SELECTED THEMES IN ECONOMIC HISTORY OF MEDIEVAL INDIA

III SEMESTER

ELECTIVE COURSE

(HIS3 E04)

M.A. HISTORY

(2019-Admission Onwards)

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CONTENTS

Module I: Agriculture in Medieval India **5**

Module II: Non- Agricultural Production **29**

Module III: Trade, Commerce and Money **61**

Module IV: Urbanization **112**

Module I

Agriculture in Medieval India

Land

The medieval India had a vast area of land cultivated by peasants residing in its geographical area. The agricultural technology owned up by the peasants in India were no less inferior than the technology used by peasants in other parts of the world. The peasants cultivated the traditional crops but when they were exposed to the new crops they produced it with the same zest and zeal.

Land was available in abundance all through the medieval period. Thus, the high land: man ratio was an important feature of the medieval agrarian structure. It is very difficult to assess the actual size of landholdings per *asami* (household) during the Sultanate period. Delhi Sultans, particularly Alauddin Khalji and later Muhammad Tughlaq experimented with measurement of the agricultural land. The essence of Alauddin Khalji's agrarian reforms was to bring the villages in closer association with the government in the area extending from Dipalpur and Lahore to Kara near modern Allahabad. In this region the villages were to be brought under *Khalisa* (land under the ownership of crown), i.e. not assigned to any of the nobles as *iqta*. Land assigned in charitable grants were also confiscated and brought under khalisa. Further, the land revenue (*kharaj*) in this area was fixed at half of the produce, and assessed on the basis of measurement (*paimaish*).

Muhammad Tughlaq tried to revive Alauddin's system and to extend it all over the empire. However, his measures led to a serious peasant uprising in the doab. But he tried to improve cultivation by changing cropping pattern. He planned to extent cultivation in the area so that ‘one span of land would not remain uncultivated.’ The intention was to bring barren (*banjar*) land under cultivation, not uncultivable (*usar*) land, as Barani asserts. Barani says that the entire scheme failed, and during three years, not a thousandth or hundredth part of wasteland was brought under cultivation.

Some regional studies pertaining to the Mughal period do shed some light on the actual size of land holdings per *asami* (household) during the Mughal period. Dilbagh Singh has calculated for eastern Rajasthan the size of landholdings per *asami* as high as approximately 90 *bighas*. Since land was in abundance during the Mughal period it was the state’s concern to keep the peasants tied to the land. Aurangzeb in his *farman* (royal decree) to Rasikdas (1665-66) ordered that if the peasants have fled the *amils* (revenue collectors) should try to bring them back. All through the state’s interest was to expand the cultivation for the purpose of increasing its revenue resources.

During the time of Akbar, for purposes of laying down the state demand, both productivity and continuity of cultivation were taken into account. Lands which were continually under cultivation were called *polaj* and lands which were fallow (*parauti*) for a year, paid full rates when they were brought under cultivation. *Chachar* was lands which had lain fallow for three to four years due to inundation etc. It paid a progressive rate, the full-rate being charged in the third year. *Banjar* was cultivable waste-land. To encourage cultivation it paid full rates only in the fifth year. The lands were further divided into, good, bad and middling.

Abul Fazal provides us in great detail the statistical information of with regard to the extent of cultivation. It is interesting to note that for measurement both kharif and rabi crops were measured separately. Suppose, in a village both rabi and *kharif* crops are harvested then that village land was calculated twice.

Abul Fazal’s *arazi* (measured area) figures probably comprised not only the gross cropped area as W.H. Moreland has pointed out, but also include current fallows, cultivable waste and parts of uncultivated waste as rightly pointed out by Irfan Habib and Shireen Moosvi. Shireen Moosvi has calculated that Ain’s *arazi* figures included around 10 per cent of the uncultivable waste. Dilbagh Singh and S. P. Gupta’s calculation for eastern Rajasthan show that the range of waste land varied from 7-10 per cent. This could be *basti* (habitation), forest, *mullah, nadi*, tank, garden land or hills. Shireen Moosvi for Akbar’s period and S. P. Gupta for eastern Rajasthan have pointed out that the total cultivated area was around 50-65 per cent of the measured area.

High productivity largely depended upon irrigation facilities and quality of the soil. Harbans Mukhia argues that, generally speaking cultivation during the medieval period confined largely to the most fertile plains. High yields for various crops entered in the Ain-I Akbari led, K.K. Trivedi to conclude that in suba Agra ‘the cultivation was normally confined to fertile land.’ Chetan Singh also points out that, in Punjab the extension of cultivation was largely occurred only in agriculturally developed areas during the 17th century.

One reason for the large scale expansion of cultivation was distribution of secular (*jagir*) and religious (*madad*-i *maash*) grants. Each *madad-i maash* grant was normally consisted of 50 per cent *banjar* (waste) or *liak uftada* (cultivable waste) under the Mughals.

The pattern of productivity on irrigated and dry land varied from region to region. In Kashmir the average output of *abi* (irrigated) land was six times higher than yields of the *khushki* (unirrigated) land. In Maharashtra cultivable land was very little. A.R.

Kulkarni has brought out that in village Menoli cultivated land was just 16 per cent of the total village land while availability of irrigated land was even much less. However, Bhimsen, writing in 1658, mentions about Aurangabad that, ‘the region is very thickly populated and not a single piece of land was to be found there which was without cultivation.’

Property Rights &Ownership and the Growth of Landlordism

The Ghorian conquests of northern India, leading to the establishment of the Delhi Sultanate (1206-1526) may be said to mark the true beginning of the medieval period in India. The new conquerors and rulers who were of a different faith (Islam) from that of their predecessors established a regime that was in some profound respects different from the old. Their principal achievements lay in great systematization of agrarian exploitation and an immense concentration of the resources so obtained. Immediately after the conquest the conquerors tended to enter into settlements with members of the defeated and subjugated aristocracies. Nearly a century of experience and adaptation cleared the ground for the radical step taken in the first decade of the fourteenth century

Alauddin Khalji, the most powerful and successful of the Sultans decreed that the land revenue was hence forth to be at half of the produce and was too levied separately on the holding of each individual cultivator. Under Alauddin Khalji the land was measured and a fixed tax in kind on each unit of area (*biswa*), presumably worked out on the basis of an approximation to the standard, was levied irrespective of the current year’s harvest. Payment in cash had become quite widely prevalent by the fourteenth century, although Alauddin Khalji himself preferred collection in grain. Besides the land revenue, other burdens were also imposed upon the peasants such as the tax on cattle or grazing tax.

The revenue resources so created were distributed among ruling class principally through the Sultan's assigning to individuals the right to levy the revenue in particular territories. Territorial units assigned in this way were termed *iqtas*, while the territory whose revenues were directly collected for the Sultan's own treasury was designated *khalisa*. If appropriation of the surplus produced by the peasant above the requirements of his subsistence is taken to be the principal criterion of landed property, the *iqta* may be considered the basic unit of such property, and its holders as forming the main class of landed proprietors.

Iqta

The term *iqta* is Arabic in origin and represents long established institutions of the polity of Islamic countries. The history of *iqta* system can be traced back to the establishment of the Delhi Sultanate in northern India. The early Sultans assigned *iqtas* to their nobles for their maintenance instead of cash salaries. The nobles who were assigned small *iqtas* were called *iqtadars* while the large *iqtas* were assigned to high nobles partly for the maintenance of their family and large contingents of *sawars* and partly for the administration. These high nobles were called *muqtais*. The holders of *iqta* were forming the main class of landed proprietors during the medieval period in India. It is therefore, necessary to examine the nature of the *iqta* and rights and position of its holders in some detail.

In the earlier phase, the Turkish Sultans were assigned different regions as *iqtas* to their commanders, who were required to maintain themselves and their troops out of the revenues of the *iqtas*. The *iqta* then stood for a revenue assignment as well as an administrative charge, and the *muqtis* or holders of *iqtas* also governors.

Under the Khalji's and the early Tughlaq's (1290-1351) the administration of the Sultanate was consolidated and the earlier simple arrangements were considerably modified. The transfers of *iqtas* became even more frequent at the same time the *muqtis* no longer remained in absolute control of the revenues of their *iqtas*. They had to submit accounts of their collection and expenditure and to send balances (*fawazil*) to the king's treasury. The pay of the troops under muqtis was also deemed to be a direct charge on the Sultan's treasury rather than on the commanders and a portion of revenues of the *iqta* was set apart for the payment of the troops of *muqtis*. It also necessitated the appointment of Sultans officers within the *iqtas* and this practice was begun under Balban.

With the accession of Sultan Firuz Tughlaq in 1351, the entire trend of the preceding period was reversed, and a series of concession were granted by the Sultan to his officers. First of all the *jama* or estimated revenue income was fixed permanently, so that the assigners obtained all benefits of increase in actual revenue collection. Firuz Tughlaq also appointed the sons of previous incumbents in the administrative offices. It also suggests *iqtas* too were similarly treated when their holders died. He instituted the practice of paying his troopers by assigning them revenues (*wajh*), thus recreating the small *iqtas* under a new name. He also made both the assignments and the posts of troopers practically hereditary.

The concessions that made by Firuz existed for a long duration. Under the Lodis (1451-1526) the administrative charges and revenue assignments were assimilated, so that *sarkars* and *parganas* represented administrative divisions as well as assignments. Like Firuz, Sikandar Lodi (1489-1517) too did not claim the balance if the revenue income of the assignee increased and he is also said to have confirmed the assignment, in the assignee's death, upon one of the latter's sons, chosen by the Sultan himself.

From the above stated developmental stages of *iqta* system we can understand that, first during the thirteenth century there was a simple division of the empire among tribute-receiving governors. Then, in the first half of the fourteenth century there took place an enlargement of the revenue demand, and so of the income of the *iqta*, while an extreme degree of royal control was established over the *iqta*. Finally, from the middle of the fourteenth to the early years of the sixteenth century, there was a reversion to the simpler form of *iqta* organization, but with the difference, perhaps, that the assignees directly appropriated the bulk of the peasants’ surplus for themselves.

These developments in the *iqta* system appear to be closely related to the changes in the composition of the ruling class. In the first stage the composition was relatively stable, the ruling class being confined to royal slaves of nomad Turkish origin and their families. But along with the inauguration of a regime of monarchial despotism under Alauddin Khalji, a series of veritable upheavals occurred in the composition of the ruling class. The older elements were destroyed and Indianized Turks, Indian slaves, and foreign immigrants now formed the bulk of the Sultan’s bureaucracy. Even more sensational phenomena were witnessed under Muhammad Tughlaq: large scale recruitment of foreigners, still greater recruitment from the lower strata of the Indian population and from Hindus; and an attempted wholesale destruction of the older, chiefly military elements (represented by the cavalry officer-corps, the *amiran-i sada*).

Such sweeping changes in the composition of the ruling class that in effect held the bulk of landed property could only have been possible because of the nature of the *iqta* system. The individual members of the ruling class had no claim whatsoever to any particular parcel of land or locality and thus could be provided with, or deprived of, their income at the will of the king. However Firuz Tughlaq publicly announced the policy of letting son succeed father to official posts and the fullest degree of fixity of rights for its members was achieved by the nobility under the Lodis.

Unlike the previous periods, the ruling class of the Sultanate was mainly urban in character. The *iqta*-holders, subject to periodic transfer from one locality or region to another, could not base their authority upon the control of any particular rural area. Many of them lived or served in Delhi, and presumably at other big towns, far from their current assignments. They had, therefore, a strong tendency to commute their revenues into cash. Since the land revenue constituted the bulk of the peasants' surplus, large scale trade between town and country must have resulted. This in turn promoted the cultivation of superior, or cash, crops. The large export of grain and other produce from the country, caused by the exaction of the revenue, maintained a class of specialized grain merchants (*karvanis*, the later *Banjaras*) which appears for the first time now in our historical period. The *multanis* (Hindu merchants) and *sahs* (moneylenders) of Delhi became enormously rich by advancing very large loans to the Turkish nobles against drafts on the revenues of their *iqtas*. The *iqta* system may thus be said to have forced in some ways the pace of medieval commercial development.

The immense drain of a substantial part of rural produce to the towns in the form of revenues of the *iqta*-holders helped to create large town populations. Town crafts also grow. So great was the demand of the nobility that slaves were trained to be artisans in large numbers and the Sultans, and so presumably also the nobles, maintained large workshops (*karkhanas*) where free and servile artisans worked to meet their needs.

Due to the increased pressure of the Sultanate ruling class beginning with Alauddin Khalji's land revenue measures the *ra'is,* and *ranas* now represent the bigger chiefs and lower status headman's like *chaudhuris* (Hindu headmen of groups of 100 villages), *khuts* and *muqaddams* (village headmen) were represent second class chiefs, they also had large landholdings of their own, which were generally not liable to land revenue. In return for this share in the agricultural surplus these rural and village 'chiefs' collected the land revenue from the peasantry on behalf of the Sultan and his assigners. According to Irfan Habib landed property of medieval India could not have consist any right to a particular parcel of land. In the absence of full-fledged serfdom, it had to lie principally in a share of the produce wherever the peasant might cultivate, within the village, or the district, or the whole empire.

***Jagirdari* System**

The detailed information that we possess about the methods of assessment and collection of land revenue under the Mughals enables us to form an idea of the magnitude of the revenue demand. When the bulk of the peasants' surplus was thus being claimed for the king, it is not surprising that contemporary European travellers should have declared, without a single voice of dissent, that contemporary European travellers should have declared, without a single voice of dissent, that the king was the owner of the soil in India. Even an Indian writer of the earlier half of the eighteenth century asserted that the *kharaj* (land revenue) was due to the king because of his property right (*milkiyat*) in the land. However, no official Indian writer, subscribed to this view. This may partly have been due to the fact that the king did not claim the right to eject the peasant occupant. Whether the right that the Mughal emperor claimed was in name proprietary or not, he must be enjoyed a major share of the fruits of proprietary possession. It rested with his will to dispose of this enormous tribute. Over the large portion of the empire he transferred his right to collect the land revenue and other taxes due to him to concern of his subjects. The areas whose revenues were thus assigned were known as *jagirs* and the assignees were termed *jagirdars*.

The *jagirdars* were officers and servants of the emperor, and their *jagirs* were normally assigned to them in lieu of their pay. Each officer of the Mughal emperor was given a dual numerical rank (*mansab*), the first number representing his *zat*, and the second his *sawar* rank. The *zat* rank determined, according to the sanctioned schedule, the personal pay of the *mansab*-holder (*mansabdar*) and the *sawar* rank determined the size of the cavalry contingent maintained by him for the emperor's service as well as the pay he was to receive to meet expenses for maintaining it. The total amounts sanctioned for both *zat* and sawar made up his play-claim (*talab*) and this could be met either by payment in cash from the imperial treasury or by assigning to him territories in *jagir* whose revenue income as officially estimated (*jama, jama-dami*) had exactly to equal the pay due to him.

Besides the ordinary *jagir*, there was a kind known as *watan jagir*. A *watan jagir* was really the territory of a subordinate chief who had been enrolled in the imperial service, and granted a *mansab*; his pay was then supposed to be met by the income of his home territory, which was treated as his hereditary *jagir*. The relative extent of area covered by *watan jagirs* was not large. These in the main comprised many of the subjugated kingdoms of Rajputana, Saurashtra, central India and the Himalayan sub-hills.

The Mughal system of *jagirs* was essentially similar to that of the *iqta* system under the Sultans. In fact, in the Mughal period the two terms were considered to be synonymous. But in most respects the *jagir* was closer to a pure revenue assignment than the *iqta* had ever been. It was never a fixed territorial unit, and had no connection, except for convenience in assignment, with the administrative units, *sarkars* and *parganas*. These units had their own officers, appointed by the emperor and independent of the assignees, in whose *jagirs* the units might be placed, whether wholly in one man's *jagir* or divided up among those of several. The official assumptions was that the *jagirdars* or their agents could collect the land revenue only in accordance with the imperial regulations and levy only such other taxes as were authorized.

Lands not assigned in *jagir* formed a category known as *khalisa-i sharifa,* the revenue being collected here directly for the king's treasury. The total extent of the *khalisa* varied. Akbar once resumed all *jagirs* to the *khalisa* in the large portion of his empire; later in his reign it appears to have accounted for one fourth of the total revenues. Under Jahangir its *jama* (estimated revenue income) fell to less than 5 per cent of the total *jama* of the empire. Under Shahjahan it was gradually expanded, so that its *jama* rose to one- seventh, and early under Aurangzeb to nearly one-fifth of that of the empire.

***Zamindari* System**

During the period of Delhi Sultanate, there witnessed a tendency to merge into a single rural exploiting class by various strata of the subjugated rural aristocracy and other superior elements within the villages. This process was largely completed by the beginning of the Mughal period. The old terms indicating the different elements had by now disappeared and a single designation '*zamindar'* had been substituted for them. A number of local names representing a variety of rights were still preserved, but they were almost invariably treated as mere synonyms of the universal term, '*zamindari'* and the autonomous chiefs too were described as *zamindars*.

The *zamindari* system may be described as a right superior to that of the peasants, and originating, in the main, independently of the existing imperial power. It implied a claim to a share in the produce of the soil which was completely distinct from, although it might be laid side by side with, the land revenue demand. This claim took many forms, it might consist of a cess, levied in kind or cash, on the cultivator; or it might be made up of the difference between the *zamindars* actual collection of land revenue from the peasants, and the amount assessed by the state or it might be compounded by the authorities for a definite share, either out of the land revenue or by allotment of revenue-free land. In the last case the conventional share of the *zamindar* was called, *malikana* and amounted to one-tenth of the revenue in northern India. In Gujarat it amounted to a fourth, the land left revenue-free to the *zamindar* being called *banth*. Besides holding this right to a share in the produce of the soil, the *zamindar* also levied a number of other cesses and exacted certain customary perquisites from the peasants under him.

The *zamindars* share in the surplus was subordinate to that of the king or his assignee, appropriated in the form of land revenue. This is also confirmed by the sale prices of *zamindaris*, which, if they are capitalized values of return expected from the respective *zamindari* holdings, show the *zamindars* income to have been very substantially smaller than the land revenue imposed on the area of his holding.

The historical roots of *zamindari* system were apparent in its close association with caste and clan. *Zamindari* holdings of the same clan were generally contiguous, lending support to the usual tradition that they had originated from the dominance gained over the territory by the ancestors of particular clan. The pattern of *zamindari* possession that had been so established was, however, subject to constant alteration under the influence of three factors.

First, the application of Hindu and Muslim laws of inheritance to zamindari led to increasing fragmentation of *zamindari* holdings. This gave rise to the traditional mode of division of the *zamindari* right in a village, consisting of an initial division into *pattis*, and of an untimate one in terms of *biswas* or one-twentieth of the whole.

Second the sale and purchase of *zamindari* introduced strangers and altered the size of holdings. During the Mughal period the *zamindari* right was fully saleable with almost no restraints. This was true of almost all parts of the empire. Purchases are often found to be of different castes, and also faith, from those of the sellers, so that the caste monopoly of the *zamindari* of any locality was quite vulnerable to the inroads of money. It is quite possible that the marketability of *zamindari* also encouraged fragmentation, the heirs tending to break up joint-holdings to be able to sell their shares. On the other hand the surviving sale deeds often show a single purchaser buying from a number of holders, and thus substituting one holding for several.

Finally, the emperor claimed the ultimate authority to depose as well as appoint *zamindars*. This authority was exercised generally in case of non-payment of revenue or rebellion; but it seems as if sometimes the Mughal emperor might have created *zamindars* where none existed before. On the whole, imperial action must have resulted in considerable changes in *zamindari* possession.

The relationship subsisting between the imperial administration and *zamindars* is of very great interest. In as much as the *zamindars* formed a powerful local element, the Mughal authorities aimed at using them, as did the Sultans, for the collection of land revenue from the peasantry. Thus in several cases the land revenue, though supposedly assessed directly upon the peasants, was paid by the *zamindar* who actually collected it from them. For the service the zamindars were allowed compensation, *nankar*, in the form of either of a percentage of the revenue collected or of a portion of revenue-free lands. The semi-hereditary local official *chaudhuri*, chosen from amongst the *zamindars*, was charged with assisting the *jagirdars* and their agents with the collection of revenue, and was compensated for his pains by *nankar*. By the latter half of the seventeenth century a particular term, *ta'alluqdar*, arose to designate a *zamindar* who paid the land revenue not only on his zamindari but also on lands outside it.

At the same time, considerable antagonism between the imperial ruling class and the *zamindars* seems to have existed on the score of their respective shares in the surplus produce of the peasantry. With its armed retainers and its local customary ties with the peasants, the *zamindar* class appeared to the Mughal nobility a subversive element in the whole political structure. When the pressure of the land-revenue burden increased, *zamindars* found themselves either unable to collect it or saw their own share being reduced. By the latter half of the seventeenth century the relations between the *zamindars* and the Mughal ruling class appear to have reached a point of crisis, which was marked by a series of rural uprisings led by *zamindars*.

The transfer of *jagirs* and the complete alienation of the *jagirdars* from all local ties during the Mughal period encouraged an excessive exploitation of the peasantry and a mounting pressure on the *zamindars*. This led ultimately to peasant uprisings (e.g. Jats, Sikhs, and Satnamis) whose leadership was assumed at one stage or another by *zamindars* or the peasants served as cannon-fodder in revolts of *zamindars* themselves (e.g. Marathas). The states that arose on the ruins of the Mughal Empire could not create any new social structure. Wherever the *zamindar*- leaders of the Marathas or Jats were successful, they not only sought to overthrow Mughal *Jagirdars*, but also replaced other *zamindars* by themselves. Elsewhere, revenue-farmers aspired to acquire a hereditary status by claiming the position of *zamindars*.

When the British regime began, the *zamindars*, whether new or old, appear to have been exercising greater authority than under the Mughals. But, essentially, the British found the Mughal system still surviving. Initially the British government found itself in the same relationship of cooperation and antagonism with the *zamindars* as had the Mughal government. It was immensely more powerful than its predecessor; and the change in the economic context following the 'drain of wealth' to England and then the impact of the Industrial Revolution altered the whole nature of relationship between the British government and the *zamindars*, as well as that between the *zamindars* and the peasantry.

Peasants and Cultivators

The intrusion of Islam into Indian history opened the gates a little wider for the admission of techniques received from external sources. There were also witnessed certain improvements in agricultural tools and methods. A notable advance seems to have been made with the provision of right-angled gearing to the Indian *saqiya* or *araghatta* (water-wheel with pot garland), the fully developed device being described as in use in the Punjab and cis- Sutlej territory by early 16th century. Liquor distillation established by the end of 13th century added a new and admittedly widespread agricultural industry. After the discovery of new world, India received important new crops, such as maize and tobacco whose cultivation belongs to the 17th century.

However, this new changes and development in agriculture nor did any fundamental transformation in the living condition of the peasantry from the preceding periods. According to Irfan Habib in his *The peasant in Indian History,* 'the developments in agriculture contributed to the extension and reinforcement of peasant agriculture, not to its subversion or transformation. Islam made almost no impression on the caste system. Caste thus remained as prominent an element of village life as in any previous period.' Upon their conversion Muslim peasant communities also tended to practice endogamy, though a greater degree of occupational and status mobility seems to have been tolerated among Muslims in general.

The relations of the peasants with other elements of the rural population also remained same as previous period. This was especially true in the case of menial castes. No sympathy is wasted on them in indo-Islamic texts. The Arab conqueror of Sind, Muhammad bin Qasim approved the humiliating restraints that had been placed by the previous regime upon the Jats, very similar to those imposed upon the Chandalas by the Manusmriti. The subjection of the menial proletariat to the caste peasantry thus continued practically unabated throughout medieval times. The occupation set for castes like Chamars, Dhanuks and Dhirs at the end of Mughal rule was quite firmly that of working in the fields of *zamindars* and peasants.

The position of village artisans and servants also remained in an unchanged condition during medieval times. The *balahar* (low caste village porter) represented the lowliest tax-paying land holder in the village in the eyes of Zia Barani (14th century); he must thus have been holding a small plot in recompense of his services. It can therefore, hardly be disputed that the caste structure of the village and its attending elements as formed in ancient India continued to function without recognizable change till the 18th century.

However the surroundings, in which the structure stood, were altered in certain crucial points. It is this alteration, in the nature of the ruling class and the pattern of distribution of the surplus, which, by its effects on the conditions of life of the peasantry, provides justification for demarcating the medieval from the ancient.

During the early centuries of Islam there occurred a considerable growth of commerce and craft production all over western and central Asia. This was accompanied by the formation of large polities each unified under a strong despotism. The Ghorian invaders brought these cultural and political traditions to India. The attempts of centralization by them expressed itself preeminently in the organization of transferrable territorial revenue assignments (*iqtas* in the Sultanate, *jagirs* in the Mughal Empire).

The imposition of the land tax (usually called mal in Mughal times) re-moulded the relations of the peasant with his superiors. Since the tax claimed the bulk of the surplus for the king and his assignees, the fiscal claims of the previous aristocracy could not be permitted. The land tax was no longer seen in the nature of tribute but as levy directly assessable upon each cultivator, whether he was a *khot* or *balahar*. In the Mughal Empire the insistence that the tax be assessed on each cultivator name-by-name pervades revenue literature. A claim on the peasant's person also sometimes taken, a 14th century text documents stated that, the peasants are 'free-born' (*hurr-asi*), but their obligation to pay tax requires that they be bound to the villagers where they have been cultivating the soil. This right of the authorities to force the peasants cultivate the land, restrain them from leaving it, and bring them back if they did so, is also arrested on various occasions during the Mughal period. Finally if the peasant failed to pay the tax, they would become subject to raids and enslavement by the king's troops. Evidence for these measures begins right from the 13th century; the same measures were almost same in the Mughal Empire also.

Clearly, the medieval land-tax generated its own pressure upon all the rural classes. It paved the way for so many uprisings from medieval peasantry. A widespread rebellion occurred in the Doab about 1330. Muhammad Tughlaq increased the revenue demand, as a result of which the weak and resource less peasants were made completely prostrate, while the rich peasants who had some resources and means turned rebels. When the Sultan sought to punish the *khots* and *muqaddams,* by killing or blinding them, those who were left gathered bands and fled into the jungles. The Sultans troops surrounded the jungles and killed every one whom they found.

In 1622, Jahangir received a report that the villagers (*ganwaram*) and cultivators (*muzariam*) of the other (eastern) side of the river Yamuna constantly engage in thievery and, sheltered behind dense jungles and fastnesses, difficult to access, pass their days in rebellion and defiance, not paying the land revenue to the *jagirdars*. An army was thereupon dispatched to suppress the revolt with slaughter, enslavement and rapine.

There were also some uprisings in medieval India, which led by *zamindars* in association with the peasants. *Zamindars* conflict with the ruling class over their share of the surplus tended them to merge with the peasants. In the 14th century an official was clubbing together 'the peasants (villagers, *dahaqin*) and the *zamindars'* (who pay the revenue only) when faced with the terror of the army and the thrust of the dagger. In the revolts that occurred during the 17th century the *zamindars* uprisings tended to feed on peasant unrest to merge with peasant revolts in many areas. In the Doab area with trans-Yamuna area the peasant uprisings of the earlier times form a prelude to the revolt of the Jat peasant under the leadership of a succession of *zamindars*. The Jat uprising was in formal terms a successful one, ending in the establishment of the Bharatpur State. It resulted in a very great expansion of Jat *zamindari* in the Doab at the expense of other *zamindari* clans, and it is therefore possible that a number of upper Jat peasants moved into the ranks of *zamindars*.

It is clear that the Maratha power in its formation in the 17th century fed on peasant unrest. The Maratha chiefs were clearly of *zamindar* origins. Yet their armed strength was based on a constant accession to them of peasant-soldiers, the *bargis*, who left their villages to escape oppression and devastation from the Mughals as well as the Marathas. According to the later sources, that the army of the Marathas consists mostly of low-born people, like peasants, shepherds carpenters and cobblers, while the army of the Muslims comprises mostly nobles and gentleman; and he ascribed the Maratha successes to this cause. The condition of the peasants did not improve upon the successes of the Maratha chiefs, but it is possible that here too certain warriors of peasant origin joined the privileged rural strata. Thus the position of the inferior peasants seems to have largely remained as miserable as before.

There were also occurred peasant revolts combined with religious movements. The movements are those emanating from the great monotheistic preaching of the 16th century, associated with Kabir, Nanak, Raidas and other teachers. Most of the teachers belonged to low *jatis* and their movements undoubtedly represented the urge of a number of low-ranking classes to rise in the social scale. Its openness to the menial castes is its outstanding achievement, practically unprecedented in our history. The Satnamis were a sect belonging to this movement, their revolt in 1672 in the Narnaul region shook the Mughal Empire. The Mughal Empire owed its collapse very largely to the agrarian crisis which engulfed it, and of which the uprisings with their varied record of failure and success were the consequence. Peasants as we have seen were deeply involved in these uprisings.

Tax and Type of Assessments

There is a lack of evidences for the agrarian policies and practices before the arrival of the Turks in north India. The cultivators were he cultivators were required to pay a large number of cesses which were subsumed under the broad categories of *bhaga* (land revenue), *bhog* (cesses) and *kar* (extra cesses). There was hardly any change in the structure of rural society during the 13th century. The early Turkish rulers depended on the Hindu chiefs to pay the land-revenue, leaving it to them to collect it from the peasants according to the existing practices.

However, during the 14th century Under Alauddin Khalji number of new developments was occurred. He was the first Sultan who paid attention to measurement (*paimaish*) of the cultivable land. Alauddin Khalji raised the land revenue demand to half in the upper Doab region up to Aligarh, and in some areas of Rajasthan and Malwa. This area was made *khalisa* (the land revenue collected there went directly to the imperial treasury). The land-revenue demand was based on the measurement of the area cultivated by each cultivator. Further, except in the area around Delhi, the cultivators were encouraged to pay land-revenue in cash. Alauddin Khalji tried to operate against the privileged sections in the villages – the *khuts*, *muqaddams*, and *chaudhuris* and, to some extent, the rich peasants who had surplus food grains to sell. The *khuts* and *muqaddams* were suspected of passing their burden on to the weaker sections, and not paying the *ghari* (taxes on houses) and *charai* (agricultural tax based on the number of animals), both the taxes were introduced by Alauddin Khalji. Other taxes such as *huquq-i-khoti* and *qismat-i-khoti*, exacted from the cultivator by their intermediaries, were also abolished.

Alauddin’s revenue measures collapsed with his death. But we do not know about his system of measurement and also the demand for half of the produce in the *khalisa* areas of the Doab were abolished by his successors. However, after the period of Alauddin Khalji the privileges of the *khuts* and *muqaddams* were restored. It indicates that the state no longer tried to assess the land-revenue on the basis of the holdings, i.e. area cultivated by each individual, but assessed it as a lump sum, leaving the assessment of individuals to the *khuts* and *muqaddams*.

Ghiyasuddin Tughlaq replaced the system of measurement by sharing in the *khalisa* areas. It provided a relief to the cultivators because while under measurement the risk of cultivation of crops had to be largely borne by the cultivator, under sharing both the profit and loss were shared by the cultivator and the state. Ghiyasuddin also took another important step. In the territories held by the holders of *iqtas*, i.e. outside the *khalisa* areas, he ordered that the revenue demand should not be raised on the basis of guess or computation.

Muhammad Tughlaq tried to revive Alauddin’s system and to extent it all over the empire. However, his measures led to a serious peasant uprising in the Doab. The reason for this was that in the assessing the land-revenue on individuals, not the actual yield but the artificially fixed standard yield was applied to the area under measurement. Like Alauddin Khalji’s agrarian reforms, Muhammad Tughlaq’s measures were also designed to curtail the privileges of the upper strata in the village society, especially the khuts and muqaddams. But his measures also hurt the average cultivator.

Muhammad Tughlaq then tried to reverse direction. In the Doab which was the directly administered area (*khalisa*), he tried to improve cultivation by changing the cropping pattern, replacing inferior crops by superior crops. However, it failed because the officials appointed for the purpose had no knowledge of local conditions, and were only intereste3d in enriching themselves.

All in all, it would appear that the land-revenue under the Sultans, especially during the 14th century, remained heavy, hovering in the neighborhood of half and that there was definite effort to reduce the power and privileges of the old intermediaries, the *rais*, *rawats* etc., with the *khuts* and *muqaddams* forging ahead. This was the first time that such a high magnitude of land revenue was assessed and collected from a large and highly fertile area for several decades.

The European travellers, who visited the country during Mughal period, commonly described the king as the owner of all land in India. An Indian lexicographer of the eighteenth century, too, cited a similar view. An eighteenth century jurist, who explicitly rejected such an assumption, argued that the tax in India was not the *kharaj* (a land tax paid by non-Muslims) of Islamic low, because it often exceeded half of the produce. *Mal* was another type of tax existed during the time of Mughals. It was a tax on the crop and it essentially represented a claim on behalf of the state to a share of the actual crop. The primitive form of its realization was known as *bhaoli* or *batai* in Hindi and *ghalla-bakhshi* in Persian. In this system a simple sharing of the harvested grain took place, one share being left to the revenue payer, and the other set apart for the state or its assignee. Other more sophisticated systems like *kankut* was developed from this system of simple sharing.

In *kankut* system, instead of actually dividing the grain (*kan*), an estimate (*kut*) was made, by working out the *rai* or yield per unit of area at the current harvest and multiplying this by the total area under the particular crop, so as to obtain the total produce of the crop. According to Irfan Habib it is possible that the system of *kankut* was already in use as early as the fourteenth century. While *kankut* reduced expense and vexation for the revenue-collecting authorities, it continued to share with bhaoli the disadvantage of keeping them in ignorance of the amount that would be actually collected at the harvest. Also the system of *kankut* or estimation provided loop-holes to local officials for corruption. These considerations were probably at the root of the radical alterations in the kankut system brought about by Sher Shah.

So modified the kankut system was became transformed into *zabt* (measurement). The assessor now had little concern with the harvest. He had simply to measure the land sown with each crop, and, with the standard schedule of rai in his hand, he could tell the revenue payers well in advance of the harvest how much in kind they would have to part with. The only allowance he might make for harvest failure was to declare a part of the sown area to be *nabud*, or ‘crop-less’, and remit the tax thereon.

The evolution of the revenue system under Akbar, leading to the *dahsala* or ten-year system in the 24th year of his reign (1579) was the logical evolution of the *zabt* system. After assuming full charge of the administration in 1562, Akbar tried to reform the system. However, till the tenth year (1566), no change was made in Sher Shah's crop-rate (*rai*) which was converted into a cash-rate, called *dastur-ul-amal* or *dastur*, by using a single price list. But Akbar's administration strove to make the rates realistic, either by varying local rais or commuting the *rai's* at local prices, or by both means, so that the *dastur-ul-amal* begin to show large local variations from 1565-66 onwards. In 1574-75 Akbar took a series of important measures, it was a new attempt to work out the revenue rates. Under this information on yields, prices and the area cultivated was collected for each locality for a period of ten years. On the basis of the detailed information, the revenue rates were now fixed directly in cash for each crop.

Under Akbar, the *zabt* system practically covered the entire region from the Indus to the Ghaghra. A major extension of it occurred in the later year of Shahjahan's reign, when it was established in the Deccan by Murshid Quli Khan. In the areas where the zabt was the standard system, other methods of assessment, notably bhaoli and kankut, continued in use. In several areas these remained the major methods of assessment, though with much local variation.

Another system of assessment mentioned by contemporaries is nasaq. There is considerable controversy among modern historians about it nature. Moreland called it group assessment. R.P.Tripathi disagreed but was not sure of its exact nature. Irfan Habib considers it estimation on the basis of previous assessment. The peasants were given estimation on the basis of the previous assessment, whether based on zabt or batai, or any other method. If they refused to accept it, new assessment could be carried out. In this way, annual measurement, or appraisement could be avoided. It seems that gradually nasaq based on zabt became the standard system, but the option of batai was always there, particularly when there had been a series of crop failures.

In addition to these taxes, there were a number of other rural taxes, collectively called *jihat* and *sair-jihat*, *furu* at and *abwab*. The levies, imposts and officials' fee comprehended under these heads varied from locality to locality, but it would seem that the total amount collected under the miscellaneous items might amount to as much as 25 per cent of the land revenue.

Module II

Non-Agricultural Production

FORMS OF LABOUR

The study of labour history of pre-colonial India is still in its infancy. This is mainly due to the lack of evidences when we compared it with that of Europe and China. However, the accounts of medieval historians, merchants, travellers and missionaries enable us to explore the major forms of labour that prevailed in medieval India.

Slave Labour

Slave labour has an ancient history in India. However, the historians of medieval India were hold different opinions on the institution of slave labour before the period of Sultanate. But the frequency of references to slaves of all kinds in Early Medieval texts certainly suggests their pervasive presence. The four documents in the *Lekhapaddhati* compiled in Chalukya ruled Gujarat, related to the acquisition and condition of work and life of female slaves. Three of the documents among them are dated to 1230 or 1231.

Irfan Habib in his article *Forms of Labour* opined that during the period of Delhi Sultanate slaves were obtained by force in large number. When Qutubuddin Aibak raided Gujarat in 1197, as many as 20,000 persons were made slaves (*barda*) and his expedition to Kalinjar in 1202-03 is said to have similarly produced 50,000 slaves. Balban as a noble led a campaign against Ranthambore in 1253-54 and gained horses and slaves without number. Marco Polo mentioned about the plenitude of slaves in Bengal in the early 1290’s. In 1312-13 horses and slaves (*barda*) expected to be gained in booty when Alauddin Khalji sent off

Malik Kafur on his Warangal expedition. Mongol invasion of Alauddin Khalji also witnessed the capture of women and children as slaves and the majority among them were sold in Delhi slave market. In the Futuhat-i Firuz Shahi, Firuz Tughlaq makes it clear that the slaves taken in war included women because he refers to children born of such slaves fathered by their new masters.

In addition to slaves so collected there were also immigrant slaves or those imported from abroad. Female slaves too were imported. Amir Khusrau speaks of the import and fixing of prices of Turkish slave girls, and Firuz Tughlaq vizier Khan-i-Jahan Maqbul Tilangani was said to have gathered 2,000 girls brought from Byzantium and China. The prices of slaves were largely determined not only by the plentitude of supply but also by costs of subsistence and the general level of prices. Thus when after Alauddin Khalji died and the price regulation collapsed, the prices of slaves to rose very greatly. On the other hand in Bengal in the 1340’s , Ibn Battuta found the prices of slaves to be very slow, he could purchase a good looking slave girl for only a gold *tanka.*

Slaves were employed in all kinds of work. A number of slaves worked at different occupations to maintain themselves and their impecunious masters. The Sultan took special care about the slave training and their employment. In order to maintain the large number of slaves properly, the sultan retained forty thousand at the court and distributed the rest in various *iqtas*.

The slaves were imparted literary and technical knowledge both. Twelve hundred slaves were trained in crafts. The *amirs* and *maliks* were also entrusted with some slaves for training. The slaves were, drafted in every sphere of urban activity, which ranged from domestic errands to elite bureaucratic levels. In state apparatus, they were required in thousands for large enterprises both military and civil. The slaves were employed in construction of government buildings, *Karkhana* or royal factories, in army, at work in palace or royal court; they were used as spies by both Alauddin Khalji and Muhammad ibn Tughlaq. There was much domestic works also to be done by slaves especially women and girls. They had to light the fire, to cook and layout the metal for the master and fetch water. Ordinary men slaves too had much physical labour to do, like carrying their master on palanquin (*dola*).

Slave labour was practically disappearing from view in Mughal India, so the decline of slavery in productive labour after the fourteenth century is a manifest fact. Slave labour was restricted largely to domestic services in Mughal India. Slave artisans existed in the early period of the Delhi Sultanate (13th and 14th centuries), are no longer mentioned at time of Mughal period. By 1600 CE slave labour formed a small component of the labour force. It was also restricted largely to domestic service and concubinage. Akbar made notable attempts to forbid slave trade, and forcible enslavement. He freed all the imperial slaves, who exceeded hundreds and thousands.

The practice of forced labour (*begar*) was generally considered unethical, though it was widely prevalent in relation to certain occasional tasks, like baggage conveyance, imposed on specific lowly rural castes or communities. Akbar in 1597 and Shah Jahan in 1641 issued orders abolishing the practice of *begar* (forced Labour) extracted for different tasks in Kashmir, such as picking and cleaning Saffron flowers and carrying timber and fire wood. It is interesting that an inscription at the gate of the fort Akbar built at Nagar in Srinagar (Kashmir) in 1598, explicitly proclaims that no unpaid labour was used there and 11,000,000 *dams* (copper coins) were spent from the imperial treasury for the payment of labour.

Agrestic slavery however existed in Malabar (Kerala) and Bihar around 1800's, and is described in Buchanan's detailed local surveys. Irfan Habib in his *Agrararian system of Mughal India: 1556-1707* mentioned that in 1637 a peasant of Gujarat claimed that he possesses a slave for work in the field.

Free Labour

Despite the large size of the slave population in the Delhi Sultanate there was also numerous mass of technically free born laborers. In the skilled sector of non-agricultural labour, large number worked as self-employed persons, doing jobs for different customers. During this period various people involved in textile Industry, building industry, metal working etc… A large number of persons were employed as attendants and domestic servants. These were divided among numerous categories, each one confined to performance of a particular duty. Ibn Battuta tells us that besides higher staff (*arbab*) at the tomb of Qutbu'ddin Mubarak Khalji, a large number of persons were employed as inferior staff (*hashiya*), comprising carpet cleaners, cooks, messengers, water-servers, sherbet-servers, betel-leaf-servers, men bearing arms , spear men, camel-keepers, basin attendants, chamberlains and announcers. Irfan Habib in his paper '*forms of Labour'* opinioned that such classifications was also duplicated in royal and aristocratic households of during this period.

A large number of unskilled laborers were kept outside regular employment and had to offer themselves for daily hire. Ibn Battuta remarked that 'if one did not have slaves, one could hire men to carry one's palanquin, for in the town there are always a number of these men standing in the bazaars and at the sultan's gate and the gates of other persons for hire.'

The domestic service sector in Mughal India was exceedingly larger. Not only did the aristocracy maintain a large number of servants, but the employment of domestic servants by 'middle-class' groups was also quite large. Bernier the French Traveller, tells us that 'personal servants in the Mughal army were numerous' and Fryer remarked more specifically that 'however badly off a soldier is, he must have three or four servants.' In the aristocratic households servants were appointed for specific duties, each servant keeps himself strictly to his own duties. On the other hand the servants working for lower officials and ordinary people had to perform varied functions.

Apart from the domestic servants in the imperial households and in those of nobles in Mughal period, there were cavalrymen and clerks, employed in large numbers, usually on monthly pay. Skilled artisans and labourers worked in imperial and aristocratic establishments, called *Karkhana's* (workshops), which produced goods of various sorts for use in the employers' households, gifts, etc.

The self-employed population consisted in bulk of peasants, who with their families, cultivated the ground with the aid of their own cattle and tools, and paid tax/rent to the state or the local potentate. The labour of such artisans as weavers, ironsmiths, carpenters, oil pressers, etc. were worked at home and sold their products either at their home as their shop or at fairs or markets.

Medieval Indian Crafts

Artisans

The concept of 'artisan' is a complex one. There are fundamental variations between artisans according to craft and within each craft according to the process of production and the nature of the product. However based on the their sites of work, four major types of artisans and craftsmen existed in Medieval India such as following

- Artisans lived in peasant villages who received fixed wages in kind
- Artisans settled in separate villages of their own

- Artisans of royal households, religious institutions
- Independent artisans residing in different areas of a city

A specimen document of the 14th century in *Lekhapaddhati* divulges to us that in a small village, there were five artisans and craftsmen (*panca-karuka*) such as, the mason (*sutradhara*), the iron smith (*lohakara*), the potter (*kumbhakara*) etc., who received handfuls of produce at harvest time from individual peasants. Works on architecture enumerate many kinds of villages where the various categories of artisans and craftsmen were settled within the dominions of different rulers. Epigraphic and literary evidences suggest that artisans of different categories settled, mixed with other in the villages of medieval India.

In India during the medieval period we can also notice the disappearance of certain categories of artisans and the appearance of new ones. In the text of inscriptions of the tenth century onwards, *rupadaksa*, *sailalaka*, *sailvardhaki*, *kamantika*, *navakarmika* and *sutragrahin* are no longer heard of while new ones such as *sthapati*, *Taksaka*, *silpi*, *rupakara*, *sutrdhara*, *aksasalin* and *vijnanika* began to be mentioned. It is however, possible that in many cases, the change might have been one of nomenclature rather than of skill or status. Regional variations of artisans can also be observed in the post-Sultanate inscriptions. In sixteen and seventeenth century inscriptions of Rajasthan and Madhya Pradesh along with the Sutradhara for the mason, the designation of *karigara*, *karagara*, *sutrausta*, and *silavata* are also employed.

Muhammed Habib suggested that ‘prior to the establishment of Turkish rule artisans and craftsmen were not allowed to live within the city wall.’ However the position of them was uplifted with the advancement of contemporary technology under Muslim rule. During the Sultanate period the city was a center of many craft works. The artisans belonged to this period were flourished in various categories of production like pottery making, textile industry, wood carving, metal working, jewellery making etc. In Sultanate period , where the material used was expensive, for example silk interwoven with gold or silver wire, the potting out system would involve too much of a risk, and so even in the textile industry, artisans would have had to be assembled under the roof of the employer. According to Irfan Habib in his *Economic History of Medieval India: 1200-1500* ‘the use of the word *Karkhana* applicable to such workshops has so far not been traced with respect to private undertakings in the Sultanate period, but the word has been used, with a fairly ample description, for royal workshops under Firuz Tughlaq.’ These establishments were classified as subsidized (*ratibi*) and unsubsidized (*ghair-ratibi*). Among the latter were workshops for robe - making (*jamadar - khana*), banner - making (*alam - khana*), and carpet-weaving (*farash – khana*), supplying articles of enormous worth to the court. It must be assumed that artisans of different kinds were employed here, although trained slave workers were also put to work in such establishments. Muhammed Tughlaq also employed 4,000 silk-workers and as many gold-brocade weavers (*zarkash*) in the royal embroidery workshop (*dartaraz*). In other skilled crafts we have indirect evidence for craftsmen working on their own. The Sultanate rulers remitted taxes from them, for instance the occupations on which Firuz Tughlaq remitted taxes included indigo makers, cotton-carders, soap makers, rope makers, oilmen etc. In the view of Irfan Habib, most of them probably were made to pay tax because they had shops or stalls, from where tax could be collected. Barani speaks of master craftsmen in Alauddin Khalji’s time engaged in such occupations as bow-making, arrow-making, turban sewing, stocking-sewing, rosary threading and cutlery-making—‘such expert artisans have not been found at any other time in the memory of the people of Delhi. It makes clear that they carried on their respective occupations on their own, and were thus not employees of anyone.

The Mughal age in India witnessed high level of craft production. There existed different forms of production from independent artisan level to the *Karkhana'*s supported and run by the state. Satish- Chandra observed that Indian craftsmen belonged to this period was able to produce goods of very high quality with very simple tools. India was able to produce large ships and also manufactured heavy guns. The artisans living in rural areas of villages produced articles of daily use for the residents of the villages, they included oil pressers, Indigo and salt workers, blacksmiths, carpenters, potters, shoemakers, and sugar manufacturers etc. Besides the village craftsmen dependent on Jajmani system (a reciprocal arrangement between craft-producing castes and the wider village community, for the supply of goods and services), there came into existence a number of independent craftsmen engaged in production for trade, either long distance or medium distance. We also notice a marked change from subsistence-oriented economy to money economy. Tapan Raychaudhuri rightly observes, 'by the 17th century, if not much earlier, exchange had made significant inroads into the subsistence – oriented system of manufacture by collectively maintained artisans.' Mobility of the rural artisan to urban markets due to the increase in the demand for their finished goods was also occurred in this period. Production for the market had become a common practice by the independent and their emerged specialist craftsmen in all crafts. Pelesaert (Dutch traveller) who visited India in 1623 refers to a hundreds of specialized categories of artisans working in different crafts. A significant feature of these times was the localization of manufacture. The highest level of specialization was noticed in the area of textile manufacturing.

During medieval period in India artisans organized under two categories; the free artisans were working their own under the artisan system and regimented worker working under the *Karkhana* system. The town based artisans formed the nucleus of such commodities which were produced for markets. Almost every craft had specialized artisans who produced articles for the markets. At this level of organized craft production the individual artisan himself produced necessary raw materials and tools, and products then sold those items in the markets. However this mode of artisanal production was suffered a major weakness. Since the production was organized on individual basis an artisan lacked big resources to invest in the production process, naturally the final the size of the final product remain small. The emergence of *Dadni* system gradually develops to address this problem. In *Dadni* system an artisan was provided with necessary raw materials and money in advance by merchants. After the production was completed the merchants collected finished goods and sold them in the markets. This was also paved way for the control of merchants over the professional artisans. They had been controlled the artisans by providing loans. As a result a class of master craftsmen known as Ustad was emerged in medieval India.

Royal workshops (*Karkhana*) were another unit of craft production. The *Karkhana's* were produced commodities for the consumption of the royal house hold. Generally expensive and luxury items were produced here. *Karkhana's* employed skilled workers, who worked under one roof and were supervised by state officials. There were two types of *Karkhana's* existed during this time; first the traditional type of *Karkhana's*, which produced luxury goods in small quantity but of high artistic value, and second was the mint or arms manufacturing unit, where in standard oriented and technological large production took place. We hardly get much information on *Karkhana's* prior to Tughlaq period. Muhammad Tughlaq had employed 400 silk weavers in his royal *Karkhana*. However Firuz Tughlaq reign saw the unprecedented growth of the institution of *Karkhana's*. He maintained as much 36 *Karkhana's*. Shams Siraj Afif provides a graphic description of the working of the *Karkhana's* under Firuz Tughlaq. According to him Khwaja Abu-l Hasan Khan was charged with the general superintendence of all the *Karkhana's*, and through him all orders were issued to the respective establishments. There was a separate financial department called *diwan khana* for the *Karkhana's*, in which the general accounts were kept. There were many accountants in the various *Karkhana's* who received monthly pay.

Under the Mughals the institution of *Karkhana's* expanded further. Akbar took special interest in its expansion. Jadunath Sarkar has counted as much as 70 types of *Karkhana's* working under the Mughals. Speaking strongly for the institution Bernier comments that, 'The arts in the Indies would have long ago lost their beauty and delicacy if the monarchs and principal *Omrahs* did not keep in their pay a number of artists who work in their houses, teach the children, and are stimulated exertion by the hope of reward and fear of the *korrah*.'

In south India craftsmen of different professions and castes are more commonly possessed 'collective identity'- *Panchala* (Karnataka), Panchanamuvaru (Andhra Pradesh), and *Kammalar* (Tamil Nadu), and artisans were at the centre of the growth and emergence of temple towns in south India. They were not only played an important role in the construction activities but also formed part of the temple complex in south India. Their settlements in the temple complex were known as *tirumadailagam*. Interestingly, in south India though we do not find *Karkhana* type of organization, we do hear craftsmen attached to temples. They were enjoyed patronage of the temple and right to participate in the temple management and used to perform the services to the temples. Portrait sculptors derived their patronage almost exclusively from the royalty. However, in contrast to artisans working in the Karkhana's they not only cater to their patrons but also the market.

During medieval period the artisans were received royal encouragement. According to Abul- Fazal Akbar persuaded artisans to settle in Agra especially the carpet weavers. Such royal patronage helped the development of silk carpet and shawl industries in the country and helped to improve the condition of artisans who engaged in such craft. However there are also evidences for the social and economic exploitation of the craftsmen lived in medieval period. Artisans were neither economically well off nor well treated. Francisco Pelsaert was lamented the condition of the artisans that 'for the workmen there are two scourges, the first of which is low wages…the second scourge is Governor, the nobles, the Diwan, the Kotwal, the Bakshi, 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 the evening paid half his wages, or nothing at all.' Bernier has also made similar remarks over the prevailing condition of the artisans in Mughal India. According to him 'when an *omrah* or *mansabdar* requires the service of an artisan, he sends to the bazaar for him, employing force, if necessary, to make the poor man work, and 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 having reason to congratulate himself if the korrah has not been given in part payment.'

In north India artisans did sometimes protest against exploitations. In 1630 at Baroda weavers declined to supply *bafta* to the English unless they stopped buying the yarn from the market for it hiked the prices of yarn. The large scale participation of artisans in the popular movement's particularly the Satnami uprising, shows signs of artisans' resistance against exploitations. South Indian crafts organization did play active role in 'collective bargaining' and protest against 'enhanced taxation.' Increase in loom tax by Krishnadeva Raya in 1513 resulted in an en masse desertion of weavers. Abbe Carre mentions that, 'there was a firmly established custom (among *kammalar* artisans) that if one of them is offended or wronged, all others shut their shops and abandon their work.'

Textiles

Textile production was the biggest industry of India, and it occupies foremost place among India's craft since the period of Indus valley civilization onwards. Pelsaert stated that from Chabaspur and Sonargaon to Jagannath (Puri) all lived by weaving Industry. Almost every town was filled with weavers. According to K M Ashraf in his *Life and conditions of the people of Hindustan* 'The Bengal and Gujarat led the whole of Hindustan in the manufacture and export of textile goods, the harbor facilities of these provinces and their commercial relations with the outside world helped them in building up an extensive textile industry.'

In 1620's at Masulipatanam alone 7000 weavers were recorded. Similar numbers were mentioned to be present at Banaras in 1640's. Certain weaving villages also emerged during this time particularly by companies for a specific variety of cloth. South India witnessed a shift in the settlement pattern of the weavers. Earlier their large concentration was in the temple premises. But the donative inscriptions of the weaving community during this phase are more frequent at secular places than in the temple complex. In medieval Karnataka *Maggadavaru*, *Neygeyavaru*, *Salesasiravaru*, *Devanga* and *Jedaru* continued to enjoy prominence among the weaving communities. In Tamilnadu *Kaikkolars* replaced the old *Saliyas*. Weavers even made grants to the temples to enhance their status in the social hierarchy.

The textile industry included the manufacture of cotton cloth, woolen cloth and silk. Cotton was extensively grown in the country. Ibn Battuta mentioned that the finest cotton cloth was sold in Bengal at extremely cheap prices of 30cubit for 2 dinars. There is evidence that the two important instruments for ginning and cleaning cotton, namely the wooden worm worked roller or gin *(charkhi)* and the bow-scutch (*Kaman*) had come into much before the Mughal period. At Ajanta cave I (6th century A D), there is a panel of frescos showing women at work, one of whom is working on the charkha, though the first reference to it is only in eighteenth century lexicon, *Bahar-i Ajam* (the cotton-cleaner's wheel/roller). Ibn Battuta mentioned about a most valued variety of cotton, named *bhairamiya* and he singles out it for special praise among the articles accompanying Delhi's embassy to China. He describes it as made of cotton, with no equal in beauty, every piece worth a hundred dinars (*tankas*). Barani does not give its price under Alauddin Khalji, but classes it among those high value textiles along with *Devagiri* (probably a term for muslin) and silk, which common people were not expected to buy. *Pat* was the name of a coarse cotton cloth which was worn by the poor and dervishes. Bard another kind of low priced cotton cloth. According to the first version of Barani's history, finer version of it came from Lakhnauti (Bengal). Thakkura Pheru mentions three varieties of fine cotton cloth such as *kara*, *vasaka* and *tana*, but these cannot be identified with any of the kind mentioned by other medieval Indian sources.

Wool could always be procured from mountainous tracts, though sheep were also reared in the plains. The finer qualities of woolen stuffs and furs were largely imported from outside and which was almost exclusively worn by the aristocracy. In India silk was produced both by the mulberry –feeding (domesticated) and non-mulberry feeding (wild) worms. The allied industries of embroidery, gold thread work and dyeing, were also carried on in many cities of India.

During medieval period the major silk producing regions in India were Gujarat, Bengal and Kashmir. Chaul was famous for silk weavers. Sericulture was also practiced in Medieval Orissa. In India the weavers followed an indigenous system of producing silk cloths. Peasants used to cut the old mulberry trees into small pieces and tilled them after ploughing in October. In a few days' time the shoots come out and they were plucked daily to feed the worms. The cocoons were first put in hot water and then in fresh water before reeling. The thread was just softened during the process of reeling. This indigenous system was considered better than Chinese and Persian methods. A variety of silk fabrics were available to the aristocratic consumer. Thakkura Pheru lists four varieties of silk cloths such as *juja*, *pattolaya*, *atalasa* and *sara*. Of these, *juja* is obviously *juz* that woven at Delhi is given the highest price among textiles, sixteen *tankas*. The *pattolaya* was the silk fabric woven by pre-dyeing warp and weft. The next variety *atalasa* is finds mention in the Ain-I Akbari under silk fabrics with a relatively moderate price. The *atalasa* has a glossy surface by a tight weave with the weft yarns forming bands over the upper surface. *sara* of Thakkura Pheru must be the *sha'r* mentioned by Amir Khusrau, an expensive material counter posed to *galim*, the coarse woolen blanket. Barani gives the price of the legally permitted fine *sha'r* under Alauddin Khalji as three *tankas*. The other silk fabrics that Barani mentions among those in use among the aristocracy were the *kamkhab* and *hariri* besides *chini* which should means Chinese silk. The early fourteenth century dictionary by Qawwas defines kamkhab as juz of one colour bearing embroidery. As mentioned by Amir Khusrau hariri was a most expensive silk fabric.

Gujarat was rich in the manufacture of cloths. The silks of Cambay were among the costly goods which were controlled by Sultan Alauddin Khalji. Their use was confined to the great nobles. Alauddin Khalji sent *abrad*-i-*kambayati* (stripped silk cloth of Cambay) to II Khanid minister Rashiduddin as present. Barbosa tell us that 'Cambay was the centre of manufacture for all kinds of fine and coarse and printed cotton cloth, besides other cheap varieties of velvets, satins, taffetas and thick carpets.' Varieties of printed cloth and silk muslins were also manufactured in other parts of Gujarat. *Patola* was the most sought after variety of silk produced in Gujarat. Initially Gujarat was heavily importing raw material from China. But by the 17th century Bengal emerged as one of the chief producers of Silk and ousted China.

The accounts of Amir Khusrau, Mahuan, Varthema and Barbosa all bear witness to the excellence of Bengal manufactures. Amir Khusrau was praised the stuffs which Bughra Khan, the governor of Bengal, presented to his son Sultan Muizzudin Kaiqubad. Mahuan, on his visit to Bengal, enumerates five or six varieties of fine muslins, gold embroidered caps and silk handkerchiefs. Varthema mentions a variety of fine cloths named *bairam*, *namone*, *lizati*, *caintar*, *douzar*, and *sinabaff*, the nature of which is not clear. He also described that 'the abundance of cotton cloth in Bengal than anywhere else in the world.' Barbosa observes that 'a kind of *sash* named *sirband*, made in Bengal, was much esteemed by Europeans for the head dress of ladies, and by Persians and Arab merchants for use as turbans.' Arab merchants were similarly fond of using Bengal *sinabaffs* for shirts. *Juz*, *koila*, and *mashru* (mixture of cotton and silk) were produced in Delhi. Bhagalpur in Bihar was known for *tasar* production. Tavernier mentions that the 'Qasimbazar alone exported 2.4 million cloths and he also mentions the production of Assam *muga* silk.' Among articles of internal consumption, *dhotis* and *saris*, both of silk and cotton, were manufactured in large quantities.

Apart from the manufacture of cloth, other, miscellaneous goods, carpets, cushions, coverlets, beddings, prayer carpets, bed strings and several other articles were also manufactured.

Spinning and Weaving Technology

Irfan Habib in his works on the technology of Medieval India stated that the first textual reference to the spinning wheel is found in the metrical history of the Delhi Sultanate by Isami, who wrote his work in 1350 A D. According to him it was an ancient Chinese invention, which seems to have made its way slowly to India. The first illustration of spinning wheel occurs in a Persian dictionary written in 1469 in Malwa. India, however, never came to know either the multi-spindle wheels illustrated in China from 1313 onwards or the U shaped flyer rotating around the spindle attached to it in Europe by 1524. But to go by the evidence of Mughal miniatures during the seventeenth century the Indian spinning wheel appears to have been furnished with the crank handle, which in Europe too definitely appears only by 1524. Irfan Habib has assessed that spinning wheel enlarged the efficiency of weavers. It paved way for the increase of overall consumption as well as production of textiles during the medieval period.

Vijaya Ramaswamy in her article *A Note on The Textile Technology in Medieval South India* questioned the above mentioned arguments of Irfan Habib. She argued that Habib’s finding that the spinning was introduced in India only around the fourteenth century when it is first mentioned by Isami is wrong and, we can trace the evidence for the use of spindle till the thirteenth century from the Jain saint and poet Bhavanandi Munivar. In his Nannul (a work on grammar) he compares poetic composition to the process of spinning in which he refers to the spindle (*kadir*) but not to the wheel. She supported Irfan Habib’s conclusion that the device originated in China and came to India with the Ghorian conquerors. She has further expressed her view over the usage of draw loom in India that Irfan Habib accepts it seventeenth century incorporation. Vijaya Ramaswamy argued that the vertical loom seems to have been the most primitive type in existence in India. She cites the 1184 A D inscription of Vira Ballaladeva’s reign in Jambur village (Shimoga district) that refers to ‘looms which are tied to the roof with a rope.

In tracing the history of the draw loom Irfan Habib viewed that the draw looms had been invented in antiquity in China and the Middle East. In India the earliest instance was cited only by Streynsham Master in 1679 when he observed at Ellur in Andhra Pradesh. Vijaya Ramaswamy criticized this evidence by Irfan Habib and she argued that it seems inadequate. She suggested that on the basis of inscriptional evidence relating to South India that the patterned loom in India can be dated from the eleventh century onwards.

Cloth Printing and Dyeing

Cloth printing is a very important aspect of textile technology but its origin is shrouded in obscurity. According to Irfan Habib 'the two basic methods of the multi-colour or pattern dyeing in India, namely, the application of resists to confine colors to patterns and of mordents to take colours are described in seventeenth century accounts, printing blocks might have been used to apply the resists and mordents since early times; there is evidence for this from Egypt and Iran of third-fourth century A.D.' He stated that 'Moti Chandra finds the word *chhimpaka* for a female calico-printer and *chhipa* for calico-printer in a 14th and 15th century source respectively.' The term *chhapa* for calico-printing occurs in the work of Malik Mohammad Jaisi (16th century). In Bahar I Ajam (18th century), *chhapa* is said to be a Hindi word for the printing -block accepted only recently in Persian as *chapa*. Jean de Thevenot in his account of Agra says that 'the printing -block was being used for direct colour impressions on cloth.' While noticing the same process in Isfahan (Iran), he says 'significantly that such cloth used to come there from India.' The primacy of Indians in cloth printing at this time is suggested also by the use of the word *chit* (Persian form of the Hindi *chhint*) for calico printed in Isfahan itself. Tavernier makes it clear that in his time calico printing was a small localized industry, while it was the printed calico which was produced in large quantities for the internal as well as foreign (including Persian) markets.

According to Vijaya Ramaswamy, block-printing existed in India in the twelfth century itself. The word *chhint* or *chhit* itself is almost certainly a corruption of the Sanskrit word *vichitra* means printed calico and the twelfth century work Manasollasa makes a reference to *vichitra*, it specifically states that the cloth could be washed in the dyes and printed with the instruments. She also argued that if the term *Yantraka* mentioned by the work pertains to the wooden block then the process of cloth printing can be pushed back to the twelfth century.

Building Technology

The changes occurred in the materials used and in the techniques of construction paved way for the expansion of building industry in medieval India. With the introduction of fine cementing materials such as lime and gypsum mortar and new techniques the medieval Indian cities marked growth of brick buildings and houses. Lime and gypsum acts differently from their predecessors, the lime mortar hardens slowly and acts chemically on bricks to bind them together; gypsum hardens rapidly and holds stone or bricks together by its own solidity. According to Irfan Habib in his Economic History of Medieval India: 1200-1500 ‘the medieval use of lime and gypsum mortars was eminently due to the combination of building methods derived from Byzantium and Sassanid Iran under the Arab Caliphates.’ Lime, both as mortar and as plaster was in use in the Roman Empire and Byzantium, Sassanid Iran exclusively used Gypsum. The Arabs as a consequence of their conquests of much of Byzantium and the whole of Iran in the seventh century began to use both these mortars in their buildings. By the time the Sultanate was established early in the thirteenth century, both lime and gypsum has become inseparable from building construction under the Indo-Muslim aegis. However these practices did not spread to the other areas where earlier building practices prevailed. As late as the 1530,s Fernao Nuniz noted that in Vijayanagar, lime was not employed in building construction.

The introduction of these types of new elements in cementing also lead to the new techniques of construction like the 'arcuate mode of construction' that introduced in India in the 13th century. It was a fusion not only of two types of mortars, but also of the two distinct styles the Byzantine and the Sassanid, brought about under the umbrella of Islam. In his pioneering work on the history of Indian architecture Fergusson noted in 1876 how it took time for the new arcuate techniques to be adopted in actual construction. Initially Indian artisans applied the corbelling techniques to build pointed arches and domes as in the 'Qutb mosque' at Delhi and this naturally resulted in the structures being seriously crippled. In the course of the century, however the accurate were learnt so, that Indian masons began to erect arches, vaults and domes. Expenses of construction were naturally reduced through the newly introduced techniques and by the beginning of fourteenth century Delhi and other cities of the Sultanate witnessed a dramatic expansion of building activity.

Irfan Habib stated that from the words of Barani alone one can judge the scale achieved in royal construction under Alauddin Khalji. Barani mentioned that 'the wonderful numbers of buildings constructed and the erection of mosques, towers and forts, and the excavation of tanks that were witnessed in Alauddin Khalji's reign have not been seen, and will not be seen, under any ruler.' Alauddin Khalji employed 70,000 craftsmen for his buildings. The rulers of Tughlaq dynasty also proved to be equally relentless builders with Muhammad Tughlaq building Tughlaqabad, a new city within Delhi. Firuz Tughlaq had the largest building establishments of all rulers yet. Afif mentions the following categories of workmen in Firuz Tughlaq's employ who worked on his buildings: stone cutters, wood carvers, blacksmiths, carpenters, sawyers, lime - makers and masons.

When Babur laid the foundation of Mughal Empire in India, India had made a lot of progress in the field of building construction. The number of stone-cutters alone employed by Babur for his buildings was 1491. Babur was much passionate about the garden craft rather than building construction, and he built artificial terraces with water chutes and cascade. However he built Kabulibagh mosque at Panipat, Jama Masjid at Sambhal and mosque at Ayodhya which were made over the demolition of preexisting monuments. Thus, building materials were obtained from the remains of the buildings and the surrounding areas. The magnificent architectural work has been occurred during Akbar’s reign. Mughal architecture gained recognition throughout the world and he established a fresh construction of red sandstone at the site of Badalgrah known as Agra Fort and built many palaces and mosques at Fatehpur- Sikri and also constructed forts and palaces in different parts of his territory. Thus the architecture developed under Mughal is built with qualitative building materials in which red sandstone and white marbles were principle and mortar was prepared with source of lime. The basic ingredients of mortar were lime waster and *surkhi* (pounded bricks). Apart from this, various types of coloured stones, precious and semi-precious gems were also used for decoration of monuments.

During this period the red sand stone was quarried from Fatehpur Sikri and Rupbas. Bihar was known for cutting and polishing of stone. Phalodi in Rajasthan had two stone quarries. Abu’l Fazal records presence of two marble quarries at Rajgir and Gaya in Bihar used for making ornaments. Marble was quarried from Marwar. For Taj Mahal marble was brought from Udaipur region. The stones were transported on cart loads. Lime was quarried from Broach and Patiali (near Aligarh). Limestones were used for white washing. Gujarat's *sang mahtabi* (a variety of lime) was known for its softness and whiteness. Lime from sea-shell was prepared in the region of Bengal.

In building construction role of engineers (*muhandis*) and architects (*me'mar*) and builders (*banna*) was most important. The drawing or plan (*tarah*) of the building was the main part of the construction after choosing the site. The *tarah* or plan was chalked out on a sheet of paper and building was constructed as per the *tarah*. The master architect was known as Ustad. Ustad Ahmad and Ustad Hamid were the chief architects appointed for the construction of Shahajahanabad fort. A painting from Baburnama shows Babur inspecting the graph-sheet (*naqsha*) of a layout of a garden. 'Gardens' formed an integral part of Mughal building construction. In Karnataka architects and builders were known as *ruvaris*, and *rupakaras*, *silpi*, *achari*, and *acharya*. They were involved in tank and temple construction.

Among the workers *Beldar* specialized in laying out the foundation. Stone cutter or *sangtarash* was another important worker to construction of building. There were three categories of stone cutter i.e. 1.*sangbar* (man who works in quarry), 2.*munabbatkar* (embosser), *naqqash* (tracer) and *parchinkari* (inlayer) and 3. *sadakar* (plain stone cutter). Bricklayers (*raj*) constituted separate category. Ironsmiths though played an active role in the building activities as is evident from Mughal paintings, who manufactured nails, screw, nuts, clamps, knockers and other equipments. Interestingly he is found missing in Abu'l Fazal's list of building workers. Carpenters (*najjar*) and sawyers (*arra kash*) were important part of building construction. In Karnataka, known as *badagi* and *varadhaki*, they enjoyed the status equal to *rathakara*.

Tanning

The leather industry also considerably developed during the medieval age. Leather was used increasingly, for purposes like manufacture of saddles and bridles for horse's scabbards of swords, shoes and other items of common use by upper class. Even the ordinary peasants made water buckets and leather pots. Besides these goods certain articles of great excellence were made out of leather. In Gujarat, the leather workers made red and blue leather mats 'exclusively inlaid with figures of bird and beasts and skillfully embroidered with gold and silver wire'. They also dressed great numbers of skins of various kinds namely, goat skins, ox-skins, buffalo and wild ox-skins as well as those of the rhinoceros and other animals. In fact, so many skins were dressed every year in Gujarat that they exported many ship-loads to Arabia and other countries.

Tanning was the craft that was solely the profession pursued by the 'Chamar caste'. They were a Dalit community known for their scientific pursuit. It was the time during the rule of early Mughals in 15th century Agra, also known as the leather capital; the Chamars had begun an interesting journey. The leather industry of Agra was formed during the period of Humayun; however, Agra's leather industry received its main impetus during the time of Emperor Akbar, who declared that his soldiers wear shoes. Till that time the Mughal army had fought barefoot. Shoe-makers were summoned from all over the empire and work began to produce hundreds of thousands of pairs per year. Besides the hard-wearing leather jootis with slightly turned up toes for the soldiers, there was also a huge demand for more delicate versions for nobles, their ladies and vast entourages. The Mughal shields which at least for the common soldiers also were made of leather.

The Chamars were the first discoverers of the role of salt in keeping the wet skin from rotting. The natural tanning process adopted by the Chamars was largely eco-friendly. The salted skin is dipped into the powdered mixture of the bark of Tarwar plant. The Chamars discovered that the tannic acid of the Tarwar could be used to convert raw skins into leather. The treated skin is then put into a tub of lime. After a week it transforms into leather. The leather is then washed clean in a storm or a pond. To give a finished touch to the leather the Chamars use the dried and powdered fiber of a fruit called *Karukkaya*. The fiber is boiled in castor oil. On cooling this solution is systematically applied to the leather to give it a polished, smooth look.

Ship-Building

The maritime history of Indian ship building begins right from the time of Indus valley civilization. The evidences of Chinese sources suggests that from early twelfth century onwards the major portion of the export trade of China was not in Arab bottoms but in the ships of the Kling merchants of Coromandel and Ceylon.

By 1200 commodities of the maritime trade were mainly carried in two types of vessels, such as ‘the dhow’ and ‘the junk’. In addition to these, many varieties of specialized crafts were in use some probably deriving from traditions of ship-building of independent historical origin. According to Simon Digby in his article *The Maritime Trade in India* ‘the generic term dhow is often stated to be of non-Arabic origin and only in recent usage; yet the fifteenth-century Russian, Nikitin, who travelled from the Persian Gulf to India in such a vessel, describes it as a ‘*tava*’.’ These ships were rope-sewn, with a mainmast and a mizzenmast rigged fore-and-aft with lateen or, more properly, settee sails. They each had a side rudder. The hulls of the ocean going vessels were built of teak-wood from the rainforests of western India and it may be assumed that by this period they were mostly built there. The dhows of the Arabian Sea must have been large compared to Mediterranean and north European shipping of the period.

The Chola kingdom at its height in the early eleventh century was capable both of mounting maritime expeditions against Sri Vijaya and dispatching embassies to China in its own craft. Chinese evidences suggest that at the beginning of the twelfth century much of the eastern carrying trade was in the great ships of Kling merchants from Coromandel. In the middle of the fourteenth century the Sultans of Madura could contemplate a naval expedition to conquer the Maldives and description by Ibn Battuta of the strong wooden defenses of the harbor of Mali-Pattan, suggest that a strong ship-building tradition survived on the Coromandel Coast as well as the Malabar Coast.

Chinese evidences indicate that there was a maritime shipbuilding tradition in Bengal in the later fourteenth and fifteenth centuries. According to the sources a vessel from Bengal probably owned by the sultan of Bengal, could accommodate three separate tribute missions from Bengal, Sumatra, and Brunei. It can hardly have been smaller than the largest class of Chinese junks, which were no longer faring abroad in the later fifteenth century. This suggests that it was of junk construction. In the early sixteenth century Portuguese writers careful with their nautical terms describe some of the ships of the Bay of Bengal as junks, and others as dhows. It is true that Chinese junks were withdrawn from the Indian Ocean in middle of the fifteenth century, but Indians continued to copy the construction of Chinese type vessels. However the Indian junks were different in some particulars from their Chinese prototype. We have a very good description of the Indian junk from Peter Mundy at Surat. He tells us ‘ Junks are this country vessels, so called by us, of which many belong to this place, among the rest some of 1000 or 1200 Ton each, and but one Deck. This put to Sea with early Monsoon, and before the wind out goes our ships, by reason of purpose, as being confident of the continuance of faire and moderate winds and weather during that monsoon.’

The Mughal Empire from the very first day of their direct contact to the Indian Ocean just after the conquest of Gujarat in 1572 A.D., developed interest in the ocean. According to Abu'l Fazal the construction of the first great ship by the side of river Ravi at Lahore was completed in June 1594. The length of its keel (the wooden beam on which this wooden structure is raised) was 35 *gaz-i ilahi* (a little over 93 feet). It was made of 2936 large planks of *sal*-wood and pine tree. Iron, weighing 468 *mans*, 2 *sers* 11.56 tons in weight was used indicating a very generous application of iron nails, strips, rings, etc., in joining the planks together. As many as 240 carpenters, ironsmiths and others were employed in the ship's construction. When it was completed the emperor himself went to see it being launched. A thousand people drew the ship with various ingenious devices; but it took ten days to put it into the river. It was obviously difficult to find enough water in the Ravi River to accommodate a sea going vessel. However, it ultimately reached Bandar Lahiri. Another contemporary narrator tells us that this ship was made and sent to the port of Sind for undertaking voyages to Mecca, i.e., the Red Sea.

Abu'l Fazal says that the difficulty the first ship had experienced in drawing water in the Ravi led Akbar to try out the idea of building the next sea-going ship upon a big barge capable of carrying a burthen of 15,000 *mans* (370 tons in weight) or more. The ship began to be constructed around mid-July and was completed about mid-December 1596. It was 37 gaz or nearly 99 feet long, but whether at the keel or at upper deck is not stated. A sum of Rs 16,338 was spent on it. Carried by the barge, the ship was conveyed conveniently to Bandar Lahiri. Apparently the barge, on which the vessel was built and carried, was there scuttled, enabling the vessel to enter sea water. This device anticipated the camel (invented in Dutch dockyard in 1688), which was a barge that could be submerged to let a ship come over it and then be raised to carry the ship over shallows. Akbar was so interested in sea shipping that he even built a vessel, modeled after sea – going *ghurab* (small vessel, galley), to ply on the Jhelum river and the linked lakes in Kashmir. Akbar himself took a ride on it in July 1597. This interest continued under other Mughal emperors also especially Jahangir, Shah Jahan and Aurangzeb. Jahangir himself used to invest in the ships voyaging to Mecca. Shah Jahan, as Prince Khurram, took great interest in shipping, when he became governor of Gujarat, and he built and plied his own ships. The two famous ships owned by him were 'Shahi' and 'Ganjawar'. His interest continued after becoming Emperor also. Aurangzeb also took great interest in shipping especially in sending ships to Mecca. The 'Ganj-I Sawai' was his ship whose seizure by the English is well known incident. Other royal family members also used to invest in shipping such as Princess Jahan Ara and Prince Dara Shukoh etc. Nobles were also involved in shipbuilding and shipping.

In Mughal India planks of vessels were joined mostly by a method called 'rabbeting', a tongue and groove method. However other methods were also applied by them. Earlier, Indians used to join the planks by stitching or sewing with rope. It is only at the beginning of the sixteenth century that sources begin to note the presence of iron fastenings in Indian ships, as is shown by the accounts of Pedro Alvares Cabral. Who tells us that on the south west coast that 'the ships are made with iron nails. Ludovico di Varthema, in the first decade of sixteenth century found at Calicut that 'they put in an immense quantity of iron nails' in building their ships. Gaspar Correa, writing the history of the first voyage of Vasco da Gama, noted that most vessels present at Cannanore were sewn, but there were iron-nailed vessels also which were flat-bottomed. If we believe Gasper Correa, who mentioned presence of nailed vessels at Cannanore, at the coming of Vasco da Gama, it cannot deny the use of iron in Indian vessels was still not employed on a large scale. In Mughal India, in late sixteenth century we have very interesting and informative description of use of iron nails in joining planks, in the Akbarnama of Abu'l

Fazal. From the paintings of Mughal period it is also confirmed that they used iron in building their ships. And this is an important proof against the popular notion that, Indian ships were only stitched and sewn with rope and there was no use of iron.

Under the Portuguese, ships and boats were built at several places, such as at Diu, Goa, Daman, Bassein etc. but their main ship building centers were Daman and Bassein. The English after their peace with Portuguese, used to purchase from these places. Later on areas adjoining Bombay, became the main center of shipbuilding, after the coming of English there.

Metal works

Metal work has a very old tradition In India, to which many ancient idols, pillars and other rock structures bear witness. Among the metals mined diamond occupied the foremost place. India was also known for its iron, copper and steel. Iron, mercury and lead mines existed in India and were worked to a certain degree, though the output does not appear to be very considerable. Abu'l Fazal definitely states that Indian metal workers fully understand how to handle various metals, namely iron, brass, silver, zinc (*kansi*), mixed metal (*hasht-dhat*) and mica (*kol-pattar*).

Gold and Silver

Gold was not produced in India on a considerable scale. Gold mines of Karnataka exhausted long back. But there are evidences for the extraction of gold from river sands during medieval period in India. Ralph Fitch mentions that people find gold by digging sand deposit at Patna. Gold was extracted from the sands of river Ganga and its tributaries, however the extraction process was very expensive and the margin of profit was almost negligible.

As for silver mines, references to its extraction are very rare. Though Abu'l Fazal mentions the presence of silver mines in

Kumaun hills and there were some traces of silver mines in Sirmur hills, largely gold and silver were pumped to India through favorable balance of trade.

However, craft of jewellery making was a flourishing one in medieval India. According to K M Ashraf in his work *Life and Conditions of the People of Hindustan* 'By the time of Timur, gold and silver vessels, inlaid ornaments, embroidered belts, necklaces, dishes, dish covers and other articles were common in many big cities.' Barbosa bears testimony to the very fine work of the very good goldsmiths of Gujarat. Under Akbar, an even greater refinement was attained in the quality of metal work. Abu'l Fazal praised the excellence of goldsmiths who made ornaments and were sometimes paid ten times the value of the metal they worked, for their wages. He enumerates a number of groups of goldsmiths, who had specialized in making various ornaments.

Copper

Copper was extensively used for coinage as well as it was important for production of arms. In the north copper mines were located amidst the spurs of Aravallis. Rajasthan was known for its copper mines. The copper mine tracts in Rajasthan were Sojat, Toda Bhim, Bairat, Singhana, Udaipur, Kotputli, and Narnaul. Southeast Bihar was also rich in copper ores. Raja Bahroz of Kharagpur (1631-76) exploited the rich mineral deposits to his advantage. We also hear the presence of copper and iron mines in Suket- Mandi.

Technique of tinning of copper vessels was a great innovation in metallurgy during medieval period, which made it possible to use them for cooking. The practice is supposed to have come with Muslims, and the earliest extant copper container bearing marks of tinning is said to be one found at Brahmapuri (Kolhapur district, Maharashtra), associated with Bahmani coins of the fourteenth and fifteenth centuries.

Iron

India, in its central parts and in the peninsula, has extensive good quality iron ores found close to the surface. Iron ores were largely located in the hilly tracts extending from Gwalior to down south. The neighbouring spurs of Himalaya (Kumaun and Siwalik hills) also possessed iron mines. Deccan was exported iron to the Middle East. Masulipatanam, Petapoli, Pulicat, etc. were major centers of iron export. Sea coast town of Chikhli in sarkar Surat also possessed iron mines.

The iron smelting process was highly labour intensive, using rudimentary furnaces and implements. No underground mining was practiced, instead of it the deposits were tapped near the surface level. Usually when one bed was exhausted another shallow mine was dug elsewhere. Fakhr-i Mudabbir also mentioned how a horse was shod with *na'l*, and Amir Khusrau in tells us of the curious quality of the horse when nails (*mekh*) are driven in to its hooves.

Gender and Labour

During the medieval period largely women's role in the entire production process was that of a 'subordinate' partner and was 'marginalized' in the whole processes. However Women were equally involved in the organization of production, but the wages they receive for their labour was far less when compared with those of men. The gendered discrimination in wage payments suggests that women's labour was socially and economically devalued in relation to the wages of men. Women participation in production is constrained not only by consideration of gender but also equally by facts of caste.

Textile was the one craft where women's participation appears to be the maximum. Women largely involved in separating the cotton fiber from the seed. Spinning was the area where women were in sole command. It was done women by hand spindle or by wheel. Amir Khusrau links needle and the spindle to a young woman's spear and arrow. Miftah ul Fuzala explains the term for spindle *duk* and shows it being worked by women. It also defines charkha as the device by which women spin. In bleaching, dyeing and printing probable men and women participated together. We do get separate word for male (*chhipa*) and female (*chhimpaka*) printers. At Cambay Duarte Barbosa mentions the presence of Muslim washer-women. Female participation and involvement in the textile industry, however, did not allow them to exercise any leverage in gender relations. Vijaya Ramaswamy explains that women were not allowed to touch loom because of the concept of ritual purity. The idea behind the control of the means of production through the control of machines, e.g. loom could be a way to ensure the dominance of male over production, and appropriate women's labour in the service of patriarchy. The commercial production combined with domestic putting out system also paved way for the male dominance in crafts production. The father/master was at the head of the household with a hierarchy of women/girls beneath him. This structure based on the supremacy of male became the basis for future hierarchical divisions in industry.

The building industry of the medieval India also shows full-scale participation of women. This comes out clearly from several extant paintings of the period. However women's participation here was confined to the unskilled sector as pounding of bricks, sieving line, carrying mortar. In a depiction of the building of Akbar's capital of Fatehpur Sikri, women are shown performing tasks like breaking stones and old bricks by pounding to prepare rubble, preparing bitumen mortar- cement and staining and mixing lime used to surface walls. In another painting of construction of Agra Fort b, women are seen preparing lime mortar, and carrying it in pans, held in hand or over their heads, to masons. Yet in another Mughal painting in 1596 A.D. women are shown carrying pans filled with bitumen. We have inscriptional evidence from Rajasthan around 1597 where during construction of a step well the number of men employed is 171 whereas women are 221.

There were other works where there was division of work between both sexes. There was a large involvement of women in manufacture of salt. Women also helped their husbands in blowing bellows and dragging hot iron from the furnace. In south India Women were allowed to use bellows but not permitted to forge the iron. Women were also not allowed to assume the prime role of a designer while they were involved in the process of polishing, cutting, etc. in jewellery making. In one reference from Maharashtra, man is mentioned operating the oil mill, while women were engaged in its selling.

From the available evidences we can understand that in both agricultural and non-agricultural sectors, women were performing work that required much harder strength, stamina and energy. As for example, transplantation is a very tedious task requiring bending for hours together and in the same way, pounding of bricks is very hard. The age old explanation for women’s works attempt to rationalize an age-old tradition of gendered inequality. The assumption that women are physically weak is a culturally defined position that serves to perpetuate gender hierarchy and places obstacles in the way of Women’s participation in skilled and better paid jobs.

The gendered basis of wage difference and the exclusion of women from certain skilled and classified jobs in medieval India show the extent of patriarchal domination in the economic domain. They also provide us with a clue to an important problem in medieval history- that of the ability of the patriarchal social structure to appropriate women’s labour without letting women benefit from it socially, culturally or economically. The sexual division of labour cannot be understood in purely economic terms. It has sexual as well as symbolic dimensions. There is no doubt that women’s work is determined and constrained by the caste system. The role of women and the kinds of work they could do were largely determined by their position in the caste system, for example, spinning being such an important industry comprised of all women but with different purposes. The poor would get involved for money whereas the rich would be involved for leisure.

Women’s labour was significantly deployed in the domain of production. In non-agricultural sector, the role of their labour was quite significant. However, the social institutions like the family, kin, household and the caste, prevented women from letting their significance in production. Even despite the important role of women in economy, they remained subordinate, subservient and oppressed social group.

Module III

Trade, Commerce and Money

Nature of Trade

Domestic Trade (Local and Inland)

A large volume of internal trade in items such as food grains, other agricultural produce such as cotton, other raw materials and finished manufactured goods across the length and breadth of the country contributed a good deal to the growth of productivity in both the agrarian and the non – agrarian sectors during the medieval period.

During the Sultanate period, as during the earlier period, India remained the manufacturing workshop for the Asia world and adjacent areas of East Africa, with brisk and well- established domestic trade. India's position was based on highly productive agriculture, skilled craftsmen, string manufacturing traditions and a highly specialized and experienced class of traders and financers. The growth of towns and a money nexus in north India following the Turkish centralization which led to improved communications, a sound currency system based on the silver *tanka* and the copper dirham, and the re-activation of Indian trade, especially over-land trade with Central and West Asia.

Domestic trade may be divided into local trade between the villages, and with the mandis and district towns; and long distance trade between, metropolitan towns and regions. Local trade involved the sale of crops for the payment of land revenue and to feed the towns which were growing in size and number. The sale of crops was primarily the responsibility of the village *bania* who also provided the peasants with such necessities as salt and spices, and raw iron for use by the village black smith. Sometimes the rich cultivators themselves took their surplus produce to the local *mandis*. The *mandis* was encouraged by Alauddin Khalji to prevent hoarding at the village level. The local trade undoubtedly played a vital role in the economic life of the country. However, local trade did not generate enough wealth to make the traders engaged in it wealthy enough to lead a life of ease and plenty.

The long distance trade was mainly carried out by rich traders and financers, the *sahs*, *modis* and *sarrafs*. Their trading activities were geared both to the movement of bulk commodities within the country, as well as to cater to the demand for luxury goods required by the nobility living in the big cities. The bulk commodities included food grains, oil, ghee, pulses, etc. with some regions having a surplus and some others a deficit. Thus rice and sugar which were surplus in Bengal and Bihar were carried by ships to Malabar and Gujarat. Wheat which was surplus in modern east U.P. (Awadh, Kara/Allahabad) was transported to the Delhi region. Transport of bulky commodities overland was expensive, and was carried on mainly by the Banjaras, who moved with their families along with their families along with thousands of bullocks. Perhaps, the operations of the *banjaras* were financed by the rich merchants, the sahs and the modis. Expensive but bulky commodities, like fine quality textiles, were carried on the backs of horses or in bullock carts. The movement of these goods was in caravans or *tandas*, protected by hired soldiers because roads were unsafe on account of both wild animals and dacoits.

Supply of the food-grains to the towns was an important feature of inter-local trade during the Mughal period also. Apart from food-stuffs, the villages also supplied raw materials, such as cotton, indigo etc. for many urban manufactures. This trade was in hands of village *banias* and Banjaras who transported the food-grains to the mandis or local markets at qasbas. Certain big villages or *katras* between a number of villages could also have *mandis*. At the *mandis*, the villagers not only sold their products but purchased salt, spices, metalwork and other commodities not available locally.

Regional specialization in certain types of products, including luxury goods led to a good deal of intra-regional trade. Like the Sultanate period in the Mughal period also the overland trade was dominated by the *banjaras*, who specialized in carrying bulk goods. The *banjaras* were tribesmen who moved with their families over long distances, sometimes with thousands of oxen carrying food grains, pulses, ghee, salt etc. trading on their own, or carrying goods for the bigger merchants. Sometimes caravans of 30,000 bullocks moved under state protection for the supply of food grains to the army. The more expensive goods, such as textiles, silks etc., were laden on camels and mules, or in carts. But it was cheaper to move bulk goods through the rivers on boats. Boat traffic on waterways, and coastal trade along the seashore was then more highly developed than now. Water ways and coastal trade was used more for movement of heavier goods since transport on land was more expensive.

The trade in food stuffs and a wide range of textile products were the most important components of inter-regional trade during the period. Bengal exported sugar and rice as well as delicate muslin and silk. The coast of Coromandal had become a center for textile production, and had a brisk trade with Gujarat, both along the coast and across the Deccan. Gujarat was the entry point of foreign goods. It exported fine textiles and silks (*patolas*) to north India. It received food grains and silk from Bengal, and also imported pepper from Malabar. North India imported luxury items and also exported indigo and food grains. Lahore was another centre of handicraft production. It was also the distribution centre for the luxury products of Kashmir- shawls, carpets, etc. The products of Punjab and Sind moved down the river Indus. It had close trade links with Kabul and Qandahar on the one hand and with Delhi and Agra on the other.

There was a well-organized trade network in semi-luxury and luxury goods, with Agra and Burhanpur being the two nodal points in north India. Later, in the 18th century, with the decline of Agra, Banaras emerged as one of the nodal points. Lahore had the advantage of sending its goods down the river Indus, just as Delhi and Agra were connected by the Yamuna.

India’s inter-regional trade was not in luxury alone. The movement of these goods was made possible by a complex of network, linking wholesalers with merchants down to the regional and local levels through agents (*gumashtas*) and commission agents (*dalals*). The Dutch and English traders who came to Gujarat during the 17thy century found the Indian traders to be active and alert.

Inland trade was served by a network of roads which successive rulers from the time of Sher Shah tried to improve. Before this, Muhammad Tughlaq built a road from Delhi to Deogir. It illustrates the manner in which road communication were sought to be improved. Thus, trees were planted on both sides of the road, and a halting station (sarai) was built every two miles (*karoh*) where food and drink was available. The transport arrangements of Mughal period can be compare favorably to those prevailing in Europe, with sarais being set up at intervals of eight or ten miles on the principal routs. According to Tavernier, the facilities were “not less convenient than all the arrangements for mm arching in comfort either in France or in Italy.” Pack-oxen and ox-drawn carts, as well as camels, were the chief means of transport, while horses were used as mounts. A palanquin, carried by four to six servants, with others to relieve would, according to Ovington, with ease carry one twenty or thirty miles a day. However, a normal day’s journey was considered to be eight to twelve miles.

Movement of goods was also facilitated by the growth of a financial system which permitted easy transmission of money from one part of the country to another. This was done through the use of *hundis*. The *hundi* was a letter of credit payable after a period of time at a discount. The *hundis* often Included insurance (*bima*) which was charged at different rates on the basis of the value of the goods, destination, means of transport (land, river or sea), etc. The *sarrafs* (shroffs) who specialized in changing money, also specialized in dealing with *hundis*. In the process, they also acted a private bank: they kept money in deposit from the nobles and also lent it to traders. By means of *hundis*, they created credit which supplemented the money in circulation and financed commerce, particularly long-distance and international trade. Since the merchant could cash his *hundi* at the point of his destination, after he had sold his goods, movement of species or money which was always a risky enterprise could be reduced, especially when the rich traders such as Virji Vohra set up agency houses in different parts of India including Burhanpur, Golconda, Agra and in the Malabar and also in West Asia the port-towns of the Persian Gulf, Red Sea and South East Asia. So brisk was use of *hundis* that in the Ahmedabad market merchants made their payments or adjusted their obligations almost entirely through *hundis*. Even nobles used the *hundis* for payments of salaries to the soldiers.

Foreign Trade

India's Overland Trade

India had an old tradition of trade with West Asia and extending through it to the Mediterranean world, and also to central Asia, South-East Asia and China both by overseas and over-land routes. The over land routes lay through the Bolan Pass to Herat and through the Khyber Pass to Bokhara and Samarqand, and also by the Kashmir routes to Yarkand and Khotan for onward transmission to China. These trade routes were sometimes disrupted due to the outpouring of nomadic hordes from central Asia, such as the Hun eruption during the 13th century. The rise and fall of empires also affected the safety of these trade routes. However, the traders proved to be extremely hardy and skillful in overcoming these obstacles.

With the establishment of the Mongol empires, and the security of roads, trade with China and West Asia became easier than ever before. With the gradual assimilation of Mongols to Islam, conditions for trade improved further during the 14th century. However, overland trade concentrated on commodities which were light in weight but high in value because of the high cost of transportation. Horses were the most important commodity imported overland into India. There was a steady demand for Arabic, Iraqi, and Central Asian horses in India for the needs of the army, the cavalry being the principal instrument of warfare. They were also valued for purposes of show and status. Hence, the careful regulation of sale and purchase of horses was apriority for the state. The other commodities imported into India included camels, furs, white slaves, velvet, dry fruits and wines. Tea and silk were imported from China, though silk was also imported from Persia, the mulberry tree and silk cocoons having been introduced there during the 13th and 14th century by the Mongols. The exports from India included cotton textiles, food stuffs such as rice, sugar and spices. There was a continuous export of slaves from India for whom the demand in the Islamic world was quite considerable. The principal centre for overland trade from India was Multan. Multan was also the entry point of all foreigners, including traders who were all called Khurasanis. It is difficult to estimate their number, but in wealth they appear to be inferior to the Multanis.

For the Mughals, it was imperative that overland commercial arteries were kept in a state of running efficiency because these channels acted as conduits for the deliveries of strategic goods such as horses and bullion. The good horses were imported to the Mughal state from Arabia, Iran, Turan, Turkey, Turkestan, Badaksahan, Shirwan, Qirghiz, Tibet, Kashmir and other countries. Kabul and Qandahar were the major entrepots on the land routes in the Mughal India for the horse traders. Domestic production of gold and silver was very limited in India at the time and therefore it was extremely critical for the state to work towards the promotion of trade so that India could avail its traditionally favorable position in the global commodity flows and consequently attract inflows of gold and silver against its robust portfolio of tradable goods. So, the monetization of the agrarian surplus and trade-induced exchange economy came to effectively hinge on availing bullion flows on the back of robust trade.

The trading sessions conducted by Akbar indicates his favorable disposition towards trade. The mercantile people eagerly look forward to attending this event and would layout articles from all countries. These sessions were attended by the ladies of the harem as well as the emperor who would personally visit the kiosks set up in the pavilion and converse with the assembled traders. Apart from catering to the concerns of the domestic mercantile constituents, Akbar also endeavored to advertise his resoluteness towards encouraging commerce by making references to state of affairs along trade routes in his correspondences with foreign Muslim potentates. In one such correspondence with Abdullah Khan Uzbeg, Akbar conveyed the situation along trade routes passing by Qandahar. Another major initiative of Akbar geared towards expanding commerce was the appointment of twenty one new officials to preside over an equal number of branches of commerce. These officials were entrusted with the responsibility of setting the sale price of different goods. Akbar also abolished a number of vexatious taxes to add to the viability of commerce.

His measures were further augmented by Jahangir, who was equally keen on promoting overland trade. One of his specific measures in this direction was the decision to repeal dues on several commodities in the region of Kabul at a great loss to the state exchequer. A major motivation for this concession was probably a desire to expand trade with Iran and Turan. Continuing his father’s engagement with the northwest, Shah Jahan also sanctioned a series measures along the Khyber route to promote commerce. As part of the plan to invigorate commerce along that route, a bridges and caravanserais were constructed.

During the entire medieval period the Indians prospered in overland trade because they were skillful in their business, and were frugal. They also had advantage of dealing with Indian textiles which were cheaper and often superior in quality compared to local products. The exports from India, apart from textiles, included indigo, spices and sugar. The imports included horses, carpets, furs, dry fruits and species.

It is difficult to estimate the quantum of goods across the overland Mughal frontiers. According to an estimate, Mughal mints from the northwest parts of the empire-Kashmir, Kabul, Lahore, Multan and Thatta together issued the largest number of coins of all the Mughal mints , amounting, taken together, to 36.7 per cent. Apart from Thatta which was a river port, the mints of Kabul, Lahore and Multan would have issued coins out of the silver imported from Iran and Turan.

Overseas Trade

There was a time in the past, when Indians were the masters of sea borne trade of Europe, Asia and Africa. They built ships, navigated the sea and held in their hands all the threads of international commerce, whether carried on overland or sea. From the earliest time India has an enormous trade links with Asia and western countries. This glory of Indian overseas trade even continued in the medieval and modern period.

Many of foreign travellers give accounts on India’s trade during the medieval period. Medieval India’s Arab traveller Ibn Battuta (1333-46) found great cities with rich markets in the north and south. In another context the same writer while describing the magnificent port of Alexandria in Egypt, observes that he has not seen its equal in the universe, if exception is made in the case of Quilon and Calicut in Malabar, Sudak in the Crimea, and Zaytun in China. The rich sea ports of Gujarat, Deccan, Malabar and Bengal are described by the Portuguese writer Barbosa as handling an extensive trade (inland, coastal and overseas) in the remarkable variety of merchandise. In the city of Vijayanagar, because of its large size and huge population, rich bazaars (markets), the number of it skilled craftsmen, and dealers in precious stones as well as other articles, impressed profoundly a succession of foreign visitors. One of these, the Portuguese traveller Domingo Paes, describes its heavy traffic and busy markets.

The trade in Indian coastal ports, from the detailed narrative of Ibn Battuta, it appears that the western coast of India was studded with a large number of sea ports, excellent harbors and extensive trade. Among these ports Diu, Goa, Calicut, Cochin and Quilon gained more prominence. The highly profitable direct trade between Gujarat and Malabar was almost completely monopolized by the Malabari merchants. In the fullest list of imports from Malabar are included cocoa-nuts, cardamoms and other spices, emery, wax and iron, sugar from Bhatkal, sandal-wood and brazilo-wood, silks and other articles. The exports to Malabar consisted mainly of cotton, cloth, wheat and other grains, horses and carnelians. The coastal trade of the Deccan ports appears to have been shared by both Gujarati and Malabari merchants.

The trade of the neighbouring island of Ceylon appears to have been largely controlled by the Indians. Merchants from Coromandel, Malabar, and from the Vijayanagara, Deccan, and Gujarat kingdoms are described as visiting the island of Colombo. The imports consisted of very fine Cambay cotton cloths, saffron, coral, quicksilver, cinnabar, gold and silver. The coastal trade of Coromandel and the Vijayanagara kingdom was carried by Hindu Muslim merchants from Malabar and imports consisting of areca-nuts, cocoa nuts, horses etc., and the exports comprising rice and cloth.

The vast overseas trade of India with Western Asia flowed during this period. The merchandise was carried along the Persian Gulf and thence overland through Mesopotamia to the Mediterranean coast, and also by the sea-route to the Red sea ports, and then, Western Europe by the Venetian and other Italian merchants. In the Early part of the fourteenth century as we learn from Ibn Battuta, Ormuz was the entrepots of the trade of Hind and Sind, the merchandise of India being carried thence to the Iraq's, Fars and Khurasan. Merchants of Fars and Yemen, as told by Ibn Battuta, disembarked mostly at the port of Mangalore, and Chinese ships bound for India entered only the ports of Ely, Calicut, and Quilon. In the work of Barbosa we have a valuable report of India's maritime commerce with the western world in the beginning of sixteenth century. We learn that an extensive and highly profitable trade was borne between the Indian ports, Diu, Chaul, Dabhol, Goa, Bhatkal, Calicut, and so forth, on the one side and those of Arabia and Persia, such as Jeddah, Aden, Esh-Shihr and Ormuz on the other. In a comprehensive list of imports from India into Ormuz are included pepper, cloves, ginger, and cardamoms, sandal-wood and brazil-wood, saffron, indigo, etc, from Cambay, Chaul and Dabhol, as well as Bengal muslins. The exports carried to India on the return voyage are said to have consisted of Arabian horses and other things. For while ships from Cambay brought to it cotton cloth in 'astonishing quantities' as well as drugs, gems, seed-pearls and carnelians in abundance, and carried back madder, opium, copper, quicksilver, vermilion, gold other things, those from eastern coast of imported commodities etc. The Muslim merchants of Cambay, Chaul, Dabhol, Bhatkal and Malabar imported cotton cloths, inferior gems, rice, sugar, and spices into the neighbouring Arabian port.

The direct trade established by the Chinese with India during the twelfth century appears to have been continued and developed during this period. It received a great impetus through the series of maritime expeditions fitted out by the Chinese Emperor Yung-Lo (1403-24), culminating in a succession of seven such expeditions led by the Eunuch Cheng- Ho during and after his lifetime (between A.D. 1405 AND 1433). In the early part of the fourteenth century regular voyages were made by Chinese ships to the three Malabar ports. The Chinese imports into the Indian ports followed a set pattern, the merchants bringing silk, coloured taffetas and satins, cloves and nutmegs, blue and white porcelain, gold, silver etc., for exchange with the Indian goods. Barbosa quoted Malacca, established as an independent Muslim State in the fifteenth century A.D., was the great international port of south-east Asia at that time. It contained a colony of wholesale merchants (Hindu and Muslim) who owned large estates and great ships. The list of its imports (evidently from India) included pepper, incense, saffron, etc., from Bengal, and some goods from Gujarat to South East Asia. Some of these were carried to the islands of Java, Sumatra, the Moluccas, Timor, Banda, and Borneo. The imports brought there every year in Muslim ships, evidently from India.

India's overseas trade steadily expanded after the arrival of the Portuguese at the end of 15th century. They established their dominance over the overseas trade and monopolized certain articles of trade, such as spices, horses, armaments, and species etc. for themselves and excluded the Moors (Arabs and Muslims in general) from trade as far as possible. The Asian traders, conscious of the Portuguese domination of the seas, had to obtain from the Portuguese *cartaz* or passes for their ships on condition of payment of customs duties at a Portuguese controlled port. This passes were given liberally. Between the middle of the 16th and the middle of the 18th century, India's overseas trade further developed, both in terms of the tonnage of the goods carried as also expansion into new areas, or areas which had been lightly touched earlier. This was due to some extent on account of the activities of the various European companies which came to India during the period, notably the Dutch and the English and later the French. Other European companies, the Austrian, The German, Danish etc., played only a limited role. Another important in the growth of trade was the rise of three powerful Asian states during the period, viz., the Ottoman, the Safavid and the Mughal. The role of the mining in China also cannot be disregarded. These empires not only provided for law and order and conditions under which trade and commerce and manufacture could grow, but also aided the process of urbanization and monetization of their economies.

Stakeholders

Due to the activities of the various European trading companies, and their domination of the Indian Ocean there was general belief that Indians traders and Indian shipping had been largely displaced from the seas during the seventeenth and eighteenth centuries. But now it is largely discarded and recent researches shows that far from ousting the Indian traders from overseas trade, the share of the foreign companies in various regions of India, specially Gujarat, Coromandel or Bengal remained a fraction of the total, and that Indian trade and Indian shipping declined and made way to European carriers only after the establishment of colonial rule in the country. Thus Ashin Das Gupta in his Indian Merchants and the decline of Surat 1700-

1750, calculates that the end of the 17th century, Surat’s annual turnover was Rs.16 million annually, of which the European share was only Rs.2 million or one eighth of the total.

There are rich merchants in medieval India who invested the trading activities with high entrepreneurial skill and organizing capacity. However information about Indian overseas traders is scanty. Indian overseas traders have been divided into several economic categories. The backbone of India's sea-borne trade was provided by ship-owners and operators whose primary activity was long –distance and coastal trade.

The ship-owners themselves fell into several categories. At one end were magnates who owned a fleet of ships which were based on one big entrepots port, such as Surat or Masulipatanam, or a cluster of ports such as in south and central Coromandal, or Bengal and Orissa. Examples of Such traders were figures such as Abdul Ghaffur of Surat, Mir Kamaluddin of Masulipatanam and Astrappah Chetty of Pulicat. Abdul Ghaffur was the largest merchant of the seas during the latter part of the seventeenth and the early decades of the eighteenth century which was a boom period in trade. He was said to own 20 ships with total dead-weight of carrying capacity of well over 5000 tons. Thus he could easily challenge comparison with any of the European concerns at Surat. He traded from Manila to Mocha, and exercised strict control over all his managers of ships (*nakhudas*). There were other ship owners who had between five and ten vessels each. There were also single owner – operated ships which did regular overseas trips. The largest fleet owing houses were controlled by the head of the family who resided at a major port. Apart from members of his family assisting him or sailing his ships, he would have paid servants, and regular agents in major producing centers and towns to supply his ships with export goods. The nakhudas or manager-cum-captains were a privileged lot, often being substantial merchants themselves. They also enjoyed special privileges on board the ship, and in the ports.

A second category of overseas merchants who were considerably larger than the first were those who did not own ships, but hired space on ships of others for their own trade and the trade of others. The bulk of India's overseas merchants during this period belonged to this category. It was the pressure of demand from them for shipping spaced which led to the construction of new ships including construction of large carrying capacity ships of up to n1000 tonnes, during this period. The number of ocean going ships in Surat in 1650 was 50. The Mughal Emperor ordered in 1650 that six to eight well-built ships be built every year. This continued till Aurangzeb discontinued it. However, at the turn of the seventeenth century Surat alone had 112 sea going vessels.

A third category of overseas merchants were kings, princes, other members of the royal family, administrators and military officials and nobles who took to trade. Besides the Mughals, there were officials from the states of Bijapur and Golconda, and from the smaller Hindu states of the south- Ikkeri, Tanjavur, and Madurai etc. The rulers of Malabar states- Calicut, Cochin, Cannanore, Travancore had a tradition of engaging themselves in trade. But most of them used established merchants for pursuing their trade. It is known that they invested heavily in ship building, and used their ships for freight. Rulers of some of the neighbouring states- Ayuthya, Arakan, Acheh, Johore, Bantam, etc. also regularly traded with Indian ports in their ships, the rulers of the two sides helping each other in procuring cargo for the ships on return.

In addition to these sections, there was a vast group of merchants who operated in the ports and their hinterlands. Many of them were wholesalers who operated on a large scale in the import and export of commodities. They purchased in bulk from ships, sometimes contracting for an entire ship load. They had their own ware houses for storing goods to be sold in small lots when the price was right. These merchants had agents in hinterland markets to dispose of their purchases. They were bulk buyers of commodities brought by European traders, such as spices, copper, tin, broad cloth etc. Thus Virji Vohra of Surat was a large scale importer of pepper from Malabar and Kanara. Similarly, Ahmad Chellaby of Surat, Malay Chetti, Kasi Viranna and Sunca Rama of southern Coromandal were masters of extensive commercial empires. These merchants were comparable to European's merchant princes in wealth and power.

The Dutch historian, Van Leur, called the Indian merchants engaged in over-seas trade as pedlars, i.e. merchants who carried with them goods from market to market for sale. This could apply to the large number of small merchants, sometimes 500 in a ship, who carried their cargoes with them. The European trade companies, with their warehouse and network of agents is said to have established 'transparency' in the market, or a better control over movement of prices. But establishing warehouses was the basis of all large scale foreign trade which may Asian Traders possessed, as also agents for providing information about the market. But the market remained volatile, and even the European companies were not able to fix prices except by compulsion of the producers later on.

There were several reasons why the Indian traders successfully coped with the competition offered to them by Dutch and English traders in South East Asia and West Asia. The Indian traders expected a profit of only 10 to 15 per cent whereas the Dutch and the English were not willing to work on a profit of less than 40 per cent and hoped for more. Freight charges on the Indian ships was also lower, sometimes half of what was charged by the Dutch and the English. Ashin Das Gupta says that, Indian Merchants could not charge more because of the fierce competition from the large number of small merchants. According to Ashin Das Gupta, while the pattern of Asian trade did not change and trade remained largely in the hands of Indian merchants, European intervention in the Indian Ocean area led to changes in the deployment of Indian shipping from time to time. The Indian traditional structure was enriched and strengthened through European skill and enterprise. However, some historians are of the opinion that the impact of the European intervention was for deeper than this. They think that the influx of South American silver into Indian via the Cape of Good Hope and the Philippines had a dissolving effect on the traditional Indian and Asian economies.

Trade Routes

During the medieval period a vast network of roads connected different ports, markets and towns with one another and served as the channel of trade and commerce. Arabic and Persian accounts provide detailed information on the contemporary trade routes. Al-Biruni mentions fifteen routes which started from Kannauj, Mathura, Bayana, etc. The route from Kannauj passed through Prayaga and went eastward up to the port of Tamralipti (Tamluk in the Midnapur district of West Bengal), from where it went along the Eastern coast to Kanchi in south. Towards the North-east, this route led to Assam, Assam and Tibe, from where one could go overland to China. Kannauj and Mathura were also on the route to Balkh in the North-west. This also joined Peshawar and Kabul and ultimately the Grand Silk route connecting China with Europe. This North-western route was the chief channel of commercial intercourse between India and Central in the pre-Gupta centuries. But in the early medieval period, it was largely under the control of Arab and Turkish traders who used it primarily to bring horses from Persia, Balkh and other regions. The route starting from Bayana in Rajasthan passed through the desert of Marwar, and reached the modern port of Karachi in Sindh. A branch of this route passed through Abu in the western foot of the Aravalli hills and connected ports and towns of Gujarat with Bayana, Mathura and other places in North and North-western India. Another route of from Mathura and Prayaga proceeded to the port of Broach on the Western coast via Ujjain. These routes played an important role in opening in the interior of India to the international sea trade which acquired a new dimension in the post-tenth centuries.

The main lines of trade between the great Asian civilizations had been set out in antiquity, and continued to operate during the medieval period. The routes all converged on Baghdad. Caravans coming from Iran, India, Central Asia and China met at Baghdad. Baghdad was also linked by sea via Shiraz which reached the port of Siraf on the Persian Gulf. The main highway forked at Nishapur, one going via Merv and Bukhara to China, and the other via Herat and Qandahar to Multan. According to Satish Chandra, only one of these the road going to China has been in focus. It has been miscalled the Silk Road, although silk was no longer the main article of trade over5 this road. The southern route, the route going to India , was one which Kirti Chaudhury says could well have been called the cotton road, because it was along this road that Indian textiles reached west and Central Asia, and later, even Russia. This road terminated at Aleppo in Ottoman Turkey which was such mart of Indian goods that it was called little India. Many Indian Merchants were also settled there.

During the Mughal period an elaborate network of trade routes linking all the commercial centers of the Empire was constructed by the rulers. Generally the roads were looked after by the state or chieftains through whose territory they passed. In certain regions, these rods were obstructed by a large number of rivers which were crossed by fords or sometimes bridges had to be built. The fords and bridges were also built and maintained by state or nobles. However the condition of the roads during the rain was a bad commentary since long stretches became unusable during the monsoons. There are records from travellers lamenting the bad muddy condition of Surat-Burhanpur route during the rains. All the prominent routes had sarais at short intervals. These *sarais* were used by the merchants and travellers as halting places. Apart from residential quarters, big *sarais* also provided to the itinerant traveller space for storage of goods.

Besides roads, the rivers in the plains of North India, and the sea route along the Eastern and Western coasts in South India also served as important means of inter-regional contacts. The sea routes on both the Arabian Sea and the Bay of Bengal were well frequented. Before the discovery of the sea route via the Cape of Good Hope, the most frequented sea routes in the north were; a) from Cambay, Surat, Thatta to the Persian Gulf and Red sea, b) from other parts like Dabhor, Cochin and Calicut to Aden and Mocha. At Mocha certain commodities were carried via Red sea and then through overland route to Alexandria via Cairo.

Alexandria was another point of distribution of commodities into European countries. With the rounding of the Cape of Good Hope, the European countries got new openings. Now they no more depended on Alexandria or Aleppo. Instead they dealt directly with India and South Asian countries. As for Eastern seas, since long the Indian Merchants were having seaborne trade with China and the Indonesia Archipelago. From Hugli, Masulipatanam and Pulicat, commodities were sent directly to Achin, Batavia and Malacca. Through the Malacca straits, merchants used to go as Macao and Canton in China.

Involvement of State

Discussion about the attitude of medieval Indian states, especially the Mughals, and the bigger states of the times, Bijapur and Golconda, towards commerce brings us to the question of the nature of the state. The coastal states of Malabar, Hindu Nayakdoms of South India and the Marathas fall into a different category. They were more conscious of the importance of trade for their economies and interacted closely with traders, or even tried to monopolize the major items of export such as pepper.

It is wrong to consider that since the Mughals came from Central Asia they were indifferent to trade. Recent research shows that since Central Asian states were located in steppe lands with limited land for agriculture, they were even more conscious of the importance of the roads – east to west, and south to north which criss-crossed their lands, and upon which cargoes moved. The control of such roads in order to tax the customs was, thus, an important part of Timur's empire building. The Mughal Attempt to conquer Gujarat, Bengal and Sindh-three commercial regions of the country, and their attempts to keep their control over Kabul and Qandahar, two of the principal over-land trade marts is comparable to Timur's attempt to control the important Central Asian trade routes.

In the rich fertile plains of north India, the state's share of the agricultural surplus was far greater than the tax on trade. However, as commerce expanded, the rulers as well as the nobles began to look upon trade as a supplementary source of income. This type of an approach had both negative and positive aspects. Negatively, both the rulers and nobles holding administrative charges tried to distort trade for their personal profit. Thus, in 1663, Shah Jahan gave to a Gujarati bania, Mohandas Danda, the sole right s to buy indigo grown in the kingdom. He was to return rupees eleven lakhs in three years' time out of his profit, including rupees five lakhs which were advanced to him from the royal treasury. The object was to raise the price of Indigo for the Dutch and the English. The scheme failed after a year because of the refusal of the Dutch and the English to buy except at their own prices.

Another commodity which was frequently sought to be monopolized was saltpetre. When Mir Jumla was the Governor of Bengal, he tried to become the sole supplier of saltpetre to the

English. Shaista Khan who succeeded Mir Jumla, tried to monopolize salt, bee's wax, and the purchase of gold. After the Dutch monopolization of the trade in spices and their conquest of the pepper producing areas of Sri Lanka and Malabar, the price of pepper rose three times. More objectionable was the attempt of some officials to monopolize trade in their areas in order to sell more profitably to other traders. Thus, Prince Azim-ush Shan declared the entire import trade of Bengal as his monopoly-calling it *sauda-i-am-o-khas*. However, such practices were frowned upon. Aurangzeb wrote a sharp reproof to Azim-ush-Shan when he heard about his attempts at monopolization.

The practice of rulers, members of the royal family, and even some leading nobles having their own ships which made regular voyages to the Red Sea ports and to Southeast Asia was more common during this period. Thus, Jahangir, Nur Jahan, Prince Khurram had had ships which plied between Surat and the Red Sea ports. Shah Jahan was a major participator in shipping which extended to queens, princes and princesses of the realm. Prince Dara and Aurangzeb had their own ships which traded with Acheh and Bantam. This extended to the Deccan kingdoms. Thus as a leading noble at Golconda, Mir Jumla had a large fleet of ships which traded with Bandar Abbas, Red Sea ports and Southeast Asia. Shipping in Bengal was generally owned by leading Mughal nobles.

These trading activities cannot be considered harmful to trade. They created additional carrying capacity which also helped the Indian traders. The investment of members of the royal family in lending money to the merchants for trade, or even advancing money from time to time from the royal mint was give direct benefit to the traders. In 1646, the English factors complained of shortage of money at Surat, for as soon as money was coined, the merchants at Surat paid it to the king's diwan in satisfaction of the advances made by him. As a direct involvement with trade, the king and his leading nobles became more aware of the concrete problems facing the merchants.

The traders in every major city were generally organized on a religious-cum-caste basis. Thus at Surat the Jains had their own organization headed by a major seth. Likewise the *baniyas* and the Muslims also organized. These organizations constantly interacted with the local port administration, and also had access to political power at the intermediate/provincial level, and at the highest central level. They peddled influence and played politics with the various organs of government. Merchants also employed vakils or agents in the courts of emperors and powerful princes through whom representations were made to redress grievances or make complaints. Thus in 1616 -19, the Indian merchants first persuaded the emperor not to allow English ships to Mocha, but w2hen the English blockaded Surat the merchants were the first to make representations to the emperor to solve the dispute.

In general, neither the Mughals, nor the rulers of Bijapur and Golconda believed in administrative trade, though silk was a royal monopoly in Persia under Shah Abbas, and the rulers of Acheh, Ayuthya, Arakan, Pegu etc., often made tin, rice etc. royal monopolies. In Travancore also the entire pepper trade was a royal monopoly. The major effort of the Mughal state was that trade was kept free and the sea rotes open to their merchants. The Mughals lacked a navy and both their ports and shipping on the high seas were vulnerable to the threats or pressure, first of the Portuguese, and then of the Dutch and the British. However, the Mughals used their power to decide whom allow to trade in their territories , and to setup their trading establishments. To ensure freedom of trade to the Indians , they also did not allow the foreigners to set up forts or armed settlements in their territories. This was a delicate balance which the Mughals maintained in their territories till the empire itself disintegrated.

The biggest crisis that faced the Mughals in respect of freedom of navigation arose in the 1640s, when the Dutch attempted to take on the mantle of the Portuguese to control and redirect Indian Ocean trade. The Dutch denied passes to Indian ships leaving the ports of Gujarat and Bengal to sail to South East Asia. Their long term aim was to discourage Indian ships from trading eastwards so that they could engross all the markets for themselves and be the sole suppliers of Indian goods. The Dutch showed that they meant business by blockading Surat, and seizing ships as prizes. The Mughals retaliated on land by seizing all the Dutch factories, and arresting their agents. This led to hostilities which continued between 1648 and 1652.

The Mughals came into clash with the English East India Company in 1687. Although their main complaint was about customs, it should be remembered that the Mughals customs were exceedingly low, between two and a half to five per cent. A third crisis which the Mughal faced towards the end of the seventeenth century was the growth of piracy, both by Europeans and Omanis. The Mughals sough to meet these situations by pressuring the three European companies to convoy Indian ships. Simultaneously, the number of cannons the Indian ships carried was steadily increased from twenty-four to forty and then fifty, like their European counter parts, and their hulls strengthened to bear the strain of firing. Because of navigational weakness, not placing the cannons properly, and lack of experience they were unable to meet armed European ships. But developments showed that the Indians were slowly catching up.

Bill of Exchange (Hundis)

Long before inland bills were made legal in England, 167, different forms of bills of exchange or *hundis* were performing a variety of functions in the credit market in Mughal India. The term hundi is derived from the Sanskrit word *hundika*, whose earliest usage goes back to 914 AD. The *hundi* was a piece of paper, usually written in Hindi or any other Indian language, promising the payment of a sum of money to the bearer at a particular place either immediately or afterwards. The *darshani hundi* was paid at sight whereas the miyadi hundi was redeemed after a stipulated period of time. It was called bill of exchange because the device was originally associated in Europe with the exchange of foreign currencies given at one place and taken at another. One type of hundi, typically medieval in character, functioned as a mode of money transfers from one place to the other. A person, in order to avoid the risks of carrying cash deposited it with a *sarraf* and obtained a hundi instead. It was honored by the *sarrafs* agents (*gumashtaha*), who had their shops at various places in the empire. The *hundi* was carried to the destined place either by the person himself, in which case it paralleled the travellers' cheques of modern times, or by a messenger (*qasid*), in case the amount was simply to be remitted to his counterpart.

According to Irfan Habib in his *The System of Bills of Exchange (Hundis) In the Mughal Empire*, Abul Fazal digresses on the subject of the *hundi* while he narrating the events of the 40th year of Akbar's reign. He says "In this country when any one wishes to transmit money to a distant place, without undertaking the risks of journey and expenses of conveyance, he delivers the money to a financier (*khwasta-dar*). The latter gives him a written paper, which he draws on the place desired; and there he (the drawee) hands over the money upon sight of that hand-written paper. Wonderful it is that no seal or witness is required. That document they all know by the said name (hundi). In accordance with place and time, on some occasions the payment it made at par while on others gain accrues to one of the two parties." In other words, depending upon the stream of remittance and reverse-remittances between any two places, a hundi, drawn at one place upon the other, might carry either a premium or discount.

Irfan Habib also mentioned the descriptions offered by the historian Sujan Rai Bhandari about a hundred years later (1695-1696) on hundi. According to him “if because of dangers on the routes, a person cannot convey sums of money to a near or distant place, the *sarrafs* take it from him, and give him a piece of paper written in the Hindvi Characters, without a seal of envelope addressed to their agents (*gumashtas-ha*), who have their shops in the various towns and places throughout these lands; and this paper in the language of this country is known as *hundi*. The *gumashtas* of these honest dealers pay out the money, in accordance with that document, without any argument or objection, though the distance may be two hundred leagues (*farsang*), and so they keep their dealings straight. It is still more wonderful that thought that document is nothing more than a piece of paper, if its possessors wish to sell it at a place other than the one where payment is promised, it is sold for the sum that it specifies, and the purchaser, obtaining a small amount from the seller, receives the sum stated in it, at the promised place.”

Sujan Rai thus adds two further points of importance to Abul Fazal’s description. One is that it was the *sarrafs* (money-changers, the Indian bankers), who specialized in issuing *hundis* to enable remittances to be made. A similar statement is made in the famous dictionary, Bahar-i Ajam. The second point emerging from Sujan Rai’s description is that the *hundi* was a negotiable document, usually transferred at a small discount. It was thus convertible from a means of remittance into an instrument of credit.

The English factors trading in India largely remitted money through *hundis* in order to supply adequate capital to their factories for investments. The ledger of an Armenian merchant furnishes interesting information on commercial transactions through such medium. It appears that the Armenian merchants often travelled with little cash in their hands, while keeping their main capital in circulation, transferring it from one place to another through the *hundi* (yendvi).

The remittance of the state's resources to the central ex-chequer and from the latter to treasuries throughout the empire was also made through *hundis*. The *hundi* facilitated the remittance of even sums as small as 50 rupees to 3 lakh sent by Akbar to Deccan. The bill functioned purely as a credit instrument when a short-term loan was raised against it. Tavernier stated the conditions under which such *hundis* were drawn by the merchants and discounted by the *sarrafs*. Besides remitting money, the English merchants also financed their capital starved establishments by drawing bills which the *sarrafs* discounted. At time too they borrowed money from agents of established merchant money-lenders, giving bills of exchange for both the principal and interest. On certain occasions, the English merchants themselves assumed a position analogous to the *sarrafs* by discounting merchants' *hundis*.

Members of the Mughal ruling class also discounted merchants' bills and extended loans. In 1633, Peter Mundy took up money at Jalore by obtaining a bill from the treasurer of Baqir Khan, the Subedar of Gujarat. Presuming that Mundy must have given a bill to obtain another, it would serve an example of a bill dawn against another.

Another important use of the *hundi* was a medium of payment in commercial transactions. In Deccan the purchasers of diamonds concluded the transactions by drawing bills on the *sarrafs*. A letter of the Patna factors in 1620 informs us that the local merchants bought everything they wanted by means of bill of exchange. There are numerous instances of the English factors paying for their transport coast or making purchases through bills of exchange drawn upon their factories.

The rate of exchange in medieval bill of exchange was the actual price paid for a *hundi*. It being the ratio between the amounts stated in the *hundi* and the initial payment made against it. Most of the exchange quotations come from the commercial correspondence of the European factors in India. In these documents a single rate of exchange is quoted for type of bills, those drawn by merchants and those by the *sarrafs*. Only on rare occasions are separate crates quoted. The duration of *hundi* was specified in the document itself. In case a *hundi* was payable at sight (*darshani-hundi*) a customary grace of four or five days was allowed. The *muddati hundi* was paid after a stipulated time reckoned from the day it was produced before the drawee. The interest charged on the principal amount carried by the hundi was normally calculated on the basis of the duration of the hundi and the time taken to produce it.

The discount and premium rates of the *hundis* included the rate of interest charged on short term commercial loans. The interest on the merchants and the *sarrafs'* hundis was charged at two different rates. The *sarrafs* charged more on their loans than what they themselves considered while accepting deposits. It appears that the bills of exchange were paid in all the three types of rupee coin, depending on the terms of exchange profit expected by the parties, and the coins current at the place of receipt. At Agra, payment for bills was always made in rupees called *hondis* or *hundis*. These were certainly the standard coins paid on *hundis* drawn and honored at Agra and hence had acquired this particular name. For the *hundis* issued at Patna, the amount was paid in *nuryes*, which were probably the newly minted rupees of Jahangir's reign.

The fact that the English merchants continued using the indigenous network of bills of exchange to facilitate their own commerce in India suggests that the rates were acceptable to them. Even in their commercial correspondence they never considered these exorbitant. May be the administrative unity and law and order established by the Mughals was responsible to a great extent in keeping the exchange rates to a moderate level. However, the inherent risks of deteriorating political condition, together with a considerable increase in the amount of money and paucity of actual coins, contributed to a rise in exchange rates in the first half of 18th century. In 1720, a bill of remittance from Surat to Agra suffered a discount of 10% to 15%. The Dutch director noted that commercial instability, followed by the political crisis after Aurangzeb's death jeopardized the business of the *sarrafs*.

It therefore appear that in the seventeenth century through the ubiquitous use of bills of exchange, the *sarrafs* were not only able to finance a great deal of long distance inland commerce and overseas trade of the Mughal Empire but were also successful in integrating, at least financially, the widespread commercial networks all over India, by offering credit facilities.

Insurance in Medieval India

Bankers and businessmen living in Medieval India knew only too well the dangers of long-distance trade and travel and the risks to which their capital and goods were exposed. Ion its most elementary form risk-sharing was witnessed in the partnership arrangement where two or more persons shared profits and risks in an agreed proportion. However, in such cases, the management of risks was internal to the process of trading and did not provide full cover against losses and uncertainties. Insurance was an important business practice which brought in a third party to underwrite risks on payment of a small sum known as premium.

The first firm evidence of inland and marine insurance (bima) in India came from the seventeenth century. While discussing the *sarrafs'* business in bills of exchange, the author of Khulasat ut Tawarikh, Sujan Rai Bhandari, mentions yet another practice which they used to undertake. According to him, any one could deposit his “goods and merchandise and other property and baggage” with the *sarrafs*; the latter, after taking their fee, conveyed them to the destined place safely. This practice, he says, was designated *bima (*insurance*).*

A reference to the same practice, called *bemah* defined as insurance, occurs in the commercial correspondence of the English factors at Surat. In 1662, unable to obtain specific varieties of cloth from Agra due to the lack of adequate resources, the English approached the *sarrafs* who agreed to incest Rs. One lakh at Agra and transport the goods to Surat for timely dispatch to Europe. The deal, however, could not materialize as the English, for total want of money in their hands, could not pay an initial amoun6t of 20,000 to the *sarrafs*.

In India, two types of insurance arrangements were provided by the *sarrafs*. According to Sujan Rai Bhandari, the first system is; insurance proper was joined to carriage and the insurers undertook the conveyance of the merchant’s consignment as well. Here, insurance covered not only risks of loss but also tax payments and transport costs. The rates for such arrangements were therefore higher than ordinary insurance for the same merchandise and destination. In running the business of carriage and insurance, the *sarrafs* made use of a class of people, called *adhvaya*, who specialized in cartage and the payment of transit dues (*rahdari*) for a fixed sum of money. The *adhvayas* (carters) were essentially carriers (probably banjaras) who made profit out of savings from tax payments while accepting a lump sum from merchants or insurers.

Besides this specifically Indian form, there existed the more usual form of insurance which was devoid of any obligation on the part of the *sarrafs* to convey goods. This included insurance of goods and money vin transit over land and sea at a cost. The rates for inland and marine insurance were based on the condition of security on roads and sea. Any breakdown in law and order, rise in the incidents of robbery and piracy, political instability or a natural calamity enhanced the premium. It is noteworthy that the rates of insurance in the Mughal Empire were considered moderate by contemporaries and were not higher than those prevailing in Central India in the nineteenth century. Sujan Rai Bhandari mentioned that the travellers could undertake their journey without fear of thieves and robbers, and we know from o0ther sources that the Mughal state had an outstanding policy of holding officials responsible for the crime committed in their jurisdiction and making them pay for the losses suffered by the victims.

The availability of finance and protection against loss were the two major concerns of medieval businessmen and they were together taken care of in a single practice. In many cities of the Mughal Empire merchants had the facility of borrowing money by drawing *hundis* payable at Surat on condition of the safe arrival of their goods. The rates of such *hundis* were higher than ordinary credit bills because they included insurance premium. The maritime version of this practice was known as *avak* in India and respondentia in Europe. Much like marine Insurance, respondentia rates were calculated after an assessment of the nature and size of the risks such as the quality of the ship, route of the voyage and threats from pirates.

Insurance and respondentia complemented each other because they were both risk sharing devices. Just as the insurers accepted the risk of loss of goods, they also underwrote the risk of loss in financial transactions. This meant that all those who advanced risk sharing loans, either on land or sea, could themselves go to a *sarraf* to insure their losses for a premium which was lower than what they charged the borrowers. The practice of credit insurance was known as *avak vyaju*. The development of credit insurance is usually considered to be a nineteenth century phenomenon, but in

1648, the English merchants sent money from Gujarat to Sind through *hundis* and insured them against the risk of non-payment.

Monetary System

The revival of urbanization and foreign trade, and the introduction of monetary and fiscal institutions from Central Asia paved way for a gradual reorganization of the monetary economy in early medieval India. The establishment of Delhi Sultanate in the thirteenth century, and its extension to Gujarat in 1299 and to Sind and southern India a few years later, brought about a perceptible change in the production and circulation of currency money. The Delhi Sultanate promulgated a standardized multi-metallic currency system of gold and silver *tankas*, billon *jital* or *damma* (base metal mixed with silver) and copper *paika*. The widespread circulation of gold, silver and billon currencies indicates large-scale transactions and fuelled the expansion of the Sultanate's exchange network. It was possible for the state to realize revenue in cash, for peasants to pay taxes by selling their products in the market, and for merchants, manufacturers and bankers to make money out of cash and credit transactions. Both the textual and numismatic evidences, such as coin specimens preserved in museum and private collections, *Drvyapariksha* of Thakkura Pheru, a Khalji mint official, and the *Tarikh*-i *Firozshahi* of Ziauddin Barani, a fourteenth century Delhi intellectual and companion (*muqarrab*) of Sultan Muhammad Tughlaq etc. provides information on the monetary system of medieval India.

During the downturn of the fourteenth century (1350-1540) there witnessed a transition from precious to base metal coinage and shift in the mode of payment from cash to kind. It results the disappearance of gold entirely from the circuit of exchange, silver gave way to billon, and currencies reserved for petty transactions, such as copper and cowries, began to compete for a larger share of the market. It was under these circumstances that the much derided policy of Muhammad Tughlaq to establish a fiduciary currency came into effect.

The establishment of a new currency regime by Akbar on the foundation laid by Sher Shah paved way for the development of monetary transaction and it put an end to the scarcity of gold and silver coins in India. Sher Shah revived the classical tri-metallic currency of the Delhi Sultans to strengthen his political authority and organize the finances of the territories he had conquered from Humayun. A pure silver coin by the name of *rupiya* was introduced along with the gold *asrafi* or *muhr* and a heavy copper coin called *paisa* or *dam* also introduced. Akbar's administration expanded this currency structure and displaced the previous billon and copper regime, reflecting a series of developments within and outside India.

The most important external development at this time was the eastward transmission of European silver obtained from the mines of Peru and Mexico (Spanish colonies of America) to finance the Indian Ocean trade. The Mughal Empire alone received an annual supply ranging from 85 to 131 metric tons of silver to become the biggest importer of foreign money outside Europe in the late sixteenth as well as the seventeenth centuries.

At the same time that Spanish- American silver was on its outward journey to India, the Mughal Empire expanded westwards to embrace the coastal regions of Gujarat and Sind, which were direct recipients of foreign bullion not only from Europe but also from Japan. In the second half of the seventeenth century, Bengal emerged as a major destination for the transmission of precious metals by the Dutch and the English East India Companies. The territorial expansion of the Mughal Empire created conditions for the integration of coastal hinterlands into a single network of commodity exchange, fiscal remittances and currency circulation.

The absorption of external and internal stocks of monetary metals was facilitated by the state and market. The Mughal state adopted fiscal and monetary policies which streamlined and expanded currency circulation in the empire. A policy of collecting taxes and disbursing salaries in cash triggered a cycle of monetary circulation aided by the open coinage system of the imperial mints. A series of measures were taken from 1582 to create a standardized currency system in the empire through the replacement of regional as well as old and sub-standard coins with freshly minted Mughal currency. Money-changers and merchants offered a certain uniformity and cohesion to the areas covered by the networks of monetized exchange, by negotiating the movement of cash, goods and services across customs barriers and between different sectors of the economy.

The uniform and standardized currency system which emerged after three decades of intense administrative and market changes was sustained by a constant flow of silver through foreign trade and its absorption into the circuit of exchange. The domain of petty transactions was dominated by the use of fractional pieces of the silver rupee (*ana*) and copper currencies (*paisa*/*dam*). At the levels of exchange where prices needed to be expressed in units lower than the copper coin, metallic currency was supplemented by cowrie shells in Bengal, Bihar and Orissa and bitter almonds (*badam*) in Gujarat. Being imported respectively from the Maldives and Iran, cowries and almonds were more abundant at the coast but were in greater demand in the hinterland.

The Deccan and South India were different from the north insofar as their monetary systems were based pre-dominantly on gold with copper as the second metal. The principal gold coin of this region was known as *hun* locally and *pagoda* internationally. It was modeled on the Venetian gold coin, *ducat*, which was a major currency of international commerce on the Mediterranean-Indian

Ocean axis, and has been rightly called the 'dollar of the Middle Ages'. The *ducat* came to India in large quantities in the fourteenth and fifteenth centuries and inspired a series of imitations, the hun being one of them. The *hun* was of the same weight, fineness and appearance as the *ducat*, the only difference being that the latter had portraits of the Venetian duke (*doge*) and Saint Mark (the patron saint of Venice), while the former had images of Indian deities , such as Uma- Maheshvara. For this reason, Persian writers often used the term *ashrafi do buti* for the two coins. From the second half of the seventeenth century, those areas of the Deccan which came under the influence of the Mughal administration had to pay tribute in silver rupees and began to turn tri-metallic.

Banking

The expansion of the commercial activities and business opportunities created a greater demand for money and exerted pressure on available credit resources. Money-lenders and bankers also attempted to enlarge their loanable capital by reinvesting profits earned from interest, in due time, they also tapped resources outside the money market to run their business operations. Deposit banking emerged to provide another important source of money supply.

Deposit banking is the term used for any form of a regular, usually recorded, business accepting deposits and advancing loans (out of funds made available by those deposits), carried on by individual or firms. About the origin of deposit banking in India little is known. Usury was certainly practiced in the sixth century B.C., but we do not know anything about the accumulation and commercial use of usuries capital. In medieval times, from references to the merchant usurers in the documents and chronicles of the thirteenth and fourteenth centuries, it seems that it was largely the merchant's capital which took the form of usurer's capital. In the Lekhapaddhati documents of the thirteenth century, a class of merchant usurers (*dhanik*, *vyavahara*, *sreshti*) is found advancing money loans on interest. Zia Barani stated that a large part of the wealth of the Multanis and *sahs* of Delhi in thirteenth century derived from the resources of Balban's nobles, who took up money from them on loan and paid them in drafts (*qabzha*) on the revenues of their *iqtas*. However, the *sahs* and Multanis in this period were basically merchants. There are epigraphical references to the Jain bankers in late twelfth and early thirteenth century, but since nothing is explained about their functions, and the use of the term banker remains obscure. The limited monetary base of the empires in this period and the reticence of sources strengthen the presumption against widespread practice of deposit banking.

The Mughal Indian banking system was largely in the hands of *sarrafs*, though even other professional groups also loosely functioned as deposit bankers. The *sarrafs* actually specialized in the business of money into their hands. Like the goldsmiths of England, who combined deposits in precious metals with the issue of promissory notes and making of loans, the Mughal Indian *sarrafs* employed their capital in discounting bills of exchange (*hundis*) and advancing loans on interest. But, besides extending short term commercial credit the *sarrafs* performed yet another important function which indicates their ability to create credit. Various medieval sources mentioned about the merchants, who traded in bullion alone bought commodities in the market through bill of exchange. Tavernier describes the process of buying diamonds at Rammalkota by drawing bills on the *sarrafs*. Though nothing is known about the *sarrafs* own mode of payment, which might not have been in cash , the *sarrafs* while settling the transactions by clearance, acted purely as bankers.

Sarrafs maintained their accounts in the traditional manner; however, none of their records have unfortunately survived from the seventeenth century. It is, therefore, not clear when and how the *sarrafs* took to accepting simple deposits. The *sarrafs* accepted cash deposits essentially in two ways: the short term ‘conditional deposits’ which they accepted while issuing bills of exchange (*hundis*) to anyone who needed payment elsewhere; and ‘demand deposits’, accepted from the merchants, nobles and other wealthy people of the empire. Not only the wealth of merchants and nobles but also the money of the state could be put in deposit with the *sarrafs*. In 1623, when Prince Khurram ordered his treasure to be transported to Mandu, the *sarrafs* of Ahmedabad were asked to make the remittance which caused a great scarcity of money at Ahmedabad.

The system of credit and the institution of intermediaries (brokerage) in and between markets grew in similar historical circumstances, mainly, the break in the immediacy of the process of exchange. It is, therefore, the brokers occupied a significant position in the organization of credit and commerce in Mughal India along with the *sarrafs*. The brokers were basically commodity brokers, i.e. those who acted as intermediaries between the primary producer and the merchants, on varying degrees of commission. In north India they generally belonged to the *baniya* communities and were distinguished from other professional commercial groups by their specialization in this field. The credit brokers belonged to the same genre, but by virtue of their knowledge of different types of coins and bills, they provided credit facilities to their clients through diverse means, besides performing their primary function of brokerage. The English and Dutch factors normally raised funds from the money market through brokers. Even when the agency of the *sarrafs* was employed by them for transactions in bills of exchange (*hundi*), the expertise of a broker had to be harnessed. A source of the brokers’ income was the commission they received both form the buyers and the sellers. When employed as agents of the merchants, they received regular salaries for those who served the English merchants either as commission agents or regular employees; there was yet another source of income. There is ample evidence of the English leaving money into the hands of the brokers, sometimes not their employees, for investment, and which at times remained in their hands for long. This resulted in the concentration of large deposits of money in the hands of the brokers. There is evidence of the brokers' lending money to the English at Surat, Broach, and in the Deccan. Large-scale money-lending, however, does not seem to have been practiced by the brokers since the commercial capital at their disposal was limited in relation to the demand in the market.

The big merchant usurers in Mughal India also employed their capital to earn interest. The two prominent merchants of Gujarat in the seventeenth century, Santidas and Virji Vohra, offered loans to the merchants. W. H. Moreland has suggested that Virji Vohra accepted deposits, and has also ascribed banking functions to him. There is, however, no evidence that he or other such merchants accepted deposits or performed banking functions.

Besides the *sarrafs* and the brokers, there were other people who undertook functions close to those of a banker. They were variously styled as *mahajans*, *sahukars*, *sahu* and *sahs*.

The Sanskrit term *mahajans,* which literally means 'great person', has come to connote a merchant banker in modern writings. References in a Persian source of seventeenth century Rajasthan indicates *mahajans* was basically grain merchants, who was also a money-lender and accepted securities, sometimes traded in certain other commodities. Irfan Habib stated that, a document belongs to seventeenth century described, how a village was collectively indebted to a *mahajan*. Even the zamindars and *mansabdars* had to depend quite often on the *mahajans* to meet their obligations. The *mahajans* usually gave loans on the strength of the *jagirs* assigned to the *mansabdars*. Studies in Rajasthani records have brought out the *Mahajans* character as trader and money-lender. It seems that in eastern

Rajasthan they were popularly known as *bohras*. They operated in rural marts (*mandis*), stood as guarantors to the *ijaradars*, and advanced loans on behalf of the state. It seems that in the eighteenth century Bengal, the *Mahajans* primarily carried on money-lending for there the term *mahajani* had come to be used for the business of money lending. As with the *sarraf*, it is difficult to ascertain when and how did the *mahajan* take to money lending. An important feature of the *mahajans* activities was acceptance of deposits. These deposits came from both merchants and Mughal officials.

The term *sahukars*, *sahu* and *sah*, were interchangeable in seventeenth century literature, also stand for merchant bankers. The *sah* in the fourteenth century appears as a merchant usurer, and was counted among the moneyed man of Delhi Sultanate. In an early seventeenth century biographical work, the *sahu, sah* always appears the designation of a big merchant. The *sahukar* were also merchants and money lenders. A notable feature of the *sahukar* or *sahu's* trade was the carrying of operations at distant places through his factors (*gumahta, beopari, banjara*), whose services he probably secured through advancing them some capital. *Sahukars* seemed to have excelled the *sarrafs* in banking in the nineteenth century.

Major Ports

Broach

Broach was major port from the ancient time and continued to be important till the medieval period. It was situated on the on the bank of the river Narbada about 30 miles away from its mouth in the Gulf of Cambay. Barbosa describes Broach as a good port with much shipping, where dealings take place in many kinds of goods, which were further carried on in many parts of country. Purchas quotes a report of ships of 200 tons at Broach port. From the English Factory Records we learn that the boats could be procured from Broach port to carry 1000 mounds of goods as piece, and the freight to Swally Road. However, Careri differed and says that only ‘small barks’ could ply from this port. It produced the best kind of Calico (bafta).

Cambay

During the medieval period, the impact of the overseas trade was visible in a number of port towns in the Gulf of Cambay, such as Gogha, Cambay, Gandhar, Broach, Rander, Surat and Gandevi. Cambay and Surat emerged as the most important Oceanic ports of Gujarat during the period. The ports of Gujarat became the ‘Sea Gates’ of North India, besides the major emporia for import and export. Cambay was the greatest port in the Sultanate of Gujarat (1401-1573), especially owing to its proximity to Ahmedabad (the capital city) as an important commercial and manufacturing center. It is situated at the northern end of the Gulf Cambay on the river Mahi. The changing geography of coastal Gujarat made the trade of Cambay very difficult and risky. Owing to the presence of sand banks, which was the result of the silting up of the Gulf of Cambay and to the heavy tide bore on the Gulf, the vessels could not come directly to the town. In the view of Moreland it was not a sea –port because vessels could not approach it directly. The prosperity of Cambay rested mainly on its outer ports, Gandhar and Gogha. Gandhar was the main serving port of Cambay, when Ibn Battuta visited this port town in 1342 A.D. During the medieval period large number of ships came to Gandhar port from Malabar, loaded with commodities to sell. Abul Fazal does say that the port (*Bandar*) was frequented by the vessels (*jahaz*). However, by the 17th century, the port seems to lose all its importance.

In Course of time, Gandhar was replaced by Gogha, as an outer port of Cambay. In 1512 Barbosa found Gugarim (Gogha) as a large town with good harbor, where ships of India as well as of Meca (Mecca) and Adem (Aden) were anchored. The cargoes carried on small boats (*Tawri*) sailed from Cambay to Gogha, while they brought cargo to and from the larger vessels. In the first half of the 17th century, emperor Jahangir noticed, the ships could not directly come to Cambay but anchored at Gogha. Thus Gogha served as an outer port of Cambay.

Surat

The city of Surat had developed with the entry of the Portuguese on the scene but was came into prominence only after the destruction of Rander by the Portuguese. After the rivalry between the Portuguese and local rulers Surat experienced peace after coming under Mughals in the latter half of the 16th century. Abul Fazal in 1595 described Surat as a ‘celebrated port’ which was situated on the River Tapty, 7 Kos away from the river. It was already a port of importance for the pilgrims to Macca, with full support of the Mughal emperor. Since Surat became the headquarter of the English and the Dutch Companies in 17th century , almost all the European travellers visited Surat and have furnished the vivid description of the port city. River Tapti was very convenient for the trade of the city and the goods could be sent by boats save the charges and port rages of land. The big vessels could sail into the ports only after discharging the cargoes. Surat emerged as the premier port of Gujarat in the 17th century. Surat became the great emporiums of the world because of merchandise it received by land and sea.

Rander

Another important town in the Gulf of Cambay during the period was Rander, situated on the north side of the river Tapty. Before the arrivals of the Portuguese this city was very rich and had trade with Malacca, Bengal, Tenasarim, Pegu, and Sumatra in their own ships. But in 1530 it was burnt by the Portuguese along with Surat. Rander which previously enjoyed a considerable importance in the Indian Ocean trade, never regained its lost position In 1622 English Factory Records mention that there were difficulties in carrying goods to the port of Rander.

Mangalore

Mangalore was an important port catering to the hinterlands of Karnataka region and northern Malabar, and it was a major commercial centre, as it figures in many travelers' accounts. It is identified with Ibn Battuta's Manjuran, a major estuary of Malabar. It is said to have had 4000 Mohammedan merchants including the greatest merchants from Yemen and Persia and was rich in spices and ginger.

Pantalayani Kollam

Pantalayani Kollam was an important port on the Malabar Coast. This port figures in the accounts of Ibn Battuta as Fandarina and it is identified with Shaojunan of Daoyi Zgilue. Its location is close to a bay, which is considered an ideal location for wintering of the Chinese ships. Name of a merchant called Kantancantirayya Chetti from Pantalayani Kollam occurs in an inscription (1234-35 AD) from Vizagapattinam, a medieval port on the Andhra Coast. Mostly ceramic of thirteenth and fourteenth centuries were unearthed from Pantalayani Kollam. This town also had Jewish and Arab merchants.

Calicut

Calicut or Kozhikkode was a major port in the northern part of Kerala. The reason for the development of Calicut was perhaps the Samuthiri (Zamorins) kingdom. In addition, its location in north Malabar directly opposite to the Gulf is very significant. Calicut seems to have emerged as a major trade centre mainly from the thirteenth century. Marco Polo who visited Calicut in 1293-94, mentions that, Calicut was an important port and famous for spice trade. Ibn Battuta also gives a detailed account of Calicut port. The Samuthiris were the leading political powers here from the thirteenth century. They could raise a strong army; build an alliance with the Muslim traders to develop commercial activities in this town. The Chinese admiral Zheng He touched Calicut eight times, which suggest that Calicut had a settlement of Chinese merchants. The Samuthiris also had maintained good relations with the Chinese empire. This all indicates Calicut was a large cosmopolitan center with Arab, Jewish, Chinese and local merchants, and well known for pepper and other spices and the famous textiles called Calico.

Cochin

By the middle of the 15th century Cochin emerged as an important port on the Malabar Coast. At Cochin there were powerful merchant families with wide connections in the inter-Asian trade. One such family of merchants was Mamala Marakkar who had well established trade connection with the East Indies. In the closing years of the 15th century the ship industry of Cochin was comparable with that of Lisbon. All this reveal that much before the advent of Portuguese that there had developed infrastructure for overseas trade at Cochin.

Quilon

The port town of Quilon was a brisk trading centre even in the 9th century has been well corroborated by the inscriptional and literary evidences. All facilities including ware houses were offered in the town. The presence of foreign trade communities in the town is also attested by the inscriptions.

Masulipatanam

By the late 15th century, under Sultan Quli Qutub Shah Masulipatanam became developed an important port city of Andhra. Under the Quli Qutub Shahi rulers, apart from textiles, Masulipatanam would emerge as the hub of international diamond trade. It was the diamonds, muslin and Kalamkari textile that attracted Europeans to Masulipatanam. Apart from the Europeans, there were Armenians who dominated the trade in Burmese rubies and Persian merchants also had contacts with Masulipatanam. Masulipatanam was also known for its cabal of 10-12 wealthy Persian merchant princes, who completely dominated India’s trade with Persia.

Hugli

The origin of the port town of Hugli is shrouded in darkness. It has been established beyond any shade of doubt that the Portuguese were the founders of Hugli port. The precise date of the foundation of Hugli however, is not very easy to determine. After the foundation of Hugli, the Hugli port flourished with amazing rapidity and as soon as rose as the richest, and the most populous port of India. According to Ain-I Akbari Hugli was a more important port than Satgaon (first Portuguese settlement in the western Bengal). Thus it appears that at the end of 16th century Hugli became the premier port of Bengal. There is not exact figure about the volume of trade carried out by Portuguese at Hugli, but from the number of ships plied to and from that port we can get the extant of trading activities at Hugli. Ceasure Federici found that 30 to 35 ships were laden every year at Hugli by the Portuguese. Manrique states that more than 100 ships yearly laden in the port of Bengal with rice, sugar, fat oil, wax, and other commodities and probably most of them were laden at Hugli since it was then the chief port in Bengal. Besides the Portuguese, the Dutch and English had also brisk trading activities at Hugli.

Guild System

During the early medieval centuries, the process of collection and distribution of goods involved a large number of merchants, big as well as small, local as well as inter-regional. There were hawkers, retailers and other petty traders on the one hand and big merchants and caravan traders on the other. The second phase of early medieval India (900-1300) brought the mercantile community back into prominence, and there existed a large number of merchants carrying luxury and essential goods from one place to another. They accumulated fabulous wealth through commercial exchanges and acquired fame in society by making gifts to temples and priests. Many of them look active part at various levels of administration, and even occupied the ministerial positions in royal courts.

The literature and inscriptions of the period refer to the large number of merchants who were known by the specialized trade they followed. There were dealers in gold, perfumes, wine, grains, horses, textiles, curds, betel etc. Some of the merchants employed retailers or assistants to help them in trading activities. As inter-regional trade developed a group of merchants specialized in examining and changing coins for traders. Moneylending also became one of the major activities of merchants. Though people deposited money in temple treasury for the religious purpose of endowing flowers, oil, lamps, there are very few references to guilds accepting deposits and paying interest thereon. There emerged a separate group of merchants, called *nikshepa-vanika* in western India, who specialized in banking or money lending. The Lekhapaddhati, a text from Gujarat refers to a merchant’s son who claimed his share in the ancestral property to start the business of moneylending.

This period also witnessed the emergence of many regional merchant groups, i.e. the merchants who were known after the region they belonged to. They were mostly from western India As this region had a wide network of important land routes connecting coastal ports with the towns and markets of northern India, the merchants of certain specific places in this region found it more profitable to specialize in inter-regional trade. Thus, the merchant groups called Oswal derive their name from a place called Osia, Palivalas from Patlli, Shrimali from Shrimala, and Modha from Modhera and so on. Most of them are now a day collectively known as Marwari’s, i.e. the merchants from Marwar. Apart from their functional and regional names, merchants were also known by various general terms, the two most common being-*shreshthi* and *sarthavaha*. Both these terms were known from very early times. *Shreshthi* was a rich wholesale dealer who lived in a town and carried on his business with the help of retailers and agents. The *sarthavaha* was the caravan leader under whose guidance the merchants went to distant places to sell and purchase their goods.

The expansion of agricultural and the availability of surplus from the 8th and 9th century onwards led to increase in commercial exchanges in South India too. It resulted in the emergence of a full time trading community looking after the local exchange. This community also participated in wider inter-regional trade and inter-oceanic trade. As in the north, South Indian merchants too specialized in the trade of specific commodities such as textiles, oil or ghee, betel leaves, horses etc. At the local level, regional markets called nagaram were the centre of exchange. They were situated in acluster of agrarian settlements, and they integrated not only collection from hinterland but also commercial traffic from other areas. The numbers of the nagarams increased considerably during the Chola period in the eleventh and twelfth centuries, and the term *nagarattar*, i.e. member of the nagaram assembly, became a generic term for all Tamil merchants.

During this period the merchants derived their power and prestige not only from wealth but also from the guilds or associations formed by them to protect their interests. Guilds were voluntary associations of merchants dealing in the same type of commodity such as grains textiles betel leaves, horse, perfumes etc. They were formed by both local as well as itinerant merchants. The association of local merchants having permanent residence in town was more permanent in nature than the association of itinerant merchants which was formed only for a specific journey and was terminated at the end of each venture. In the first phase of early medieval India the decline of trade weakened the corporate activity of merchants, and many of the guilds were reduced to mere regional or occupational sub-castes. But as trade revived in the second phase, merchant guilds reappeared as an important feature of the contemporary economic life.

The guilds framed their own rules and regulations regarding the membership and the code of conduct. They fixed the prices of their goods and could even decide that specific commodity was not to be sold on a particular day by its members. They could refuse to trade in a particular day by its members. They could refuse to trade in a particular area if they found the local authorities hostile or uncooperative. The guild merchants also acted as the custodians of religious interests. The inscriptions refer to numerous instances when they collectively agreed to pay an additional tax on the sale and purchase of their goods for the maintenance of temples or temple functions.

The guilds normally worked under the leadership of a chief who was elected by its members. He performed the functions of a magistrate in deciding the economic affairs of the guild. He could punish, condemn or even expel those members who violated the guild rules. One of his main duty was to deal directly with the king, and settle the market tolls and taxes on behalf of his fellow merchants. The growth of corporate activity enabled guild chiefs to consolidate their power and position in society, and many of them acted as the representative of their members on the local administrative councils.

A member of guild worked under a strict code of discipline and was also robbed some initiative or action but still he enjoyed numerous benefits. He received full backing of the guild in all his economic activities and was, thus saved from the harassment of local officials. Unlike a hawker or vendor, he had greater credibility in the market on account of his membership of the guild. Thus, in spite of the fact that guild –chiefs tended to be rude and authoritative at times, the merchants found guilds an important means of seeking physical and economic protections.

The digests and commentaries of the period refer to the corporate body of merchants by various terms, such as *naigama*, *shreni*, *samuha*, *sartha*, *samgha*, etc. The *naigama* is described as an association of caravan merchants of different castes who travel together for the purpose of carrying on trade with other countries. *Shreni*, according to Medhatithi, was a group of people following the same profession such as that of traders, moneylenders, artisans, etc. though some authors considered it to be a group of artisans alone. The Lekhapaddhati indicates that a special department called the shreni-karana was constituted by the kings of western India to look after the activities of the guilds of merchants and artisans in their region. Another text Manasollasa reveals that many merchant guilds maintained their own troops (*shrenibala*) for personal safety. Inscriptions too refer to the corporate activity of merchants. An inscription from western India refers to *vanika-mandala* which was probably a guild of local merchants.

The expansion of agriculture and the growth of trade from the tenth century led to the emergence of many merchant guilds or organization in South India too. The two most important merchant guilds of South India were known as the Ayyavole and the Manigramam. Geographically, the area of their operation corresponded to the present day state of Maharashtra, Karnataka, Tamilnadu and south Andhra Pradesh. The Chola kings from the tenth century onwards made a concerted effort to trade and commerce through trade missions, maritime expeditions, abolition of tolls, etc. It greatly increased the activities of these guilds which were involved in not only inter-regional but also inter-oceanic trade across the Bay of Bengal.

The merchant guild called Ayyavole was also known as ‘guild of the 500 Swami of Aihole’ and Ainurruvar. While some have argued that such organizations were primarily traders in various types of merchandise and not a single unified corporation of merchants. Ayyavole might have had an initial membership of 500. But there is no denying the fact that with the growth of trade and commerce, the Vira Bananjas (representing the trading guild of Ayyavole) operated on a trans-regional plane and had developed deep socio-economic interests between the ninth and fifteenth centuries. They spread from Bhalvani (in Sangli district in Maharashtra) in the north to Kayalpattinam (in Tamil Nadu) in the South. The number five hundred also became conventional as the guild became a much larger body and drew its members from various regions, religions and caste. In course of outward expansion, the members of the Ayyavole guild Interacted with the local markets called nagaram, and promoted commercial activity by collecting agricultural goods from the hinterland and disturbing the goods brought from elsewhere. The commercial influence of Ayyavole spread even beyond South India. It is indicated by the inscriptions found at Burma, Java, Sumatra and Sri-Lanka. As the mercantile activities of Ayyavole increased, some of its members became quite rich and powerful, and acquired the title of Samaya Chakravarti i.e. the emperor of reading organization.

Another important merchant guild of South India was the Manigramam. It first appeared along the Kerala coast in the ninth century A.D. However, as it gradually came into close contact, with the Ayyavole, it greatly improved upon its inter-regional activities and covered a, large part of the peninsula. A ninth century Tamil inscription found at Takua pa on the West coast of

Malaya indicates that it was engaged in the long distance sea trade from the very beginning.

Anjuvannam was another body of merchants in South India, which probably represented an association of foreign merchants. Some scholars argued that it was a group of five communities or castes. Like the Manigramam, it also began its commercial activity along the Kerala coast in the eighth or ninth century, and gradually spread out to other coastal area of South India by the eleventh century. It interacted both with local merchants as well as the Ayyavole and Manigramam organizations.

In short, the vast trading network in South India was controlled by a number of merchant organizations which worked in close cooperation and harmony with one another. The guild-chiefs, on account of their control on trade and trading organization, established close links with the royal houses and enjoyed great name and fame in the society.

Indain Ocean Trade

The Indian, ocean, with its warm waters and its sailor friendly monsoon system, was the first ocean that human could move across, covering vast distances at relative ease. Consequently it was also the first ocean across which goods, people and ideas were exchanged on a massive scale over long distances, much before the same happened in other parts of the world.

India’s maritime trade before the advent of European powers was characterized by both continuity and change. During the earlier times, drugs, spices, the teak-wood of Malabar, precious stones and a great variety of exotic luxuries and exotic luxuries passed westwards. The absorbs of Indian markets in exchange for its exports was largely limited to strategic war-animals, spices and medicaments, rarities, toys and exotic textiles. Significant developments occurred in the pattern of trade in medieval period due to the expansion of maritime activity in the eastern waters of the Indian Ocean and the Chinese Sea.

The presence of Indian traders following the emergence of great civilized states in Southeast Asia under strong Indian and Buddhist influence in the earlier centuries led to an expansion of the textile trade towards these growing markets. So far as the trade between India and Indonesia is concerned, spices and raw materials of Indonesia were an important part of Indian Ocean trade. The trade of these settlements in Indonesia and Malay Peninsula was largely in the hands of Muslim merchants of the Indian Ocean. There is also evidence to Indian trade with the Horn of Africa and that the communities of the Arab peninsula who were heavily dependent on Indian imports. Ashin Das Gupta stated that Arab navigational treaties show that Arab sailors had a clear concept of Indian Ocean remarkably congruent with later European ideas. Muslim Chinese eunuch explorer and Admiral Zheng He during his expedition (1405-1433) traversed the whole ocean, and touched at ports in Indian Ocean such as Calicut, Hormuz, Aden and Mogadishu. It indicates the concept of Indian Ocean was there, among both Chinese and Arabs long before the Europeans arrived.

The early years of the 15th century saw, what can be called, the last flowering, of the Chinese presence in the Indian Ocean. Simon Digby has pointed out the importance of the Chinese factor in the Indian Ocean in the three hundred years before the arrival of the Portuguese, though they withdrew from the western routes in the 1430s. But Malacca continued to be the meeting place of the Chinese, Indian and Malay traders. This period also witnessed the losing of the importance of Arabs in Indian Ocean It created a vaccum in both the east and west. It was mainly the Gujaratis who filled in the vaccum thus created. Indeed, the 15th century witnessed a significant expansion of Gujarati overseas trade. Ashin Das Gupta argued that the real alteration in the Indian

Ocean in the 16th century was brought about not so much by Portuguese presence as by the rise of three continental empires in the western Indian Ocean: the Mughal, the Safavid and the Ottoman. After the first violent overture, the Portuguese settled within this structure and were in a way ‘swallowed by it’.

The discovery of direct maritime route to Asia round the Cape of Good Hope by the Portuguese under Vasco da Gama in 1498 marked the beginning of a new era in the history of Euro-Asian trade. However, it was not until the capture of Goa from the Bijapur Sultan by Albuquerque in 1510 that the foundation of the future Portuguese maritime empire in the Indian Ocean region was truly laid. This was followed by the foundation of Goa as the chief administrative seat of the Portuguese in the east and soon followed by the occupation of Malacca (1511) which was extremely important as an entrepot in Southeast Asia and which controlled the sea-routes in the area. In 1515 the important port of Hormuz at the mouth of the Persian Gulf was conquered and this virtually completed the Portuguese plan of establishing forts in key areas for controlling trade in the Indian Ocean. Throughout the 16th century, an important aspect of the Portuguese involvement was the attempt to control and tax the trade carried on by Asian merchants in the Indian Ocean. They introduced cartaz system and under this system every Asian ship was required to take a cartaz from the Portuguese. It authorized the vessel to embark on a specified trip. The port of call was also specified and generally included a visit to a Portuguese-controlled port to pay duties before proceeding to its destination. If a ship was found without a cartaz, it was automatically confiscated and its crew immediately killed or sent to the galleys

The principal item exported by the Portuguese to Europe was spices overwhelmingly pepper, though some other varieties were also exported in the early 16th century. The Portuguese occupation of Malacca (1511) notwithstanding, they procured the bulk of the pepper from the Malabar region (later on from Kanara as well) on the southwest coast of India. Thus India became the main theatre of their trading activities in Asia. The Portuguese also attempted at the monopoly of horse trade. Before their arrival, there was an important trade in horses largely in the hands of Arab merchants. These horses were imported from the Persian Gulf region as Arabia and Persia produced best horses.

The longest and glamorous route of the 16th century in Indian Ocean was from Aden to Malacca via either Gujarat or Malabar where the goods entering the Red sea included cottons, indigo, spices and drugs. The imports consisted of European woolens, silk and bullion. Most of the cloths and indigo came from Gujarat which took much of the bullion. Some of the pepper came from Malabar through Cochin and cinnamon from Sri Lanka. Malacca received cloths from India and bullion from the Red sea in return for pepper, mace, nutmeg and cloves from eastern Indonesia, and silk and porcelain from China. Another major sea-route, dominated by the Gujaratis, brought slaves, ebony, ivory and gold from east Africa while cloths, beads and food stuff were provided in return. Through another route from Hadramawt and the Persian Gulf via Hormuz came horses, pearls, Persian silks and carpets.

Of India’s exports to the Indian Ocean Markets, a few points are worth noting. First, of the textiles this was the major export of India throughout the period. Secondly, staple food items like rice, wheat, pulses, oil, and ghee (clarified butter) were important components of India’s exports and were in great demand in the Indian Ocean region. Bengal, Orissa and the Kanara coast were the major grain-surplus areas. They not only supplied the deficit pockets along the Indian coasts, like Malabar or on occasions Surat, but their supplies helped feed even cities like Malacca, Hormuz and Aden.

Module IV

Urbanization

The Development of Urban Centers in Medieval India

Cities were normally developed due to some reason, sometimes economic and commercial activities converted small towns into big cities. Some places serve as pilgrimage centers and it help in urban growth. Coastal line also made towns when they ultimately turned into urban centers. Max Weber defined city, as a place where trade and commerce dominate agriculture. According to him the most important aspect of the city was urban economy. Cities were normally centralized and bureaucratize. But Karl Marx considered urbanization is a launching pad for sustainable development of productive forces. Marx never alienated rural life from the city. There is always some impact of agriculture upon urbanization. Weberian notion identifies the influences of administrative political classes. Marx argued about the class struggle in the capital city structure. In case of Indian urbanization Max Weber ideas are more relevant especially in the case of Mughal India.

Studies on the growth of urbanization and urban centers during the medieval period in India have largely remained a neglected and relatively less explored filed. According to S.C. Misra, ‘in the study of urbanization the urban centers expanded with the passage of time. It promoted growth and ecology which was generated by the towns in various dimensions; in economic system, in natural environment, in political system, in social networks and even in the minds of the people who lived in a particular area.’ Hamida Khatoon Naqvi has highlighted the importance of political stability in the growth of medieval Indian towns. She argues that, ‘the highly centralized Indian states with base at Lahore, Delhi or

Agra worked to foster viability and endurance in urban concentrations. The rise and fall of medieval Indian towns corresponded largely to the vigour or weakness of the central political power'. Lahore enjoyed importance place as early as Ghaznavid period. It had a fort and Sultan used to conduct his durbar here. However, in Firuz Tughlaq's scheme Lahore was lost its importance, as a result the city was in ruins. But under the Mughals Lahore again revived its past glory and Lahore almost became the second capital of the Mughals. Hamida Khatoon Naqvi emphasizes that on account of peace and tranquility that was achieved under the Mughals, Lahore and other towns of Punjab received unprecedented growth.

K.N. Chaudhuri has focused upon the 'complementarity of economic modality and political attributes'. He defines commercial towns of Mughal period as a case of 'flag following the trade'. For him 'political skills' were essential to preserve their economic interests.

Satish Chandra, however, argues that the political integration resulting in unprecedented growth of towns in actually over emphasized. He questions, if that was so then why after the Tughlaq period following the disintegration of the political power, did not result in the decline of towns? Satish Chandra, instead, links the growth of towns to agricultural expansion. He argues, taking the case of Firuz Shah Tughlaq's reign when the Sultanate shrank to half its size, that the period is marked by emergence of many new towns. As a result of Muhammed Tughlaq's network of canals and impacts of new technology (Persian wheel, etc.) and expansion of horticulture all this led to the growth of agrarian sector. He has emphasized that we cannot simply dismiss the Afghans as 'merely warriors'. Instead, unlike the Turks, Afghans settled in the countryside suggest that they must have had something more to do with agriculture. He applies the same arguments to the 18th century as well. He argues that evidence pertaining to the decline of cities during the 18th century comes largely from literary traditions (*shahr*-i *ashob*). There is no doubt that Delhi faced a decline but only as a chief administrative centre. In 1772 Delhi is mentioned by Shah Nawaz Khan as a flourishing city filled with all sorts of crafts. Dargah Quli Khan in his Muraqqa-e Delhi speaks about the grandeur of markets of Shahajahanabad city. Chetan Singh has also emphasized the growth of urban centers, particularly manufacturing centers in well-developed agricultural zones away from the main trade routes.

Henri Pirenne has linked growth of medieval towns to long distance trade. In the Indian context R.S. Sharma in his well-researched monograph on Indian feudalism also argues that the growth and decline of long distance trade resulted in the growth and decline of the towns during early medieval period.

I.P. Gupta while denying any significant role of administrative and military factors in the growth of urbanization and urban growth argues that ‘administrative and military influence in all the major cities and towns remained subdued to economic activities in Gujarat.’ His estimates reveal that roughly 80-90 per cent of the activities in the large urban centers in Gujarat were ‘economic’. There is no instance where a ‘fort’ assumed the status of an ‘urban centre’. Out of the 33 forts reported in Gujarat in the 17th century only 9 were located at the big and small towns. His study shows that the towns of Gujarat during medieval times were largely performing the role of either manufacturing centers, or collection centers, and distribution centers, or else were port towns. Ahmedabad, Surat, Broach, and Cambay performed such multifarious activities. According to him hardly towns emerged on account of being administrative centre. Instead, it assumed the place of an administrative centre on account of its being important as commercial centre. He point outs that the rate of growth was faster at manufacturing centers and larger towns; smaller towns developed at much slow a pace.

Chetan Singh has also emphasized the economic base of the urban centers. Though some towns derived their strength as important administrative centers their importance as thriving manufacturing centre as well as market and transit points cannot be ignored. He argues that though Lahore was an important administrative town, it derived its strength ‘as a center of considerable manufacturing and commercial activity.’

Nihar Ranjan Ray and Arun Das Gupta have linked the rise of Islam to urbanization in Bengal. However, Aniruddha Ray argues that, the thesis of Islamization and revival of Bengal’s overseas trade and urban centers is difficult to accept, for Bhakhtiyar Khalji’s attack on Bengal occurred in early 13th century. But by 13th century already one finds the presence of many flouri9shing towns like Harikela, Nadia, Vikrampur, Bakla and Lakshmanavati. Aniruddha Ray attributes two major factors to the rise of urban centers during the 12-17th centuries in Bengal such as, a) Decline of central power during the 15th century saw the rise of many semi-autonomous principalities/kingdoms that led to rise of a number of new urban centers (Champaner, Sonargaon, Pandua, Lakhnauti, Chittagong, etc.). b) Changes in the riverine courses also resulted in growth and decline of towns. Growth of Pandua is attributed to change in the course of Mahananda that began to flow close by. Similarly, Lakhnauti declined because river Ganga moved much towards west, Gaur also faced the same fate once Bhagirathi moved further westwards.

Muhammad Habib in his introduction to Elliot and Dowson’s *History of India as Told by its own Historians*, *Vol.II* has put forward the thesis that Turkish conquest led to ‘urban revolution’ in North India. He argues that prior to them the higher classes appropriated the cities and towns exclusively to themselves while the workers lived in unprotected villages and in settlements outside the city walls. With Turks such barriers were broken. When the Turks entered the cities, the Hindu low caste workers entered along with them, which paved way for the development of new cities into thriving centers of industry and commerce. Thus, according to Muhammad Habib this ‘revolution’ became possible because the new ruling elite were urban/town based and the Turks succeeded in emancipating the working class. This way they brought a sea change in the overall growth and pattern of town life. However, Irfan Habib has expressed his doubt whether at all the city workers enjoyed greater degree of emancipation under the Turks. He criticized the way how the labour process was explained by Mohammed Habib to study the nature of the emergence of urban centers in medieval India. Irfan Habib argues that the expansion of urban centers during thirteenth and fourteenth centuries was not because of the liberation of any segmentary society, but slave labour or unfree labour was vital in almost all the domains of production in the towns of this period.

Iqtidar Hussain Siddiqui’ in his work *Delhi Sultanate: Urbanization and Social Change* attempts to describe the processes of emergence of new political and social structures illustrated by the advent of new urban culture. According to him urbanization provided the space for adaptation in the evolution of Sultanate. Exploring the process of urbanization he traces the changes that the older Indian urban centers while transforming from ‘caste cities’ to cosmopolitan urban centers. In his view the urban ethos of immigrating Muslim communities paved the way for the establishment of a symbiotic relationship between the followers of anthropocentric and cosmo-centric traditions. According to him an important aspect of these urban centers was the large scale construction carried out by the sultans and nobles that led to a significant change in the skyline of these cities. He rightly points out that the construction of palaces, gardens, forts, *serais*, *thanas*, and *khanqahs*, etc. would have promoted large scale immigration of skilled architects, masons and craftsmen, thus enriching the prevalent styles of architecture. In Siddiqui’s understanding, the Delhi Sultanate could in fact be viewed as an intricate network of small and large urban centers through which authority and governance was conveyed to the vast hinterlands.

According to James Heitzman in his paper *Temple Urbanism in Medieval South India*, Urban development in south India closely bound to the agrarian interests of temples. The expansion of local temples occurred along side and interacted with the growth of commercial networks focused on the mercantile communities (*Nagaram*) scattered amid the numerous agrarian zones of central Tamil Nadu. The growth of ritual endowments of the Chola period stimulated the growth of commercial networks on the local and regional level, with an associated growth of artisanal activity. Temple rituals demanded a wide assortment of foodstuffs and precious goods, many of which required the services of merchants for procurements and artisans or specialized workers. Specialists in commerce and manufacturing lived alongside the brahmana ritual specialists, the cultivating groups, and the agricultural labourers who congregated in large numbers around the lands of the religious institutions. Heitzman points out that despite the growing concentration of specialization and population around the temples, spatially the settlements of the Chola period show little differentiation between ‘town’ and ‘country’.

R.Champakalakshmi traced the origins of medieval Indian towns back to ninth century onwards. She focuses on south India and examines several towns of varying size and nature in Chola territory that appeared during the period between ninth and thirteenth centuries due to the stimulus from external trade. By her meticulous analysis, she shows that all the medieval south Indian towns were not alike and marked distinction visible among the mercantile towns, royal towns, ceremonial-cum-religious towns of the Cholas and the militarized and fortified towns of

Vijayanagara Kingdom. She argued that the revival of the long distance trade in the tenth century and the eventual organization of various guilds paved way for the emergence of many towns particularly along the coast, to evolve in Chola territories that extended to Andhra and southern Karnataka.

Shahr* and *Qasba

Medieval texts clearly distinguish between a small town and a metropolis. Nizamuddin Ahmed clearly differentiates between a *qasba* and a *Shahr*. As per his estimates there existed 3200 qasbas and 120 towns (*shahr*) in Akbar's time. Ibn-Khaldun believed that royal authority and dynasties were essential for building and planning of a city. Sultanate sources also make clear distinctions between the rural and urban residents. Isami calls villagers as impure demons and unworthy. The city is represented often by Hasan Nizami in his Taj-ul-Maasir. He calls Delhi as one of the principal cities of Hindustan.

During the medieval period in India the smallest towns were known as *Qasba*. Nizamuddin Ahmad in his *Tabaqat i Akbari* has defined *qasba* as an administrative centre, a *pargana* headquarter. He clearly differentiates between a *qasba* and a *shahr* (city). *Qasba's* in the medieval context were largely an extension of a village. A large village with a market centre possessed all potentials to turn into a *qasba*. *Qasba* was a *pargana* headquarter however, it was not necessary that a *pargana* should have only one *qasba*. In *pargana* Barsana (western Rajasthan) there existed twenty *qasba's* in early 18th century. In western Rajasthan *Qasba's* generally surrounded by forts (*garhi*) or fortresses (*garh*) with town-walls.

Qasba's also possessed an intermediate status between the wholly rural and the uniquely urban. Thus terms such as 'rurban', 'nuclear urban' township and town convey that the *qasba's* shared certain urban features with the city or *shahr* such as a fixed market, a concentration of non – agricultural population, military garrisons and forts. Within the rural-urban continuum, the basis for the classification of an urban as a *qasba* rather than a shahr derived primarily from the extent of its administrative jurisdiction. Based on the administrative hierarchy defined in the Ain-I Akbari the administrative headquarters of larger units such as the *sarkar* and *suba* were termed *shahr* while those of lower administrative units – the *parganas* and *tappas* were termed *qasba's*.

There were 3200 *qasba's* and 120 towns (*shahr*) were existed in Akbar's empire. Then by 1647 the number of *qasba'*s rose to 4350 and later in early 18th century their number increased to 4716. Irfan Habib in his Towns and cities argued that 'the attempts made by the Mughal government especially under Akbar to substitute cash payments of the land revenue for payments in kind must have greatly stimulated the growth of the *qasba's* during Mughal period. According to him in sixteenth century there were overgrown villages and burgeoning township serving as granaries for the storage of government grain paid as revenue, as grain-distribution centers, and as collection points for the Banjaras (a nomadic caste specializing in the transport of grain). In course of time such focal points of localized economic activity acquired additional importance as a result of the government's insistence that the land revenue be paid in cash and not in kind, which meant that the cultivator had to secure a market for his crop before he could meet the revenue demand. This stimulated increased marketing activity in the townships and the last decades of the sixteenth century and the first decades of the seventeenth saw the steady rise of perhaps hundreds of such nuclear urban centers over much of northern India.

Qasba's in the medieval context were largely an extension of a village. A large village with a market centre possessed all potentials to turn into a *qasba*. In Barsana (western Rajasthan) villages Harigarh, Kundi, and Kakurmi reported to be villages in the 17th century elevated to *qasba's* in the early 18th century records. Sometimes, villages got attached to a fort on account of the protection they received and developed into *qasbas*. But *qasbas* emerged due to the extension of villages were more common during medieval period. In western Rajasthan Daulatganj was established as a market village annexing lands from Rojhari in AD 1785. Many *qasba's* also emerged out of market towns. *Qasba*'s with *ganj* (large market towns), *hats* (weekly markets) and *melas* (fairs) were also held. Such *qasba's* however, emerged more prominently from mid-18th century onwards in western Rajasthan. B.L Bhadani and Sato's studies on the growth of *qasba*'s in western Rajasthan suggest that during the 18th century growth of market towns from villages, etc. continued unabated. But during the 19th century the pace slowed down.

There are many distinction existed between a *qasba* and a town. Satish Chandra has analyzed that the connotation of a *qasba* varied from period to period and differed from region to region. According to him during the Sultanate period a *qasba* was a village with a fort. By Mughal period it came to be referred to as a village with a market. These centers not only served as market for agricultural produce but were also centers of craft production. However, Sunil Kumar argued that during the 13th century they did not perform the role of 'market' centers. Instead they were 'fortified encampments' and not always associated with a large town *shahr*). Some times *qasba's* developed around a *sarai*. During medieval period in India the traders and travellers used to travel on horseback or carts. The maximum journey they could perform in a day was 10-12 miles. After that they required a resting place. This led to the establishment of *sarais*. Some of these *sarais* later emerged as *qasba's* or small towns. Nobles also contributed the emergence of *qasba's*. In certain cases the *mandis* (market place) established by them was developed as *qasba's*.

Cantonment and Fortifications

The medieval fortifications of India occupy a position in the history of military architecture in the world. A striking feature in these fortifications is that tall and massive walls and towers, designed in all essentials on medieval concepts.

The sultanate of Delhi built hundreds of monuments throughout the rocky terrain of Rajputana and beyond, among these forts was prominent. According to M. Athar Ali in the north Indian plains the fortification were built on artificial mounds and in the Deccan the forts were constructed on the rocky hills. During Sultanate period the fortifications served as base camps which facilitated the imperialistic and expansionistic policies of the Khalji's and Tughlaq's.

Devagiri or Daulatabad was one of the most important military cantonment of Delhi Sultanate which provided all the necessary facilities to the imperial army on their way to Warangal and Dwarasamudra. The fort which was constructed at Daulatabad stands on conical rock scraped from a height of about 600 feet. The outer wall of it was 2¾ miles in circumference, with three lines of fortification between it and the base of the upper fort. Ibn Battuta stated that, the first division of Daulatabad was reserved for the Sultans residence and his troops, the second division is called *kataka* (military cantonment) and the third is the peerless fortress which is called Deogir and has no impregnability. Sultan Muhammed bin Tughlaq had chalked out a plan for a residential complex for the different section of the people at the foot of the citadel. Warangal was also a fortified town under Delhi Sultanate. The fort of Warangal has been described by Amir Khusrau in very explicit manner. According to him the fort had two lines of fortification; the first fortification was of mud but yet so hard that a spear of steel could make no impression upon it. In Delhi also various fortifications were raised during the sultanate period. Siri, Tughlaqabad and Adilabad etc. were important among them.

During the reign of Sultan Muhammed bin Tughlaq a new face lift was given to the fortifications of Delhi. Old Delhi and Siri was joined by a fortified wall and the area between the two came to be known as Jahanpanah. As a result of this Delhi became a very large city with the incorporation of other fortified cities. Ibn Battuta described that, the breadth of the fortification wall of Delhi was eleven cubits.

However that the sultanate fortifications were limited to imperial establishments and common people largely lived outside of the fortifications. It was under the Tughlaqs that for the first time besides the palace town was also fortified. But Mughal cities generally amassed the palace, nobles and the common masses, merchants etc. encompassing the suburbs, suggest that the close symbiosis between the political authority and the commercial classes. During the Mughal period the towns were exposed to external frontiers. Under the Mughals Lahore, Ahmedabad, Broach, Baroda and Cambay were protected by thick walls with battlements while Shahajahanabad, Ajmer, Multan and Kol were walled cities. Interestingly Agra and Ujjain were towns with no city walls, though its counter city Fatehpur Sikri was very much protected by walls. However, Agra was protected by deep trench instead of walls. In contrast to Timurid palaces were always fortified structures. Further, Timurid palaces were always located at the periphery of the city, away from the city population. Though Mughal palaces were always fronting the rivers nevertheless they always occupied the central place in the city. Since the palaces were housed within the city for privacy and protection fortification of the imperial household was a must.17th century traveller Francois Bernier remarks that, Indian cites were merely military camps. Father Monserrate mentions the length of Akbar’s camp on the move was around 2.5 kilometers, with all his retinues, ministers and servants. Based on Bernier’s account Karl Marx also reiterates that the main reason behind the retarded urban growth was that the cities in India were mere military camps.

Burton Stein stated that, military was an independent stimulus to urban development and the south Indian macro-regions adds several excellent examples of fortified cities to the number of impressive cities in the sub-continent. Vijayanagara, the capital city of the empire from 1340-1565 was one of the greatest fortified cities of all of India. Others were Senji (Gingee), Dindigul, Chandragiri, Tiruchirapalli, Vellore, Bengaluru, Madurai and Thanjavur. Most of these cities were fortified during the Vijayanagara Period though all had attained fame as a strategic defensive point at a much earlier time. Several were hill fortresses commanding views of a subjugated countryside and major road and river routs. Senji, Tiruchirapalli, Chandragiri and Dindigul were fortified points of special importance to the Telugu Vijayanagara warriors whose incursions into Tamil country followed the western edges of the Coromandel plain. Such fortified places were intended to support the scattered settlements of Telugu migrants. Double walls, moats and bastions lent great strength to these places and all were meant to withstand artillery assaults. Plans of these cities of eighteenth century show that they contained several temples, bazaars, palaces, harems, and garrison building for soldiers and their mounts and within each as well as outside of their walls were residential clusters for townsfolk. Burton Stein argued that, ‘there are only slight differences between temple cities and fortified cities in south India.’ Temple complexes of the late medieval period were great walled places with towering gateways (*gopurams*). It is not clear to what extent temple architecture of the time was influenced by military models or concerns, but in the warfare of the French and British of the eighteenth century considerable use was made of temples as fortified places. It is possible that the warrior supporters of medieval temple religion may have considered the walls of temples as part of the defensive works of cities under their control.

Nagaram

Nagaram was a separately designated area in nadu inhabited primarily by men of the trading community and others who earned their living largely by commercial and artisanal activities. In south India *nadu* is a basic topographical and territorial unit in which the agricultural production was organized and *brahmadeya*, *ur* and nagaram are categories of village and town included in nadu. Historians including K R Hall and R. Champakalakshmi have paid due attention to *nagaram* in relation to the development of commerce, trade and urbanization. According to them *nagaram* is the town in which merchants lived and carried out their activities.

According to Noboru Karashima, Y Subbarayalu and P Shanmugam, the relation of *nagaram* to *nadu*, namely how many *nagarams* existed in one nadu has been an issue discussed by previous scholars. K R Hall stated that, there was a maximum of one *nagaram* for each nadu in Chola times. R Champakalakshmi accepted this as generally true but at the same time she pointed out that there is also evidence of more than one *nagaram* in some *nadu's*.

According to Noboru Karashima et al, the number of *nagarams* included in one nadu is crucial for understanding the function of *nagaram* in the state economic policy as well as its local administration. They argued that, the period of existence of more than one *nagaram* in one and same nadu longer than 50 years but less than 200 years. They point out that Tiraimurnadu in the Kumbakonam area had two towns namely Kumaramattandapuram and Tiruvidaimarudur and inscriptions of Tirunagesvaram and Tiruvidaimarudur testify to the existence of *nagaram* in these towns in 873 CE and 1016 CE respectively.

However, an analysis of the large corpus of inscriptions available for Chola-Mandalam, the central part of the Chola state shows that many *nadu's* do not have *nagaram* settlements. Champakalakshmi also suggested that there were there were only ninety two *nadu's* in the entire Tamil Nadu with a *nagaram* during one or more of the five periods from 600 CE to 1350 CE.

There were many inscriptional evidences which indicating the control of *nagarams* activities by the Chola state. For example, a Tillasthanam inscription records that, a king's officer investigating temple affairs and imposed a fine on the people who did not attend the committee (*variyam*) meeting of the *nagaram*. Another Tillasthanam inscription records a similar case in which another officer investigating temple affairs and imposed fines on an accountant of the *nagaram*, a *shroff* and an oil supplier for some mischief. These inscriptions clearly indicate that *nagarams* were placed under the strict vigilance of the state. An inscriptions yielded from Melappaluvur suggest that the *nagarams* were able to get concessions from local chief in the payment of fine, but they also reveal that *nagarams* were under state control and that they did not enjoy freedom to the extent some medieval towns in Europe and Japan did.

Based on the inscriptional evidences of the early Chola period, the people of the *nagaram* were known as *nagarattar*. They were the corporate body of *nagaram* and the recipients of money donated to the temples. There are many inscriptions which show us that the *nagarattar* cooperated with state officers, temple authorities, and corporate bodies such as *sabha* and *ur*, in the managements of temples. Tiruvidaimarudur inscription records that on the renovation of a temple *nagarattar*, state officer and the people of similar composition, decided to re-engrave on a new stone which bearing the record of lamp-burning engraved on an old discarded stone. Madras Museum Plates of Uttamachola records, the royal order concerning the management of

Kanchipuram temple. Four *nagarams* of saliyar who weave royal cloth living in four streets in Kanchipuram were assigned the work of supervising the temple management such as the, realization of the interest on the temple money deposited with outsiders.

There are some inscriptions which suggest that *nagarattar* held land in their town. A Tiruvaiyaru inscription seems to record that *nagarattar* transferred the land they had reclaimed in their town for the purpose of burning a lamp. The Madras Museum Plates also revealed that the temple purchased land from *nagarattar*. From these, therefore, we can presume that *nagarattar* who were primarily merchants were also landholders.

Inscriptions which founded from south India also revealed the professions of *nagarattar* or the communities who engaged in commerce. A Tiruvaiyaru inscription records the donation of land to a temple by a ruby merchant of bazaar in Thanjavur. He must have been a member of the *nagarattar*. A Tillasthanam inscription records that a big merchant (*manayan*) of the sankarapadi community received thirty *kalanju* of gold from a Pandyan queen and allotted ten *kalanju* each to three *sankarapadis* of the village for burning lamps in the temple. The Uttaramallur inscription reveals the *madavidiyar* (merchants living in the street of two storied houses), *senai* (betel leaf merchants) and *sankarapadi* (oil merchants) should elect respectively four, two and three qualified members of their group.

The inscriptions belonged to Chola period also revealed the evidences of the creation of new *nagarams*. Chidambaram inscription dated to 1036 CE records that a concubine of Rajendra I purchased a hamlet of the Chidambaram town and made it a new *nagaram* naming it Gunamenagaipuram, to which she invited merchants, cultivators, and other professionals and entrusted to them the responsibility of conducting services (festivals) to the temple of Chidambaram. The invitees included *viyapari* (merchants), *vellalar, sankarapadiyar* (oil merchants), *saliyar* (weavers), *tachchar* (carpenter) etc.

According to Noboru Karashima et al the *nagaram* changed its characteristics with the progress of time and we can find many differences in the *nagarams* character between the early period (850-1000) and the late period (1201-1350). They argued that the middle period *nagaram* showing a transitional character. In the early period it consist similarity to villages represented by *ur* and *brahmadeya*. Such activities of *nagarattar* of this period as custodians of money donated to the temple for some charity or participation in temple management were almost the same as carried out by *urar* and *sabhaiyar*. Another noticeable point of this period was the state control of the *nagaram*. So far as these points are concerned, therefore, we find basically no difference between *nagaram* and *ur*/*brahmadeya* in the early period.

In contrast to this trend in the early period, in later period we can find more vigorous activities of merchants in relation to the *nagaram* as well as guild in consequence of the development of East-west maritime trade. The *nagaram* seems to have been incorporated into, or at least have cooperated with the guild of *ainurruvar* in and after the twelfth century. There are so many inscriptions which yielded the evidences of *nagarams* joined in the assembly of *ainurruvar*. According to Noboru Karashima et al Merchant guilds such as *ainurruvar* must have been the most important motive power to let *nagarams* make a network among themselves. *Jati* formation also seems to have been a factor which made a possible linkage among *nagarams* of different localities

From the points described above we can say that the *nagaram* was one of the organizations utilized by the state for its local administration during the early and middle Chola periods but in and after the twelfth century the *nagaram* transformed its character to the promoter of commerce by associating itself with the merchant guilds *ainurruvar*. *Jati* formation also accelerated the process of their network formation.

Pattanam

Port towns were the chief centers of vibrant urban life during the medieval period. According to Arthasastra, ‘*pattana* is a port town situated in the coastal area where transactions took place in items of distant origins. The Manasara describes, ‘*Pattana* situated in the proximity of water ways and it is a town well-fortified with rampart.’ According to Mayamata, ‘a *pattana* is inhabited by the people of classes.’ Abundant merchandise such as precious stones, grains, fine cloth and perfumes are found in among them.

The meaning of the term *pattanam* becomes clearer when it is examined as a suffix to place names. The epigraphs from different parts of the country indicate that the settlements carrying the term *Pattanam* in their names often functioned as a centre of exchange.

From the inscriptional evidences belonged to various part of the country we can find towns referred to as *pattana*. The records dated to A D 907-968 belonged to Siyadoni near Jhansi refer to the same place as *pattana*. It contained various *hattas* (markets) consisting of *vithis* (shops). Each of this markets specialized in one or the other item. Siyadoni was intersected by a number of roads such as *rathya* and *hatta-rathya*. A number of professional groups such as distillers of liquor (*killapala*), brazier (*kamasakara*), oil miller (talika) potter (*kumbhakar*), stone cutter (*silakuta*) and sugar boiler (*kanduk*) lived in this and carried on their business. Mention of a *mandapika* being attached to this town suggests that it was an important exchange and manufacturing centre. Tattandapura, near Bulandshahr, situated on the western bank of the river Ganga was also a *pattana* during early medieval period. According to the inscriptions the town was intersected by a number of roads and consist many buildings.

Different castes and merchants inhabited Tattandapura. They were Kshatriya merchants, merchants of Mathura caste and merchants of vanik-varkkata caste. These merchants dealt in items like perfumes and the sauvarnika traders also carried on their business in Tattandapura.

The word *pattanam* is also used in the inscriptions of south India for the port towns during this period. According to R Champakalakshmi, Kamudi and Piranmalai were the centers of merchant activity in Ramanathapuram district of south Pudukkottai in tenth and thirteenth centuries. There Members of several merchant organizations met and recorded their endowments to the local deities in a joint donation. In both the records there are references about 18 *pattanams* or *pattinams*. She stated that, *pattanam* usually refers to a coastal town or port but interior towns with names ending *pattanam* are also known. For example an inscription o0f twelfth century mentions Aruviyue, near Sivapuri as Desi-uyyavanda-pattanam which was a trading centre colonized by merchants of different localities. However Nagapattinam functioned as an important port town under the Cholas.

In addition to *pattanam* or *pattinam* there were also *erivirappattanas* towns in south India. *Erivirappattanas* have been described as inland ports and are believed to have come up only in remote and inhospitable areas. These places served as centers for stocking merchandise and also as distribution center both for rural and urban population. A number of references are found in the sources to the conversion of villages into pattinam or *erivirappattanam* by the merchants. The community of merchants (*nanadesi*) at Mayilarppil converted Ayyapalalkattur into Virapattanam in the eleventh century. Similarly, fifteen thousand merchants of the four quarter converted Siravalli into erivirappattana. Many privileges were granted to the residents of this town. In the twelfth century, the village Velur was converted to erivirappattanam by the merchant organization. This merchant organization jointly looked after the administration of this center. According to sources in pattanams pattanasvami is reported to have controlled the administration of the city.

Administration

The medieval period in India had witnessed unprecedented growth of towns. Medieval towns were centers of manufacture and commercial activities. The administration pattern of medieval urban centers can be studied at two levels. One governed through self-administering institutions, which largely determined and regulated by traditions and social ethos, while the other one was the towns which were administered by state determined rulers and state appointed officials.

In India also there did exist some autonomous urban institutions during medieval period. *Mohallas* existed in medieval Indian towns were an important example for it. In Gujarat it were known as pols and they were generally formed the residence of a particular caste or profession. These *mohallas* or pols also served as self-governing bodies. Mirat-i Ahmadi mentioned about the superintendents of each *mohallas*. As mentioned by the text they were known as *mir-i mohalla*. These references clearly point to the presence of some sort of local units. State administration was to mediate and work in coordination with these local bodies. Besides, these *pol*/*mohalla* organizations, there were also existed parallel organizations of various crafts and artisans. Abul Fazal in his *Ain-i Akbari* refers to guilds (*juki*) and guild masters (*sar-i giroh*). Similarly, there was presence of *mahajans* in each urban centre. These *mahajans* were concerned with occupational regulations. It was a body of a group of elders of the community headed by a *sheth*/*seth*. S C Misra points out that, ‘He (*sheth*) maintained the traditional craft ethos within the group, regulated trade relations , laid down the price line, in sum secured internal harmony, outlawed unfair internal competition, and generally made a fair distribution of work.' The *seth* was the real mediator and spokesperson of the community. Even the state machinery made use of them when the need arose. These craft specific *mahajans*/*seths* confederated into a larger body headed by *nagarseth*/*nagarsheth*. He used to negotiate on their behalf in times of need. In one such instance the *nagarseth* of Ahmedabad saved the town from Maratha attack by paying ransom. In return the *mahajans* of the towns agreed to give a part of town duties in perpetuity. It also suggests that his position was probably hereditary.

Irfan Habib stated that, the Mughals did not appoint city governors, although *qil 'adars'* were appointed to the command of strategically important fortresses. Some fortresses were adjacent to towns of some importance in their own right, but the duties of the *qil'adar'* did not normally extend beyond the fortress walls. But the *mutasaddis* for Surat and Cambay combined the functions of both *faujdar* and *kotwal* and may be regarded as being city governors of a type no to be met with elsewhere in the empire. In the case of the *mutasaddi* of Surat, he was frequently responsible for the administration of the entire Surat sarkar, and also for the port of Broach. In Cambay too the offices of *mutasaddi* and *faujdar* were held by one person.

Apart from *qazi*, whose divers range of duties derived from his functions of enforcing the *sharia* and the *muhtasib* whose responsibility for ensuring the moral well-being of his charges made him, in effect both an inspector of markets and a censor of morals, the only official appointed by the government to make its will felt specifically in the towns and cities was the *kotwal*, or prefect of police, whose office dated back to the early years of the Delhi sultanate. *Kotwal* was the overall in charge of town administration in north India. He was appointed by the emperor at the recommendation of *mir-i atish*. It is significant that during the reign of Aurangzeb the Kotwal was in many instances personally appointed by the emperor. He was responsible for the maintenance of law and order and safety of the town population. To prevent theft, murder, etc. was the responsibility of the kotwal. He also supervised and controlled the markets. His office in the city was known as *chabutara-i kotwali*. To maintain his authority, he had a staff of underlings (*mahaldars*) and a substantial body of armed retainers. Manucci mentions a horseman and twenty to thirty foot soldiers for each mahal and when necessary he could call upon the *subadar* for assistance. According to Manucci, the Kotwal responsible for the collection of various taxes and cesses, and it was presumably for the reason that his instructions included observing the spending habits and knowing the income of everyone in the town. This was done by the appointment of a *mir-i mahal* in each quarter and by nominating the heads of the local guilds.

Some of the duties assigned to *kotwal's* office were very distinct such as acquisition of the information and domestic espionage, as a law enforcement officer he was required to ferret out and apprehend criminals, to petrol the street to ensure that the city gate were closed at night, and to see that a watch was set. It was his responsibility to see that the walls and gateways were kept in a proper state of repair to prevent illegal entry or exit In addition to these onerous duties, the *kotwal* had a number of other miscellaneous duties, some of which lay clearly within the sphere of duties traditionally associated with the office of *muhtasib*. These included checking weights and measures, controlling prices, preventing the sale of wine to Muslims, the expulsion from the town of dishonest tradesmen and religious charlatans, the segregation of butchers, sweepers and washers of the dead and the proper location of cemeteries and the place for executions. He was also to see that the streets were kept clear of obstructions, to set the idle to work, and to take charge of the property of persons who had died without heirs.

Aurangzeb in 1569 created the office of *muhtasib* who was incharge of public morals. He was to enforce standard of weights and measures, etc. All through the empire, and so also in the cities intelligence officers such as, *waqai navis*, *sawanih nigar*, *khufia navis* and *harkaras* were posted. *Qazi* was the incharge of overall judicial matters. Fiscal administration of a town (*sair* mahal) was looked after by *amin*, *karori* (revenue collectors), *qanungo* (keeper of accounts), *chaudhuri* (head of traders), *mushrif* (treasurer) and *tahvildar* (cashier). Separate *mutasaddis* were appointed for market administration. *Nigahban* (watchman) and *piyadah* (foot soldiers) were also appointed at each market.

At each city gate guards were posted, headed by a *darogha*, who shut the city gates after sunset and no one was allowed to leave or enter the city without the written permission of these guards. *Daroghas* (superintendents) were also appointed to look after and supervise public works, purchases, stores, bazaars, etc.

In south India the representatives of *nagaram* assembly were known as nagarattar. It consisted of local merchants. Their job was to administer the local market. They provided police protection and were responsible for the cleaning of streets, garbage collection, etc. For these services a fee was collected by *nagaram* from merchants. *Angadikuli*, *angadipattam*, *taragu* (brokerage fee) were fees charged from the shops and *karai-irai*, *kadaipattam* was the fees charged from bazaars. It had full-fledged machinery of sweepers, policemen, market officials, accountants, etc. *Nagaram* possessed the right to authorize a wholesale dealer for a specified commodity.

Life

The medieval towns had a miscellaneous population including many nobles and a large class of clerks for running government offices, shopkeepers, artisans, beggars, etc. Standard of living in a medieval city shows striking contrast, while the upper strata led a life style akin to the royalty, the urban poor found it difficult to achieve the bare subsistence level.

During the period of Delhi Sultanate a large section in the town consisted of slaves and domestic servants. The most usual method of acquiring a slave was capture in war. Slave markets for men and women existed in West Asia as well as in India. The Turkish, Caucasian, Greek and Indian slaves were valued and were sought after. A small number of slaves were also imported from Africa, mainly Abyssinia. Slaves were generally bought for domestic service, for company, or for their special skills. Skilled slaves were valued and some of them rose to high offices as in the case of the slaves of Qutubuddin Aibak. Firuz Tughlaq also prized slaves and collected about 1, 80,000 of them. It can be argued that the condition of slave was better than that of a domestic servant because the master of the former was obliged to provide him food and shelter, while free person may starve to death. However, it was widely accepted that slavery was degrading.

The posts of clerks and lower government officials had, obviously, to be given to the people who could read and write. Since the work of teaching was largely in the hands of the Muslim theologians (*ulama*), the *ulama* and the lower officials tended to think and behave a like. Most of the historians were drawn from this section. Beggars, who generally wore arms like the ordinary citizens, formed a large mass and could sometimes create a problem of low and order.

In general, food grains were cheap for the townsfolk during the Sultanate period. Under Alauddin Khalji, a *man* (about 15kg) of wheat was sold for 7½ *jitals*, barley for 4 and rice for 5 *jitals*, with 48 *jitals* being equal to a silver *tanka*. Prices rose sharply under Muhammad Tughlaq but declined almost to Alauddin’s level under Firuz. It is possible that this was due to the extension of cultivation during his reign.

It is difficult to compute the cost of living in towns. According to Satish Chandra, a modern historian has estimated that during Firuz's reign, a family consisting of a man, his wife, servants and one or two children could live on five *tankas* for a whole month. Thus, for a lower government official or a soldier, living was cheap. But this did not apply to the artisan and workers in the same way. In Alauddin Khalji's reign the wages of an artisan amounted to 2 or 3 *jitals* per day or about 1½ to 2 *tankas* per month. House hold servants were paid even less. Even under Akbar, an unskilled labourer earned 2½ to 3 rupees a month, or even less. In terms of their income, the living conditions of artisans and workers in towns appear to have been hard.

The Mughal towns also had a miscellaneous population and, the urban population was not a homogenous one during this period. We can divide the urban population of Mughal period into four broad groups:

i) Nobles and their retainers, officials of the state and troops

ii) Persons engaged in mercantile activities

iii) People involved with religious establishments, musicians, painters, poets, physicians, etc., and

iv) Artisans, menials and workmen of sundry sorts

The composition of different categories of people in different towns depended on the nature of towns, i.e., administrative centers or commercial centers. In imperial headquarters perhaps the biggest group was that of the retainers and troops of the king and nobles. Bernier estimated the total strength of Shah Jahan's great camp around 3-4 lakh.

The situation in other administrative headquarters was also the same. The provincial governors, high nobles and other administrative officers all had their contingents, official hangerson, servants and their families. As most of the big town were commercial centers of importance, the mercantile community of the towns was quite important. At Ahmedabad it was estimated that there were around 84 castes and sub castes of Hindu merchants alone. In 1640 there were 600 brokers in Patna. The number of grocers in Patna a moderate town was around 200. In a comparatively smaller town Jodhpur more than 600 shops were owned by Mahajans.

Another important group in town comprised of people associated with the profession of medicine, learning, literature, art and music. Besides, a large number of poets, musicians, physicians also made their abode in towns because here money could be earned or patronage of the king and nobles was available. Artisans, workmen and labourers also formed one of the biggest groups in towns having large commercial activities.

Standard of living in a Mughal city shows striking contrasts. Commenting of the life style of the common populace at Goa , Linschoten says that, ‘they are so miserable that for a penny they would endure to be whipped and they eat so little that it see meth they live by the air; they are likewise most of them small and weak of limbs.’ Similar observation was made by De Laet as well. He comments that ‘the condition of the common people in those regions is exceedingly miserable; wages are low ; workmen get one regular meal a day; the houses are wretched and practically unfurnished, and people have not sufficient covering to keep warm in winter.’

The Ain-i Akbari and other contemporary and other contemporary European travellers (Pelsaert, Pietro Della Valle, etc.) accounts show that an average monthly wage of the urban workers ranged three to four. Shireen Moosvi has shown that the purchasing power of an unskilled worker was significantly higher in 1595 than in 1867-1871-2. An unskilled worker during Akbar’s reign was able to purchase much more wheat, inferior food grains, sugar, etc. Thus, he could have afforded better food-stuff than his counterparts did in the latter half of the 19th century. However, his purchasing power was poor in terms of clothing.

Middle classes, specially the petty revenue officials, lower rank *Mansabdar's* and the physicians appear to be fairly prosperous. However, intellectuals were, in general poor and depended for their livelihood solely upon their patrons.

The nobles and other upper classes in Mughal India led a luxurious life-style. According to the sources an *amir's* son spent one lakh rupees in a day in Chandni Chowk to buy the necessities. Moreland comments that 'spending not hoarding was the dominant feature of the time. Shireen Moosvi has analyzed the pattern of consumption of the Royalty and the nobles which clearly reflects the nature of the life-style the Royalty and the Mughal nobles enjoyed. According to her a Mughal noble spent almost 75 per cent on luxury and comforts. The luxurious life style of the Mughal nobles resulted in their impoverishment. Bernier states that, 'Omrahs on the contrary most of them are deeply in debt, they are ruined by the costly presents made to the king and by their large establishment. This, in turn pressed them to extract more from the peasants than the required dues.'

Monserrate described that, all the Indian towns looked alike. According to him if a traveller has been one of these cities, he has seen them all.' This indicates some regional variations are discernable in spite of the fact that certain basic features of houses of the rich, ordinary and poor remained more or less common. Monserrate himself helpfully provides us a general description of the houses of rich and the poor in Mughal towns, as follows: 'The house of rich had ornamental gardens in their courtyards and tanks and fishponds which are lined with tiles of various colours, artificial springs and fountains and pathways paved with brickwork or marble. They adorned their roofs and arched ceilings with carvings and paintings. Windows were not provided for on account of the fifth of the streets.’ He adds that, ‘the Hindus (Brahmanae) had another style of architecture but does not elaborate upon it and simply says that they decorated their houses with stone and wooden statues and sculptures of their deities and fabulous creatures.’

As for the common people he merely says that, ‘they lived in lowly huts and cottages.’ In Surat the ordinary people live in dwellings covered by *olas* (interlaced palm leaves), Godinho says and adds ‘that is why, if by chance any house catches fire, it spreads over the entire lengths of several roads.’

The major descriptions of Mughal towns such as Agra, Delhi, Lahore and Surat given by other European travelers largely match and supplement these accounts. Finch reports that, ‘the houses of nobles and merchants at Agra were built of stone and bricks and had flat roofs while those of poor were of mud walls covered by thatch that often caused terrible fires.’ But he also mentions carved windows and doors in houses at Lahore that were fair and high. Describing houses in Lahore Finch remarks that, ‘in most of the houses of Hindus the doors were placed high, six or seven steps above the ground, so built for more securities and that passengers should not see into their houses.’ Pelsaert tells us that in Agra the houses of the nobles had many apartments and that their tanks were filled by drawing water from wells by ox-driven water wheels. As for the houses of workmen at Agra Pelsaert describes them as made of mud with thatched roofs. Bernier does us special favour by describing the middle class housing in Delhi. He tells us that the houses of merchants were built over their warehouses.’ They look handsome enough from the street and appear tolerably commodities within. The lower strata consisting of common troopers including vast multitude of servants and camp followers lived in houses interspersed with those of the nobility and the rich constituting an immense number of small houses built of mud and thatched with straw.

The style of clothing of the middle and upper strata was by and large similar. Both could be distinguished on the basis of the quality of cloth they worn. Men wore drawers (shalwar) and breeches and a shirt. In the winter they also wore a long loose fitting coat (*qaba*). Besides they put shawl on shoulders and a *patka* round the waist and a turban. Women wore a long chadar and a bodice (*choli*). In the doab area, *lahanga* (a long loose skirt) and *choli* and a long scarf was quite popular. The Muslim ladies usually wore loose drawers, a shirt and long scarf together with their usual veil. Lower strata for most part were scantily clothed. Salbanke comments about the common populace between Agra and Lahore that ‘the plebeian sort is so poor and the greatest part of them was naked.’ Similar observations are given by the European travellers for the south. Barbosa remarks about the common masses of the Vijayanagar Empire that ‘they go quite naked with the exception of a piece of cloth about their middle.’ Women also tie on a cloth, one half of which goes around the waist, the other is thrown over the head. In winter men wear quilted gowns of cotton and quilted caps. In the South most of the people went barefoot.

Joint family system was common. Women were subordinate to man. The higher class women observed purdah. There was ample freedom of social intercourse within the limits of the purdah. The custom of Jauhar was almost entirely confined totally among Rajputs. Among the Upper caste Hindus, the practice of sati or self-immolation was quite common. Akbar took a serious view when the daughter of Mota Raja of Marwar was compelled to burn herself against her wishes. Akbar appointed observers in every town and district to ensure that while those who on their own impulse wished commit sati might be allowed to do so, they should prohibit and prevent any forcible sati.

Marriage ceremonies hardly differed from the present day celebrations. Nobles and rich merchants spent huge amount of money on marriages. Thirty two lakhs rupees were reported to have been spent on marriage of Prince Dara Shukoh. A 17th century traveller to Sindh, Boccaro, reports that even an ordinary Hindu spent 4000-5000 rupees on a marriage. On a marriage in his family Raja Bhagwan Das Provided a number of houses, one hundred elephants and boys and girls of Abyssinia, India and Caucasia, and all sorts of jewels studded golden vessels and utensils, etc.

In general education was beyond the reach of common women. But women of urban areas especially from elite class got opportunity to study. Princesses were taught to read and write. Akbar was greatly interested in female education. Badauni comments that he recommended a new syllabus. He established a school for girls at Fatehpur Sikri.

Gambling, elephant fights, *chaupar*, *chandal-mandal*, chess, cards, polo, etc., were the sports greatly indulged in by the higher strata. *Chaupar* playing was very popular among the Hindus, specially the Rajputs. Hunting was the most popular pastime of the royalty. Generally, ladies of harem did not participate in outdoor games. But some played *Chaugan* (polo).

Religious festivals and pilgrimages to holy shrines were popular means of amusements. Huge celebrations were organized at the tomb of the Sufis. At Delhi such celebrations were held at the tombs of Bhakhtiyar Kaki and Nizamuddin Auliya. At the tomb of Hazrat Nasiruddin Chiraghi Delhi on every Sunday, both Hindus and Muslims gathered specially during the month of Dipawali. Idul Fitr, Idul Zuha, Nauroz, Shabbarat, Holi, Dasehra, Dipawali etc were also celebrated with great pomp and show.

Nobility

The nobles enjoyed a high standard of living during the medieval period in India. In the time of Delhi Sultanate the nobles tried to ape the Sultans in ostentatious living. They had magnificent palaces to live in and they used costly articles of apparel, and were surrounded by a large number of servants, slaves and retainers. Alauddin Khalji sternly repressed the nobles, but the ostentatious mode of life revived under his successors. The nobility came into its own under the Tughlaqs. Due the rapid expansion of the empire, large salaries and allowances were given to the nobles by Muhammad Tughlaq. During the Tughlaq period, a number of nobles were able to acquire large fortunes. The property of a noble was generally safe, and was allowed to pass on to his sons. Under the Mughal rule also the nobles was the richest class in the empire. Hereditary was the most important factor in the appointment of the nobles during this time.

For a long time the mansions of nobles do not appear to have been built within the royal quarters, though probably they were not situated at a very long distance from it. According to K M Ashraf ‘A more unfettered and intimate social intercourse began to prevail among the noble classes only after the establishment of the Mughal dynasty and with the growth of a thoroughly Indian outlook among all the ruling classes.’ There is comparatively little information about the mansions (*havailis*) of the nobility. It appears, however, that they were built on the plan of the royal buildings. The mansions of the nobles were big buildings with spacious apartments. There were drawing rooms, baths, sometimes a water tank, a spacious courtyard, and even a library. Separate apartments were assigned for the use of the ladies of the haram. The drawing rooms were sometimes decorated with costly hangings and beautiful curtains. The walls of the houses of the richer Hindu classes were probably painted and white-washed and the doors were of ornamental wood work.

Some references are found about the houses of upper classes in Bengal and Gujarat. The houses of nobles in Bengal were conspicuous for the construction of a tank on one side of the house, an orchard on the other, bamboo groves on the third side, and open spaces on the fourth. The houses of nobles in Orissa were spacious and tall structures with orchards of fruit trees and plots of land for purpose of cultivation. Gujarat was similarly a very advanced country in respect of house construction. Cambay was a most excellent city and the people of Khambayat had many vegetable and fruit gardens and orchards which they used for their pleasures. Champaner and Ahmedabad came into prominence at the close of our period. There were fine houses with big courtyards, tanks and wells of sweet water, all made of stone in both the cities. Marwari merchants of those days were very fond of bathing and constructed many water tanks in their houses in addition to the usual orchards and gardens.

From Shaikh Farid Bhakkari's biographical work Zakhirat-ul Khawanin, it appears that Mughal officers and nobles were fond of contracting attractive and imposing houses for their residence. A large number of sarais, *hammams* (public baths), well, step-wells (*baolis*), water tanks, markets, roads, and gardens were also built by the nobles throughout the Empire. During the reign of Akbar, Murtaza Khan Shaikh Farid Bhakkari built mosques, sarais, khanqahs, and tanks at Lahore and Agra. The Wives and staffs of nobles also took equal interest in constructing work of public utility. We get several references about religious and educational buildings such as mosques, madrasas, khanqahs, tombs and temples (*devrah*) built by Mughal nobles. Some of the Hindu nobles and officers also built mosques. Construction of tombs during one's own life time and for the deceased persons of one's family was a popular trend in the Mughal Period. Beautiful gardens were laid out around the imposing structures. In constructing these tombs, the nobles sometimes vied with each other. Mughal nobles and officers constructed public welfare buildings outside India. A number of Irani nobles at the Mughal court are reported to have funded the construction of mosques, *sarais*, etc. in Iran.

Many nobles and officers also founded cities, towns and villages in their native places or in the territories under the jurisdiction. Sometimes the old existing towns were renovated and beautified with gardens, trees, roads and structures of public utility. Whenever a new city or town was built it was provided with all the necessities of civil life and amenities of an urban settlement with the purpose of encouraging the people to settle down there. Lying out of gardens was a part of the nobles' cultural activities.

A J Qaisar has shown a linkage between social values and building activity of the Mughal elite. He stated that these values were a continuation of the long established Indian traditions. According to him building activity was undertaken on such a large scale was mainly due to the prestige factor of the Mughal Nobility. It nourished competitive spirit for cultural exercises with a view of scoring over their compatriots. The desire was so perpetuate one's name for indefinite period. The aspiration unfolded itself in both the forms of their activities, private and public.

The nobles maintained their own Karkhanas to manufacture luxury items for their own consumption. Carpets, gold embroidered silks and high quality jewellery were the main items produced. Besides they imported large number of luxury articles from different countries.

Mosques and Temples

The institution of pilgrimage, though a pan-human phenomenon, is an integral part of Indian tradition. During the medieval period the religion play an important role in the growth of cities. Ajmer, Banaras and Pandharpur were the prominent north Indian sacred cities of the medieval period being centers of Sufi, Hindu and bhakti traditions. While Banaras and Pandharpur emerged on account of their having a strong religious roots, Ajmer initially enjoyed its prominence for being located at a strategic location.

However, soon it also emerged as a prominent Sufi center under the Mughals.

Ajmer

Ajmer is the abode of famous Chishti Sufi saint Shaikh Muinuddin Chishti who accompanied Shihabuddin Ghori. However, in spite of being the chief centre of Sufi activities, it appears that throughout the Sultanate period the city largely remained in abeyance, though we do get the reference that Iltutmish and Muhammad bin Tughlaq did visit Ajmer to pay their homage to the Khwaja's tomb.

The city emerges prominently during Akbar's reign. It was in 1556 that Ajmer passed into the hands of Akbar. After the birth of Prince Salim in 1569 Akbar paid regular visits to the city and revered tomb till 1580. The city had more to offer than simply being the adorned Sufi center, it was its strategic position combined with commercial importance. In 1580 Akbar created a separate suba Ajmer to be governed by a subadar. Jahangir made Ajmer his headquarter during his campaign against Rana Amar Singh of Mewar. Shahjahan, along with his daughter Jahan Ara Begum, was a regular visitor to the city.

The major constructions in Ajmer were undertaken during the reign of Akbar. Akbar provided the city its city wall with strong ramparts and a deep moat. The city wall had five ornamental lofty gates – Delhi, Madar, Usri, Agra and Tripolia. Abul Fazal mentions the fort on a hill as 'one of the important in India'. Akbar repaired and extended the existing old fort and built a palace called Daulatkhana. The lofty and imposing main entrance gateway of Akbar faces the city – Nayabazar. He also built the Khas Bazaar, Dargah Bazaar and added a mosque to the Dargah (Akbari Masjid, 1570, built of red sand stone). Akbar's governor Ismail Quli Khan built Buland Darwaza in 1569-70 on the shrine of Miran Saiyyad Husain. Jahangir during his three year stay at

Ajmer built a palace and gardens (Daulat Bagh and Kaiser Bagh). Shahjahan added a marble mosque in 1637 to the west of the Muinuddin Chishti's tomb. He also built a marble parapet with arched roofs, and five *baradaris* (pavilions) of marble and a *hammam* (Turkish bath) against the picturesque setting of Ana Sagar. No monument was built by Aurangzeb here. However, Saiyyid Brothers built a mausoleum of their father here. In 1791 Sivaji Nana built a *Jhalra* (water reservoir) known as Nana Sahib Ka Jhalra. He also designed the Naya Bazar.

The city presents remarkable tradition of syncretism. The liberal grants to the shrine were given not only by the Muslim rulers but also by their Hindu counterparts. Even during Diwali the Hindu devotees light the lamp at the Dargah. The city was not much known for its manufactures. However, the city produced cotton and leather. Among the coarse cotton produce were: *reza khes*, *dhoti susi*, *charkhana*, *chadar*, carpet and rugs. The city is also abundantly provided with sandal-wood related items, incense and rosaries to cater to the pilgrims. The city was also the convergence point of trade during medieval periods and there resided wealthy *seths (mahajans* and *banias* etc.).

Banaras

The city of Kashi was known as Banaras during the medieval and British periods. The city has the honour of being one of the most revered places for the Hindus and it equally important for the Jains and the Buddhists. It also has the history of almost 2500 years and it is the place where great sages like Buddha, Mahavira and Shankara gathered to deliver their message.

In the medieval period as well the city continued to enjoy the status of the center of high learning and intellectual thought. Bernier records that, 'the town resembles rather the school of the ancients, the masters being dispersed over different parts of the town, in private houses and principally in the gardens of the suburbs, some of these masters have four disciples and the most eminent may have twelve or fifteen. He also mentions presence of a large hall (library) full of books.'

In the medieval period the city represented dominance of the Indo- Islamic character which is largely evident in its built in environment-mosques, bazaars, tombs and gardens. Sandria Freitag calls it a 'mughalizing' city. However, Madhuri Desai looks at these developments as more a 'long term manifestation of the syncretic culture of northern India.' Aurangzeb even renamed the city as Muhammadabad, however, the name could not get currency and Kashi continued to remain in the popular memory. Among the Islamic buildings in 1659 Aurangzeb built a mosque near Ratneshwar temple and another near Brihadeshwar temple. In 1669 Dharahara mosque was built.

However, it is rightly stated by Altekar that modern Banaras is the creation of the Marathas. In the eighteenth century Marathas and Peshwas added and repaired a few existing structures on to the Brahmanical landscape of the city. Throughout the medieval period the city shared high level of syncretic tradition and one does not find any Hindu-Muslim conflict during the medieval period. Twinning who visited the city in 1794 estimated the population of the city approximately 400000-500000 people. The city was also known for her own products such as silk, cotton and fine woolens.

Pandharpur

Pandharpur saw gradual growth from a small village to a prominent town in the thirteenth century. The growth of Pandharpur was exclusively related to the rise of the Varkari sect in the region and Pandharpur being the center of its activities. The center of the city is the Sri Vittala temple; it is a huge complex with eight gates. The city had a chequered history from being a small village to a prominent center of Varkari faith. In the 6th century copper plate grant of Rashtrakuta ruler Amoghavarsha I (516 CE) it is mentioned as Pandarangapalli (*palli*- a small village). In the copper plate of 757 CE of Chalukya ruler Kirtivarman II the area is mentioned as a village on the bank of the Bhimarathi. In the 1237 CE inscription of the Hoysalas which is housed in the great temple of Vittala the place mentioned is no longer a small village (*palli*) but a Mahanagaram (a large village i.e. a small town a *qasba*). Thus the emergence of Pandharpur as a town coincides with the establishment of the Varkari sampradaya and the entry of Jnanadeva on the scene in the 13th century.

The city has truly been called a mini Kashi. The sacred land scape provided architectural marvels to the cityscape. The present city landscape is the contribution of the Marathas, particularly the Holkars. All the major existing shrines at the city are the result of the liberal grants given by the Marathas (*Peshwas*) for the construction, restoration and maintenance of the major temples. However the Varkari Sampradaya was not only instrumental in the rise and growth of the town of Pandharpur, it brought the town to the cultural map of India. The town soon emerged as a prominent centre of literary activities. In fact the Marathi renaissance owes its rise and growth to Varkari saint-poets who largely composed their works at Pandharpur and the Marathi language got the enrichment here. The earliest work produced was Jnanadeva's Jnaneshvari (1290).

The emergence of temple towns in south India was the unique phenomenon. Temples not only served as instruments of political legitimation but also created a huge hinterland and resource base to emerge as prominent urban centers. Temple towns, so named for in a region 'temple' became the source of economic activities, emerged as biggest generator of demands and facilitated trade and commerce. This phase is marked by the emergence of bhakti in the region which facilitated the construction and spread of Vishnu and Shaiva shrines. These temple towns so developed were either a single cult centers (Srirangam) or at times were also multi-cult centers (Kanchipuram), some of them developed as a result of a deliberate act, by the political will as ceremonial cities (Tanjavur).

According to R Champakalakshmi the specialized merchant guilds which emerged during the middle Chola period were instrumental in the expansion of temple urbanization in South India. There developed three types of temple towns. First the ‘ceremonial centers’: the Cholas sponsored two such ceremonial cities- Tanjavur and Gangaikondacholapuram as sacred centers. Madurai and Kanchipuram, the oldest cities, whose antecedents could be traced in the early historical period, also served as major ceremonial centers. Another type of urban centre was ‘multi-temple centers’ developed after centuries of agrarian expansion. The chief characteristic of such centers was their dispersed foci. Instead of having single ceremonial centre they possessed a number of temple complexes and depending upon the patronage of a particular ruler for legitimation accordingly their foci also kept on changing. Kudamukku-Palaiyarai and Kanchipuram can be classified as multi-center temple towns. The third type of temple towns were those sacred centers evolved around a ‘single cult’, developed into a *tirtha* (pilgrimage). Chidambaram for the Shaivas and Srirangam for the Vaishnavites were such sacred towns. None of these temple towns were fortified except that their temples were provided with defensive wall, demarcating the sacred spaces. In the thirteenth –fourteenth centuries new features emerged in the urban landscape as a result of changing power relations under the Vijayanagara kingship. The major trend that emerged was militarization resulting in the fortification of towns. Earlier settlements were not fortified.