bankers or Merchants of the World) and the unscrupulous tax-farmer Omichand in Bengal illustrates this.

Socially speaking, the great merchants belonged mostly to the Muslims of the seacoast, foreign immigrants, who were active on both the coasts of the Deccan as well as in Gujarat and Bengal. Among the Muslim merchant communities mention must be made of the Bohras, the Khojas, and others. Legendary was the fame of Baharji Bohra (Virji Vora of English factory records), the Merchant Prince of Surat. Reputed to be the richest merchant in the world owning 80 lakhs of rupees, ships, and urban properties and controlling syndicates capable of buying goods valued at 5-10 lakhs, he could charge monopoly prices and dominated the wholesale market of western India (in articles like gold, silver, lead, coral, ivory, spices, opium and cotton, etc.), like a colossus for nearly half a century, financing the transactions of the East India Company (1619-70). All merchants at Surat, local or foreign, were so overawed at the concentration of economic power in his hands that none wanted to compete with him in any transaction (1636). His business activities illustrated monopolistic or ‘quasi-monopolistic trends which the European merchants
did not relish though in their own countries these were regarded as improved commercial technique.

The Bohra family lost its pre-eminence after his death. But the tradition of the great merchant families of Surat survived in the enterprise of Abdul Ghafur in the last quarter of the 17th century which lasted for more than four generations till mid-18th century. According to Alexander Hamilton who knew him as well as Surat, Ghafur’s trade was equal to the English East India Company’s: he annually traded with more than 20 ships (between 300-800 tons, containing his foreign stock that was worth between 10,000-25,000 pounds), besides having more as inland stock for next year’s market. His great grandson, Mulna (Maulana) Fakiruddin was considered as a great saudagar of Surat (1742). In mid-18th century Surat had rich impressive Hindu merchants who could, as Grose observed, alone purchase the entire cargo of a European ship on the spot after bargaining for only half an hour.

Surat also had the Chellabis (descendants of Ahmad Chellaby) and the Nizamis. In Golkonda Mir Jumla, who rose to be the Mughal diwan, stood apart from others.

The Khojahs, generally operating in Sind, Gujarat and the Punjab, had business affiliations in other provinces as well.

Some members of the Mughal imperial family including Nurjahan and Asaf Khan; and many Mughal nobles or high officials also owned ships and carried on trading activities in and outside India.5

The banyans (baniyas) of Gujarat, Marwar and Cochin and other places were well-known throughout contemporary India for their skill in business activities and in money-lending. Fabulously rich, they frequented every important port of India with varied merchandise including rice, corn, linen, indigo, etc., and specially precious stones, in which they had ‘great skill’. The Parrack family was a big merchant house of Surat. The Parsi community in Gujarat also grew rich by money-lending in western India. The house of Rustumji Monackji, the Surat broker, was one of the great merchant families of Surat.6

Like Virji Vora on the West Coast, the ‘Chettis’ and ‘Komatis’ dominated the Coromandel Coast but our information about their activities is incomplete. Their organization, centred at Pulicat, was represented by the firm or family of Malay (d. 1634) and his younger brother Chinna Chetti, controlling the marketing and commercial
organization of the entire area up to Negapatam. In the 1660s and
1670s the commercial life of southern India was dominated by the
extensive activities of the wealthy Kasi Viranna (Cassa Verona) (born
a Muslim as Hasan Khan), the principal independent merchant in
Madras with monopolistic rights over some goods and ‘the only
Indian partner’ of the East India Company, in whose honour the Fort
St. George Council fired a 30 gun salute at his sudden death in 1680.
Again, Sunca Venkatachilum, better known as Sunca Rama Chetti
(d. 1736) was one of the most influential merchants at Madras in early
18th century. He not only undertook overseas voyages to south-
eastern Asia but had a large shore of the East India Company’s textile
trade and also participated in the inland trade of southern India.7

Some of the merchants of northern India, who belonged to different
nationalities or castes, were also comparable in standing to the great
merchants of Surat and were found in Agra, Lahore, Delhi, Benares
and several other cities and also in Bengal, e.g., Murshidabad, Hughli
and Dacca. But our information about them is less than those of
Surat and Coromandel.8

(ii) Below the great merchant houses came the individual or in-
dependent merchants, less wealthy and hence less powerful. Limited
was their capital, often augmented by loans. Relatively limited, too,
was the nature of their activities, in diversity of their merchandise
and the extent of area covered. None the less these, too, based on
use of their own agents and network of dealers, were fairly large. I
think the ‘Prayahees’ of early English records (1618-21) are to be
identified with the Bengali traders and placed in this class. They were
found to be active up to Agra by Pelsaert. Mention may be made
of the Hindu merchants and brokers of East India Company like
Khemchand of Balasore and Mathuradas of Hughli competitively rich,
dominating the commerce of those places by monopolistic activities
and political machinations. A part at least of the trading capital
of the Bengal merchants came from the ruling class elites. The
Company’s merchants in Bengal belonged not only to the mercantile
but also the non-mercantile classes and were subject to a close
scrutiny of their character, honesty and ability.

(iii) Third, side by side with the great merchant, the small mer-
chant, the banias (selling ‘butter, rice, straw, vegetables’, according to
Favournier), the warehouse keepers (of ‘sacks of rice and grain’),
jewel-merchants like the Jain Banarasidas, Hovhannes, the Armenian pedlar (of cloth and indigo), could also flourish because their activities cost very little. They were more interested in eking out a living than in profit. For this they had to move from place to place. The autobiography of Banarasidas clearly refers to the mobility of the merchants.

The mercantile communities of the banjaras and the komatis (of Telugu region in the South) specialized in inter-regional movements of provisions and other articles on cafilas (caravans).

The Banjaras, including four tribes trading respectively in corn, rice, pulses and salt, and moving from place to place with their 20,000 pack oxen caravans, were but pedlars writ large. They played an indispensable role in the marketing organization and supplied the army with provisions.

(iv) Lastly, even the agriculturist selling his produce in the local village or town market or even to the ‘pedlar’ was a trader. The tax-collectors in Rajpur kingdoms selling the tax (in kind) for cash as well as the creditors of the peasant (urban merchant, his agent and village money-lender) marketed the produce and so served as traders. At the lowest rung of the ladder was the ‘pedlar’, who purchased his wares from the producer to trudge on foot with or without any pack ox to sell these to a bigger urban merchant or to the consumer.9

While the trading groups and the individual merchants were centred at their home bases, there were a few exceptions. Besides the nomadic Banjaras, Gujarati Banias and the Marwaris already mentioned, there were also the Khatris to some extent, and the Jews and the Armenians. The Jews were active in Cochin and other places in the South and occasionally found in the interior. The Armenians traded throughout the Middle East, India, Tibet and Europe. They were highly skilled arbitrage traders with flexible and geographically mobile commercial methods, taking up any article for the sake of profit. Their uncertain status made them indifferent where they resided. A few among them were on par with the great merchants of London and Amsterdam in wealth and position. Khwaja Sarhad of Bengal was so powerful and influential as to intercede before the Mughal emperor for the East India Company in the beginning of the 18th century, while Khwaja Wajid entitled Fakhr-ut-tujar (chief of the merchants), was financier
of Nawab Alivardi of Bengal whose friendship the Dutch chief recommended (1755).\textsuperscript{10}

The members of these few trading communities were distributed over a large area. This favoured the development of business organization, especially in exchange and credit. The importance in the Indian market of the Portuguese in the 16th century and of the Dutch and the English in the 17th century must not be exaggerated. The latter dominated the markets for particular commodities only, imported from or to be exported to western Europe, and that, too, only at times. But their competition (as in indigo, 1633-34) adversely affected their interests and reduced their influence to the advantage of Indian producers and consumers. Occasional efforts to eliminate competition were short-lived (e.g., agreement against indigo monopoly, 1634).\textsuperscript{11}

Middlemen trade: Besides the merchants there were the middlemen. Some were dealers, stocking and selling goods of other merchants in return for a commission (cf. the \textit{Aratiyas} of Bihar), while others were mere warehouse-keepers (\textit{goldars}), lacking capital. But the most prominent middlemen, who were present everywhere, were the \textit{dalals} or brokers. To fulfil an order received they sub-contracted with other merchants (\textit{paikars}) and got a share of the profit.

The distinction between a merchant and a broker usually arose from the difference in wealth. But this was often found to be blurred. Many brokers, like Khem Chand himself at Balasore and Ji (Jai?) Ram Shah at Cambay, were also merchants. Those of the European Companies were often wealthy independent merchants. With their great knowledge of the ins and outs of the market and ability to gauge the reliability of the merchants, the brokers played an indispensable role in the economic organization of the country. Judged by importance they stood next to merchants. Both foreign companies and Indian traders or procurers of goods needed their services to facilitate business. But they were indispensable to the foreign companies. So their activities influenced the course and nature of trade. They used to act as intermediaries between the producers and the merchants, finding out for the latter sources of supply of goods, bringing samples for approval, to be returned, if disapproved. Different brokers specialized in different varieties of goods. In return for their services they received a brokerage (1-2\%), varying according to the goods. All of them, however, were not very honest in their activities. Some entered
into clandestine relations with the Europeans. In Bengal, dalas were appointed by the Government in some lines of business.

A few instances of the influence of the brokers on the marketing organization early in the 17th century are given below. Ji (Jai?) Ram Shah (Jeram Show of English records) was not only the Cambay broker of Prince Khurram, Mughal Viceroy of Gujarat in the first quarter of that century, but also served as broker of the English for cotton goods to be sent to Mocha (1622). But as he turned out to be dishonest Khurram replaced him next year by 'Soweges' (? Shivaji) Deva for procuring 'buckar' (bakram, a variety of stiff cotton goods). But he absconded after amassing money by dishonest means. At Baroda (1622) Tapidas expected to get Khurram's permission for continuance of the trading activities of the English there, and, if not, to supply goods demanded by the latter secretly. Both he and 'Perebora' (Pir Bohra), brother of Ishaq Beg, sometime Governor of Surat, wanted the English to have a warehouse at Baroda. At Broach Pangue, the broker of the English, was severely whipped for despatching some of their goods by sea therefrom in contravention of agreement. There were about 600 brokers and middlemen, mostly wealthy, at Patna, according to the estimate of Manrique 1629-43.12


Trade and business organization are inter-related as cause and effect. The growing trade of the period required proper financing and elaborate and complicated credit facilities, which, in turn, were stimulated by it. Modern advanced banking system was, of course, unthinkable during the period under review. But, judged by contemporary standards, the rudiments of deposit banking and credit system were highly acclaimed by a 17th century Indian historian. An idea of these can be formed from contemporary Persian histories, accounts of foreign travellers like Tavernier and European factory records. Tavernier's account of the system of exchange, i.e., remittances by bills in mid-17th century, may reasonably be held applicable to the 16th century also. It appears that in all inland industrial and commercial centres, there were networks of indigenous banking establishments, e.g., credit-suppliers, commercial bankers and money-changers, known variously as sarrafs (shroffs), mahajans and sahukars belonging to specialized caste-groups. Not only was there an elaborate system of
cross-country financial credit, but there existed even an international credit system, based on the same system as the former and working irrespective of political limits, reflecting a fairly high degree of commercial morality. To avoid risks involved in making cash payments especially in long distance trade, these could be made by a brisk use of commercial paper, then known as hundi (or hundwi) or bills of exchange, assuring payment after a definite period. This grew to be the standard credit institution and a channel of investment. The hundi was used by private persons, European factors and even government officials to transmit money from one place to another at charges which appeared moderate to European factors. In the 18th century the Bengal revenue was sent by Jagat Seth to Delhi through a hundi on his agents there unlike the previous century when it was sent through a bullock cart caravan to Agra. It was also drawn by merchants to obtain short term credit (two months or less) at a discount (including interest and insurance charges on goods and transmission charges) which varied according to the length of the term. It was also transferable or saleable and bore endorsements. It is possible to detect the rudiments of deposit banking and loan of money in these transactions.

Though the chief function of a sarraf was to test money, he even issued a token currency at times. The functionary was so important that even every village, if not small, had one. He acted as a money-changer and banker to remit money, issue and discount hundis or letters of exchange. He thus became a commercial banker. A few shroffs who accepted deposits (amanat) in cash and kind, also advanced loans to the wealthy (‘persons of qualletie’) at high rates at a profit to themselves.

But money-lending was not the monopoly of a particular caste. Apart from the shroff (sarraf) it was done by different classes of persons in various ways to different levels of society. For the lower social levels the sources of credit were the wholesale merchant, the sahukar and the mahajan, often at usurious rates of interest. Merchants like Virji Vora in the 17th century with large supplies of capital advanced money (dadan) to cultivators, producers and artisans for ensuring adequate and timely supply of goods, in produce or manufactures (e.g., cotton, silk, indigo, etc.) for purposes of internal and external trade. Grain merchants in the Punjab and sannyasis (mendicants),

132 MUGHAL ECONOMY
zamindars’ retainers and rich professional moneylenders (mahajans and sahukars) in general in Bengal engaged in usury. The debtor, whether a peddler, or an artisan, or a peasant, was reduced to subservience to the lender. The rates of interest are not generally known but at times these were as high as 150% for the peasants of Bengal. Peasants also got taccavi (taqavi) loans from the government and village headman for purposes of cultivation. For the higher commercial levels, too, credit came from the big merchants like Virji Vora and the other merchant houses in the 17th century and those of the 18th century also, including the merchant cum banking house of the Jagat Seth. Sometimes as in Shahjahan’s reign the imperial treasury supplied loans Rs. 500,000 to merchants as in indigo monopoly. Government officials invested illegally government funds with the shroffs for their own profit. Nobles like Amirul Umara Shaista Khan, then Governor of Bengal, also indulged in usury by advancing money against the holy law. During the 17th century in a very popular ‘speculative investment’ money was lent out at 14-60% interest for shipping cargo to a place, the lender bearing the risk. This was known as ‘avog’ or bottomry.

Rich money-lenders used to stand security for those merchants who received advance as order-suppliers and so played a significant role in trade.

Besides banking, a system of insurance (bima) or goods in transit as well as of ships, was fairly well organized by the sarrafs. This was an index of the development of Indian commerce. Frauds were sometimes practised but the risks of insurers in particular cases were largely minimized because of the widespread prevalence of the system.12

4. Prices

The successful prosecution of trade depends on several inter-related factors of which prices constitute one. Among the various factors which determined prices were the currency policy of the rulers, and the revenue system which concern the administration and are not therefore discussed here. Prices of food grains and other agricultural products would depend on seasons or harvests. Other important factors were duties or taxes imposed by various ruling authorities, either at the centre or in the provinces, including the transit duties,
rahdari, etc. Competition of merchants or monopolies would also affect prices. So also would growth of towns and cities and of population and trade with Europe.

Apart from these, a most vital factor was bullion movements, the amount of metals like gold and silver in circulation. But there were local variations in prices on account of India’s dependence on imports of these metals from foreign countries, the cost of transport from the ports (e.g., Surat, Satgaon, Hughli, etc.) to the mints, and also from one area to another and political factors. It is not possible here to enter into all fluctuations of silver and gold prices during the 16th and 17th centuries. It may, however, be noted that the shroffs in the gold market of Surat controlled the price of either specie at their sweetwill. Gold was gradually appreciated from the time of Akbar (9.4:1) Jahangir (10:1), Shahjahan (14:1), Aurangzeb (16:1). The gold mohur was not ordinarily used. So the ordinary people were more interested in silver and copper prices. The value of the rupee varied from 2s. to 2s.9d. It was the principal standard of value and legal tender in the Mughal empire in the seventeenth century. Silver fluctuated according to the batta (discount) on sicca (newly coined) rupees. Copper dams with smaller subdivisions (\(\frac{1}{2}, \frac{1}{4}, \frac{1}{8}\)) were ordinarily used by the people. No fixed ratios between gold and silver and copper were maintained by the State. Hence as the latter two sought to find their ratios there was ‘disturbance to the course of trade, prices and economic relations in general’. From Akbar to Aurangzeb the relative depreciation of silver (with its increased import into Bengal) and appreciation of copper due to its scarcity hit the peasants hard. A rupee came to be valued at 53 pice as compared to 102. The burden of the revenue demand (jama dami), assessed in copper dam, but collected in silver (hasil kamil) became very heavy. With the consequential fall in agricultural produce, agricultural income diminished. The jagirdars’ exploitation of the peasantry increased. This augmented the appalling poverty of the masses, to whose discontent Manucci bears witness.\(^{14}\)

It is neither possible to enter into all the intricate problems referred to above here nor to solve the controversy hanging over the question of prices.

However, some aspects of the subject have bearing on the nature of markers. Moreland held that (i) commodity prices remained stable
up to about the seventies of the 17th century except that the relative price of copper and silver changed, the former becoming costly; and that increased imports of silver into Bengal caused inflation and a general rise in food prices. Moreland’s views have been criticized in recent years. The food grains in fact became costlier in Hindustan, the Punjab and Gujarat. But prices continued to be relatively low in Bengal, which continued to export food grains to her older markets on the Coromandel, Gujarat and even outside India. However, the stable prices of Sarkhej indigo supports Moreland, though even this was due, according to Habib, to West Indian competition, and prices of North Indian indigo registered an upward curve. Again, while the prices of cotton yarn and raw silk exported from Bengal by the East India company remained stable for nearly 60 years (c. 1663-4 to 1719-20), those of saltpetre rose by about 50-67% from c. 1700-’20. Prices, especially of food grains continued to vary from one region to another. Thus the data is too variable to allow definite conclusions.

5. Dislocations

Normal market conditions might be affected or disturbed by two factors: official interference and time and cost of transport.

(a) Official interference: Sometimes official intervention affected the course of markets as well as of trade. Competition gave way to monopoly, cooperation to force. A Governor or an official would either personally or through a nominee enter the market at any moment as the prospective trader in the sale and purchase of an article. Sometimes such action came to be justified on grounds of exigencies or needs of the State and foreign merchants did not complain much against such monopolies, e.g., lead, saltpetre, copper, etc., though they tried to evade them, as for example in the case of saltpetre. However, they did complain against two other kinds of monopoly, the agencies behind which were either the imperial government or the provincial governors or local officials and which were motivated by the profit of the State or of the governors or officials (in absence of any prohibition of officials trading as merchants). (i) First, there was the practice of ‘engrossing’ or ‘cornering’ or monopolizing of all staple commodities. Thus food grains were engrossed by the Governor of Surat during the famine in 1632; cotton piece goods also in Gujarat in 1641; spices
and unbleached cloth on the East Coast; indigo by the Governor of Ahmadabad in 1647.\(^\text{15}\) (ii) Secondly, there was the monopolistic developments of a more general nature, viz., the imperial monopoly in indigo (1633-'35); the monopoly of the trade of Hughli sea port by its Governor (1635-'36), who farmed it out to three men; the Dutch at Masulipatam were farmed out (1625), i.e., they could not deal with merchants except those specially licensed or privileged in return for a sum of money; the English abandoned that port in 1628 so as not to come under a similar arrangement. Mir Jumla, Minister of Golkonda, had a most highly developed system of monopoly which he continued also in Bengal. His lengthy commercial operations inconvenienced traders as at Masulipatam, 1659.

Again, Indian merchants were sometimes unpleasently treated by the government. Virji Vora was imprisoned in 1638 and subjected to 'most barbarous tyranny' under orders of the Governor of Surat.\(^\text{16}\)

(b) *Time and cost of transport of goods* across India and between India and Europe tended to introduce an element of uncertainty and to confine the market within narrow limits and make prices depend on local stocks alone. Supply of imported goods took a long time, say two years, during which the need might pass away and the goods would be unsaleable. As regards country made goods also the time factor did count but it was less important than the cost of transport, by land or by water subject to highway robbery, piracy or war.\(^\text{17}\)

**General Characteristics**

India, on account of her remarkable industrial and urban development and widespread commercial relations, had developed almost an all-India marketing organization by the end of the sixteenth century, independently of Anglo-Dutch penetration, though some would question its integrated character. Subsequently the organization grew more ramified in the next two centuries to cope with the needs of internal and international commerce. K.N. Chaudhury's study of the European records reveals that the market organization in the chief seaports of India as in the Red Sea or China 'followed lines that were to be found in contemporaneous Europe.' It was a complex texture, with varied economic institutions and commercial practices, prevailing in different types of markets, in which both peddlars and great merchants as well as some intermediate types of merchants coexisted.
and moved, some stationery and others nomadic or itinerant. Again, the pre-Industrial Revolution market, both in Asia and Europe, was small. The European trade pioneers of the seventeenth century found that the Indian markets differed little from other parts of the world and that they would hardly expect to have their own way. Under normal conditions the basic ideas and practices of the business activities in the medieval Indian markets during the sixteenth and seventeenth centuries would seem to be strikingly modern. There were recognized market prices, changing with variations in demand and supply: the cost of production determined normal price: there was open and keen competition between buyers and sellers, both keen on getting information. Merchants and middlemen were active. A network of financial machinery with facilities of credit, exchange and even insurance existed. Business rings and commercial monopolies were organized. Cases of financial or commercial crises occurred at times. Interested individuals declared bankruptcy even though there was no law on it.

We can form a general idea of the merchant community and the prevailing commercial morality from the accounts of the foreign travellers, checked by the records of the European companies and supplemented by an invaluable autobiography of a Jain (bania) jewel-merchant, poet and a religious leader of the 17th century. There was an established tradition of commercial skill and shrewdness in which they were not a whit behind the foreigners. This they learnt from their infancy. A bania boy was trained from childhood for money-making. He was to devote the time for play to learning Arithmetic and to avoid scholastic studies as the sure way to beggary, if he was to qualify for his proper place, the shop. This is corroborated by Ovington who remarks that even the owner of a lakh of rupees would 'fly at the securing of a pice'. Again, the merchants must have acquired their commercial and financial expertise through heredity and from membership of specialized, communal groups. Divergent views about the Indian merchants have been recorded by the travellers. One has to form an idea about them only after examining these. Finch characterized them 'as subtle as the devil as they declined to sell their goods at less than double the price. This in a way is more a praise of their business acumen than an opprobrium. Sir Thomas Roe, however, often complained of the characteristic dilatoriness of the traders, always saying 'Tomorrow' (i.e., in fulfilling promises); Tavernier
spoke of their being ‘eager to defraud than be defrauded’; while to Fryer, the ‘masterpicce’ of the Surat merchants was ‘Lying, Dissenting, Chaeting’. Perhaps it was on the basis of such observations that Moreland opines that Mughal India was not a country of ‘arcadian simplicity’. But he ignores the favourable opinions about Indian merchants, held by some others. Pyrard found the Malabar merchants to be ‘well-skilled in trade’. Tavernier held the Indian merchants to be superior to the Jews. Ovington found them ‘obsequious, humble and patient to a miracle’. There were, of course, dishonest and unscrupulous men. But as many traded on loans and contractual advances, the average professional merchant may be presumed to be honest. All that can reasonably be said is that Indian merchants knew their art well and like, other merchants, were interested in profit motive, neither saints nor knaves. Lastly, we may refer to the tradition of resilience and and adjustments of the Hindu merchants in the atmosphere of political instability of the times especially in the days of Aurangzeb. The mercantile strike at Surat in 1669 certainly dislocated the commercial life of that port but the Surat banias managed to preserve their wealth and family integrity by dint of rationalism and political skill, as we learn from a Surat letter of 18 January, 1672.  

NOTES AND REFERENCES


2. Rural markets: General Remarks: Moreland, FAA. Ch. 5; Chicherov, 95-105; J. N. Das Gupta, India in 16th century 16; Floris p. 114; IA. 1914 (Patna), 73; Tavernier, ii. 2; Salbancke (iii. 82); Martin, Ei. ii. 971, 975 (Bengal); Colebrooke, 175; Wilks, i. 118; Khan, JMI.

3. Spatial and functional features of urban markets, masterly analysis of K.N. Chaudhury, TWA. 132 (market defined), 139-41; Econ and Soc. 156-7.

4. Role of urban markets: Mrs. Naqqi, ch. 2 and 3, pp. 73-79 and passim: Agra, Pelsaert, 4; De Laet, 41; Ahmadabad, Della Valle. i. 96; Patna: my SELMI ch. 1. A & B; ch. 5B; Bengal and East Coast: Hawkins (Hakluyt), 150; Master, i. 257, 399; ii. 11. 81-2, 178; Relations of Golconda 34; Bowrey, 116 (Narsapur); A.

T. Raychaudhuri holds that the capital market could not develop integration, as the regional rates of interest were divergent and it remained fragmented (CEH. i. 348). On the other hand K. N. Chaudhury holds that ‘The central system of purchasing was in itself a powerful force in the integration of the market, continually interacting with the indigenous economic conditions’. TWA. (145). It seems to me, therefore, that the subject needs further study.

5. *Merchants and middlemen*: Moreland, IDA. 245-7 ; FAA. 152-9 ; K. N. Chaudhuri, TWA. 145-51 ; *Econ. and Soc.* ch. 6; He considers the Asian market organization to be ‘more akin to the Venetian *fraterna* than the impersonal business form of the joint stock companies’. TWA 138. CEH. i. 340-43.

*Muslim merchants*, Pyrard, i. 447; for Virji Vora, English and Dutch records abstracted in Moreland, FAA. 153-6 ; Chaudhury, TWA, 138 ; *Econ and Soc.* 150, 154-EFI. 1634-36, 218 ; 1661-64, 308. For Abdul Ghafur and family, Alexander Hamilton, i. 89 ; 1.0, Records in K. N. Chaudhuri, *Econ. and Soc.* 150-1 ; *Hindu merchants*, Grose (1757), 159-60 ; others, TWA, 146 ; For Mir Jumla, my *Life of Mir Jumla*. CEH. ii. 29-30.

6. *Banias*, Purchas i. iii. 166, 263 ; Linschoten, i. 252 ; Varthema 151 ; Pyrard, ii. 249 ; CEH. i. 343 ; TWA. 146.

7. *Chettis*, Barbosa, 373 ; Linschoten, C. 30 ; Malay in Eng. & Dutch records, Moreland, FAA. 156 ; For Kasi Viranna and Sunca Rama Chetti, TWA. 138. 146-7, 258 ; *Econ & Soc.* 150.

8. TWA, 146.

9. For the next three grades below the first, Chaudhury, TWA, 146-7, 138 ; *Econ & Soc.* 149-150 ; CEH. i. 341-3 ; 331, 339. For Khemchand, my SELMI. ch. 9B ; For *banias*, Tavernier ; Banarasidas (b. 1586) belonged to the Srimal clan of the Jains. M. Lath ed. *Ardhakatha*, Intro. ii. For *banjaras*, Mundy ii. 95-6 ; Tavernier, i. 32-34. For Hovhannes, the enterprising Armenian merchant who travelled in the 17th century from Isfahan via India to Lhasa and recorded his very small-scale (or peddling) operations in a detailed journal (1682-93), TWA. 137 ;


11. Moreland, IDA, 248-9 ; FAA, 152-3 ; EF. iii. 208 ; V. 205, 206, 1, 69, 142 ; CEH. i. 341-2.

12. My SELMI, ch. IC. 14ff (importance and brokerage) : Moreland, FAA. 156-8 ; Govt. appts. in Bengal, Tavernier, i. 156 ; Master, ii. 15 ; CEH. i. 342 ; ii. 29-30 ; EF (1634-6), 102, 171 ; (1627-29). 239 ; (1630-33), 101 ; (1637-41), 225 ; (1646-50), 209 ; Manrique (for Patna). A few other names, available in Eng. factory records are Kedar Khan (Khidir or Khizr?), Choutte (Chhote), Herra (Hira), Surji Naik.

14. Mughal currency has been discussed in standard works on the subject like Thomas, Lane-poole, Nelson Wright, Hodivala and others. References may be made for details to *Ain* B. i. 16ff, 32, 38-9; Tavernier ii. 14ff; Moreland’s IDA. 54-60 and FAA. ch. 5. The latter book discusses the Indigo market in Gujarat, markets for imported goods (especially quicksilver, lead, cloves), food grains and silver, gold and copper with detailed references. R.K. Mookerji (Ec. Hist. ch. 2). Some of Moreland’s conclusions have been criticized as early as 1929 by Brij Narain, *Indian Economic Life, Past and Present* (ch. 1-5). Chcherov, 131-4; I. Habib, Mughal Currency System, *Med. Ind. Oly.* IV no. 1; *Ag. Sys. Mugh. India* 380-94; also CEH. i. ch. XII and pp. 355-337. Bengal exports in S. Chaudhuri. *Trade and Commercial Organization in Bengal* 1650-1720. App. B, K. N. Chaudhury, TWA. 137.

15. Moreland FAA, 146-48; EF (1618-21), 34 (lead); (1646-50), 53 (Saltpetre); (1651-54), 22 (cloth); 1630-33), 209 (food during famine).

There was an interesting case of connering rice in Bihar c. 1670-72 causing famine in Patna. See Section on famines post.


17. Moreland, FAA, 149-52.

18. General remarks, Chaudhury, TWA, 145, 137; Moreland, FAA, 145-6; *Storia* (old) ii. 84 (Patna bankruptcy).

Commercial morality: TWA, 149, 150; Banarasidas, *Ardhakathanak* (M. Lath’s edn) Finch, in *Letters Received*, i. 30; Roe (one-vol ed. 1926). 80; Tavernier, ii. 25-6; Fryer, i. 211-2; Pyrard, i. 443; Ovington, 163, 165; TWA, 147-8, 150-1; My article on A Mercantile Strike in Surat Pr. IHRC. (Jadavpur Session). Hedges Diary, ii. 312. CEH. i. 343-44.
IV  Internal Trade

A.  Some Features of Inland Trade

As explained earlier, internal trade may comprise both inland and coastal trade. Inland trade might be purely intra-local, confined to one particular producing unit, village or town. Here traditional social obligations were strong and formal exchange through commercial undertakings was not always behind distribution. Or it might be inter-local, i.e., between different villages and towns, and between towns, distributing their respective products to meet mutual needs. Generally speaking, the trend of the movement of goods was from the village (or groups of villages) to towns. But the village was not actually self-sufficient in all its needs, which were partly supplied through the rural markets and the pedlars and partly through traditional customary obligations. Such inland trade would be inter-regional when confined to a small region, and inter-country or cross-country, if covering the length and breadth of the country.

It is only natural that various types of articles figured in inland and inter-local trade. We refer to a few salient features, without attempting to be exhaustive. These may be grouped in a general way as raw materials, necessities and luxuries. Villages supplied different raw materials for urban manufactures (e.g., cotton and silk to textiles). Forests yielded wood for ships, boats and furniture.

The most important items were food stuffs and coarse, cheap textiles. Despite the prohibitive cost of inland transport these, though heavy, were necessities. Bengal, where all kinds of food were plentiful, used to replenish most deficit areas in food grains. Agra got rice, sugar and butter from Bengal and also some wheat from Bengal and Bihar via Patna along the Ganges. Strange to say, sometimes surplus areas also traded in food grains. Masulipatam in North Coromandel took cheaper Bengal and Orissa rice. Thereform some quantity might have gone to the deficit area of South Coromandel. Bengal, according to Bowrey, absorbed Patna ‘grain’, probably wheat or special variety of rice. But Bengal had to import Rajputana salt via Agra down the Ganges. Gujarat, reputed for her manufacturing and commercial importance, had to import food grains (e.g., wheat and coarse grain) from Malwa, Rajputana and northern India.
Agra and rice from the Deccan, Gondwana and from Malabar (by sea). Supply of food was generally responsive to demand. Cheaper varieties of spices and tobacco were necessities for the masses of the people.

A natural but striking feature in inland trade was inter-regional interdependence in certain spheres. To take a few examples only. As regards trade in raw materials the silk industry of Gujarat depended wholly on Bengal raw silk largely replacing Chinese in the 17th century. Bengal also had to depend on raw cotton of Surat-Burhanpur region coming from Agra along the Ganges. Again, everywhere textile manufactures needed indigo and other dyes, grown only in particular areas. Further, for washing and dyeing, cloths woven throughout the country had to be despatched to places like Agra, Ahmadabad, Masulipatam and a few places in Bengal.

Luxuries included finer varieties of rice, mangoes (e.g., of Bengal, Golkonda and Goa for Delhi), finer textiles (e.g., of Gujarat cotton and Bengal silk); Malabar spices including pepper, ginger, cardamom, cinnamon, etc.; Kashmir products (e.g., shawls and wood crafts); Bengal lac for Gujarat lacquerware, Bihar opium to Bengal, and Malwa opium to different parts). Bengal exported her sugar by sea to 'all India' and by river to Agra. Slaves (usually children and then castrated) procured by the Maghs and the Portuguese were available in Bengal for disposal in different areas. But all these were costly, and evidently meant for the courts and aristocratic circles, and so could touch only a fringe of the internal trade.¹

B. Routes and Centres

_Inland trade routes_: As regards trade routes it is to be borne in mind that while some land routes within the country were joined with international highways of commerce, her seaports served as starting points both for coastal and oceanic voyages. Thus inland, coastal and international routes, by land and sea, were all inter-linked. Subject to this reservation the routes are differentiated below.

For the sake of convenience, the principal internal land routes have been shown below as radiating from major emporiums.

A. _From Lahore to Sind and Gujarat_: (a) to Multan-Bucker-Sucker-Thatta-Lahari Bander-Ahmadabad.
B. *From Agra*: 
(a) northwards to Delhi-Karnal-Sirhind- 
Lahore; 
(b) southwards to Gwalior, *via* (Malwa)- 
Handia-Burhanpur; 
(c) southwest to Ajmer-Bogra-Ahmadabad, and 
then south to Surat *via* Baroda-Aurangabad 
and the Deccan; 
(d) eastwards along the north of the Jamuna 
to Allahabad; then across the Ganges to 
Benares and Patna.

C. *From Benares*: to Patna: one eastwards *via* Jaunpur; and the 
other south-east across the Son *via* Sassaram 
and then north.

D. *From Patna to Bengal*: *via* Monghyr, Rajmahal, Kasimbazar, 
Hughli, Medinipur,

E. *Bengal to Orissa*: *via* Medinipur to Balasore

In the Deccan, the principal routes connecting the coasts were

(i) from Surat to Masulipatam on the Coromandel *via* Aurangabad, 
Ashti and Golkonda or beyond Ashti *via* Bidar and Burhanpur 
and with Bijapur; (ii) Burhanpur, linked with the north, was also 
connected with Surat and Broach in the west and then with Baroda 
and Ahmadabad; and also with Bidar and Golkonda-Hyderabad 
and so with Bijapur in the south and Goa in the south-west and 
Masulipatam and Chicacole on the east coast.

In Golkonda there were six trunk roads: (i) from Surat to Haidara-
bad, (ii) from Haidarabad to Masulipatam; (iii) from Haidarabad to 
Madras *via* Gandikota; (iv) from Vijayavada (Bezwada) to Madras; 
(v) from Masulipatam to Srikakulam; and (vi) from Haidarabad to 
Ramallakota. Golkonda was also connected with Bijapur and Goa. 
Thus the two seas and two coasts (Masulipatam to Goa) was connec-
ted.²

**River routes**: 
(i) From Multan down the Indus to the sea; 
(ii) From Patna down the Ganges to the Bay of 
Bengal; 
The journey depended on winds.³

**Inland trade centres**: Along the routes or rivers mentioned above 
flourished numerous industrial and commercial centres of inter-local
trade and emporia, wherefrom commodities, agricultural and manufactured, moved to other centres or ports. A few towns grew as 'localized markets' for particular goods secured through inter-regional (and oceanic) trade. Traders in precious stones thronged Goa and Belgaum. Sometimes the government encouraged such markets. Various drugs and aromatic roots, imported from Surat were sold free of any excise duty at a suburb of Ahmadabad. The manufactures of Malda town were sought after by and so sent to both neighbouring and distant places. Purchasers from neighbouring places, e.g., Masulipatam usually flocked to such centres as Velapalem (in the Krishna district) for its special calico. The main bazar of Hughli served as a market for the goods of Bengal, Patna (Bihar) and Orissa, and the 'Great Bazar' of Masulipatam for the whole region with a radius of nearly exceeding 100 miles round it, including the textiles of Madapolam-Palakollu. At Surat all kinds of commodities were vendible.

During the 16th and 17th centuries these inland trade centres passed through vicissitudes of fortune,—some flourishing, some declining and others rising to prominence. However, taking the period as a whole, and proceeding from the east to the west in northern India, the principal emporiums were Sripur, Satgaon, Hughli, Dacca, Calcutta, Patna, Benares, Lucknow, Agra, Delhi, Multan, Lahore, Qandahar and Kabul, Thatta and Ahmadabad. In the south Burhanpur, Surat, Golkonda and Masulipatam were a few important ones. There was brisk internal (also coastal) trade, between Gujarat, Konkan and Malabar.

Patna and Benares were the important trade emporiums through which Bengal goods, food-stuffs, cloth and silk goods, were carried on roads or rivers to northern India and then through Agra, Lahore (the Punjab) and Qandahar to Persia and through Kabul to Samarkand and Kashgar, and through Agra and Burhanpur to Gujarat and Surat. Bihar carried on inland trade with the Uttar Pradesh areas, Punjab, Bhutan and other areas.4

C. Coastal Trade

The hilly hinterland along both the eastern and western coasts of India and unauthorised exactions of tolls by jagirdars and government officials, precluded smooth wheeled traffic on land. This made coastal
trade important on either coast. A few of the important coastal routes are noted below:

1. From the mouth of the Indus to Gujarat;
2. From Gujarat ports to the ports along the West Coast; and also to the East Coast; as well as to Bengal ports,
3. The Coromandel Coast ports carried on an established coastal trade mainly in the products of Vijaynagar empire and Golconda kingdom, including food stuffs, rice, iron, steel and other metals (zinc, tin), tobacco, spices, and the Masulipatam chintz with Bengal, Malabar and Gujarat and also northern India by land. Regular coastal trade between Malabar and the Konkan Coast, Gujarat and the East Coast in spices, arecanuts, cocoanuts and palm candy was conducted by ships of Malabar or by the Chetti merchants.

4. The ports of Bengal had a flourishing coastal trade with several areas of India. Early in the 16th century Barbosa testified to Bengal’s trade (from Sripur, Satgaon) with Coromandel Coast, Konkan and Gujarat. Bengal’s rice was carried in small boats to the Coromandel Coast, where it was transported on Malabar ships to relieve local shortage. Bengal ships also met those from Malacca at Ceylon and then went to Cochin in the Malabar and other ports of India. Thirty to thirtyfive shiploads of rice, cotton cloth, sugar, oil and other goods daily left Satgaon for the West Coast. In the 17th century also Bengal’s coastal trade with the east through Hughli, Dacca, Chatgaon, etc., continued. Various food stuffs, cloth, silk and other goods, used to come annually on a fleet of small vessels to Masulipatam yielding contented profit. The dependence of several areas on Bengal food stuffs is attested by Pyrard when he says that if there was delay in their arrival almost famine conditions would result.

5. Orissa maintained lively coasting traffic with the Coromandel and Malabar Coasts, Khandesh and Gujarat. ‘Gingelly Coast’ oil was an important article exported from Orissa.\(^5\)

The shipping interests of coastal India were largely in Muslim hands. But the Hindus predominated as shore merchants feeding the former.

COMMERCE, INTERNAL AND EXTERNAL

—10
But the organization on the coasts was not uniform. Small boats plied on the East Coast throughout. But on the west boats had first to organize and then move under convoy (gafila, caravan) owing to the fear of piracy. The Cambay-Goa convoy was bigger than the Cochin-Goa convoy. Portuguese fleets used to guard or escort merchants, from Cochin to Goa and from Goa to Bombay, and often surprised the pirates in their dens. The Cambay convoy of 200-300 crafts totalled about 20-30,000 tons a year.

The main trunk trade routes, possibly fed by branch routes going into the interior, the location of different inter-regional centres and emporia, and coastal routes and traffic with places in South India all tended to favour the development of an integrated market over wide areas in Mughal India and beyond. But integration could not be fully achieved as the arterial roads in the Mughal empire were not usable throughout the year and also as there were internal toll barriers which increased in the 18th century. In both these respects Mughal India lagged behind contemporary Tokugawa Japan and even China with more developed national markets than in India.6

D. Inland Security

Inland trade was largely conditioned, besides other factors, by the extent of security on the inland highways or arteries of commerce. Moreland held that insecurity was so chronic that inland trade became merely a periodical business, when rendered possible by withstanding it,—organizing vast convoys or caravans (gafilas) or strong armed guards. True indeed, that several European travellers do testify to caravans, small or big, of travellers, merchants (including banjaras), footmen, horsemen, animals (camels, horses, oxen, buffaloes, etc.), numbering hundreds, thousands and even several thousands, carts and coaches. T. Raychaudhuri has criticized him and given interesting additional evidence to show that Moreland's picture was not wholly true. In fact traders and travellers did freely move individually or in small numbers at times without any untoward event occurring.

It is not possible here to enter into details. Suffice it to say that the state of inland security itself varied from time to time, depending on the vigilance of the Emperor or ruler and more so on the attitude and the conduct of the local officials. The Emperors never lost sight of the necessity of maintaining the right of way, establishing chaukis
on highways and adopted various other methods. The local officers often neglected their duty of checking crime at times and even made exactions from the people, justifying Finch’s observation that ‘the foxe is often made the goose head’. During wars and rebellions insecurity tended to increase.

It is necessary to remember that the accounts of the foreign travellers form the only prolix source about the practical working of the police system and internal security. Indigenous sources are rare. And the travellers differ in their assessments, as their experiences were different. Some routes were more dangerous than others. Precautionary measures were adopted both by government as well as by the merchants and travellers; guards were furnished by local authorities; caravans; travellers or coachmen engaged a special class of guards, charans, as in Malwa and Gujarat, who compounded with the robbers for a sum payable by the party concerned.

Successful prosecution of commerce demands a reasonable degree of security of life and property. That it existed, notwithstanding the gloomy picture of insecurity drawn by some foreign travellers, is shown by India’s extensive commerce.7

E. The Carrying Agency in Internal Trade

The general position of merchants has already been discussed. Those conducting the internal trade, i.e., its carrying agency formed a heterogeneous medley of men of diverse nationalities, castes, of divergent socio-economic status and of varied functions. Various agencies transported the articles of internal trade, itinerant merchants or banjaras, banias, khatris and others, on land and water, subject to seasons, floods, drought and inland security. The carriers of inland trade included, ‘great’ and ‘small’ merchants. They ranged from enterprising ‘merchant princes’, rich millionaires of Gujarat, Malabar, Coromandel, Orissa and Bengal to petty ‘pedlar’. The former’s wings covered internal and coastal trade besides oceanic. While some owned ships, others were financiers and tax-farmers and some were even both.

Besides the Indians, there were other Asian merchants, who, besides carrying on their overland trade, also participated largely in the internal trade of India. Further there were the Armenians, the Mughals and the Persians and the ‘Praychaes’ (East Bengal traders), besides
the Portuguese, Dutch and the English. Pelsaert has left an interesting account of their competitive activities in Agra during 1620-6. Even after European penetration in the 17th century, the internal trade continued to be controlled by Indian merchants.8

NOTES AND REFERENCES

   However, spontaneous responsiveness is not proved by abundance of food in royal camp in Burhanpur during the Gujarat famine or the engrossing of grain by the wife of the Bihar Governor during 1670 famine.
   Inter-regional inter-dependence, ibid. 332-3.

2. Trade routes used by foreign travellers like Fitch, Munrique, Mundy, Bernier, Tavernier and John Marshall, Van Ravenstein; De Laet's account, Chahar Gulshan; Sarkar. SAR; Mookerji (observations on p. 11 very useful): Sherwani, Qutbshahi Dyn; see also CEH. i.

3. For river routes see relevant sub-section in Section II.

4. Localized markets—Tavernier. ii. 95; Fitch (ETI. 15). Mirat (Supplement). Tr. 12.
   From Bengal to Bihar: EFI (1618-21), 192-7; Pelsaert, 7; Mundy, ii. 254-9; Master, ii. 135 (Hughli); Wilson, EAEB, i. 379.
   To Benares, Agra, Lahore &c: Baharistan, 5; Pelsaert, 4, 9; Munrique, ii. 392; Bernier, 437-9; Tavernier, ii. 2-5; Schouten, ii. 155; Master, i. 400; ii. 15-16.
   To Gujarat: Pelsaert, 19; Pyrard ii. 245; Tavernier, ii. 2; Master i, 399.
   S. Indian Centres, Bowrey, 168, 106; Ovington, 131.

5. Moreland, IDA, 240-5; CEH. i. 333.
   Bengal: 16th century: Barbosa i. 125, 127-30, 137-9; ii. 92-3; Fitch; Linschoten, i. 94-7; Du Jarric, 140, 157; Badauni (Tr.) i. 349.
   17th Century: Pelsaert, 12, 27; Moreland, Relations, 59, 68-69; Munrique, i. 56; Bernier, 437-9; Pyrard, ii. 327; Baldaeus tr. 163; CEH. i. 331 (Gingelly).
   Imports to Bengal: Varthema, 151; Fitch, ETI. 18; Baharistan Tr. 5; Munrique, ii. 428, 440; Hedges, iii. pp cclxxvii-ix; Wilson, EAEB. i. 398-400.

6. Shipping interests, CEH. i. 408; Pyrard, ii, 245ff (kafila); Moreland, IDA. 240-1; CEH. i. 338-9, ii. 33-5 (integrated market).

7. For details, Jagadish N. Sarkar, Mughal Polity, ch 6; CEH i. 356-8.

8. Mookerji, 130; Pelsaert (chs. on Agra and Lahore); EFI 1618-21, p. 56; Moreland, IDA. ch. VI, Secs VII and VIII.

148
V Foreign Trade

A. General Distribution

The geographical position of India, projecting southwards from the centre of Asia to the Indian Ocean, not only influenced her history but also determined the directions of her maritime trade. She had centuries of traditional commercial contact with other parts of Asia, Africa and even Europe, with the Red Sea and the Persian Gulf in West Asia, and the coasts of Abyssinia and Africa and the West; Central Asia, Tibet and China in the north and with Arrakan, Pegu (Burma) and the Indian Archipelago, the East Indies (Indonesia) and the Far East (China and Japan) in the east and South-East. Besides, India had also long-standing overland commercial contact through the Levant with some countries of Europe. This was snapped after the Turkish capture of Constantinople (1453) and of the Near East countries. But it was resumed in a different form, i.e., along the high seas, within half a century, i.e., after Vasco da Gama doubled the Cape of Good Hope and reached Calicut (1498). A century later came the Dutch, the English, and later still the French, the Danes and others. For three centuries, from the end of the 15th to the end of the 18th century the Europeans dealt with four clearly separate commercial zones in Asia: the Red Sea and Persian Gulf area (the Middle East), besides some ports in Abyssinia and East Africa; India; South-East Asian islands and the mainland; and the Far East. While the Middle East held a very important position as 'the half-way house between Europe and Asia's real surplus areas' and as a major source of wealth (i.e., gold and silver), India was, as K.N. Chaudhuri observes, 'perhaps the most versatile nation of the time', on account of her geographical, climatic and ethnic diversities. The Europeans came not only for spices but also for textile manufacture (cotton and silk), indigo, saltpetre and other goods. Thus India's trade relations with Europe became more intimate in the seventeenth century than before. Further, besides the European companies, there was the irregular or unlicensed private trade of the Europeans. To get a total picture of India's foreign trade, therefore, one has to examine all these four facades, the Indian overseas and overland trade, Portuguese trade, European companies' trade and European private trade.
B. Trade Routes and Means of Transport

Well-established commercial relations implied the existence of well-known routes, overland and overseas, that would both be safe from natural dangers and secure from human depredations. On the Indian seas, again, navigation was seasonal unlike the European seas, where it was for all seasons. A network of trade routes connected India with Asia, Africa and Europe, i.e., from the Far East and the Spice Islands to India; and from India to West Asia and Africa; and to Europe. There were two principal commercial arteries between the Indian Ocean and the Mediterranean,—the Red Sea and the overland caravan route through Mesopotamia and Syria to the Levant direct or from Mesopotamia by sea down the Persian Gulf. To these traditional routes was added the direct oceanic route to Europe via the Cape of Good Hope since 1498.

By land: India was linked with the overland trade routes in Asia during 16th to 18th centuries. The inland trade routes of India, which have already been mentioned earlier, were connected with the international highways of commerce. These latter were principally the following:

(i) Agra-Lahore to Kabul. From here one route went north-east to Kashgar and thence to Succur, Singanfu, Nanking and Canton in China (old Silk route), while another route went west to Balkh and thence to Bokhara and Urgenj on the Caspian sea.

(ii) Lahore-Multan via Chotiali and Pishin to Qandahar, India’s doorway to West Asia, and thence along the main old silk route to Herat, Meshhed, Yezd, Isfahan, Kashan, Tabriz and Aleppo (connecting with Damascus, Tor, Suez, Cairo and Alexandria), and also to Tripoli on the Levant or east coast of the Mediterranean, and again to Trebizond and Brussa on the southern shores of the Black Sea, across which lay Constantinople.

(iii) Lahari-Bandar on the Indus delta to Qandahar in the north and Gwador in the west.

(iv) Kashmir to Tibet and China.

(v) Patna to Central Himalayan states—Tibet (Lhasa)—China.

(vi) Awadh to Tibet—China.

The two overland routes westwards through Kabul and Qandahar not only carried Indian merchandise to foreign countries but also
brought foreign goods to India. The flow of traffic was restricted and irregular, partly because the goods were transported on pack-animals like oxen, horses and camels, partly because of the ever-present risk of highway robbery and violence, and partly because of political factors. Hence the volume of this overland traffic pulsed with the Mughal-Persian conflicts over Qandahar, which impeded the flow of goods or with Mughal-Portuguese conflicts (which interrupted the sea trade from Gujarat to Persia) and Perso-Portuguese rivalry on the Arabian Sea, which automatically augmented the land traffic. Early in the 17th century (1615) 3000 camel-loads passed every year to Central Asia, while the number of caravans swelled up four or five times when the Arabian sea and the Persian Gulf routes were dislocated by Perso-Portuguese conflicts during the time of Jahangir. Again, the importance of the land route declined at first in the 16th century after the coming of the Portuguese but it revived afterwards. However, in the 17th century after the coming of the northern European powers, the Dutch and the English, the overland route came to be somewhat affected again on account of the competition of European shipping. Indigo carried to the Levant by land from Agra and by sea and land from Gujarat had to compete with that brought by sea which proved cheaper.

*By seas and oceans:* The principal sea-routes of international commerce during the 16th and 17th centuries were the following:

(i) From the mouth of the Indus to Persia, Arabia and occasionally toOrmuz.

(ii) From Cambay, Surat and other Gujarat ports to Arabia, Persia, Egypt, Europe and the Straits of Malacca.

(iii) On the West Coast, (a) from Goa and Cochin to Persia, Arabia and Africa and via the Cape of Good Hope to Portugal (Liston); (b) from Goa and Cochin and other Kanarese ports to the Malay world and the Far East, (c) from Malabar Coast to the Red Sea.

From the above, it will be clear that there were two well-reputed routes to West Asia, Egypt and the Levant or East-Mediterranean Coast: one via the Red Sea, Cairo and Alexandria; and second, via the Persian Gulf, Basra and Baghdad.

COMMERCE, INTERNAL AND EXTERNAL 151
(iv) On the East Coast (a) from Negapatam, San Thome, Pulicat to Colombo; (b) from Masulipatam to Pegu, Malacca and the Far East and also to the Near East.

(v) From Orissa and Lower Bengal to Europe and the Spice Islands.

(vi) From Bengal ports, i.e., Satgaon, Hughli, Sripur, Chittagong to Burma ports and Far East.

(vii) From Pegu to Malacca, Bengal, Coromandel Coast, Orissa, Masulipatam, Red Sea, China and Japan.

(viii) From Tenasserim to Bengal and Moluccas.

Apart from the Red Sea and the Persian Gulf trade across the Arabian Sea, and the trade with Arakan, Pegu and the Indian Archipelago across the Bay of Bengal, India’s trade with the East Indies and China and Japan to the east, carried on by Indian and Arabo-Persian merchants and later on by European powers, as well as the trade with Europe was, principally, oceanic. The type and size of ships needed for the seas and the high oceans were different. This will be discussed later.10

Dangers to trade:

Robbery on land and piracy on the sea constituted two dangers to India’s extensive and profitable trade. The degree of insecurity, of course, varied on different highways. But as a precautionary measure merchants used to move in caravans and under armed escort. To meet the consequential increase in the cost of transport, prices had to be raised. As regards overseas trade, there was no exemption from Portuguese regulation and no navy to protect the ships from pirates, who were of all nations, but the most notorious were the Portuguese and the English. European piracy in Indian waters, which began after 1498, ‘excited no moral reprobation in Christiandom’. This, too, affected prices, which more than quadrupled in Europe, as compared to those in India. To cover such risks marine insurance was resorted to as early as 1622.11

C. Nature and Pattern of Asiatic and African Trade

During the 16th-17th centuries India’s Asiatic and African trade was conducted both along overland and overseas routes. Three broad points arise: the directions of trade and destination; the
sources of supply or participating regions; and the merchandise carried both ways.

*West*: In the west, India had active business connections with West Asia and Africa, though a clear line of distinction is not possible. Among the major maritime regions of India, Bengal traded extensively with West Asia, Persia, Arabia, Abyssinia and Syria (and through it with Europe); the East Coast areas also had brisk trade with Persia, Arabia and east coast of Africa; the West Coast areas including Malabar, Konkan, Gujarat and Sind had active commerce with the Persian Gulf and the Red Sea countries, Persia, Turkey, Syria, Abyssinia and Egypt.

Indian merchants brought their goods to the Red Sea markets, of which there were two types. One was the *hajj* market for pilgrims, where the long distance caravan routes met and wherefrom Indian goods passed to Europe. The other, the regional market, catered to the needs of the towns in Hijaz, Yemen and Hadramaut and Red Sea ports on the east African littoral. The Indo-Red Sea carrying trade was controlled but not monopolized by the Kārim, a Cairo-based organization (c. 12th–c. 1470). Indian ships could visit the ports in South Arabia and Gujarati *baniyas* settled here in 15th century. Indian trade here was also cosmopolitan, Hindu, Muslim and Jewish merchants working in cooperation. The Red Sea developed as a major overseas market of India by the end of the 16th century. The Red Sea route was subject to different political authorities. (For the Gulf route trade see later under Ormuz.)

*East, South-East and Far East*: Here the chief customers of India’s cotton goods were Arakan and Pegu, Tenasserim (the Indian Archipelago), Malay (Queda or Kedah, Perak on the route to the Straits of Moluccas), Malacca, Sumatra (Achin, Priamom, Bencoolen), Sunda Islands, Java (Bantam, Batavia), Borneo, Celebes (Macassar), Ceram, Banda, Amboyna, Siam and Indo-China. But these did not find a promising market in China. Japan came later when the Dutch established trade there after 1625. These areas were fed by the above maritime regions of India—Bengal; the East Coast areas; and the West Coast areas (Malabar, Konkan, Gujarat) and Sind.

The keen interest taken by China in India’s trade is vouchsafed by the fact that China’s marine pilots of 15th century used to have

*COMMERCE, INTERNAL AND EXTERNAL* 153
maps indicating the principal mercantile centres in Bengal, the Coromandel and Malabar Coasts, Konkan and Gujarat.

Now, as regards the articles of trade, the principal imports from the above Asiatic and African countries included precious metals, spices and luxury goods. But cotton goods of India constituted the most valuable exports in this trade in the 16th-17th centuries.

Bengal's renown for her mercantile marine and her active participation in trade with countries in the west and the east is proved beyond doubt by the accounts of the Moroccan Ibn Batutah in the 14th century, the Chinese Mahuan in 15th century and the Venetian, Varthema in the 16th century. According to Varthema, Bengal exported agricultural products, cotton and silk goods to Abyssinia, Arabia, Syria, Turkey, Persia, Malacca, Sumatra and Pegu. Her merchants took four or five shiploads of cotton fabrics, sugar and ginger annually to Malacca and Java, covering the distance in a month, and with the proceeds brought in return camphor, pepper, cloves, nutmegs, sandalwood, precious stones, copper, tin, lead, arms and even after paying 30% export tax earned a huge profit by selling these at 250-300%.

On the Coromandel Coast the local Telugu merchants carried on a brisk trade with numerous ships, exporting cotton cloths of Golkonda, cotton, thread, iron, steel and agricultural products and imported horses from Arabia, gold and silver from Africa, Pegu and China, spices and metals from Moluccas and the Sunda Islands, and silk and other goods from China.

Early in the 16th century according to Albuquerque (1512) forty to fifty ships annually carried Gujarat fabrics from Cambay to Persia, Turkey, Arabia, Syria and Abyssinia. The merchants of Malabar exchanged Gujarati goods for Golkonda fabrics on the East Coast, sold the latter at Malacca and returned with goods of China and S.E. Asia.

To Persia were carried the specialized cotton goods of the Deccan and Bengal along the overland and the sea routes. West Arabia, Egypt and adjoining areas of North Africa and even West Africa were important consumers of Indian goods. The markets in Abyssinia, East and South Africa were, however, limited. Turkey (also Muscovy and Poland), as Tavernier says, demanded the printed cotton goods of the Deccan.
The sea-borne trade of India with West Asia and Africa and Indonesia was controlled by Bengali, Telugu, Malabari, Konkani, Gujarati, Sindhi, Arab, Persian, Armenian and S.E. Asian and Chinese merchants. In the beginning of the 16th century the Portuguese traveller Barbosa (1514) found, besides Indians, numerous foreign merchants, Arabs, Persians and Abyssians at the seaport of Bengal, possessing ‘a very good harbour’. All, according to him, were “great merchants, owning large ships of the same build as those of Mekkah and others of the Chinese build (jungos, i.e., junks) which are very large and carry a considerable cargo. They traded with Cholamender, (Cholamandala, i.e., Coromandel), Malabar, Cambay, Pegu, Tarnasari (Tenasserim), Samatra (Sumatra), Ceylon, and Malacca and they traded in all kind of goods from many places to others”.

Albuquerque noticed at Malacca many Asian merchants specially Persians, Gujaratis, Burmans, Malabaris, besides those from Coromandel. There were also merchants from the Coromandel Coast and the ‘Gores’ of Tome Pires (? inhabitants of Japan or of near-by islands, perhaps the Lew Chew islands). The Arab and the Indian merchants brought many wares from the Red Sea and the Persian Gulf to India and controlled the trade between Bengal and the East Coast with the East Indies. The former also conducted the Hajj (pilgrim) traffic. India’s entrepot trade with China, the Archipelago and Ceylon presupposed a fleet of ships. The balance of trade in Asiatic and African trade was in India’s favour.12

South: Ceylon (Colombo)

D. International Trade Emporiums in Asiatic Seas

The principal international commercial emporiums in Asiatic seas were the following:

1. The island of Ormuz (Hormuz) in the Persian Gulf, then held by the Portuguese, was the centre of a small oceanic organization extending from Basra in the north at the head of the Gulf to Muscat on the opposite coast of Oman in the south. As an entrepot in the Gulf region its importance was comparable to that of Malacca in South-East Asia. Indian ships sailed to Muscat and Hormuz. The entire Eastern trade,—goods from the Far East (China and Japan), S. E. Asia (Siam, Cambodia, Spice Islands, Malay Peninsula) and India,—went from here in ships through the Persian Gulf and the river
Euphrates, and in caravans to Aleppo, Damascus and Trebizond for distribution in Asia Minor, South and West Europe and in Muscovy. Fitch (1583-91) found here ‘merchants of all nations, and many Moors and Gentiles’, ‘a very great trade of all sorts of spices, drugs, silk, cloth of the silk, fine tapestries of Persia, great stores of pearls from Bahrein, the best pearls, and many horses of Persia, which serve all India’.

2-6. Red Sea ports. As Indian shipping to Malacca declined, as the trade of the substantial Arab merchants like the Kārimī or their successors in West Indian Ocean (cf. ‘the foreign moors’ of Barbosa) suffered and as the Persian Gulf was blocked, all on account of the Portuguese activities, the Indians diverted their trading operations to the Red Sea. It was then an Osmanli Turkish lake. The Turks naturally controlled the ports there.

Early in the 16th century the Red Sea had two unrivalled trade centres, Jedda and Aden. Jedda was important as an embarkation port for ḥajj pilgrims to Mecca with its annual fair where Indian cotton textiles sold well. It was also an entrepot for the Red Sea transit trade. For Indian ships it was the only port of unloading even in the 18th century.

Aden, at the mouth of the Red Sea on Surat-Mecca route, was a Turkish garrison town since 1538. A very convenient port of call, it was also advantageous like Jedda. True, the Portuguese failed to capture it. But eventually it declined as a port and overgrown by Mocha in the 17th century, when the newly-risen Amirate of Yemen favoured the latter for shipping coffee. Mocha also became a transit port for Indian goods.

So the Indian goods collected at Mocha or Jedda were transported further up to Tor (near the head of the Gulf of Suez) and Suez. Tor, too, an important port on the Red Sea for Indo-Syrian trade, came to be eclipsed by Suez. From here the articles were sent by caravans to Grand Cairo and then along the Nile to Alexandria (in Egypt, conquered by the Turks in 1516) and by sea to Rhodes (conquered by the Turks in 1522) to be shipped to Venice, Naples, Genoa, Barcelona and other Mediterrânean ports.

7-10. There were four intermediate stations on the western route, Berbera and Zeila (Somaliland ports), Massowah and Suakin
(Abyssinian ports). Abyssinia was full of Indian merchants, who had to face the Portuguese trade pioneers there.

11-17. Before the advent of the Portuguese Indian (Gujarati) traders had established a small pocket of trade on the east coast of Africa. While voyaging to the Red Sea they came on their ships to places like Mombasa, Malindi, Kilwa and Pate, bringing textiles and taking gold and ivory. Such a trade was a result of Indo-Arab trade cooperation in this area.

Subsequently the Portuguese, dominating the east coast of Africa, had Mozambique, a fort, and three other ports, Sofala, Mombasa and Magadoxo (Somali Coast), importing from India textiles, spices and provisions and exporting ivory, amber, ebony, slaves, and especially gold.

18. Malacca, a creation of Moslem traders, had a cosmopolitan population of 100,000. A. Dasgupta regards its emergence as an entrepot as the most significant development in maritime history in the 15th century. Here was centred all traffic between India, S. E. Asia, the Malay Archipelago and China. It was, according to Barbosa, "the richest trading port ...(containing) the greatest merchants and most extensive shipping and traffic (existing) in the whole world." Among Indian shippers the most important were the Muslims of Gujarat but many Hindu merchants came here from the East Coast and other Indians from Bengal. Arab and Persian traders came from the Red Sea area to Malacca direct but many were wont to come here via Cambay. The article most coveted by the Indians and the Chinese alike was spices from the East Indies. No wonder it was captured in 1511 by the Portuguese who purchased the Bengal fabrics here. Even after that Malacca continued to be 'one of the greatest emporiums and entrepot centres of Asian commerce'. Further, its trade remained mostly with non-Portuguese merchants.

At first Indian ships used to come to Indonesia through the Sunda Straits. As this southern route fell into disuse early in 16th century, the Malacca Straits or the northern route grew to hold the key to the trans-oceanic route from the Far East to Suez. But with the Dutch capture of Malacca in 1641, the northern route lost its importance and its trade suffered.

19-20. The fall of Malacca left a great vacuum that was, not filled up by the rise of Bantam in West Java and Achin in North-West
Sumatra. The Gujarati Muslim shipowners supported the cause of Achin principality more than that of Bantam in their bid for freedom of the seas. When Bantam was captured by the Dutch in 1682, Achin was the sole port in Indonesia which remained open to Asian and independent European merchants.

21-22. Manila and Macao. One of the routes of flow of silver to the East was Acapulco (in the Spanish Indies) to Manila in the Philippines. The trade with Manila, irrespective of its carriers, the Chinese or the Portuguese from Macao (where they set up a settlement in 1517), was always important.\(^{13}\)

*North: Central Asia and Asiatic Russia*: During 15th-16th centuries India had brisk trade along overland routes to Central Asia and western Turkestan. Her cotton goods, spices, etc., reached even Asiatic Russia (Astrakhan) through Bokhara and Samarkand. In fact, Nikitin was the pioneer Russian merchant to visit India early in 15th century. During the next two centuries not only did this Indo-Russia commerce develop through Tibet and Bhutan but Indian merchants, Hindu and Muslim, from Gujarat and the Punjab, settled in Astrakhan, a busy international emporium. India also came to be visited by traders from West Turkistan, Georgia and other border areas of Russia. The Tsar was anxious to open trade relations with the Mughal empire and Semyon Malenky, a Russian merchant, coming on his behalf, was permitted by Aurangzeb the privilege of duty-free trade towards the end of the 17th century. Efforts, backed by the Tsarist State, continued throughout the 18th century to establish trade relations with India on a firm footing.\(^{14}\)

*Indian Settlements abroad*: In quest of trade the Indian merchants evinced a remarkable spirit of adventure, enterprise and a highly commendable degree of social mobility. Not only did they trade with countries far distant from their homeland, they even formed settlements in foreign lands. Thus the merchants of Sind, Punjab, Gujarat and Rajputana had their settlements along the overland routes in Kabul and Qandahar (in Afghanistan), Herat and Ispahan (in Persia), Bukhara (in W. Turkistan), Baku and Shemakha (in Trans-Caucasia) and Astrakhan (in Russia). Indian settlers were granted Russian citizenship and sought to secure duty free trade for all Indian traders. They moved from place to place in Russia in pursuit of trading and other financial activities.\(^{15}\)
Again, the Gujarati, Konkani and Malabari merchants, conducting the Red Sea trade had settlements in Arabia. In Mocha particularly there was an Indian town. The Indians built for themselves ‘a petty town of slight cabins along the strand’. Some of the Nakhudas (skippers) had their own houses there and meetings and discussions were occasionally held between them, high Turkish offices and others. Similarly in South-East Asian cities like Achin and Malacca, Gujarati, Bengali and Coromandali traders also had their own settlements.16

D. Trade with Europe

(16th-18th century : Portuguese, English, Dutch, French and others)

Before the discovery of the Cape route, i.e., the direct sea route to India via Cape of Good Hope (1497) India’s trade with Europe was indirect. It was partly carried by sea through the Red Sea and the Persian Gulf and partly by the overland route, both converging on the Levant or east coast of the Mediterranean where the European merchants came and distributed the Indian goods to different countries in Europe. The return traffic also followed the same routes. This overland Indo-European trade link was snapped by the Turkish capture of Constantinople (1453), victory over the Venetians at Lepanto (1499), conquest of Egypt (1516) and of Rhodes Island (1522).17

The sixteenth century was, in the words of Moreland, ‘a period of unstable equilibrium’ as regards the organization of oceanic trade in its political and commercial aspects. The advent of the Portuguese in 1498 in Malabar and the establishment of direct trade with Europe by the Portuguese from the beginning of the 16th century greatly affected the pre-existing system. True, this did not altogether erode the maritime predominance of the Muslim merchants in the eastern waters. In the sixteenth century, therefore, both the Muslims and the Portuguese came to dominate the commercial situation. But its nature was undoubtedly changed. Besides territorial ambitions, the Portuguese resolved to dominate the eastern seas, regulate and secure the eastern trade. Their programme changed from separate assaults on Muslim ships plying between the Red Sea and India’s western shores to a systematic policy of complete control of the trade in spices. This required, besides their naval superiority over the Asian powers, establishment, by force or negotiations, several fortified harbours and widely scattered strategic centres from Mozambique to Malacca.18
The Portuguese maritime empire (later known as *Estado da India*) pursued an imperial scheme based on a commercial policy which appeared to be something new to Indian rulers and traders. A distant power from a different continent sought to establish a state monopoly in such an important article as spices (e.g., pepper) to be enforced by open exhibition of sea power. Use of force rather than peaceful trade was the basic motivation of the Portuguese ever since Vasco da Gama doubled the Cape. So long commerce was independent of political control. The Muslims adjusted themselves to the situation in the areas of trade and permitted other traders of Bengal, Gujarat and Coromandel to hire space and accompany those on their own ships. But the Portuguese made trade a State or royal monopoly on certain scheduled routes in specific articles, allowed private shipping outside these limits only under licence (*cartaze*) from the Viceroy of Goa and making war prizes (i.e., seizing and confiscating the goods) of all unlicensed ships. This system had different impacts on different ship-owners. Many Muslim shippers, unwilling to yield but unable to compete with the Portuguese, sought to preserve themselves and their trade by adjustments and accepting the *cartazes*. Thus from 1548 Bijapur accepted the system and could send ships from Dabhol to Mocha and later the sphere was extended to Mecca,Ormuz and elsewhere in the Red Sea and the Persian Gulf. The Mughals, too, accepted the *cartazes* for ships from Surat to Mocha. Many ship-owners, fearing Portuguese seizure, suspended their voyages to East Africa, the Spice Islands and the Far East or formed indirect partnerships with the Portuguese officials or merchants. Others, still, sought to defy the *cartaze* system, (a) changing the routes, viz., from Malacca to Coromandel instead of to Malabar; (b) preferring ship-wreck along the longer Maldives route to the west to piracy by Portuguese along the shorter route; (c) sailing to the Red Sea pilgrim ports with *cartazes*; (d) occasionally fighting or pirating the Portuguese ships like the Malabar coastal pirates, whose licences the latter took. In any case the Portuguese could not very well succeed in completely controlling India’s oceanic trade in practice on account of the corruption and laxity of their officers. Indian merchants could thus avail of the loopholes in conducting their commercial activities.  

The 17th century witnessed another commercial revolution more far-reaching than that of 16th. The outstanding development in that
century was the advent and the activity of the Dutch and the English merchants and the collapse of the Portuguese. If the Portuguese lost the bulk of the trade with western Europe to the Dutch and the English during the first half of the 17th century, the two Protestant companies changed not only the trend of India’s trade with the East African coast and Asia but also established a direct trade between the markets of the east and the west.

It was the United East India Company of the Netherlands (VOC, 1602), which first attempted, in the 17th century, to assert their claims to a monopoly in the spice trade (including pepper). Here, however, the Dutch had to face the competition of the English East India Company (founded 1600). It soon dawned upon the two companies that their Indonesian trade must have a foothold on India, that no profitable trade in spices and pepper could thrive without the backing of Indian cotton textiles. As a later Dutch Governor-General in the East Indies correctly assessed that ‘Coromandel was the left arm of the Moluccas’. The needs of inter-Asian commerce, and the possibility of directly marketing Indian textiles and other articles in Europe stimulated the efforts of these two companies, though the VOC was more successful in breaking the ‘country trade’. They were, again, more resourceful and vigorous than the Portuguese in establishing direct trade with Europe.

For both the northern companies the reign of Jahangir was a period of experimentation and assessment of the needs and potentialities of this new trade. By 1625 they established the trade in indigo and calicoes. Surat grew to be the chief centre of European trade. However, the terrible Gujarat famine of 1630-32 led them to seek alternative fields and supplement the reduced supplies therefrom. By 1650 the Dutch and the English were not only firmly established in all the principal marts of the coast from Sind to Bengal but they prosecuted their commercial enterprises over Bihar and modern Uttar Pradesh.

In the second half of the 17th century came the French and, later still, three other European companies were in the field, so that India’s foreign trade substantially increased in the 18th century, with a set-back in pre-Plassey quinquennium. In the long run the English ousted all her rivals and came to control India’s trade with Europe.
E. General Course of Foreign Trade: 16th Century

*Articles of Trade*: Foreign trade is a dependable index of the economic development of a country. Ever since the second century B.C. the general course or nature of India's foreign trade (Asiatic African and European), as expressed in the classic observation of Gibbon, "The objects of oriental traffic were splendid and trifling", remained almost unchanged till at least our period, except that some items of export like indigo or saltpetre could hardly be characterized as trifling. India needed some foreign goods and exported her own.

The nature of India's foreign trade during the 16th and 17th centuries was fundamentally different from the present times.

India's imports consisted of three categories: necessaries, raw materials and luxuries. *(a)* The necessaries included precious metals and horses. Bullion was needed for coinage, ornaments, display and/or hoarding. Some gold came, it is true, from the Indian Archipelago, China, Japan, Sofala and Mozambique; and silver from Japan, Malacca and nearby markets (bringing Mexican silver). But India imported bullion pre-eminently not from East and South-East Asia but from her West Asian markets, in the Red Sea and the Persian Gulf, particularly Mocha and Ormuz. Mocha was described as 'the treasure chest of the Mughal'. Good horses, needed for the army and display, came from Arabia and Iraq-Persia.

*(b)* The raw materials included raw silk (from China) for Gujarat silk winding; metals, e.g., copper, tin (from Malay), zinc, lead and quicksilver (from Lisbon via Red Sea); and ivory (from East Africa) coral, amber and dyewoods (from Persian Gulf); other goods for artistic handicrafts.

*(c)* Luxuries or fancy goods for the king and the upper classes included (i) all sorts of precious stones (from the Archipelago) and pearls (from Ceylon); (ii) textiles, silks, woollens (broad cloth) velvets and brocades; (iii) spices, (iv) perfumes (and rose water); (v) fruits, (vi) drugs; (vii) China goods (fine Chinese porcelain, highly prized by the emperor and the Muslim nobles); (viii) European wines (and spirits); (ix) African slaves, (x) rarities or novelties, mirrors, glassware, including coloured glass from Venice.21
In the 16th century the principal exports from India were as follows; and their pattern generally remained the same later, subject to a few changes.

(i) Textile fabrics including calicoes, muslins and fancy goods formed the major item of export throughout the 16th to 18th centuries. These were indispensable to Asia. While the finer varieties of Bengal and the East Coast were needed for the aristocrats of Asia, the coarser and cheaper ones of Gujarat weavers clothed the masses in South Asia, Indonesia and the Red Sea.

(ii) Common food articles,—rice, wheat, pulses, oils. Surplus grain went from Bengal, Orissa and the Konkan Coast, north of Malabar to cities like Malacca, Hormuz and Aden; cocoanut products and some minor spices like ginger, cardamom, turmeric, nutmegs, etc. All these were cheap necessities and not luxuries, and all, even including Bengal sugar on the border line, generally illustrated bulk trading.

(iii) Raw silk from Bengal, and cotton yarn or raw cotton from Gujarat (to Pegu).

(iv) Indo-Portuguese commerce in the 16th century rested on a single item, export of black pepper from Malabar and Kanara. But it was "a big business". It not only went to Indonesia but it was the chief item in direct Portuguese trade to western Europe. Pepper lost its primacy as an Asian import because of competition of other goods, especially Indian textiles directly imported by the Dutch and the English to Europe.

(v) Indigo (from Bengal, Coromandel and Gujarat) and some other dyes;

(vi) Opium (to Pegu, Java, Malay Peninsula, China and Persia);

(vii) Miscellaneous minor goods, e.g., Bengal wax and lac and Coromandel skins.

Of all these exports cotton goods constituted the most important and extensive. Again, of the three principal centres of export of cotton goods, the Coromandel coast was more important than Cambay or Bengal. It was 'the left arm of the Moluccas and the islands round about, because without cloth imports from Coromandel, trade would be dead in the Moluccas' (1612).22
F. Changes in Foreign Commerce in 17th Century

1. Articles of Trade

India’s foreign trade, as we have just seen, underwent momentous changes in the 17th century. Generally speaking, however, the articles of trade at first remained the same as in the 16th century, subject to some changes. The imports into India included, as before, (i) gold, silver and horses; (ii) raw materials; and (iii) principally, luxuries, with the addition of copper from Japan and ‘toys’ from Europe. As regards exports, too, the earlier trend continued in most goods, though some new articles were introduced, as explained later.

But Moreland’s view, that at the beginning of the seventeenth century Indian goods were not much demanded in western Europe, is either an understatement or ignores the evidence of some Dutch sources. The demand for the cotton goods of Coromandel was much wider there than in South-East Asia and the Dutch possessions therein, or in East African coast. Almost from the very inception of the Dutch and the English Companies, there was a keen demand for cheap Indian cotton goods by them for use in Europe and England in preference to the costly linens of Holland and Germany.23

Cotton manufactures and handloom products continued to constitute the principal prop of export trade to Asia, where these were indispensable, and the most valuable item for the exporting areas (except Malabar and Bengal). These were of three broad types: calicoes; muslins; dress and fancy goods; (i) calicoes, widely manufactured in various regions of India, chiefly for Indian wear were also exported to different countries of Asia. The Portuguese extended its trade to West Africa and Brazil, (ii) muslins differed from calicoes only in degree, i.e., in texture or weight. With their production localized in Bengal and the Deccan, these were chiefly exported to Persia, Arabia and Egypt. The trade in muslins to North-West Africa, as organized by the Portuguese, might either be a diversion of the old Egyptian trade or a new development. (iii) Dress and fancy goods (pintados, chintz, handkerchief, etc.), manufactured in Coromandel Coast areas and Gujarat, were demanded in the east. In the 17th century the Dutch and the English Companies effected a change in the direction of the textile exports. At first they exported the piece-goods of Coromandel and Gujarat to Indonesia but later they extended their
import into Europe. At first the English led the race in the cotton trade but the Dutch made up the lee-way in the second half of the 17th century. The demand for cotton goods by the Dutch, the English and the French in Europe also grew in the 17th century as house linen and as calicoes for ordinary use. But the trade was mostly retail and up to 1660 there was practically no demand for muslins and prints for apparel. But by the third quarter of the century Indian textiles became highly popular and the eighties showed “exceptional” rise in their imports. Then came a setback owing partly to prohibitionist policy and partly to the point of saturation being reached.

Besides pepper and spices, which were older exports, the new items to Europe were the following: Indigo now became so highly prized an import that it became, in Roe’s words, a “prime commodity” in commerce. It was found to be more advantageous than woad: it was relatively fast and cheap, and hence economical; it was mostly needed in the Mediterranean area. But Spanish American and West Indian competition reduced its use to a small extent in western Europe in the second half of the 17th century. Saltpetre, an indispensable raw material for manufacture of gunpowder, was in great demand to feed the growing munition industries in West European countries for their political policies and military developments. It was also a lucrative article of trade. Next came raw silk from Bengal. Mulberry plantations of Kasimbazar and north Bengal yielded silk yarn of all India repute and the area had become famous for its silk-weaving also. The European companies bought at first the finished silk manufactures of the region and then raw silk. By the fifties of the 17th century Bengal came to supplant Persia, France and Italy as suppliers of silk yarn to Europe’s weavers. In the 18th century it ranked next to textiles in bulk and value among imports.

Demand for a variety of Indian silk goods (taffetas and brocades) and cotton goods grew in Europe now. Raw cotton came to be exported especially to Persia and Arabia but not to England and Europe till the American Revolution. Cotton yarn, however, went to Europe in large quantities for manufacture of wicks. Other items were rice and sugar, both moist and dry (to Persia and France along land routes); lac (to Persia). Iron and steel went from Masulipatam.24

In the second half of the 17th century the principal items of India’s

COMMERCCE, INTERNAL AND EXTERNAL 165
direct trade with Europe were four: (i) Madras calicoes, (ii) Bihar saltpetre, (iii) Bengal silk and (iv) Bengal sugar. European goods were, as before hardly demanded. But now the rich upper classes got wider opportunities of satisfying their craze for costly novel curiosities, described by Jahangir as 'rarities and antiquities', and mentioned in English commercial records as 'toys', to be presented or sold to them.25 The Europeans utilized this weakness of the Mughal ruling classes for gaining vital economic privileges which proved ultimately detrimental to the economic interests of the country.

2. Problem of Proving Purchasing Power

European merchants trading with India and all countries in the Asiatic seas soon realized that the demand for European goods there was insufficient. They could, however, easily purchase goods for import to Europe by ready cash. But export of bullion (i.e., gold and silver) was against both prevailing mercantile theory and popular prejudice. The question, therefore, arises how they solved the problem of financing their trade.

At first the Portuguese had to pay for spices in the Archipelago in bullion. Subsequently they avoided this by exchanging goods between India and the Archipelago. By the end of the 16th and beginning of the 17th century, they established a profitable commerce between (i) India, West Asia and Europe, and (ii) China and Spice Islands. Thus they financed spices largely by (a) importing Chinese silks, tin and jewellery to India and (b) exporting Indian cloth and silk goods, Moluccan spices and pepper to Persia, Arabia and Mesopotamia, (c) importing to India horses, carpets, dates, raisins, raw silk and silver from Persia and Arabia; ivory, musk, wax and coffee from Africa; slaves from Abyssinia and Mozambique; and quicksilver, cutlery, swords, glassware, wines and various luxury goods from Europe.26

Both the Dutch and the English also had to devise methods to solve the problem of financing their imports. They could have paid for these by exporting European goods for sale. But as the Indian demand for these was insufficient, they began to limit such exports. demand for these was insufficient, they began to limit such exports. There were three other methods of solving this problem and the commerce of the 17th century was a combination of all these: (1) to
carry out precious metals; (ii) to borrow money; and (iii) to invest capital in Asiatic trade and to remit the profit to Europe in the form of spices and other eastern products. The first, i.e., export of gold and silver, which could have solved the problem very easily, was controlled by charters or orders. Handicapped by the criticisms levelled against export of bullion, the English East India Company tried to reduce it as much as possible. In Holland the merchants dominated the State, which was not subject to a similar prohibition. But the Dutch company, too, was limited by the prevailing practice. Hence the operations of both of them in this sphere were limited.

Secondly, they had, therefore, to borrow money in Indian markets. But it was too costly an expedient to be permitted except in limited cases as the rates of interest were crippling high, varying from 9 to 36%. Free export of bullion was, therefore, resorted to as an easy practicable solution of the problem of financing the new trade notwithstanding theoretical objections. Thus the English company’s bullion imports to India steadily grew through the 17th century, from £22,000 in 1601 to £52,000 in 1616; and £800,000 a year by end of 17th century.

Thirdly, the method of remitting the profits of Asiatic trade was followed more by the Dutch than by the English. The former found that Indian cotton goods were needed for spice trade. The latter, purchasing indigo and calico for Europe, found that Persian raw silk could be paid for in Indian produce or in spices. Thus the merchants who came to purchase eastern goods for Europe had to engage themselves in carrying on a purely Asiatic trade, trading with different Asiatic ports and in markets offering little for Europe. Both the Dutch and the English naturally tried to increase the quantity of gold and silver available for disbursal in India. The supply of gold from Sumatra and Borneo was less than that obtained from the Red Sea, China and Japan, the last two offering the largest supply. Japanese silver was paid for imports to Japan like hides and skins from Siam and Indian cotton goods. The process worked in the following manner:

(i) Cotton goods from India to Siam;
(ii) Hides and Skin from Siam to Japan;
(iii) Silver from Japan to India.
Raw silk was the chief article of demand in Japan. But its supply was controlled by the Chinese. Direct China trade was protected by the Emperor and so the Dutch had to bring it from Indo-China in exchange for Indian cotton goods, spices, etc. The Dutch opened the Japanese market to Bengal raw silk. China and Indo-China supplied gold in exchange for Asiatic goods purchased with Indian cotton goods. The Dutch settlement at Taiwan in Formosa was the centre of this trade. In this way the need for remittance of Dutch money was reduced. The nature of Dutch trade was accordingly changed. They began by direct purchase of spices for Europe and then they gradually traded throughout Asiatic waters in order to bring treasure to India.

The English also followed this general course, but being excluded from the Farther East, they could not participate in Asiatic trade as much as the Dutch, and their main line of business was to develop direct trade between India and Europe. In 1658, however, the English purchased the Guinea Company in order to ship African gold dust and ivory directly to India.27

3. Effects of the Advent of the Dutch and the English on Trade

(i) On Old Establish Trade

The advent of the Dutch and the English profoundly affected Indian trade and industry. Not only did they establish a new direct trade between India and western Europe, but they also modified the course of the old established trade of India with other parts of Asia and the east coast of Africa, the principal changes in this respect being traceable in (a) import trade (b) export trade and (c) shipping industry.

(a) *Import Trade*: The changes in import trade were not much. As old needs continued and new needs were not created, consumption of foreign goods did not increase much. However, a new feature was that copper was imported from Japan into northern India. There was a craze among the upper classes in India for costly European novelties, called 'toys' in English commercial correspondence. It was not very extensive but it was the principal commercial necessity at that time. Foreigners used to get political and commercial privileges by presenting 'toys' to the authorities.28
(b) **Asiatic Export Trade to other Asiatic countries**: It is very difficult to say whether the activities of the European merchants resulted in extension of existing commerce. C. J. Hamilton held that more cotton goods were carried to Asiatic markets now. But Moreland does not wholly agree with this view. Though the quantity of cotton goods handled by the Dutch increased progressively (and more than doubled) during 1625-61, particularly in the markets of south-eastern Asia, there were no signs of a similar development of English trade there. So Moreland doubts whether the increased Dutch exports represented new business or merely a change in carrying agency. The general facts are that (i) the increase in Asiatic trade was perhaps not much, because goods were sent from Batavia to Europe, Africa and America; (ii) the carrying trade of India, conducted by the Portuguese, was declining; hence it was not new business but merely change in carrying agency; the markets were conservative and could not have absorbed the excess of cotton goods. The Dutch supplied the markets provided for India first by the Arabs and then by the Portuguese. As regards other Asiatic markets for cotton goods trade in Pegu or Arakan did not expand. There is no evidence of material increase in Red Sea trade. Most of the English exports probably represented a change in carrying agency and a transfer of business from the land route.

On the whole in Asiatic markets, though there is no sign of decline, there are no definite grounds to say that there was large expansion in Indian cotton goods. There is also no suggestion for similar expansion in other goods.

New lines of business, however, were opened specially by the Dutch regarding Bengal silk (from 1650) and Coromandel skins (from 1644) to Japan, export of slaves, provisions (food grains) and other goods for Asiatic settlements. Besides, the Dutch trying to engage in Asiatic trade, build up a capital and reorganize the economic life of the Spice Islands, developed Indian export trade. Further, Indians were purchased on the coast from Indian dealers and were imported as slaves in Dutch ships to Batavia and the Spice Islands (roughly from 1620). The English did not actively participate in it. But this was coming down from the 16th century. Development in export trade of food grains was due to absence of local supplies. Batavia became a centre of grain trade imported from India and elsewhere.
Generally, the Coromandel Coast and Bengal supplied the bulk of the grains imported. From 1660 the Dutch began to export grain to Ceylon but this was not a new feature. From 1623 tobacco came to be exported from Surat to Coromandel Coast, Mocha, Arakan, Bengal and Pegu.29

(c) Shipping Industry: At the time of the advent of the Dutch and the English in the beginning of the 17th century, the overseas and coastal trade of India was shared by the Indian shipowners and the Portuguese. But now, with the decline of the Portuguese, the Dutch and the English entered the field and soon came to control an increasing share in this trade, not so much by peaceful competition as by terror tactics. The defenceless existing Indian carrying agencies, unbacked by their own government, were injuriously affected. While Goa declined Surat and later Bombay prospered.

The effect of these changes on the position of the Indian shipowners was not uniform. In Gujarat trade the most important change was the decay of the coasting trade to Goa, which was carried on by Indian ships under Portuguese regulation and protection. By 1621 there was rapid decay and the number of vessels and the value of articles fell heavily. Protection of the Portuguese war vessels was no longer available. Goa was blocked by the Dutch. Gujarat business suffered as a consequence. On the other hand the Dutch and the English carried goods direct to Europe without transhipment at Goa and this favoured export trade from Gujarat. So producers and merchants were less affected than the owners of coasting ships. Gujarat had trade connections with Achin, Persia and the Red Sea. Achin (in Sumatra), a distributing centre for cotton goods, competed with Batavia (Dutch) and Bantam (English). Here the shipowners of Gujarat suffered but did not wholly lose the trade and retained a substantial share of it. The Dutch tried to divert trade from Achin to Malaccan settlements. Again, goods from Gujarat were carried to Persia mainly in Portuguese vessels at the beginning of the 17th century. After the fall of Ormuz, Indian owners sent their ships to Gombroon but as the Portuguese collected tolls from Indian vessels, the Dutch and the English were preferred by Indian merchants. This difficulty was removed after the fall of Muscat. To the Indian merchants of Gujarat the Red Sea route was vital. Prince Khurram, Governor of Gujarat, reserved the Red Sea trade alone for Indian traders and excluded the
English from Mocha. The Dutch also began to compete here. But the English, thanks to the policy of force of Sir Thomas Roe, were determined to deprive the Gujarat traders of their monopoly and carried out this policy by repeated acts of piracy. Moreland euphemistically said that the trade was thrown open by the treaty of 1624 but it was a virtual surrender of the Indians to brute force. Thus the shipowners of Surat lost a major share of the trade, though there was some recovery in 1644 and 1660 for Muslim shipowners.

On the Coromandel Coast the trade was transferred from the Portuguese centres of Negapatam and San Thome to Pulicat and Madras. The trade to Cochin and beyond was transferred from Portuguese to Indian shippers. But they did not gain much because the markets were poor. At Masulipatam the major part of the shipping was in Indian hands and it suffered due to foreign competition. But about 1640 the Golkonda officials insisted on preferential treatment for their own ships. Later on (1647) Mir Jumla, the Minister of Golkonda, converted the preference into a monopoly and articles could be sent only on Indian ships to Persia, Basra, Mocha and Pegu. This was discontinued when he joined the Mughals. By 1661 the Dutch and the English again competed for freight to Persia.

In Bengal, up to 1630, the bulk of the small export trade was in Portuguese hands and it was developed by Indian shipowners at Pipli and Balasore (both in Orissa). It declined suddenly after 1644 on account of Danish attacks. After the fall of Hughli in 1638-39, the Bengal trade of the Portuguese practically disappeared. The Dutch stepped into their shoes and began to export cargoes to Asiatic markets in increasing quantities.

Briefly, therefore, Indian-owned shipping (i) definitely lost ground in Gujarat, (ii) lost on balance in the Coromandel Coast and (iii) gained ground but failed to retain it in Bengal. Indian merchants, who were also shipowners, suffered; but Indian merchants and producers except ship-builders did not.

Moreland has minimized the adverse effects of the advent of the English and the Dutch on Indian shipping. It declined not as a result of peaceful competition but of a calculated policy of force exemplified in repeated acts of violent piracy. The lot of the Indian merchants and shippers was not even half so bad under the Arab domination and even the Portuguese domination (subject to cartaze) as under
the Dutch and the English. True, the Indian merchants came to prefer the European ships to Indian ships but that was not due to the superiority of the European navigators, not to the stronger build of the European ships and not to the cheaper rates offered by them as Moreland opines. The point will be discussed later in detail. The real reason for the preference was that the European ships afforded greater security against European pirates, besides exemption from Portuguese customs.\footnote{31}

(ii) New Direct Trade: Export Trade to Europe

*Establishment of New Markets*: The ‘outstanding commercial development’ of the first half of the 17th century (1600-60) was ‘the establishment of new markets for Indian goods’ in England, the Netherlands and France. There were three commercial regions in Europe: Russian, Mediterranean and the Atlantic. The trade in the first region was certainly not as negligible or unimportant as Moreland implies. This was already been discussed earlier. The second area used to get eastern goods by way of the Red Sea and the Persian Gulf and partly along the land route to the Levant. The third area was also fed by these routes up to the end of the 15th century. But here the high cost of overland transport limited the eastern goods to spices, drugs and curiosities. The entire organization was revolutionized by the opening of the new direct sea-route to Lisbon for the Atlantic countries. It was cheaper and more efficient than the overland Levant route. The latter continued as a distributing medium but the overland merchants lost their monopoly for ever. But the Portuguese had not developed this trade position. They had established trade to West Africa and Brazil in Indian cotton goods. But they had not introduced any new Indian goods into the wholesale markets of the Atlantic Europe. This trade consisted only of spices, drugs and other Far Eastern products, in the 16th century.

But in the 17th century the chief feature was the wide consumption of indigo, saltpetre and calico. Most of the cotton went to Morocco, Brazil or Guinea Coast of Africa. Pepper and spices were carried on Dutch ships to Antwerp, Amsterdam and other north-western seaports. The great bulk of the trade to western Europe passed from Portuguese to Dutch and English hands. But the transfer of agencies did not affect Indian interests except in Malabar pepper
export. This was now replaced, through the activities of the Dutch and the English, by Java and Sumatra pepper, which the Portuguese did not handle. Thus India lost the West European trade in pepper and production decreased accordingly. On the other hand there was gain from the trade in indigo, saltpetre, calicoes, etc.32

*Volume of Export Trade to Western Europe*: The Dutch tried to centralize the trade at Batavia but did not wholly succeed. The export trade of the English (i.e., for western Europe) from Surat passed through several stages. Up to 1620 the main articles were indigo and miscellaneous goods. Then during 1620-30 trade in calicoes rapidly developed. After the Gujarat famine and during 1638-53 the articles increased to calico, indigo, yarn, saltpetre, pepper, sugar, etc. The trade of the English East India Company rapidly increased from 1657 and there was a rapid change in relative importance of the East and the West Coasts. The establishment of trade in Bengal, better suitability of the Madras calicoes to European markets than the Gujarat calicoes, decay of the indigo trade of Gujarat and defects in local administration, all made the East Coast prominent.

At first indigo was the ‘prime commodity’ but as calicoes could be sold largely in western Europe, calicoes and indigo became the two main items by the middle of the 17th century. The consumption of indigo in western Europe was mainly a question of price and the effect of the direct trade was to reduce the price of Biyana indigo by 25% or more, which increased the consumption; and Sind and Coromandel began to produce indigo from about 1646. But in the sixties of the 17th century export of indigo largely declined.

The export of saltpetre as a constituent of gunpowder was a new feature of Indian commerce. It was organized first by the Dutch and then by the English.

At first only small quantities of Indian cotton goods arrived in Europe by the overland route and the consumption was limited owing to high cost of transit. The Portuguese did not try to lessen the price and so at the beginning of the 17th century the western market was a large but wholly undeveloped market for cotton goods. It was the English rather than the Dutch who opened this trade.

Besides these three principal bases of the new trade relations between India and western Europe, raw cotton, yarn, sugar and raw silk were also exported. The first half of the 17th century as regards
export trade to western Europe was a period of prolonged experiment. Late in the first decade the Dutch on the East Coast and the English on the West were beginning to learn by experience what goods could be bought and sold. During the second decade the Dutch had discovered indigo and saltpetre, but they found that indigo was worst and saltpetre dearest. The English indigo trade was good and they were establishing calico trade in Gujarat. By the middle of the first half of the 17th century (c. 1625) Surat became the principal port for Europe. The East Coast was contributing little and Bengal was still unknown to European buyers. After the famine of 1630-31 many parts of India including Bengal and Orissa were tapped afresh to supplement inadequate supplies. After 1650 the eastern coast took a prominent place in European trade. As the trade of Gujarat declined then on account of West Indies competition and unfavourable political conditions due to the rise of the Marathas and in the 18th century for political disorders in India and Persia, Bengal became commercially more important. The position of India was changed by the opening up of new commercial relations with the progressive markets of western Europe. Indian goods became familiar in Amsterdam, London and Paris and other places. A business organization was created with future possibilities.33

G. Chief Sea-ports of India

The importance of a port depends on its hinterland, a good transport system as well as natural facilities depending on location. Generally speaking, the principal outlets of India’s foreign oceanic commerce may be grouped into two categories according to their geographical position: (i) ports on the western or Arabian sea coast, extending southwards from the Indus delta to Ceylon; and (ii) ports on the eastern or Bay of Bengal Coast from Negapatam on the Coromandel Coast, running northwards up to deltaic Bengal [and then southwards to Pegu up to the Indian Archipelago]. An important feature of India’s commerce was the diversification and partial specialization of her exports. Some of her seaports specialized in export of certain articles, just as a few regions had specialized in production of particular goods for use in consuming markets. Thus Bengal mainly exported rice, sugar and muslin; the Coromandel Coast, calico, muslin, fancy goods and dyed yarn; Malabar, pepper; Gujarat, cotton goods, indigo and yarn. Another
striking feature was that to every important oceanic port were attached a few auxiliary roadsteads where articles of overseas trade were assembled and distributed.34

1. Western or Arabian Sea-coast Littoral

The western sea-ports may, again, be subdivided into several regional groups:

(a) *Indus Delta*: In the Indus delta (called Deul-Sind by the Portuguese), the old 8th century port of Daibal (Dewal), described by early Arab geographers, had decayed. The most important port at the beginning of the seventeenth century was Lahari Bandar at the mouth of the Indus connected with Thatta (in Lower Sind), Multan and Lahore. But as it declined with the defeat of the Portuguese (then friendly with the Mughal officials) at Ormuz, Surat grew in importance. About the mid-17th century Aurangzeb sought to revive the trade of this complex.

This region exported calicoes or cotton goods of various kinds, indigo and various local products to the Persian Gulf (i.e., Persia) and Arabia in the west and to the Indian Coast in the south (Goa). It also imported metals (silver *larin* from Persia), spices and luxury goods for cities on the Indus and its branches.35

(b) *Gulf of Cambay (or Gujarat) Ports*, collectively forming the most important group in western India. Gujarat owed her commercial ascendancy and prosperity, perhaps, to some sociological factors, the commercial ability, discernment and enterprise of the wealthy Gujarat merchants. This is confirmed by the early 16th century accounts of the Portuguese Tome Pires and Italian Barbosa testifying to their activity not only in the Middle East, in India’s coastal trade, in Bengal and Pegu, but also as far as Sumatra and Malacca in South-East Asia and China. In the 15th century Cambay (Bandar Khambayat) of the Sultanate of Gujarat had grown to be the most important port in India with 22 ports and an income of 34 lakhs. Later on the number of its ports increased to 48, as mentioned in *Mirat i Ahmadi*, dealing with corals and pearls, while that of Delhi depended on wheat and barley. Apart from Daman, Diu and Goa, the fortified Portuguese ports, the main Gulf ports were Cambay, Broach, Rander and Surat. But when Cambay declined at the end of the 15th century on account of silting, Ghogha roadstead opposite it supplied

COMMERC, INTERNAL AND EXTERNAL

175
anchorage to ocean-going ships. There was now a competition between Surat-Rander and Diu to replace Cambay. Diu had no trade with Europe, but large ships, for which the Gulf of Cambay was dangerous, were unloaded here and the goods were transported in qafilas of small ships to Cambay. Though guarded, these were not fully immune from piratical attacks. Rander was an old town on the Tapti opposite to Surat and the chief commercial centre of Broach during the first quarter of the 16th century. Its destruction by the Portuguese in 1530 led to the rise of Surat.

Already by the beginning of the 17th century when the Anglo-Dutch companies appeared in India Surat, situated on the south bank of the Tapti estuary then with a great delta, had grown to be one of the major sea-ports of Gujarat and supplanted Cambay as its 'commercial metropolis'. As its local trade came to feed the 'wealth and grandeur' of Surat, Cambay became nothing but its 'economic satellite'.

Surat was not only one of the major sea-ports of Gujarat but the largest port of the Mughal Empire and the port of pilgrimage down to the first half of the 17th century. The imperial ship, Ganj-i-Sawai, returning from pilgrimage and bringing 52 lakhs of rupees in gold and silver (the sale proceeds of Indian goods at Mocha and Jedda), was plundered by English pirates (Khafi Kh.). All the caravan routes in India converged on the city and from the port radiated sea-routes to all important ports of the Indian Ocean and even beyond. Fed by a rich hinterland extending to Ahmadabad and Agra through trunk roads, it came to control the bulk of the Indo-European trade developed by the Dutch and the English. No wonder it came to be praised by Bernier, Tavernier, Fryer, Ovington, Hamilton and others. The principal trade from Surat to Europe in 17th century consisted of the export of silk and cotton fabrics, indigo, saltpetre, pepper and spices. A brisk trade from Surat was also carried on in jewellery and in silver imported from Turkey and Iraq, while cotton went to the Red Sea, Ormuz and Basra. True, Gujarat's position as a link between Malacca and the Red Sea suffered with the decline of the spice trade through that sea and eastern Mediterranean. But even after Shivaji's two sacks of it, Ovington (1689) considered it to be the most famous 'Emporium' of the Mughal Empire. K. N. Chaudhuri.
attributes this ascendancy of Surat to the greater skill, greater knowledge of the sea and of shipping and greater wealth of the merchants of Gujarat than Bengal, whose maritime trade exceeded her own in the first half of the 18th century.

But Surat came to be eclipsed by Bombay very gradually during the 18th century. Various factors, geographical, political and military, were responsible for this development; the silting of the Tapti Delta, the decline of the empire, internal political weakness, the raids of the Marathas and their expansion in Gujarat and military operations dislocating the caravan trade of Ahmadabad. What is striking, however, is not its decline but its long survival. Even English shipowners preferred Surat to the Company's own settlement of Bombay for quicker sales and higher prices. Even in the third decade of 18th century, Surat was described as 'the storehouse of all India' by a servant of the East India Company. Thus on India's western sea coast the port of Surat stood unrivalled for nearly two centuries.

The chief exports from these Gujarat ports were: silk goods, woven out of Murshidabad silk in Ahmadabad and Gujarat going to Holland and Japan; patolas of Ahmadabad, exported to the Philippines, Borneo, Java, Sumatra and other neighbouring lands; baftas dyed in Agra and Ahmadabad and sent to East Africa, Abyssinia and Arabia. 36

(c) Konkan Ports: Next came in the Konkan region, and in Ahmadnagar kingdom the Portuguese-dominated ports of Bassein, a great shipbuilding centre, and Chaul and Dabul (Dabhol), exporting the cotton clothes of painted and of superior quality silk fabrics woven out of Murshidabad (and also Chinese) silk in Ahmadabad and Gujarat and pepper and pilgrim traffic to Red Sea (Mocha) and Persian Gulf areas (Ormuz), and also coastwise to Goa by sea.

(d) Kanarese Ports: Further south came the Kanarese ports,—Goa, Bhatkal (western sea-port of Vijaynagar), Rajapur and Karwar. Goa (passing from Bahmani Kingdom to Bijapur and then under the Portuguese) must be considered along with Cochin. Goa was not important for its local trade but as an entrepot (and collecting centre) and transhipment like Cochin. Goa exported cotton and silk goods (as specified before) to Persian Gulf, East Africa, Lisbon, Malacca and beyond and to Ceylon.
The decline of Vijaynagar trade was a factor in the Portuguese decline. Bhatkal was monopolized by them and declined.

This group of ports traded with:

(i) Malacca and Far East (Japan) in textiles and other goods. In return came spices, gold and miscellaneous China goods, lacquers, camphor, drugs and perfumes.

(ii) Persia and Arabia (trade centring in Ormuz), Red Sea (Aden, Mocha and Jedda) took cotton goods and gave coined silver (larins), pearls, horses, silk goods.

(iii) East Africa (Sofala, Mozambique, Zanzibar, Mombasa, Melinda, Zeila, Berbera), Magadoxo (Somali) and Abyssinia (Massowah) took textiles (e.g., baftas dyed in Agra and Ahmadabad), spices and provisions. In return came slaves from Abyssinia and Mozambique, ivory, amber, ebony and specially gold.

(iv) Europe (Lisbon in Portugal and then Holland). If textiles were the principal export, metals and luxuries were the chief imports to India.\(^{37}\)

Possibly the routes from Konkan and Gujarat were shared by the Arabs with others.

(e) Malabar Ports: There was also coastal trade to Calicut, Cochin and Ceylon. The advent of the Portuguese in India and their antagonism towards the Malabar and Konkani Muslim traders adversely affected the shipping of the latter with the Middle East and proportionately favoured the Gujarat traders. Unlike the Cambay ports, the Malabar group of ports, hardly exported local products except pepper. Between Mangalore and Cape Comorin, the most important ports were Calicut (opposing the Portuguese and sheltering the Arab pirates) and Cochin, Calicut was an important centre of the Kārīmi traders in India. Possibly the route from here to Aden was monopolized by the Arab ships. Cochin, was ‘the chiefest place of the Portuguese in the Indies next to Goa’ (Frederici, 1563-81). “Several ships from all parts of the world annually cast anchor (in Cochin) as Malabar, situated as it were, in the centre of the East Indies, is a convenient station for vessels to refit and take in water, fuel and provisions (which are good and plentiful) here before continuing their voyage, vessels from Batavia to Mocha, or from Persia and Surat to Batavia;...French and English ships,...Moorish vessels.” Apart from carrying pepper to Lisbon, Ceylon and Malacca, the most
important trading voyage of the Portuguese from here was to Mozambique, bringing pepper, linen and other articles. Slaves (Kaffres) were also imported to Goa and sold at high price. Quilon and Tuticorin exported calico and pepper to Malacca and beyond and also coastwise to Negapatam.³⁸

(f) Ceylon: Colombo, dominated by the Portuguese, was the intermediate port for all ships going from Bengal, Pegu or the Archipelago to Malabar and Gujarat. It exported cinnamon and precious stones and imported provisions and clothing from India.³⁹

2. East Coast Littoral: Bay of Bengal Ports:

(a) Coromandel Coast Ports: From time immemorial India’s entire East Coast had maintained commercial and colonial connections with South-East Asian islands and the mainland. In the 16th century the Coromandel Coast ports, Negapatam, San Thome, Pulicat (eastern port of Vijaynagar) in the south and Masulipatam (the chief port of Golkonda) in the north, had already become commercially somewhat important. Their importance grew further in the 17th century due to the activities of the European merchant companies. These ports not only exported piece-goods (muslin, white cloth of Bengal and pintados and red-dyed cotton of this coast) and fancy goods to the straits but also these along with dyed yarn and opium to Mocha, the Persian Gulf, Pegu, Arakan, Ceylon, Indian Archipelago, Malacca Tenasserim, Achin, Siam, Cambodia and the Far East. In return came spices and China goods from the Straits and gold, silver and precious stones from Pegu. Silver and copper came from Japan (Nagasaki, Hirodo Yedo). There was a coasting trade in the above exports to Ceylon, Malabar and Goa on the West Coast and also north (Bengal) and south in the East Coast.

In South India Masulipatam was the most important seaport from which ships sailed to the coasts of Bengal, Arakan, Pegu and Tenasserim, laden with all sorts of cotton cloths, glass, iron, cotton yarn, both red and white; tobacco and cowries, used as money in Bengal and Arakan, and also some spices and sandalwood. Linschoten has referred to the cotton fabrics of Negapatam, San Thome and Masulipatam (1595). The Shah of Golkonda agreed to supply annually several thousand pieces of red cotton stuffs to the Shah of Persia for the latter’s army by sea and controlled the trade. Hence
the Dutch found difficulty in procuring red cotton cloth through the middlemen at Petapoly (1607-8). Subsequently in the 17th century Masulipatam had to face competition from the English in Madras and the Armenians in San Thome. But it possessed unquestioned importance as a port of call for all Indian ships moving in and out of Bengal.

Other articles of export from the East Coast were iron and steel, diamonds, rubies and pearls.\(^{40}\)

\((b)\) _Gingelly Coast_: Vizagapatam and Bimalapatam sent out rice and oilseeds to different ports on eastern and western coasts of India for export to foreign countries.\(^{41}\)

\((c)\) _Orissa Ports_: Pipli and Balasore became important only during the first half of the 17th century. Cuttack, the capital of Orissa province, at the bifurcation of the Mahanadi and the Katjuri, was an important port.\(^{42}\)

\((d)\) _Bengal Ports_: Deltaic Bengal with its principal river systems, innumerable creeks and estuaries and a rich and long hinterland had several important ports. Persian chronicles yield only incidental information about these. But contemporary Bengali literature, Portuguese accounts of the 16th century, European travellers’ accounts and factory records throw light on their condition during 16th to 18th centuries. The _Suma Oriental_ of Tome Pires refers to two distinct lines of commerce of Bengal, to the Coromandel Coast, Ceylon, Malabar and Gujarat; and to Malacca and indicates that the Bengal merchants were almost at par with those of Gujarat.

Chronologically Satgaon (Saptagram, i.e., Porto Pequeno of the Portuguese) on the Saraswati was the most important port down to mid-16th century when it declined like Cambay), owing to silting up of the river. About it Mukundaram wrote: ‘ Merchants of (Orissa), Traillanga (Madras), Mahendra (Ceylon), Maharashtra and Gujarat came to Saptagram, but the merchants of Saptagram do not visit other ports and countries, but enjoy their fortunes at home.’ An approximate idea of its size may be obtained from the fact that in 1567 it provided anchorage to 30 or 35 ships, big or small, every year. As the river silted up large Portuguese ships anchored at Betor (Howrah) wherefrom smaller ships sailed to Satgaon. Even then Fitch found to be ‘a faire cities for citie of the Moores, and very plentiful of all things’ and a very important port exporting textiles,
provisions (rice, sugar, etc.) and other local products to Pegu and Malacca and importing silver and other metals, spices and miscellaneous goods therefrom. Besides being a port, Satgaon was also an important entrepot and a distributing centre for goods, local and imported.43

Hughli, situated on the main stream of the Hugly River and founded in 1538 by the Portuguese, came to supplant Satgaon for better navigability for bigger ships, and soon became the common emporium of the ships of India, China, Malacca and Manilla, and the most important port of Bengal during the second half of the 16th century, frequented by numerous traders, Indian and foreign, Persians and Armenians. Then, even after the expulsion of the Portuguese, with the settlements of the English and the Dutch, it grew to a high pitch of prosperity from mid-17th century as a port, an inland emporium and home of several indigenous industries. Early in the eighteenth century, this principal port of Bengal concentrated on trade with Europe, Persia and Arabia, sending 50-60 richly laden ships every year, besides carrying necessaries on small vessels to the interior. As it collected customs both on oceanic and inland trade in the imperial customs house, it was reputed as Bakhshí Bandar.44 But though the total maritime trade of Bengal exceeded that of Gujarat in the first half of the 18th century, Hughli was not regarded as comparable to Surat, which was then in a state of decline.

Towards the close of the 16th century Hijili (then in Orissa) became an important trade emporium. Fitch wrote in 1586: "Not far from Porto Piqueno southwards standeth a haven, which is called Angeli in the country of Orize....To this haven....came every year many ships out of India, Negapatam, Sumatra, Malacca and diverse other places and laden from thence great store of rice and much cloth of cotton wool, much sugar and long pepper, great store of butter and other victuals for India". It suffered a setback during the Portuguese occupation of Hijili island with consequent depredations and enslavement of the people. But after their expulsion from Hughli and Hijili (1633)-and the transfer of the latter to Bengal its fortunes revived and it became a leading sea-port in lower Bengal. By 1679 the English East India Company began to use it for lading and unlading.

In eastern Bengal (now in Bangladesh) there were also several ports:

COMMERCCE, INTERNAL AND EXTERNAL
(i) Sripur, near Sonargaon, and about 15 miles east of Dacca the famous capital of Chand Rai, the starting point of Sher Shah’s G.T. Road, and at the old confluence of the Meghna and the Padma.

(ii) Chittagong (Chatgaon, Porto Grande of the Portuguese) : Early in the 17th century Indian merchants, ‘Benjanan’ (banias) and ‘Keteris’ (Khatris) flocked here from Lahore, Agra, Delhi, etc. It was under Arakan up to about 1666, when Shaista Khan conquered it. It decayed due to Arakanese piracy and loss of importance of Rajmahal.

(iii) Dacca, capital of Mughal Bengal, 1608.45

The sea-ports of Bengal were not very popular at first, because of time factor among other reasons. Even in 1627 the Batavian Governor-General considered trade here to be precarious owing to constant wars, rebellions and frequent administrative changes, while the estuaries of the Hughli and the Meghna were full of pirates. Gradually this aversion wore off and in the seventeenth century many Bengal ports on the Ganges and its branches were frequented by numerous Dutch, English and Portuguese merchants. Their ships, says Bowrey 1670, “do annually resort to lade and transport of sundry commodities; hence great commerce go on into most ports of account in India, Persia, China and South Seas”.

The chief exports from Bengal until mid-17th century continued to be provisions (rice and sugar), muslin, lac, butter, indigo, pepper, raw cotton and silk and cotton fabrics. Rice was carried up the Ganges as far as Patna, and exported by sea to the Coromandel Coast, Ceylon and Maldives. Sugar also went from Bengal to the Carnatic and to Persia, Arabia and Mesopotamia. Of all these commodities cotton fabrics were most important. Fitch (1583-91) records: “Great store of cotton cloth goeth from hence (Sonargaon), wherewith they serve all India, Ceylon, Pegu, Malacca, Sumatra and many other places”. This cotton trade of Bengal received a further fillip after the loss of eastern coastal trade (due to fall of Golkonda in 1687 and Maratha depredations. As a result of this shift of importance, primacy of trade passed to Bengal but this also declined in the 18th century.46

The relative importance of the sea-ports was, as follows: (i) Cambay ; (ii) Bengal ; (iii) the Coromandel ; (iv) the Indus delta ; (v) Malabar ; (vi) Goa.47 By the first half of the 18th century, however, Bengal became comparatively more important than Gujarat.
The growth of Anglo-Dutch shipping and trade in Asia and control of the trade routes and centres in the East Indies hit the Indian traders of the East Coast and Bengal adversely. The Dutch Company (VOC) was unwilling to issue passes to Indian ships of those parts to trade there. The three chief ports, Masulipatam, Balasore and Hughli, continued to trade with Sumatra, Malaya, Siam and Borneo till the end of the 17th century, though not to Java. The number of ships sailing from Hughli and Balasore to the East Indies gradually diminished after 1700. Only the coastal trade to South India, Ceylon and the Maldives remained with the Bengal merchants by 1720 (the Surat merchants controlling the Gujarat trade). However, K.N. Chaudhuri thinks that the extent of the loss is uncertain. He points out that as the Bengal merchants used to send their goods in ships of the English and (later) the French private traders to escape Dutch embargo during the first half of the 18th century, the former did not suffer total exclusion from some markets at least. But certainly this was far different from the earlier freedom of navigation of Indian merchants. Even for this doubtful limited advantage they had to yield to the Anglo-French traders a large share in eastern trade as well as in Persian Gulf trade where Bengal goods sold well.

(e) Pegu and the Archipelago - Far East: Below Arakan, in the Irravati delta the principal ports were Pegu, Kusima (modern Bassein), Martaban, Tenasserim and Qeda.

Fitch’s (1583-91) journey throws light on the trade and seaports of:

Sripur-Sandwip (island)—Kusima (modern Bassein)—Medon (not identified)—Dela (Dala, part of Rangoon city)—Syriam—Mahkan—Martaban—Tavoy—Tenasserim—Junkseylon—Malacca (most important emporium in the East).

In Malay, Kedah (Sanskrit Kataha) and Patani were visited by foreign ships throughout the 17th century.

In the Indian Archipelago the ports frequented were:
in Sumatra: Tiku, Priamoun, Achin, Jambi, Indragiri, Palembang and Bengcoolen;
in Java: Bantam, Jakatra and Japara;
in Borneo: Sukandana, Sambas and Banjarmassin;
in Celedes: Macassar and
in Islands of Amboyna, Ceram, Banda and Moluccas.
Towards the end of the 17th century Ayuthia (capital of Siam), Kamboj and Tonking grew into importance, as European traders sought to trade with China through Macao and Amoy for getting gold, copper, silk, musk, porcelain, tea, sweetmeats and sugar. Japan: Foreign merchants visited Nagasaki, Hirado and Yedo in search of silver and copper there.\(^{48}\)

H. Organisation of Commerce—Internal and International

How was this vast internal and international trade of India organized during the 16th to 18th century?

Subject to the influence of important political changes and maritime developments, India’s commercial personnel practically remained basically stable, characterized by regional and functional specialization throughout the period of this survey.

Cosmopolitan body

This vast trade was organized by a distinctly cosmopolitan group of merchants belonging to diverse ethnic groups. The merchants of a particular group, community or caste controlled the trade of one area. \((i)\) On the western coast of India the Muslims concentrated their business especially at Surat and in the ports of Malabar (e.g., Cannanore and Calicut), which became an entrepot of the trade of the Far East to the Persian Gulf and the Red Sea and hence a commercial centre of first importance. With their cosmopolitan and wide outlook they were predominant in the Indian Ocean and eastern seas from Madagascar to Malacca, as shippers and pirates on seas and as merchants on land. Though not claiming sovereignty in the Indian ports, they enjoyed a more privileged position than ordinary people.\(^{49}\) \((ii)\) The Gujarat baniants (banias, brokers or merchants), including Jains, though more localized than the Muslims, moved freely by sea and land and had trading establishments from Bantam to the Red Sea, and East Africa down to Mombasa.

The commercial communities of Gujarat, the ‘Guzarats’ of early English records, had frequent contacts with Socotra, Aden, Mocha, Mogustain (east of Bandar Abbas), Bantam, Priamon, Tiku and Barouse. Mentioned along with the “Deccanis, Flemingo (Flemish) and Moors besides the English” (1614), they were enemies of the Portuguese and the great enemies of the English in the East Indies.
The latter regarded them as their “most dangerous and malicious enemies” both at Achin and Tiku, 1616.

Besides the Sindhi traders in western India there were the traders of Dabul and Malabar (including the Konkanis, Arabs and other Muslims), referred to as ‘Dabulls’ and ‘Malabars’ in English records whose ships traded with the Red Sea ports.50

(iii) The Chettis of the Coromandel Coast were wellknown in the Indian Archipelago, the Straits and South-East Asia. They took an active and large part in the Malacca trade before its conquest by the Portuguese. But they did not go west of India.51

(iv) Moreland makes no distinct reference to the trading groups of northern India but surmises them to be the same as now. But this seems to be an underestimate. There were of course, the Kashmiris and the Khatris of upper India. The records of the first half of the 17th century refer to, besides the Portuguese and the English, ‘Mongoles’ (Mughal, i.e., Persians, Central Asiatic foreigners and North-West frontier merchants), Pathan (Afghan), Armenian and Indian merchants including Bengali and East Bengal traders (‘Praychaes’). While the Pathans were generally found in Bengal and Bihar, the Armenians, wellknown for their spirit of enterprise, adventure, adaptability and mobility, played an important part in India’s trade during 16th-18th century and were found almost everywhere. In the 16th century they were active in Diu and Cambay. In the next two centuries their activities swelled, especially to Bengal and the Coromandel. The Persians (including Zoroastrians) and Armenians who traded overland through Qandahar thronged the markets of Agra and Lahore (1620-26). They were in Patna (1632). Tavernier met four of them coming from Danzig and going via Patna to Bhutan to sell yellow amber images. Owing to decline in the trade of Surat after 1664 the Armenians and Persians left it for Bander Abbas. They also traded with Russia in the 17th-18th century. The Marwari merchant and the financier grew to prominence in extensive areas in the 17th and 18th centuries, as the career of Banarasidas and the Jagat Seths showed. By the 18th century the Komatis of Telugu region also traded in northern India.

By the 18th century the Hindu merchants who had once been prominent in Asiatic trade with their fleets had lost their importance (except a few) and had to restrict their activities to less hazardous

COMMERCE, INTERNAL AND EXTERNAL
inland trade and money-lending, while the Muslim traders continued to control overseas and coastal trade.

The Parsis (Zoroastrians), at first an artisan (weaving) community, developed as traders, money-lenders, middlemen, shipowners in the 17th century in Gujarat coasting trade, collaborated with the English and later grew to be the first modern capitalists in India. The Jews, who were at Cochin and elsewhere in the Deccan, were also active on the roads in the interior. If we add to the above the Chinese and South-Eastern Arabian, Ethiopian and South African merchants as well as the merchants of the Europe, e.g., the Portuguese Dutch, English, French, Danes and others, the trade would be manned by international personnel.

Role of Ruling Classes

Secondly, what was the role of the ruling classes, the emperors, queens, princes and nobles in commerce? This aspect of India’s economic history has not yet been adequately stressed. Here we must distinguish between their interest and active participation in commercial ventures and their measures for protection of trade in the competitive maritime struggle going on in Indian waters during the 16th and 17th centuries between the Portuguese and Muslims on the one hand and between the Portuguese, the Dutch and the English *inter se* on the other. Moreland was not unaware of this distinction. But he has bypassed the positive trading ventures of the ruling classes and focussed attention only on their failure to stem piracy and protect India’s trade. He opines that the Indian States were continental or land powers, benefiting from foreign commerce and its revenue, but doing nothing to protect it. Even this is only a half-truth for all the Indian States were not land-locked powers and many had long coast lines. What they lacked was a strong navy. Aurangzeb decided, according to Manucci, that naval warfare suited the European powers alone. Vijaynagar’s sea-borne trade came to Portuguese hands in 1547 by a treaty. Bijapur quarrelled with the Portuguese on land but could not drive them from the sea. The Zamorin of Calicut protected the ‘pirates’, some paying tributes but could not face the Portuguese in open fight. The unprotected Indian merchants had to fend for themselves.
All Mughal emperors from Akbar were interested in sea-borne trade. Father Monserrate has referred to Akbar's trading activities and his eagerness for commercial profits. But even he never challenged the Portuguese control of the sea and his ships from Gujarat to the Red Sea sailed with Portuguese passes (cartazes). Akbar's wife had a ship which was plundered by the Portuguese. Nurjahan and Khurram were not only interested in trade but actively participated in it.

About the role of the nobles in the economic life of the Mughal empire the current view is that, scared by the spectre of escheat of their property at their death, they wasted their wealth in luxury and extravagance and did not contribute to the economic development of the country by investing their wealth. A close study of the European factory records and foreign travellers' accounts would, however, make it abundantly clear that many nobles did engage in trading activities in Asia.

Thus while among European powers naval force was an inseparable adjunct and ally of commerce, in India the commerce of her nationals was unbacked by power and so became a helpless and easy victim of piracy. The erstwhile peaceful organization of trade of pre-European age was rent asunder in a welter of chaos.53

Organization of the Europeans and their Methods of Trade

Thirdly, it is necessary to have some idea of the organization of the Europeans and of the methods of Europe’s Asiatic trade. Regarding the commercial organization of the Portuguese maritime empire (Estado da India) something has already been said earlier, particularly about their separate assaults on Muslim ships, their conception of wholesale State monopoly (of an article, the spices), establishments of fortified harbours and strategic centres, the cartazes (passes) system and their imperial ambitions. The Portuguese, however, had not fully developed the potentialities of India's commerce with western Europe, as we have seen before.

Though the Dutch and the English accepted some features of the Portuguese trade like the passes, their methods were different. So they succeeded where the Portuguese failed, i.e., in utilizing the opportunities for development and tapping Indo-European commercial potential. Perhaps the major difference lay in the contrast between
the Portuguese State monopoly and the Anglo-Dutch Joint Stock Company organizations. These differed from the traditional systems of mercantile organization in Europe as well as in Asia and constituted, in K. N. Chaudhuri's words, a most revolutionary development, and anticipated "modern multi-national, multi-product business corporations". Though, the efforts of the northern companies to insist on supply of standardized goods according to specification were not always successful, undoubtedly "the methods and spirit of the impersonal abstract firm" proved to be eminently successful. As the mercantile concerns in India were generally family-based personal concerns, they even differed from the contemporary Indian foreign merchants in the Red Sea, the Persian Gulf and the East Indies. Indian merchants did not seek to emulate the Anglo-Dutch example except occasionally under Dutch and French initiative about the first quarter of the 18th century. But this novel experiment was restricted only to the Coromandel Coast.54

The commercial organization of the two Protestant companies had certain structural similarities. Each had several factories or 'head settlements', located at or near important ports, mutually independent but closely related for operational purposes. These served as centres for localization of manufacture like traditional centres. Each had sub-stations in the hinterland producing the articles for export. The Dutch organization in India survived till the second half of the 18th century.

The next question was that of ensuring security of trade. This concerned the methods of Europe's Asiatic trade. While the Dutch had Batavia, a base in Java and another base in the Malabar Coast, the English had no such bases and so required fortified trading settlements as a part of a fixed policy, e.g., Madras (1639), Bombay (1665) and Calcutta (1696-99), which would be independent of native political power. Instances of the pursuit of force or 'gun diplomacy' before Sir Josiah Child were many but it was he who championed the British imperial policy (1686), but it met with a reverse in the war with the Mughals (1697-99).

Another equally potent method was 'naval blockade'. Here the warships of the European companies either blocked a major sea port, preventing native ships to sail out or captured Indian merchant ships. This was possible because the Mughals, mighty on land,
were utterly weak on sea. Failing mediation of merchants, there were frequent unresolved disputes over customs, financial impositions, private trade, between the Mughal authorities and the companies. The former stopped the supply of rations and other necessities to the latter, who retaliated by blockade. Ultimately some compromise was arrived at.55

The problem of customs-disputes was sought to be tackled in Farrukhisiyar’s firman of 1717 to the English fixing a lump sum of Rs. 3000/- a year in lieu of customs. The decline of the Mughal empire in the 18th century was utilized by the foreign companies specially the English and the French to improve their political and economic interests. Finally the English succeeded in worsting their rivals.

I. Balance of Trade

India was habitually a creditor country ever since the days when Pliny lamented the drain of Roman gold to India. Her exports exceeded the imports in value. Before the close of British rule, too, India’s balance of trade was generally favourable. But it was virtually unfavourable, as the balance of payments went against India, due to the Home Charges, the yearly drain of industrial profits and indivisible imports. Dragged thus into a debtor position, India paid her debts by excess of exports over imports. Throughout the Mughal period this paradox did not exist. Not only India’s balance of trade but even the balance of payments was in her favour. This was because of the prevailing economic conditions. The demand for India’s goods in foreign countries exceeded her need for their staple goods (woollens). But this is at best only a partial explanation. If woollens are unsuitable in India’s hot climate, why did Europe with its cold climate import cotton goods? Moreland attributes this to the poverty of “the masses of Indian consumers” who “were too poor to buy imported goods”, the market for which was limited to a small wealthy class. True, except spices and a few other articles most of the imports were articles of luxury. But throughout the world the masses would ever be too poor to buy imported luxuries. He further says that India was always eager to export her goods and her appetite for bullion was insatiable. But this appetite
was not at all unnatural. Others have sought to explain the situation by referring to (i) the nature of India’s imports, determined by the self-sufficiency of her economy, and (ii) the tempo of her varied industrial activity, which, even after meeting domestic needs, left enough surplus for export. In fact the rise of inter-continental commerce whipped up the dormant forces of production. India automatically became a creditor of the contemporary known civilized world, which paid her debts in gold and silver.

How was it possible for western European countries to effect this exchange of bullion for articles of manufacture, or ‘commodity structure of trade’? Their money supply increased through the discovery of American silver mines so much that they could finance this adverse balance of trade for about three centuries.

One peculiarity of Indo-European trade was that its major profits accrued not from sale of European goods to India but from that of Asian imports in Europe, Africa, the New World and even the Middle East. It developed largely on account of the three-fold commercial contacts between Europe, west coast of Africa and the slave plantation settlements in America and the West Indies.

Hence the absorption of precious metals was the chief feature of India’s foreign trade. It was favoured by laws then enforced in India. The Mughal emperors were ‘mercantilists’. Both Van Twist and Mandelslo testify to this.

To customers with ready cash trade with India was a simple affair. It was, however, not so easy with the European customers, who were governed by the prevailing mercantilist theory. As bullion was equated with national power, export of gold and silver was prohibited to conserve national strength. Hence the mercantile theorists (bullionists) were opposed to this export of bullion. Moreover as the metallic units used for domestic currency and international commerce were the same, and bimetallic ratios fluctuated, there was danger of international monetary instability. But the merchant, lured by the exigencies of trade, overbore governmental fiat which had no effect. It is not, therefore, surprising to find successive travellers coming from different European countries, harping on what, to them, appeared to be a drain from their own countries. Making allowance for evident exaggeration, their remarks reflected the prevailing strong popular prejudice, and equally stiff State legislation
in European countries. William Hawkins noted: “India is rich in silver for all nations bring coin and carry away commodities for the same and this coin is buried in India and goeth not out.” Terry estimates that an Indian ship returning from the Red Sea was “usually worth £ 200,000, most of it in gold and silver... many silver streams run thither as all rivers to the sea... thence”. Sir Thomas Roe’s remark ‘Europe bleedeth to enrich Asia’ has become classic. Mandelslo tells us that export of gold and silver and even coined brass was prohibited as a capital offence. Bernier remarks that gold and silver, after circulating in every other quarter of the globe, came at last to be swallowed up and lost in some measure in Hindustan. In a similar strain observes Gemelli-Careri (1695), “all the gold and silver which circulates throughout the world at last centres here”.

A large part of export trade was controlled by Indian hands, and carried on the Indian ships and the profits of Indian shippers, merchants, bankers and other intermediaries contributed to turn the balance of payments in India’s favour. In the 17th century the advent of the Dutch and the English affected Indian shipping but not balance of trade.56

But opinions differed even among mercantilist writers, particularly in early 18th century. They realised that international commerce was linked with money, prices and wages. So Indo-European trade was a matter of ‘price differentials’. As early as 1701 an anonymous author held that Indian manufactures were cheaper than the corresponding English, because Indian labour was cheaper. The idea was elaborated by Thomas Prior in 1729: as bullion was scarcer in the East Indies than in Europe, wages and prices were lower there; hence specie (rather than manufactures) had to be exported to purchase (E. Indian) goods. Thus economic forces and not any resistance to European imports determined the commodity structure of Indo-European trade.57

Some idea of the import of bullion into India may be formed from the following details. An Indian ship returning from the Red Sea brought gold and silver worth 2 millions sterling (Terry). During 1635-50 England’s balance of trade so fell that the Court of Directors scrutinized the exports of bullion. The figures of import of bullion by the English East India Company to India would show
that the amount thereof steadily increased during the Mughal period: 1601 (£22,000); 1616 (£52,000); end of 17th century (£800,000).

This position continued even a little beyond mid-18th century: 'The immense commerce of Bengal might be considered as the central point to which all the riches of India were attracted. Specie flowed in by thousand channels. All the European companies formed their investments with money brought into the country; the Gulpfs (of Mocha and Persia) poured in their treasures into this river (the Ganges)'.

As regards the impact of the inflow of specie on medieval Indian economy no categorical answer is possible in the absence of information on the volume of such annual inflow, the currency needs of bullion and price movements in India. Of course there was widespread hoarding in India but this was true also in Europe. K. N. Chaudhuri has shown that there were considerable fluctuations in bullion prices as well as bimetallic movements of treasure to and from India. The bimetallic ratio in China being lower than in India, silver from Europe or the Philippines passed from India to China. At any rate India was the penultimate and not the ultimate destination of specie.\(^{58}\)

By the first half of the 18th century the impact of Indo-European trade, both Company's as well as private, on India's internal economy was felt. It had grown so vast as to become a rich source of revenue to the Indian rulers, who taxed the merchants and weavers. Ali-vardi's Bengal, one of the most prosperous provinces of the Mughal empire, witnessed the greatest expansion especially in textiles. The Directors of the English Company held that the Bengal Nawab must have realised that his revenues benefited from the vast imports of bullion by the Europeans into the province and that this depended on the English hold over Calcutta (1748).\(^{59}\)

I. Volume of India's Foreign Commerce

Attempts have been made to estimate the volume and value of Indo-European trade. But in the absence of adequate data, it is difficult, if not impossible, to arrive at any definite numerical assessment of the volume of India's commerce, overseas and coastal and value of her imports and exports.
The pioneer economic historian of the period, Moreland, however, attempted to estimate its volume and value at the end of the 16th century (c. 1605) on certain general considerations, viz.,

(i) European goods had no market among the poor masses, while the rich upper classes had a craze for novelties, toys or dear trifles.

(ii) India’s exports were limited, as she insisted on bullion in exchange of goods, but European mercantilism was against its free export.

(iii) Influence of seasons or seasonal winds. Regular sailings were then the exception rather than the rule. From May to beginning of September the ports were entirely closed on the West Coast and ships from the west could venture to approach the coast only when the monsoon abated. Here the busy season lasted from September to January and the trade with Malacca continued till April. Other coasts had seasons of their own. Thus commerce was regulated by seasons on Lisbon-India route, Red Sea and Bay of Bengal traffic. Sometimes ships missed the monsoon and a vessel which did not sail in the proper time had to wait in the port till the next year.

(iv) The variety of merchant vessels used on the Indian seas. These were of five broad categories: (a) the largest, the (Portuguese) carracks (1500-2000 tuns) with an average of 1800 tuns (for European voyages) or less (for Far East); (b) the next largest, the pilgrim ships to and from the Red Sea, of 400-1500 tuns; (c) the ordinary Indian trading vessels, about 200 tuns; (d) the junks, built on Chinese model and roughly of 30-400 tuns and (e) the coasting crafts, averaging 50 tuns, occasionally used in foreign commerce to Ormuz, the Red Sea, Pegu, etc. Besides the commercial vessels, there were fighting ships like galleys.

From these, Moreland estimates India’s total foreign trade on western and eastern routes to be small, about 60,000 tuns of that period or 24-36000 modern tuns.

On the face of it, Moreland’s estimate, which he thinks to be an over-estimate, appears to be an under-statement. On the one hand, some of his general considerations require to be qualified if we consider the 17th century. The first one may be generally true but notwithstanding the limitations imposed by mercantilism, referred to in his second, Europe’s imports from India were substantial. As
regards the influence of seasons, Moreland has not taken into consideration the evidence of Dutch sources which showed that Indian sailors braved the sea to sail to Achin in bad weather, which would increase the tunnage. Lastly, several contemporary observers refer to tunnage and number of inland and sea-going vessels which would yield a higher volume of trade than suggested by Moreland. Regarding inland vessels Jourdain speaks of barges, each of 400-500 tuns, carrying salt annually between Agra and Bengal (1612) and Peter Mundy of those, each of 300-500 tuns between Agra and Dacca. Among the Indian ships ‘raped’ by the English under Nicholas Downton and Sir Henry Middleton (1612) were the following ships:

\[
\begin{align*}
(i) & \quad \text{The Muhammadi of Dabhol} & 1500 \text{ tuns} \\
(ii) & \quad \text{The Rahimi of Surat} & 1500 \text{ tuns} \\
(iii) & \quad \text{The Hasanee of Surat} & 600 \text{ tuns} \\
(iv) & \quad \text{The Mohammadee of Surat} & 400 \text{ tuns} \\
(v) & \quad \text{The Salamatie of Diu} & 450 \text{ or} \\
& & 460 \text{ tuns} \\
(vi) & \quad \text{The Kadiri of Diu} & 200 \text{ tuns} \\
(vii) & \quad \text{The Agancany of Diu} & 208 \text{ tuns} \\
(viii) & \quad \text{The Kadiri of Dabhol} & 400 \text{ tuns} \\
\end{align*}
\]

\[
\text{Total} \quad 5258 \text{ or} \\
5268 \text{ tuns.}
\]

besides several others whose tunnage was not given. In 1616, Terry found the vessels between Surat and Mocha to be “of exceeding great burthen”, some at least of 1400 or 1600 tuns, one of which carrying 1700 passengers. In 1657, Christopher Hotton found 20 “sails of ships of burden belonging to the native inhabitants” at Masulipatam, constantly sailing to Arakan, Pegu, Tenasserim, Queda, Malacca, Mocha, Persia and Maldiva islands. Several ships traded annually to Arakan, Tenasserim and Ceylon to purchase elephants for the Sultan of Golkonda and his nobles. As the imported elephants numbered 14-25, the ships must not only be very strong but also of vast size (i.e., tunnage). Indian ships of tunnage varying between 900 and 1500 frequently sailed in the Asiatic waters, the smaller being of 60-80 tuns. The standard tunnage of a fair sized marine ship in England till the beginning of the 19th century was 300-400 tuns. According to Milburn, England used about 150 ships for her
world-wide trade towards the end of the 16th century (1588), the average tunnage being 150, which declined by one-third in 1602. Some ports of India accommodated 500 ships. Thus the tunnage and number of India’s ships were quite considerable. Balkrishna estimates the volume of India’s shipping in 17th century to be 3,45,000 tuns of which foreign trade came to 85,000 tuns and coastal trade to 2,60,000 tuns.

The latest writer on the subject, K. N. Chaudhuri, has pointed out that before the activities of the two northern companies, the Dutch and the English, there was no substantial increase in the volume and value of Indo-European trade. Portugal’s Asiatic trade, though not negligible, was small and less diversified than that of her successors. Subsequently, European private traders encroached on the fields of the Indian merchants. The trade of the Anglo-Dutch joint stock companies was worldwide. Chaudhuri has discussed their methods and features but wisely refrained from a quantitative assessment.  

NOTES AND REFERENCES

9. General: Moreland, IDA. ch. VI; FAA, chs 1 and 2 are based on various sources. Mukerjee, chs 5 and 6; Chicherov, ch. 3; K. N. Chaudhuri, TWA, 193-94; ch. xiii (1): CEH, i. 382-407; A. Dasgupta, op. cit. ch. xiii (2).

10. Influence of wind pattern and risks of storms, TWA, 201f; Sarkar, SAR; Moreland, IDA, 198, 218f; FAA, 57-8; Mukerjee, 117. 93, passim; Chicherov, 105f; Dasgupta, op. cit.

11. Moreland, IDA, 220, 220-3; FAA, 1-10; Mukerjee, 93.

12. West: history and nature, Dasgupta, CEH. i. 411-12, 426. East, S. East and Far East—Both the Indian and Chinese traders bought spices in Indonesia. But they also mutually purchased each other’s goods,—the former, Chinese porcelain and silk, the latter some Malabar pepper in Malacca, besides incense and sandalwood and rare articles (e.g., cornelian) from Cambay and perhaps opium. The ‘Gores’ ( ? Japanese) bought Bengal cloths at Malacca. CEH. i. 409.


Bengal: Earlier activities in Marco Polo; Ibn Batutah; and Mahuan (JRAS, 1895, pp. 530-2); Varthema, 151-212; T. Pires (1512-5), i. 92-95 (Malacca trade); Bolts, Considerations, i. 92; ii. 133-45; Taylor, Dacca...110-5.
13. **Trade emporiums**: Ormuz, Fitch, in Purchas, II. X. 1731; Barbosa, 260ff; Linschoten, c. 6; Dasgupta, CEH, i. 412.

**Red Sea** ports, Jourdain, 77, 103, 353; Purchase, i. iii; Chaudhuri, TWA, 194.

**Suez**: Birdwood, Records of E.I.C. 165, quoted in Marriott.

**English in India**, 35; Mukerjee, 112.

**Somali and Abyssinia**: Barbosa, 233 ff; Pyrard. ii. 224 ff; Mukerjee, 113.

**South Africa**: Purchas, I iii. 149; Mozambique and Sofala identified with Ophir, Purchas, II, viii. 1022.

**Malacca**: Barbosa, 370ff; Indian shippers, CEH. i. 409.

**Bantam**: Jourdain, 308.

**Achin**: Purchas I iii. 123, 157.


14. Chicherov, 109, has referred to a large number of scholars who have studied this subject (in Russian). He says that in the 18th century the efforts to develop trade with India were practically dropped on account of political crises. But I have shown from a study of abstract of Russian documents (published in English) in USSR archives that this view is not quite true and the 18th century was also full of several such attempts. Names of at least 27 Indian merchants and details of their activities and efforts of the Tsarist government to devise ways and means to develop trade were made up to 1801. See for details my *Thoughts on the Study of Indian History*, Address of General President, Proc. Ind. Hist. Congress, Calicut, 1976; also my article 'Russo-Indic Economic Relations in 18th Century', Dr. K. K. Dutta Commemoration Volume, Patna, 1985.

15. Chicherov, 109-110; *My Thoughts, op. cit.*


17. Moreland, IDA, ch. 6; FAA, chs. 1 and 2; Van Leur

18. Portuguese attitude, Barbosa, 353, 358; Pyrard, i. 279; Re: Portuguese policy, Hunter had long ago referred to their territorial ambitions. True, at first they professed to have a double objective, Christians and spices, as Vasco da Gama's *A Journal of the First Voyage*, 1497-99 (tr. & ed. by Ravenstein, 48-49) would show. Perhaps this led Moreland (IDA, 198-202) into an error of holding that the Portuguese did not want a land empire but only trade and proselytization. But the territorial ambitions are clear from the subsequent letter of King Manuel to the Vatican, claiming to be 'Lord over conquests, navigation and trade with Ethiopia, Arabia, Persia and India'. The Portuguese naval commander, Pedro Alvares Cabral, was instructed by him
to assure his claim to armed control to oceanic trade (1590). W.B. Greenlee, tr. Cabral, *The Voyage of Pedro Alvares Cabral to Brazil and India*, 180. See CEH, i. 382.

Stages in acquisition of key stations: 
(i) 1502—Calicut bombarded; 
(ii) 1503—first Portuguese fort in India built in Cochin; 
(iii) 1509—Francisco de Almeida crushed the Egyptian fleet at Diu; 
(iv) 1510—Albuquerque captured Goa from Bijapur and it became the administrative headquarters of the Portuguese maritime empire in the East; 
(v) 1511—Malacca, the famous commercial emporium, which controlled the sea-route to the Far East was captured; 
(vi) Ormuz in Persian Gulf was conquered. Subsequently other fortified and commercial centres were occupied; San Thome on the East Coast; Hughli and Chittagong in Bengal; Macao on the Pearl R. in China and Colombo in Ceylon.

19. *Cartaxe*, Moreland, FAA, 9f; Steensgaard, 84; Chaudhuri, 383-5; CEH, i. 381-2.

20. Anglo-Dutch, Moreland, FAA, 1-3; Mukerjee, 100-110; Comparative details in Chaudhuri, CEH, i. 386-91, based on Meilink Roelofsz, *Asian Trade and European Influence* (1962), 207-8, 189; Terpstra, 40; Glamann, *Dutch Asiatic Trade* (1958), 132.

For the French, S. P. Sen, *French in India: First Establishment and Struggle* (1947), 45; CEH, i. 393-4; ii. 25.

21. Moreland, IDA, *op. cit.*; FAA, 54; BN, 50; Mukerjee, 157. Antiquity of India’s trade with Babylon and Egypt: Egyptian mummies were wrapped in Indian muslins. Import of bullion, CEH, i. 417.

Horses were bred in some parts of India but their standard was not comparable to Arab and Persian horses.

Porcelain dishes were used for Akbar’s dinner. He left crockery worth 25 lakhs rupees, besides artistic porcelain and coloured glass items: cf. De Laet and Manrique; *Treasure of Akbar, Jour. Royal Society*, 1915, p. 242.

*Spices*: Spices made history in the middle ages like oil and rubber in modern times. “The history of modern Europe and emphatically of England is the history of the quest of the aromatic gun resins and balsams and condiments and spices in India, Further India and the Indian Archipelago”. (Sir George Birdwood). The civilized world of the medieval age owed the taste for clove and nutmegs (of the Moluccas of the Spice Islands) to China, wherefrom it spread to India, Persia and Western Asia, Egypt and Europe. The world quest for spices fed a brisk and profitable trade in the Asiatic seas, manned by the Arab merchants. The spice emporiums were Ormuz, Aden, Suakin, Tor, Sofala, Cannanore, Calicut and Malacca. Ormus and Tor were the gateways of the West. Mukerjee, 112-3.

22. IDA, ch. 6; BN, 52; Srivastava in *Mughal Empire*, ed. R.C. Majumdar, 731; CEH, i. 413-6.

Pepper: CEH, i. 399-400.

“The coast of Coromandel is the left arm of the Moluccas and the islands round about because without cloth imports from Coromandel trade would
be dead in the Moluccas”. Hendrick Brauwer (later Dutch Governor-General) to Dutch E.I. Co., June, 1612, quoted in BN, 53.

23. Piteter Gielisvan Ravesteijn wanted to give to the Dutch authorities an idea of the nature of demand of the Mughal Court for foreign goods. The following imports came from England to Surat: fine swords and knives able to cut through iron; satin and velvet of various colours (except black); fine woollen cloth, green, yellow and crimson; 3 or 4 pieces of men’s and women’s clothing, each of a different fashion; oil paintings landscapes and portraits; perfumed leather; mirrors of man’s size; pet birds (parrots, cockatoos); Japanese weapons; ornamented copper candle stands; ornamented genuine glass and table service inlaid with gold; watches (hour-glasses) of metal and crystal; breast plates; arms (spikes, matchlocks); curiosities not of much value; good sleuth hounds and powerful hunting dogs, not afraid of fighting leopards and tigers. Remonstrantie or Report on Surat, d. 22.10.1615. Terpstra, 215, quoted in BN, 50-51.

Moreland, IDA and FAA; opposite view, BN, 54-55. The conversation of Morris Abbot, Dy. Governor and Thomas Mun with James I (EF, 1624-29, xxvi) illustrates the part played by cotton goods in India’s foreign trade.

24. Moreland, FAA, 54-57 (chart useful); K.N. Chaudhuri, TWA, 313f (Pepper trade); 329-35 (Indigo); 336-41 (Saltpetre trade); 343-58 (Raw Silk trade); Cotton goods, Burnell’s letter, EF (1651-54), 91; Yarn, Tavernier, i. 5, 27, 72; Indigo, Roe, 447; Iron and steel, Terpstra, Koeomandel, 176, in BN, 55; Mukerjee, 117-8, 94; CEH, i. 402-04.

25. See f.n. 20; Toy trade, LR, i. 33; Roe, 383; EF (1618-21), 111; (1624-26), 134; (1637-41), 183, 184; (1642-45), 81.

26. Mukerjee, 115-6; Moreland, IDA, 221ff.


Eng. E.I.C.’s bullion imports in Khan, E.I. Trade...

For Guinea Co., EFI (1655-60), 141, 206, 398. The germ of the later colonial system was contained in this method. A Dutch Governor-General, Coen, advocated it (1623). He suggested that not only should the Dutch prosecute Asiatic trade but invest the available capital in principal means of production, so that the necessity for importing capital every year might disappear. The Dutch followed this system in several places, Moluccas, Java and Formosa. But the Company did not approve of the ambitious second project of Coen. So the Dutch agents depended mainly on the profits of Asiatic trade. The English had then no territorial possessions in Asiatic waters.

28. Moreland, FAA, 67-71; LR, i. 33; Roe, 383; EFI (1618-22), 111; (1624-26), 134; (1637-41), 183, 184; (1642-46), 81.

29. Moreland, FAA, 72-81, based on Dutch and English records; Hamilton Tr. Relations (old ed.), 110.

30. Moreland, FAA, 81-88, minces matters re: Red Sea trade, omitting Roe’s designs thereon altogether. The initial resistance of the Indian merchants
and their final surrender, in LR, vi. 227; EFI (1618-21), xi. ff, 174 ff, xxix ff; (1624-6), i. ff, 27 ff.

The subject is discussed in great detail in P.N. Chakravarty, Anglo-Mughal Commercial Relations (1583-1717). See also S. Gopal, Commerce and Crafts ... 93f.

31. Moreland, FAA, 87-8; BN.
32. Moreland, op. cit. 91-96.
33. Ibid, 96-141.
34. Moreland, IDA, 203-18; FAA, 57-58 (chart valuable); Mukerjee, ch. 6; CEH, i. 413.
35. Thatta, 15 miles from sea (De Laet, 3); Abul Fazl equates Thatta with Dewal. Ain (Jarrett), ii. 341; Lahari Bandar was a mahal under Sarkar Thatta; also in Khulasat; Sarkar, Aurangzib, i. 68; Moreland, IDA, 204; Hobson-Jobson; Barbosa, i. 105-6; Purchas I. iv. 49.
36. Mirat-i-Ahmadi, 38, 29; Bird, Hist. of Gujarat, 132; Varthema, 111; Barbosa, i. 146; Commissariat, i. 264-5; CEH, 412-13; Chaudhuri, TWA, 195; Arab Shia merchants traded on their own ships in spices, silks, musk, proce- lain and other goods with Malacca, China, Tenasserim, Pegu, Sumatra.

For Bombay, see Holden Furber.

It is very curious that Moreland does not dilate on Surat in IDA, 205.

37. Linschoten, c. 10; Pyrard, ii. 259; Jourdain, 198; Srivastava, in Mugh. Emp., ed. R.C. Majumdar, 751; Sewell, Forgotten 'Emp. (old), 156, 210; Groups of Ports, Moreland, IDA, 19, 208.
38. Visscher's Letter No. 11. quoted in K.P.P. Menon, Hist. of Kerala, 11; Srivastava, op. cit.: CEH, i. 413.
39. Pyrard, ii. 140.
41. Srivastava, op. cit.; Mukerjee, 125.
42. Ain, J. ii. 139; my SELMI, ch.
43. Mukundaram, quoted in Mukerjee, 122; Caesar Frederici (1567) Purchas, x. 113, 114; Campos, 57; Fitch (ETI), 26; TWA, 198.
44. Both Satgaon and Hughli in Sarkar, Satgaon, (Ain. Jarrett, ii. 125), Lahori, i. 434; ML, i. 468; Hughli, FR, ii. 25, iii. 50 and Misc. Fac. Records, vol. XXVI, 24, 26 (exports) quoted in AC, 99; Alex. Hamilton, 12; Sarkar, HB, ii.; Karim, Murshid Quili (for Hughli); Bengal ports, Moreland, IDA, App. C.
45. Hijili, in Fitch (ETI).
Balasore, FR, i. 16 in AC, 101; Moreland, IDA, App. C; Chatgaon in Willem- sen, 1618, quoted in: Brij Narain, 60; Dacca, in Abdul Karim, Dacca, The Mughal Capital.
46. Bowrey, Bernier, 437; Mukerjee, 122-4.
47. Moreland, IDA, 212; CEH, ii. 25-26.
48. Ibid, 212-6; Mukerjee, 115-7.
Stability, CEH, i. 425. Acc. to Pyard the Malabar pirates were good merchants on land during the rains, i. 438-47; Barbosa, ii. 73, 76; Moreland, IDA, 245; S. Gopal, 87; CEH, i. 421f, 425.

Purchas, I. iii. 166, 263. LR, i. 11-14, 49; ii. 87-97; iii. 121-8; iv. 279, 287, 332; my SELMI, 224-6; S. Gopal, 1-3, 21, 53, 148; Moreland, IDA, 245-6.

Barbosa, 373; Linschoten, c. 30; Moreland, IDA, 246; Chaudhuri, TWA, 1980 of the Chettiares of Tamilnad.

IA, 1914 (XLIII), 73, 83; EF (1618-21), 191-6, 213-4; Mundy, ii. 362, 366, 159; Pelsaert, 30; Ball, Tavernier; Storia, ii. 84; Master, i. 310; Bowrey, 221. Expl. of Mongoes and Praychaes, my SELMI, 16; Persians and Armenians, Roe, 439; Seth, 225-6; SELMI, 253-4; Moreland, IDA, 246; S. Gopal, 16, 21, 49, 179-80.

Parsis: S. Gopal, 16, 103, 184, 202 (and references); Jews, Purchas, I. iii. 232; Moreland, op cit.; for decline of Hindu traders, see T. Raychaudhury, CEH, ii. 30-32.

Moreland, IDA, 202-3; Aurangzob's view in Storia, ii. 45; Commercial activities of Mir Jumla, in my Life of Mir Jumla (2nd edn.), ch. 2B.

CEH, 1. 404; ii. 26-27.

Commercial organization of Dutch and English, Chaudhuri, CEH, i. 381-2; Europe's methods of trade, ibid, 384-5; TWA, 114-9. See also CEH, ii. 27.

Moreland, IDA, 226-7; FAA, 53, criticized by Brij Narain, 56-7; Purchas, I. iii. 221; II. ix. 1470; Forster, ETI, 112 (Hawkins), 302 (Terry); Roe, 496; Van Twist, ch. on 'Wealth of Kings of Hindustan'; Mandelso, 68; Bernier, Gemelli-Careri, Mukerjee, 157-9; K.N. Chaudhuri in CEH, i. 395-9; TWA, ch. 8.

Mercantilism:
Cunningham, Growth of Eng. Ind. and Com. (1:03); Mun; Purchas, I. V. 732.

This argument closely resembles that of David Ricardo, acc. to whom labour costs accounted for differences in international prices. See K.N. Chaudhuri, TWA, 156-8, and CEH, i. 396-7, based on work of an anonymous author 1701 and Thomas Prior (1729), both quoted in J.R. Mac Culloch, A Select Collection of Scarce and Valuable Tracts on Money, 1856.

Bullion worth Rs 320,000 was absorbed by Bengal alone (1681) S.A. Khan, E.I. Trade 17th c.
Select Committee in Bengal to Court of Directors, 1767.

An estimate of 1621 by Sir John Wolstenholme, a member of the E.I. Co., placed before a government commission of enquiry about the drain of silver from England showed that Spanish American (W. Indian) silver coming to Spain again outflowed to different parts of Asia (£1.5 million) through three channels via Aleppi for raw silk; via Mokha for calicoes; and via the Cape of Good Hope to Surat and the East Indies for indigo, pepper and other spices (cloves, mace and nutmegs). But there was a fourth and equally reputed routes between Acapulco (in Spanish Indies) and Manila. K.N. Chaudhury, TWA, 155-60; also CEH, i. 397-8.

K.N. Chaudhuri, in CEH, i. 406-7.

Moreland, IDA, 227-29; Brij Narain, op cit.; Balkrishna; For impact on India's economy, K. N. Chaudhuri, CEH, i. 406-7.
V

SOCIOECONOMIC ASPECTS
Urbanization

Though urbanism was a striking feature of socio-economic history of medieval India, its study has been, till recently, an unbeaten track among scholars. Since the significant process of urbanization involves a mix-up of social, political, administrative, military, economic and cultural trends, materials for the same have to be gathered from a variety of sources likely to throw light on these. While the contemporary chronicles in Persian and other regional languages are usually sparing on socio-economic matters, they occasionally supply information on political, administrative and military factors concerning the origin, rise and decay of towns and cities. Contemporary literature, including religious literature, supplemented by epigraphic records and temple records, records of grants, \textit{Waqf}, etc., mosque and church records, helps us with the socio-economic and religio-cultural details. European records, besides the first-hand reports of factors, merchants and businessmen of all nationalities, and their autobiographies or accounts, registers, if available, are highly valuable for all matters concerning trade and hence, relating to manufacturing enterprises in rural and urban centres. Foreign travelogues, generally suffer from either prejudice or ignorance or both, but yield highly valuable information, when used after due scrutiny and caution. None tells us in detail about what we want to know, but a fairly clear and intelligible account may be woven by a critical and synthetic study of all these together. In fact this is a subject which requires an interdisciplinary approach. Even cliometry or the application of statistical analysis and reasoning would be a much-needed methodology. But demographic or statistical data or even precise figures are rare indeed. What we do get are some estimates of contemporary travellers. Even Abul Fazl's
Ain-i-Akbari does not supply the actual size of the urban centres. Such estimates or figures have their limitations no doubt, but we have to accept these as indicating the growth of urban centres with vaster populations than in contemporary Europe or England.¹

1. Physical Aspects

As in the late medieval Europe, a striking phenomenon in the socio-economic life in India during the 16th and 17th centuries was the rapid growth of towns in numbers, size and wealth. In some respects this was a continuation of the process that had already begun under the Delhi Sultans, like Alauddin, Ghiyasuddin Tughlaq, Firuz Tughlaq and Sikandar Lodi. The peculiar conditions in Northern India during the Sultanate “gave rise to a little urban life in a few big towns which also served as the seat of local or provincial administration”. In times of danger these were walled and provided security. In times of peace they served as centres of commerce in goods, agricultural or industrial, and of culture. But they were not sufficiently important “to modify the economic outlook of the people as a whole”. We may refer to a few big cities or towns of the Sultanate, like Delhi, Lahore, Multan, Surat and Ahmadabad, and after its disintegration, to a few regional ones, like Jaunpur, Gaur, Cambay, Ahmadabad, etc.²

But the significance of the process of urbanization during the Mughal period is strikingly different from that during the Sultanate. True, now some of the urban centres represented resuscitation of and growth from older units, like Delhi, Lahore, while others illustrated the emergence of new ones, e.g., Allahabad, Fatehpur-Sikri, Gujarat (in Lahore province), Attock (Atak Benares), Faridabad; all under Akbar, besides others under his successors. In fact revival and fresh settlements were the two characteristic features of this period. While both were wholly dependent on the direct intervention of the rulers, in the second a most active part was taken by nobles and officials, albeit with imperial favour and sanction. The process continued to the 18th century as well. Beyond the Mughal empire in the Deccan, too, there were older towns, like Vijaynagar, Goa, Calicut, Cochin, Golkonda, Bijapur and newer towns like Masulipatam. While some smaller towns catered to local needs and local trade, the bigger ones came to worldwide importance.
during the period under review as controlling international trade with South-East Asia, Middle East and Western Europe. Their varied manufactures, flourishing markets, ramified credit facilities, and fairly extensive cross-country communications on land and water, wealth and prosperity impressed foreign travellers. These two centuries constituted the great age of urbanization in Mughal India. It must not, however, be supposed that this increase in the tempo of urbanization, in the size of the older and in numbers of the newer centres with their growing manufacturing and commercial importance, upset the traditional predominance of villages with their agrarian economy.

Various concomitant factors were responsible for this stimulus to urban development during the period under review, for the transformation of agricultural communities into urban, for the transition from the qaria and the qasba to the shahar, from the village and township in which land was predominant to the town in which trade became the supreme factor. The process, though slow, was perfectly natural. A distinguished modern Marxian economic historian of medieval India regards this development of towns to be one of the most important results of "the deepening social division of labour, the separation of the crafts from agriculture, and the expansion of commodity-money relations". This explanation is only partially true as it ignores various non-economic factors. The contributory factors which pushed up urbanization during the period under review are discussed below:

(i) *Administrative and Military*: The establishment and expansion of the Mughal empire with increasing political stability encouraged growing numbers of people to flock to royal camps and nestle under the protection of fort walls. The unification of vast areas so long covered by warring states helped to remove the numerous impediments to trade, the multiplicity of weights, measures, currency, inland customs barriers. The enlightened policies of some rulers generated a sense of confidence in the minds of the people in general and merchants in particular. Sher Shah’s trunk roads ran like arteries throughout Northern India. Akbar’s efforts to evolve a uniform system of currency, weights and measures formed part of a wider policy of administrative integration. The atmosphere of peace and security inevitably stimulated economic activity and long distance trade along.
a network of cross-country highways and waterways. Rulers, nobles and high officials were all interested in trade and monopolies and encouraged the activities of merchants. The spectacular expansion of commerce, specially illustrated in the growth of textile trade to feed the international market besides the internal, also accelerated the pace of urbanization and the prosperity of cities and towns. In fact the town symbolized wealth, the village poverty. It is thus possible to grasp the true reason behind the urban propensities of the ruling classes, the emperor, the nobles, and the courtier classes and their dislike of the village, as evidenced by Hamiduddin’s humorous reference in a doggerel. The increasing opportunities of making out a living in the capitals and towns also encouraged the people to flock there from the villages. The oppressed rural peasantry exchanged the plough and the countryside for the artisans’ craft in towns, as that acute French observer Bernier remarks. But this inexorable shift in population must have been due to other factors as well.

Of course, all towns did not become equally prosperous. Some, favoured by location on river bank, became more prosperous than others, especially if those had easy access down the river to the coastal ports to whip up international trade. Developments of such a kind occurred at places like Benares and Patna (1541), Agra (Akbarabad) and Lahore (both about the same time during 1565-80), and Delhi (Shahjahanabad, 1638-9). The growth of Murshidabad on the caravan-sarai or commercial site of Maksudabad, dotted with a few silk shops, was due to administrative reasons of a different kind, viz., the ill-will between Azim us Shan, Governor of Bengal and Murshid Quli Khan, Diwan (1704). In the Deccan, under Shivaji a large number of forts (240) were built, and some of these also grew to be important urban centres.

The rapid growth of urbanization was stimulated by the administrative framework. The imperial capitals, the provincial or regional capitals and the district (Sarkar) headquarters, besides being the political and cultural centres, all grew by promoting economic activity and attracting in varying degrees economic entrepreneurs, merchants and businessmen. Lower down the scale, the ghasbas (townships), numbering (according to Nizamuddin) 3,200 in Akbar’s reign, and specially those in ‘the core provinces’, also grew. Big villages and flourishing townships with government grain stores had
long been serving as centres of distribution as well as of points of
collection for the specialized itinerant grain merchants (banjaras).
Such local economic foci grew more important as a result of Akbar's
insistence on collection of land revenue in cash in place of kind. As
the peasant had to sell his grain in the market, traders made their
appearance and the countryside began to hum with marketing activity,
necessitating in course of time business and credit facilities, offered
by money-lenders, money-changers (sarrafs). The importance of
the villages and the townships also grew with the activities of the
small landholders, jagirdari agents, various assignees, waqf-holders,
and recipients of in'am, madad-i-ma'ash, wazifa or 'aima grants. In
this way such villages and townships, constituted in Hambly's words,
numerous 'nuclear urban centres'.

(ii) Geographical: Geographical factors, besides administra-
tive, were also responsible for urbanization.

As in England, so in India also, natural or strategic or geo-
 graphical factors sometimes influenced the choice of sites and hence
growth of towns thereon, and accounted for their importance. A
cardinal consideration was situation on the bank of a navigable river.
Besides helping to cool the temperature, it facilitated defence, water
supply and cheap, though somewhat slow, transport of goods. Agra
owed its commercial and strategical importance to its location on
the Jamuna, navigable all the year round, as a natural highway of
trade with rich deltaic Bengal, and grew to be an emporium and a
frontier-fortress from the west. The incomparable situation of Delhi
on the Jamuna marked her out to be an imperial metropolis through-
out the ages, though changes in its course occasioned changes in
the locations of the town. Lahore's prosperity depended largely
on its location on the Ravi, connecting it with Kashmir, Multan
and Sind (Thatta) and its harbour, Lahari Bandar, transporting a
large volume of goods of 1000-2000 mds in shallow vessels of 600
tuns or more, and thereby helping it to tide over the disadvantages
of its land-locked location.

Before the rise of Surat, Thatta was the biggest seaport in India.
Boats used to bring along the Indus from Lahore and Multan
various goods like cotton goods, sugar, opium, sulphur and nutgall.
Camel caravans brought goods from Agra to Bucker on the Indus
near it. Multan was an important religious as well as an inland

URBANIZATION 205
trade centre (previously on the confluence of three rivers, the Indus, the Ravi and the Beas) on the Indo-Persian trade route through Qandahar. Kabul was also a big inland trade emporium where merchants of India, Persia, Central Asia and China met. Standing on the bank of the Ganges, Sher Shah observed after much solid reflection and sage determination to his companions: “If a fort were to be built in this place, the waters of the Ganges could never flow far from it, and Patna would become one of the great towns of this country; because this place is situated to the west, on the banks of the Ganges which flows from the north”. So he transferred the headquarters of Bihar from Bihar Sharif to Patna, then a small town dependent on it, by considering the utility of the Ganges as a highway of commerce and for defence purposes. Ajmer occupied a very strategic position controlling a gap in the Aravalli range and so also the shortest and easiest trade route to Ahmadabad.

Situated on the estuary of the Tapti river on the West Coast, connected in the west with Persian Gulf and the Red Sea, in the east with Bengal, and in the north-east with the Gangetic plain, the pre-Mughal port city of Surat occupied a ‘magnificent central position’, according to Terpstra. It was not only the “gateway to the holy places of Arabia” for Indian Muslim pilgrims, but it became a convenient emporium of trade, inland and oceanic, for goods coming from Kashmir, Lahore and Agra and other places in North India, as well as those coming from China, the South Seas and Malabar and sugar and saltpetre from Bengal. Further it was a centre of European commerce. Thus it grew to be the richest port of the Mughal empire of early 17th century. Madras owed its opulence and fame to its convenient situation on the Coromandel Coast as a centre of trade with England, China, Persia and Mocha and not far from the diamond mines of Golkonda. It was, as assessed by G.W. Forrest, “inferior to none of the European establishments in India except Goa and Batavia”. Calcutta (Fort William) was more favourably situated on the Hughli than its Dutch and French rivals at Chinsurah and Chandernagore.  

(iii) Commercial: Trade gave an invariable stimulus to the rise and growth of urban and maritime centres. It might be encouraged by Indian states out of their own volition or be fed by the needs of European trade. European writers have generally stressed the role
of the European companies and the influence of European commerce in stimulating the growth of India’s seaport-towns. A typical illustration of this attitude is seen in the case of Masulipatam, a principal port on the East Coast in the 17th century. Methwold attributes its growth from a “small”, “poor fisher town”, “populous, unwalled, ill-built and worse situated” to the activities of the English and the Dutch. Within two decades Masulipatam developed into the principal port of Golkonda state and its importance was duly stressed by internal writers like Nizamuddin. Indian states, Hindu and Muslim, were ever conscious of the importance of encouraging trade, domestic and foreign, in the traditional seaports of India like Broach, Cambay and Goa.

Nevertheless it cannot be denied that the exigencies of European commerce and the needs of European factors stimulated the development of the older ports and eventually led to the growth of new seaport-towns. After 1498 the Arab domination of the Indian Ocean and the Red Sea, established at the cost of Indian overseas commercial and colonial activities, came to be challenged by European powers. The Portuguese, the English, the Dutch, the French and others penetrated India through her sea frontier. The history of modern commerce began in India as in Europe. New markets grew for India’s raw materials and manufactures. For a time India supplied the whole world in several articles. Thus foreign trade during 15th and 16th centuries made Cambay one of the largest commercial centres in Asia. But after the Portuguese aggression on the Gujarat coastal towns, Surat began to replace it as the chief port of Gujarat from about 1530 and grew to be the chief port of the Mughal empire.

Portuguese trade stimulated growth of several industrial and commercial centres: Goa, already familiar to Arab merchants and fed by caravans from different parts of the Deccan, grew famous by end of 16th century; Cochin came to have a new town beside the old; Hughli grew about the same time as a new factory was established, followed by an Indian settlement.

The exigencies of English trade similarly stimulated the growth of Balasore from 1633, Madras (Fort St. George, 1639), Bombay (1687), and Calcutta (Fort William, 1690).

Dutch commerce quickened the growth of Mylapur, Negapatam and Cuddalore on the East Coast and Chinsurah in Bengal. French
trade led to the growth of Chandannagar (Chandernagore) in Bengal, Pondicherry on the East Coast and the like.

Sometimes the growth of world civilization is said to have passed through three stages, potamic,thalassic and oceanic. In India the growth of commerce may be said to have passed at once from the potamic to the oceanic stage.

(iv) **Religious**: Religious factors played a very important role at times in urbanization. Religious centres or places of sanctity, of the Hindus and the Muslims, attracted vast multitudes of pilgrims or devotees, sight-seers and others as magnets. The economic needs of vast multitudes assembled there stimulated markets, fairs and commerce. Hence fairs were invariably associated with special occasions there. So temples, mosques, tombs and *dargahs* of saints naturally developed as centres of handicrafts and commerce. In this way religious centres in India, Hindu or Muslim, traditional or new, grew to be commercial centres or industrial towns. Examples may be found in the cases of Multan, Ajmer, Mathura, Allahabad, Benares, Puri, Cambay (near a Jain centre), Madura, Srirangam, Shriparvata (near Hyderabad), Tirupati, etc.6

Sometimes several causes combined to account for the rise and growth of urban centres. Generally speaking it may be said that whatever their origin, it was trade which guaranteed their continued existence and stimulated their growth.

This was so because very often big towns were surrounded by industrial and commercial suburbs, serving as feeder artisan settlements, sometimes extending to neighbouring villages. Thus cities and towns were not always unalloyed urban. These were villages writ large. To take a few examples, Delhi had Haidargah (settlement of brass or copper utensil manufacturers) and Qarol Bagh (settlement of tanners). Both Delhi and Agra had grain markets surrounding them. Benares and Patna had settlements of weavers and *thatheris* (bell-metal workers). Sonargaon and Dacca had numerous feeder weavers' settlements (“from Chabaspur or Shahbazpur and Sonargaon to Jagannath”). Patna was the centre of a circle with a radius of not less than 30 miles, dotted with weavers' villages like Lakhawar, Baikatpur, etc. Similarly Suro (Soro, Sohroh), Harrapore (Hariharpur) and Mohunpur, all weavers’ villages, specialising in *sannoes*, were suburbs of Balasore. Various goods including dyes
and paper were produced in the suburbs of Cambay. Ahmadabad had, according to Mirat i Ahmadi, 360-380 such suburbs, including many villages. Goa came to have a new industrial settlement around it, inhabited by wealthy Asian as well as Indian merchants (chiefly Gujarati, Canarese and Bengali). A prosperous Indian settlement, (called ‘Black Town’) of weavers, dyers and other artisans and merchants seeking the protection of the Fort and residing in clay houses, soon developed around Chinnapatnam or Fort St. George (‘White Town’) and the population of the former almost quadrupled within about a century.  

This development may be compared with what happened in medieval Europe and England. With regard to the continent Pirenne tells us that the municipality originated in the mercantile settlement or ports in the suburb of some ecclesiastical feudal cities of fortress, in the outer enclosure of some bourg, as a result of revival of commerce. Thus the agricultural interests of the older community were overgrown by increasing number of men specializing in trade. According to Coulton at Cambridge, both the fortress and the town grew out of the bridge over an impassable river and there was “no sudden and artificial creation and no clear differentiation between merchant and agriculturist, such as Pirenne has traced in so many continental cities. Agricultural Cambridge became urban Cambridge by exactly the same slow but irresistible development which has gradually transformed England from a country of villages to a country of towns. Almost everywhere we can trace the same causes at work. The original village would find itself in a particularly fortunate position—a natural halting place on a great road held by the bridge or the ford of a river, or a point commanding a pass through the forest or between the hills, or at the gate of a castle or monastery. This would cause a natural influx of inhabitants.”

Categories of Urban Centres:

For purposes of making a socio-economic analysis, the urban centres may be arranged, according to origin and function, into three broad categories, capable of further subdivisions as follows: administrative cum military; economic specially commercial; and sacral (i.e., religious and pilgrimage centres).
The *first*, again, included two layers:

(a) The imperial capitals of Agra, Fatehpur-Sikri, Delhi or Lahore (and Aurangabad in the Deccan), as administrative centres for the whole empire. Paradoxical as it may seem, it is an unassailable fact that even in its heyday the Mughal empire had no fixed capital in the sense of being the centre of government, comparable to London and Paris. The capital was where the emperor was. The imperial camp (*urdz-i-mu'allaa*) would be transformed into a *de facto* capital through the presence of the emperor. Without it even the fortress-cities like Agra, Lahore or Delhi would not rank as capitals. The pendulum of emperor's personal choice oscillated between Agra and Delhi (since its foundation down to 1712) with greater leaning to the former and occasionally towards Lahore or Fatehpur-Sikri.

(b) The provincial (or regional) or *subah* capitals, *viz.*, Rajmahal, Dacca, Murshidabad in Bengal; Bihar Sharif and Patna-Azimabad in Bihar; Burhanpur in Khandesh; Fyzabad and Lucknow in Awadh, to mention only a few, administrative headquarters in a particular region. Older capitals of independent sultanates like Ahmadabad and Golkonda-Hyderabad became now regional headquarters.

The *second* may be subdivided into three types:

(a) Commercial centres and seaports—Thatta, Broach, Cambay, Surat, Goa, Masulipatam, Balasore, Satgaon, Hugli, Chatgaon, Calcutta, etc.;

(b) Inland emporiums—Ahmadabad, Baroda, Lahore, Multan, Agra, Benares, Patna, Lucknow, etc.;

(c) Centres growing as the ‘single producing market’ out of a conglomeration of several small villages, where skilled artisans specialized in producing a particular commodity with a special technique, *viz.*, Biana (in indigo), Chapra (in saltpetre), Khairabad and Dariabad (in textiles), Dacca-Sonargaon (in muslin), Kasimbazar (in silk), etc.

The *third* category included places like Benares, Mathura, Allahabad, Multan, Nasik, Puri, Ajmer, Cambay (near a Jain centre), Madura, Srirangam, Shripuravata (near Hyderabad), Tirupati, etc., with a settled and resident population as well as a shifting, i.e., pilgrim population, attracting various crafts as well as commerce.

Sometimes the lines of division were overlapping and might cross each other. The imperial and provincial capitals were also important inland or regional commercial centres or entrepots for smaller
hinterlands. Religious centres like Benares and Multan, might also be inland emporiums.

However, irrespective of the primary and secondary roles and of their classes explained above, these metropolitan, regional or suburban towns, besides discharging their economic roles, also served as so many radiating centres of culture, rooted in the life of the principal communities of the country.

Thus the urban centres varied in their functional and cultural roles. In other words, the urban qualities differed with the variations in the amalgam of the component elements. In this milieu any search for a "model" or "type" would clearly be in vain. Situation within the same geographical area was immaterial. Cities of separate categories, administrative (e.g., Delhi or Agra) or religious (e.g., Benares), though in the same geographical area were clearly different. Similarly religious centres (e.g., Kanchi or Tanjore) and seaports (e.g., Calicut or Cochin), all in Southern India, widely differed. Even within the particular sacral category there were wide differences between a North Indian city like Benares and a South Indian like Tirupati. The utmost that can be said is that the North Indian Muslim capitals like Delhi or Agra resembled the South Indian like Ahmadnagar, Bijapur or Hyderabad. But even the greatest and most prosperous Muslim capitals in India did not wholly conform to the 'Islamic' cities of Central Asia and the Middle East in planning and function, largely because the Muslims, though the ruling power for centuries before the advent of the Mughals, were never in a majority. One marked feature of the Muslim capitals, whether in the north or the south was that these were strongly fortified as in the Near and Middle East and as in medieval Europe but wholly unlike Hindu cities. Among examples of such palace-fortresses and fortified cities of Muslim states are Agra, Lahore, Fatehpur-Sikri, Shahjahanabad, Allahabad, etc.

Nevertheless many prosperous and expanding cities had a tendency to overflow the walls. This outgrowth has been termed 'urban sprawl'. The manifestation of this trend in Agra, where the expanding suburbs were joined to the walls, was noticed by John Jourdain (1608-17). In course of time the suburbs came to virtually encircle the inner foundation. It is evidently to these outgrowths of what we may call 'Greater Agra' that Bernier referred when he wrote that

URBANIZATION
Agra was "without walls". Suburbs at Shahjahanabad grew round some foci—camp-sites of a great mansabdar (e.g., Jaisingpura) or a sacral site (e.g., Nizamuddin) or houses gardens of nobles (also in Agra) on river banks. Surat city, close to the fort, was also unwalled and proved to be a rich and defenceless prize to Shivaji during his first attack (1664). Subsequently, Aurangzeb had it walled round but this proved no deterrent to the intrepid Maratha (1670).

The European Companies' settlements in the 16th and 17th centuries, originally for purposes of trade and later fortified, formed a class of urban centres separate from the other towns. Again, the respective settlements of the different nationalities of Europe, the Portuguese, the English, the Dutch and the French, etc., had their peculiar characteristics. Further the three Presidency towns of the English Company, Madras, Bombay and Calcutta were also unique in their character and formed a class apart. 9

Population of Towns:

In medieval Europe a town with a population of 20,000 was considered to be a big one. About 1600 only about three cities (e.g., Constantinople, London and Paris) had more than 200,000 population and nine with more than 100,000. By contrast the towns in medieval India, judged by numbers and size alone, if not by anything else, must have been quite impressive. If early in the 15th century Nikitin found "the land (i.e., Deccan) overstocked with people", Conti estimated the population of Vijaynagar city to have been 90,000 within a circumference of 60 miles, while Cambay and Calicut, respectively, had a circumference of 12 and 8 miles. In early 16th century Gaur (i.e., Lakhnauti or Lakhnavati) is said to have 40,000 homes. The Mughal Empire under Akbar was stated by Nizamuddin Ahmed to contain 120 big cities and 3,200 gasbas (townships), each an agglomerate of 100-1,000 villages. The queen of all cities in medieval India was Agra of Akbar. Though according to some contemporary European travellers both Agra and Lahore may be bracketed together as the largest city in seventeenth-century India, it was Agra that deserved the title of being the most populous. Ralph Fitch (1589-91) found it to be 'a very great city...and very populous'. When the court was there its population was estimated at 500,000 by J. Xavier (1609) and at 6,60,000 by Manrique (1629-43, excluding strangers). Even
after the court shifted to Delhi (Shahjahanabad) by mid-17th century, Agra continued to be larger than it. Thevenot described it as 'a great Town', which could not have supplied more than 200,000 soldiers. Habib's interpretation that this meant (assuming a ratio of 1:4) a total population 800,000 seems to be over-liberal. Delhi, though not so large as Paris (500,000), then the largest city in Europe, was held by Bernier to be 'not generally less'. Thus Agra was larger than Paris from the point of view of population. Agra and Lahore appeared to Finch (1608-11) to be larger than London, which by c. 1700 grew to be the biggest city in 'one of the most urbanized' countries of Europe. He is supported by Terry (1616-19) and also by Monserrate (1581) who asserted Lahore to be "second to none either in Asia or in Europe". Coryat (1615) described Lahore to be larger than Agra, and "one of the largest cities of the whole universe", as exceeding Constantinople (400,000-700,000) "in greatness" (in size). The subsequent decline of Lahore may be traced in the accounts of Pelsaert and Tavernier. The size of Benares and Patna struck Finch with wonder. The population of Patna was estimated at two lakhs by Manrique (1631). Ahmadabad was described in the Letters Received (1613-15) and also by De Laet to be as big as London (100,000-200,000) with its suburbs. Surat appeared to William Finch (1608-11) to be "a citie of good quentitie, with many faire merchants houses there in". Its population was estimated in 1663 at one lakh by Fr. Manuel Godinho and in 1700 at two lakhs by Alexander Hamilton. Masulipatam was found by Fryer (1672) to contain a population of two lakhs.

To sum up, judged by figures of population and making allowance for exaggerations, if any, the proportion of urban developments in India and Europe, would be in India’s favour. In Europe, about 1600, the population of only three (including Constantinople, London and Paris) exceeded 200,000 and nine had more than 100,000, in India three cities, Agra, Lahore and Delhi, had a population varying between 800,000-400,000, and six cities, Thatta, Patna, Dacca, Masulipatam, Surat and Ahmadabad had between 225,000-100,000. In England of 1700 (including Scotland and Wales), then ‘the most urbanized’ country in Europe, the population of towns of 5,000 and more was not higher than “13% of the total population”.10
Information about the social composition of the urban population is scanty indeed. Generally speaking it may be said that this consisted of various groups: (i) ruling classes of different categories according to the degree of importance and nature of the town; (ii) merchants, banias, money-lenders, etc.; (iii) the military classes; (iv) the artisans, weavers; (v) the agriculturists; (vi) members of various professions or workers; (vii) hired labourers and (viii) untouchables. Differences in detail existed in Northern and Southern India, and the pattern was not uniform in all towns of a same region.\footnote{11}

II. Historical Aspects

It is sometimes held that the vicissitudes of urban economy and culture are generally independent of dynastic or military events, for the two are not usually correlated. But this is not applicable to the period under review. Both the rise and fall of towns during 16th-18th centuries illustrate the profound influence of personal equation and of military factors.

The historical survey of some urban centres illustrates the process of urbanization, de-urbanization and re-urbanization. This is well-illustrated in cases like Delhi, Patna and Agra. Delhi, 'the Empress of India's cities', marks the site of successive kingdoms and empires. A very old capital and centre of civilization in ancient India, it continued as the metropolis of Delhi Sultans for just three centuries since 1206. It witnessed successive changes in location but even when it was not an imperial capital it continued to be a rich commercial centre and a great city. It regained its imperial position, for nearly half a century from the foundation of Shahjahanabad in 1638 and the Red Fort at Delhi till Aurangzeb's march to Deccan (1681). For the next 30 years (till Bahadur Shah's departure from the Deccan in 1710) Aurangabad served as the operational headquarters of the empire. It was from 1712 that Delhi became, so to say, the permanent capital. But its halcyon days were long over.

Famous as the imperial metropolis under the Mauryas and the Guptas, Patna (Pataliputra) declined but revived under the imperial Palas only to decline again, till it was revived by Sher Shah when he built a fort here in 1541 and made it the capital of Bihar in place of Bihar Sharif. It continued as the headquarters of Bihar subah under the Mughals.
In certain respects the process of urbanization in the Mughal age ran along the same parallels as during the Sultanate. First, if the Delhi Sultans generally modified the older Hindu centres like Delhi, Lakshmanavati (Lakhnauti), the Mughals, too, did the same at Agra, Lahore and Delhi. Whatever might have been the origin of Agra in pre-Muslim times, its strategic importance was realised by Sultan Sikandar Lodi, as a buffer against the rebellious vassals from the south and an old village grew to be a subsidiary capital (1506). It became the Mughal capital under Babur and Humayun and mostly under Akbar also. Situated on the Jamuna along both its banks, it grew rapidly under Akbar, who built here a fort of red sandstone, evidently to strengthen the very old citadel which, according to Jahangir, surrounded it. It soon became a more important Inland emporium than Lahore and Multan, as it was the focal point of all roads. Pensaert says: "All goods must pass this way, as from Gujarat, Thatta; from Kabul, Kandahar or Multan to the Deccan; from the Deccan or Burhanpur to those places or to Lahore; and from Bengal and the whole East country; there are no practicable alternative routes, and the roads carry indescribable quantities of merchandise, especially cotton goods". Notwithstanding Jahangir's liking for Lahore, Agra continued as occasional capital. But as the heat became intolerable, Shahjahan transferred the capital to Delhi (Shahjahanabad) in 1638. However, Agra continued as a secondary capital and did not suffer in extent, population and greatness till the beginning of the 18th century. The imperial treasury continued to be partially kept in the Agra Fort till 1719 when the city was captured by the Sayyid brothers.

Lahore (or Rohri) grew from a village to a camp town. This eastern frontier town of the Ghaznawids became the western outpost of the Delhi Sultanate. Balban strengthened this strategic place with a fort against the Mongols and invited merchants to settle there. The 14th and 15th centuries, generally speaking, constituted a period of peace. By mid-16th century it grew to be a first rate city, remarkable for its 'populousness and extent', riches and manufactures, unrivalled, according to Monserrate, by any Asian or European city. Akbar's stay here for 15 years (1584-98) increased its importance. Its fort was strengthened with brick masonry. In the early 17th century it was considered by some travellers as the greatest city of the East.
surpassing even Constantinople. The occasional stay of Jahangir and Shahjahan improved the appearance of Lahore, and stimulated its commerce. It was described as ‘the prime city of traffic in India’ (Henry Bornfod, 1639). ‘All commodities of the adjacent places were brought thither and brought by Uzbegs and Tartars...sugar the best, not much less in goodness than at Agra...sugar candy, all sorts of clothing such as sufflocannas, cautars (chautars), chints, salooses. Hither is like-wise brought the greater part of the Goria indigo’ (i.e., from Gorza or Khurja’).

Second: The Delhi sultans founded wholly new cities like Siri or Ahmadabad and the Golkonda Sultan, Muhammad Quli Qub Shah founded Hyderabad (at the end of 16th century) as a twin of Golkonda across the Musi to relieve the pressure on its population. Similarly the Mughals also laid out new grandiose cities like Fatehpur-Sikri and Shahjahanabad. Fatehpur-Sikri grew to be Akbar's new capital (1569-86) from a near village, as a symbol of Akbar's conception of universal kingship, sanctified by the ‘beneficient spiritual power’ (baraka) of the famous Chishti saint Shaikh Salim. But it did not last long. Shahjahanabad was wholly a new complex of a palace-fortress, distant but not wholly dissociated from the older capital-cities of the Delhi Sultans and the Afghan Surs.

At times, with the rulers’ grants or permission, a direct part in founding new settlements was taken by prominent jagirdars or Zamin-dars, who were interested in developing their jagirs or in making an investment. Such a process happened most particularly in Uttar Pradesh right up to the 18th century, as exemplified in Shahjahanpur, Hazaffarnagar, Muradabad and Yekdilabad in the time of Shahjahan; and Farrukhabad, Ghaziabad, Najibabad, Fyzabad and Rampur in the 18th century. In the absence of definite information, we may presume that the immigrant population of the new settlements might be accounted for by forcible transfer, persuasion by grant of favourable terms, or voluntary flight from agrarian oppression in the countryside. In Rohilkhand, however, some Afghan immigrants were known to have been regularly recruited. A place near Shahjahanabad was colonized by a group from Bukhara in the reign of Aurangzeb.

Decay of Towns: Generally speaking, towns decayed when the contributory causes of their rise and development became inoperative or due to natural causes. Establishment of political stability stimulated
the growth of some. Its lack was a prime factor in their decline. The prosperous Sharqi capital Jaunpur decayed after its capture by Sultan Bahlol Lodi in 1479 for good.

Fatehpur-Sikri, Akbar’s dream-capital, remained merely as a “military encampment” in Bernier’s words and did not become an integral part of the economy of the region. Hence, it declined after the government deserted it for failure of water supply.

The decline of Lahore was due partly to political and partly to natural causes. Inordinately heavy rains for successive years towards the end of Shahjahan’s reign and changes in the course of the Ravi, marked by withdrawal in one part and erosion in another irretrievably damaged the city. Aurangzeb saved it by a protective embankment, 2 kos long for more than two decades. But his absence in the Deccan hit the city hard. To check the plundering Sikh insurgents, the governor invited Ahmad Shah Abdali. This worsened the situation. Trade declined. Lahore lost its greatness by the end of the 18th century. The fortunes of imperial Delhi decayed on account of the succession of weak rulers since 1707, the spate of Persian and Afghan invasions from 1739 to 1769 and the marauding activities of the Sikhs, Jats and Marathas. Consequent on Mughal political decline political stability departed from greater part of Northern India. With it, too, the earlier urban economy and culture suffered or departed from the Punjab, Rajputana, the Ganga-Jamuna Doab and the Narmada-Chambal basin. Delhi in decline flew its boundaries. The resultant disorder and insecurity led to the continuous flow of emigrations of different sections of the population—courtiers, soldiers, merchants, artisans (e.g., weavers, dyers, etc.), the intellectuals and poets to provincial head-quarters or new kingdoms for greater safety. There was thus dispersal of talent and industry. Agra also declined in the 18th century for similar reasons. Under the Jats and the Marathas dominated by Mahadaji Scindia it regained its earlier eminence. But it was the last flicker of the lamp before it went out (after 1787). The commercial period of Surat, the greatest port of the Mughal empire, declined with the two sacks of Shivaji in 1664 and 1670 and its gradual replacement by Bombay. But even in decline it continued to be important.

Even above the surging waters of the sea of disorder of the 18th century in Northern India, a few islands could raise their heads where
the rulers were able to dam the forces of disintegration and instability. A few such examples where urban economy and culture could flourish, were Awadh, ruled by strong and benevolent Nawab-Wazirs; the capitals of some members of the Maratha Confederacy at Puna, Nagpur and Baroda; and most remarkably the three Presidency towns, the port cities of the English E.I. Company, Madras, Bombay and Calcutta and the French settlement of Pondicherry.

Where the rise and growth of a town was due to its situation on a river, changes in its course would cause a decline in its trade and hence, automatically lead to the decline of the town itself. Thus the silting up of the tributary of the Hughli river prevented ships from reaching Satgaon by the end of the 16th century. The biggest seaport of Bengal of that century, the populous town of Satgaon, was reduced to a "petty village." Similarly Thatta in Sind declined in the sixties of the 17th century as the river on which it stood was blocked by sand accumulations, preventing entrance of big trading vessels.12

III. Economic Aspects

Speaking of medieval Europe, Pirenne observes that between the towns and the countries "there was sharp division of labour, the latter practising agriculture only, the former trade and the manual arts". But with regard to medieval England Coulton holds a diametrically opposed view: "The modern distinction between municipal and village life had comparatively little force in the Middle Ages. The town was often scarcely more than an overgrown village..."

What was the position in medieval India? During the Turko-Afghan period this separation, K.M. Ashraf thinks, did exist in a marked degree. The Mughals, like their Turko-Afghan predecessors, were essentially an urban people in India. Their courtiers, officers and the upper and middle classes of the Muslim population also preferred a town life to village. Hamiduddin's doggerel, already referred to earlier, definitely indicates this distinction between the town and the village in Mughal India, unlike medieval England and comparable to medieval Europe. Nevertheless a hard and fast line of distinction was perhaps not possible. There were economic links between the two. The villages supplied the sources of revenue as well as food to the town. Further the villages also supplied manufactures (e.g., cotton, silk, saltpetre, etc.), which were sold in the town
markets. Of course, the village lacked the amenities which were available in the towns. The humble village (qaria) was inhabited by cultivators only, without any craftsmen (except occasionally by scavengers), without any bazar (but only the weekly hat). The next unit was the large village or a small town (qasba) with a predominantly agricultural population but with several craftsmen and some low grade officials. The town (shahar) had a majority of non-agricultural population and regular administrative officers. The difference, if any, was occupational and organizational but it was not fundamental. The Mughal town was an overgrown village, a village raised to the third degree. For one thing, towns were like small islands engulfed by the vast expanse of the country. For another, the exigencies of local trade broke any barrier between the town and the village, the town and the hinterland. As Dr. Irfan Habib says that "local trade largely meant the trade between town and country".13

The provisioning of the towns, the supply of food to the town population was the primary need of urban economy. Next to food were other necessities and luxury goods. While reliable census figures are not always available, it is perhaps undeniable that urban population had a high ratio to the total population of the country. With the exception of a few small centres which preserved a semi-rural character which could subsist without outside help, the majority of large towns, the big mercantile centres, the cradle of the middle class, had to get their substantial food supplies from outside, the surrounding country and commerce. It was no mean achievement, that normally no town is known to have suffered from lack of provisions.

(a) In the first place, the peasants of the surrounding country or hinterland constituted the purveyors of the urban population. This tended to break the economic stagnation of the country and forged a link between the peasantry and the nascent cities which was mutually satisfying. The growth of the town and its steadily increasing consumption led the surrounding villages to increase their own surplus production.

The Mughal government was fully conscious of the need of provisioning. Prices of all articles of food were regulated at least at Agra through Mir-i-Bakawal. Perhaps Delhi (after 1638) and Lahore also had similar arrangements. These were maintained by Jahangir and Shahjahan. The Emperor had his own farms not only for

URBANIZATION
vegetables but also for cattle and poultry. Perhaps the nobles also did the same.14

The Mughal town government had to regulate the markets and movements of food stuff, guard against arbitrary rise in prices and safeguard the interests of the consumer. The exhaustive duties of the Kotwal, described in the Ain-i-Akbari indicate this spirit of control.15

(b) In the second place, commerce also played its parts in provisioning the towns. This required the intervention of merchants, the banjaras, the grain merchants, etc. During times of scarcity or famine it was on the goods brought by them that the towns had to depend for food. Merchants also brought luxuries, wine and fruits and other articles for the rich section of the population. Thus foreign merchants came to supply the needs of the urban population. The institution of brokers had its inception in the exigencies of trade, local and international.

(c) Thirdly, the countryside also supplied the towns with raw materials for their manufactures.16

In fine, the medieval Indian town had three distinct but interrelated roles to play in the economic organization of the period: as a centre of industrial production; as an inland mart, a trade centre for goods produced largely in the hinterland, some towns combining both these roles, e.g., Lahore, Delhi, Agra, Benares, Patna, Murshidabad, Sonargaon-Dacca, Ahmadabad and others; sometimes as a centre of international trade, in seaports like Lahori Bandar, Cambay, Surat, Masulipatam, Satgaon, Hughli, Chatgaon or in inland marts.17

NOTES AND REFERENCES


This is a revised and expanded version of a part of my paper 'Urbanization in Medieval India', which I read in 1966 at a seminar organized by the late Professor Nihar Ranjan Ray, then Director, Indian Institute of Advanced Studies, Simla. Both he and Professor Nurul Hasan, then Head of the History Department, Aligarh Muslim University, complimented me on emphasizing for the first time the importance of the subject. For reasons unknown to me the seminar proceedings volume has not yet been published. The late Professor Ray had even requested me to write a book on the subject within the next 6 to 12 months. But I could not pursue the subject in the midst of my other preoccupations in Jadavpur University. The paper was
published in Journal of History, Vol. I, Jadavpur University, 1972, and then in my *Studies in Economic Life in Mughal India* (1975), ch. 5 of which contains a general plan for a more detailed study of the subject. Meanwhile Dr. (Mrs) Hamida Khatoon Naqvi published her books *Urban Centres and Industries in Upper India*, 1556-1803 (Asia, 1968), and *Urbanization and Urban Centres and the Great Mughals* (Simla, 1972).

See S. Gopal, *Commerce and Crafts in Gujrat...*(1975) and Chicherov, 134-44; CEH, i. ch. xiv (Cities and Towns) has two sections: Mughals India by Gavin R. C. Hambly; The Far South by Burton Stein; ch. vi (population discussed by I. Habib); while Habib appreciates the value of such estimates, Hambly differs, 436. I am inclined to agree with Habib.


3. Factors: Chicherov, 135; Urban propensities, Hamiduddin, *Akhami Alamgiri*; Sarkar, *Anekdotes of Aurangzeb*, 75; Mugh. Adm. (1963), 48. [A crow turned its tail to the city and its head to the village; (surely) the crow's tail was better than its head]; Bernier, 205; For Murshidabad, *Riyaz*, Sarkar, HB, ii; No. of gosbas, TA, iii. 545-6; Satish Chandra, ESHR, iii. (4) 1966, 321-31; CEH, i. 441-2.

4. Coulton, *Medieval Panorama*, 284, has analysed the factors that caused conglomeration of people at certain places in England, leading to growth of towns. See also his *Introduction to Contemporary Civilization in the West*, i. 349, quoted in my *Studies...*110-11; Mrs Naqvi, 20-21 based on various sources (for Delhi, Agra and Lahore).


5. For *Masulipatam, Methwold in Relations of Golkonda*, 6. But this must be only one of the contributory factors leading to the port, as shown by me on the basis of other contemporary sources like Nizamuddin’s *Hadigat-us-Salatin* (569-70). ‘Masulipatam was then the ‘principal port’ of the Golconda Kingdom. It was ‘well-peopled’ and reputed for ‘great trading’ in calicoes and Chintz, because besides those manufactured there, many were brought from St. Thomas which were ‘much finer and of better colours than those of the other part of the Indies’. Indeed it was the centre of the East Coast cotton manufactures, which commanded a large market in Bantam and the Far East, and had commercial intercourse with Surat, Bandar Abbas (Gomboon) and other western settlements as well as the ports on the Eastern Coast and Pegu. Nizamuddin Ahmad wrote of it that, from there ‘ships proceeded to the countries of zerbad (down country) and balabad (up country) and the ports of ‘Arab and Azam’. Throughout the year ships used
to come to and go from there in all directions. That was the special feature of this port". This is corroborated by Thevenot who observes: "The coast is excellent, and so ships come thither from all nations, and go from thence to all countries. I saw there Cochin Chinese, men of Siam, Pegu and of many other kingdoms of the East." See my Mir Jumla (2nd edn. 1979), 6-7.

*Cambay*—Gopal, 14-16.
*Goa*—Cathay and the Way Thither...ii. 448; Commentaries of Albuquerque, ii. 93-4.
*Cochin*—Pyramid, i. 4.
*Hughli*—Sarkar, HB, ii. 319.
*English trade* : Balasore (SELMI, Ch. 9A); Foster, FFSG; Wilson, *Early Annals*, i.; Sarkar, HB, ii.
*Dutch* : Linschoten i. 82-9.

6. "The whole of India" flocked to Sriparvata during "the five days fair" near its temple in the second half of 15th century "to see its wonder". Nikitin, quoted in Chicherov, i.37.

7. Haidargarh, Thevenot (Sen), 66; Qarol Bagh, Punjab Dt. Gaz., 149. Mrs Naqvi has collected names of various *gunjes, katra* and *mandis* a round Delhi, Lahore and Agra, Benares, Patna (chs 1-3). For Dacca, Pelsaert, *Jahangir's India*, 8; For Patna, Mundy, ii. 145-6; SELMI, 8-9; For Balasore, the point is fully discussed in SELMI, 314; For Cambay, Forbes, *Or. Memoirs*, ii. 222-3; For Ahmadabad, *Mirat* (Supp.), 10-12; For Goa, Linschoten, i. 179-257; Fort St. George, Bowrey, 6; A. Hamilton, i. 386; Love, *Vestiges*, vol. i.


"In the earlier centuries, the distinction between towns and countryside was not great; but the needs of commerce, notably for freedom from tolls and arbitrary exactions and for special laws, courts and administration soon led to insistence by the townsmen on autonomy and a fight to keep a similar economy from developing in country villages. Some lords, among them many ecclesiastics, opposed these town developments and gave way only to heavy pressure or even force; others, notably the kings, associated themselves with the movements, sold charters for handsome sums, and in the long run profited both financially and politically from their foresight. Often charters were drawn up in limitation of grants to other towns; thus the "Laws of Breteuil", a small town in Normandy, were widely copied in England. King John's charter to Gloucester granted in 1200 and confirmed in 1227 and 1328, is illustrative of the privileges which townsmen wanted." *Introduction to Contemporary Civilization in the West*, 1. 349.


*Types* : Hambly, CEH, i. 438-9.

Unfortified cities, Bernier, 284; Sarkar, Shivaji, op. cit. Pirenne tells us that "there were no unfortified towns (in Europe) in the Middle Ages". But Coulton has shown that many noted English towns had never rudimentary defences such as earthen bank.

10. Population: Conti in Major, 7,20; TA (Tr. De), ii. 545-6; Agra, Fitch (ETI), 17-18 Xavier, in JASB, NS xxvii (1927), 121; Manrique, ii. 152; Thevenot (Sen), 49; Delhi, Bernier, 281-2, 284-5; Lahore, ETI (Finch, 161; Terry, 292); Monserrate (Hoyland and Banerjee), 159-60; Coryat (ETI), 243; Pelsaert (M and G); Tavernier (Ball, i. 74, 77, 86); Patna, Manrique, ii. 140; Ahmadabad, Letters Received, ii. 28; De Laet, Surat (Finch, ETI, 133); Godinho, tr. Moraes, JBBRAS, New Ser. xxvii. ii. 12-45; Hamilton (ed. Foster), i. 89; Masulipatam, Fryer, i. 90.

Dacca, Manrique, i. 44-45.

Habib, Ag. Sys. Mughal India, 74-5. See Table in CEH, i. 170-1 regarding comparative statistics of urban population. New Camb. Mod. Hist., v. 246 (Paris); iii. 33-4 (London); 34 (Constantinople).

It seems arrangements for vital statistics existed at Patna. Marshall got a written account (11.12.1671) from the local Kotwal's Chabutra that 1,03,000 died in all during the past one year, 53,000 Hindus, 50,000 Muhammadans "as recorded in their record books". Elsewhere the number was given as 90,720. Marshall (Khan), 149-56, 125-7. CEH, i. 170, based on New Camb. Mod. Hist., iii. 33-34 and P. Deane and W.A. Cole, Br. Econ. Growth (1962).

11. Chicherov's assessment, 138ff, valuable in its own way, is one-sided, as it is based entirely on South Indian sources. Varthema (pp. 141-2) mentions the following groups: (i) 'first class': the rich sections including brahmans and merchants; (ii) the naa' or military; (iii) the tiva or artisans; (iv) the meehua (fisherman), the poliar (collecting pepper, nuts, etc.), the hirava (rice-planters and collectors), untouchables. A 19th century author (T. Marshall, 1882) in his statistical report on 'Belgam' (Belgaum) (pp. 43-44) mentions the following groups: (i) Khooshbash, living on their own means, "without the necessity of labour" viz., brahmans, inamdars (perhaps landholders), 21% (ii) beoparee—merchants, shop-keepers, money-lenders, 13% (iii) kusubdar, i.e., professional classes, 27% (half being weavers); (iv) kool or cultivators, 26%; (v) muzdoor or labourers, however, comes to 99%.

12. Historical Aspects:

Delhi: Ain, ii. 278-9; i. 456; Badauni (Lowe), i. 472; Tavernier (Ball), i. 96; Bernier, 241-2.


Agra: Makhtwan-i-Afghana (Tr. NB. Ray), 83-84; Tuzuk (R), i. 3-4; Ain. JS, ii. 190-1; Monserrate, 34; Fitch (Ryley), 98; Pelsaert, p. 4; Finch (ETI), 182; De Laet, 37; Manrique, ii. 152; Thevenot (Sen), 49. See Mrs. Naqvi, ch. 1 (for Delhi and Agra), 12-23; Bernier, 217, 384; Tavernier, i. 96.

Lahore: CHI, iii. 22, 29; T. Mubarakshahi (Tr. Basu), 38; Ain, ii. 317;
Monserrate, 159; Finch (ITI), 161; Coryat (ETI), 243; EFI (1637-41), 134-5.

*Officials and Towns*, see CEH, i. 128.

* Fatehpur-Sikri : Ain, B & P, i. 57; J & S, ii. 191; De Laet, 41; AKN, ii. 531.

*Satgaon* : Riyaz, 29.

*Thatta* : Tavernier (Ball), ii. 10.

*Surat* : CEH, i : (See *ante*, ch. 8. Section V).


17. *Ahmadabad* was a typical provincial town. the most important inland trade centre in Western India in 16th century, linked with Cambay in the south and Lahari Bandar in the north. Finch described it (1608-11) as a “goodly city, walled with fair gates and beautiful turrets, castle large and strong”. None was allowed to enter it without licence, nor leave it without certificate. Two hundred richly laden couches went to Cambay every 10 days. ETI.

*Golkonda*, the most important emporium of South Indian products sent a vast variety of these to three big ports of Goa, Masulipatam and Surat regularly throughout the year.

In Northern India *Lucknow* grew to be an important inland emporium of the diversified cloth products of Oudh.
Inchoate Developments
Towards Capitalism

Having discussed the agrarian economy, industrial and commercial organizations and urbanization, the stage is now set for an enquiry as to how far there were any traces of capitalist development during the 16th and 17th centuries.

Marx sought the essence of capitalism in a particular mode of production. It was not a system of commodity production as such but one in which labour power was itself a commodity. Max Weber holds that ‘capitalism and capitalistic enterprises’ existed throughout history but it was only in Western Europe that ‘sober bourgeois capitalism’ existed as ‘exploitation of a rationalized organisation for the mechanised mass production of goods built up with the free labour and based on a free, specially peaceful market for sales’. It is not to be expected that such features could be traced in ancient or medieval times. Werner Sombart has, however, pointed out that the ‘capitalist spirit’ existed even in embryo at sometime in the distant past. The German Historical School distinguished between medieval ‘natural economy’ and the succeeding money economy, a distinction which certainly prevailed in medieval India. She also may be said to have developed what corresponded to Earl Hamilton’s description of capitalism, where ‘wealth other than land’ is used to secure an income. India also illustrated the acquisitive use of money, with which Pirenne equated capitalism and which he treated in the 12th century. India also exhibited the commercial phase of capitalism as emphasised by Cunningham, in which possession of capital and the habits of pushing trade became dominant.¹
In fine, capitalism implies the dominance of ‘primary accumulation’ of capital arising out of production. In all likelihood re: *per capita* productivity Mughal India did not lag behind contemporary countries including Western Europe. In other words, the absence of capitalistic development was due not so much to the level of agricultural production as to the manner of its use and distribution.²

Indian agrarian economy exhibited two contrasted features: individualistic peasant farming; and self-sufficient village community, unfavourable to the growth of an inner rural market with capitalistic elements. Collection of land-revenue in cash led to drain of wealth from the village; establishment of rural markets; monetization of ‘natural economy’ of the village and growing tendency towards cultivation of high-grade crops and cash crops, e.g., wheat, cotton, sugar-cane, indigo, poppy, tobacco, etc. Administrative pressure, pauperization, peasant indebtedness ("for subsistence, food and cattle") and moneylending worked in a chain reaction to subvert the peasant economy of the village. The practice of *khud-kasht* by zamindars, headmen, assignees and revenue officials, based on hired labour and linked to the market and commercialization of superior agriculture, contained elements of commodity production and so marked an advance, in form, towards capitalist farming. Still its full development was retarded on account of certain reasons.³

As regards signs of capitalism in the non-agricultural sector we have to depend on indirect evidence, as statistical data is not available. An essential pre-requisite of capitalism is a large non-agricultural labour market. This condition was fulfilled by the vast numerical urban population of servants, soldiers and dependents of the nobility, of artisans and labourers engaged in non-agricultural crafts, transport and commerce. Among the many excellences of Hindustan that struck Babur was this vast "unnumbered and endless workmen of every kind".⁴ Skilled labour far from being scarce, was abundant. The skill of the artisan involved specialization, based on division of labour.⁵ Caste did not constitute any impediment to social mobility of labour. Castes were weaker than guilds and were often subject to government control as in the Maratha State. The urban market for non-agricultural goods was large.⁶

Did the organization of production reflect any drift towards capitalism, i.e., towards real commodity production?
The answer is ‘no’ when the rural artisans supplied the local needs of peasants and rural communities or moved from village to village to purchase raw materials or dispose of their goods.

But in case of the urban artisans the situation was somewhat different with two probabilities.

(i) First, if they owned their product, produced in anticipation of demand (e.g., the weavers of Lakhawar near Patna in 1618-21) they might extend their activities by employing apprentices and servants. According to Marx this was the “really revolutionary way” in the evolution of capitalism “from below”. But in the 17th century except goldsmiths (with workshops) perhaps there were not many examples of such independent master craftsmen. The 18th century, however, marked a change in this direction, thanks to the operation of market forces. As noted earlier, private workshops owned by artisans engaging hired workers, non-existent in the 17th century, grew up by mid-18th century in a few cases, e.g., a few rich Bengal weavers, Kashmir shawl ustads and a Parsee shipwright. The transformation of the artisans into ‘capitalist entrepreneurs’ favoured the transition from mercantile to industrial capital. Still, however, the instances were not many.7

(ii) Second, the artisans produced on behalf of others, i.e., merchants, receiving dadan (or advances) from rich merchants and working under dictated terms and conditions, especially in goods of long-distance trade. But sometimes they also worked with materials supplied. Thus, in handicrafts, merchant capital had grown so completely as to hold the artisans under subjection in both these forms of ‘putting-out’ system.8

Productive processes like large buildings and shipbuilding, involving employment of vast numbers of skilled and unskilled workers and unified supervision, approached the organization of the manufactory, but fell short of it, because production was ephemeral. Production, no doubt, was continuous in diamond mining in the Deccan and saltpetre manufacture, which also required vast numbers. These, therefore, came nearer to capitalistic development than the first two. But these too, could not develop into real manufactories due to lack of specialized skill and of sophisticated tools.9

The Mughal karkhanas, characterized by specialization and the transformation of the independent artisan into a wage-earner, were
the true parallels of manufactories. But, with the exception of the mint, the production was limited to meet the needs of the imperial household and the aristocracy. Rich merchants' karkhanas if any, paying higher wages, were small and few.¹⁰

All these forms approached the manufactory stage but remained inchoate and fitful. The sum total of production was extensive. But all was not commodity production. There was progressive control of labour by capital. But industrial capital was still far off. All these buts were fingers pointing to the limitations of capitalistic development in medieval India.

From the sector of production let us now pass on to distribution. Medieval Asian trade did exhibit the phenomenon of 'political capitalism' of Van Leur's connotation, in which overhanging its central arch, the pedlar, the carrier of world trade, there were individuals with unusual accumulation of capital. Persia, like Portugal, had a tradition for political capitalism. It was exhibited in Persian silk trade since the time of Shah Ismail Safavi in the 16th century and it reached its apogee with the entrepreneurial activity of Shah Abass I.¹¹

In Mughal India, too, we have definite instances of 'political capitalism', implying accumulations of capital in individual hands, which were not merely hoarded or buried underground but used in business and trade with an eye to profit. It is not generally known that members of the Mughal imperial family—kings, princes, princesses and ladies of the imperial harem were not only commercially minded but directly engaged in commercial pursuits especially with the Red Sea. Akbar's widow, mother of Jahangir, was the owner of the largest Indian vessel of those days, the Great Rahimi of Surat (1500 tuns). The ships of Jahangir and Nurjahan and Prince Khurram frequently sailed between Surat and the ports on the Red Sea. As governor of Gujarat Khurram carried on a highly profitable and vast trade in broadcloth, textiles, gumlac, indigo and tobacco which he continued even as emperor. The full story of the diplomatic rivalry and intrigue over the clashing interests of high personages in the Mughal court has not yet been adequately studied. Thus the Red Sea trade was a bone of contention between Prince Khurram and the English East India Company. Sir Thomas Roe was backed in his efforts by pro-English Nurjahan with decided political proclivities against the Prince. Nurjahan herself had her own commercial
activities, to further which she sought to utilise the English. She was instrumental in even securing a firman for the English so that to Roe she became ‘my solicitor and her brother...my broker’. Asaf Khan’s own commercial interests led him to make an entente with the English and showed undue concessions to them, which Khurram considered to be highly injurious to the interests of the Indian merchants. Again, Muqarrab Khan, who had his own axe to grind, sought to create bad blood between Asaf Khan and Roe. Princess Jahanara not only owned ships but also freighted her goods in Dutch and English ships. Dara and Aurangzeb also had their respective fleets for trading with the Red Sea and Africa.¹²

The capital accumulations of Indian merchants constitute a subject of controversy. A few writers, W. H. Moreland, B. B. Mishra and Morris D. Morris hold that they could not have amassed much wealth because of insecurity on the highways due to robbery, brigandage; insecurity of property due to the escheat system; high taxation and official interference with free prosecution of trade and monopolies. This view is opposed by Brij Narain, Saran and Irfan Habib.¹³

In a vast country like India occasional cases of highway robbery or brigandage did take place at times. But the successful prosecution of a flourishing commerce would show that a minimum degree of security did exist. The inland insurance rates do not, as Habib has shown, support insecurity or stifling of trade. Following some contemporary foreign travellers, even a few modern writers have misunderstood the real nature of escheat system. Rightly interpreted in the light of the imperial regulations of Jahangir and Aurangzeb, it would appear to be an attempt to settle accounts of officers in most cases, except when there were no heirs. The effects of high taxation were sought to be counteracted by orders abolishing numerous taxes and imports in each reign. True there were monopolies and administrative interference in trade but all these did not prevent the merchants from being wealthy.¹⁴

Briefly speaking, the merchants came to have vast accumulations of capital through various ways. They purchased the grain of land revenue and sold them at higher rates. Both the grain merchant (banya or baggal) and the banjaras (itinerant grain merchants) handled vast capital. Merchants of different parts of India invested enormous
capital or carrying on long-distance trade in vast amounts and varieties of goods.\(^{15}\)

Some merchants (and also a small middle-class population) became very rich as intermediaries of the European merchants and also on account of the increasing volume of Indian export trade in calicoes, indigo, sugar and saltpetre. But they could not indulge in expenditure for luxuries for fear of arousing the jealousy and wrath of officials and being used as "filled sponges". In their business they had to face the competition of members of the imperial court, governors and high officials who carried on trading activities and interfered with them by setting up monopolies or combines. But, generally speaking, a 'strong and competent mercantile community' grew up pari passu with the growth of internal and foreign trade (and wholesale and lengthy commercial operation).\(^{16}\)

At Agra, there were immensely wealthy merchants (Sodaga or Saudagar) locally called Katwri (Khatri) who had money piled up like grain heaps in their houses. In Dacca, money similarly heaped up in houses of the Khatris, could be counted with difficulty and had to be weighed. The banias of Gujarat living by intrade, were to be found 'all along the coast', i.e., Diu, Dabhol, Goa, Coromandel and Bengal, and were found also in Ormuz and Gombroon in Persia, right up to Mocha. 'Many of them are brokers...Among these Banias there are many substantial merchants, who do a great amount of trade. So that the largest trade and the best is carried on by them and they do more trade than the Muhammedans. They are sharp businessmen and honest in payment...among them there are many money-changers, found in all places in these ports'.\(^{17}\)

We can form some idea of the size of merchant capital from a few examples. Before Shivaji's first sack of Surat, the local merchants were "very rich", some having more than 5 or 6 millions of rupees and 50 ships trading overseas (1633).

The celebrated Gujarati merchant, Virji Vora (1619-70) controlled the entire trade of Surat and a large part of the coastal trade to Malabar. He had his agents in distant places like Agra, Burhanpur and Golkonda and traded with the Persian Gulf and the Indian Archipelago. He was considered by the English to have been "the greatest and richest general merchant in the Mughal empire and the richest man in the world", whose wealth was estimated by Thevenot at 8 millions of
rupees. The trade of Abdul Ghafur, owner of an identical sum, and of 20 ships of tonnage varying between 300 and 800, equalled that of the entire English E.I. Company. Surat also had Haji Said Beg and Haji Qasim. The East Coast was dominated by the firm of Malay and Balasore by Chim Cham (Shyam Chand), Kshem Chand. 18

The 17th century tradition of individual merchants like Virji Vora, and others controlling the wholesale trade of particular regions seemed to have been kept up during the first half of the 18th century. Indians continued to participate as investors in and carriers of the then flourishing external and internal trade of India. In the East Coast there were, among others, merchants like Kanakaraya Mudali, Ananda Range Pillai, Seshachala Chetty and others. Merchants from Bengal used to visit various places in Northern India—Kashmir, the Punjab, Gujarat, Malabar and the Coromandel Coast, Assam and Cachar. In Bihar, the Europeans made their purchases of saltpetre through contracts with merchants like Umichand, Dipchand and Khwaja Wajid. Some Indian merchants and bankers played an active part in politics as well—Jagat Seth, Umichand and Khwaja Wajid in Bengal and Arjunji Nathji in Western India. 19

The Seths of Murshidabad represented the most influential banking and financial house, advanced money not only to the farmers of revenue and Nawabs of Bengal but also occasionally to the English East India Company and wielded great political influence at the time of the rise of the English to power in Bengal. 20

The merchants, bankers and shroffs, who had their agents posted in different industrial cities and ports of India, could have grown as budding representatives of semi-capitalist merchants of the period, but could not really become so.

The Indian joint-stock companies in the Coromandel Coast from c. 1660 till c. 1720 commanded enormous capital (150,000-10,000 pagodas), with a share value (100,500 or 1,000 pagodas). But these declined in the 18th century, partly on account of the inner rivalries of the caste groups from which the merchants were drawn and partly on account of the internal weaknesses in their working. Thus these could not develop into real capitalistic organisations. 21

In fine, notwithstanding some adverse conditions, merchant capital was enormous. 22

INCHOATE DEVELOPMENTS TOWARDS CAPITALISM 231
Even without a full development of machine-industry, India had her economy fairly highly monetized. The system of credit and banking, including the sarraf (shroffs) serving as deposit bankers and the organization and general use of hundis or bills of exchange, which enabled easy transmission of money, private as well as government, was efficient, judged by contemporary standards and gave mobility to merchant capital. *But* there was no provision for long-term investment. The rates of interest were calculated for short periods, e.g., by month, and doubled after a year and also very high. Being limited only to the needs of commerce, the credit system could not develop independent roots as a medium of industrial capital.\(^{23}\)

All these corroborate Marx’s dictum that merchant capital does not necessarily lead to industrial capital. This survey shows that modern capitalism did not develop indigenously during the age of the Mughals.\(^{24}\) At best we may conclude that some capitalistic features were present.

**NOTES AND REFERENCES**


2. Conditions of agriculture not adequately known. Moreland has tried to show that agricultural output was lower at the end of Akbar’s reign (c. 1600) than at before the First World War (c. 1900). IDA. 100-124. But I. Habib differs because of abundance of land, cultivation being limited to fertile lands, larger wastes and greater cattle power, optimum size of the peasant farm and double cropping even though canal irrigation and railways have revolutionized agrarian technology under the British. (*Ag. Sys.*, 36-57). In Southern India, the available surplus was very great, as we know from Bhimsen. (Athar Ali, Pr. IHC, 1966).


Horticulture and orchards did not encourage capitalistic tendencies in agriculture. Habib, 49-51, 244-5.
Khudkasht: Habib, 114-5, 120-2; T. Raychaudhuri, Enquiry, NSII (1) 97-98; Grover, IESHR, I(1), 15.

4. Pattern of distribution of land revenue, Bernier, 246; Zamindar's dependants, Habib, 163-4; Pelsaert, 61, 54, 55; Babur's Memoirs (Mrs. Beveridge), ii. 52; Size of Indian towns, see Section 9 on Urbanization.

5. Skilled labour, Bernier, 254; Pelsaert, 60, 9; Ovington, 166.


Ain on Kotwal's control of guilds (Bloch, i.284); Fukazawa, op. cit. 32-44 for Maratha State; Pavlov, 24; Aurangzeb's orders, re: Caste mobility in Ahmedabad.

Mirat, i. 260, 292-3; Geleynssen, tr. Moreland, JIH, iv. 75.

7. EFI, 1618-21, pp. 192-3; Marx, Capital, iii.; Bernier, 228-9; Habib in JEH, March, 1969; CEH, ii. 24-25. T. Raychaudhuri holds that the capitalistic trends did not very much affect the traditional caste structure except that peasants and others became weavers.

8. Hobson-Jobson, S.V. Dadney, EFI (1618-21), 192-3; (1624-27), 149; (1637-41), 137; (1646-50), 159; (1655-60), 296; (1661-64), 111-2; 208-9; Fryer, i. 221.

Moreland, IDA, 184 ff; Chicherov, 163-70; Habib in Enquiry, NS. vol. iii(3) Winter, 1971.

9. Moreland, IDA, 185-6; Chicherov, 188-190 (buildings); 190-4 (shipbuilding); 194-9 (Diamond); 170-1 (Saltpetre); Tavernier (Ball), 326 ff; Pelsaert, 46; my SELMI (for Saltpetre).

10. See ante Ch. 7, Sec. VA; Bernier, 228-9.

The English in Bengal found it more economical to undertake winding, dyeing and cleaning raw silk in their own premises (i.e., own karkhanas) than to purchase the finished articles. EFI (1655-60), 296.


N. Steensgaard, Carracks Caravans and Companies, 15.

12. LR, i. 150 (Roe); iii. 270; EFI (1618-21), 92, 106, 113, 117, 240, 325; (1622-3), 273 ff.

Satish Chandra, 'Commercial Activities of Mughal Emperors during the Seventeenth Century', BPP, LXXXVII. pt-II. No. 146 (1959), 92-97; my Mir Jumla (2nd ed.), ch. 2B. Speculation among nobles, Tavernier, Crooke, i. 31.


   For monopolies, see my SELMI, ch. 4.

15. Habib, *Potentialities*, etc.
   *Ag. Sys.*, 78-79; 61-3.
   For merchants, brokers, etc., see Iqtidar Alam Khan, 'The Middle Classes in the Mughal Empire', *Pr. IHC*, 1975, 113-41.

16. Terry in ETI, ed. by W. Foster.
   Bolts, 197; Mukerjee, 84-5.

17. *Agra*, Manrique, i. 44; ii. 156.


   *Virji*, EFI, 1661-64, 308; Sen, (ed.), Thevenot & Careri.


   The value of a *pagoda* varied at times. Usually it was about Rs. 5; 12sh. or 6 Dutch sloins.


23. See ante Ch. 8 Sec. III.

   System praised by Sujan Rai; KT; Tavernier (Crooke), i. 24; *Mirat*, i. 410-11 (mobility); *Storia*, ii. 379. No adverse comment by Europeans.

   Discount on *hundies* covered insurance (*bima*) charges. Habib in *Contributions*, etc, i. 13, 15-17, also 17-19 (deposit bankers).

   Monthly interest, in *Comparative Studies in Society and History*, VI (4), 401-2, quoted by Habib in *Potentialities*. Rate doubled in Ahmadabad-Surat letter May 17, 1647; Surat Record 1646-47, p. 130 quoted by Habib.

24. "The independent and predominant development of capital as merchants capital is tantamount to the non-subjection of production to capital, and hence to the capital based on an alien social mode of production which is also independent of it. The independent development of merchants capital, therefore, stands in inverse production to the general economic development of Society".


Social Stratification and Standard of Life


No comprehensive contemporary account of social stratification and standard of life of the classes of the population during the 16th and 17th centuries, comparable to Buchannan's economic survey in the 19th century, exists. All relevant information has to be gleaned from Indian work, European factory records and foreign travellers' accounts and incidental epigraphic references. Absence of statistical information, prejudice or ignorance make the resultant picture essentially fragmentary and inadequate. Conditions differed in different areas and among different classes of people with sharply contrasted levels of wealth and life styles. Hence, it becomes difficult to describe the standard of life of the people of this sub-continent of ours in general terms.

Bernier writes: "In Delhi there was no middle state: a man must either be of the highest rank or live miserably". This, however, is not a correct assessment. Generally speaking, medieval Indian society presented the picture of a pyramid. Its apex was formed by the emperor. Its upper slopes covered the grand imperial court and a small wealthy, luxurious and extravagant aristocracy, the autonomous chiefs and rajas, the mansabdars, jagirdars and zamindars, sometimes inaptly called feudal. The base was formed by the so-called lower classes, the masses or the common people having two tiers, the peasants, as well as workers or artisans, (both in villages and towns) and the agrestic serfs at the bottom. In between the apex plus the upper slopes and the base, however, there were various trading, pro-
fessional and service groups which formed the middle stratum of society. These included the rich traders and merchants, bankers, sarrafs, mahajans, thrifty shop-keepers, and various professional classes like accountants and writers or clerks, teachers and other high officials and physicians, though it must be admitted that this small middle class, constituting the urban intelligentsia, was not powerful.¹

The traditional structure of society in Northern India, as described by Alberuni in the 11th century, was its division into four major castes, the Brahmans, the Kshatriyas, the Vaisyas and the Sudras. Next to these there were Antyajas or low-caste people, not belonging to any caste but members of some crafts or professions, or guilds, numbering eight, viz., the fuller, the shoe-maker, the juggler, the basket and shield maker, the sailor, the fisherman, the hunter of wild animals and of birds and the weaver. Besides these there were the Hadi, Dom (Domba), Candala and Badhatan, constituting one class, doing dirty work.

This account shows remarkable parallels with the observations of Mukundaram, the famous Bengali poet of the 16th century in his epic Kavikankan Chandi (c. 1578-89). In rural Bengal of the 16th century there were the following classes of people:

(i) The Brahmans were of two categories. Those in the higher class were educated and taught in their tols (schools). Those in a lower scale lived as priests in temples and households (jajmani), remunerated by contributions from villagers, milk from the cowherd, oil from the oil-presser; sweet-meats from the confectioner and rice, cowries and balls of pulse (dalbari) from the people.

(ii) The astrologers or minstrels, depending on offerings of householders.

(iii) The professional classes—physicians wearing fine clothes and carrying palm-leaf books; and writers (kayasthas) proud of their learning (as ornaments of the place) and claiming best lands and houses free of rent.

(iv) The Vaisyas, traders, 'a happy set of men always buying and selling'. Some travelled to distant lands on land or sea, carrying local produce to Ceylon and returning with cargoes and luxury goods (sandal wood, conch-shells, pashtu shawls, Tibetan fly-whisks).
The agricultural caste represented by the Hakil Gopes and the Baruis (betel-growers).

The artisan castes—goldsmiths, blacksmiths, braziers, potters, carpenters, dyers, oil-men, confectioners, spice-dealers, conch-shell bangle-makers, cotton-weavers, silk-weavers (encouraged by assignments of rent-free land).

The low castes—doms, hunters, fishermen, date-palm-tappers and watchmen.

The depressed castes—living in the suburbs Kols, Korenas and Mahrattas (who tapped for curing diseased spleens and operated for cataract)³.

The gulf between the upper and the lower classes, existing in the age of Akbar, increased during the successive reigns. European observers like Sir Thomas Roe, Pelsaert, Van Twist, Bernier and Tavernier have all referred to the yawning gulf between the small, rich aristocracy and the poor commonalty, and to the broad and deep contrast between the luxury and extravagance of the upper classes and the dismal poverty and helpless misery of the masses. This is reflected in the work of modern writers like Moreland and Mukerjee. Sir Thomas Roe refers to this cleavage between the aristocracy and the common people: "(The people) live as fishes do in the sea—the great ones eat up the little. For first the farmer robs the peasants, the gentlemen robs the farmer, the greater robs the lesser, and the king robs all". Pelsaert's comment is in a socialistic vein: "In the palaces of these lords dwells all the wealth; there is, wealth which glitters indeed, but is borrowed, wrung from the sweat of the poor. Consequently their position is as unstable as the wind resting on no firm foundation; but rather on pillars of glass, resplendent in the eyes of the world, but collapsing under the stress of even a slight storm".

All this would tend to show that economically the Mughal social pyramid was in an unstable equilibrium, standing on its apex. But such a contrast between the 'haves' and 'have nots' in society was not a characteristic feature of medieval economy of India alone. It holds good in varying degrees even in modern India and even in many other parts of the globe. During the 17th century, about 25% of people of England were also poor, underemployed or wholly unemployed.⁴
2. The Upper Classes:

The grandeur of the imperial court is indescribable. The forsaken Mughal palaces help to conjure a picture of the pompous lives of the kings and their nobles.

The upper classes,—the nobles, the *mansabdars* and high officials, mostly foreigners, forming a numerically small body, received, when prices were low, high salaries perhaps higher than any other country then. After meeting their expenses and service obligations, they kept an appreciable balance which could be accumulated for investment (e.g., in trade, loans to merchants) or economic development of the land (e.g., markets or orchards) or spent on luxuries. Roe found ‘great and small’ to be traders. Nobles like Asaf Khan and Mir Jumla did engage in trade. But as the escheat system tended to discourage thrift and as investment was comparatively rare, the usual practice was to spend lavishly not to hoard (in cash and jewellery) what was not spent. The courtiers and officials wanted to imitate their master, the king, and to encourage the foreign merchants in order to satisfy their craze for novelties which were of doubtful economic interest to the country.

*Food* was a source of heavy expenditure. The bulk of the food consumed by the upper classes consisted of grain (wheat flour and rice), meat with lavish use of spices (especially for Muslims) and various pulse and milk preparations (especially for Hindus). Thus, we read of *birinj* (dressed and aromatic rice, e.g., *qabuli duzdbiryan*, *aeshalia* (spiced meat); *pollaeb* (*pulao*, *qimah pulao*) coloured differently (yellow, red, green or black); *zuyela* (perhaps *thuli*, spiced wheaten cakes); rice pudding with almonds, raisins, butter and pepper; *dupaiza*; roast meat, sweet-meats, *halwa*, *faluda* and other delicious items served on big dishes, including those of Chinese porcelain and European glass-ware. Both provision and service were lavish. There were “cooks from all countries” in Akbar’s kitchen. The accounts of his table by Abul Fazl, of Asaf Khan’s dinner to Roe, and banquet on the occasion of Mumtaz’s marriage, as well as of a Gujarat Governor to Mandelslo fairly sum up the position. Jahangir liked to take *laziza* or *khichri* of *bajra* in Gujarati style on the days of abstinence.5

Arrangements were made to procure costly auxiliaries like ice, cold drinks (*sherbets*) and fresh fruits (from Afghanistan and Central
Asia) which were regularly used. Nobles used ice costing 10-20 dams a ser throughout the year. Fruits were so highly prized by the Mughals that their price was immaterial. A melon from Badakhshan cost Rs. 2½ in Akbar’s time and ‘a crown and a half’, as recorded by Bernier. But ‘nothing is considered so great a treat, it forms the chief expense of the Omrahas’. Besides melon and grapes of Kabul, Badakhshan and Samarkand, pomegranates, pears, apples and pineapples also were in demand. White sugar cost as high as 128 dams a maund. Wines and intoxicants of various kinds were used in profusion. The best wines came from West Asia for nobles and the harem women. Coffee came from Arabia. We can thus understand Pelsaert’s observation: “Gold and silver were used more in serving food than we do in our country”.

Another source of extravagance was dress. It was costly both for quantity and materials—cotton, painted or plain, wool, silk, striped or plain, embroidered velvets and brocade, etc. Abul Fazl says that Akbar cared more for dress than food, employing skilled tailors for new inventions. His wardrobe was elaborated with 1000 complete suits a year, partly given away as gifts. Even Abul Fazl distributed his wardrobe among his servants every year. The dress of rich Muslims included shalwars or tight trousers, shirts, waist-coats, long coats (qaba), and cotton-stuffed vests (arcabi ek) shawls, waist-scraves (patka) in winter, turbans and shoes (either of leather or embroidered silk). Socks were not in general use. Muslim ladies also used shalwars, shirts; ghagra, dopatta and burqa (or full length veil); and if rich also used qabas and Kashmir shawls. Hindu ladies used sari, angiya (brassiere) and also dopatta. Men were armed. Costly jewellery was used by both sexes profusely; stones were eagerly sought.

Generally speaking, the autonomous chieftains and rajas imitated the dress and standard of life of the Mughal nobles.

As regards accommodation, European travellers were favourably impressed with the houses of the rich. Pelsaert described these as “noble and elegant, spacious and pleasant”. Bernier found the mansions of the nobles at Agra “interspersed with luxuriant and green foliage”. Similarly, the houses of the aristocrats at Delhi, Lahore and Masulipatam were lofty and spacious and sometimes had gilded roofs. These had luxurious furnishings to match, rich carpets from Persia, Turkey, Kashmir, Lahore; jajams, shatrijnis and baluchis
spread over mattresses; large cylindrical cushions (*takiya*), often ornamented and brocaded; costly curtains from Gujarat and Benaras often embroidered with silk; leather hangings from Sind. Furniture was less varied than now. Tables, chairs or couches were not ordinarily used. But carpets, bedsteads, mirrors and utensils were profusely used. Pelsaert remarks that cots and other furniture of kinds unknown in his country were lavishly ornamented with gold and silver. Similarly the expenditure on camps (tents) with velvet, brocade and silk fastenings and screens perhaps exceeded that on houses.

A large menial staff and slaves (including Habshis) was inevitable with the above style of living. This was so not only in Mughal empire, but also throughout India—in the Deccan and Vijayanagar. The Portuguese in Goa also held that 'a man of quality' must not move without a train of servants and slaves.

High prices were also paid for *animals*. Expensive stables were also maintained for elephants, horses, camels, mules, other animals and carts. An elephant cost from Rs. 100 to Rs. 1,00,000; and horse between Rs. 200 to Rs. 1000 or more. These had to be suitably equipped and adorned, occasionally with silver or gold picket-chains. Palanquins (*palkis*) for transport needed carriers.

In amusements, sport and gambling also cost much.

Presents to the King or influential persons, open or secret, constituted another source of expenditures. Open presents constituted social decorum and often influenced appointment or promotion.

The above details would show that the one concern of the upper classes and the nobles in life was to secure a surfeit of pleasure (De Laet) and that 'they are nothing but voluptuousness and wealth confusingly intermingled' (Roe). Gradually they became impoverished. Speaking of the reigns of Shah Jahan and Aurangzeb, Bernier found 'very few wealthy omrabs', most of whom were 'deeply in debt' and were 'ruined'. This in turn, affected economic life as the governors and officials tried to replenish their dwindling resources by oppressing the peasants and artisans. True, there were thrifty nobles who amassed fortunes. But the law of escheat, as modified by Aurangzeb, prescribing in case of indebtedness, reversion of wealth to the state after death and the prevailing discouragement of carrying money out of the country, encouraged expenditure, viz., dowries for their
daughters; construction of buildings, tombs and commemorative monuments, rather than work of utility; and lavish style of living.

The characteristic ostentation and luxury of the upper classes, unaffected during the time of the puritanical Aurangzeb and undiminished even within the shrinking limits of the empire, influenced the economic life of the country. Demand for luxuries (e.g., fine cloth from Bengal and Gujarat) tended to whip up production and imports. A national market, seemed to grow, as Moreland observed, in cloth. But the craze for ‘toys’ among the nobles and the court did not adversely affect the domestic production as he assumed, for there was no steady demand for ‘toys’ and even her imports were smaller than her export. The autonomous rajas and nobles patronized writers, fine arts, including painting and music. They must have spent on charity but the amount cannot be assessed.

3. The Lower Classes

The question arises who constituted ‘the lower classes’ or the masses. The remarkable similarity in the 11th and 16th century connotations of this term has already been noted. According to the latest work on the subject, the term includes the peasants, the artisans or ‘urban poor’ (or ‘city poor’) and the domestic attendants. But as artisans were not confined only to the towns or city, it would be truer to include five tiers or elements: (i) the peasants, (ii) the village artisans, labourers and servants, (iii) the urban artisans and labourers, (iv) domestic servants and (v) slaves and agrestic serfs.

Contemporary village society has been correctly described to have been “highly segmented both socially and economically”. It consisted of different sections of unequal economic standing: (i) peasant owners of land (khud kashta), resident cultivators of early British times (ii) cultivators coming from outside (pahi or upari, ‘outsiders’) (iii) share-croppers or land-rentiers (muzari’an). Landless peasants were village servants like the tanner, the potter, the washerman, who were remunerated by a fixed share of the produce. They served also as casual labourers.17a

In the absence of any comprehensive, contemporary account, a picture of the standard of life of the common people can only be drawn from the occasional and independent but more or less congruent descriptions of foreign travellers, of varied tastes and pursuits, relating
to different areas of the country, contemporary literature as well as from the wages. The cumulative evidence of all these sources regarding the standard of life of the people may be grouped under four broad heads: increase of population; the sharp contrast between the poverty of the masses and the opulence of the rich; frequency of famine; and oppression on the peasants.

In a classic observation regarding the Deccan, the Russian traveller, Athanasius Nikitin says: 'The land is overstocked with people: those in the country are very miserable while the nobles are extremely opulent and delight in luxury'.

This is equally applicable to Northern India as well. Manucci found many parts of the Mughal empire 'extremely populous'. Two factors which contributed to the population explosion were child marriage and polygamy. All this tended to lower the standard of life. It is not at all surprising, therefore, that successive foreign travellers, Barbosa, Varthema, De Laet, Pelsaert, Bernier and Manucci, all harp on the same story of the miserable poverty of the masses. On account of this poverty, the masses had no economic reserve. As they depended on the season, failure of rains made the country liable to recurring periods of famine (except in Bengal). Administrative oppression also contributed to the poverty and misery of the masses. Paes and Nuniz have referred to the grievous oppression of the ryots of Southern India by the nobles in Vijayanagar. In the Mughal empire, too, there were instances of oppression of the masses in the 17th century. Comparing the poor in India and England, a foreign observer (1765) felt pain in describing the former in terms reminiscent of Pelsaert and Bernier. But the poverty of the masses must not be exaggerated.

Relying wholly on some concurrent, but adverse comments of a few foreign travellers on certain aspects of life of the masses of the people, Moreland has drawn a very dark picture of their standard of life. But he has not taken into account some fundamental points: (i) the occasional divergences in detail between these travellers; (ii) the inner contradictions in these reports; (iii) the favourable factors like extraordinary cheapness or articles, wide consumption of ghi as a part of daily food of the masses and availability in markets of cooked food to suit the pockets of everybody and (iv) the distinction between money wages and real wages. At any rate it
would appear that the masses were not uniformly poor. Let us take a few illustrations.

Food: The food habits of the general masses of the people, the agriculturists and artists, Hindus and Muslims, practically remain almost unchanged till now. The broad distinction between vegetarian and non-vegetarian food existed then as now. Vegetarian food is testified to by Fitch and Pelsaert: ‘These Gentiles will eat no flesh nor kill anything. They live with rice, butter, milk and fruits’ (Fitch). ‘They know little of taste of meat’ (Pelsaert). ‘It was a forbidden item for the majority of people even in Agra. In Lahore, however, shops sold roasted flesh of domesticated and wild animals, including horse flesh, as pork was not used’ (Manrique). Usually the major crops in a particular area generally constituted the diet of the masses besides pulses, rice in Bengal, Orissa, Sind, Kashmir and different places in South India, and millets (jowar and bajra) in Rajasthan and Gujarat in Northern India. In certain areas wheat and barley were also used. Besides foodgrains, they used vegetables like beans and herbs, which were available even in the smallest village according to Tavernier. As cattle was abundant, the masses could use milk and milk preparations. Fish was in common use in Bengal, Orissa, Sind and on the coasts. So was meat in the Punjab and the South. But beef was taboo for the Hindus and pork for the Muslims.25

To the student of economic history, however, what is important is not so much the details of food articles as the light they throw on the standard of life.

The item much emphasized by Moreland to prove the poverty of the Indian masses is the use of khichri, consisting of boiled rice and pulse, by the masses, both in Northern and Southern India. Pelsaert, the Dutch factor at Agra, wrote on the basis of his seven years experience (1620-26) that the masses had only one meal a day. He observed that the chief article of their food were pulses and parched grain (sattu) (which sufficed for their ‘lean stomachs’) in the day and the kitsery or khichri (with green pulse or moth) with butter and salt in the evening, their one regular meal. De Laet practically corroborates him. But Manrique, Bernier, Thevenot, Gemelli-Careri and Fryer did not concur in characterizing khichri as the sole regular meal, though they described it as the “common food” of the people, as general food of the masses or as the “ordinary food of the poor”.

SOCIAL STRATIFICATION AND STANDARD OF LIFE 243
Again *khichri* must not be interpreted, as Moreland does, as a sign of extreme poverty. Manrique (1629-43) found that the vegetarians used *kachari* (or *khichri*), rice mixed with lentil or *mung*. Among pulses *mung* is quite costly. When seasoned with spices it became a very luxurious dish, served at feasts in Bengal. In other words it could be used for more aristocratic tastes also. Butter or *ghi* was a necessary item, as we know from Terry, Pelsaert and Bernier. Ovington (1689), referring to Western Indian, found *khichri* a very common dish, very nourishing, though not very savoury. It is not surprising that it was given to European sailors once or twice a week without meat.\(^{36}\)

Owing to the abundance of cattle, sheep and goats, milk, butter (*ghi*), cheese and meat were easily available in Northern India (except Kashmir), Bengal and Western India, besides edible oil-seeds. So these were cheaper relatively to grain than now. Hence, the lower classes may be regarded to be relatively in an advantageous position as regards nourishing diet as compared to modern times. But salt and better qualities of sugar were costlier than at present. There was also scarcity of fuel, salt and oil. Sweetmeats were presumably made with raw sugar of jaggery (*gur*).\(^{37}\)

Again, to describe the *khichri* as a monotonous daily food, as Pelsaert says, is neither quite accurate. Nor was it the only one meal, especially among the relatively well-to-do villages. For there were other articles of food. Besides rice and other edible grains, cakes were prepared by the common people therefrom and baked on small iron hearths. They also consumed wheat in Northern India. But its use was less than now even in the wheat producing areas of Delhi and Agra in Northern India. Thus bread was prepared (broad and thick *chapatis*) not only from wheat but also from *jowar*, gram and barley in Northern India as now. Terry found the ordinary sort of people of Malwa, using the flour not of wheat but of 'a coarser grain' (possibly *jowar*), 'wholesome and hearty'. But he also spoke of pure, well-relished bread, used with butter and cheese (available on account of cattle wealth). In Bengal, the people, according to Manrique, were satisfied with the daily meal of rice and salt (with nothing else to add) and 'xaga' (*shak* or green vegetable), while those better-off used milk, *ghi* and other lacteous preparations. Bengali literature of 16th century refers to the use of curds and cheap sweetmeats made
of milk, oilseeds and gur, which were used only on rare festive occasions. In the 17th century, however, sugar and other sweets, dry or liquid, says Tavernier, were abundant even in the ‘smallest villages’. Towards the end of the 17th century the people of Bengal had rice and fish as their staple food. They were not accustomed to using bread, brinjals, herbs and lemon, cooked together but kept in cold water, were mixed with salt to form a delicious dish the next day. This was carried to distant places and sold at a high price. In the markets of Lahore, Manrique found three varieties of bread: (i) apas (Tamil) made of flour, the usual bread of the common, poor people; (ii) caruchas (Kulcha) white good bread consumed by richer people; (iii) ragunis (roghani) made of wheat of flour, very fine bread, delicate in flavour. In Gujarat, the rabi harvest being scanty, wheat and rice came from Malwa and Ajmer and the Deccan, and so the common people, as we know from W. G. De Jongh (1628-9), lived mostly on bread of barley. Towards the end of the 17th century, the Gujaratis used wheat and bajra.28

Being a government monopoly salt was expensive, perhaps more than in modern times. References to its use by the people in the sources except in some crude forms are, therefore, infrequent. As regards spices, while some like cloves, cardamoms and pepper were beyond the means of the ordinary people, others like cumin seed, coriander seed and ginger were within their means and so consumed by them. Chillies were not known. They could also consume common fruits like mangoes, coconuts, melons and berries.

**Housing and Furniture**: The description of housing conditions of the masses, as given by foreign travellers, is so true to life that it might apply to modern times as well. These were lowly and miserable, generally had no windows. The very poor kept their cattle also in their one-room huts. The better-off would have more rooms, if their families were bigger and also had a store and a courtyard. Terry found the cottages of the people in Northern India, to be ‘miserably poor, little and base’. These were made, according to Jourdain, of straw, while Pelsaert found their houses to be built of mud with thatched roof.29 These accounts find corroboration in Manrique: In Bengal, the huts of bamboos, mud and clay were low and thatched with straw or palm-leaf (olas). But the people kept their dwellings very clean, frequently smearing the walls and the floor with cattle-dung.
and mud.\textsuperscript{30} In South India, conditions were very similar as we know from Fryer.\textsuperscript{31} The huts of cajan leaves were too low to allow one to stand erect. In Gujarat, however, the houses, we learn from Abul Fazl, had tiled roofs (khaprail) and were often built of brick and lime. Patna also had huts with khaprail in the 17th century.

If the poor men’s dwellings were lowly and miserable, these were also scantily furnished. If there were bedsteads (perhaps rope khatias) the bedding was thin and scanty. In Agra, says Pelsaert, man and wife had two beds but the bedclothes were scanty, merely a sheet or two. This did not pose any problem for the summer. But ‘the bitter cold nights’ were ‘miserable indeed’, relieved to some extent by ‘little cow-dung fires’\textsuperscript{32}. Manrique’s reference to the general use of a straw mat (i.e., madur) on which they sleep, using cotton quilts as bed covers (kanthas) in Bengal holds good even today. In the West Coast, Linschoten refers to the use of mats of straw both for sitting and sleeping.\textsuperscript{33}

As regards household utensils, use of metals was very rare, except ‘small iron hearths’ and thin iron plates for baking bread. There were a few earthen vessels for cooking and storing water. Plantain-leaves for taking food were used on the West Coast and also in Bengal.\textsuperscript{34}

\textit{Dress and Jewellery}: Contemporary travellers are almost unanimous regarding the general nakedness of the people, peasants, workers, artisans throughout India and their scanty clothings. But this need not be taken literally since the extent of clothing depends on climate, custom and price. Cloth was then costlier than wheat. In the Deccan, nudity was not necessarily a sign of poverty. It was almost a traditional feature through the ages, except some covering for the middle of the body (langota).\textsuperscript{35} But this could be a pointer to poverty. Even in Central and Northern India, where adequate clothing is necessary for efficiency, not only foreign travellers like Fitch and Salbank, respectively of 16th and early 17th century, but even careful observers like Babur and Abul Fazl spoke in very general terms. Babur found ‘peasants and people of low standing’ going about barefoot; the masses, men being naked except for the decency, wore clout (lunguta) and women the sari. Abul Fazl found the masses in Bengal mostly naked wearing only a cloth (lungi) about the loins. In Bengal while Fitch found partial nudity, Manrique found the
common people wearing unshaped and unsewn cotton cloth, 6-7 cubits long from the waist down. Generally speaking, the upper part of the body of men remained uncovered. They used a turban 12-14 spans long and 2 wide, costing Re ¼. The Bengali women wore the same kind of cloth but of 18-20 spans with which to cover the whole body. But on festive occasions they wore coloured silks or rich gold and silver embroidered cloth or silk. However, Fitch’s reference to the use by the people in Benares of ‘quilted gowns of cotton and quilted caps’ during winter may be regarded as applicable to the plains of Northern India. Use of woollen garments or blankets by the common people is not mentioned, perhaps because cotton and woollen goods then cost more than now in terms of grain. Moreland’s suggestion that sack-cloth of jute was used by the poor in Northern and Eastern Bengal has now been found to be wrong due to a misinterpretation of tatband in Ain, which means eri-silk, not jute. In Western India, however, Della Valle says the people seemed to be clothed better, wearing cheap fine linen, coloured turbans and slippers.37

Women generally wore cotton sari, which suffices to cover their breasts also. The non-use of blouse was not necessarily a sign of want of clothing as held by Moreland. It merely indicated the influence of climate or the prevalence of regional custom. The breasts even of the well-to-do were bare in Malabar; in Eastern Indian villages the blouse was not commonly worn. However, in some other regions (e.g., Agra-Mathura, and Western and Central India) even an ordinary woman wore it (choli or angiya) to cover their breasts especially where they wore skirts (lahanga).

There was little need of shoe-makers as of tailors. Generally speaking the masses in the Deccan were barefooted. North of the Narmada, too, shoes were rarely used by the common people notwithstanding abundance of labour. Only Barbosa refers to their use in the ‘city of Bengala’.38

As regards jewellery, evidence is not much and applies both to women of the rich and poor. According to Fitch their necks, arms and ears were decorated (at Patna) with rings of silver, copper, tin (brass) and round hoops made of ivory (conch-shell), and decorated with amber stones and agates, while there were rings of silver and copper on their toes39 (this militated against use of shoes). In Bengal, Manrique found the women wearing armlets, bracelets,
large earrings and small nostril-rings, as well as necklaces of bellmetal though those of upper classes wore the same ornaments made of gold and jewelled on ceremonial and festive days. In fact, as Della Valle also says, those who could afford used 'gold-works and jewels' for adornment. In Western Deccan, Fryer's evidence is similar, (with jewellery of costlier metals for richer women).40

*Minor conveniences*: Among minor conveniences and gratifications of life of the masses, tobacco and toddy may be mentioned. The use of tobacco grew after Akbar's reign: Fryer found that a 'pipe of tobacco' contented the people after the humble dish of boiled rice in the Coromandel and Malabar Coasts. As regards intoxicants, toddy or arrack (from such plants as mahua and sugarcane), opium and some other drugs were easily available throughout the country.41 Looking glasses were rare, as also pocket knives and buttons.

Pelsaert has drawn a very unfavourable picture of the economic condition of the common people. "They have always been plagued by the gnawing worm which has consumed them so that they have nothing more left than subsistence or what is required to fill their stomachs". Again they have been described as poor wretches, "contemptible earthworms", living in "bitter poverty, clothed with the woeful garment of sighs, the foe of love, friendship, and happiness, but the friend of loneliness wet with daily dew of tears..." The evidence of Van Twist is also gloomy. On the basis of such remarks Moreland concludes that "The great bulk of the population lived on the same economic plane as now" and, again, "the broad facts remain that the mass of the nobles were steeped in luxury and that the mass of the people were miserably poor, even than they are today" (1920). Further he observed "we see the mass of the population living on the margin not of comfort but of bare subsistence", with only two alternatives of escape, migration or enslavement, "in years of normal production" (1923).42

If such was the real situation "in years of normal production the condition of the people must indeed have been deplorable. True, in the middle of the 17th century the land was seldom cultivated except under pressure as the evidence of Bernier and Aurangzeb's *firmsans* would show but till then normally there was extraordinary plenty and cheap living.

MUGHAL ECONOMY
This was due to fertility of the land and incredible purchasing power of money, also testified to by foreign travellers whose evidence Moreland has not considered. Thus in the beginning of the 16th century Correa wrote favourably about Cochin, Varthema (1510) of Vijayanagar, Linschoten (1583-88) of Cambay, Malabar and Bengal. In the 17th century Schorer (1616) praised the Coromandel Coast for fertility, Thomas Coryat (1612-17) of Agra, and Pietro Della Valle (1623-4) of the West Coast, W. G. de Jongh (1628 or 29) of Broach, Mundy (1628-9) of Malwa. Speaking of Gujarat Van Twist (1638) wrote that there was no place as deliciously cheap as Ahmadabad.43

We have also to consider that if money wages then was very low, the real wages were high.

In Akbar’s time a worker of the lowest grade, earning 60 dams (Rs. 1½) a month could purchase 135 seers of wheat, or 202 seers of barley, 162 seers of jowar and 270 seers of bajra, that would more than suffice for a family of five.44

Thomas Coryat (1612-17) travelling from Aleppo to Agra, spent £ 3 only during ten months and ‘yet fared reasonably well’. Often he could live very complacently “for a penny sterling a day with meat, drink and clothes. At this rate he could live for three years on £ 12 sterling. He commented: “Such is the cheapness of all eatable things in Asia, drinkable things costing nothing”.45 If an Englishman could maintain himself comfortably on that pittance, an Indian worker could easily do so on 1 d a day or 2s 6d (or a little over Re 1/-) a month.

In Bengal, a candil of rice (about 20 mds) could be purchased at only Rs. 3 or 4. Cheapness of grain in the time of Shaista Khan has become a legend.46

In Gujarat (about 1628-9) ‘A common man or labourer who does not eat anything else than bread made from this grain (barley) can easily live on 1½ stivers daily (with 6 lbs of barley), and taking many other things in addition, might well find 3 stivers per day quite sufficient’.47

About the middle of the 17th century, the Indian lascars at Surat who were of superior standard than the ordinary workers, were paid 3-4 rials of eight (Rs. 6-8) a month, about four times higher than that of the latter. They also got their food which was ‘little inferior’ to that of the English.48
Therefore, the sympathetic and poignant but rhetorical observations of Pelsaert is that “the life of the people can be described only as the home of stark need and the dwelling place of bitter woe” must, however, be largely qualified on account of the extreme cheapness of articles and low cost of living and the high purchasing power of money. It is not implied that the condition of the masses left nothing to be desired, but certainly it was not as bad as Moreland pictures it.

A quantitative estimate of the city poor is hardly possible. Besides the innumerable workmen and artisans, there were many servants and attendants free as well as slaves. The economic position of the urban artisans has been discussed earlier. Their lifestyle was generally similar to that of the peasant, living in single and crowded thatched huts, subject to famine and pestilence.\textsuperscript{46a}

\textit{Servants, Slaves and Serfs} : An outstanding economic phenomenon of the Mughal age was the diversion of productive forces to unproductive forms of luxury and display on account of performance of personal services by servants and slaves. Almost every contemporary writer testified to it. In Northern India, the imperial establishments of the seraglio (harem, zenana), the camp, the household, sports and amusements had innumerable guards, male and female, porters and troops. The example of the emperor was avidly followed by the nobles or officers. The army, too, engaged numerous non-combatants as servants or porters and the like. In the Deccan States, Bijapur, Golkonda, Vijayanagar, Calicut, etc., also the position was practically the same. Even the Portuguese at Goa imitated the example of their neighbours in this respect.\textsuperscript{49}

The servants were free but hired. Commenting on the rates for their hiring, Moreland says that these were low and allowed them only a bare existence. But this does not give a correct picture. At Agra, Pelsaert found that ordinary servants and attendants were paid Rs. 3 to 4 a month, which was sometimes counted as 40 days. According to Pietro Della Valle servants at Surat were paid Rs. 3 a month. Considering the prevailing cheapness of articles, these rates were not very low. Moreover, they had a lucrative income from tips from the visitors to their masters. In any case their standard of living was better than the poor artisans.\textsuperscript{50}

Slavery in some form existed from time immemorial. If Megasthenes was wrong in believing that India had no slaves in 4th century

\textbf{MUGHAL ECONOMY}
B.C., Ziauddin Barani tells us that Firuz Tughlaq took special care in procuring best slaves for the state out of those captured by his fief-holders and officers during war. Their establishment in the capital and in fiefs numbered 1,80,000 and was duly regulated personally by the Sultan. In fact slavery was recognized both in Hindu and Muslim law. The Mughals also sought to increase the supply of slaves but unlike the Europeans treated them more humanely. Islam, in fact, enjoins that the slave was not to be persecuted but be well-treated in the household. The Portuguese became notorious for their scandalous slave-dealing. The Dutch were hardly better than the Portuguese but they traded in Abyssinians, whose descendants form a mixed race in Kanarese Coast of India.

Moreland has rightly differentiated slavery between urban and rural servitude. In towns and cities slaves are engaged as domestics. In the villages they served as labourers or agricultural labourers and were virtually agrestic serfs.

Slaves, male and female, were available in plenty. Indian slaves, Hindu or Muslim, were hereditary, i.e., from father to son. Their ranks swelled through involuntary and voluntary sources of recruitment, as well as imports.

(i) Involuntary enslavement resulted from raids to one village or more, followed by capture of the inoffensive villagers as slaves. War-prisoners were given away among officers and fief-holders as slaves, whose descendants also continued as such. Akbar is credited by Abul Fazl with having ordered the abolition of enslavement (1516): "It had been the custom of the royal troops, in their victorious campaigns in India, to sell forcibly and keep in slavery the wives, children and dependants of the natives. But His Majesty, actuated by his religious, prudent and kindly feelings, now issued an order that no soldier of the Royal Army should act in this manner". However, slavery continued to be a recognized institution, throughout Akbar's reign. Badauni spoke vehemently against slavery due to oppression of collectors on peasants and famines. However, Akbar's prohibition perhaps tended to limit the participation of his soldiers in both these above practices which were liable to serious abuse, at least during his reign. Again, as a result of enclosing a large area of land with forests by military guards and then narrowing the circle during the favourites royal hunt (Kamargah Shikar) not only of beasts, but also
of people of primitive or aboriginal tribes or lowly dwellers in forests regarded as wild beasts, described by Finch as poor, miserable, theevish people that live in woods and deserts, were also captured as slaves and sent to Kabul ‘to barter for horse and dogs’⁵⁵. Apart from such militaristic or pseudo-martial operations, slavery also resulted during normal times from stealing of children or kidnapping, for which Bengal and Orissa became notorious. In their principal hunting grounds, Chittagong, Jessore, Bakla, Selimabad (a part of Bakarganj), Hijili and Orissa, the Portuguese, Maghs and Arrakanese under arms used to capture men, women, children and infants and sell them in the principal slave markets of India at Hughli, Tamluk, Pipli, St. Thomas, Goa, Surat and also in Ceylon.⁵⁸ The Sundarbans and the islands of deltaic Bengal were almost depopulated in the 17th century.⁵⁴ Manrique records that the Arrakanese brought 18,000 slaves from Bengal to Arrakan (Dianga and Angarcale) in five years. With the expulsion of the Portuguese from Hughli, other places downstream, Akra and Budge Budge, came to be infested down to 1760 by slave ships. Again servitude became a penalty for criminals, insolvent debtors and revenue-defaulters; both along with their whole families were turned into slaves.⁵⁵

(ii) Voluntary enslavement, arising from sale of children by debtor-parents and even of oneself during famine, scarcity or epidemics or eviction from land was considered quite normal down to the first half of the 19th century even at Calcutta.⁵⁶ A Bengali document of 1729 refers to one’s own sale with wife and children for Rs. 11/- in perpetuity, i.e., hereditary service in future. Regular purchases of slaves were registered in 1752 in the court house (kachari) of Calcutta, the E. I. Company getting a duty of Rs. 4/- from each slave. Europeans in Madras, Calcutta and some rich Indian merchants at Surat engaged Abyssinians (coffrees) as slaves.⁵⁷

(iii) Imported slaves: Besides indigenous slaves, there were also imported slaves. Foreign slaves, imported from Abyssinia, Mozambique and other places in Africa and Persia in West Asia were costly luxuries. The Portuguese imported African slaves (kafris) for sale in the Indian markets at high profits. The Dutch and English merchants at Surat, Madras and Masulipatam and the Arab merchants also shared in the trade which continued down to the 19th century.
The 'abominable custom' of castration of children and trafficking in young eunuchs was prevalent in Bengal. In the 16th century, Barbosa (1514) refers to the practice of castration by the 'Moorish merchants' of the city of Bengal who purchased 'Gentile children' from their parents in the interior and by others who stole them. Those who survived the operation were brought up well and sold “as merchandise for twenty or thirty ducats each to the Persians who value them as guards to their wives and houses” . Jahangir found that the revenue defaulters of Sylhet used to make some of their sons eunuchs and give them to the governor in place of revenue (mal wajib). The custom spread elsewhere and became common. It is not known how far his prohibition was effective.

Information regarding price of slaves is scanty during the Mughal age. A eunuch sold in Bengal for 20-30 ducats, according to Manrique. Bengali slaves were sold in Arrakan at Rs. 20-70 each.

The chief slave market in Bengal was Hughli. The Arrakanese brought here prisoners from their own country and these were purchased not only by the Portuguese but also by the people or the merchants at Hughli and then despatched to different parts of India. Slave traffic was abolished by proclamation in 1789 in India. But domestic slavery continued in houses of landlords or Muslim nobles even early in 19th century as Buchanan has shown.

Besides urban slavery there was predial slavery or agricultural bondage in rural areas. The village labourer or agricultural labourer were practically serfs. In return for cultivating the estates or rented lands of their masters they got by way of subsistence and allowance grain (about 15 mds) and a piece of coarse cloth. Agrestic servitude survived down to mid-19th century.

According to Moreland, the people practically enjoyed nothing in the way of communal services and advantages, e.g., organized medical help or veterinary treatment, popular education, industrial or agricultural development, etc. The shadow of famine was ever present. But this condemnation is unfair. In those days modern communal facilities were unthinkable. Recent research has shown that hospitals and dispensaries were established by the imperial government and also by rich, charitable persons for the poor, who could not bear the cost of treatment. In Ahmadabad the 'Darus Shifa' was a part of the imperial karkhana (Mirat). There were also veterinary hospitals.
(pinjrapoles) built by the Jains. There were chatuspathis and pathshalas and maktabs in villages for education at primary stages, respectively, for Hindu and Muslim boys. True, famines, accompanied by pesti-
lience often dislocated the economy of the country and even the most well-intentioned relief measures of the Mughal state were like a drop of water in the desert. The spectre also haunted British India on the whole, notwithstanding occasional areas of discontent, e.g., the Jat area of Agra-Mathura in 17th century, the people soon adjusted themselves in the situation as best as they could.

4. Middle Class

The concept of a 'class' presupposes common or identical interests, social, economical and cultural. This applies, more or less, to all social classes, the upper, the lower and the middle. The term "middle classes" would simply mean the classes intermediate between the upper slopes of the social pyramid and the base, i.e., between the upper and the lower classes, and not in the sense of Marx. Nevertheless a middle class society presupposes certain conditions, including large-scale production, based on technological and mechanical develop-
ment, growing industry and trade, comparative economic freedom, educational progress and existence of professional classes, preferably educated. We have to consider how far these conditions were present in medieval India. In England of the 14th century, the parallel or simultaneous growth of business and commercial activities, urbaniza-
tion, the emergence of the trader-burgher-bourgeois separate from the master-craftsmen, the growth of the merchant-capitalists and municipal self government based on royal charters, struck at the roots of feudalism. As it is said, "the trading, travelling, money-
making middle class proved to be the antithesis of feudalism, that stable pyramid of society."65

The situation in India must have appeared to Bernier to be some-
what different from that in Europe. That acute French observer of India of mid-17th century, made a classic statement: "In Delhi there is no middle state. A man either be of the highest rank or live miserably." In other words, he denied the existence of a middle class in India and found society to consist mainly of two tiers, the rich and the poor. He, however, spoke of various occupational groups, and cautiously warned that he "continually met with persons neat
and elegant in their dress, finely formed, well-mounted and properly attended”. Among the factors which, to him, militated against the full growth of a middle class in India were: (i) the absence of technological or mechanical development, though there was excellence of handicrafts as well as extensive production; (ii) the absence of economic freedom due to authoritarian and administrative control or oppression and monopolies; (iii) limited education; and (iv) rigid caste regimentation.

Moreland refers to the comparative insignificance of the middle classes, devoting hardly two pages in his pioneer study of the economic life of Mughal India. In a sentence, strongly reminiscent of the tone of Bernier, but oblivious of his reservation, referred to above, Moreland writes: “There were at this time no lawyers, very few of any professional teachers, no journalists or politicians, no engineers, no forms of employment corresponding to the modern railway, postal or irrigation services or to factories and large workshops, few landholders in the modern sense, and, unless I am mistaken, scarcely any families living upon accumulated property...”. At another place he says that the middle classes were numerically few, and their life was “free from ostentation”.

During the last sixty years, however, considerable research has been made which has practically revolutionized the concept of the middle classes in medieval India, as propounded by Bernier and Moreland.

Let us, therefore, try to trace the elements of middle class development during this period. For the sake of convenience we may discuss this under the following four aspects: (i) Mercantile classes; (ii) industrial middle classes; (iii) landed middle classes; (iv) professional middle classes.

(i) The mercantile classes, including merchants (beoparis), and banjaras (itinerant traders in bulky goods), shroffs (sarafs, money-changers), mahajons (money-lenders), bankers, gumashtas (agents) and middlemen (later called paikars or pykars and dellals), all constituted separate professional groups and played an important role in society on account of their wealth not only in the coastal regions up to the first quarter of the 18th century but also in the interior of the country. Some of these may be regarded as the forerunners of the commercial middle class which grew up under the East India
Company during the second half of the 18th century and was typified by the Parekhs, Seths, Chands and the Armenians.70

It is very surprising that Moreland has completely ignored the evidence of Dutch and Italian sources regarding the existence specially at coastal towns of numerous body of merchants and trading classes, constituting a very wealthy middle class. Thus, Linschoten found the Goa merchants to be very “rich and substantial”. In Bengal and Arrakan, the banias (merchants) of Chatgaon were “great and powerful.” The chief merchants of Surat had great wealth. Many banias, shroffs and brokers of Gujarat were “substantial”, carrying on the “largest” and “best” trade, more than the Muslims. The Italian Pietro Della Valle referred to “very considerable gains” of trade of the merchants.71

To support his case Moreland refers to a case of “instability of commercial fortunes” and says that the average income of the merchants was “probably not large” (italics mine) and that even the wealthy ones, except in the coastal ports, had to be careful to be frugal and unostentatious to avoid being used as “filled sponges”. Such statements, however, are not only misleading but also can have, at best, only a very limited application. Several merchants in Gujarat and Bengal possessed amazing wealth, as noted earlier. Virji Bohra, owning eight million rupees, conducted a trade comparable to the East India Company’s. Not only the merchants of Surat and Cambay, even many of inland towns like Agra, Ahmadabad, etc., and the baniyas of Agra owned big and fair houses. If a merchant or baniya did not imitate the costly styles of nobles, that might have been due in some cases to fear of theft in unsafe places or to frugality. The descriptions of food and clothing of Hindus of Gujarat by Barbosa (1514) which were similar to Van Twist’s (1628-29) and that of their marriage festivities by the former would show that the merchants in certain areas were not only rich and prosperous but also showy. However, the Muslim merchants on the West Coast at Calicut and Rander (Surat) were exceptionally ostentatious.72

The influence of the mahajans especially in Rajasthan, was such that by mid-18th century they came to compete with the zamindars and jagirdars in controlling the peasant communities.73

(ii) No industrial middle class could flower in medieval India, comparable to what emerged under the E.I. Company’s rule especially
during the 19th century. India’s reputation for her excellent handicrafts, which lingered on till the forties of 19th century, was no index for any high social status of her craftsmen. Without capital, without tools, without education, without division of labour, no artisan could ever hope to override the limits of small-scale domestic system of production and of the small internal market. The only exceptions were when the artisans produced in anticipation of demand or worked for a wider market with dadan from middlemen, manufacturers, merchants or broker, who acted more as agents of supply than of industrial organization. The state monopoly of production in the karkhanas turned the free artisan into a wage-earner. Without free competition an industrial society could not develop.74

(iii) Was there any landed middle class below the landed aristocracy? Moreland’s statement that “there were few landholders in the modern sense “seems inexplicable from a person who has studied the “agrarian system” of the country. In fact it needs to be qualified. In the Mughal empire there was “an intermediate landed interest”, i.e., a class of small landholders between the big zamindars and the tenants—the taluqdars and muqarraridars in Bengal and Bihar, village zamindars in parts of Bihar and the modern Uttar Pradesh and mirasdars in Southern India, all holding the villages as coparceners. The superimposition of a superior landed interest (zamindars in Bengal, taluqdars or jagirdars in Oudh, imamdars in Bombay and poligars in Madras) on the former, however, militated against its flowering into a landed middle class like the English landed gentry of yeomanry. Nevertheless, in practic the intermediate Zamindars, the rich peasants and the aimabholders (of rent-free tenures) constituted petty gentry in the village.75

(iv) Professional Middle classes there were certain elements which formed the foundation of the future middle classes. The Mughal raj, being a kaghazi raj, required maintenance of seas of records and thousands of officials forming the lower tiers of the bureaucracy. In the first place there were the functional or service groups of men in the medieval state services. Moreland’s view that professional men were rarely found at the court, has got to be discounted. True, there is considerable lack of information about the importance of these constituents of urban intelligentsia, including even the nature of payment in some cases for their ‘specialised skills’, or

SOCIAL STRATIFICATION AND STANDARD OF LIFE 257
salaries of numerous ‘minor functionaries’ at different administrative centres and the ‘literate classes’ and ‘clerks’. But it is undeniable that corresponding to the different levels of administration there were different tiers of amirs, mansabdars in the centre, the provinces, the districts and the parganas, etc. So that the lower grades of mansabdars as subordinate and ministerial staff, and ahadis (gentlemen troopers) may be regarded as constituting a middle class functional group. Revenue officials from the highest to the lowest, diwans, amils and accountants, clerks (karkuns), muharrir and other petty officials in revenue, administration or performing other special duties in central and provincial governments constituted a flourishing group of Brahmans, Kayasthas, Khatris and Baniyas. The sources of their wealth were not always honest. Much came from cheating the state or defalcation or manipulation of accounts.76

In the second place there were members of learned professions. To the question whether there was any ‘educated middle class’ Moreland’s answer is a definite ‘no’, for he denied the existence of ‘professional teachers’, i.e., teachers with English education. But there were certainly indigenous educational institutions (e.g. tols, chatus-pathis, madrasas and maktabs) which produced teachers versed in Sanskrit (pandit), Arabic or Persian (mulla). Among the Hindus, the profession of the priest conducting religious functions was the monopoly of the Brahmans, with two grades. The superior grade, consisting of educated Brahmans (raj pandits, raj gurus) catered to the needs of the rajas or rich clientele. The lower one of uneducated Brahmans served the lower castes.77 Among the Muslims the mulla or the qazi did the same. Economically they were very much worse off than the petty officials and often depended on some patrons and were generally poor, with a few exceptions like Abul Fazl and Birbal. Then as regards legal profession, there was, of course, no plethora of lawyers as in modern times, but there were learned legists and there were a few wakils, known as wakil-i-shara’ in contemporary Mughal courts.78 About medical practitioners and surgeons (vaid, hakim) Moreland held that the demand for these services were very limited. Misra, relying on the evidence of Terry, Tavernier and Bernier, underrates their importance. The Portuguese of Goa, however, preferred the Hindu physicians to their own, as Linschoten testifies (1630). There were unlettered and ignorant quacks who treated the poor

258 MUGHAL ECONOMY
villagers. Some practitioners with a smattering of medicine used to treat rich families on Rs. 15-20/- a month. Both the views of Moreland and Misra have to be largely qualified in view of the large number of instances collected by Iqtidar Alam Khan. He has shown that apart from service in the state or with some nobles there were numerous demands from private persons for the skill of the physician and surgeon, who were fairly prosperous. 79

The scholarly profession included philosophers, lawgivers, grammarians, astronomers, writers and poets and others including saintly or scholastics among Hindus and Muslims, all endowed with stipends or grants of land by the Mughal emperors and nobles or Hindu rajas and zamindars. 80

Another important profession of those days was that of astrologers. Both Hindus and Muslims invariably consulted them as infallible oracles, before starting a work or setting on a journey. These 'crafty diviners', as Bernier calls them, were of two kinds, to be found in the bazar or in the court. 81

True, Mughal India had no press, and journalism or politics did not flower as avenues of employment. True also, modern railways, postal and irrigation services and large factories or workshops did not exist but to say that there was no engineers would be to deny the existence of the civil builders or shipbuilders.

Last but not the least, the reference to numerous castes, covering artisans and service occupations in some contemporary sources also points to the existence of a considerable middle class. Abdur Rahim Khan-i-Khanan refers to 66 and Pelsaert to a hundred, while Banarasidas to 36 lowly clans (pauni) of the Sudras. Weavers, tailors, wood and metal workers, oil pressers, glass-blowers, etc., must have catered to the needs of a considerable middle class, besides those of the upper and lower classes.

Thus, notwithstanding some impediments there were certain elements in medieval social stratification, by no means inconsiderable, which anticipated modern middle classes (bhadralok, ashraf). Authoritarianism at the top with administrative controls and monopolies and escheat of property certainly existed but their influence in creating a feeling of insecurity was not so inhibitive as is sometimes believed. 82 Again the caste system, with all its traditional rigours, did not always act as a deterrent to social mobility or economic progress. That
it was not as inelastic as it is usually supposed is clear from several instances of mobility among the mercantile and professional groups, merchants, artisans, teachers, accountants, writers, etc., and identity of their interests.

In 18th century Rajasthan merchants and mahajans were appointed local functionaries as chaudhuris, ganungoes. Even the clerks (accountants and record-keepers) of the state and nobles were appointed from mercantile communities, e.g., the khatris and Jain banias of Northern India, among whom, caste solidarity was strong. Geographical mobility among these classes was indicated by migration, sometimes accompanied by change of professions.83

NOTES AND REFERENCES

4. General: Moreland, IDA, ch. 7; FAA, ch. 6; Mookerjee, ch. IV; P. N. Chopra, Society and Culture during the Mughal Age, 2nd ed., 1963; Social Life under the Mughals, 1963, Life and Letters... ch. 1,2,10,11; summary in Mughal Empire, ed. R. C. Majumdar, ch. XXI; Satish Chandra in CEH, i. 458-71; C. Wilson, England's Apprenticeship, 1603-1763. Quoted CEH, i. 262.
5. Abul Fazl's advice to nobles to engage in trade, Ain (Bloch). i. 57-61; AKN, Tr. 1. 208; Terry, 195 (Asaf's dinner); Manrique, lxvi; Terry in Purchas, iv. 421; Mandelslo, 69; Hobson-Jobson, (S. V. pilau); Hindu feasts with vegetarian dishes, Mukundaram, J. N. Dasgupta, 181; Tuzuk (R), i. 419.
6. Ice-supply, Ain (Bloch), i. 56. Moreland calculated the price at Re. 1/- a lb (1920).
7. Babur's Memoirs, 503, Ain (Bloch), i. 65; Tuzuk-i-Jahangiri, R. i. 116, 270, 350, 422, 435; B. ii. 145, 159; Waqiat-i-Jahangiri (p. 349).
8. Babur and Jahangir were veterans. Akbar and Shahjahan were moderate. Humayun preferred opium. Aurangzeb abstained from wine. The nobles were heavy drunkards. The country-made liquor was of different kinds; mahua, neera, kherra, bhadwar, jare and toddy, Europeans spoke of it is arrack. Good wines were imported.
10. 11 types of coats, Ain (Bloch), i. xxviii, 87-84 (prices); Monserrate, Tr. 198 (Akbar's gold-embroidered silk dress); Chopra, in Mughal Empire, ch. XXI.
11. Chopra, *Social Life under the Mughals*, 86 ff; Monserrate, 97 refers to well-built, lofty and handsomely decorated nobles of nobles; Pelsaert, 66-67; Mandelslo, 54; Bernier, 247 (requisites of a beautiful house), 285; Thevenot and Careri (Sen), 22, 163; *Khulasat* (Sarkar), 34; *Ain* (Bloch), i. 45-55 (tents); *Storia*, iii. 41. Chairs wholly absent according to Pelsaert & Fryer, but Abdur Razzaz (1443) and Roe refer to these being used. Abdul Aziz, *Thrones, Chairs*, etc., 182.

12. Mughal: De Laet, 119; Roe in *Letters Received*, vi. 298; Moreland, IDA, Ch. 3.

*Other parts*: Della Valle, 42; Thevenot, 307; Pyrard, ii. 75, 80, 135; Hay, 750 & *passim*.


15. Presents, *Tuzuk*, i. 103, 132, 134; Roe, 110; Sewell, 281; Manrique, ixiv; Hay, 723, 762, 869.


17. Ban on taking money out, Tavernier, 75; Manrique, 1xxi; Badaoni, ii. 352 (dowry of Raja Bhagwant Das). Khem Chand, a Balasore merchant spent 15 lacs on daughter's marriage. Sushil Chaudhuri, 94-5; CEH, i. 470-1.

17a. CEH, i. 458-9, 463.

18. Nikitin; Moreland, IDA, 267.


20. 'Their daughters be married at or before the age of 10. The men may have seven wives.' (Fitch, ETI). "Every body of both sexes marries and a considerable number of men take more wives than one* (*Storia*, ii. 51). 17th century Hindu society was more polygamous than now.


22. Barbosa, 358; Hobson-Jobson (*Kerainine*); E & DV, 490; vi. 193; *Purchas*, II. x. 1703; Linschoten, c. 41.

23. Sewell, 379 etc.

24. Mrs. J. Kindersley, *Letters*, etc. (1777), No. 43 quoted in CEH, ii. 8.

25. *Ain* J., ii. 122, 151, 239, 338; Barbosa, 291; Sewell (old ed), 366; Della Valle 42; Linschoten, c. 33; Fitch; Terry, 198; De Laet, 116; Manrique, 64-65; Pelsaert, 61. I. Habib holds that as a general rule the peasants could retain only the lowest varieties of his produce for his family. *Ag. Sy.*, 91.


27. Butter, Mandelslo, 64; Della Valle (1664), 409; Tavernier, ii. (1678), 70: When salt was dear, wood ash was used. Shireen Moosvi, however, thinks salt to have been cheaper in 1595 than in 1886-95. IESHR, x(2), 1973, xiv (3); see CEH, i. 462.

SOCIAL STRATIFICATION AND STANDARD OF LIFE 261
28. Terry, *op. cit.*

Manrique, i. 64-65; de Jongh, quoted in Brij Narain, 7.

Satish Chandra (CEH, i. 462) discerns some *occasional* differentiation between the generality of the masses and ‘the very poor’ in the sources. In such cases the above general description of the standard would not be applicable. On the West Coast the food of ‘the very poor’ was ‘boiled rice, nichany (ragged millet), Millet and grass root’. The ‘pea-like grain’ in Bihar the use of which caused sickness, which, however, has not been explained, refers to *Kisari* (or Khesari) pulse, ‘eaten by the poor,’ (Ain. J & S, ii. 164).

29. Terry, 179; Jourdain, 162; Pelsaert; Thevenot (Sen).

30. Manrique.

Chopra, *Social Life*, 103-4. Cow-dung was used even in houses of the rich for its antiseptic qualities (based on Manrique & Della Valle).

31. Fryer writes: “The poorer (houses) are made of boughs or oleas of palmyras or leaves of teak and thatched both sides and coverings the middle fort of gentuices with mud one story; flooded with cow-dung, which they do afresh every day after they have swept and cleansed them under which, their household gods, themselves, their family, and cattle, are all housed, and many times in no distinct partition. They plaster cow-dung before their doors and so keep them clean, having a little place or two, built up a foot square of mud, where they plant calaminth, or (by them called) *tulce* (i.e., tulsi plant), which they worship every morning and tend with diligence”.

32. Terry, 198; Abul Fazl, *Ain*, Mundy, ii. 258; Pelsaert; De Laet; Major, 17.

33. Manrique; Linschoten, c. 33, 39.

34. Terry; Pelsaert, 61; De’Laet; Manrique (four pots). Linschoten found the use, for drinking purposes, of coppercan at Goa and ‘copper canne (can) with a spout’ in the adjoining countryside. Terry refers to ‘thin iron plates’ (taoa of today) for baking bread. See Moreland, IDA, 273-4.

35. Yule, *Cathay*, iii. 57; Major, 12: *Purchas*, II. X. 1732; John Montecorvino (14th century); Nikitin (15th century); Barbosa, 290; Varthema, 129; Fitch, *Purchas*, ii. x. 1732; Linschoten, c. 39; Della Valle, 157, 360.

36. Babur refers to ‘peasants and people of low standing.’ Mrs. Beveridge, ii. 519; *Ain* (Sarkar), ii. 134; Pitch, *Purchas*, II. X. 1735-7; *Lett. Recd.*, vi. 187; Manrique, 162; Buchanan, Martin, E. I.; Moreland, IDA, 179, 275; CEH, i. 460.

37. Della Valle, 42 ff. Hindi literature refers to shoes used, respectively, by dwellers in cities (*panahi*) and villages (*upanaha*), Ojha.

38. Yule, *Cathay*, iii. 57; Major, 12; Sewell, 252; Linschoten, c. 38, 39; Barbosa, 365.


262

MUGHAL ECONOMY
40. Manrique, i. 62 ; Della Valle, 45 ; Fryer, ii. 117.

41. These are mentioned by Terry & Ovington (also Banians) as being commonly used to revive wasted spirits, 'both by Indians and Europeans'. Toddy, a common drink, is mentioned by Thevenot and Tavernier.

42. Pelsaert’s original account in Dutch in De Laet, quoted in Brij Narain, Remonstrantie in Moreland, FAA, 200, 203 ; IDA, 279.

43. Brij Narain has shown on above evidence that due to abundance and extraordinary cheapness of necessaries of life, an ordinary labourer earning a minimum wage, could live quite comfortably (pp. 8-9).

44. Mookerjee, 64, 67.

45. Ibid. 64 ; S. R. Sharma, Making of Modern India, 150.

46. Mookerjee, 64.

47. W. G. De Jongh, quoted in Brij Narain, Indian Econ. Life, Past and Present, 7.

48. EFI (1642-5), 186.

49. Ain (Bloch), i. 44 ff (first two books): Purchas, I. iv. 432 ; Della Valle, 42, 82 ; Pyrard (Tr.), i. 376 ; ii. 75, 80, 135 ; Thevenot, 307. As Bernier observes: "for two or three (in Delhi) who wear decent apparels, there may always be wretched seven or eight poor and ragged miserable beings…", as contrasted with Paris where "seven or eight out of ten" on the streets were "tolerably well clad" (p. 282).

For Deccan, Major, 29-31 ; Barbosa, 309, 358 ; Linschoten, c. 29 ; Della Valle, 157 ; Pyrard (Tr.), ii. 39.

50. Rs. 1.1/2 a month at Akbar’s court ; about Rs. 2 on the West Coast. Moreland, IDA, 90. But Rs. 3 to 4 at Agra, Pelsaert, 60-62 ; Rs. 3 at Surat acc. to Pietro Della Valle ; Tips, Dutch sources in Brij Narain, 10-11.

51. AKN (Beveridge), ii. 246.

52. e. g., Dravidian and Kolarian forest tribes, the Santals, Gonds, Bhils, Minas & others who were then regarded as being outside the pale of humanity. See Finch, Foster, ETI, 154 : Aurangnamah of ‘Haqiri’ in my Mir Jumla, 2nd edn.

53. Marco Polo (Yule, ii. 115) ; Barbosa, 363 ; Pyrard, i. 322 ; Ain, Jarrett, ii. 122 (account of Bengal). The King of Portugal sought to minimize the cruelty with which the Portuguese treated their slaves by an order in 1599.

54. Shahjahan perhaps retaliated by sending the entire Portuguese population of Hughli as slaves to Agra in 1629.

55. e.g., according to Manrique (i. 53) governors of provinces used to seize and sell the wives and children of defaulting cultivators by auction. Alexander Hamilton was himself empowered to sell the families of creditors in Thatta without going to court (i. 121). Madras Cons. Bks. quoted in Wheeler, Early Records of Br. Ind., 81-86.
56. Children stolen or purchased for rice during scarcity were brought in large boats down the Ganges to Calcutta, (Evidence of Sir Wm. Jones before the Grand Jury, Calcutta, 1785). These were hawked on Calcutta streets in 1834, "Report on Slavery" (1841), p. 17. It states that slavery was prevalent throughout Bengal and Madras Presidency.

57. K. K. Dutta, "Bengal Subah," 493, based on Mitra, "Types of Early Pross," 87; Abbe Raynal, ii. 147; Mookerjee, 75-78.

58. Barbosa, 358; Tuzuk, R. i. 150-1.

59. Buchanan gives the price of slaves belonging to the depressed classes like Dhanuks, Chamars and Rawaries in 19th century as follows: an adult male (nafar or ghulam) Rs. 15-20; a boy of 16 years Rs. 12-20; a girl (laundi) of 8-10 years Rs. 5-15. Roughly up to age of 20, one year was valued at a rupee. Martin, EI, iii. 496.

60. Manrique.

61. Buchanan has left a graphic account of agrestic servitude in Bihar (Purnea, Gaya, Shahabad, Bhagalpur, etc.), North Bengal, Kamrup and Assam. A serf usually got an allowance of 15 mds of grain (985 lbs) and a piece of coarse cloth "Ibid." iii. 289. In South India also, Buchanan found widespread slavery (1800) but commented that the system in Malabar was better in some respects to that in the West Indies. Journey from Madras to Mysore, Canara and Malabar, i. 371.

62. The areas concerned were the Punjab, the Deccan, Eastern U. P., North Bihar, North Bengal, Assam, Orissa, Central India, Central Provinces, S. W. and S. E. Coasts of India, Mookerjee, 76. He has shown that "hereditary servitude" of the labouring classes dies hard especially in regions where low and untouchable castes are widespread as in modern Bihar (pp. 77-78). (See "Maratha Supremacy," vol. 8. 745, Bombay). Malcolm also found domestic slavery widely prevalent in Central India, Malwa, Rajputana and Gujerat in the beginning of the 19th century ("Memoir of Central India," 1880, i. 164.5).

63. Moreland, IDA, 278-9. In the 16th century neither Europe nor England provided for state controlled education. The Mughals encouraged learning and scholars. Education was imparted among Hindus and Muslims in private. S.H. Askari, "Medicines and Hospitals in Muslim India", JBRS, March-June, 1957, XLIII (i & ii) pp. 7-21. This gives a list of renowned physicians and surgeons.

S. R. Sharma holds that the Mughals did much to introduce a very high standard of life, though it could not become general among all sections of the people. "Making of Modern India," 149.

64. Owing to the controversial and heterogenous character of the "middle classes", this discussion follows and does not precede that on the lower classes.

According to Marx the term "middle class" meant the growing industrial bourgeois entrepreneurs, while the Marxists widen it to mean the classes between the feudal lords and the serfs.
65. Lewis and Maude, *The English Middle Classes*, 27.


67. IDA, 26, 263-5.


69. The idea of such a categorization has been adapted from Misra, *op. cit.* Pt. II.

70. See *ante* Section for details. Misra, 21-35, 75-78.

71. *Goa*, Linschotchen, 228; *Chatgaon*, Pieter Willemssen (Opkomast); *Surat*, Van Ravesteijn (Oct. 1615) (Terpstra); *Gujarat* (Coll. papers de Jongh)—all quoted in Brij Narayan, 59-64.

72. Moreland, IDA, 264a; fear of being ‘made spunges’; Terry, ETI, 326; Bernier, 223, 229. Instances of ostentation, Finch in ETI, 133 (Surat), 173 (Ahmadabad), 185 (Agra); Barbosa, 52-4; Brij Narain, 62-4; Muslims on West Coast, Barbosa, 280, 342; Della Vallee, 42; Moreland, IDA, 162-5.


74. See *ante* sections on Industrial Labour and on Capitalistic Development; also Habib in *Enquiry*, *op. cit.*

75. IDA, 26; Misra, 44, 120 based on S. S. Iyengar, 94-5, 112; Satish Chandra in CEH, i. 466, 467.

76. Moreland, IDA.

Some information about payments collected by Iqtidar Alam Khan in *Pr. I.H. Congress* (1975), 117-126 and corresponding footnotes. See CEH, i. 466-7; also Misra, 58. Mrs. A Chatterji on *diwans and bakhshis*, serving local rajas and *qanungoes* of Bengal grew to be *zamindars*. *Bengal in the Reign of Aurangzeb*, 200.


78. Moreland, IDA, 26; William Adam, *Report on State of Education in Bengal*, 1833, pp. 116, 190, 194; Law, *Promotion of Learning*, etc. Examples of higher education in Northern India, Nadia, Darbhanga (Tirhut), Benares; different *madrasas*, Patna, Jaunpur, Bidar in S. India.

**SOCIAL STRATIFICATION AND STANDARD OF LIFE** 265
Wakil, Moreland, IDA, 83; Wakil-i-Shara, M. B. Ahmad, Adm. of Justice, etc.

79. Moreland; Misra, 59-61; Terry (ETI); Tavernier (Ball), i. 200-1, 301; Linschoten, i. 230; Adam's Reports, 139; 1st Report, 117. Iqtidar Alam Khan, Pr. Ind. Hist. Congress (1975), 126-30.

80. Misra, 61.

81. Bernier, 243, 245; Pyrard (W. India); Misra, 61.

82. Autocracy, Mishra, 45-51.

83. Caste, ibid. 51-57: Morris D. Morris; I.A. Khan, Pr. IHC, 1975, 130-4; My Thoughts on Study of Indian History (Pr. IHC, 1976).
VI

DISLOCATIONS AND DECLINE
Economic Dislocations; Famines

1. Nature and Causes of Famines

Sir Harcourt Butler observed: "Famine lies broad written across the pages of Indian history." Referring to the harrowing miseries during the Gujarat famine of 1630-32, V. A. Smith complacently contrasts the conditions during the heyday of Mughal rule under Shahjahan with those under the benign British rule. Moreland proudly reiterates that "the very idea of food famines has been banished" during British rule except in inaccessible tracts. Such chauvinistic claims of British writers to prove the superiority of British rule over Indian governments are not wholly true. The British rule almost began with the notorious Bengal famine of 1770-71, which took a toll of one-third of the people there and it almost ended with another Bengal famine of 1943-44, when about 3.5 millions died amidst 'modern' horrors which put even the medieval age in a favourable light.

The connotation of the term 'famine' has changed. First, while modern famines are mostly work famines or money famines, those of the 16th and 17th centuries were dire food famines, caused generally by total failure of crops or exceptionally deliberate withdrawal of food resources. The question was how to get food, not so much how to pay for it. Secondly, on account of phenomenal extension of communications in modern times the area of distress has ceased to be local. Railways, steamships, aeroplanes have reduced the acuteness of distress but its area has been extended by equalization of prices. Medieval famines were essentially local, the intense distress being confined to particular regions. Such local shortages of food could not be relieved because of prohibitive cost of land transport of food grains and provisions or of comparative absence of facilities of river
or coastal transport. Thirdly, relief system has almost been revolutio-
nized. It has become more elastic. As the administration’s control
of the problems has improved due to a better system of agricultural
intelligence, improved knowledge of social conditions and greater
transport facilities, control of relief operations has become more
elastic and efficient. Private agencies now play a more active part
in relief than before.¹

The frequency of famines during the period under review varied
much in different areas. However, our information in published
chronicles is not complete. These have to be supplemented by tra-
vellers’ accounts and European commercial correspondence, mainly
Dutch, English, French, etc. While Bengal and Malwa were gene-
really free from scarcity, the Indus valley, the upper Gangetic area,
Gujarat and the Mughal Deccan including the Coromandel were very
much susceptible to famines.

A famine is a characteristic disease of all agricultural countries
depending on periodic rainfall. There was incidence of famines
in Europe, too, in the past. India’s climate in the 16th-17th centuries
was practically the same as now. The autumn or kharif harvest
(of millete and rice) and the spring or rabi harvest (of more valuable
wheat, barley, pulses), respectively depended, then as now, on the
South-West and the North-East monsoons. So, the occurrence of
scarcity or of famine, resulting from partial or total failure of crops
was perhaps natural, especially because the power of insurance or
resistance of the people was scanty. Crops might fail either on account
of deficient or excessive rainfall and floods, or be destroyed by ravages
of locusts and mice or of exigencies of war. Occasionally there might
be a combination of all these factors. Sometimes, again, grain might
not be available because of large-scale engrossing of corn by merchants
or officials. The area affected might either be extensive or local.

Though not a direct cause of famine, administrative or revenue
oppression, which deprived the peasants of their economic reserves,
loomed large at the bottom as a factor which aggravatated their misery.
Hence they could hardly fight scarcity. Akbar’s zabti or regulation
system safeguarding the peasants’ interests with all its strictness did
not long survive his death and the first signs of its breakdown were
visible under Jahangir. The state demand rose from ½ of average
produce to ¾ under Shahjahan and Aurangzeb. Even during the
so-called golden age of Shahjahan’s reign, revenue oppression became so galling that peasants left their lands and migrated to dominions of Hindu rajas, if we believe Bernier. During the first decade of Aurangzeb’s reign his two firmans to Rasikdas Krori and Md. Hashim, Diwan of Gujarat, clearly refer to the breakdown of Akbar’s system, and growing flight of peasants leaving their lands uncultivated and leading to loss of revenue and efforts to increase it by applying force on the peasants, if persuasion to return failed. Living on the margin of subsistence, the peasants could hardly accumulate reserves of grain to meet a rainy day.

2. Incidence of Famines

In considering the incidence of famines, it is necessary to distinguish between a famine and a scarcity. While all cases of famine implied scarcity, scarcity by itself need not necessarily constitute a famine. Even all famines were neither equally extensive nor equally grave. We have to consider whether a famine was general, i.e., extensive or local, i.e., regional. Area studies would perhaps yield a truer picture than all-India accounts but unfortunately neither statistics, regional or otherwise, nor details are always available. The exact connotation of such terms as Hindustan and the Deccan used in the sources, has to be examined. Even Moreland’s list is not exhaustive and more instances can be found out. But numbers do not always tell the true story. Moreland’s conclusions, argued with his innate acumen, but based on incomplete data, are bound to be inconclusive. A balanced assessment of the famines, whether general or local, is not, however, easy to make.

During Akbar’s half a century long reign (1556-1605) there were 6 instances of famines and 4 cases of regional scarcity. Besides the general famine of 1554-56 in Northern India (‘all the eastern parts of Hind’), excluding Bengal and probably Bihar, and continuing from earlier times, there were 5 other famines—two in Gujarat (1563-67, 1574-75) and three in isolated areas, Sirhind (1572-73), Bhakkar (1589-90) and Kashmir (1595-98). Scarcity occurred in some parts of Hindustan (1578-79), Bengal (1583-84, due to drought; and 1584-85 on account of heavy floods in Bakla and Bhakkar (1587-89, due to locusts). The famine of 1595-98 was caused by drought, “dispersal of the husbandmen”, arrival of the imperial army in Kashmir and
rising prices. While Abul Fazl’s evidence is general and vague, Nurul Haqq Dihlavi has described it as “fearful”, affecting Northern India. But the latter’s source, Faizi Sirhindi, does not draw such a dismal picture. The Jesuit missionaries, who were with Akbar in Kashmir in 1595-97, also does not refer to famine conditions in the Indo-Gangetic plains, though they refer to famine and pestilence in Lahore and Kashmir in 1597. The account of famine relief measures in their as well as Abul Fazl’s accounts would prove the severity of the calamity in these two places. In other words, it did not affect the whole of Northern India.⁵

The two famines during the time of Jahangir occurred in two scattered areas, one in the Punjab-Delhi (1613-15), followed by bubonic plague (1614-16) and the other in the Coromandel Coast and part of Vijayanagar (1618-9).⁶

There were at least 27 instances of failure of crops (seven famines and twenty cases of drought, destruction of crops and war exigencies) during Shahjahan’s reign of 31 years, as against 11, noted by Moreland. In the thirties of the 17th century Gujarat, Sind and the Deccan were affected repeatedly (e.g., 1630-32, 1633-34, 1635) and the Punjab once (1636-37). During the forties there were three famines in Kashmir (1642), South Coromandel (1645-47) and Marwar (1647), while scattered areas from Kashmir to the Deccan and Agra repeatedly were affected by drought or excessive rain. In the fifties there were no famines as such though drought or excessive rain affected scattered areas. Of all the known instance of famine during the period the most widespread and destructive was the ‘Gujarat famine’ (1630-32), which affected not only Gujarat but also Sind and most of the Deccan.⁷

As compared to the reign of Akbar the equally long reign of nearly 50 years of Aurangzeb had a longer record of famines and scarcities, 12 famines and 10 scarcities. The first decade was marked by a famine of intense severity due to want of rain and effects of war in Northern India including even Malwa and causing indescribable misery (1658-60), famines in the East Coast (1659-61), Sind (1659-60) and Bengal (1662-3); and drought in scattered areas (in Gujarat 1659-60, 1663-64, and the Deccan 1659-61 and 1663-64.)

ECONOMIC DISLOCATIONS; FAMINES 271
<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Period</th>
<th>Famine affected areas</th>
<th>Failure of crops due to drought/scarcity</th>
<th>Destruction of crops due to a) excess of rain, floods b) Locusts, mice</th>
<th>War/Engrossing</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>1554-56</td>
<td>Eastern parts of Hind</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1563-67</td>
<td>Great scarcity in Gujarat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>c, 1572-73</td>
<td>Round Sirhind</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1574-75</td>
<td>Gujarat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1578-79</td>
<td>Some parts of Hindustan</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1583-84</td>
<td>Bengal</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1587-88</td>
<td>Bengal</td>
<td></td>
<td></td>
<td>Bhakkar</td>
</tr>
<tr>
<td>9</td>
<td>1589-90</td>
<td>Bhakkar</td>
<td>Drought</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1595-98</td>
<td>Kashmir (1597)</td>
<td>General insufficiency of rain (1596)</td>
<td></td>
<td>arrival of army</td>
</tr>
</tbody>
</table>
Jahangir

1. 1613-15 Punjab, Sirhind, Delhi, and Doab  
   Drought

2. 1618-19 Coromandel Coast and part of Vijayanagar  
   Extreme dearth

Shahjahan

No record

1. 1630-32 Gujarat, Sind and most of the Deccan  
   Drought

2. 1633-34 Deccan and Gujarat

3. 1635 Surat
   West Golkonda  
   Scarcity near Masulipatam

4. 1636-37 Punjab  
   Scarcity

5. 1640 Deccan (near Pulicat and Madras)
<table>
<thead>
<tr>
<th>Sl No.</th>
<th>Period</th>
<th>Famine affected areas</th>
<th>Failure of crops due to drought/scarcity</th>
<th>Destruction of crops due to</th>
<th>War/Engrossing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>a) excess of rain, floods.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>b) Locusts, mice</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>1640</td>
<td></td>
<td></td>
<td>Kashmir (Kharif)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>1641</td>
<td></td>
<td></td>
<td>North India and Ahmadabad</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(Cotton)</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>1642</td>
<td>Kashmir</td>
<td></td>
<td>Rain and floods</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>1642-43</td>
<td></td>
<td></td>
<td>Pipli (Orissa)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>1644</td>
<td></td>
<td></td>
<td>and Bengal (Bengal)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>1644-45</td>
<td></td>
<td></td>
<td>Agra</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1645</td>
<td></td>
<td></td>
<td>Punjab</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1646</td>
<td></td>
<td></td>
<td>Agra</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1646</td>
<td></td>
<td></td>
<td>Ahmadabad</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>1645-47</td>
<td>S. Coromandel Coast</td>
<td></td>
<td>(Pulicat-Madras)</td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Year</td>
<td>Region</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>------</td>
<td>--------------</td>
<td>--------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>1647</td>
<td>Marwar</td>
<td>Failure of rains</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>1648</td>
<td></td>
<td>Partial failure in Agra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>1648</td>
<td></td>
<td>Excessive rain in Bengal (sugarcane)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>1650</td>
<td></td>
<td>‘in all parts of India’ but not famine</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>1650</td>
<td></td>
<td>Dearth of corn in Awadh, Agra, Ahmadabad</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>1650</td>
<td>Punjab</td>
<td>Punjab</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>1650-51</td>
<td>Multan</td>
<td>Multan (Rabi)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>1655</td>
<td></td>
<td>Balaghat (Kharif)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>1658</td>
<td>Surat</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>1658</td>
<td>Sind</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sl No.</td>
<td>Period</td>
<td>Famine affected areas</td>
<td>Failure of crops due to drought/scarcity</td>
<td>Destruction of crops due to a) excess of rain, floods.</td>
<td>Destruction of crops due to b) Locusts, mice</td>
</tr>
<tr>
<td>--------</td>
<td>--------</td>
<td>-----------------------</td>
<td>-----------------------------------------</td>
<td>------------------------------------------------</td>
<td>------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Aurangzeb**

1. 1658-60 Northern India (Agra, Delhi, Lahore, Marwar) Central India Malwa

2. 1659-60 Sind

3. 1659-60 Gujarat

4. 1659-61 East Coast Masulipatam (Scarcity) Negapatam

5. 1659-61 Bengal Drought

6. 1662-63 Bengal Deccan, Gujarat

7. 1663-64 Bihar Failure of Kharif

8. 1670-1 Supplies for army Engrossing
<table>
<thead>
<tr>
<th>No.</th>
<th>Year</th>
<th>Location</th>
<th>Cause</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.</td>
<td>1678</td>
<td></td>
<td>Lahore</td>
</tr>
<tr>
<td>10.</td>
<td>1678</td>
<td></td>
<td>Deccan</td>
</tr>
<tr>
<td>11.</td>
<td>1682</td>
<td>Gujarat</td>
<td>Scarcity</td>
</tr>
<tr>
<td>12.</td>
<td>1683</td>
<td>Konkan</td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>1684</td>
<td></td>
<td>Deccan</td>
</tr>
<tr>
<td>14.</td>
<td>1686</td>
<td>Deccan</td>
<td>Failure of rains</td>
</tr>
<tr>
<td>15.</td>
<td>1685-91</td>
<td>Gujarat</td>
<td>Scarcity</td>
</tr>
<tr>
<td>16.</td>
<td>1694-5</td>
<td></td>
<td>Gujarat</td>
</tr>
<tr>
<td>17.</td>
<td>1694-5</td>
<td>Bagar area</td>
<td>Round Delhi</td>
</tr>
<tr>
<td>18.</td>
<td>1696-7</td>
<td></td>
<td>Gujarat</td>
</tr>
<tr>
<td>19.</td>
<td>1696-7</td>
<td></td>
<td>Marwar</td>
</tr>
<tr>
<td>20.</td>
<td>1702-4</td>
<td>Deccan</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>1702-4</td>
<td>Maharashtra</td>
<td>Both kharif and rabi affected by excess rain.</td>
</tr>
</tbody>
</table>
The second decade witnessed a severe famine in Bihar (1670-71) and drought in isolated areas (Lahore and the Deccan 1678). The third decade saw two famines each in Gujarat (1682, 1685-91) and the Deccan (Konkan) (1683-86), and one case of scarcity in the Deccan (1684). During the fourth decade the Bagar tract on the North-East edge of the Thar desert was affected by famine (1694-95), while drought affected Gujarat twice (1694-95, 1996-97), Marwar once (1696-97) and also scarcity in the area round Delhi. In the fifth decade the Deccan (1702-4) and Maharashtra suffered from famine.8

During the reign of Bahadur Shah there were instances of scarcity in Bengal and Madras in 1709-11.9

3. Socioeconomic Results of Famine

Harrowing details, sometimes exaggerated, of the dire socioeconomic effects of famines have been left in contemporary chronicles, European factory records and travellers' accounts. Most of these effects were illustrated during the Gujarat famine of 1630-32, the most devastating and hence the most representative of all the known contemporary calamities. These effects may conveniently be analyzed into the following categories:

(I) Food shortage and rise in foodprices

All famines, whatever the cause, led to shortage of normal food and consequential rise of food prices which made peasants unable to pay full revenue. Living below the subsistence level, men were compelled to take to the use of non-edible articles. During such occasions of 'great scarcity', says Fryer, 'the ordinary people' found their 'common Food' in 'grass roots’. During the 1554-56 famine 'the common people', says Badauni, 'lived on the seeds of Egyptian thorn (acacia), wild dry grass and cow hides'. In 1596, 'high prices plunged a world into suffering'. On account of shortage of fodder horses and cows had to consume barks of trees, as Nizamuddin says. As against the normal price level of 80 or 85 lbs of wheat a rupee, the English purchased it at Surat at 13½ lbs (November, 1630) and 6 lbs in September, 1631. The highest level was reached during the famine of 1630-32. Ordinary people ate hides of cattle and dog's flesh. Abdul Hamid Lahori remarks: 'Life was offered for a loaf (jane ba nane), but none would buy; rank was to be sold for ghaifi, but none cared for it...'. In 1646 famine, foodgrains sold at high rates
in the Punjab. During the famine of 1659-60 there was in Marwar, “no longer distinction of caste, and the Shudra and the Brahmin were undistinguishable...Fruits, flowers, every vegetable thing, even trees were stripped of their bark, to appease the cravings of hunger, nay men ate men...”(Tod). During the Gujarat drought in 1659-60 and 1663, prices of corn rose so high that another failure in 1664 was apprehended to “utterly dispeopel all these parts”. While the normal price of rice was 1-2 mds a rupee, it sold during the Patna famine (1670) at the following rates. At first one Patna seer (27 oz) of rice cost a rupee, and even at that rate it was not available. In November 1670, rice cost half a rix dollar for 6 seers or 916 Dutch weight while in ordinary years 60,70 or more lbs could be bought for the same amount. In August 1671, rice sold at 5 seers a rupee and even ‘very scarce to be bought for that price’.10

(ii) Break-up of family life and slavery

Famines disrupted family life and increased the trade in slaves, though high mortality would restrict it. With rising prices of food-grains and increasing pangs of hunger, men began to desert their wives and children. Such women and mothers sold their children and the deserted children, too, sold themselves as slaves. Parents would also often sell their children for trifles, as during the Gujarat famine (1563-67). The destitute people of Kashmir unable to nourish their children ‘exposed them for sale in the public places of the city’ in 1597. Slaves were plentiful in Pulicat at the time of the famine of 1618: but when by 1622 rice was cheap, slaves were hard to procure. The supply then revived but shortly after the great famine of 1630 business was brought to a standstill and the bulk of the trade was transferred to Arrakan. During the great Gujarat famine 1630-32 parents had to sell their children so that they might live. Mundy records that children were sold at 12 d or 6 d or (?) pence each. In 1634 the factors at Pulicat reported that slaves were unprocurable owing to great mortality and ten years later from the same place, the buyer still met with limited success, as the surplus population was disposed of by death and voluntary enslavement during the famine so that no volunteer came forward and the Indian dealers could get slaves only by occasional kidnapping. In February 1646, the ‘indigent’ were compelled to sell their children on account of high prices of grains in the Punjab.
Parents also sold their children for next to nothing during the Bihar famine of 1670 at Patna. There were cases of voluntary enslavement also. In the scarcity of 1694-95 around Delhi which hit the Bagar tract hardest the people sold their children. During 1702-4 in the Deccan hungry fathers offered children for sale ‘for a quarter to a half of a rupee and yet forced to go without food, finding no one to buy them’.

About the great Bengal famine (1770-71) Hari Charan Das observed that in Bengal and Azimabad ‘about 3,700,000 men were starved to death and many sold their sons and daughters for grain, or for 4 or 8 as. per piece’.11

(iii) Cannibalism

Unable to bear the pangs of hunger, the famine-stricken people took recourse to eating their own kind, living or dead. Both Abul Fazl and Badauni, eye witnesses, refer to acts of cannibalism during the famine of 1554-56. During 1595-58 ‘men ate their own kind, the streets and roads were blocked up with dead bodies and no assistance could be rendered for their removal’. Such cases became common during the famine of 1630-32. Lahori remarks ‘destitution at length reached such a pitch that men began to devour each other and the flesh of a son was preferred to his love’. Men on streets and travellers on highways stood in danger of being kidnapped, killed and eaten. ‘They form themselves into parties to carry off solitary individuals for their food’. Human flesh was sold in open markets.12 In Bagar tract (1694-95) the famished people ate carrion.

(iv) Migration

Famines caused men, some times with whole families, to leave their homes in affected areas and migrate elsewhere. During 1554-56 the affected parts near Agra, Bayana and Delhi became desolate, cultivators and peasants disappeared and rebels plundered the towns. During 1574-75, many people, both ‘lowly and respectable’, left Gujarat to escape starvation. During the Bhakkar famine, 1587-88, “most people migrated and the Samija and Baluch plundered both sides of the river”, sparing no inhabited place. During the Gujarat famine of 1630-32 people moved en masse away from the affected areas but many were overtaken by death on the way, the roads became blocked with corpses. In 1642 about 30,000 men fled in distress from Kashmir
to Lahore. In 1647 people fled from famine-affected Marwar. The inhabitants of Bagar migrated elsewhere in 1694-45. In 1702 people had to migrate from their ancestral homes in Sangamner (Aurangabad province). Famines proved the instinct of social mobility of the Indians.

(v) Pestilence

Jahangir refers to a view that there was a close association between drought and pestilence (plague). The belief commonly held was based on experience. Pestilences usually followed the trail of the larger famines and even of the lesser scarcities. Malaria infected Bengal and Gaur in 1575. The area from the Punjab to Delhi was affected with bubonic plague in 1614-16. During the Gujarat famine 1630-32 ague, fever and pestilential diseases, like cholera, prevailed in every house. Even the English merchants in Gujarat did not escape from these. The Deccan fell a victim to pestilence in 1682.

(vi) Death and Depopulation

Large-scale migration, combined with high mortality figures, accounted for depopulation. Statistics are indeed rare. In the famine of 1554-56, followed by an epidemic, “people died in groups of tens and twenties and more, the dead getting neither graves nor coffins”. In the Bengal famine of 1584-85 about two millions died. During 1630-32 the poor died at first; but the rich also did not escape, their turn came next. During Jan.-Oct. 1631, three millions died in Gujarat which suffered the most, and one million in Ahmadnagar. The cities of Gujarat were reduced to almost \(\frac{1}{6}\)th of their former state by death or flight. The villages hardly fared better. “The parganas of Sultanpur, Bihar, Mandu, Ahmadabad and indeed the province of Khandesh and some parganas of Balaghat were rendered utterly desolate”. It became necessary to settle peasants from other provinces.

During the Gujarat famine Mundy, travelling from Surat to Agra, found that a vast area from Surat to Burhanpur was so thickly strewn with corpses that there was no space even for a small tent. In 1647, the areas round Marwar were “either (by) mortality or people’s flight, become wholly depopulated and impassable”.

Famines acted as a great leveller. Describing the effects of the famine of 1659-60, Tod writes: “There was no longer distinction of
caste, and the Sudra and the Brahman were undistinguishable. Cities were depopulated. "The seed of families was lost, the fishes were extinct and the hope of all extinguished." During 1659-60, Sind suffered acutely, as the local factors wrote, due to famine and plague which 'swept away most part of the people' and 'the living being hardly able to bury the dead'. During the Bihar famine, 1670-71, 90,000 were estimated to have died in Patna alone and of the towns near it some had become 'quite depopulated without any inhabitants (103,000 according to another estimate)'. Thousands died in Bagar in 1691. Many villages of Sangamner (Aurangabad province) became desolate in the Deccan in 1702.\textsuperscript{15}

The saving grace was that all scarcities were not as serious as full-fledged famines spread over several years, causing heavy mortality. Nothing like the North Indian famine of 1554-56 and the Gujarat famine of 1630-32 happened for a long time, enabling the areas to recover from their ravages.

\begin{quote}
(vii) Ruination of agriculture

The famines illustrated the utter lack of economic reserve of the people (peasants and artisans). It is almost a platitude to say that famines were ruinous for agriculture. Failure of rain, or excessive rain, the destruction of seeds sown and of saplings, the consequent food shortage, all led the starving peasant and his family to abandon their home, village and fields and migrate elsewhere. Many died. The ground remained untilled. Those 'lands which were famous for their fertility and plenty retain no trace of productivity'. The peasants also suffered a serious loss of agricultural capital when their working animals died for lack of fodder and pestilence. As relief was either inadequate or ineffective, the peasant had ordinarily to bear the burden himself unaided, except in cases of effective remission or reduction in revenue demand.\textsuperscript{16}
\end{quote}

\begin{quote}
(viii) Paralysis of industries and urban centre

With dislocation of production and death of peasants, master craftsmen, weavers and artisans, different industries were hard hit: their outturn diminished. 'With materials and labour scarce, and foodgrains at famine rates, manufacture came of course to a standstill'. A few illustrations are given below.\textsuperscript{17}
\end{quote}
Indigo: The crop could not be harvested owing to lack of workers. So the people had to promise half of the crop to harvesters. By October, 1630, impending scarcity of indigo was realized in Surat; arrangements were made for its procurement in Agra instead of Ahmadabad. The yield of indigo in Gujarat was \( \frac{2}{3} \)th of normal, and only old refuse was available. In September, 1631, the cost of indigo became prohibitive as indigo was rotting on the ground for want of men to gather it.

Cotton: In November, 1630, scarcity of cotton goods was felt at Masulipatam. Weavers, washers, dyers departed for more prosperous places. In December, inferiority of Armagon cloth was partly due to fourfold rise in cotton price. In September, 1631, the cost of cotton goods became prohibitive: the places in Gujarat which yielded 15 bales of cloth a day could now produce barely 3 bales in a month.

Quilts: Cambay was specially noted for production of quilts. But the famine caused its stoppage in Cambay, Surat and Navasari. Only Ahmadabad continued to produce it.

Bullion: In November, 1630, there was a fall in price of gold and other imports, while in December, gold was failing in price as the poor were selling and the rich could not buy.

Spirits were unprocurable by November, 1630, as distillers departed into the “parts of more hoped plenty”.

Industries were affected as the hungry artisans abandoned their homes, migrated from the place of work or perished as in December, 1630. Several cities were also adversely affected by depopulation. Ahmadabad was half ruined. The neighbourhood of Broach was ‘dispeopled’, i.e., depopulated. Mundy has vividly described this desolation.17

Thus Gujarat, ‘the garden of the world,’ was turned into a wilderness, with few or no cultivators and artisans.

(ix) Effect on marketing conditions

The marketing conditions were deeply affected by adulteration and engrossing.

Adulteration: Unscrupulous traders took advantage of the famine conditions to adulterate the food. For a long time, during the famine of 1630-32, ‘dog’s flesh was sold for goat’s flesh and the pounded bones of the dead were mixed with flour and sold’.
Profiteering/Engrossing: Unscrupulous officers and local traders utilized the occasions for engrossing, as in Gujarat 1630-32, Bihar 1670 and in Ahmadabad 1685. There was a riot against the qazi of Ahmadabad suspected to be in league with engrossers. The Europeans also made large purchases and hoarded.

Smuggling: Famines tended to restrict smuggling activities of the English East India Company. Saltpetre, though a prohibited commodity, was carried away surreptitiously as sugar. So during the famine the Company’s authorities warned their factors in India not to pass off saltpetre through inland customs as sugar, lest the bales of sugar might be seized (as provisions or food materials) and the fraud detected.

(x) Disruption of internal transport and trade

With agriculture and industry affected and breakdown of law and order internal trade was also seriously disrupted. The cost of transport grew prohibitive. That between Ahmadabad and Cambay soared up 4 or 5 fold. The English could not get carriages for sending goods, the charge being Rs. 2½ for a small maund between Ahamadabad and Surat. As no porters were available, they had to engage their own mariners at Surat.

Roads became unsafe and messengers stood in danger of being murdered. Even local chiefs with local bands at their beck and call attacked traders and exacted levies. Special precautions were necessary to protect provisions on the way to ships from assault by poor starved people (October, 1630). In 1630, the task of feeding the imperial army at Burhanpur interfered with the transport of grain by the banjaras to Gujarat from Malwa and beyond.

Early in 1631 the cost of land transport increased. Ships were advised to lay in rice on the voyage. In 1642, the drought in Orissa dislocated the normal export trade in grain to Coromandel. During the Dacca famine (1662-63), the distress was aggravated as officials demanded exactions and obstructed the transport of foodgrains on the highways.19

Coastal Trade: Owing to virtual stoppage of productive activities for three years, coastal trade of Gujarat suffered (especially with Malabar, either way, 1631-32). The English E.I.C. complained of non-availability of goods of Western India in Surat for export to Europe.
and Asian markets (e.g., Malabar pepper by end of 1630). The English had to purchase ‘Priamon pepper’. So they began to develop coastal trade with Maharashtra from their Gujarat bases and the Dutch with Malabar. Owing to the decline of the Portuguese and inability of Gujarati merchants in the post-famine period, the Europeans were in a advantageous position. Thus ‘port-to-port trade ceased to be the monopoly of the Indians’ (Balkrishna). The English started building ships at Bassein and Diu for coastal trade on the West Coast at the cost of Indian merchants. Even after recovery they had to cooperate with the English and the Dutch.

Again after the 1630-32 famine, the Europeans became the exclusive carriers of Gujarat-Maharashtra trade. Similarly the famine temporarily stopped the Gujarat-Sind trade.20

(xi) Dislocation of foreign trade

The famine together with war in the Deccan had ‘disjointed all trade out of frame’.

Import Trade: The Gujarat famine changed the pattern of import trade of Surat. From being an exporter Gujarat became an importer of provisions from Iran (December, 1631—rice and provisions from Iran imported to Gujarat by E. I. C.; January 1633—foodstuff from Iran brought by English for sale in Gujarat markets). The European companies had to face growing difficulty in finding adequate consignments for shipping. Before 1630, Gujarat’s exports to Europe were textiles and indigo (and saltpetre). But as a result of the famine there was scarcity of goods, whether agricultural or manufactured, for export. The death of master craftsmen caused a perceptible decline in quality and quantity of Gujarat textiles. So the English and the Dutch both found alternative sources in East Coast and Bengal (fine piecegoods as compared to coarse Surat fabrics). In the second half of the 17th century, export of Gujarat indigo to Europe stopped.

The bad effects on industry had their repercussions on the Company’s trade. By November, 1630 the Surat factors had the rare experience of having more funds than could be invested owing to the shortage of cotton goods and indigo and so they were suggesting importation of rice from Macassar (in Celebes) and reducing the rations allowed on English ships. Lading for next year’s home return
was doubtful. A Dutch factor wrote then that he saw no hope of trade for 3 years to come.21

(xii) Lasting effects

One of the most lasting effects of the fearful famines was the lowered level of skill resulting from the death of expert peasants, artisans and workmen, and the cotton goods of Gujarat suffered in reputation owing to this cause for many years after 1632.

4. Famine Relief Measures in Mughal India

Some European writers have sought to blame the Indian governments, Hindu or Muslim, for the absence of any famine relief policy. Foster observes that epidemics and famines constantly swept away large numbers and their advent found the authorities fatalistic and impotent. V. Smith writes: "The governments, Hindu or Muhammadan, did nothing as a rule, in the way of famine relief". Both the King of Kashmir in the 10th and Hemu in the 16th century showed heartless indifference to the sufferings of the people. In 1555-56, Hemu, the General of Sur King Adil, is accused of utter indifference to the distress of the people. While they resorted to cannibalism, Hemu fed his elephants with rice, butter and sugar. The Mughals are also accused of not making any comprehensive effort to provide relief.

Before passing any stricture it is necessary to bear in mind that in an agricultural country it was a wholly unmanageable evil and that man cannot prevent droughts or floods from causing famine, he can only restrict or allay the suffering. When we remember that even during British rule no definite famine relief policy could be evolved earlier than 1877, i.e., before more than a century had elapsed after its establishment, we can not very well accuse the Mughals of indifference to the sufferings of their subjects and of failure to provide for any comprehensive or long-standing relief programme. A double objective was sought to be achieved by the British: remedial, relieving distress; and protective, protecting the people against drought. The policy of saving human life anyhow, even at enormous cost, was accepted by three Famine Commissions in 1880, 1898 and 1901. Even then the mortality figures in the famine of 1900 were gigantic. The Famine Commission of 1880 had the courageous frankness to admit
that "we must not permit ourselves to be deceived by the vain hope that the famines of recent years have been more difficult to deal with than those of the past, nor have we any right to suggest that those who have gone before us were less humane than ourselves, for there is direct evidence to the contrary". One cannot, therefore, deride the ancient and medieval governments outright, without considering the limitations under which they 'had to work'. What is important is to understand the spirit actuating the governments. Certainly indifference to suffering is to be condemned but honest efforts, however circumscribed in nature and effect, cannot. Among the immediate relief measures of the Mughals, may be noted the opening of public kitchens and alms houses, distribution of cooked food, remissions of taxes, allocation of money for gratuitous relief and distribution of surplus grain from other regions.

It speaks volubly of the forethought of some of our enlightened medieval rulers to have conceived of some protective measures, however inadequate, against emergent famine or poor relief. Following the example of Sher Shah, Akbar also established grain stores in every district with the dahseri tax (or 10 seers of grain on every bigha of cultivated land). This may be regarded as a 'permanent famine insurance and poor relief' scheme. These stores supplied food to livestock of the government, distributed grain-seeds to poor peasants and sold cheap grain to the poor during famine. Further Akbar established charity houses for supplying food to the needy, the department being manned by a superintendent (darogha) and a staff.

In 1583, Akbar opened three kitchens outside Agra to distribute food to the Hindus, to the Muslims and to the jogis, called, respectively, Dharmapura, Khairpura and Jogipura.

Unfortunately adequate details are not available for assessing the extent of actual relief. But even the brief incidental references that we get enable us to know that Akbar made commendable attempts to ameliorate the distress of the famine-stricken people. He opened more kitchens (langars) and alms houses, in addition to the three establishments outside Agra, for distributing food to the poor (1583). In 1595-96 he placed Shaikh Farid of Bokhara, a man of generous disposition, on special duty to superintend relief operations. Free kitchens were ordered to be opened in every city. With limited facilities and organization, the only thing he could do was to...
provide some food to the people in some towns or cities. Akbar asked a few rich men (khwastadarān?) to feed a few beggars. Relief to the poor was rendered by appointing able officers ‘to every place’ (i.e., affected areas). In 1597-98, more elaborate measures on similar lines were taken in Kashmir. Twelve places were selected at Srinagar for feeding ‘great and small (i.e., young and old).’ The programme was probably broadcast in a general proclamation in the ‘Idgah and food, and peasants were distributed according to the applications of the needy, numbering approximately 80,000. The unemployed were sought to be provided with jobs in the construction of the fort there. To give some relief to the hard-pressed husbandmen, 55 ‘censurable customs’ were abolished, according to Abul Fazl, one of these being that on saffron.23

The picture of the Gujarat famine during the reign of Shahjahan drawn by the Dutch Van Twist is horrible indeed but he says nothing of state relief measures. Mundy sarcastically remarks: “no course is taken in this country to remedy this great evil, the rich and strong engrossing and taking perforce all to themselves.” Of the actual relief measures we can have some idea from contemporary chronicles like Lahori’s Padshahnama. The famine of 1630-32 affected Golkonda, Ahmadnagar, Gujarat and some parts of Malwa. Shahjahan directed the officials of Burhanpur, Ahmadabad and the country of Surat to establish langars or free kitchens and alms-houses not only in those three cities but also in other major cities throughout the region. These were not merely ‘soup-kitchens’, as derisively described by Smith, but places where large quantity of soup and bread were daily prepared and rations distributed to the hungry. During the emperor’s stay at Burhanpur, Rs. 5000/- was distributed among the poor every Monday (day of Shahjahan’s accession) for 20 weeks. At Ahmadabad city which suffered more than any other place, another sum of half a lakh was distributed. Thus a total sum of 1½ lakhs was distributed at both these places. Surplus grain was sought to be brought from elsewhere for distribution. Large-scale remissions of land revenue were made in Ahmadabad. Lahori clearly states that the emperor remitted 70 lakhs of rupees out of the total revenue of 2 kror rupees (80 krors of dams) of the khalsa of Gujarat (which was ⅛th of the total imperial revenue). In other words, the remission amounted to about ⅓rd. The emperor also ordered the nobles (i.e., the jagirdars

MUGHAL ECONOMY
and mansabdars) to follow the same rate of remission. This was far better than what the early British administrators did during the Bengal famine of 1769-70. The net revenue collection in 1771 was more than that in 1768.24

During the scarcity of food in Kashmir in 1641, about 50,000 people left the country and migrated to Lahore where the Court was staying at that time. They appeared in a body before Jharokha window to represent their misery to the emperor. Shahjahan sheltered them under the fort walls, ordered that 100,000 rupees should be distributed among them, and cooked food worth 200 rupees should be daily provided to them. He sent 30,000 rupees to Governor Tarbiyat Khan to be spent on famine relief work in Kashmir, and ordered him to establish five kitchens to distribute soup and bread. But Tarbiyat Khan failed to manage the situation and was replaced by Zafar Khan. The emperor gave the latter another 20,000 rupees for relief work in Kashmir. The entire expenditure was met by him and not from the Treasury. Later on, the emperor ordered the distribution of 50,000 rupees from the provincial funds among the poor and the famine-stricken peasants of Kashmir for rehabilitation purposes.25

In 1646 scanty rainfall caused a severe famine in the Punjab. By order of the emperor ten kitchens for distribution of cooked food were established in the province and Sayyid Jalal was commissioned to distribute Rs. 10,000 among the poor and the destitute. In February, 1647, Shahjahan sanctioned another 30,000 rupees for relief measures in the Punjab.26

During the prolonged scarcity in 1658-63, which was quite as severe as that in 1630-32, Aurangzeb established free kitchens (langars) on a large-scale in or before the 4th regnal year in the cities of Agra, Delhi and Lahore. He also issued orders remitting a large number of taxes and cesses and prohibiting their collection: râhdari (toll) collected on every highway frontier and ferry; pandari a ground or house cess paid by individual tradesmen, dealers, butcher, potters, green-grocers, drapers, jewellers and bankers; the tithe of corn and about 80 other imposts. But the imperial order was not carried out; faujdars and jagirdars not only collected but even increased these for their own benefit, as Khafi Khan says.

ECONOMIC DISLOCATIONS ; FAMINES

—19
The Mughal government took steps against adulteration of food. Lahori tells us that when cases of selling adulterated food, e.g., dog's flesh as goats and mixing powdered bones with flour, were detected, 'sellers were brought to justice'.

Again, there is at least one recorded case where the government sought to restore sold children. In 1646, sold children were ransomed by the government at the original price and restored to their parents. Habib thinks that the rise of prices was temporary, pending the rabi harvest, that the scarcity was limited and that large numbers were not involved. This is likely but not conclusive. It might be that the number of sales was limited. In any case there is no evidence that such a humane concession was granted either before or later.

Another form of relief granted was the remission of all duties on food grains in Gujarat in 1685 on account of soaring prices.

But the effect of these measures was trifling. These were, as Moreland says, "admittedly inadequate and tardy". These might have helped to improve the distribution of available stocks, but could not bring grain into the country and so could not counteract actual deficiency of food. There was surplus grain in Northern India. But overland cost of transport was very high. It was difficult to move adequate number of pack animals through affected areas without water or fodder so as to satisfy the needs of the emergency. Again the action of the leaders of the people also tended to aggravate rather than alleviate their suffering. First, the Deccan wars and the location and the needs of the Mughal armies at Burhanpur across the route of grain supply to Gujarat from Sironj, well stocked with food, also limited the extent of food supply available. Secondly, selfish and unscrupulous persons, described by Peter Mundy as "the rich and strong", took to engrossing and taking perforce all to themselves.

Casual references in letters of 1631 and 1632 show that the English merchants had ordered large quantities of grain from Persia but the course of shipping imposed narrow limits on such supplies. Sind was affected; the Malabar Coast ordinarily imported a large proportion of its food: the East Coast was starving and it is doubtful whether the best humane administration in the world could have organized imports by sea sufficient to meet the situation.
As there was no economic reserve or margin of insurance against adverse days, famines in Mughal India caused greater distress and mortality than they need have, as discussed earlier. But it would be unhistorical and unjust to condemn the Mughal government for having failed to avert the calamity and not doing anything to alleviate suffering. Even Moreland admits that it is difficult to suggest ‘what more could have been done’. That the Mughal state was solicitous of the welfare of the people will be attested by the measures adopted, though it must be admitted that these proved to be inadequate on account of the inherent limitations of the environment—state demands, corruption, greed of the civil service, and, above all, want of rapid communications. The last factor, the problem of transporting food grains, was the most crucial, posing as insuperable a difficulty in saving human lives even in the 19th century before the advent of railways as in the 17th century. Mortality was as terrible at Kanpur in 1837 famine as in Gujarat 200 years earlier. As a long term or remedial measure the construction of the Ravi canal near Lahore ‘benefitting the cultivation of the country through which it should pass’ and the repair of the Jamuna canal in the Khizrabad pargana and the excavation of the 30 kos long new channel from Safidun to Shahjahanabad deserve to be mentioned.82

5. Recovery

The process of recovery of the affected areas from the effects of the famine (1630-2) was naturally very gradual and slow. It is briefly traced here.

The economic life of a village, a town, or a district, when once broken up by migration, disease and death, could not quickly be renewed. Lands famous for fertility and plenty took time to recover productivity. The people, who began to aimlessly wander and migrate in search of food, would return on the advent of a favourable season and the old life would gradually be restored, but the recovery was a tedious business and it may be delayed by the ‘tyranny and covetousness’ of the governors. President Methwold of Surat observes (end of 1634) : “The villages fill but slowly, yet it betters with them also and if the excessive tyranny and covetousness of the Governor of all sorts would give the poor people leave but to lift up their head in one year’s vacancy from oppression, they would be enabled to
keep cattle about them and so to advance the plenty which the earth produces". In 1631, rains became promising and activity was renewed, cloth was coming in at Broach and Baroda, 'with the help of a ser or corn delivered out to the weavers on every piece bought'; and there were hopes of making up some sort of cargo for England. But by September things became worse again and the year closed in desolation. However, towards the end of 1631, banjaras or grain carriers began to appear, the sea-trade was helping, and the needs of the reduced population could be provided by ordinary course of trade, though prices were still abnormal. Early in 1632 the tide of distress began to recede. Supplies became available from remote areas and prices began to fall as grain arrived from outside. The worst was over. But the restoration of industry and commerce was a matter of years. The slow progress may be traced in the reports of the English merchants.

The recovery of commerce was marked by a Surat letter of December, 1633; 'prices were falling; grain was becoming cheap; people were returning'. But the process of recovery was unequal at different places. By September, 1635 steps were taken to reestablish factories at Ahmadabad and Baroda. But Broach was still 'not well peopled' with weavers and a separate establishment there was considered useless. So Gujarath could not supply all goods, wanted by the Surat factors. The latter had to extend their operations to Sind and Northern India, where supply was abundant and prospects were encouraging. In January, 1636, freight goods for Persia were being offered by Indian merchants, and the English factory correspondence began to record activity of pre-famine days. By March, 1637, price of grain came below normal; in April, foodgrains and raw cotton were sent from Surat to Masulipatam (because of Golkonda drought of 1635). Baroda was able to produce good cloth but not Broach ('broken'). The 'marks' of the famine were visible even in 1638-39. Some signs of prosperity were visible only by 1639. But cultivation had not become normal even till 1646-47 as well learn from Lahori.

NOTES AND REFERENCE

1. Paper entitled 'Famines in Mughal India' published in 'Itihas', Hyderabad IG (1907), iii. 475; Moreland, FAA, 210.
2. AKN, iii. 475; Badauni, i. 428-9; ii. 186.
3. Gujarat, Purchas, x. 90; Sirhind, Habib, Ag. Sys., 101; E & DV, 384; Badauni, ii. 186. Gujarat (1574-5), AKN, iii. 625.
4. 1578-9; AKN (Tr), iii. 316, 625. *Ain*, J.S, ii. 135-6 dates the flood in 29th year (1584-85); *Bhakkhar*, Habib, 102.

5. AKN (Tr), iii. 1063-4, 1087; Faizi Sirhindi in Habib; *Zubdat-ut-Tawarikh*, E & D, vi. 193; Jesuit accounts, Payne, 77-8; Saran, 398n; Srivastava, *Akbar*, i. 408-9.


7. Moreland, FAA, 210; Brij Narain, 88-89.

Among Persian sources Qazvini and Saliq Kh. were eye-witnesses, being present at the imperial camp. Lahori summarizes Qazvini. Khafi Khan (i. 444-9), plagiarizes from Sadiq Khan with some changes. E & D, vii's version of Lahori is incorrect at places—corrected by Saran, *Prov. Govt.* etc., 402-3.

Among European sources are *English Factories in India* 1630-33, *passim*; Mundy, ii; Van Twist, (*JIH*, xvi. 65-9). Sir Richard Carnac Temple has collected the evidence of all English travellers re: the famine (Mundy, ii. app. A).


Multan, Adab, 202.

Balaghat, 54b, 55b; Habib, 106n.


10. Fryer, ii. 119; AKN, ii. 35; Badauni, i. 428-9; E&D, iv. 490; v. 384 (Nizamuddin).

Shahjahan, 1630-2; Lahori, i. 363-3; E & D, vii. 24 translates ghaffi as a cake. Literally it means 'a flock of birds' hence derivatively it would imply as insignificant a meal as a cake. *Marwar*, Tod (Crooke), i. 455; *Gujarat EFI*, (1661-64), 320-1; *Patna*: Bowrey, 236; De Graaf in Bowrey 227n; John Marshall, 125-27, 149-56.

11. *Purchas*, x. 90; Payne, 77-8; FAA, 77-8; Mundy, ii. 38; Lahori, ii. 489; For Bihar, my *Glimpses*; *Bagar*, Habib, 108; *Deccan, Storia*, iv, 97; Chahar Gulzar Shujai, E & D, viii. 229.

12. Dr. Saran opines (*op. cit.* 403-4) that the references to cannibalism in Lahori, E & D, vii. 24-5 and van Twist (in FAA) were unreal. Dr. Habib refutes him (pp. 103-4). Such cases occurred under Akbar, AKN, ii. 35; Badauni, i.
428-9 (eye-witness); Faizi Sirhindi, 121a-122a quoted by Habib; Mundy, ii. 276; Sadiq Kh. reports a woman’s complaint before the qazi of Ahmadabad that her neighbour, permitted to kill her son, did not share the latter’s flesh with her. The Sunday Statesman (June 3, 1979) reported that after an aircrash in N. W. Canada the corpse of an aged person was used as food by his daughter and her brother-in-law.

13. 1554-6, AKN, ii. 35; Badauni, i. 428-9; 1574-5, Nizamuddin, ii. 301; E&D, v. 384; 1578-8, AKN, iii. 224; 1630-2, Mundy, ii. 176; EFI (1630-33), 180; 1642-7, Habib, 106; EFI (1646-50), 192-3; 1694-5, 1702, Habib, 108.

14. Tuzuk (R), i. 330, 342; E & D, vi. 346; EFI, 1630-3; Smith, 399 (Bengal); Habib, 107 (Deccan); Roe’s party fell a victim to plague at Ahmadabad in May, 1616.

15. 1554-6, AKN, ii. 35; Badauni, i. 428-9. In 1630-2 the mortality of the poor as well as of the rich in the first and second year respectively, has been referred to both by Sadiq Kh. (quoted by Habib, 103-4) and Van Twist (tr. Moreland, FAA); Mundy, ii, passim; Marwar, EFI (1646-50), 192-3; Tod (Crooke), i. 455; Sind, EFI (1665-66), 210, 307n; Bihar, my Glimpses; Habib, 108.


17. Details collected from EFI, 1630-33. passim; see also A. A. Hamilton, i. 143 and S. Gopal, Commerce and Crafts in Gujarat.

18. Adulteration, Lahori, i.; E & D, vii. 24; Engrossing, Mirat, i. 309; Habib, 108; Smuggling, EFI (1630-33).

19. EFI (1630-33); 165; Mundy, ii. 56; Orissa, FAA, 208; Raychaudhuri, Jan Co., 142; Dacca, Talish (AS), 79b-80a, 110b-111a.

20. EFI (1630-33), passim; S. Gopal, op. cit.; Balkrishna, Com. Rel., 86.

21. Facts collected from EFI, passim.

22. Badauni (R), i. 549-51; E & D, v. 490-1; Smith, Akbar; Moreland, IDA; FAA, 208.

Br. Govt’s anticipatory measures, IG, iii. ch. x. 478; cf. views of Mill on early relief measures of British govt. Famine Com. Report, 1880, sec. 86.

23. Dahseri Tax, Ain (B & P), i. 199-200; Charity houses, ibid, 210-11, 285-6; Relief, AKN (Bev), iii. 1064, 1087; E & D, v. 490-1.

24. Lahori, i. 362-4; Mirat - i - Sikandari, 83b, quoted in Saksena, Shahjahan; Mundy, ii. 49, 50, 56; E & D’s translation of Lahori (vii, 24-5) re: remission of revenue is incorrect. It is not 1/11th of the assessment as Smith relying on this indignantly states, but 1/3rd. See Saran, Pröv. Govt., 405n, 406n, Habib, 10; In 1769-70, when 35% of the cultivators perished, not 5% of the land tax was remitted and 10% was added to it for 1770-71 (Hunter, Annals of Rural Bengal, 1879, p. 39). Banerji, E. I. Finance, 132; R. C. Dutt, i. 52-3; Moreland, FAA, 214; Habib (ch. vi. 250-1) characterizes Shahjahan’s remissions to be the most liberal on record.

25. Lahori, ii. 282-3. During the Kashmir famine the jama assessed on the peasants was ordered to be reduced (acc. to Sadiq Kh.). In Lahore province the jama of Khalsa was specially reduced during scarcity (acc. to Waris), Habib, 250-1.
26. Lahori, ii. 289. 632; Md. Sadiq, f. 116 quoted in Saksena (1st edn, 292-3); Saran (399) writes that the governor was also asked to distribute food worth Rs. 200 daily.


28. Lahori, ii. 489; Habib, 105n.

29. Mirat, i. 309.

30. Moreland, FAA.

31. EFI (1630-33).

32. Brij Narain, 90n.

33. EFI (1634-36), 65; Moreland, op cit; Commissariat, Mandelslo, 7.

34. Lahori, ii. 711-12 says that the assessed revenue of Gujarat and the Deccan showed no increase. See Habib, 105n; Moreland, op. cit. 217-8.
Seeds of Economic Decline

Classical writers on Indian economy like R. C. Dutt and Dadabhai Naoroji once held that British rule was responsible for India’s economic decline. Following them it was generally believed that Plassey unleashed the forces of economic decline of India, that unlimited political power of the British in India, joined to the expansive economic developments in Britain and the limitless economic ambition of the industrial and commercial classes there in the age of the Industrial Revolution, encompassed the economic ruin of India, and that the E.I.C.’s servants, gomostas and agents contributed to the decline of Bengal’s agriculture, industries and trade.

Recently a distinguished economic historian has carefully enunciated his thesis that the real economic decline of India came after 1757 or even after 1813, and that it must not be equated with the decline of the Mughal empire. True, even during the period of pervasive Mughal political decadence there were some pockets of comparative political stability which exhibited signs of considerable economic buoyancy.

It is, however, difficult if not impossible, to attribute definite datelines to trends of broad historical movements. We can at best refer to certain tentative factors and signs thereof. All these, again, were not always synchronous. Just as in a physiological organism, all the organs do not go out of gear all at once, so in the body politic, society or economy, too, all its mechanisms do not decay simultaneously. A dispassionate study will show that such a tendency can never sprout overnight. The seeds of economic decline were not sown after 1757. Many had already begun to sprout before 1757 and in some respects even before 1658.¹
A. Baneful Economic Influence of Administration

Without minimizing in any way the contributions of the Mughal Empire, the largest single state in the country, to its prosperity, it has to be admitted that the administrative and economic policy of the Mughal state contained within itself the seeds of economic ruin, though the military glories of the Emperors and the brilliance of the Mughal court seemed to conceal the massive internal corrosion for some time. The pithy observation of Moreland admirably sums up the situation: “administrative activities were the most important factors in the distribution of the national income”.

(i) Post-Akbarite Revenue System: India, primarily an agricultural country, requires a well-regulated and liberal land revenue system. The raiyatwari system of Akbar showed signs of cracking as early as the reign of Jahangir, with relaxation of control, re-emergence of revenue—farming and increasing recourse to grant of jagirs. The state demand rose from Akbar’s 1/3 of average produce to 1/2 under Shahjahan and Aurangzeb. Revenue oppression became so galling that the peasants fled, leaving their lands uncultivated during Shahjahan’s reign. Bernier’s evidence is corroborated by Aurangzeb’s firmans. The peasants in the khalsa lands had hardly any reserves of grain. Those in the assigned lands also were ruined by oppression of jagirdars, undeterred by light punishments. The situation was aggravated in the 18th century.²

(ii) Fiscal Policy: (a) Levy of miscellaneous imposts. Trade and industry were impeded by multiplicity of taxes, abwabs and exactions which damped the industrial ardour and productive energies of the people. The beneficent imperial remissions were defied in practice by distant officials, screened by a corrupt intelligence system. Shihabuddin Talish has shown how in the sixties of the 17th century “tradesmen and merchants gave up their business and householders went into exile...” In Aurangzeb’s time there were about 63 miscellaneous taxes and exactions to which people were subject almost from birth to the grave. The birth of a male child was taxable. So was the shroud, as weaving, the most important national industry of India had to pay during 17th and 18th centuries several restrictive imposts including stamp duty on cloth before sale. Brokerage charges were legal but the rates were very high. The economic subjection of the weavers to the intermediaries, merchants and money (and

SEEDS OF ECONOMIC DECLINE
lenders approached slavery in practice.⁵ Again the emperors established general monopolies in profitable articles of internal and foreign trade like indigo and saltpetre. Prices rose. Distribution became uncertain. Merchants lost all profits. Trade suffered and the monopolies failed. Further, local monopolistic controls were set up by provincial governors or their nominees in necessaries of life like food, clothing, fodder, firewood and thatch. They carried on their private trade (sauda-i-khas) which led to extortion. Trade suffered on account of this odious direct taxation.⁴

If revenue—farming grew extensively after Akbar, farming of customs revenue was equally baneful for economy. For in both, the farmer was apt to resort to extortion in order to fulfil the contract. Frequent changes in personnel would aggravate the evil. Shahjahan’s reign witnessed the decline in customs revenue at Cambay, Broach and Surat. Competition among revenue, farmers and assigness affected the course of Gujarat ports through bribes, over-sales and over-valuation of goods.⁵

(b): A twofold fiscal discrimination was another harmful feature. On the one hand, Aurangzeb’s customs tariff, based on religious discrimination, was neither economically sound nor politically wise. His ordinance of April 10, 1665, subjected the Hindu traders to a customs duty of 5% ad valorem but the Muslims to 2%, while that of May, 9 1667, altogether exempted the latter, without any relief to the former. The heavy loss of revenue was perhaps greater as the Muslim merchants with whom the Hindus were in collusion, carried the latter’s goods as their own. Again, Aurangzeb’s re-imposition of the jizya (1679) adversely affected the Hindu predominance in trade and wealth, testified to by Pelsaert and Bernier. Such discriminatory attitude not only affected many Hindus adversely in trade but its influence also ruined others.⁶

The second type of discrimination was the preferential treatment shown by emperors from Jahangir onwards to the European merchants re.: customs duties and exemption from inland transit duties. All classes of Indian merchants, Hindu and Muslim, were seriously handicapped in an unequal struggle for survival. Our rulers, lacking naval power, had to stoop to surrender to the policy of force or piracy of the European companies, holding the richly-laden but defenceless
Indian ships to ransom. They utilized the inordinate craze of the emperors and governors, for imported insignificant novelties, called "toys" in contemporary commercial correspondence to secure trading rights and privileges. As a result not only did the national revenues suffer a distinct loss but the economic interests of the country were frittered away or sold to the foreign mercantile companies for mere trifles. Thus did they slowly and inexorably penetrate into India's economy.

Only a few illustrations of the unequal competition and struggle between the Indian traders and the Europeans may be given here. In Western India, Captain Best (1612) demanded from the Mughals, among others, payment of 3½% customs ad valorem to be reduced to 3% with imperial sanction, exemption of small wares valued at Rs. 20-from customs and non-application of escheat to the property of deceased Englishmen. The gifts brought for the emperor were to be given only after he sanctioned these demands. However, the English defeat of the Portuguese raised the former's prestige. As at first Prince Khurram did not grant complete freedom of trade to the English on payment of 3½% customs (September, 1616), Sir Thomas Roe threatened the Mughal sea-borne trade with the Red Sea. This at once forced Khurram to relent (c. Sept., 1618). Roe ultimately proved to be the inexorable architect of India's commercial ruin. To grab the Red Sea trade for the Company he formulated a scheme of systematic piracy on Mughal shipping. This was sought to be implemented after his departure in 1619-24. By surrendering the country's economic interests to a foreign mercantile body, Jahangir's firman of 1624 contained the seeds of India's commercial decline. It granted the English, among other things, free trade throughout the empire and exemption from land customs at some places including Broach and Baroda. Shahjahan granted several more trade concessions to the English, including exemption from the road and transit duties between Agra and Bengal and between Agra and Surat, placing the Indian merchants at a further disadvantage.

In 17th-century Bengal (and Orissa) also, the English came to enjoy greater privileges and influences than the indigenous merchants— in Hughli in 1651 in the shape of exemption from anchorage charges and customs duty of 4% at all port towns, from the right of search of English goods, etc. By Aurangzeb's firman of 1680 the English

SEEDS OF ECONOMIC DECLINE
would be liable to 3½% customs at Surat and not at other places. This led to a controversy in Bengal, Bihar and Orissa. The local officials held that 3½% was applicable, the English differing and “managing” Shaista Khan, reappointed Governor of Bengal (1680-88). However, advised by his deputy at Murshidabad, Rai Balchand, about the adverse effects on the revenues of Bengal, the Governor sent a complaint to the Emperor. Thereupon, Aurangzeb superseded his own order and re-imposed 3½% customs on the English in Bengal. It is surprising that the simple truth had not dawned on him earlier. The governor of Hugli, be it said to his credit, held that the exemption of the growing English trade from dues paid by all private merchants was highly iniquitous. At the end of the Anglo-Mughal war in Bengal (1690) Aurangzeb commuted all customs and transit duties and other charges payable by the English into a lump sum of Rs. 3000 a year but the Indians continued to pay these as before.

During Azim-us-Shan’s governorship of Bengal (1697-1712) the English jumped at once from traders to zamindars and administrators, when they were allowed to purchase the right of 3 villages of Calcutta, Sutanuti and Govindapur from their respective owners even without prior imperial sanction. However, Murshid Quli Khan, Diwan of Bengal, was opposed to the dutyfree trade privilege as causing loss of imperial revenues. He also felt that the possession of the riparian villages made the English too strong. The Dutch, however, paid 4% customs at Hugli, 5% at Pipli and Balasore and 2% at Surat but no transit dues.¹¹ That the Indian traders were unfairly treated by the discrimination was clear to contemporary foreign observers like Tavernier and Stavorinus. Even the English E. I. Company themselves admitted (1698) that their “privileges and immunities” in India exceeded those of the other foreign traders and even of the Indians themselves.¹²

(iii) Naval Weakness: The naval weakness of the Indian powers was largely responsible for their lack of bargaining power in customs. The Indian ships, though rich, were relatively deficient in artillery and so became targets of pirates and greedy European sailors. The Great Mughals were powerless on the seas. Akbar’s vain boast to “drown the Firingis (Europeans) in the seas” remained a pious wish. European piracy was then an invariable adjunct of the profits of European commerce. Aurangzeb once had a model battleship built
by an Italian at Surat, but gave up the project, being dissuaded by Wazir Jafar Khan.18

(iv) Absence of Consistent Commercial Policy: The absence of a consistent commercial policy paralleled the lack of a strong navy. The Mughal administration of customs, discussed above, makes it clear that the emperors and other members of the royal family, governors or nobles had no progressive attitude towards trade and commerce, i.e., no sound ideas of ensuring national economic well-being. They had their personal interests in trade no doubt but this often led them to regard the Indian merchants in the same field or area as their rivals. Even elementary economic laws were not grasped by those in power. At times the diwan or the governor of a port like Hughli showed greater economic sense than even the emperor or prince, who might have their own axe to grind.

Customs was a source of imperial revenue. But this was not a matter of central regulation. This led to a great anomaly. Throughout the 17th century customs was the subject matter of imperial firmans, princely nishans and governor’s parwanas, which were sometimes conflicting and worked at cross purposes. If at times the emperor acquiesced in the latter, at other times his orders were ignored or defied. In the field of commercial policy, then, the Mughals showed complete bankruptcy of economic wisdom. The firman of Farrukhsiyar (1717), described as the ‘Magna Carta’ of the English E. I. Company’s trade in India, registered practically no novel concessions. It was merely a coping stone to or confirmation of the various concessions and privileges granted by the Mughals during the last century by Khurram (1618), Jahangir (1624), Shuja (1651), Shahjahan (1653), Aurangzeb (1690) and Azim-us-Shan (1698). By giving unqualified rights of trade only to the English in Bengal, Surat and Madras and to none else, Indian or foreign, and by virtually conferring extra-territorial privileges affecting Mughal sovereignty and influence; zamindari rights, the firman paved the way for British supremacy in India, commercial and political. With the gradual growth of British commerce, the continuing privilege of duty-free trade in Bengal and Gujarat on payment of the fixed annual sum of Rs. 3000 proved to be a mounting and colossal loss of revenue to the government. Even this was followed by continued evasion through abuse of dastaks causing additional loss and introducing additional troubles. The

SEEDS OF ECONOMIC DECLINE

301
diwan of Bengal, Murshid Quli, might have defied the firman in some respects but was wiser than the moles of Delhi, the emperor and his wazir, in assessing its grave consequences. He rightly realized that acknowledgement of concessions and privileges like the possession of 38 riparian villages and use of the mint would make the English too strong in the country.14

(v) Currency Chaos: The establishment of a uniform currency of a high metallic standard throughout the empire was a great achievement of the Great Mughals. This was an essential pre-requisite of commerce and smooth business. The silver rupee (rupia, rupya) with an average weight of 175 grains of silver (from Akbar to Muhammad Shah) was the basic unit of cash transactions. The value of a coin depended on weight and age. It depreciated if it losts weight. Again, a newly-coined rupee (sikka, sicca or hundwi) was of higher value than the current or standard ((chalani or peth), i.e., the earlier coins of the same ruler, while coins of previous reigns (khazana) were also accepted with a variable discount.15

The currency came to be debased, i.e., in purity and weight from Aurangzeb’s time and more so thereafter, particularly under Muhammad Shah. Several factors were responsible for this trend. (i) Prices of precious metals, fluctuated on account of the ‘Price Revolution’; influx of gold and silver to India,—in Bengal, Sind and Gujarat, and then transported to Agra ; import of copper from Japan to Bengal and Gujarat, necessitated by exhaustion of the copper mines in Rajputana and Central India (during Akbar’s reign); (ii) As Mughal mints came to be formed, bankers re-coined the old rupees into siccas of lower weight and lower value; causing annual changes. Again, unscrupulous governors and superintendents of mints made profits by changing the weight and value of coins on account of the price fluctuations. All this caused confusion.16 (iii) While the revenue (jama’ dami) was assessed in copper dam, the standard revenue (hasil kainil) was payable in silver rupees. When the silver depreciated relatively to copper the prices of agricultural produce fell. As this compelled the peasant to sell more produce, the pressure on him increased. Under Aurangzeb the officials were paid their salaries by converting the rupee to old Akbari rate of 40 dams. He ordered that the devalued rupees should pass as full-weight rupees and also reduced the weight of ordinary copper coins. When the day labourers

302 MUGHAL ECONOMY
of the capital refused to accept the lighter dams, Aurangzeb ordered a proportionate rise in wages. Probably the real wages were reduced. The lighter copper coins continued thereafter also. The depreciation of silver, the increasing pressure on the producing classes, the debased currency and the resultant confusion largely contributed to sap the economy of the empire.17

Thus the oft-repeated currency muddle after Plassey, caused by multiplicity of coins and shortage of silver, were not new features but a continuation of the earlier evils. There was, however, an aggravation after 1757, dislocating industry and trade in India.18

Both the independent principalities growing in India in the 18th century and the new kingdoms in Asia had their own separate currencies. The problem of exchange of money in and outside India became serious, as standard coins were not acceptable at par in trade.19

B. Political Disorders in India and Asia

The economic vitality of India was slowly but steadily corroded by the political upheavals and disorders in India in the 17th and 18th centuries. In the latter century, marked by the disintegration of the empire, and resultant chaos and anarchy seriously disrupted the economic life of the Punjab, Malwa, Gujarat and Bengal, the main exporting regions and their trade and commerce with the Asiatic countries and islands. The invasions of Nadir Shah and Ahmad Shah Abdali, the conflicts between the Abdalis, the Marathas, the Sikhs and Adina Beg affected the Punjab. The Maratha-Mughal and Maratha-Nizam conflicts harried Malwa and Gujarat. The chaos in Bengal, due to contests for Nawabship and the wars between the governor and the unscrupulous military nobility and the repeated Maratha invasions, injured her trade, internal and foreign.

The internal or inter-provincial trade of the country came to be seriously affected. As independent kingdoms arose overshadowing Delhi imperial authority, framing distinct transit and customs laws and imposing heavy duties on passing goods and as disorders aggravated insecurity, the easy flow of goods throughout the country with comparative safety ended. Bengal’s trade with upper Hindustan came to be limited to Awadh.20

But the Mughal Empire took some time to die. Even after its virtual collapse (1739-59) the ‘Mughal tradition’ lingered. The
economic needs of the decaying court of Delhi and its miniature replicas, the courts of the succession states of the Ruhelas, Awadh, Hyderabad and Bengal, etc., continued to be met, intermittently though, by the cotton and silk goods of Bengal. Before 1767 manufactures and trade were still free from undue oppression and restrictions. Bolts observes: 'in the time of the Mogul Government and even in that of the Nabab Alivardi Khan, the weavers manufactured their goods freely and without oppression...it was then a common practice for reputable families of the Tanty or weaver castes to employ their own accounts'. Even his critic, Verelst, corroborated him in his despatches: "...Vast variety and abundance of the produce of the lands and the excellency of the manufactures of the inhabitants"; their "Superior cheapness and quality"; and "general opulence".21

The prolonged Mughal-Maratha wars in the 17th century and the Maratha ascendancy during the first half of the 18th century contributed to economic dislocation in different regions of India; including the Deccan, Bengal and Northern India. In particular the Maratha invasions of Bengal not only sucked the people dry but caused insecurity of person and property, compelling the people, weavers and husbandmen to desert their homes, aurungs (looms), and fields (and seek refuge east of the River Padma), decrease in the quantity and deterioration in quality of manufactures, dislocation of agriculture, rise of prices of articles of consumption as also of raw silk and of manufactured goods, cotton and silk. Holwell tells us that during these invasions the manufacturers could not devote adequate time and apply their usual skill and so the quality of the manufacture suffered. As these fell into disrepute the demand for them diminished. This is corroborated by Fort William Correspondence: 'The late troubles up the country and the unsettled state of the province of Behar has hitherto prevented our sending any broad cloth or copper to the factory of Patna'.

In areas where the Marathas dominated, the 'Maratha tradition' gradually supplanted the 'Mughal tradition'. "The Mughals magnificent and ostentatious required every article of luxury. Towns and cities grew out of the spirit. The Marathas were averse from these costly modes of expense. Towns and cities were smouldering fast into ruin. In this cause may be traced...the drooping commercial state of the province of Hindostan".22
Besides these internal factors, the political disorders in different Asiatic states, with which India had economic and commercial relations, also contributed to the decline of India’s Asiatic and African trade, Persia tasted the evils of disorder even before the assassination of Nadir Shah (1747). Ambitious chieftains, however petty, became independent in their usurped domains and demanded exorbitant duties from all passing merchants on pain of plunder in case of non-payment. Their example came to be followed by even ‘each head of a town or village’, who regarded himself to be an independent ruler and oppressed the people, taking advantage of the Shah’s absence and making “travelling unsafe even in caravans”, as we learn from an eyewitness, William Bartholomew Plaisted and another acute observer, William Forster.23 After his murder the situation grew worse, as Alexander Dow points out. The anarchy and ceaseless civil wars in Persia (after Nadir’s assassination, 1747), Georgia and Armenia, the decline of the Turkish empire and the disturbances in countries, bordering the Red Sea, the rebellions in Egypt and Baghdad—all rendered the caravan trade from Suez to Cairo, the emporium of Bengal goods and almost stifled the trade with Syria. “...Trade in a manner unknown; the merchants of Busserah are ruined: and there were last year in the value of two hundred thousand pounds, which could not be sold for half the prime cost”,24 Verelst rightly observes that previously the commerce of Bengal with different countries of the East used to yield ‘a very considerable balance, paid in bullion, but that the troubles in Persia adversely affected this trade’.25

C. Presages of Economic Decline before Plassey

Economically the first half of the 18th century, while being a continuation of the 17th, was brighter than, but in several respects a presage or foreshow of, the post-Plassey period, i.e., the second half of the 18th century. The half-century preceding Plassey exhibited certain aspects of the economic history of India which were accentuated in the half-century following Plassey and became specially characteristic of it.

(a) Economic Drain: It is well-known that there was drain of wealth from India to England in the second half of the 18th century
not only from Bengal, but from Bombay and Madras as well, known as ‘Plassey Plunder’ and ‘Indian Plunder’. In the first half of the 18th century also there was economic drain from India to outside, though its sources were not so diversified and so exhausting as later. The wealth extorted by Nadir Shah and Ahmad Shah Abdali, from the Emperor, his nobles, the commercial classes and the citizens of Delhi, crippled the power and authority of the Emperor who was left with no cash reserve for an emergency and also adversely affected the position of Delhi as one of the commercial marts of Northern India.\textsuperscript{26}

(b) Private trade of the English East India Company’s servants constituted a pernicious malady in post-Plassey India. But it was not at all a new growth. In fact, apart from the private trade (\textit{Sauda-i-Khas}) of Indians, governors and officials, etc., private trade of the European traders was a prevailing economic malaise in India’s trade —foreign (European and Asiatic), coastal and inland—in the 17th century as well. During the first half of the 18th century the subtle distinction between the goods of the Company and those of their servants involved in the practical working of the \textit{firman} of 1717, though not grasped by the moles of Delhi, was quite patent to the astute and alert Murshid Quli and also Shujauddin in Bengal. As the legal wig of the \textit{dastaks} was increasingly used by the Company’s servants to cover surreptitiously even their inland private trade, troubles began from Alivardi onwards. The adoption of the agency system in place of the \textit{dadni} system (1753) facilitated the invasion of inland trade and hence of the Company’s investment as well by their servants. The lure of private gain overbore national differences and forged a liaison between the Englishmen and the Frenchmen. Non-payment of duties to the “country” government by them, trafficking in \textit{dastaks}, and the participation of Indian merchants in this clandestine trade, involving a serious loss of revenue, were fully rampant even before 1757. The scruple of the Court of Directors that the country government would regard them as “strangers to honour and gratitude” (23 March, 1759) must have appeared strange indeed in the atmosphere of naked scramble for riches and “scandalous prostitution” of the \textit{dastaks} after Plassey.\textsuperscript{27}

(c) The oppression of the E. I. Company’s servants and agents (\textit{gomostas}) which had begun before 1757 and reached unprecedented limits after it was \textit{a} factor but not \textit{the} factor in causing the ruin of

306

MUGHAL ECONOMY
Bengal’s industries. By their unjust and cruel treatment of the indigenous weavers, manufacturers and traders, already afflicted by various other maladies, the E. I. Company’s servants and agents only worsened the situation and hastened the destruction of Indian handicrafts. But this alone was not responsible for the decline.\textsuperscript{28}

D. \textbf{Responsibility of the European Companies—}

\textbf{Decline of Indian Shipping}

India’s mercantile marine carried a major portion of her foreign and coasting trade even after the advent of the Europeans in the 16th and 17th centuries. But gradually Indian shipping declined not only because of open, peaceful competition but also because of a determined, ruthless policy of force and violence, perpetrated through piracy on defenceless Indian ships, which continued right up to the mid-18th century, if not later.

Moreland has referred to European piracy in the Asiatic waters. But he has ignored it as a factor in the decline of Indian shipping. He has attributed it and Indians’ preference for Dutch and English ships to four causes—the superiority of European navigators; stronger build of European ships; lower freight and greater security of the Dutch and English ships as compared to India. The first suggestion is misleading, for the Indians did have experience of conducting carrying and coastal trade in Asiatic seas in weather, fair or foul, long before the advent of the Europeans. The charge of lack of experience during the emergencies has not been levelled against them by Van Twist, Linschoten, De Jongh, Pelsaert and Baldaeus. The European navigators were as much susceptible to the limits imposed by seasons as the Indians. Moreland’s second charge of weaker build with defective armaments might be true as regards India’s big pilgrim ships, but not perhaps about ordinary ships. The Bombay authorities made it quite clear to the Company in November, 1668 that Indian-built ships were never to be despised, as these built by expert Indian carpenters, “masters of their art”, were bigger than the English or Dutch vessels and that “ships of English oak were not quite suitable in Indian seas and those of Indian timber were well adapted... very cheap, substantial and strong...very lasting”. Moreland’s third argument of cheaper freight on European ships is incredible, as the Bombay letter of November, 1668 clearly referred to “the inconvenience,
the extraordinary charge and expense of time”, caused by English shipping, the charges in India being just half of the customary charges. The true reason why the business-like Indians preferred the English and Dutch ships to their own was that these better armed and better equipped vessels afforded security against the Portuguese pirates.29

True, piracy was not a novel danger to Indian shipping. The Malabar pirates were notorious even prior to the advent of the Portuguese. But the Indian merchants were familiar with their methods. On the other hand, European piracy constituted a wholly unknown and hence unmeasured danger. It started with the Portuguese, who were specially dreaded for their activities on the coasts of Gujarat and Malabar. In Bengal they ‘lived in no forms of subjection to God or Man’ (Finch). But the threat to Indian shipping on the Asiatic seas came not only from the Portuguese but also from the English and the Dutch. The latter imitated the former and used force to secure trade privileges for the companies, besides the highhanded adventures of private merchants and interlopers. No protection came from the Indian administration. The helpless Mughals moved from pillar to post—to the English against the Dutch or vice versa but all in vain.

The net result was that the carrying trade of the Indian merchants slowly declined.

The associative commercial communities of India, the Gujaratis, the Malabar traders, the Dabullers, the Bengalis and others, had special links with two or three regions, from the Red Sea ports and Persia in the west to South-East in the east. With the advent of the Europeans—the Portuguese in the 16th century and the English and the Dutch in the 17th, trade rivalry and competition between the Indian and the European merchants became bitter and prolonged. The communities of Gujarat, (the “Guzarats” or Gussaraits, Guzzaratits of early E. I. Company’s records) used to have frequent trading contacts with Socotra, Aden, Mocha, Mogustan (east of Bandar Abbas), Bantam, Priamon, Tiku and Barouse. They are described as enemies of the Portuguese and mentioned along with the Deccanis, Flemingo (Flemish) and Moors...besides the English (1614). About 1617 the Kingdom of Gujarat is said to have mostly “live(d) by the trade of Moha (Mocha) and other places.” The lucrative trade of the Gujaratis with Achin (Sumatra) in cloth trade suffered (1615) on account of their conflicts with the Portuguese and the latter’s piracy. The Gujaratis

308 MUGHAL ECONOMY
had also to face the commercial competition of the English in the East Indies. Regarding the Gujaratis as their "great enemies", "most dangerous and malicious enemies", who wanted to poison the English, the latter intended to capture their cloth and pepper trade at Achin and Tiku, respectively (1616). The rich Gujarati merchants were "very well provided for trade" and wanted to divert the pepper trade from Tiku to Achin (1616).

India's maritime contact with the Red Sea was of long standing antiquity. Mocha on the Red Sea was important as a commercial centre not only for pilgrim traffic and the influx of Egyptian merchants purchasing Eastern goods with ready bullion but also because the Red Sea was the main outlet of the maritime activity of Gujarati traders of Diu and Cambay. It was again frequented largely by merchant and pilgrim ships from the Sind port of Lahari Bandar, the Mughal imperial port of Surat, the Bijapuri (Konkan) port of Dabhol ('Dabulls' or Dabul traders) and the Malabar ('Malabars' or Malabar traders) or Vijayanagar ports of Cannanore and Cochin. The skippers of some of their ships (nakhudas) had houses at Mocha. That the rape of eleven Indian ships (1612) in the Red Sea by Sir Henry Middleton, Nicholas Downton and Captain Saris, already known along with their methods of plundering them to the extent of 40,000 rials (for five ships), did not cause much remonstrance in India, is a curious but sad commentary on the naval weakness and apathy of the Indian ruling powers including the Great Mughals.30

The same policy of high-handedness on the seas was followed by Captain Best, as explained earlier. Immediately after settling in Gujarat, the English developed a profitable coral trade in the Mediterranean (1616-7) seriously affecting the Indian merchants importing coral from Mocha. The governor of Surat prohibited the landing of coral from English ships to protect the Indian merchants but the English retaliated by seizing and plundering Indian ships and had to be conciliated by paying indemnity and agreement for complete liberty to freely import goods.

Perhaps the most sinister move against the Indians was made by Sir Thomas Roe. The latter's policy of grabbing the Red Sea trade of the Indian merchants was at first sugarcoated with the innocent offer to shield the Indian merchantships by an English convoy against the Portuguese. But the Indian merchants were shrewd

SEEDS OF ECONOMIC DECLINE
enough to see through his inner motivation and declined it. Roe then wanted to teach them a lesson and enunciated a cold-blooded, deliberate programme of piracy on the Indian ships sailing to the Red Sea so as to compel the Indians to fall in with his plan, i.e., virtually to oust them from the highly lucrative Red Sea trade. This was actually implemented after his departure. Thus did India lose her position in Red Sea trade.

In Orissa also this policy of force was applied successfully by the English as early as the thirties of the 17th century. On several occasions they got trade privileges from local governors by threatening to seize Indian ships at sea or blockade them in the ports of Orissa. The unwilling Mughal governor of Cuttack was thus forced to grant the privilege of trading without any duties and of building houses and ships in Orissa. Thus the English settlements at Hariharpur and Balasore were founded in 1633.

In 1652, Blackman, seeking to wrest privileges from the governor of a port in Malabar, observed: ‘God hath given power on the sea that if we bee wronged on the land, wee may right ourselves there’.

Even in mid-18th century the English pursued this policy of force in Bengal and Nawab Alivardi had to severely admonish Barwell, Governor of E.I.C., in a parwana, 1748: “The Syads (Arab), Mughals, Armenians, etc., merchants of Hooghly have complained that lakhs of goods and treasures with their ships you have seized and plundered, and I am informed from foreign parts that ships bound to Hooghly you seized under pretence of their belonging to the French. The ship belonging to Antony (an Armenian) with lacs on board from Mocha and several curiosities sent me by the Sheriff of that place you have also seized and plundered... As you were not permitted to commit piracies I write to you that on receipt of this you deliver up all the merchants’ goods and effects to them.” As this warning went unheeded, the Nawab adopted various repressive measures against the English traders in their different factories. A strong ruler like Alivardi could adopt a strong attitude. But a weak ruler submitted to foreign high-handedness, backed by sea power, which gradually ousted the Indian, Armenian and Turki mercantile marine out of the Asiatic seas. After England’s political suzerainty over Bengal (1757) the E. I. C. had the province’s entire resources at her disposal for establishing commercial hegemony.31

310 MUGHAL ECONOMY
Similarly, the Dutch wanted to eliminate the competition of Indian shipping in the trade with Persia and the Indian Archipelago. Shahjahan did not agree to their proposal that none of his ships or other ships of Surat, Bengal or other places could in future be allowed to trade with Achin, Perak, Queda, Oedjang, Salang, Malacca, etc., and if they did so, these would be liable to be captured as "good prizes" by the Dutch on the pretext that they were at war with these places. In 1649 the Dutch sought to redress their "Affronts and Injuries by Force of Arms" by secretly ordering their ships to ambush and blockade Indian vessels, including even the Great Mughals' ships sailing from Goa and capture Muslim ships from Mocha and those of Cambay (Feb. 20, 1649). On Shahjahan's yielding to this threat on account of his naval weakness, the Dutch ambassadors gave an assurance to issue passes for trade to Achin and the neighbouring places.\textsuperscript{32}

Thus the general policy of both the English and the Dutch was to completely eliminate Indian shipping from coasting and overseas trade. This policy was relentlessly pursued by both these foreign companies for nearly a century and a half (c. 1600-1750) with all their destructive weapons against the defenceless Indian ships. As the transport of Indian merchandise was gradually transferred to European mercantile marine due to European naval supremacy, the Indian merchants had to pay heavy freight charges, while the Europeans paid nominal or no charges in the ships of their own companies. From being ship-owners, the Indian merchants were reduced to the position of freighters of goods on foreign ships. Indeed it was a veritable commercial revolution in personnel at least. The decline of India's mercantile marine as well as of some of her once flourishing seaports became a foregone conclusion. The general trend of Moreland's arguments in \textit{From Akbar to Aurangzef} would appear to be that the advent of the Dutch and the English was an unmixed blessing. But the above details alone would show that this was far from truth. Pelsaert was not alone in voicing the complaints of the Indian merchants, who blamed them for the ruin of the trade of Cambay. He is corroborated by Van den Broecke, de Jongh and also by the English factory records.\textsuperscript{33}

(E) \textbf{British Commercial Policy}

If the English and the Dutch companies succeeded by their naval supremacy and subtle manoeuvres to oust the Indian merchants

\textbf{SEEDS OF ECONOMIC DECLINE}
from their traditional areas of commerce and thereby to encompass the decay of Indian shipping and ruin of her sea-borne trade, the English, then in power, endeavoured to ruin India’s flourishing textile industry by passing several prohibitory laws.

As regards the anti-Indian trend of the British commercial policy which constitutes the theme of the Dutt-Hamilton controversy, it is to be noted that the object of British commercial policy from the beginning of the 18th century was the protection of the textile industries of Britain against foreign competition. The Act of 1700 prohibited the use in Great Britain of silk goods of Bengal and Persia, China and the East Indies and painted calicoes. It was effective from 29 September, 1701 but it did not stop export of manufactured silk to England. It was not applicable to muslins proper and white calicoes, which were subjected to an import duty of 15% ad valorem. But these continued to be imported and then locally printed. So the Act of 1720 prohibited the wear and use of printed calicoes, whether printed in England or elsewhere. This stimulated the mechanical inventions and discoveries in textile industry. Additional duties were imposed in 1747, 1759 and 1760 on Indian cotton goods. By 1765 Indian silk and cotton manufacturers paid an import duty of nearly 45%. Thus the anti-Indian trend of British commercial policy was not a novel feature after 1757 and had begun quite early in the 18th century. It is to be borne in mind that down to the agricultural and industrial revolutions in the 18th century (c. 1760) production in England was in the “domestic” stage as in India, the tools used in cloth manufacture in England were, according to J. F. Royle, “nearly as simple as those of India”. But the English became technologically superior to India, whose foreign masters continued her domestic system.

(F) Neglect of Science and Technology

The reasons for the loss of India’s industrial and commercial excellence as well as of her maritime decay have to be probed not merely in her political history or administrative and economic systems but in other spheres as well, viz., social and educational. Though the deterrent influence of caste system on economic progress and social mobility is now recognized to be exaggerated, the fact remains that the centres of learning, Hindu of Muslim—parishads, tols and
madrassas—were more concerned in scholastic tradition rather than in scientific or technologicaal discoveries and showed no initiative and made no experiment in technology. It would, however, be unhistorical to attribute this weakness to the absence of a national educational system. For that absence did not stand in the way of such discoveries as in Great Britain. The eternal village communities survived dynastic changes and political convulsions no doubt, but remained weak on account of inner contradictions, lacking pioneering spirit and the urge to improve the low standard of life. Technology, suitable for agriculture, handicrafts and rural industries, was simple. A wide gulf separated the intellectual and working classes. This hampered mechanical improvements in the arts and handicrafts. The bulk of the artisans and workers, universally extolled by contemporary observers for their skill and ingenuity, had no education to command social respect or know the theoretical aspects of their manual skills. No economic or technical revolution could take place.96

EPILOGUE

Generally speaking, the economic decline of India came to be accentuated after mid-18th century. But this period falls outside the scope of the present subject. The same general causes as were operative before Plassey were also at work afterwards but in an aggravated form. But the process came to be accelerated in those regions of India which came under the control of the English East India Company as a result of their growing contests in Bengal and Southern India. Plassey at once changed the English East India Company, in the words of Henry Vansittart, from a “commercial” to “a military and political body”. But it was Buxar which finally “rivetted the shackles” of the Company’s rule on India.97 The Diwani of 12 August, 1765 gave it a constitutional basis of authority. All these changes adversely affected the foreign trade of India in general and Bengal in particular. The other trading companies and communities (e.g., Asian merchants) were gradually liquidated by the English. This changed India’s commercial relations with foreign powers.98 The imposition of “excessive” customs duties tended to discourage merchants, foreign and Indian, from trade.99 The English monopoly of export of piece-goods to Asiatic countries deterred Asian traders from trading in Bengal, Bihar and Orissa. Those who risked still

SEEDS OF ECONOMIC DECLINE
were arrested and had their goods confiscated. Foreign trade in salt, iron and opium was also monopolized by the Company. Trade with Pegu, Siam and Malay decayed. The E. I. Company began to import various goods like cloth, yarn, utensils, horses and other animals from England and sell them in India at a profit. Naturally the “lucrative” flow of bullion, the traditional feature of India’s commerce, stopped. During 1766-68 India became insolvent and the balance of trade went against Bengal, amounting to Rs. 50,000. The Court of Directors noted the decay of India’s foreign trade as early as 1757.

NOTES AND REFERENCES

1. My Paper entitled ‘Seeds of Economic Decline in Pre-Plassey India’ read at Institute of Historical Studies, Calcutta on 18.4.1980 and published in its Journal, QRHS, XXII No. 1; see my SELMI, 370; T. Raychaudhuri in CEH, ii. 5-9.

2. Habib, Ag. Sys. Mughal India, ch. VI, 294-7; My Mughal Polity, ch. 8c; T. Raychaudhuri in CEH, ii. 10-19.

18th century: my Eighteenth Century, i. 154-63; SELMI, ch. 10.

3. Sarkar, Mughal Adm., ch. 5; Habib, 243 f; Fathiyya in Shaista Khan in Bengal, JASB (1906), ii. 263-4; O’Malley, Mod. India & West, 19-20.

Stamp: Tavernier, i. 118; Brokerage, Letters of Hughes (12. 7. 1620, & 11.11.1620), IA, XL. III. 70-71, 79-81; EFI (1618-21), 191-6, 205; Mundy, 369-70; my SELMI, 35, 14; Golconda, LR. ii. 85; Mookerjee, 151-2.

4. My SELMI, 177-203.

5. Mookerjee, 174-5; Moreland, FAA, 205-1.

6. EFI (1624-29), 29-30; Mookerjee, 181; Sarkar, Aurangzib, iii 275, based on Mirat, 272, 280; Storia, ii. 61.

7. Best, 31-34.

8. Roe, 73, 64-65.

9. EFI (1624-29), 21, 29-30; Hedges, iii. 174; S. Gopal, Commerce and Crafts in Gujarat, 31-32.

10. EFI (1642-5), 214; (1651-54), 8-9; Mookerjee, 174-5; Gopal, 32.

11. Master, ii. 21-22; EFI (1661-64), 60; (1665-67), 51, 191; (1670-77), ii. 330, 375, 419-20; (1678-84), iv. 160, 165, 226, 230-1, 256, 257, 263, 277-8; Mir Jumla (2nd edn), 281-2; Balkrishna, Early English Settlements in Bengal, Pr. IHRC, 1939; Wilson, i. 78; Sarkar, Aurangzib, v. 322; Mrs. A. Chatterjee, 131-3; Growth of Eng. Tr. in Sarkar (ed.), HB, ii. 389 f; Mookerjee, 175-6: Terms, HB, ii. 386; Stewart, App., vi & viii. Azim and Murshid, HB, ii. 397; my SELMI, 363-4.

MUGHAL ECONOMY
12. Tavernier, Stavorinus; Sieur Luillier, quoted in Balkrishna, Pr. IHRC, 1938 and 1939.

13. Arnold Wright, Annesley of Surat.
   *Latifa-i-Faizi to Abdul Haq Muhaddis*
   Aurangzeb, v. 277-86.
   *Storia.* ii. 47.
   S. H. Askari, Mughal Naval Weakness and Aurangzeb’s Attitude Towards Traders and Pirates on West Coast, JBRs, XLVI (1960) : The relevant section in Med. India 1984. *Art of War*, JBRs.

   My SELMI, 363.


17. *Storia*.
   Siyar : 277.


   My SELMI, ch. 10 ; Grose, *A Voyage to East Indies*, i. 99-100 ; BPP, July-Sept., 1933, 28.


25. *A View of the Rise etc.*, 85-86.

26. R. C. Dutt, i. ch. 24 ; N. K. Sinha, i. ch, XI ; K. K. Datta, *Survey*, ch. 6 ; see his article on ‘Economic Drain...’, in JBRs, XLV, 1959.

27. Balkrishna, *Com. Rel.*, 77-79 ; N. K. Sinha, i. ch. 6 ; Hill, *Bengal in 1756-7*, iii. 384 ; *Fort Wm. & Ind. House Correspondence*, vol i. (K. K. Dutta), XL, XLIII-XL IV ; vol ii (B. A. Salitore, XXX-XXXIII, XLvIII-LIII) ; R. C. Dutt, i. ch. 2 : my SELMI, 369.

**SEEDS OF ECONOMIC DECLINE** 315
28. Bolts, Considerations..., 206.


30. East Indies : LR, i. 11-14; iv. 279, 287, 332, 72, 92-93; 167; iii. 121; 227-8; ii. 87, 97; vi. 255.

Red Sea : LR, i. 162-3; my article in JIH (Aug. 1949), 109-201; my SELMI, ch. 6B.

31. EFI (1630-33), 301-5; Datta, Alivardi, 147-8.

32. Baldaeus, Malabar & Ceylon, 567-72; Narain, 77, 79-81. Gradually the English ousted not only the Indian but also the Dutch and French merchants from the carrying and maritime trades. By the beginning of 18th century the English captured the Dutch and French commerce with India.

33. Policy, in EFI (1655-60), 272; Pelsaert (JI), 39-40; Brij Narain, op. cit.


K. K. Dutta minimizes the effects of the restrictions on the import of Indian cotton and silk piece-goods of Bengal, as England was then one of the several markets of India; and as the English traders continued to import Indian cotton and silk goods for export to other countries. The Company, however, “encouraged the import of raw silk to feed the growing silk manufactures of England”. Fort William-India House Correspondence, XLI-XDII.

35. Royle, Cultivation & Commerce of Cotton in India (1851), 80-8 quoted in Misra, Middle Classes, 108-9; Mookerjee, 182-3.

36. Weber, op. cit. 112; B. B. Misra, Middle Classes.

37. Vansittart, op. cit. p. 22;

R. Muir, Making of Modern India.

38. Long, Selections, i. 169-78 (Complaints to Clive, Jan. 15. 1759), Bolts, Consideration, 206.


40. Bolts, 199, 195-7, 73; Taylor, Dacca, 88, 164.

41. Fort Wm. Corr., ii. 18; Forster, i. 9.

42. Khairabadi, 41 (quoted in Med. India, A Miscellany, iii): Stoppage of Bullion in Forster, 3-4; Verelst, 117-9; Fort William. Corr., ii. 34.
Summary and Conclusion

The foregoing analytical study of ‘Mughal Economy: Organization and Working’ is an attempt to survey the economic conditions in Mughal India from about 16th to mid-18th century. It seeks to throw light on some aspects of what is now described as pre-modern or pre-colonial economy in India. Within an unified political structure the Mughal empire included diverse peoples with varying traditions and regions that were geographically dissimilar. But it was not coeval with India as a whole. Cultivable land was enough and to spare. There were both villages and towns. The traditional subsistence-oriented village was there. But the rural organization was not uniform; it was complex and contradictory with division of labour and caste cohesion of the peasants and the varied crafts, rural self-sufficiency, commodity production and money economy. Infinite were the number of agriculturists and artisans. But there are no firm estimates of population, which ranged, according to the latest estimate of Irfan Habib, between 107 and 115 millions for Mughal India (and 140-150 millions for whole of India) about 1600 rising to 200 millions about 1800. The rate of the growth of population was not high.

As regards agricultural organization the country was pre-dominantly agricultural. It hardly witnessed any revolution in agricultural methods or tradition. The administrative system displayed two opposing trends—agricultural development as well as oppression. The peasants were not unduly conservative. They fixed iron teeth to the plough when needed, knew seed-drill and dibbling, intensive ploughing, rotation of crops and fertilizing qualities of some crops. The Indian peasants knew more crops than their counterparts elsewhere. In cropping they even sought to follow the new needs of the market.
instead of custom, growing high-grade cash crops like cotton, sugar-cane and indigo, and even accepting two new crops of the New World, tobacco and maize, in the 17th century. They resorted to artificial irrigation (wells, tanks and dams displaying engineering skill) when necessary. Fish manure was used for cultivating sugar in Gujarat. The peasants also possessed some mobility, settling new lands in organized groups and sometimes individually shifting their cultivation, or moving during famine or times of oppression.

Horticulture was developed by all. New species of fruits were introduced—papaya, cashew nuts and pineapple by the Portuguese from America; musk-melons and Iranian vines by Babur. The Mughals introduced the technique of grafting.

In animal husbandry, the Indian peasant was wealthier in cattle and draught animals than his counterpart in Europe and modern India.

A characteristic feature of rural economy was the production of agro-manufactures, combining agriculture with handicrafts or cottage industries, e.g., corn-thrashing (and milling for larger supply), cane-sugar (and sweet-making), oil-pressing, tobacco, coffee, opium, indigo (and other dyes) and wines.

Two diametrically opposite views are held regarding industrial organization. A few consider India of this age to have been the industrial workshop of the world. But others hold that the country was industrially backward. The truth lies somewhere in between the two.

In non-agricultural production there were several handicrafts ranging from household utensiles, furniture, leather work, tailoring, perfumery, writing materials, pottery, building industry, glass, soap, and means of transport. The most important of Indian industries was, of course, the textile manufactures (silk, wool, jute, hemp and pre-eminent of all, cotton). Pyrard’s picturesque observation that it was the products of Indian looms which clothed every man and woman from the Cape of Good Hope to China might be exaggerated. But Moreland justly remarks that “cotton weaving was by far the most extensive industry in India” and its “aggregate production was one of the great facts of the industrial world of the year 1600”. In the 17th and 18th centuries the technology of silk spinning and winding so improved as to win praise from the Europeans. Silk-weaving, too, showed a distinct expansion, to which Moreland does not refer.
The gradual development of the cotton industry—the operational processes, the stages in manufacture, the centres of production and finally the centres of export, have all been discussed in detail.

Forests supplied timber for shipbuilding, furniture and fuel and some minor produce which met the local needs. Lac-culture was an important industry and it was also an article of export. Fisheries constituted another industry as an article of food and manure. Pearl-fisheries were cultivated in South India.

Minerals could not be exploited properly then. Deep-mining was not known. Nor was coal then mined here. So wood became the only source of fuel. But the location of minerals was not contiguous to the sources of fuel. Gold and silver were obtained from mines and soil-washings but the outturn was small and these had to be imported. Copper, too, was obtained from soil-washings, and mines, some of which were quite profitable. Northern India had no need to import copper from outside before Shahjahan’s reign. Southern India, however, had to import copper in the 16th and early 17th centuries. In iron, however, India was self-sufficient for her substantial needs. Golconda steel was then world-famous for its quality and was used to manufacture Damascus swords. It was also sent to some other parts of India, specially Gujarat. Diamond was available in mines (near or below the ground) in some regions but those of the Deccan (especially Golconda and Bijapur) were famous. Economically more important than diamond was salt. It was manufactured either by mining or by evaporation of seawater. Saltpetre had several uses for internal consumption. As an ingredient of gunpowder it was also highly prized by the Europeans for their military needs. It was available in scattered regions throughout India but the best came from Bihar. There were some other minerals, jewels and stones also.

As regards the nature of industrial organization, some writers hold that India had a feudal economy similar to the Russian. Notwithstanding some apparent similarities the separation between agriculture and craft never became complete as is supposed. The arts and crafts, surveyed above, envisaged an organization more advanced than that of contemporary Europe, though technologically India was deficient. The degree of specialization and integration of India, unattained in contemporary Europe, worked through a proliferation

SUMMARY AND CONCLUSION
of castes and subcastes. Industries were localized where raw materials were available. Production was market-oriented. The trend was accelerated by increase in trade, inland and foreign. The rural and urban aurungs for collection of "investments" of the European companies grew, fostering localization. Even the markets and mahallas (wards) came to be localized. A hard and fast distinction did not exist between agrarian and industrial activities. The manufacturing system was subsistence-oriented. This pattern of the self-sufficient economy ensuring economic security, called the jajmani system, prevailed widely. But gradually this decayed in the 18th century, if not earlier, through the operation of the market forces. The need for production for an expanding market, for increasing long and medium distance trade required capital which the poor artisans could not supply and they began to take advances ((dadan) in prices, i.e., cash (and only occasionally in kind) from the middlemen or buyers. Hence it differs from the ‘putting out’ system in Europe. The contract was based on siliim law. The jajmani decayed in the 18th century.

The patterns of industrial organization were limited to two, representing two different stages or forms of production: the artisan or domestic or cottage system, and the karkhana system. In the former the artisan himself was the master, and he combined both production and distribution at his home-cum-workshop. If the former represented in a way independent, single artisan’s labour, followed by decentralized cooperation, the latter was characterized by compulsory labour, centralized control over numerous wage-earning artisans and controlled cooperation. Besides imperial karkhanas, whose numbers declined by mid-18th century, karkhanas were maintained by provincial governors, sultans and nobles and even by the European companies, and local rulers as in Jaipur and the Bengal nawabs. Private factories of artisans in general did not exist. But with the expansion of the market by mid-18th century arose ‘entrepreneurial’ artisans, rich master-weavers in Bengal or master-craftsmen in Lucknow and Parsi shipwrights who engaged poorer artisans, giving rise to graded artisans. The karkhanas had considerable influence on urban life and village town relations.

Despite the quantitative output and the qualitative excellence of India’s staple industries, her industrial organization and the technology on which it rested were limited and relatively stagnant as compared
to China, Italy and France in some respect. Unlike Europe the artisan could not blossom into an entrepreneur, while high caste men disdained manufacturing activity. India’s technological weaknesses coupled with the non-mechanical bias of the artisans retarded all prospects of an industrial revolution. However, this stagnation was perhaps offset by industrial excellence even with simple tools and fairly advanced technology in some crafts like manufacture of cannon, muskets, fowling pieces and rockets, rivetting of planks of ships and lime-coating thereon, bayonet-proof lacquer-work and soldering gold on stone. Again in certain fields technology was not stagnant, while the artisans were not only able imitators but had ‘matchless ingenuity’, as praised by foreign travellers like Bernier, Fryer and Ovington. India’s technological deficiency may be traced to her social and economic structure based on caste, lack of any economic incentive for increasing outturn and technological advance due to surplus labour and low wages, and an oppressive and exploitative administration. Nevertheless it must be borne in mind that India’s technology based on traditional skill inherited through generations was the foundation of an organization which was able to make adjustments with a few changes to supply her large internal market and also for the growing and newer demands of the foreign markets of the 17th century. If stagnation implied stability, the industrial organization cannot be denigrated as ‘weak and backward’, notwithstanding that stagnation and associated deficiencies.

Industrial labour was either free or regimented, according to the forms of industrial organization, and ordinary or skilled, the number of artisans, ‘skillful masters and craftsmen’, being infinite. In a classic observation Pelsaert, the Dutch factor at Agra in the first quarter of the 17th century, referred to ‘two scourges’ of the workmen, low wages and oppression of officers. True, the wages were low, lower than contemporary Europe, but their standard of life depended not on the money wages but the real wages, the purchasing power of the wages. The oppression of the officers virtually amounted to forced labour (begar), a trend to which Bernier also refers about forty years later and which is confirmed even by Aurangzeb’s firman of 1665. The English and the Dutch also resorted to it. Owing to the consequential bad environment the artisans had no economic incentive to raise their standard, while the rigid steelframe of caste

SUMMARY AND CONCLUSION
limited and often discouraged economic mobility. Short distance, occupational-and horizontal mobility were there. Regional mobility, however, was rare. But upward mobility could not flower. Sometimes the high cost of materials favoured exploitation of the artisans, who were also liable to pay miscellaneous cesses and taxes affecting their economic position. That notwithstanding such adverse factors individual artisans reached excellent standards was due to some favourable conditions—the patronage and encouragement of emperors like Akbar and of particular nobles and the influence of the imperial workshops. But the lot of the vast majority of the labourers was not happy.

Mughal India's commercial organization had two facades, internal or domestic and foreign trade, the former comprising inland and coastal trade, the latter trade with Asiatic (and Indonesian), African and European countries. Judged by prevailing standards this vast trade was kept a going by a fairly adequate system of communications; and an organized land and water traffic; a complex marketing mechanism with banking and credit facilities and mercantile establishments in her industrial centres, inland emporiums and seaports. The premodern Indian markets, rural and urban, small according to modern standards, could be hierarchically graded—the tiny village *hat*, the periodic fairs (*melas*), the urban markets fed by village hinterland, single producing markets, inland emporiums and the 'nodal markets', i.e., great seaports (or international emporiums) like Surat, Masulipatam, Hughli, etc. In the markets the small traders and peddlars (of Van Leur) coexisted with great merchants, e.g., Baharji Bohra (Virji Vora), Abdul Ghafur, Kasi Viranna, the Jagat Seths and others, comparable to princes and big merchants of Europe in wealth and power. Brokers played an indispensable role in the economic organization. True, modern advanced banking system was absent but there were rudiments of deposit banking and credit system through indigenous banking establishments, credit-suppliers, commercial bankers and moneychangers (*sarrafs* or shroffs, *mahajans* and *sahukars*), use of commercial paper (*hundi* or *hundwi* or bills of exchange). A system of insurance (*bima*) of goods in transit and of ships existed. Trade depended on some interrelated factors like prices, taxes and bullion movements. Thus India had developed an all-India marketing organization by the end of the 16th century independently of European
penetration. This differed little from other parts of the world. The Indian merchants knew their art well, were as shrewd as the Europeans and were neither saints nor knaves.

Inland trade might be intra-local, if confined to one unit; or inter-local, between villages and towns or between towns; or inter-regional, within a small region; or inter-country or cross-country, if covering the whole country. The articles might be raw materials, necessaries and luxuries. Some internal land routes were joined with international highways. The seaports fed both coastal and oceanic voyages. So inland, coastal and international routes, by land and sea, were all inter-linked. Numerous industrial and commercial centres dotted the land routes or river routes. River and coastal traffic was cheaper than road traffic and hence, more convenient. Again coastal trade was important because of hilly configuration along the two coasts and exactions of tolls by jagirdars and officers. The main trunk routes with possible branch routes, the location of different emporiums and centres and the coastal routes and traffic with South India all favoured the growth of an integrated market over wide areas in Mughal India and beyond. But this could not fully develop as in Tokugawa Japan. India’s extensive commerce would tend to disprove the exaggerated gloomy picture of inland security. The extent of insecurity evidently varied in different areas and different times. Even after European penetration in the 17th century internal trade continued to be controlled by Indian merchants.

For a total picture of India’s foreign trade—with Asia (Middle East, Central Asia, the East Indies and the Far East), the coasts of Abyssinia and Africa, and Europe (through the Levant and then via the Cape of Good Hope from 1498), we have to examine the Indian overland and overseas trade, Portuguese trade, European companies’ trade and European private trade. Well-established trade routes, overland and overseas, connected India with these countries. Safeguards notwithstanding robbery on land and piracy on the sea affected trade and raised the cost of transport and prices. To cover such risks marine insurance began in 1622.

Among the principal international emporiums in the Asiatic seas frequented by Indian traders were Ormuz in the Persian Gulf (as important in West Asia as Malacca in East Asia); five Red Sea ports, Jeddah, Aden, Mocha, Tor and Suez; four ports in Somaliland (2) and

SUMMARY AND CONCLUSION
Abyssinia (2); and seven along the East Coast of Africa. The trade of Malacca (in S. E. Asia), the greatest entrepot in the Indian Ocean since the 15th century, remained, even after its capture by the Portuguese in 1511, in non-Portuguese hands. But the Dutch capture of it (1641) was followed by the rise of Bantam in West Java and Achin in N.W. Sumatra. After Bantam fell to the Dutch (1682) only Achin was left open to Asian merchants. The trade with Manila (famous for silver traffic with Spanish Indies) and Macao (under the Portuguese) was important.

Indian merchants evinced a remarkable spirit of adventure and social mobility not only by trading but also by making settlements in distant lands in Afghanistan, Persia, West Turkestan, Trans-Caucasia and Russia (Astrakhan). Many merchants of Sind, the Punjab, Gujarat and Rajputana were even granted Russian citizenship. Traders from West Turkestan, Georgia and other border areas also came to India. Aurangzeb permitted a Russian merchant duty-free trade about end of the 17th century. Russo-Indic connections lasted at least for four centuries (15th-18th). Similarly, Gujaratis, Konkanis and Malabaris trading with the Red Sea had settlements in Arabia, particularly, at Mocha, while in S. E. Asian cities like Achin and Malacca, Gujarati, Bengali and Coromandali traders had their settlements.

With the Portuguese discovery of the direct sea-route to Malabar in India a revolution occurred in commerce. 'A period of unstable equilibrium' began in which oceanic commerce ceased to be independent of political control. The Portuguese made trade a state or royal monopoly. The Arabs lost their maritime supremacy. The Indians were unwilling to yield but unable to compete. Most of them had to accept the imperial methods of the Portuguese (e.g., forts, piracy and cartazes or passes) or make adjustments. The 17th century caused another more far-reaching revolution in commerce. The Portuguese, who did not organize new lines of commerce, virtually collapsed before its first half ended. Faced with an unequal competition with the English, the Indian merchants were gradually displaced from their lucrative Red Sea trade, thanks principally to machinations of Sir Thomas Roe. The Dutch and the English changed the trend of India's trade with East Africa and Asia and established a new direct trade with new markets in Western Europe in certain articles (cotton, salt-petre and indigo). In enforcing a monopoly in spices (and pepper)
they soon realized that "Coromandel was the left arm of the Moluccas". By 1650 they were firmly established in India's seacoasts from Sind to Bengal and also penetrated into Bihar and Uttar Pradesh. By the end of the century they established direct trade with Europe in Madras calicoes, Bihar saltpetre, Bengal silk and Bengal sugar. The costly "toy trade" of Europe came to be patronized by the rich.

The Indian traders of the East Coast and Bengal suffered adversely on account of the growth of Anglo-Dutch trade in Asia, particularly in the East Indies. The extent of the loss is uncertain, according to K. N. Chaudhury, as the Bengal merchants used to send their goods on English and French ships to escape Dutch embargo in the first half of the 18th century. But the situation was far different from the earlier freedom of navigation.

During the 16th and 17th centuries the articles of trade were generally same. India imported a few necessaries, some raw materials and luxuries. Among the exports including textile fabrics, common food articles, raw silk, and raw cotton and black pepper, and indigo, cotton goods, especially the coarser ones, were the most important and extensive. In the 17th century, however, the Dutch and the English changed the direction of export of cotton goods from Indonesia to Europe. Indigo now became a 'prime commodity' in Indo-European trade, while Bihar saltpetre was found to be indispensable for the growing munition industry in Western Europe, and Bengal now supplan ted other countries in supplying raw silk (yarn) to Europe.

The European merchants trading with India and Asia were faced with the problem of finance, as these had insufficient demand for their goods. At first they exported bullion for buying articles therefrom. But such export was against the prevailing mercantilist theory and popular prejudice. The Portuguese and the two northern companies sought to devise their own methods. For the latter in particular export of bullion was limited by legislation or practice but could not be stopped outright. So they also either borrowed money at very high rates of interest or invested capital in Asiatic trade and remitted the profit to Europe in spices or other Eastern goods.

Broadly speaking, India had two groups of outlets for her oceanic commerce, with regional subdivisions. Each region exported particular goods to particular countries. In each region, again, some ports decayed and others arose. Each important port had a few auxiliary

SUMMARY AND CONCLUSION
roadsteads for purposes of collection and distribution. The principal seaports (i) on the Western or Arabian seacoast included Lahari Bandar in the Indus delta; Gulf of Cambay or Gujarat ports, constituting collectively the most important group in Western India, Cambay (15th-16th century), Surat (16th-18th century); Konkan ports, Bassein, Chaul and Dabhol; Kanarese ports—Goa, Bhakal, Rajapur and Karwar; Malabar ports—Mangalore, Calicut, Cochin and Cape Comorin. (ii) Those on the East Coast or Bay of Bengal included Coromandel ports—Negapatam, San Thome, Pulicat and Masulipatam (in Golkonda); Gingelly Coast ports—Vizagapatam and Bimalapatham; Orissa ports—Pipli and Balasore, Cuttack; Bengal ports—Satgaon (Porto Pequeno), Hughli, Hijili, Sripur, Chittagong (Porto Grande), Dacca.

India’s vast commerce during 16th-18th centuries was international in character. It was manned by various classes, castes, communities of India and peoples of different continents—the Muslims of the West Coast, the Gujarat banias, the traders of Dabul and Malabar, the Chettis of the Coromandel Coast, the Kashmiris, the Khatris, the ‘Mongoles’ (Mughals, i.e., Persians, Central Asiatic and N.W. Frontier merchants), Afghans, Armenians and Bengali and East Bengal merchants (‘Praychaes’). The Parsis grew to be the first modern capitalists in India. The Jews were active both in the South and the North. Add the Chinese, South-East Asians, Arabian, Ethiopian and South African merchants and the merchants of Europe—the Portuguese, Dutch, English, French, Danes and others, to complete the picture. The ruling classes—the emperors, queens, princes and nobles had some positive trading ventures, but they lacked a navy. The unprotected Indian merchants had to fend for themselves in the competitive struggle.

In their commercial organization the Dutch and the English accepted some features of the Portuguese like piracy, the licensing system (cartazes, passes) and fortified bases, so as to control the Eastern seas and secure their trade. However, as contrasted with the state monopoly of the Portuguese, the latter had jointstock organization, head-settlements or factories, with substations for tapping trade potential and suitable bases for security. They resorted to naval blockade either as reprisals or to put pressure on the Mughals, who were weak on the sea.
Excess of exports over imports tilted the balance of trade in India’s favour. Western Europe could exchange bullion because of American silver. So the chief feature of India’s foreign trade was the absorption of precious metals. Once it was believed that she was their sink. Modern research shows that as the bimetallic ratio was lower in China than in India, specie from Europe or the Philippines ultimately went to China. European governments, under the influence of the prevailing mercantilist theory, were opposed to export of bullion. So the European companies sometimes went against them. Many, however, held that international trade was linked with money, prices and wages and so trade with India was a question of price differentials.

Estimates differ as regards the volume of India’s foreign commerce. But as adequate data is absent, a quantitative assessment is not possible.

Mughal India witnessed a rapid growth of towns in number, size and wealth. Some had vaster populations than in contemporary Europe or England. But this did not affect the traditional predominance of villages. Some towns were revivals, while others were new settlements. A few were founded by officers and nobles with royal permission. Various factors—administrative, military, geographical, economic and religious—were responsible for urbanization. But generally speaking, commerce gave an invariable stimulus to it. If the smaller towns catered to local needs and local trade, some bigger ones, with their varied manufactures, markets, credit and transport facilities, came to possess worldwide importance as centres of international trade. Naturally the urban centres belonged to different categories and discharged different functional and cultural roles. The European companies’ settlements formed a class apart from the rest.

How far were signs of capitalistic developments traceable in Mughal India? The agrarian economy was marked by individualistic peasant farming and self-sufficient village community. The practice of khud-kasht with elements of commodity production showed some progress towards capitalist farming but not wholly. In the non-agricultural sector, there was a vast labour market, of urban population, workers, unskilled and skilled, and a large urban market. The karkhanas approached the manufactory stage. But there were several limitations to capitalistic development. In distribution, ‘political capitalisms’

SUMMARY AND CONCLUSION

327
existed with vast merchant capital in individual hands that was used in business for profit. The Indian capitalists not only resembled the rulers and merchant-princes of Europe in wealth and influence but some of them like Baharji Bohra were richer even than the English East India Company. The capital of some Indian joint-stock companies in the Coromandel Coast in 17th century varied from approximately 150,000-10,000 pagodas or 750,000-50,000 rupees (of those days). Thanks to a fairly advanced monetized economy—this merchant capital had great mobility. But it did not lead to industrial capital.

As regards social stratification and standard of life, conditions differed in different areas and among different classes of people with contrasted levels of wealth and life styles. Notwithstanding the wide gulf between the upper (or richer) and the poorer (described as ‘lower’ by some) classes, the Mughal social pyramid cannot be held to be in a state of unstable equilibrium. Moreland’s account of the classes has to be taken with a dose of salt. Bernier held that “In Delhi there was no middle state” and he has influenced Moreland. But there were “middle classes” between the rich and the poor, viz., the mercantile classes, industrial middle classes, landed middle classes and professional middle classes and the like.

The economy of Mughal India was subject to frequent dislocations, the gravest being famines. These were dire food famines. These were caused by failure or loss of crops on account of drought, floods, locusts or ‘cornering’, i.e., deliberate withdrawal of crops and hence were generally local or regional, unrelieved by movements of grain from surplus areas because of transport difficulties and an inelastic relief system. Famines implied scarcity but scarcity did not necessarily constitute famine. Again, all famines were not equally extensive or grave. It is, therefore, difficult to catalogue all instances of these though these were fairly frequent. Perhaps the most destructive was the famine of 1630-2, affecting Gujarat and most of the Deccan. All contemporary sources have left harrowing accounts of the socioeconomic results of it. These may be analyzed as (i) food shortage and rise in food prices, (ii) breakdown of family life and slavery, (iii) cannibalism, (iv) migration, (v) pestilence, (vi) death and depopulation, (vii) ruination of agriculture, (viii) paralysis of industry and urban centres, (ix) marketing conditions affected by
adulteration, engrossing and smuggling, (x) dislocation of foreign trade, (xi) lowered level of skill. Relief was certainly inadequate but we cannot very well accuse the Mughal rulers of indifference, especially as they had conceived of some protective measures. Recovery was gradual and slow.

It was once held that India's economic decline began after Plassey (1757) due to British imperialistic policy. But such a development can never sprout overnight. The seeds of decline had been sown much earlier, even a century before. Though Mughal rule had helped to develop the traditionally large potential wealth of India, the baneful economic influence of Mughal administrative activities on the distribution of the national income can be detected in several factors which silently sapped the economic vitality of India beneath external magnificance. Akbar's land revenue system gradually deteriorated. It began to show signs of increasing strain from the time of Jahangir. It became the exception rather than the rule by the time of Aurangzeb. Various classes of intermediaries arose between the state and the actual cultivator. Thanks to an oppressive fiscal policy, industry and commerce came to be honeycombed with numerous imposts, monopolies and farming of customs. Owing to a double fiscal discrimination between Hindus and Muslims and between the Europeans and all other Indian merchants, Hindus and Muslims alike, the latter lagged behind their European counterparts in unfair competition. The situation became unavoidable on account of the colossal naval weakness as well as of the absence of a consistent commercial policy of the Mughals. Indian shipping to S.E. Asia, the Red Sea and Persia declined not so much for the peaceful and open competition of Europeans as for the determined and ruthless, unknown and unmeasured 'gun-boat' policy of piracy, first by the Portuguese and then by the Dutch and the English. For nearly a century and a half this process of ousting the Indian merchants from their traditional arenas of commerce continued till they were utterly ruined. Thus those who had once braved the unknown seas from Africa to Sumatra now gradually lost their commercial dominance and even business connections and grew less enterprising. As a result of these trends investments in land became the craze in place of commercial and industrial enterprise. Within the country a chaotic currency from the time of Aurangzeb

**SUMMARY AND CONCLUSION**
onwards accentuated the difficulties for the state and the people alike. Science and technology were neglected.

Besides these internal forces, the political disorders in the 17th and 18th centuries within India (including Maratha ascendancy) and also outside in Asia also contributed to India’s economic decline before Plassey, of which there were some clear presages. Drain of wealth from the country by foreign invaders, private trade by high officials and by European traders and oppression of artisans, weavers, manufacturers, etc., and traders. Again, ever since the beginning of the 18th century the English had been seeking to ruin India’s flourishing textile industry by passing several laws. After Plassey the change in the character of the English East India Company further accelerated India’s economic decline. Thus the political, economic, intellectual and social conditions during the first half of the 18th century all conspired towards loss of her industrial and commercial hegemony in the Orient, while the European countries were forging ahead through the Agricultural and the Industrial Revolutions, cumulative results of inventions in agriculture, textiles, coal, iron and steel industries and in methods of transport, trade and commerce.

Conclusion:

It is difficult to strike a balance sheet of economic progress in pre-colonial India. Quantitative data and other necessary information are not available. Some hold that she was at par with Europe before the Industrial Revolution, and that her economic development held out bright possibilities of the same. But others hold that this was out of question, as all Asiatic countries, except Japan, suffered from stagnation and backwardness.

On the credit side, our survey shows that notwithstanding technological weaknesses, the country’s agricultural output, thanks to the fertility of land and slow growth of population, was not only adequate for the home market but also for exports. The vast resources of the Mughal empire not only indicated a surplus but also chances of occasional saving and investment. In the field of industrialization there were, besides traditional rural manufactures, some instances of commercialized agriculture, diversified artisan industries, characterized by specialization and localization, both in villages and towns, of which textiles were the most impressive. These were so developed as to
respond to the needs of an expanding domestic and international market, as partly reflected in the trend towards artisans working as wage-earners under orders and in the growth of the dadni system. A drift towards entrepreneurial activity was also noticeable, particularly in shipping. A ramified hierarchical market network with growing market integration, increasing money economy, and an elaborate credit, exchange and insurance system illustrated links with the expansive commercial sector. In commercial methods too, we notice occasional, though on a limited scale, changes from the traditional personal or family business concerns towards joint-stock companies. In this way the traditional economy was showing signs of change and progress.

On the debit side, technology alike in agriculture and industry was unprogressive. It was also relatively behind contemporary China and Japan.¹ So there was no revolution in either field during the period of this survey. Nor was there any scientific revolution. In fact science was neglected, thanks to the system of education and relatively low level of literacy as compared to contemporary Japan, India lacked the intellectual and scientific curiosity of even contemporary Japan and China in learning the secrets of European science and technology. The high manual skill of India’s myriads of artisans, which put a premium on Indian manufactures in the competitive international market, could not ultimately compensate the lack of technology and of machines for power. Again, market integration in India was relatively less achieved than in contemporary China and Japan as the free movements of goods was impeded by the fact that the main arterial roads were not negotiable throughout the year and also by toll barriers which increased in the 18th century. The lack of control of merchants over production led to lack of standardization of goods. These were only a few of the many hindrances to industrialization, for which India lagged behind Europe of the pre-Industrial Revolution epoch. Indeed, the prospects of any industrial revolution in pre-colonial India were bleak.

¹. For comparison with China and Japan see the illuminating remarks of T. Raychaudhuri, CEH, ii. ch. 1. passim.

SUMMARY AND CONCLUSION

331
SELECTED BIBLIOGRAPHY

A: SOURCES

I. EUROPEAN RECORDS:

English


Court Minutes of the East India Company or The Dawn of British Trade to the East Indies, 1599-1603, ed. Henry Stevens and G.C. Birdwood, London, 1886.

Danvers, F. C., (i) see under Foster; (ii) India Office Records, a brief account of his examination, during the last six years of the Records relating to India and the East India Co., London, 1890.


Firminger, W. K., Bengal Historical Records of the Select Committee of Fort William in Bengal, 1788, Calcutta, 1914.


Fort William-India House Correspondence, and other contemporary papers relating thereto (Public Series) Indian Records Series,


**Dutch** : (at the Rijksarchief or the Archives at The Hague)

*Agra Accounts*, The accounts of the Dutch factory at Agra 1637-39, in W. Geleynssen de Jongh Collection in The Hague Public Record Office, quoted in Moreland, FAA.

*Dagh Register...Batavia*, 1624-84, as quoted in Moreland, *op. cit.* The collection in National Library, Calcutta, is not complete.

*Diary of van den Broecke* at Surat, tr. W. H. Moreland, JIH, 1931.

*Gujarat Report* (on markets of Gujarat before 1630), in de Jongh Collection, Moreland’s article in JIH.


**Portuguese** : Travelogues and Records


**BIBLIOGRAPHY** 333
For the work of F. L. Castenheda, G. Correa and D. de Couto, *Da Asia (Decadas)*, see Moreland, FAA.
Lisbon Transcripts or Copies and Translations of Portuguese Records (Books of the Monsoons) in India Office. Available in the Goa Archives. Extracts in *English Factories*, 1634-36.
French : (original records in Archives Nationales, Paris)
Conteur, Le, *Letters Chiefly from India* (tr. from the French), London, 1790.

II. FOREIGN TRAVELLERS' ACCOUNTS :
(Arranged chronologically)
Nicolo Conti (1444), *Travels of...*, tr. J. W. Jones.
Athanasius Nikitin (d. 1475), *Voyage to India*, tr. Count Wielhorsky.
Duarte Barbosa, (1516-17), (i) A Description of the Coasts of East Africa and Malabar in the beginning of the Sixteenth Century,

Dom Joao de Leyma (1518), Letters to the King of Portugal, Cochin, etc., Eng. tr. by S. N. Sen (An Early Portuguese Account of Bengal), Calcutta Review, vol. LXVI, March, Calcutta, 1938.

Reis, Sidi Ali, Travels and Adventures of ...during the years 1553-56.


(For other Jesuit accounts see my SELMI, 404)


Ralph Fitch (1583-91), England’s Pioneer to India, Burma, etc., ed. J. H. Ryley, London, 1899; also in Foster, Early Travels in India (1583-1619), OUP, 1921; Delhi Offset, 1968.


Sir Thomas Lancaster (1591-1603), The Voyages of...1606..., ed. R. Markham, Hakluyt, London 1940.

John Mildenhall (1599-1606), The Travels of..., Purchas, Pt. II; also in Foster, ETI.

John Saris (1605-13), Purchas, Pt. I.


Schoerar, Relations. This Dutch factor was at Masulipatam, 1609, in Moreland, Relations of Golconda..., Hakluyt, London, 1931.

Joseph Salbancke, The Voyage of...through India, Persia, Part of Turkie, the Persian Gulf and Arabia, 1609-10, Purchas.

William Finch (1608-11), Observations of...merchant taken out of his Journal, Purchas, Pt. IV, pp 1-77; also in Foster, ETI.

William Hawkins (1608-13), The Hawkins Voyages, etc., Purchas, Pt. I, ed. C. R. Markham, Hakluyt, London, MDCCCLXXVIII; also in Foster, ETI.

BIBLIOGRAPHY


Nicholas Wilhington (1612-16), *Extracts of a Tractate written by... which was left in the Mogols country by Captain Best, Purchas*, Pt. IV, Hakluyt, London, 1905; also in Foster, ETI.

Thomas Coryat (1612-17), *Coryat's Crudities*, 2 vols, Glasgow, 1905; *Purchas*, Pt. IV, 469-87; also in Foster, ETI.


The Rev. Edward Terry (1616-19), *A Voyage to East India*, London, 1655, 1777; also in *Purchas*, Pt. IX, pp. 1-54; and in Foster, ETI.


Francisco Pelsaert (1620-26), *The Remonstrantie..., ed. and tr. as Jahangir's India* by W. H. Moreland and P. Geyl, Cambridge, 1925.

Pieter van den Broecke, *The Diary of...at Surat* (1620-29), tr. W. H. Moreland in JIH, X (1931) and XI (1932), pp. 235-50.

Sir Thomas Herbert (1626-29), *Description...travel...Asia the Great*, London, 1677.


Isaac Commeline, *Begin ende Voortgangh...*, Amsterdam, 1644-45.


**BIBLIOGRAPHY**

—22
as *Travels in India* by V. Ball, 2 vols, London, 1889; (iii) same, revised and ed. W. Crooke, London, 1925.


Glanius (unnamed Dutch sailor), *A Relation of an Unfortunate Voyage to the Kingdom of Bengala*, originally printed in Amsterdam in 1681, London, 1682.


Manuel Godinho, Surat in 1663 as described by...tr. G. M. Moraes, JBBRAS, vol. 27, Pt. ii (1952).

Nieuhoff, John (1665), *Voyages and Travels of...printed for Henry Lintot and John Osborn.*


Jean de Thevenot (1665-67), *Relation de Indostan etc.*, tr. Lovell, 1687 (Pt. III); corrected and edited as *Indian Travels of Thevenot and Gemelli Careri* by S. N. Sen, New Delhi, 1949.


Francois Valentijn, *Oud en Nieuw Oost Indien...*, Amsterdam, 1724-26, refers to Asiatic trade of the Dutch, etc.


John Splinter Stavorinus, *Voyage to the East Indies* (1768-71), tr. S. H. Wilcocke, 3 vols, London, 1798, refers to several firmans obtained by the Dutch.


III. SOME CONTEMPORARY OR SEMI-CONTEMPORARY WORKS AND ECONOMIC TRACTS :


‘East India Trade, Most Profitable to the Kingdom’ (An Essay), London, 1677.

BIBLIOGRAPHY
A Treatise wherein is Demonstrated that the East India Trade is the most National of all Foreign Trades by Philopatris, London, 1681.
Anonymous, Considerations on the East India Trade (1701), Mac Culloch, op. cit.
—Essay on the East India Trade and its Importance to the Kingdom, London, 1770.
—Historical Fragments of the Mogul Empire, London, 1805.

IV. HISTORICAL WORKS, LETTER, BOOKS AND DOCUMENTS:
Persian Chronicles abound but yield little of economic importance. However, a few are noted below for occasional incidental references except in a few cases.


_Akbarnamah_ by Abul Fazl (1601), tr. H. Beveridge, 3 vols, Bib. Indica, 1897-1939.

_Baburnama_, see _Tuzuk-i-Baburi_.

_Calendar of Persian Correspondence_, all volumes.

_Chahar Gulshan_ by Rai Chatarman Kayeth, wr. 1759. Partial tr. Jadunath Sarkar in _India of Aurangzib_.

Elliot and Dowson, _History of India_ as told by her own historians, vols IV to VIII, London, 1867-77; reprint Allahabad, 1963, 1972.

_Faramin-i-Salatin_, collection of documents, particularly of the Mughal period, ed. Bashiruddin Ahmad, Delhi, 1926.

_Hadigat-ul-Aqalim_ by Qazi Murtaza Hussain, Asiatic Society ms., wr. 1202/1787.

_Haft Iqlim_ by Amin Ahmad Razi, Asiatic Society ms., a copy of the well-known and important geographical and biographical encyclopaedia wr. 1002/1594.

_Imperial Firmans_ (A.D. 1577-1805) granted to the ancestors of His Holiness the Tiilkayat Maharaj, ed. and tr. K. M. Jhaveri, Bombay, 1928.


_Muntakhabul Lubab_ by Khafi Khan, ed. Bib. Indica, 1868-1925; ED, VII.


BIBLIOGRAPHY

V. ARCHAEOLOGICAL EVIDENCE:

General
Archaeological Survey of India Reports.

Inscriptions

Coins
Lane poole, S., Catalogue of Muhammedan Coins, preserved in Bodleian Library, Oxford, 1888.
—Coins of Mughal Emperors of Hindustan in British Museum, ed. R. Stuart Poole, London, 1892.
Rodgers, C. J., Coins of the Mughal Emperors of India, Calcutta, 1893.


VI. CONTEMPORARY LITERATURE:

Hindi

Ardhakathanaka by Banarasidas Jain (1691), (i) ed. Mataprasad Gupta, Prayag, 1943, tr. Ramesh Chandra Sharma, as ‘The Ardhakathanak …’ Indica, VII (1 & 2), Bombay, 1970; (ii) tr. and ed. Mukund Lath, Jaipur, 1981 (gives date of composition as 1641 when the author was 55 years old).

Bengali


Tirthamangala by Vijayaram Sen Viharad (wr. 1177 B.S./ 1770), who accompanied a pilgrimage to holy places in Northern India and left an accurate description thereof (1767-69).

BIBLIOGRAPHY
Oriya

Madlapanji, ed. A. B. Mohanty, Cuttack, 1940.
Majumdar, Bijoy, *Typical Selections from Oriya Literature*, 3 vols, Calcutta, 1925.

Marathi


Rajasthani


VII. REFERENCE BOOKS, ETC:

Annotated Bibliography on the Economic History of India, 1500-1947, ed. V. D. Divekar, Gokhale Institute of Politics and Economy, Pune and Indian Council of Social Science Research, New Delhi, 1977-80.

*Atlas of the Mughal Empire*, Irfan Habib, OUP, Delhi.


*Census of India.*


*District Gazetteers.*

*The Imperial Gazetteer of India*, 26 vols, Oxford, 1908; also *Provincial Series.*


Rennell, J., (i) *Bengal Atlas*, London, 1781; (ii) *Memoir of a Map of Hindustan or the Mogul Empire*, 1788; (iii) *Description of Roads in Bengal and Bihar*, 1778.

B. MODERN WORKS


BIBLIOGRAPHY


Glamann, Kristof, *Dutch Asiatic Trade* 1620-1740, Copenhagen, 1958.


Gopal, Surendra, *Commerce and Crafts in Gujarat, 16th and 17th Centuries*, New Delhi, 1975.

Gupta, O. P., *Trade of Surat under the Mughals*.


**BIBLIOGRAPHY**


**BIBLIOGRAPHY**

349
—‘Tibet, India and Malaya as Sources of Western Medieval Technology’, *American Historical Review*, April, 1960.

C. ARTICLES IN JOURNALS, ETC

*The Asiatic Annual Register*

‘An Account of the Early Intercourse between Great Britain and India’ (1801).

‘Letters of Sir Thomas Roe, during his Residence at the Court of the Mughal Emperor Jahangir’ (1802).

‘The Decline of the Portuguese in India’ (1802).

‘Relative Situation of the Dutch and English E.I. Cos. and of their Possessions in India in 1619’ (1804).

‘The Origin of the English Trade and Establishment in Bengal’ (1805).
Bengal Past and Present


Glamann, K., 'Bengal and the World Trade about 1700', 1957.


Economic History Review


Indian Antiquary


Indian Economic and Social History Review

Arasaratnam, S., 'Indian Merchants and their Trading Methods (c. 1700)', March, 1966.


Hasan, Aziza, 'The Silver Currency Output of the Mughal Empire and Prices in India during the Sixteenth and Seventeenth Centuries', 1969.


BIBLIOGRAPHY

Indian Historical Quarterly

Indian Historical Review

Indian Journal of Economics

Islamic Culture

Journal of Asian Studies

Journal of the Asiatic Society of Bengal

Journal of Bihar and Orissa Research Society

352

MUGHAL ECONOMY

Journal of Bihar Research Society


Journal of Economic and Social History of the Orient


Journal of Indian History


Journal of Royal Asiatic Society

Moreland, W. H., 'Prices and Wages under Akbar...', 1917; 'The Value of Money at the Court of Akbar', 1918.

_Medieval India, A Miscellany_

Qaiser, A. J., 'Merchant Shipping in India during the 17th Century', vol. II.

_Proceedings, Indian History Congress_

Srivastava, S. P., 'A Peep into the Economic History of Mughal India', 1943.
Khan, Iqtidar Alam, 'The Middle Classes in the Mughal Empire' Presidential Address, Sec. II, 1975.

_Proceedings, Indian Historical Records Commission_

Balkrishna, (i) 'English Monopoly in Indian Spices', 1932; (ii) 'Rise and Fall of the Dutch in India', 1933; (iii) 'Early English Settlement in Bengal', 1934.
Commissariat, M. S., 'Political and Economic Condition of Gujarat during the 17th Century', 1921.
INDEX

A

Abdul Ghafur, 126, 237, 322
Abdul Hamid Lahori, 278, 280, 288, 292
Abdur Rahim, 259
Abul Fazl, 4, 9, 35, 41, 44, 50, 51, 60, 61, 62, 64, 201, 238, 239, 246, 251, 258, 271, 280
Abwab, 297
Abyssinia, 252, 323
Abyssinian ports, 156-7
Achin, 157-8, 194, 308, 309
Acts of 1700 & 1720, 312
Aden, 52, 156, 308, 323
Adina Beg, 303
Administrative factors & towns, 203-5, 226; influence baneful, 297
Admiralty, 108-9
Adulteration, 283, 290
Afghanistan, 238, 324
Africa, 52, 54, 229, 252, 323, 329
India’s trade with E. Africa, 157
Agency system, 306
Agra, 9, 10, 35, 36, 40-44 (passim), 48, 52, 58, 60-64 (passim), 212-4 (passim), 230, 243, 249, 250, 256, 271, 280, 287, 299, 302
Agrestic serfs, 235
Agriculture, 284, 330; agricultural capital, 282; caste, 237; crops, 13-20; cultivation, 8-11; deve-lopment policy of, 8; factors determining organization, 8; holdings, 9; implements, 8-9; irrigation & manure, 9-11; peasants not conservative, 8-9; organization, 8-24; production, 13-20; mobility of agriculturist, 13; raw materials, 13; revolution, 312; specialization, 9
Agro-manufactures, 26-31
Ahadi, 258
Ahmadabad, 38, 40, 41, 46, 51, 69, 213, 216, 249, 253, 256, 281, 283, 284, 288
Ahmadnagar, 288
Ahmad Shah Abdali, 303, 306
Aima-holders, 257
Ain-i-Akbari, 5, 247
Ajmer, 61, 62, 206, 245
Akbar, 8, 10, 40, 49, 204, 237, 238, 239, 251, 270, 271, 286, 297, 298, 300, 302, 329; woollen dress, 42-43; carpet-weaving, 44, 61; Karkhanas, 83-84; Zabti, 269, 302
Akbaris, 48
Akbarpur, 48
Alberuni, 236
Alcha, 42
Alexandria, 156
Alivardi, 130, 304, 306, 310
Allahabad, 34, 35, 36, 39, 48, 60, 62

355
Alms houses, 286
Alum, 70
Alwar, 61, 77
Ambati, ambarti, ambertrees, ambertress, 49
America, 318
Amils, 258
Angiya, 239, 247
Anglo-Dutch shipping, effect on Indian traders, 183; trade, 325
Animal carriers, 110, 111; husbandry, 24
Antyajas, 236
Arab merchants, 252
Arabia, 41, 51, 52
Arable land, 2
Arcabi ek, 239
Archipelago ports, 183-4
Arhat, 9
Arjunji Nathji, 231
Armagon, 47, 50, 69, 283
Armenia, Armenians, 51, 129, 256, 305, 310
Arrakan, 61, 183, 194, 252, 256, 279
Artificial irrigation, forms of, 11
Artisan castes, 237
Artisans, allergic to shift, 77; sources of supply of capital, 80-81
Artisan system, 78-82; non-mechanical bias, 88; favourable factors, 101-3; unfavourable factors, 94-101
Arwal, Arwali Kaghaz, 34
Asaf Khan, 127, 229, 238
Ashraf, 259
Asia, 52, 329; Asian countries and merchants, 313
Asia Minor, 156
Asiatic and African trade 152-5
Asiatic Russia, 158
Asiatic waters, 307
Assam, 38, 42, 231; lac, 58, 68
Astrakhan, 158, 324
Aurangs, 304
Aurangabad, 281
Aurangzeb, 8, 158, 212, 229, 240, 241, 269, 270, 271, 289, 297, 298, 300, 301, 303, 329; firman, 248, 297, 299, 321
Awadh, 34, 48, 60, 61, 218, 303, 304
Ayodhya, 67
Azimabad, 280
Azim-us-shan, 204, 300, 301

B

Babur, 4, 9, 226, 246, 318
Badakhshan, 239
Badauni, 251, 278, 280
Badhatan, 236
Baftas, 42, 51, 76
Bagar tract, 278, 280, 281
Baghdad, 305
Bagliana, 10
Bahirji Borah, see Virji Vora
Bahirah, 71
Bahraich, 52
Baikatpur, 49
Bairat, 61, 62
Bajra, 249
Bajwara, 52
Bakhsibandar, 181
Bakla, 38, 252, 270
Balaghat, 281
Balance of Trade, 189-92, 314

MUGHAL ECONOMY
Balasore, 46, 50, 64, 69, 180, 231, 304
Balbi, 41
Baldaeus, 307
Balkrishna, 194, 285
Baluch, 280
Baluchis, 239
Banarasidas, 129
Bandar Abbas, 308
Bandar Khambayat, 175
Banias, 125, 127, 230, 256, 258, 260
Banjaras, 116, 129, 229, 255, 284, 292
Banking establishment 131-3
Bantam, 157-8, 308, 324
Baqqal, 229
Barbary, 41, 51
Barbosa, 41, 242, 247, 253, 256
Bareilly, 48
Baroda, 51, 292, 299
Baruis, 287
Bassein, 71, 285
Bay of Bengal, 193
Bazar, 259
Bazuha, 62
Beermahal, 62
Benares, 39, 40, 41, 47, 48 (cloth manufacture), 52, 77, 240
Bengal, 4, 9, 35-41 (passim), 44, 45, 46; centre of cotton manufacture, 49-50; export of cotton goods, 53; forests, 58; fisheries, 60; iron in, 62; salt in, 67, 68; saltpetre in, 69, 76; food supply, 141; ports, 180, 182; exports from, 182; Nawabs, 320; See also, 230, 231, 243, 249, 253, 257, 269, 270, 271, 278, 280, 281, 285, 299, 300, 301, 302, 304, 306, 311, 313, 314; famines: (1584-85), 281; (1769-70), 289; (1770-71), 268; (1943-44), 268
Beoparis, 255
Best, Capt., 297, 309
Bettle leaf, 22
Bhadra, 81
Bhadralok, 259
Bhagalpur, 45, 47
Bhakkar, 270; famine (1587-88), 280
Bhera, 71
Bhutan, 158
Bidar, 10, 51
Bihar, 34, 35, 38, 46, 47, 231, 257, 270, 278, 281, 284, 300, 313 cotton manufactures, 49; lac, 58 (also fish); saltpetre, 69, 76, 325; famine (1670-71), 280, 282
Bihar Sharif, 49
Bijapur, 58 (lac), 65, 250
Bima, 322
Bimalapatam, 180
Biragarh, 65
Birinj, 238
Blankets, 44
Bleaching, 46
Boats, kinds, 108-9
Bokhara, 158
Bombay, 66, 207, 218, 257, 306
Borax, 70
Borneo, 41
Bowrey, 49, 69
Brahmanas, 236, 258, 282
Brass, 70
Bridges, 112-3
Brij Narain, 223
British Commercial Policy, 311, 312
Broach, 46, 51, 76, 77, 249, 283, 292, 298, 299
Broker, see Middlemen, 130-1
Bronze, 71
Bruton, 50
Bubonic plague, 271
Buchanan, 47, 235, 253
Building industry, 34
Bundelkhand, 61
Burhanpur, 10, 46, 47, 51, 69, 230, 284, 288
Burma, 47
Business Organization, 131-3
Butler, Sir Harcourt, 268
Buxar, 313

C

Cabulleys, 42
Cachar, 231
Caesar Frederick, 40, 41
Cairo, 51, 156, 305
Calcutta, 206, 207, 218, 300
Calico, 50, 76
Calicut, 50, 76, 178, 212, 250, 252
Cambay, 34, 36, 40, 212, 249, 283, 284, 298; gulf of, 52; ports, 175-7
Canals, 10-11
Candala, 236
Cane sugar, 26-27
Cannanore, 309
Cannibalism, 280, 286, 328
Cape of Good Hope, 36, 159, 317, 323
Capitalism, 225; capitalistic enterprises, 225; inchoate developments towards, 225-34; production, 226-8; distribution, 228-32
Caravan trade, 305
Carpet weaving, 44
Cartazes, 324, 326
Carts, 110, 116
Cassa, 49
Cassa Verona, see Kasi Viranna, 128
Castes, 76
Celebes, 285
Central Asia, 39, 238, 323
Central India, 62, 64, 302; trade with, 158
Ceylon, 52, 179, 194, 236, 252
Chabaspur, 49
Chainpur, 61
Chandannagar, 207
Chands, 256
Charkha, charkhi, 45, 46
Charity houses, 287
Chatarman, 36, 60
Chatgaon, see Chittagong
Chatuspathis, 254, 258
Chaudhuris, 260
Chaudhury, K. N., 79, 194, 325 (passim)
Chaul, 40, 66
Chautaha, 49
Chutar, 48
Chay, 47
Chellibis, 127
Chettis, 125, 127
Chim Chim, 231

MUGHAL ECONOMY
China, 38, 39, 40, 52, 80, 179, 318, 321, 331
Chinsurah, 207
Chintz, 47, 48
Chittagong, 36, 41, 182, 252, 256
Chirah, 51
Chhota Nagpur, 42, 60, 61
Cloth see under cotton
Clerks, 258
Coastal trade, 144-6, 284, 285; routes, 145; shipping interests, 145; organization, 146
Cochin, 178, 207, 249, 309
Coffee, 28
Coffres, 252
Colombo, 179
Commerce, 107-200; categories, internal and external, 107; transport and communications, 108-18; marketing organization, 121-38; internal trade, 141-8; integrated market, 146; foreign trade, 149; organization, 184; decay of foreign trade, 314; estimate of volume, 192-5
Commercial centres, 210
Commercial factors and towns, 206-8
Commercial revolution, 311
Common food, 278
Company's trade, 285
Constantinople, 212, 213, 216
Conti, Nicolo, 36, 212
Copper, purposes, 61; not imported, 61; sources of supply, 60; mines, 60; Japanese, 62; Swedish, 62; shortage, 62; Portuguese import, 62; copper-smith, 62
Coromandel 230, 231, 248, 249, 269, 271, 284; Coast ports, 179-80; Coast, weavers' settlements, 50; export of cotton goods, 53
Correa, 249
Coryat, T., 249
Cottage industries, 26
Cottage system, 321
Cotton, 15-16, 76; manufacture of cloth, 44-54; patterning & printing centres, 47; operational processes, 44-45; specialization, 45; spinning and weaving, 45; commodity production, 46; centres of manufacture, 47-52; internal consumption, 52; centres of export, 52-53; importance of handicraft, 53; export of cloth, 53-54; development in 16th & 17th centuries, 54
Court of Directors, 306, 314
Cowries, 236
Credit, 131-3
Crops, multiplicity of, 13; distribution of, 9; low grade, 14-15
Cuddalore, 207
Cultivation & cropping, 8-11
Cunningham, 225
Currency chaos, 302, 329
Cuttack, 180
Cuttenee, 42
D
Dabhol, 309
Dabul, 52
Dabullers, 308
Dacca, 36, 46, 50, 76, 182, 213, 230
Dadabhai Naoroji, 296
Dadan, 82, 227, 257, 298, 320
Dadni, 78, 306, 311, 331
dahseri tax, 287
dallals, 255
Damascus swords, 319
Dara, 229
Daryabad, 48, 76
daryabadi, derriabadi, 48, 76
dastak, 301, 306
Deccan, 9, 47, 64, 240, 245, 270, 271, 278, 281, 282, 285, 290, 304, 319, 328; states, 250; Deccani, 308
De Jongh, W. G., 245, 249, 307, 311
De Laet, 60, 64, 76, 213, 240, 242, 243
Delhi, 10, 39, 205, 213, 214, 239, 278, 280, 281, 289, 306, 328 289, 306, 328 province as centre of cotton manufacture, 48, 52, 62, 76
Della Valle, see Pietro Della Valle
Deposit banking, 131
Depressed classes, 237
Dhebar, 10
Dhenkli, 10
Dipalpur, 9
Dharamgaon, 51
Dharmapura, 287
dhunyas, 45
Diamonds, 64-66; mines, 64
Dinajpur, 45
Dipchand, 231
Direct taxation, 298
Diu, 230, 285, 309
Division of labour, 99
Diwani, 313
diwans, 258, 301
Dom, 236, 237
dopatta, 239
Downton, N., 194, 309
dowries, 240
Drought, 271, 278, 284
Drugs, 19-20
Dutch, 9, 39, 41, 251, 252, 269, 285, 300, 308, 311, 326, 329; efforts to import Japanese copper, 62; trade, 160-1; methods of trade, 187-9; ships, 223, 307
Dutt, R.C., 296
Dutt-Hamilton controversy, 312
Dyeing, 46; colours used, 47

E

Earl Hamilton, 225
East Africa, 36, 41
East Coast, 37, 231, 271, 285, 290, 326; cotton goods of, 50
Eastern Ghats, 35
East Indies, 309, 312, 323, 325
East Mediterranean, 41
Eastern goods, 309
Echbarrys, see Akbaris
Economic decline of India, 313f
Economic drain, 305
Egypt, 305
Egyptian markets, 309
England, 194, 305
328, 330 ; merchants, 252, 281, 292, 298, 310
English men, 230, 269, 278, 284, 285, 299, 306, 308, 309, 310, 311, 326, 329
—factory, 292
—monopoly of export, 313
—settlements at Hariharpur, 310
—ships, 223, 285, 307, 308
—trade, 300 ; methods of trade, 187-9
Engrossing, 283, 284, 290
Eri silk, 247
Escheat system, 238
Ethiopia, 41, 51
Europe, 51, 52, 76, 149 ; European trade, 159 ff ; articles of trade, 16th century, 162-3 ; changes in 17th century, 164-6 ; problem of purchasing power, 166-7 ; effects of advent of Dutch & English, 168-74 ; Asiatic trade methods, 187-9 ; India’s absorption of precious metals, 190-1 ; export trade, 284 ; Europeans, 237, 284, 285 ; piracy, 300, 307, 308 ; navigators, 307 ; naval supremacy, 311 ; companies’ trade, 323 ; private trade, 323
Exchange, 131-3

F

Faizabad, 48
Faizi Sirhindii, 271
Famines, nature and causes, 268-70 ; incidence, 270-8 ; results, 278-86 ; relief measures & policy, 286-91 ; recovery, 291-2
Far East, 41, 155, 323
Farrukhsiyar’s firman, 189, 301, 306
Farrukhabad, 48
Fatehpur (Sikri), 41, 43, 44, 48, 71, 216, 217
Fibres, 15-16
Finance, 131-3
Finch, W., 173, 252, 308
Firuz Shah, 10, 251
Fiscal policy, 297 ; discrimination in, 298
Fisheries, 58
Fitch, Ralph, 36, 40-42 (passim), 48, 49 ; journey, 182, 212, 243, 246
Flax, 15
Flemingo, 308
Flemish, 308
Flywhisks (of Tibet), 236
Foodgrains, 13-15 ; as cottage industries, 26 ; shortage, 282
Forced labour, 97-98
Foreign Trade, 149-200 ; general distribution, 149 ; trade routes & means of transport, 150-2 ; dangers to, 152 ; nature & pattern of Asiatic & African trade, 152-5 ; international trade emporiums in Asiatic seas, 155-9 ; Indian settlements abroad, 158-9 ; trade with Europe, 159-61 ; general course of foreign trade in 16th century, 162-3 ; changes in 17th century, 164-74 ; chief seaports, 174-84 ; organization of commerce, internal & international, 184-8 ; balance of
trade, 189-92; volume, 192-5; mercantile companies, 299
Forest land, 2; produce, 58
Forster, William, 305
Foster, Sir William, 286
Fotah, 51
France, 321; French, 161, 269, 306, 310
Fraud, 284
Fruits, 22-23
Fryer, 243, 278, 321
Furniture, 33
Futwah, 49

G

Galicha, 49
Ganjam, 45
Gaur, 212, 281
Gelapores, see Jalalpuris
Gemelli Careri, 243
Geographical factors and towns, 207-8
Georgia, 305
German Historical School, 225
Ghogah, 35
Ghulam Md. Khan, 48
Gilgit, 60
Gingelly Coast, 180
Glass, 35
Goa, 34, 36, 66, 71, 179, 207, 230, 240, 252, 258, 311
Gokul, 48
Gold, production, 60; uses, 60; procurement, 60; goldsmiths, 61
Golkonda, 10, 35, 46, 47, 50, 63, 64, 76, 179, 194, 230, 250, 288, 292, 319
Gombroon, 230

Gomosta, 255, 296, 306
Govindapur, 300
Great Britain, 312
Gumlac, see Lac
Gurudaspur, 67
Guti, 65
Guzees, 48
Gwalior, 62

H

Habib, Irfan, 5, 8, 229, 290, 317
Habshis, 240
Hadi, 236
Haji Qasim, 231
Haji Said Beg, 231
Hakil Gopes, 237
Hamilton, Alexander, 43, 64, 69, 127, 213
Hamilton, C. J., 169
Hammam, 49
Handicarfts, 32-37, 307
Handloom (cotton) products, 53
Haricharan Das, 280
Harirupur, 50
Hawkins, William, 76
Hemp, 16
Hemu, 286

MUGHAL ECONOMY
Herba, 41
Hides, 33
Hijili, 181, 252
Himalayas, 61
Hindustan, 226, 270
Holwell, 304
Hormuz, 155
Horticultural Production, 22-23, 318
Hotton, Christopher, 194
Household utensils, 32
Hovhannes, 129
Hughes and Parkar, 49
Hughli, 39, 69, 181, 252, 253, 299, 300, 310
Hundi, 132, 232, 322
Hundwi, 302
Hyderabad, 216, 304

I

Imamdars, 257
Imperial capitals, 210
India, 2, 305, 319; archipelago, 230, 311; Asiatic and African trade, 305; balance of trade, 189-92, 195; commercial contacts, 149; commercial decline, 299; economic decline, 296-314; overland routes in Asia, 150-1; joint stock companies, 231; settlements abroad, 158-9
Indian Ocean, 150; international sea-routes 151-2; dangers, 152
India’s chief seaports, 174-84; Western Arabian Coast, 174-9; East Coast, 179-82; their relative importance, 182; —shipping, 307, 308, 310-12 (passim)
Indigo, 16-17; as a commercial crop, 28-30, 283
Indo-Arab cooperation, 157
Indo-Gangetic plains, 2, 271
Indo-Russian trade, 158
Indus basin, centre of cotton manufacture, 51-52; delta ports, 175; valley, 269
Industrial crops, 15-19
Industrial middle classes, 328
Industrial Labour, 93-103; classes, 93-4; factors influencing it, 94-103
Industrial Organization 26-106; nature, 75-106; industrial production, 75-92; comparison with Russia, 75; Moreland’s views, 75-76; specialization, 76; localization, 76; jajmani, 77; dadni, 77-78; patterns and trends of organization, 77-88; technology, 88-92
Industrial production, compared with Eastern & Western Europe, 75-76; specialization through castes, 76; localization 76; market-oriented, 76-77; attitude of artisans, 77
Industrial Revolution, 296, 312, 330
Inflow of specie, impact on economy, 192
Inland emporiums, 210
Inland Private trade, 306
Inland security, 146-7
Inland trade, features, 141-2; inter-regional interdependence, 142;
routes, 142-3; trade centres, 143-4; also 284, 298, 306
Insurance, 133
Internal Trade, see inland trade; coastal trade, 144-6; carrying agency, 147-8
Investments, 77
Iqtidar Alam Khan, 259
Iran, 285
Iron and steel, 62-64; uses, 62; self-sufficiency, 62-63; smelting of ore, 63; export to Batavia, 63; disposal, 63-64
Irrigation, artificial, 9-10; forms, 11
Ishaq Beg, 131
Ilampur, 49
Islands, 52, 53
Italy, 321

J
Jafar Khan, 301
Jagat Seths, 126
Jagirdars, 235, 256, 257, 288, 289, 297, 323
Jahanara (Princess), 229
Jahangir, 8, 39, 46, 229, 238, 253, 269, 271, 281, 297; his waterworks, 10; firman of 1624, 299; karkhanas, 82, 83; ships of, 228
Jahangiri, 49, 64, 65, 81, 82
Jain merchant, 129
Jaipur (Orissa), 81
Jaisinghpura, 212
Jajmani, 77-78, 236, 320; decline, 78-79
Jalalabad, 48
Jalalpur, 48
Jalalpuris, 48
Jalor, 70
Janahwar, 51
Jamawars, 42
Jamuna canal, 10, 291
Japan, 39, 179, 184, 331
Jast, 70
Jaunpur, 48, 77, 217
Java, 41
Jedda, 156, 323
Jessore, 252
Jesuit missions, 27
Jewels, 71
Jews, 129
Jhona, 48
Ji Ram Shah, 130
Jizya, 298
Jogipura, 287
Joint Stock Co. (Anglo-Dutch), 188
Jourdain, 194, 245
Jute, 16, 44; jute cloth, 44

K
Kabul, 52, 239, 252
Kalabatun, 42
Kalinjar, 62
Kambhayat, 36, see Cambay
Kamsukha, 49
Kamthana, 10
Kanakaraya Mudali, 231
Kanarese ports, 177-8; range of trade, 178; Coast, 251
Kandahar, 52
Kandiaro, 69
Kanpur, 291
Karim, 156
Karkhanas and the system, 82-88, 227, 228, 257, 320, 327; Europe

MUGHAL ECONOMY
companies' karkhana, 85; private factories, 85; decline, 86
Karnatak, 34
Kashida, 42
Kashmir, 38, 39, 41-44 (passim), 52, 63, 68, 71 (stone), 77, 227, 231, 239, 243, 270, 271, 279, 280, 288
Kasimbazar, 39, 44, 46, 76, 79
Kasi Viranna, 79, 126, 127
Kavi Kankan Chandi, 236
Kayasthas, 236, 268
Kazor, 71
Kerriabads, see Khairabad, Khairabad, 48, 76
Khafi Khan, 289
Khairpura, 287
Khalsa, 2
Khandesh, 10, 51, 65
Khara, 51
Kharif, 269
Khara, 48, 51
Khutris, 125, 129, 258, 260
Khem Chand, 130, 231
Khizrabad, 291; Safidum canal, 10
Khojas, 127
Khorasan, 48, 50
Khud kasht, 226, 241, 327
Khurram (Prince), 131, 228, 229, 299, 301; ships, 228
Khwaja Sarhad, 129
Khwaja Wajid, 129, 231
Kindersley (Mrs), 48
Kols, 237
Kolar, 60
Komatis, 125, 127, 129
Konkan, 69; ports, 177, 278
Korena, 237
Kuch Bihar, 38
Kullur, 64, 65
Kulpi, 77
Kumaon, 60-62 (passim)
L
Lac, 58
Lahore, 9, 33-36 (passim), 40, 42-44 (passim), 47, 48, 50-52 (passim), 58, 60-63 (passim), 67, 205, 213, 214, 217, 239, 243, 245, 271, 278, 281, 289, 291
Lahari Bandar, 32, 303
Lakhawar (Lackhoure), lakhor, 49, 76, 227
Lal, K. S., 5
Lalganj, 69
Lander, 77
Land revenue, 226
Land transport, 110-15
Lapis lazuli, 71
Laskers, 249
Lead, 70
Leather goods, 33
Levant, 159
Linschoten, 41, 246, 249, 258
Lisbon-India route, 193
Literate classes, 258
Localization of industries, 76
Lohardaga, 60
Lunar, 35, 69
London, 212, 213
Low castes, 237
Lower classes, 235ff
Lucknow, 48
M
Macao, 158, 324
Macassar, 285
Machhiwara, 51
Madag, 10
Madapallam, 50
Madras, 47, 50, 68, 206, 218, 252, 278, 301, 306, 325
Mahajans, 236, 255, 256, 260, 322
Maharashtra, 278, 285
Mahuan, 38
Maize, 9
Malabar, 34, 35, 36, 50, 58, 67, 69, 230, 231, 247, 248, 249, 284, 285, 308, 309, 310 Coast, 290; pepper, 285; pirates, 300; ports, 178-9; traders, 308
Malacca, 36, 50, 52, 53, 157, 193, 194, 311, 323, 324
Malay, 231, 314
Malda, 39, 49
Maldive, 194
Malpur, 69
Malwa, 47, 51, 52, 58, 245, 249, 269, 284, 288, 303
Mandelslo, 238
Mandu, 281
Manilla, 158, 324
Manrique, 48, 50, 131, 213, 243, 244, 245, 247, 252
Manucci, 4, 9, 49, 69, 242
Manure, 9, 11
Maratha-Nizam conflict, 303
Marketing organization, 121-38
Marwar, 271, 278, 279, 281; Marwaris, 125, 126
Masulipatam, 36, 46, 47, 50, 66, 69, 77, 179, 194, 207, 213, 239, 252, 283, 292
Marx, K., 225, 227, 232, 254
Mau, 47, 48
Max Weber, 225
Means of transport, manufacture of, 35-37; on land, 116-8
Mecca, 156
Medieval market, categories, 121-5
Mediterranean ports, 156, 309
Megalith, 250
Mehsi, 34
Mercantile communities, 260; classes, 328
Mercantile theory, 190-2
Merchants, great, 126-8; independent, 128; small, 128; free trading communities, 131; general idea and commercial morality, 137-8; Asian merchants in internal trade, 147-8; merchant vessels, variety of, 193; merchant capital, 232
mercools, mercoolees, 48, 49
Metal industries, 32
Metals & minerals, 60-71
Methwold, 247, 291
Mewar, 10
Middle classes, 254-60, 328
Middle East, 323; importance in trade, 149
Middleman trade, 130; middlemen’s share, 98-99
Middleton, Sir Henry, 194, 309
Mihrkul, 48
Milburn, 194
Minerals, 60-71; per capita income, 71
Minor minerals, 70-71
Mirasdars, 257
Mir-i-ab, 11
Mir Jumla, 64, 127, 238

MUGHAL ECONOMY
Mirzapur, 48
Mishra, B. B., 229, 258, 259
Mixed goods, 42
Mobility of labour, 100
Mocha, 156, 159, 194, 230, 308, 309, 310, 311, 323
‘Model’ towns, 211
Mogustan, 308
Money lending, 132-3
Mongols, 326
Monopolistic controls, 298
Monserrate, 84
Mookerji, R. K., 5, 237
‘Moorees’, 50
Morris de Morris, 229
Mozambique, 179, 252
Muga, 42
Mughal Deccan, 269
Mughal India, 226, 255, 291, 317; connotation of term, 2
Mughal Empire, 39, 240, 296, 297, 303; Raj, 257
Mughal-Maratha conflict, 303, 304
Mughal shipping, 299
Mughal tradition, 303, 304
Muhammad Hashim, 270
Muhammad Shah, 10, 302
muhris, see ‘Moorees’
Mukundaram, 180, 236
Multan, 11, 33, 47, 51, 62, 67
Mundy, Peter, 39, 49, 194, 249, 279, 281, 283, 288, 290
Muqarrab Khan, 229
Muscovy, 51
Muslim capitals, 211
Muslin, 47, 238, 286
Mylapore, 207
Mysore, 45, 60, 67
N
Naddaf, 45
Nadir Shah, 303, 305, 306
Nagpur, 218
Najibabad, 48
Nakhudas, 309
Nalwa, 51
Narmada, 247
Nanagarh, 69
Naptha, 70
Naqvi (Mrs.), 52
Narnol, 61
Narsapur, 36, 47, 50
Nasarpur, 69
National economy, 225; educational system, 312; revenue, 295
Naungarh, see Nanagarh
Naval blockade, 188; weakness, 300
Navapura, 51
Navsari, 76, 283
Nawabs of Bengal, 231
Nawgaon, Nayagaon, 48
Negapatam, 179, 207
Neglect of science and technology, 312
Nikitin, Athanasius, 4, 212, 242
Nilgiris, 35
Nizamis, 127
Nizampatam, 47, 50
Nizamuddin, 204, 212, 278
INDEX
Nobles & trade, 187, 238
Non-agricultural production, 32-106; goods, 226; handicrafts, 32-37; textile industries, 38-57; forests & fisheries, 58-59; labour market, 226; metals & minerals, 59-74; sector, 226
Nundownepore (? Nundun), 49
Nuniz, 242
Nurjahah, 127; ships of, 228
Nuruddin Muhammad Tar Khan, 10
Nurul Haqq Dihlavi, 271
Nygome, see Nawaqon

O

Ochre, 70
Oedjang, 311
Oil pressing, 27
Oil seeds, 15
Olas, 245
Omrahs, 239, 240
Opium, 28
Organization of commerce, 184-9: cosmopolitan body, 184-6; role of ruling classes, 186-7; Europeans & methods of trade, 187-9
Orissa, 243, 252, 284, 299, 300, 310, 313; weaving settlements, 50; lac, 58; fish, 58, 180
Orme, Robert, 49, 76
Ormuz, 38, 155, 230, 323
Orpiment, 70
Ovington, 244, 321

Padma, R., 304
Pahi, see upari
Paikars, 255
Painam, 49
Pakli, 60
Palm leaf, 33
Panipat, 48
Pannah, 65
Paper, 33-34
Pangue, 131
Parekh, 255
Paris, 212, 213
Parkalas, 50
Parsis, 125, 127; shipwright, 227
Patna, 35, 38, 39, 40, 41, 43, 49, 52, 60, 131, 213, 214, 227, 282
Patoles, 40
Pattan, 40, 51
Pearls, 71
Pearl-fisheries, 58
Pegu, 36, 41, 50, 52, 53, 58, 61, 314; ports, 183, 194
Pelsaert, F., 9, 48, 49, 76, 213, 237, 239, 240, 242, 243, 244, 248, 250, 298, 307, 311, 321
Peninsular India, 69
Perak, 311
Percalles, Perculles, see Parkalas
Perfumery, 33
Persia, 41, 228, 230, 239, 252, 292, 305, 308, 310, 324; carpets, 43, 48, 50, 51, 52, 194; civil wars in, 305; Persian Gulf, 155, 159, 223, 230; silk trade, 228
Petapoli, 50, 180

MUGHAL ECONOMY
INDEX

Phad, 10
Philippines, 41
Pietro Della Valle, 247, 248, 249, 250, 256,
Pintados, 50
Pipli, 69, 180, 300
Piracy, 310
Pir Bohra, 131
Pirenne, 225
Plaisted, W. Bartholomew, 305
Plassey, 305, 313; plassey plunder, 306; presages of decline before & after, 305
Poland, 51
Political capitalism, 228
Pondicherry, 207
Poppy, 19
Population, 4-5
Porto Piqueno, see Satgaon
Portugal, 228
Portuguese, 36, 240, 252, 253, 285, 299, 308, 318, 323, 325, 328; ports in E. Africa, 157; advent, 159-60; maritime empire, 187; methods of trade, 187
Pottery, 34
‘Priamon pepper’, 285, 308
Prices, 133-5; Price Revolution, 302
Prior, Thomas, 191
Profiteering, 284
Provincial capitals, 210
Pulicat, 50, 69, 179, 229
Puna, 218
Punjab, 9, 35, 41, 43, 60, 67, 231, 243, 271, 279, 281, 289, 303, 324
‘Putting out’ system, 227, 320
Pyramid, 36, 41, 53, 67, 318

Q
qaba, 239
qaimkhani, 49
Qalghai, 42
Qandahar, 63
Qanungoes, 260
Queda, 194, 311
Quilts, 283
Qutni, 42

R
Rahat, 9
Rahmout, 49
Rai Balchand, 300
raiyyatwari, 297
Rajapur, 69
Rajasthan, see Rajputana
Rajgir, 34
Rajputana, 58, 61, 62, 243, 256, 260, 302, 324
Rajsagar, 10
Rander, 256
Rangrez, 47
Rann of Cutch, 67
Raolkonda, 65
Rasikdas Krori, 270
Ravi canals, 291
Rawat, 49
Raw materials, 100
Raybagh, 69
razai, 49
Red Sea, 36, 52, 53; ports, 156, 159, 193; trade, 228, 229, 299, 305, 309, 310, 324, 329
Relief system, 269
Religious factors and towns, 208
Rest houses, 113-5
Rhea, 16, 42
Rice, 14-15
Roe, Sir Thomas, 137, 228, 229, 237, 238, 240, 299, 309, 324
Road construction, 111-2
Rohilkhand, 216
Rohri, see Lahore, 214
Routes and centres, 142-4
Royle, J. K., 312
Rubies, 71
Rui, 71
Schorer, 249
Seaports of India, 174-84
Seasons, seasonal winds, 193
Selimabad, 252
Selimpur, 49
Semianos, 48, 76
Semi-capitalist merchants, 231
Semyon Malenky, 158
Serfs, 250
Sericulture, 38; decline, 41
Seshachala Chetty, 231
Seths, 256; of Murshidabad, 231
Shah Abbas I, 228
Shahbazpur, 49
Shah Ismail Safavi, 226
Shai Kh Farid, 287
Shaista Khan, 182, 249, 300
Shahjahan, 8, 10, 39, 46, 50, 84, 240, 268, 269, 271, 288, 289, 298, 299, 301, 311, 319
Shahjahanabad, 60, 212, 213, 216, 291
Shahjahanpur, 48
Shahranpur, 48
Shahzadpur, 34
Shamsabad, 67
Shawls, 43-44; ‘pashtu’ shawls, 236
Shergarh, 69
Sher Shah, 8, 203, 206, 287
Shihabuddin Ahmad Khan, 10
Shihabuddin Talish, 297
Ships and shipbuilding, 36-37, 64
Shivaji, 204, 212, 230
Shroffs, 131-3, 231, 232, 236, 255
Shuja, 301
Shujauddin, 306
Shyam Chand, 231

MUGHAL ECONOMY
INDEX

Sialkot, 39, 51
Siam, 184, 314
Silk, 16, 38-42
Sillim, 79, 320
Silver, 60, 61
Sind, 35, 37, 51, 58, 67, 243, 271, 282, 292, 302, 309, 324
Sind Sagar Doab, 67
Singhiya, 69
‘Single producing market’, 210
Sirhind, 9, 48, 270
Siri, 216
Sironj, 51, 290
Skins, 33
Slaves, 279; slave market, 252, 253; slavery, 328
Smith, V. A., 268, 286, 288
Smuggling, 284
Soap, 35
Socioeconomic results of famine, 278-86
Social stratification and standard of life, 235-60
Socotra, 308
Sodaga, see Saudagar
Sohra, 70
Soil washings, 319
Somaliland, 323
Sombart, Warner, 225
Sonargaon, 46, 47, 49, 50, 76, 182
Soumelpur, 60
South Coromandel, 271
South East Asia, 76, 155, 159
Southern India, 252, 313, 319
Spinning yarn, 45
Spirits, 283
Srinagar, 288
Sripur, 182
St. Thomas, 252
Stamp duty on cloth, 297
Stavorinus, 300
Steel, 64
Stones, 71
Sudras, 236, 259, 279, 282
Suez, 156, 305, 323
Sugar cane, 17-18
Sujan Rai, 9, 36, 60
Suket Mandi, 62, 63
Sukkur, 51
Sulphur, 70
Sultanpur, 48, 281
Suma Oriental, 180
Sumatra, 36, 41, 158, 308, 324, 329
Sunderbans, 252
Surat, 36, 40, 46, 51, 52, 63, 66, 194, 205, 206, 213, 228, 230, 231, 252, 256, 278, 281, 283, 284, 285, 288, 291, 292, 298, 299, 300, 301, 309, 311; decline, 217
Sutanati, 300
Syads, 310
Sylhet, 253
Syria, 41, 51

T

Tailoring, 33
Takli, 45
Talukdars, 257
Tamluk, 252
Tanda, 49
Tank irrigation, 10
Tapidas, 131
Tarbiyat Khan, 289
Tartary, 39, 41, 51
Tasar, 41, 42
Tatband, 44, 247

371
Tattah, see Thattah
Tavernier, 9, 39, 40, 41, 48, 51, 60, 64, 65, 69, 108, 131, 237, 243, 245, 258, 300
Tawari, 36
Taxation, burden of, on labour, 100-1
Technology in industry, 88-92
Tenasserim, 36, 179, 194
Terry, E., 9, 194, 244, 258
Textile industries, 38-57, 312; silk, 38-42; mixed goods, 42; wool, 42-44; saan-hemp and jute, 44; cotton, 38, 44-54; associative processes, 54; estimate of volume of production, 54
Thar desert, 278
Thattah (Sind), 35, 36, 42, 51, 63, 67, 69, 71, 109, 205, 213, 218
Thevenot, 213, 230, 243
Tibet, 158
Tiku, 308, 309
Tipperah, 70
Tobacco, 9; as cash crop, 27-28
Tod, 279, 281
Toda Bhim, 61, 71
Tols, 236, 258, 312
Tome Pires, 180
Tor, 323
Towns, 4; decay of, 216-7; see ch. on ‘Urbanization’
‘Toy’ trade, 325
Trade, see commerce
Trade routes, interlinking of, 142
Trade and towns, 208
Trans Caucasus, 324
Transport and communications, 108-18

Tungabhadra R., 10
Turkestans (W.), 158, 324
Turkey, 41, 48, 50, 51, 239, 305, 310
Turks, 36, 156
Turquoise, 71
Tus, 43

U

Udaisagar, 10
Umichand, 231
Uttar Pradesh, 35, 257
Upari, 241
Upper classes, 238-41
Urbanization, 201-24; aspects, 201-20; towns and economic development, 220; market, 226; artisans, 227; intelligentsia, 236; slavery, 253; European Co.’s settlements, 212

V

Vaid, 258
Vaisyas, 236
Vajrakarur, 65
Van den Broecke, 311
Van Leur, 228, 232
Vansittart, Henry, 313
Van Twist, 237, 248, 249, 256, 288, 307
Varthema, 41, 44, 242, 249
Veetpur, 40, 41
Vegetables, 22
Verelst, 304
Vetapallam, 50
Villages, 2-4
Viravasaram, 50

MUGHAL ECONOMY
Vijaynagar, 2, 10, 41, 125, 186, 240, 242, 249, 250, 271, 303
Virji Vora, 126, 230, 231, 256, 322, 328
Vizagapatam, 45, 180
Voluntary enslavement, 279, 280

W

Wages of artisans, 94-97
Wakils, 258
Water transport, 108-10
Watragiri, 65
West Asia, 252, 323
West Coast, 246, 256, 285, 326
Western Deccan, 248
Western Ghats, 35
Western India, 50-51, 231, 244, 247, 257, 258, 259, 268, 284, 299, 307
Western Europe, 225, 226, 325, 327
Wheat, 13-14

Wines, 30
Wood manufactures, 33
Wool, 42-44

X

Xaga, 244
Xavier, Jerome, 212

Y

Yarn, 45, 46
Yerua, 42

Z

Zafarkhani, 49, 289
Ziauddin Barani, 251
Zamindars, 2, 226, 235, 256, 257, 259
Zamindari mushtarka, 3
Zamorin, 186
Zardozi, 42
Zinc, 70
CORRIGENDA

<table>
<thead>
<tr>
<th>Page No.</th>
<th>Line No.</th>
<th>Read</th>
<th>For</th>
</tr>
</thead>
<tbody>
<tr>
<td>34</td>
<td>5</td>
<td>Mehshi</td>
<td>Meshi</td>
</tr>
<tr>
<td>49</td>
<td>28</td>
<td>woman</td>
<td>women</td>
</tr>
<tr>
<td>84</td>
<td>6</td>
<td>varieties</td>
<td>variteties</td>
</tr>
<tr>
<td>112</td>
<td>25</td>
<td>continuous</td>
<td>continuous</td>
</tr>
<tr>
<td>113</td>
<td>22</td>
<td>accompanying</td>
<td>accompanying</td>
</tr>
<tr>
<td>129</td>
<td>17</td>
<td>Rajput</td>
<td>Rajpur</td>
</tr>
<tr>
<td>131</td>
<td>1</td>
<td>dalals</td>
<td>dalas</td>
</tr>
<tr>
<td>166</td>
<td>10</td>
<td>providing</td>
<td>proving</td>
</tr>
<tr>
<td>168</td>
<td>20</td>
<td>established</td>
<td>establish</td>
</tr>
<tr>
<td>192</td>
<td>32</td>
<td>J. Volume</td>
<td>I. Volume</td>
</tr>
<tr>
<td>227</td>
<td>22</td>
<td>receiving</td>
<td>receiving</td>
</tr>
<tr>
<td>231</td>
<td>12</td>
<td>Ranga</td>
<td>Range</td>
</tr>
<tr>
<td>244</td>
<td>8</td>
<td>India</td>
<td>Indian</td>
</tr>
<tr>
<td>247</td>
<td>15</td>
<td>jute⁸⁶</td>
<td>jute</td>
</tr>
<tr>
<td>250</td>
<td>2</td>
<td>Pelseart that</td>
<td>Pelseart is that</td>
</tr>
<tr>
<td>284</td>
<td>12</td>
<td>detected¹⁸</td>
<td>detected</td>
</tr>
<tr>
<td>285</td>
<td>21</td>
<td>by the English</td>
<td>by English</td>
</tr>
<tr>
<td>302</td>
<td>26</td>
<td>farmed</td>
<td>formed</td>
</tr>
</tbody>
</table>

Line duplicated p. 102, line 3 & p. 166, line 34
D. should be deleted from p. 155, line 26

Addenda

CATALOGUED:

Economy — Mughal
Mughal — Economy