CHAPTER V

URBAN ECONOMIC SYSTEM

Urbanization envisages a special kind of economy characterized by all round progress. An increased agricultural output is the very backbone of urban activities. The industrial development and prosperous internal and external trade give further fillip to the growth of cities. The very existence of a town signifies an overall progress in different facets of life, as city is not the result of a single factor but it is the conglomeration of many aiding mechanics.¹

A city performs different functions such as social, political, economic and religious. To study the complex process of urbanization it is necessary to understand and look into as to how the urban system works. Basically the existence of city depends on the rich hinterlands wherefrom the basic needs of urban residents are met with. Whereas the progress of the city depends on the minimum utilization of all the natural resources of the area for the commercial and industrial output.²

The surplus produce sustains urban residents and then they carry on different occupational activities in the city. Many arts and crafts are carried on by people in separate industrial units, wherefrom the manufactured goods appear in the markets.
The urban economic system mainly revolves around industries, trade activity both internal and external, and markets. In early medieval context such developments definitely aided urban activity. However, trade and commerce has been taken by some scholars as the only essential factor responsible for the rise and decline of urban life in medieval Europe. Similar kind of hypothesis has been presented in the Indian context as it is argued by scholars that the Gupta and post-Gupta period saw decline of urban centres, and urban activity ushered again only with the revival of foreign trade in the eleventh and twelfth century. R.S. Sharma postulates that long-distance trade during the pre-Christian and early Christian centuries helped in the rise of urban centres and widely accentuated urban activity.

The present study looks into the distinct economic system of the period in which industrial production, trade and agrarian production jointly accelerated urban activity. The manufactured goods and agricultural products were exported to the foreign countries which in return brought profits to the Indian merchants. The proper regulation of trade was a necessity, however, markets existed for this purpose where rare commodities and locally produced articles both were set for sale. The merchants and markets were subject to different kind of cesses. The articles of merchandise were sent to the international markets, merchants who carried on trade were rich. So the industry and trade both were the integral parts of the peasant agrarian production.
The agrarian revolution of post-Gupta period definitely gave boost to both industry and trade. While describing the crafts and industries practiced during this period, there may have been a few which were not practiced earlier. The traditional hereditary character of craftsmen was maintained. The necessity of various implements to which people had been accustomed to, was not yet over. Several pieces of evidence from both literary and epigraphic sources can be corroborated, which testify to the existence of various industrial units such as:

a. textiles;
b. metal work;
c. stone work;
d. wood work;
e. pottery-making;
f. ivory work;
g. leather work;
h. glass industry;
i. boat-making, etc.;
j. other smaller industries such as sugar-making and salt industries.

Textile industry was one of the most important and flourishing industries since ancient times. A variety of clothes have been referred to in the sources. The fine Indian textile was exported to the Roman empire, China, Syriya and Egypt in the early Christian era. The sources of the Gupta
period refer to a special quality of clothes worn by the people. Both kind of clothes, finest and coarest, were woven and used by different classes.\(^7\)

During post-Gupta times the textile industry was well established. A variety of clothes were produced by the weavers and worn by the people. Hiuen Tsang, a Chinese traveller of seventh century refers to four different kinds of clothing used by the people of the country: kausheya which represented silk cloth or silk mixed with linen and cotton; kshauma represented linen but sometimes silk also; kambala or blanket used in the sense of woollen clothing, whereas rallaka was a clothing made out of the skin of a wild animal.\(^8\)

The Mänasollāsa refers to different kinds of fabric used by the kings and the people. Numerous centres of cloth manufacturing are also mentioned. The main centres include Kalinga, Nāgapatāna (south India), Aṇhilavāda, Multan and Vaṅga.\(^9\) The Karpuramāṇjari refers to different kinds of fabric used by the people for several kinds of dresses. The text refers to women clad in delicate silk clothes, which were so fine that if touched with finger they made sound of special kind.\(^10\)

In Kashmir the people wore clothes mainly made up of serge and cotton.\(^11\) Whereas Rājatarāṅgini refers to Pattana in Kashmir as an important centre of wool manufacture.\(^12\)
India exported fine cotton cloth to other countries. It was perhaps the largest manufactured export of India to other countries.\textsuperscript{13} Chau Jua Kua refers to Bengal as the most famous centre of cotton production.\textsuperscript{14} Sulaiman, an Arab traveller of ninth century had also referred to fine cotton stuff produced in Bengal, which was so delicate and fine that the dress made out of it could pass through a signet ring. It is further contended that delicate cotton stuff was seen by the traveller himself.\textsuperscript{15} Ibn Khurdadbeh refers to cotton stuffs and aloes as speciality of the kingdom of Bengal.\textsuperscript{16} It suggests that possibly the cotton cloth was exported to other countries from Bengal.

The cotton cloth formed the major export product of Malwa. Every year two thousand oxen loaded with cotton were sent to other countries for exchange products.\textsuperscript{17} Marco Polo refers to cotton stuffs as major export products of Gujarat; every year it was sent from here to other countries.\textsuperscript{18} He further refers to cotton trees of great size grown in Gujarat, which attain age of twenty years and produce fine cotton.\textsuperscript{19}

The products of Cola domain also included fine white flowered or dotted cotton stuffs which were exported to different countries.\textsuperscript{20} Kāṇchīpuram in south India was the major centre of the manufacture of sophisticated kind of cotton cloth, which was retailed in the shopping complexes, and was sold on wholesale by the merchants. Various taxes were imposed on the weaving and sale of cloth. The records of the period
indicate that there was considerable demand of cloth goods of south India not only in India but also in the foreign lands.\textsuperscript{21}

The epigraphs of the period also refer to weavers and the woven cloth available in the markets.\textsuperscript{22} The special kind of levies were imposed on the weaving of the cotton.\textsuperscript{23} The sale of cloth was also subject to some kind of taxation. These taxes were collected by the state officials, and in other cases, were granted to the temple establishments for their maintenance.\textsuperscript{24}

The secular and religious sculptures of the period are shown clad in delicate and transparent \textit{sārīs} and other dresses which further show the expertise of the textile industry of the period.

Indian cloth goods especially fine cotton cloth had fairly good demand in other countries. The craft specialists engaged in the cloth production formed a separate professional class during the period.\textsuperscript{25} A well organised textile industry might have necessarily brought profits to India because the fine textiles were in greater demand in the foreign markets.

The metal-work industry was also one of the great accomplishments of the early medieval artists. They used metals mainly iron, brass, steel, gold and silver. Several agricultural implements, weights and measures, weapons, ornaments and furniture were made up of above mentioned metals. The
sources of the period refer to iron-smiths, copper-smiths, braziers, carpenters, gold-smiths and sculptors who worked on different metals and produced all sorts of metal articles and jewellery worn by both men and women. The metal sculptures, decked with several kind of ornaments made up of gold, silver and studded with pearls and precious stones were housed in temples.

The sources refer to several kinds of gems, diamond, ruby, pearls, etc., used for making different kinds of ornaments.²⁶ The Kuttanīmata, a text of eighth-ninth century, refers to ornaments mainly made of gold and silver used by the people.²⁷ The Rājatarāṅgini of Kalhana supports this and also refers to the images made of gold and silver.²⁸ The ornaments made of lead, glass and shells were also in vogue and were mainly used by the poorer folk.²⁹

The ornaments mainly consisted of ear-rings or kundalas, mālā or necklaces, nupūras or anklets, bangles, armlets and nose-pins. In the Hammīramahākāvyas, Hammīra’s queen has been shown decked with kundalas in the ears, pearl drops on the nose, pearl necklaces, and nupūras which enhanced her beauty.³⁰ The Karpuraṃañjarī refers to bangles,³¹ anklets,³² jewelled girdle,³³ bracelets,³⁴ ear-rings studded with gems³⁵ and a pearl necklace³⁶ worn by the royal ladies. The Prithvīrājciśva also mentions pearl necklaces and kundalas worn by the royal ladies.³⁷
The inscriptions refer to jewellery worn by both men and women to decorate their bodies. The prostitutes and temple girls used jewellery of gold and other metals to enhance the beauty and charm of their bodies. The Shirpur inscription of Narasimha Prabhu of A.D. 1049 gives a list of ornaments which include a bracelet, a waist band, an anklet, a crown, kundala, armlet and necklaces with suitable pendants gifted to the temple of Visnu. The Deopara inscription of Sena king of Bengal refers to necklaces, anklets, garlands, gold bracelets worn by the people. An inscription of king Vallālasena mentions that the royal ladies used pearl necklaces. This suggests that the pearl-studded ornaments were costly and were mainly popular among the richer section of the society. The ornaments of gold and silver studded with jewels were endowed to the temples by the ruling elites. A record of king Rajendra Cola refers to gifts of jewels set in gold ornaments to the temple of Tirumulaivāyil in Kānappurāmādu.

The images of gods and goddesses have been shown wearing necklaces, armlets, ear-rings and anklets. The images housed in various temples in situ show ornaments of different varieties and sizes, which indicate the skills of the artists of the period. The artists have sculptured them dressed in delicate and expensive sārīs and dhotīs, and adorned with all kind of ornaments which enhanced their charm and beauty. The profuse use of these ornaments on sculptural icons suggest that such jewellery was used by the people in day to day life. An interesting variety of these ornaments exhibit the beautiful blending of the richness
The metal workers also produced best kinds of weapons of iron and other metals. The images have been shown carrying axes, daggers and swords. The Indians produced best kind of swords. The *Agni Purāṇa* refers to five main centres of sword manufacturing. These include Kantikhatta and Rishika (unidentified), Sūraparaka (Sopara), Vaṅga (East Bengal) and Aṅga (Monghyr and Bhagalpur district).

An eleventh century text the *Yuktikalpataru* of king Bhoja refers to the industry of sword making in a flourishing state. The main centres for the manufacture of swords were Kalinga, Magadha, Banaras and Saurashtra. Various images are shown carrying swords which suggest that probably it was the most popular weapon used in the war. India was probably an important sword manufacturing country. The jewelled swords of best quality were exported from Indian states to other countries in the thirteenth century.

The considerable progress in the field of iron technology is further revealed by the fact that new agricultural implements were manufactured, which definitely improved agricultural production.

The iron beams used in the temples of early medieval India represent fascinating artefacts of the great skill of artists. In the temples of Bhuvanesvar, Puri and Konark iron beams of unwrought iron have been used. The bigger beams, according to Percy Brown, were produced by welding together a
number of "blooms" of wrought iron by means of a hammer, the process was known only to Orissa. 49

The metal images made up mainly of brass of octo alloy were the speciality of early medieval artists. Such images were common in parts of Himachal Pradesh, Bengal, Bihar and parts of south India. These images of different gods and goddesses are now housed in numerous museums, a few are in the temples in situ and many others are still buried underground. 50 However, large number of bronze objects have been unearthed from the temple sites in south and north India which are of very high quality and exhibit high technical skill of the sculptors of the period. They even excel the bronzes of bronze age in quality. 51 It is stated that the bronze sculptures of Bengal display high quality, which must ever remain the ultimate basis of proper valuation of art. 52

This art-activity mainly centred around the religious and monastic establishments: such as in Nalanda, Kurikhar, Odantpurī, Vikramapurī, Mahāsthān and Orissa. 53 The brass was commonly used for the images in Himachal Pradesh as these were extremely mobile and could be easily shifted from one place to another. Kashmir also became a major centre of metal-casting probably from the seventh-eighth century onwards. The south Indian temple cities have yielded a large number of bronze artefacts; we get references to various gifts of bronze images made to temples by the kings and queens. 54
The exquisite bronze images and other art edifices produced by the artists show collective craftsmanship in which the images were chiselled and moulded by the master and his pupils under the guidance of living tradition. However, in a few instances some names of artists have been recorded on the images which suggest that in certain instances the images were produced individually. Stella Kramrisch, however, does not support this. She states that the religious accomplishments of the artists did not stand for individuality of artistic conception, but the religious experience that underlies the work of art is "interior" to its conception and is moreover the common property of the initiated.

The stone-work industry exhibited greatest skill of the stone workers of the post-Gupta period. Objects like household utensils, ornaments, statues, stone-images, ruined monasteries, houses and buildings such as big temples surviving to date bear convincing testimony to the efficiency and skill of the stone workers. They were well conversant with the art of using simple and precious stones for the building purposes.

The literary and epigraphic sources refer to different types of stones used for the construction of buildings, forts, temples and for fashioning the sculptures. The temples at Khajuraho constructed by the Chandellas especially that of the Kendriya Mahadeva temple show the highest achievements of temple architects. It is one of the best and finest temples
"both in loftiness and embellishments". Similarly Brahmanical and Jain temples at Osia, a Jain temple purely constructed of marble at Mount Abu in Rajasthan show great skill of the temple builders. The temples in Orissa constructed mainly between seventh and thirteenth centuries exemplify great skill of the builders. In south India the temples of modest size with remarkable beauty and sculptural wealth were constructed from seventh century onwards. Cōla king Rājarāja I built a great temple at Tanjore, which is two hundred feet in height and is constructed of a single slab of granite stone. It is perhaps the most significant piece of architecture ever built in India, which is still well preserved. Similar kind of superb craftsmanship is exhibited in the temple constructed at Gaṅgaikondacōlapuram by Rajendra Cōla. This temple possesses beautiful and exquisite sculptures, which are important specimens of the excellent stone work industry. The stone sculptures found at Ratnagiri, Udayagiri, Somnātha, Tanjore and at a number of other places are the masterpieces of the sculptural art of this period. The sculptures found at Khajuraho are considered best and display great excellence of craftsmanship. In a few cases, sculptors, stone workers and master sculptors have been shown working on the stone with their chisel and hammer.

Excavations carried out in different parts of India have unearthed several big and small houses, ruined walls, monastic settlement and ruined pillars of broken houses, partially made up of stone or wholly of stone. These also reveal great excellence attained by the stone workers of that times, who were required in larger numbers to complete huge complexes.
The carpenters and wood carvers held important place in the social life of the people. The wood was used for making buildings, doors, frames, pillars, furniture and also for making sculptures. However, in the Gupta period stone supplemented wood but still wood work industry survived and it was used for constructional purposes, where it was easily accessible. The wood-work industry flourished in northern India, in some parts of Panjab and also in southern India because of its availability in these areas.

In Himachal Pradesh numerous shrines were built in wood since early times because it was available in plenty. Out of many temples a few have survived to date. The Laksanā Devī temple at Bharmaur, the Śaktī Devī temple at Chatrari in Chamba district, and the Markula Devī temple in Lahaul-Spiti are the living examples of the wooden architecture. The ceilings of these temples have been lavishly decorated with flowers, blocks and lotus petals. The doors of the temples show exquisite ornamentation and are examples of superb wood carving traditions.

Similarly the art of wood carving was practiced in south India from the remote period. Various specimens in the form of pillars, statues and buildings confirm to the flourishing art activities in Travancore. In Kerala also the surviving wooden remains exhibit special kinds of sculptural art. The designs for carving and decorating the doors, windows and ceilings show great skill of the artists in this art. In addition to this
we do notice wooden sculptures housed in the temples, which were supplemented by metal shoes to protect their ends from moisture. All this was possible only because of the abundant supply of wood from the nearby forests.

Apart from this, wooden furniture was used by the people. The Kolhapura inscription of twelfth century refers to wooden furniture used by the people. The different articles like table, chair, seats of chairs, cots, foot-stool, etc. were widely used by all sections of society. Mainly it was made up of wood but sometimes metal furniture was preferred and used by the people. These articles were decorated with attractive designs. The richer class used beautifully carved furniture of expensive wood like teak and sandal whereas ordinary folk used common material with simple designs.

The Kuttanimata refers to different items of furniture used by the people such as a couch, bed, foot-stool and a table. Kshemendra also refers to different article of furniture such as bed and a table used by the people. The epigraph of A.D. 1135 of Silahara dynasty refers to a carpenter making stools, bedsteads and tripods for common use.

Apart from wooden furniture, sculpture fashioned in wood were also popular in different parts of India. In Himachal Pradesh wooden sculpture have been brought to light from Gajan, a small village between Kulu and Manali, possibly of eighth-
ninth century. 67 Wood carvings are also found in the Bharmaur and Chatrari temples as referred to above. Some wooden sculptures have come to light from east India which exhibit the great skill of the artists of Bengal. This suggests that the carpenters, rathakāras or chariot builders were proficient in the art of carpentry and with their masterly skill they took delight in fashioning beautiful items of furniture and sculptures for the people and earned their living.

The art of pottery-making was also practiced by the people. The existence of this industry may be traced back to the Indus valley times. A large number of specimens of pottery discovered from Harappa and Mohenjodaro testify to the existence of this industry. In a similar fashion potter's craft was one of the most important and popular crafts in pre-Christian and Christian periods.

The post-Gupta period witnessed the use of different varieties and colours of pottery. The wide range of colour and shapes of the pottery indicate the popularity of the craft in India. The sources of the period speak of the potters and their equipments like wheel and rods used by them. Both sexes adopted this profession. The potter-woman is referred to in the Rajataraṅgini. 68 The epigraphs refer to the potters and the potters' guilds. 69 The potters' ditch (kumbhakārāgartha) is mentioned in the copper plate from Assam, where the potters worked and made different kinds of pots. 70 They made big and
and small jars, cups, bowls, handis and dishes which were in great demand by the common people for cooking and serving food, whereas the richer class used utensils of metals and other delicate stuffs.

The earthen pottery was available both with designs and plain. Sometimes the painting on the ware bore stamped designs, in other cases, they had incised designs.

The archaeological excavations carried out in different parts of the country have unearthed variety of pottery. In northern India, red ware, black and red ware and pottery of coarse grey colour was in vogue. In south India explorations conducted in a few sites revealed red-slipped, dull red and coarse red ware as the commonly used pottery. Explorations conducted in district Baroda, Broach, Bulsar and Surat yielded large amount of glazed and celadon ware. Mutapalli in south India also revealed celadon ware with a grey green glaze which bears resemblance with the Chinese pottery used during the period. In Assam a special kind of pottery made up of Kaolin, a precious variety of fine clay was used. These vessels bear various stamped designs. This fine clay ware was probably the symbol of prosperity in the houses of the people of Assam.

The pottery was mainly wheel made, however, big pots were made by other techniques as they could not be made on the wheel.
The clay modellers made many toys, animal and human figurines of clay and terracotta. India has a glorious tradition in toy-making. The excavations conducted at the Indus valley sites revealed a large number of clay and terracotta toys. The tradition was carried on by the early historical urban and rural residents. They made clay toys of considerable ingenuity. Both religious and secular categories of terracottas were produced by the craftsmen. They produced them for the markets where those were sold and the industry of toy-making got further impetus. These terracotta figurines and toys reveal the high degree of skill and perfection reached in moulding and colouring them.

The art of terracotta modelling was practiced during early medieval period, and the tradition of clay modelling was kept alive. The terracotta figurines either toys or figures of animals and men, and figures of gods and goddesses were most popular. Other than these terracottas beads, lamps, spindle whorls and ear ornaments were also common.

The figures of men and women show sensitive modelling and exquisite art techniques of the clay modellers. Excavations conducted at Sintaverapura revealed a terracotta figurine of a male wearing a long hat. Other figure shows a male half shaven with long nose and circular ear with three parallel lines on the forehead, which exhibit great development in the art activities depicting various features of the body with minute details. A lady wearing skirt was also unearthed, which depicts a western influence and was probably of later period.
Excavations at Sunet, district Ludhiana yielded a beautiful terracotta female figure, shown wringing her long curly hair after bathing. Similarly, a terracotta figure (torso of a female) of early medieval period from Gauhati is one of the excellent specimens of great skill of clay modellers, the minutest description of the physical features make it the finest figure of its class in the entire range of art between the eighth and tenth centuries.

In addition to the figures of human beings several terracotta figures of animals have also been discovered. These include bull, horse, boar and ram. The figures of horses have been found on large scale, this suggests that the horse was probably the most important animal. Various toys made up of terracotta have also come to light. These include balls, beads, gamesmen and a few exotic play objects. Excavations at Tumain district Guna have revealed terracotta play objects like beads of different sizes and shapes, gamesmen of terracotta for the children. The terracotta made wheel suggests that toy carts were also made by the modellers. A large number of balls recovered from the early medieval sites suggest that it was an important playing object. A few exotic play objects have also been unearthed from early medieval sites.

The above survey suggests that despite great development in the field of different metals the terracotta production was not over, and it continued to survive with the surviving urban traditions. Terracotta objects were produced for children,
temples and monasteries on a large scale. These were not like crude and coarse terracotta objects of Kushāṇa age when urbanization was at its peak. 94

Ivory was mainly used for articles of luxury by the richer section of society. The ivory workers produced costly furniture, planquins, ear-rings, bangles, ivory combs, thrones, caskets and figures of human beings. An increased demand of ivory products probably made elephant an important and priced animal. The person who killed an elephant was awarded capital punishment, and in the case of natural death its tusks were preserved and used by ivory workers for making and decorating various articles. 95

The Mānasollāsa refers to the chairs made up of teak wood decorated with ivory. 96 The Kuttanīmata refers to ivory ornaments used by the people in Kashmir. 97 Kshemendra refers to ivory figures made by the people 98 and sold in the markets. The inscriptions record ivory-workers (dantakāra) who were proficient in the art of ivory-carving. 99 The epigraph of Sena king Kesāvsena of Bengal refers to "planquins supported by stuffs made of elephant tusks " 100 This further suggest the use of ivory and great skill of ivory workers in early medieval India. Al Istakhri, an Arab traveller of tenth century A.D. refers to ivory-workers market near the temple of Multan. 101 Probably it was because the temples were situated in the populous parts of cities and ivory workers settled there to have good trade of their products.
It is further recorded that Kalinga was a great centre of ivory work and from here the ivory products were even exported to the Arab countries.\textsuperscript{102}

The careful examination of the sources and explored sites\textsuperscript{103} reveal that ivory working was not altogether a neglected art,\textsuperscript{104} this contention would be strengthened if more early medieval sites are explored to reveal the potential centres of the craft where ivory work got adequate attention of the artists and the elites.

The leather-work industry worked well in early medieval India. The leather was used for making domestic and daily use articles. The shoes and sandals were the speciality of leather workers. The cobblers not only made new shoes but also repaired old and torn ones. An inscription of the Śilāhāras dated A.D. 1142 refers to cobblers making new sandals.\textsuperscript{105} Kalhana remarks that a shoe-maker was paid one hundred dināra for repairing the torn shoes.\textsuperscript{106} The fine quality leather sandals were produced in Cambay. These were well known all over India and abroad, whereas the leather sheets made in Thana were exported to foreign countries.\textsuperscript{107}

Leather water bags, hand bags big and small both, saddlers, belts, straps and leather buckets were also used by the people. An epigraph of tenth century of Gurjara Pratihāras refers to a leather bucket used for drawing water from the wells.\textsuperscript{108} Kshemendra refers to leather water bags used by the people of Kashmir.\textsuperscript{109}
The glass industry also worked well during this period. The use of kācha is as old as the age of Śuṅgruta in India. It was used mainly for making bangles, ear-rings, beads and bottles in the post-Gupta period. These were of different shapes and sizes. The literary sources of the period make reference to glass jars. Kalhana states that a merchant daily sent water of Pāpasudana tīrtha filled in glass jars to king Bhoja of Malwa. Huge quantity of glass objects have been unearthed near Kother village in Kashmir which further indicate the existence of flourishing glass industry there. Even Dāmodaragupta refers to the glass imitations of precious stones (kāca-mani) commonly used by the people.

The bangle-making was one of the most important industries. The bangles were considered very auspicious for the Hindu women. For married women a bangle made up of glass was considered an essential ornament. The bangles of different colours and sizes were made. They were of many varieties. The superior ones were of high cost and usually worn by a richer class, however, kācha was a cheap object. In some instances bangle-sellers amassed great wealth and out of that wealth they came forward to convert a village into a town.

The boat-making industry was popular especially in those places which have large networks of rivers. The sources acquaint us with different kinds of boats used by the people. These were mainly made up of wood, as wood was available in abundance in India. This natural facility definitely encouraged the boat-
making industry in India and abroad. The Persians and the Arabs imported teak and coconut wood from India for making strong ships. \(^{114}\)

Contemporary inscriptions corroborate many references to ships used for the warfare and officers in charge of ships. \(^{115}\) The powerful Cōla rulers not only had strong and large naval force under them. They actively participated in the overseas trade with countries farther east as far as China and sent embassies to these countries. \(^{116}\)

The literary texts of the period refer to boats of different sizes and shapes. Bhoja's *Yuktikalpataru* represents the achievements of Indian ship-building industry. The text describes different kinds of ships made up of distinct variety of wood. The kṣatriya wood was considered most suitable for building ships because it was strong and hard. \(^{117}\) The boats were loaded with all kind of possessions of big and small size. \(^{118}\) The *Tilakamāñjarī* of Dhanapāla also refers to the use of ships, the repair of the broken planks and proper examination of every part of ship, before it was set to sail. \(^{119}\)

The use of boats becomes more clear from the recovery of boat from the excavation conducted at Navagraha hill near Gauhati. The big clay boat has been assigned to early medieval period. \(^{120}\) This suggests that Assam carried on active naval activities and conducted trade through ships.
The above examination suggests that the post-Gupta period was characterized by remarkable naval enterprise and colonising activity which must have brought a further expansion of Indians, and perhaps maritime activity in the eastern water was widened.  

Sugarcane was cultivated on a large scale. References are found to the sugarcane plantation in the epigraphs as well as in the literary sources. This suggests widespread production of sugar in the country. The juice was extracted from the sugarcane by means of machines made up of bamboo, and labourers worked for this industry who were known by a special name of tuo. The juice thus extracted was boiled, clarified and later refined to produce sugar. Hence the sugar was sent to market where it was subject to some kind of taxation as revealed by the details given in the epigraphs and other sources. The increased sugar production is revealed from the fact corroborated by Arab travellers, who refer to export of sugar from Gujarat and Malwa in the eleventh century.

Salt-manufacturing was other important industry as revealed by the contemporary sources. They record the manufacture and sale of salt, which was carried under government supervision in south India, and was subject to considerable imposts in kind and money. The salt industries were mainly located at the coastal areas. The epigraphs refer to gifts of salt pits free of all taxes to the brāhmaṇas and temples. The Chandella grant of A.D. 1050 refers to gift of the mines of salt to the brāhmaṇas which shows right of manufacturing salt granted to them. The
inscriptions from Bengal of the king Vijaysena of early twelfth century records the gifts of salt pits and salt lands to the learned brāhmaṇas free of all taxes. This shows that salt was the basic necessity of the people, so it was manufactured on large scale and sold in the markets for the local consumption.

The oil manufacturing was also widespread. It was in great demand for several purposes like preparing food in the houses and burning lamps in temples and houses. The oil manufacturers formed one of the important industrial communities and had their own guilds. These guilds were constituted of several number of oil-makers who granted, in some cases, their income to the temples for obtaining spiritual merits. An epigraph from Gwalior of Gurjara Pratihāra records a gift to the temple of Viṣṇu by the chiefs of oil-millers, to contribute one pelikā of oil, each to the temple. The Dambal record of eleventh century states that fifty families of oilmen granted oil for the perpetual lamp of the Buddha vihāra constructed by some merchants.

The oil mill was made of stone and oil-seeds were pressed in it. An epigraph of A.D. 1187 records that an oil mill made up of stone, from where the gift of one maund of oil was made for the light in the temple. The great demand of oil for lightening lamps in a large number of temples might have necessarily given impetus to higher oil-production.
Industry of perfume-manufacturing also worked. The sandal pastes and incense were offered to gods. The men and women of royal families used many scented perfumes and pastes to perfume their bodies. The sandal, camphor and kumkum was used by them. The ladies of Bengal used agru perfumes and sandal pastes to perfume their bodies. The ladies of Kerala also used several perfumes. Whereas the women of Kanauj used saffron essence for perfuming their bodies. The incense burners recovered from the early medieval sites reveal that incense sticks were used in the temples and houses to purify them. The epigraphic records also refer to gândhika (a perfumer), who was engaged in the production and sale of perfumes and scents, which were in great demand by the richer and fashionable section of the society.

Liquor-making was an important craft practiced by the people. Wine was probably a favourite drink of all classes of the society. Liquor distilleries existed to meet the demands of the consumers. The women also enjoyed the pleasures of drinking. The prostitutes and the royal ladies all drank in the company of men. The women of south India generally drank wine after eating pepper and betel.

The wine was of many varieties. It was made up of grapes, sugarcane, coconut sap in addition to many other varieties. Kalhana remarks that the king Lalitaditya of Kashmir while marching in the south got rid of his fatigue by sipping coconut wine in the cool breeze of palm trees on the bank of river Kaveri.
Other smaller crafts were also carried on by the craftsmen. These include basket-making, garland-making and making of bows and arrows and shielders. They catered to the needs of the urban residents who were prosperous enough to purchase these items. With the exception of a few, they hardly played any important role in the urban milieu, but they still continue to survive with sophisticated urban traditions. The garland-makers were the most important among these. They generally had their shops in the premises of the temples and used to sell garlands which were offered to various deities enshrined in the temples by the devotees. At times they offered garlands to temples on their own to achieve spiritual boons.

The industrial system exhibits collective organisation to promote the common interest in a better manner. They were bound up in guilds, which were given powers to lay own rules for them and enjoyed autonomous status in an urban economy. The trade was also carried on by the powerful guilds and corporations.

However, scholars have undermined the effective role of guilds during the post-Gupta period in the industrial organisations which was due to the tottering political and economic conditions in which craftsmen suffered the most. But the large scale textile production, construction of numerous monuments and exquisite bronze and stone images manufactured by the artists no longer indicate an individual skill of the artists, and their works necessarily reflect them as the work of a group of artists.
Their art activities suggest combination of divergent styles practiced in different regions, which indicate that the skill of the artists did not remain localised but it spread in wide regions.\textsuperscript{143} It cannot be ruled out that in some cases they worked on their own and produced best art pieces but for building huge complexes such as temples and monastic establishments, they always combined together.

The artisans bound up in corporate organisations had common code of professional behaviour which bound them all closely to the guild. An inscription of the Chālukyas of seventh century suggests that in case guild members did not follow the norms prescribed by the guilds they were banished by the guild chief and re-admitted into the guild again only when they agreed to follow them in future.\textsuperscript{144}

Other than these crafts, the sources also refer to the guilds of oil millers,\textsuperscript{145} guild of gardeners,\textsuperscript{146} guild of potters,\textsuperscript{147} guild of liquor makers,\textsuperscript{148} guild of betel sellers\textsuperscript{149} and guild of weavers.\textsuperscript{150} Out of all these, the guilds of architects, masons, carpenters, according to Medhātithi, imply a closer bond of union than other guilds.\textsuperscript{151}

The chiefs of the guilds emjoyed great importance in the organisation. They could accept any endowment and could impose cess on the members of the guilds.\textsuperscript{152} They had considerable authority over their members, a person failing to perform his duty was fined by the chiefs.\textsuperscript{153} It is further mentioned if the chief of the guild misused his rights, in such cases the king was to interfere and help the other members of the
guilds.\textsuperscript{154} For the proper functioning and to regulate their activities board of two, three or five superintendents was made to avoid frequent interference of the kings in their internal affairs. The interference of the state in the affairs of the guilds was not unknown in the pre-Christian and Christian era. But now the accentuated importance of the guilds' chiefs was curbed by the interference of any person who could make appeal to the king, if punished by the guild.\textsuperscript{155}

The guilds of south India had their armed forces and maintained their flags and banners and had gods of their own.\textsuperscript{156} They carried on banking business, controlled production and industries, and also engaged themselves in their distribution.\textsuperscript{157} The royal personages even invested their money in the guild banks, which were employed by them in promoting their trade and crafts.\textsuperscript{158}
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On the whole they enjoyed considerable autonomy in the regulation of their affairs and merchant guilds of south India enjoyed greater freedom and scope for initiatives.

Trade plays an important role in the urban economic system, which is the main channel of the distribution of the industrial products, and so a natural corollary of the industry. On the primary level, the merchants supply food-stuffs to the adjacent towns and on higher level the merchants participate in the long-distance trade, and also participate in the export and import of various commodities. This brings profits to the
local merchants and strengthen cultural and commercial ties with the neighbouring countries.

The merchants introduce those commodities in the markets which are not locally available and so play a distributive role in the society. The trade is probably as old as the society itself is. However, it could become regular and widespread only when basic distinction was made between cultivators and pastoralists during the New Stone Age. Gradually men developed great arts, which resulted in the increased agricultural production, indispensable for the sustenance of urban residents. Each region had to depend to some extent on other for the products of the other, which could be done through trade.

In the pre-Gupta age the archaeologists have developed a good deal of evidence for the flourishing contacts of India with the Roman empire, China, south Arabia, central Asia and South-east Asia. The considerable increase in the foreign trade led to the rise of rich mercantile class and substantial growth of market towns. The large number of exports from India to these countries brought splendid gold coins to the country. The sources both literary and epigraphic also refer to the brisk inland and overseas trade during that period. The scholars associate the history of the growth and decay of towns with the history of trade. In their view flourishing foreign trade contributed substantially to the growth of towns upto the third century A.D. and subsequently the decay of foreign trade.
resulted into partial, and in some cases, total decay of towns.

Presently such view is not acceptable to scholars. They argue that foreign trade was a contributory factor which initiated urban activity, but was not the isolated factor in the growth of early historical cities.162

In post-Gupta period, the end of Vardhana dynasty resulted into anarchical condition. The petty principalities struggled for supremacy in the country. The political fragmentation had adverse effect on socio-economic life of the people for some time. But by their constant efforts to improve the imperial supremacy and grandeur, they initiated various socio-economic and cultural activities which definitely added to their vitality.

The commercial contacts with different regions were established and inter-state trade continued. The traders of one part of country visited another part with the articles of merchandise, which were sold in the markets and merchants earned huge profits.

For inter-state and local trade markets, stalls, hatta, hattikās and nagarams existed. The merchants sold different commodities of daily use and also established exchange relations with long-distance traders. These markets had their links with other bigger centres of commerce primarily designated as pattana, managaram and erivirapattana, where greater varieties of goods were found.163 In this way, the markets not only supported
rural and sub-urban units clustering around but carried on wider network functions. 164

Both the literary and the epigraphic sources refer to merchants visiting different parts of country primarily with business interests. The merchants were intimately connected with the city life and formed a dominant group in the society, and subsistence pattern of a city entirely depended on them. 165 The dominance of merchant class is specifically illustrated by the fact that mercantile towns were specifically termed as pattan, erivirapattana, banañju-vattana and droṇamukha.

The inter-state trade was carried on considerable scale. Two literary texts composed during eighth-ninth century, the Samarāicchakahā of Haribhadra Sūri, and the Kuvalamālā of Udyotana Sūri narrate many travel stories. These stories refer to merchants visiting different places along with their commodities. The Samarāicchakahā records a story of merchant named Dharana, who was from Makandi, went to Achalapura in Uttarpatha where he sold his goods and made great profits. 166 The same merchants went to Vaijyanti on the eastern coast and sold his merchandise. 167

The Kuvalamālā refers to traders of north visiting south India exclusively for the business purposes. They sold their goods there and made great profits. Dhanadeva a merchant of small village in north India reached Sopārā, where he sold his goods and earned large profits. 168 A similar kind of story has
been found in another text Kathāsaritsāgara, which speaks of a merchant from Magadha, who went to Valabhi for business purpose. He might have visited this place for greater profits. Kalhana also records some kind of commercial and political relations with south India. The king Lalitāditya marched to south on the bank of Kaveri suggests that frequent journeys were carried on from north to south, north to north, and south to south for commercial and political purposes.

Epigraphs also refer to flourishing internal trade. An inscription from Pehowa dated A.D. 882-3 records horse dealers from different parts of the country and even foreign countries who participated in the horse trade. An inscription from Ahar records three different categories of merchants who carried on trade transactions. The merchants from Madhyadesa, Lāta and Takka traded there, not only in agricultural products, but dealt in high value items such as horses and elephants. The Dubkund stone inscription of Kachchapaghata Vikramasimha refers to a town named Chadobha (Dubkund) which was a great centre of commerce. The people from all countries come to Chadobha to traffic in things "which they had got or acquired ". The inscription of the reign of Somesvara II of A.D. 996 records capital Sundi as a big town, where merchants had permanent shops of different commodities. Here special markets were arranged on Sundays near the temples where various things were brought from different places and then sold in the markets. The Kolhāpur inscription of Śaka 1058 also records different articles of trade set up in the markets. Certain levies were
imposed on the sale of those commodities which were granted to
the Rūpnārāyaṇa temple in Kolhāpura. The Gadag inscription
of Vikramāditya VI of A.D. 1098 refers to Lokkigundī which has
shops of various kinds of gems, and many shops of other
commodities. On account of its commercial importance the town
was considered as a treasure for the Chālukya emperor. The
merchants of the place were very wealthy and were equal to god
Varuṇa. The sources refer to Balligave, Teridāl and Veṇugrāma
as important trade emporia of south India.

The nagarams were the main centres of local commodities
and also acted as wholesale trade centres in south India. The
merchants from foreign countries flocked their goods in nagarams.
The merchants of one nagaram traded with the other. Kānchi
managaram was a market centre where the merchants from adjoining
villages and towns came for the trade transactions in groups.
The merchant guilds, svadesī, paradesī and nānādesīsa were very
active in south India. These merchant guilds took very little
account of political boundaries and enjoyed respected and
privileged position everywhere. The Tamil inscription from
Punganur, dated A.D. 966-7 records the activities of trading
corporations beyond the borders of India. An inscription
from Virinchipuram in north Arcot district records that the
member of this corporation were from eighteen different countries
and they traded in all the four directions. The merchants
and mercantile organisations carried on export and import of
various commodities to the foreign lands, which resulted in the
commercial development of cities in India and gave impetus to
the production of manufactured goods.
The literary sources and the accounts of foreign travellers throw sufficient light on the various articles of export from India. From very early times Indian goods had fairly good markets in different parts of the world. These goods were in great demand in those countries. Although a comprehensive list cannot be prepared but it can be stated that number of articles were exported from India. The ports of India had merchandise from every country, wherefrom the articles were sent to other places. The port of Cambay had extensive commerce both in exports and imports. The chief items of export were mainly cotton cloth, timber, perfumes, sugar, spices, ginger, precious and semi-precious stones, swords and leather goods.

The cotton cloth formed the major export of India. It was the largest manufactured import by China, central Asia, Arabia and South-east Asia. Ibn Khurdadbeh, an Arabian traveller of tenth century, records Rahmā or Bengal as the chief centre of cotton cloth, and the king of Rahmā kept contacts with other kings by ships. This suggests that fine cotton stuff was exported to other countries through ships. The fine cotton-stuffs were also exported from Malwa. Every year two thousand oxen were laden with cotton-stuffs were sent over the roads to other countries to barter. Fine cotton-stuffs were produced in Gujarat too. They were of different colours and every year these were transported to the Tāshī countries for sale. Marco Polo refers to coloured cotton-stuff as a speciality of Gujarat which was exported from ports
of Gujarat to other places. Rashidu-d-din, a traveller of early fourteenth century also records that cotton was an important product of Gujarat and cotton trees grow in plenty here. Some inscriptions of the eleventh and twelfth centuries from Karnataka, refer that silk and cotton cloth was manufactured on a large scale. The presence of foreign cloth merchants in the city of Aihole indicate that Karnataka also exported good quality silk and cotton cloth through its western coast port-towns. The fine cotton-stuff, both plain and with coloured silk threads, was the major export product of Coromandel coast. This suggests that there was a great demand of Indian cloth in foreign lands. This demand was met by the well-established textile industries in the dominion with the help of craft specialists, and state levied various taxes on the processing and marketing of the cloth, which possibly enriched state treasuries.

Timber formed the next important article of export to foreign countries. Teak and coconut wood was exported from different parts of India. This was used mainly for manufacturing ships. This kind of wood was not very hard, had great elasticity and can easily be worked upon. Ibn Jubayr states that timber for ship-building was mainly exported from India and Al Yaman. Whereas the coconut wood was the product of south India, Indonesia, Ceylon, Maldives and Laccadive islands. Ibn Rosteh (tenth century) mentions teak wood as an important export from the Rashtrakuta kingdom.
The Jewish traveller Benjamin of the twelfth century informs us that India exported great quantities of spices to other countries. He refers to port of Quilon in south India as the major export centre of spices. The black pepper is the chief product of place, but cinnamon, ginger and other kind of spices were also grown here. This information is further supported by an epigraph of Sthanu Ravi of ninth-tenth century from south India which refers to a colony of foreign traders at Quilon who came there especially to trade in spices. Annually merchants came to Quilon from Arabia, Egypt and Europe to purchase world famous spices of Malabar. A large number of trees of black pepper were planted in Quilon and great care was taken in their processing. Chau Jua Kua refers to cardamons as the native product of the Cola dominion. These were exported mainly from south India to China and other countries, where spices had become a normal feature of people's diet.

Indian ginger was also an item of export, which earlier did not find place in the foreign markets. It was sold at a very high price in the markets of medieval Europe. Quilon in south India was important centre of ginger production, and Gujarat on the western coast also produced a fine quality ginger. Sugar and sugarcane formed another item of export. North Bengal was a leading producer of the paundraka, a variety of sugar, since very early times. In Karnataka sugarcane
was grown abundantly. The Altem copper plate inscription of tenth century refers to town of Alaktaka in Karnataca, which abounded in sugarcane production.\textsuperscript{203} Chau Jua Kua refers to sugar and sugarcane as the main products of India.\textsuperscript{204} But due to lack of data it is very difficult to ascertain as to how India met the demand of sugar in international markets.

The Indian merchants dealt in other agricultural products like wheat, barley, mash, millet, rye and all kinds of pulses to other countries. Benjamin a traveller of twelfth century refers to kish a large market where Indian agricultural goods were sold to the traders of Persia, Yemen and Mesopotamia.\textsuperscript{205} Al-Idrisi describes, Cambay as "fertile in wheat and rice \textsuperscript{206} The fertility of the region in these crops show a possibility that these were exported from India to the neighbouring countries. Ibn Khurdadbeh refers to export of rice from certain parts of Andhra to Ceylon in the ninth century.\textsuperscript{207} The inscriptional evidence also refer to large scale cereal production. The Shikarpur taluk inscription of A.D. 1150 refers to cultivation and sale of different varieties of cereals. Many spices, drugs and medicinal herbs were available in large quantities in the market places, and different Indian and foreign merchants were engaged in sale and purchase of these commodities.\textsuperscript{208} The Geniza records of the Jews of eleventh-twelfth centuries refer to shipments of wheat from the Red Sea to the western India.\textsuperscript{209} However, in the light of present data it can safely be concluded that cereals were not exported on larger scale as there are
meagre references to the export of cereals in the sources.

Perfumes were also an export item from India to other countries. Al-Idrisi (twelfth century) refers to ships laden with perfumes and aromatics from India to Debal for trade, which is a trade centre of great variety of articles. Several kinds of gems and jewellery, pearls, ivory, rhinoceros horns, aromatic drugs, etc., were also exported from India. India exported arecanuts to Arabia too.

Leather and leather-goods were exported to the neighbouring countries. Al-Masudi (tenth century) refers to export of leather shoes to Bagdad from Cambay, Sanjan and Sopārā. Marco Polo refers to Thana as an important centre of export of leather in western India.

Indigo was also exported from India. Chau Jua Kua refers to export of Indigo from Gujarat and it remained the centre of trade till the second half of the seventeenth century.

India was also an export centre of diamond. Chau Jua Kua refers to diamond as a product of India, while quoting eighth century text Tung-tien.

Regarding imports of India no comprehensive list can be prepared on account of little data at our disposal. From the statements of foreign travellers and literary sources, however, we get some knowledge of Indian imports. The import of horses to India was perhaps most important at all times. It is noted
that horses were imported through Cutch to India. The horses were imported from other countries at very high prices by the Indians. The horse fair at Pehowa and at some other places suggest that it was one of the important articles of trade and traders from different countries came to sell and buy horses of superior quality. 

Fine fabrics were also imported from the neighbouring countries for the dresses of the king and richer section of the society. In the literary sources the import of fine dress material is referred to. The *Samayamātrika* of Kshemendra refers to dress made of silk imported from China. Other sources also speak of export and import of silk into China. Rashidu-d-din speaks of Chinese junks bringing clothes from China and Machin in the fourteenth century. The *Mānasollāsa* refers to import of fine fabric from Ceylon for the kings' dresses.

Spices were imported from South-east Asia, despite good amount of production in south India. The cloves and other fine spices were imported from South-east Asian countries like Java and Sumatra, to meet the increased demand.

All the metals, except iron, were imported from the neighbouring countries. The raw iron and swords manufactured in India mainly of iron were of export quality, and formed major export of India. The Geniza records refer to import of copper
and lead into India from Aden. Marco Polo confirms that gold, silver and copper were imported into India through the ports of Thana and Cambay.

Various perfumes and scents were also imported from neighbouring countries to meet the increasing demand of luxuriant section of society. India imported rose water from Persia. Wine was imported from Egypt. The import of wine is referred to in the Abhidhānaratnamāla. The aloe wood, frankincense and camphor were imported through a south India port, Quilon in the thirteenth century, as pointed out by Kazwini.

The trade was carried on both by the land and sea routes. From the accounts of the foreign travellers it is gathered that the country was covered with a wide network of roads which served the purpose of internal communication. These roads were used by the people to visit every nook and corner of India. Merchants used to visit distant lands with their goods and had flourishing business. Every large town was linked up with roads to small and big towns in the country. Alberuni refers to Kanauj linked up with all parts of country, by routes running in all the four directions. It was connected with south India through a route going along with the bank of two rivers (the Juan and the Ganges), this route passed through Jajjamau, Ābhāpūrī, Kuraha, Barhamshil and Prayāga. This route further extended to Arku tīrtha which is at the distance of twelve farsakh. This route connects Kanauj with Uwaryahār (Orissa).
The same route extends further to south India and connects Kanauj with Daraur, Kāñchī, Malaya and Kūnk where it ended.

In the east it was connected to Bihat, Tilwat, Kāmṛū (Kāmarūpa) and finally to Nepal. There is a south-eastern route from Kanauj to Jajāhūtī (the capital was Khajuraho). In the south-west Kanauj was connected to Asī (Asni on the bank of the Ganges), to Sahanyā, to Jandrū, to Rājaurī, to Banzāna, the capital of Gujarat. In the north and north-west the route leads to Shirshārāha (Pinjaur, Dārmāla and Bālāwar) and ultimately to Ladda and Fortress of Rājagirī from here the route leads to Kashmir. In west Kanauj is connected to Diyāmau, Kutī, Ānār, Mīrat and thence to Pānīpat from here to Kāwītwał and then to Sūmnām. Kanauj was connected in the north-west to Ādītahaur, Jajjanīr, Mandahūkūr etc. Kanauj was also connected to Waihind which was the capital of Kandhar, Purushāwar, Dūnpūr, Kābul and Ghazna. The extension of routes from Kanauj to all the four sides explains the importance of Kanauj as a fine commercial city as revealed by the writing of an Arab traveller, Al-Idrisī.

The commercial and political importance of Dhāra in Malwa is further represented by the routes connecting it with different parts of the country. It was connected in the south to Bhūmihara, Kand and Nāmyur, on the bank of Narmada, and Alīspūr, Mandagir to Mahrattadesh Konkan and its capital town Thana on the sea-coast.
Dhāra and Ujjain were connected to Gujarat. The ports of Gujarat were important centres of commerce where Arab traders had their monopoly. Kashmir was connected to central Asia and China, the route also extended to Tibet and Ladakh. Kashmir was connected to Banaras, Pātaliputra, Prayāga, Mount Abu and Devarāshtra as revealed by the accounts of Dāmodaragupta, a writer of eighth-ninth century. The connection of Kashmir with Dhāra has been referred to in the Rājatarangini. Kalhana refers to one of the merchants who regularly sent water of some tīrtha filled in glass jars to king Bhoja of Malwa. Kashmir also had some kind of commercial links with Bengal. Kshemendra refers to students of Bengal studying in the mathas of Kashmir, probably, the merchants also used to visit Bengal for business purposes. Kashmir had some kinds of commercial and cultural contacts with south India. Kalhana refers to king Lalitāditya visit to south India on the bank of Kaveri; he visited the place through land route probably which was also used by the traders for business purposes.

An inscription of A.D. 953 refers to exchange centre of Ahar where merchants came from Karnataka, Madhya-vīsaya, Lata and Ṭakka. This suggests regular mobility of merchants from north to south India and from one place to another. The south Indian record of A.D. 1054 refers to Karnataka traders visiting different regions for commercial purposes. They visited Cera-land, Cōla-land, Pāndyan empire, Magadha and Saurashtra. These merchants travelled both by land and water routes, and traded in precious stones, gems, horses and elephants, with all the
countries of the six continents, Persia was also one of them. The merchants of neighbouring states visited Karnataka for trade purposes. They came from different regions such as Lāṭa, Cōla and Telunga to Karnataka for commercial purposes. Similarly in Tamilnadu also merchants came from distant lands for the trade purposes, and participated in the commercial activities. The Cōla ports such as Quilon, Nagapattinam and Kāverīpattīnām were the major centres of commerce and carried on overseas commerce with China and many countries of South-east Asia.

The Indian merchantmen visited countries like Persia, China, Indo-China, and South-east Asia. In similar fashion traders of these countries visited Indian ports and towns for Indian goods. The traders from Egypt, Arab and Europe visited south India for the world famous spices. The foreign traders had also established their colonies there. The foreign trade was carried on both by land and sea-route. The carts and ships were regularly used by the merchants for carrying articles of merchandise from one place to another. The Cōla ports, in the post-tenth century, were considered as the first class trade partners of China and had similar kind of commercial relation with Egypt. The province of Malabar was considered as the finest and best province of the world. The direct sea-route between China and India had come into use by the post-seventh century. The Indian merchants showed great interest in the foreign trade and in south India the trade was made a government
The prosperity of Gujarat was the result of the flourishing commerce at the ports of the coastal belt extending from the Gulf of Kutch to Thana. The famous ports were Broach, Cambay and Somnāthapattan which reached the height of their material prosperity during early medieval period. To these ports, specially at Cambay, the articles of merchandise were brought from everywhere and from there exported to other places. Similarly, Al-Idrisi, refers to Broach as a large handsome town. The inhabitants of the place were rich and engaged in long-distance trade transactions. It was a port for the vessels coming from China and Sindh.

Sopārā was also populous and busy port town, as pointed out by Al-Idrisi. It was considered one of the important entrepots of India. This place produced great number of pearls, probably which were exported to neighbouring countries. In eastern India Tāmralipti was a port of first rate importance. From here the ships went to Sūvarṇabhūmi, Malaya Peninsula, and to Ceylon through Kalinga and Coromandel coast. Hsiuen Tsang, a Chinese traveller of seventh century mentions Tāmralipti as an important port town where, "wonderful articles of value and gems are collected in abundance, and therefore, the people of the country are in general very rich." He further refers to Tāmaralipti as a regularly cultivated town and a great producer of flower and fruits in abundance. I-tsing also refers to Tāmaralipti as an import port town, who visited the place in the seventh century. An epigraph of eighth century of Udayamana refers to Tāmaralipti as an important port town where merchants
came from distant places for trade purposes. The post-eighth century cultural contacts of Bengal with South-east Asia reflect some kind of commercial contacts. Indian influence is seen on the social set-up, culture, art and architecture of these countries.

A number of ports in Orissa also bear testimony to the flourishing commerce. They carried on flourishing maritime trade with foreign countries. Hiuen Tsang refers to Orissa as a great centre of wild elephants which were much prized by the neighbouring provinces. The ports of Orissa had regular intercourse with Ceylon and China.

It is clear from the references given above that India participated in the overseas trade, which brought considerable profits to the Indian merchants. No doubt the profits of Indian merchants had decreased as compared to the merchants carrying on trade with the Roman empire, China and other neighbouring countries in the early Christian centuries. Still Indian spices, textiles, leather goods, perfumes, swords, elephant tusk had good demand in the foreign markets. On the other hand, Indians imported horses, fine silk, wares, metals, some perfumes which were not available in India, and spices from the foreign lands. The south Indian ports, ports of western and eastern India participated in the foreign trade and enjoyed significant shares of profits.
The profitable trade might have definitely given impetus to the construction of colossal monastic settlements, excellent temples and forts. Such structures are supported by concentrated social surplus, which is the very backbone of industrial and commercial development.

Now the question arises: how was the trade carried on and what was the media of exchange used by the traders in trade activities? The reference to a large number of coins in the sources indicate regular use of currency in the trade transactions. However, small transactions were carried on through barter, and cowries were also used for daily transactions.

The archaeologists have not brought forth much of coins which were struck by the ruling elites. The theory of paucity of coins in early medieval India has led scholars to question the very nature of trade and commerce in post-Gupta times. They consider paucity of coins as the symbol of demonetisation, which shows commercial decline. It is further contended that local self-sufficiency of post-Gupta period diminished the use of currency, by which local needs were satisfied on local level. In case goods were brought from outside, the barter system was adopted by the people. The sources show that barter played considerable part in the economy of the country and merchants found it convenient to resort to this type of media of exchange.

The accounts of the Arab and the Chinese travellers, epigraphic and literary sources show that along with inter-state and inter-regional trade, the merchants participated in the import and export of different commodities. This presupposes
that some media of exchange definitely existed by which the
articles were bought and sold in the international markets.

A systematic attempt to prepare a complete list on coins
mentioned in different sources has not been carried out.²⁵⁹
However, different regional records supply us many varieties
and denomination of coins which were current during the period.
The records of the Gurjara Pratiharas refer to dramma, pāda,
rūpaka, vimsopaka, pana and kākinī²⁶⁰ coins as media of exchange
used by the people. In the epigraphs of the Paramārās different
varieties of coins are referred to such as dramma, rūpaka,
archarūpaka, vimsopaka, vṛsabha and varāha.²⁶¹ The Chāhmānas of
Rajasthan issued dramma, vimsopakalohadiyā, rūpaka, jītal, dināra,
and tanaka.²⁶² The Siyadoni inscription of tenth century refers
to pañchiyaka-dramma, vigrahapāla-dramma, vigrahatuṅgīva-dramma,
śrīmadādivarāha-dramma, vimsopaka, kākinī, varātakā and
karpardaka.²⁶³

The sources from Gujarat suggests that dramma was the
most popular coin used by the Chālukyas²⁶⁴ in addition to
vimsopaka²⁶⁵ and rūpaka.²⁶⁶ Besides these gadahiva or Indo-
Sassanian coins were used in different parts of Gujarat and
Rajasthan.²⁶⁷ In the inscription of the Pālas and Senas of
eastern India karpardakas or coweries were the medium of
exchange.²⁶⁸ The Chandellas of Khajuraho ruled for four
hundred years but they did not issue much coins. In Orissa
many varieties of coins were used in trade transactions as revealed by the epigraphic sources. These consist of mādas, malla-mādas, matsu-mādas, gaṅga-mādas, pala, pana, rūpaya and gunja. In addition to these cowries were most important medium of exchange.

The Rāṣṭrakūṭas of Manyakheṭa ruled in the Deccan for fairly a long period, but no coin of the dynasty has been found which can be ascribed to them with certainty. However, the epigraphs of these kings refer to ġrama and gadyānaka as the popular denomination of the coins. Šulaiman, an Arab traveller of ninth century refers to coins named tatarīva dirhams which were used for trade transactions in the domain of the Rāṣṭrakūṭas. Each of which weighs a dirham and a half of the coinage of the king, and were dated from the year when they acquired the throne. Chattopadhyaya argues that this type of coins were non-indigenous and were accepted as currency with an adjusted value relation with the local currency.

In the inscriptions from Karnataka gadyāna coin is mentioned as the most popular denomination. Other epigraphs refer to pana, which was very popular throughout southern India. There are many references to ġrama in the Karnataka inscriptions, which suggest its larger circulations in the area.

In the Tamil inscriptions, the most frequently mentioned denominations of coins are kāšu, kalaṁju, māda, and achchu. In the whole of Tamilnadu the coins were used in local transactions as well as, and the place formed a broad currency area.
The coinage of C̄olās extended over the whole empire including the feudatory provinces. Despite this, barter system also existed, at times revenues were fixed and paid in paddy. The Tanjore inscription of Rājarāja I and Rajendra C̄olā I records the fixation of interest per kāšu at three kurāṇi of paddy or eight kāšu, a fact which further shows the existence of barter system.

The details of coins mentioned in the epigraphic sources suggest that these were used in the big transactions and smaller trade contacts were carried on through cowries, and at local level the barter system was most common media of exchange.

Markets formed the special feature of big cities and villages. The men and women were engaged in the sale and purchase of goods set up in the markets. These markets were full of eatables, smithy shops, cloth shops and shops of medicines. These were the centres of great din and bustle which was caused by the rush, push and chatter of the people who assembled there for purchase and sale of goods, and the place resembles "cows in the pastures and crows at evening resorts". The merchants, an intermediary group, gained profits from consumers and obviously led comfortable life. They thrived on the labour of producers but were important determinants of urban economy on whose activities largely depended the whole subsistence-pattern of a city.

The characteristic features of urban economic system outlined above make it clear that India's long-distance trade never came to an end but shows continuous links with many countries. The expansion of numerous market centres and transit places in inter-regional (far away from the early historical urban
centres) and coastal areas (the latter for international trade transactions) is an indication of expanding economy which brought under its ambit the purchasing classes of urban nature (i.e., kings, feudals, ecclesiastics and wealthy merchants, etc.) but considerably affected the people situated in farther inland. Numerous references to towns are frequently met with in both literary and epigraphic sources. The growth and expansion of towns largely depended on their immediate hinterland close by with which they exchanged city-manufactured products for rural commodities. The wider expansion of market network, now closer to the rural areas, possibly made people's participation in economic activities more direct and vigorous which in turn led to the agrarian expansion to earn more profits through agriculture.

Notes and References.

1. Supra, ch.II.

2. H.K. Naqvi, Urbanization and urban centres under the great Mughals, p.3.


4. R.S. Sharma has shown decline of urban life in India in phases and each phase synchronises with the decline of long-distance trade which involved the Romans, Chinese and the Parthians; cf. Urban decay in India (c.300-c.1000), pp.180-3.


15. Elliot and Dowson, *The history of India as told by its own historians*, vol. 1, p. 5.


24. *L*, vol. xix, p.35; vol. x, p.19, refers to a special tax levied on each load of cotton brought for sale in the market of Hastikundi, the money collected went to the Jain temple of Hastikundi, where it was used for the proper functioning of the temple.


32. Ibid., p.249.

33. Ibid., p.250.

34. Ibid.

35. Ibid., p.251.


41. Ibid., p.68.

42. SII, vol. xvii, p.354.

44. *Agni Purāṇa*, ch. CCLV, p.211 ff.


46. Chau Jua Kua, *op.cit.*, p.97. Rockhill and Hirth identified Bengal or the Kingdom of Balahara in the Deccan as the chief centres of sword export whereas Wheatley prefers Bangalore or possibly Karnataka as the export centres, cf. Paul Wheatley, *op.cit.*, p.52.


52. R.C. Majumdar, ed., *The history of Bengal*, p.547.

53. Furnaces and crucibles used for making images have been noticed at all these places while explorations were carried out in these areas.


56. Ibid.


60. B.N. Treasuryawala, "Wood sculpture from Gujarat", *Rupam*, nos. 35-6, p. 31.


64. A.M. Shastri, *India as seen in the Kuttannāmata of Dāmodara-gupta*, p. 162.


67. Laxman S. Thakur, "An iconographic study of six wooden sculptures from Gajan, Kullu district, and some connected problems", a paper read in a seminar on "Tradition of Indian sculpture: continuity and change" organized by Himachal State Museum Simla from 7 to 9 April 1988 (Manuscript).


70. *Kāmarūpa-Śasanāvalī*, p. 41 cited in Pushpa Niyogi, *Contribution to the economic history of northern India (from the ninth to the twelfth century A.D.*)*, p. 246.


IAR, 1973-4, p.7; this was an important seaport of south India since early times, Marco Polo landed here about A.D. 1290, APR, 1888, p.14.

This ware is known as Ambari ware, which was a special feature of Bharamputra valley civilization and has not been found in other parts of the country, M.K. Dhavalikar, "Archaeology of Guhati", BDCRI, vol. xxxi, p.140.

Ibid., p.142.


Ibid., p.67.

Ibid.

IAR, 1983-4, p.67.


IAR, 1970-1, p.35.

Ibid., p.22.


Ibid., 1983-4, p.83.

93. Devangana Lesai, "Social background of ancient Indian terracottas (cir.600 BC - AD 600)", in *History and society*, ed., Debiprasad Chattopadhyaya, Calcutta, 1978, p.164; the author argues that the main period of terracotta production was over with the decline of urban culture. She further states that the class which could purchase terracotta almost disappeared so the terracotta art lost its earlier glory; cf. *ibid.*, p.163.

94. A few terracotta moulds and figures suggest highest perfection and refinement during the post-Gupta period.

95. *Mānasollāsa*, vol. i, ch. III, 180, elephant was considered important for war purpose also.


100. N.G. Majumdar, *op.cit.*, p.127.

101. Elliot and Dowson, *op.cit.*, p.28. Ibn Haukal of a little later period supports Istakhari's assertion.

102. V. Minorsky, tr., *Hu-dud-al'-Alam*, London, 1937, p.86; Sulaiman, an Arab traveller of ninth century refers to Kalinga as a great centre of tusk, this is further confirmed by the account of Al Masudi, cf. Elliot and Dowson, *op.cit.*, pp.6 and 25.

104. M.K. Pal, "Ivory works in India through the ages (up to the end of the 19th century), Census of India, vol. i, pt. 7(A), Craft Monograph Survey Series (5), New Delhi, 1961, p. 10.


106. Rājatarangini, VIII, 137.


110. Rājatarangini, VII, 190/3.


115. The Khalimpur grant of Dharampāladeva refers to royal camp at Pataliputra with a fleet of boats which looked like a mountain tops in the water of Bhagirathi, cf. EI, vol. i, p. 249; ibid., vol. xiv, pp. 326-9; the Madanpur plate of Śrīchandra refers to fleets of boats, ibid., vol. xxviii, pp. 55-6; the Nidhanpur plate of king of Assam Bhāskaravarman refers to splendid ships in his possession, ibid., vol. xii, p. 76.


117. Yuktikalpataru, chs. CXX-XXI.

118. Rājatarangini, VII, 347, 1628.

119. Tilakāmati, pp. 109, 113, 145.

120. M.K. Dhavalikar, op.cit., p. 47.
121. R.K. Mookerji, op. cit., p. 120.
122. Supra, ch. II.
123. Desīnāmamāla cited in K.M. Munshi, The glory that was Gurjara-desa (A.D. 500-1300), Bombay, 1957, p. 352.
128. EI, vol. xv, p. 286; other such instances are also found; see ibid., vol. x, p. 99; vol. xxi, p. 96; vol. xiv, p. 200.
129. Ibid., vol. i, p. 161; pālikā a some measurement.
130. S. Gururajachar, op. cit., p. 75.
131. IA, vol. xii, p. 99.
133. Ibid., p. 21.
136. Kuttanīmata, 314, 413.
139. Rājarāṅgīni, IV, 155.
141. **Nānadesīśa**, a trade guild in south India was the most important mercantile corporation, which traded with many countries, for instance South-east Asia; cf. Sastri, *op.cit.*, p.595.

142. Lallanji Gopal, *The economic life of northern India (A.D. 700-1200)*, p.81. The Indo-Roman trade and feudalism both are held responsible for the change in the fortune of guilds.

143. Some similarities in the artistic accomplishment of northern Indian artists existed in the eastern and western parts of India, which suggest mobility of artists in groups from one place to another to complete different art edifices; the task which was assigned to them by the kings and the nobles as a result of their expertise in the respective fields.

144. *IA*, vol. x, pp.164-5.

145. *EI*, vol. xxiii, p.138; vol. i, pp.159-60.


150. *SII*, vol. xx, p.11.


159. Sastri, op.cit., p.597 ff.


161. Sharma, op.cit., p.8; Henri Pirenne also associates strong link between the international trade and towns. In his view the reappearance of urban life in different parts of Europe was the result of revival of trade in the tenth century but his views have substantially been rejected by the scholars. For a critique of Pirenne's thesis see Adrian Verhulst, "The origins of towns in the low countries and the Pirenne thesis", Past and Present, no. 122, 1989, pp.3-35.


163. Kenneth R. Hall, Trade and statecraft in the age of Cōlas, p.188.

164. The nagarams of south India had links with Cōla coastal ports and with rest of the world, ibid., p.81. Quilon, a famous south Indian market had links with foreign countries where the traders came annually from Arabia, Europe and other places for species, a south Indian product.


167. Ibid., p.443.

169. *KŚŚ*, ch. XXIX.


175. *Ibid.*, vol. xix, p.35. From the twelfth century onwards Dorāsamudra emerged as an important commercial centre and merchants from different parts of India dealt in various commodities, see *IA*, vol. i, pp.40-1.


179. *Ibid.*, p.270, fn. 1. The Polonnaruva inscription of Vijayabāhu I (A.D. 1065-1120) refers to an influential community of merchants, which had their mercantile establishments not only all over south India and Ceylon but also in Burma and other parts of further India (*EI*, vol. xviii, p.335).

180. Elliot and Dowson, *op.cit.*, pp.84-5. Sopārā, Sindan and Saimur were also important ports of India. They were populous and busy ports which had extensive commerce both in export and import.


186. Elliot and Dowson, *op. cit.*, p.67.

187. See also, O.P. Prasad, *op. cit.*, pp.79-80.


206. Elliot and Dowson, *op.cit.*, p.85.


208. EC, vol. vii, no. 118.

209. S.D. Goitein, *Studies in Islamic history and institutions*, Leiden, 1966, p.343, also see his, "Two eyewitness reports on an expedition of the king of Kish (Qais) against Aden", *BSOAS*, vol. xvi, pt. 2, 1954, pp.247-57. Three letters from the Geniza collection were published after the death of Goitein, however, their drafts were prepared by him. Letter no.2 is quite interesting in which a trader named Allan visited western coast of India including the ports of Sindabur and Kulum identified with Goa and Julion. The identification of the former is uncertain (see G.M. Moraes, "Sindabur of the Arab writers", *JIIH*, vol. x, 1931, pp.191-5). It is quite clear that corals and storax were brought in and textiles and iron taken out of India, see idem, "Portrait of a medieval India trader: three letters from the Cairo Geniza", *BSOAS*, vol. i, pt. 3, 1987, pp.449-64, esp. letter no.2, p.459.

210. Elliot and Dowson, *op.cit.*, p.77.


213. Paul Wheatley, *op.cit.*, p.120.


217. Paul Wheatley, op.cit., p.35.
218. Elliot and Dowson, op.cit., p.69.
223. Moti Chandra, op.cit., p.204.
225. Elliot and Dowson, op.cit., p.96.
227. One farsakh is equal to four miles.
229. Ibid., pp.202-7; Elliot and Dowson, op.cit., p.90.
230. Sachau, op.cit., p.203; Thana was a pleasant port town upon a great gulf where vessels anchor and are set sail; cf. Elliot and Dowson, op.cit., vol. i, p.89.
234. Rājatarangini, IV, 155.
237. Ibid.
240. Hall, op.cit., p.163.


243. Ibid., p.605.

244. Elliot and Dowson, *op. cit.*, p.84.

245. Ibid., p.87.

246. Ibid., p.85.


249. Ibid., p.200.


252. Puri, Kalingapattn, Sûvarnapurapattna, etc., were important port towns and centres of growing trade in Orissa.


255. Abu Zaid refers to ceased supply of dinaras from Sind to India, earlier there was regular supply of many dinaras to India, cf. Elliot and Dowson, *op. cit.*, p.11.


258. R.S. Sharma considers lack of coins as the consequence of decline in trade both internal and foreign; cf. *Urban decay in India*, pp.178-85.

259. Lallanji Gopal, *Early medieval coin types of northern India*, Numismatic Notes and Monographs, No.12, Varanasi, 1966. P.L. Gupta's *Numismatic history of Himachal Pradesh*, Delhi, 1988, informs that the coins of the Kārkota dynasty of Kashmir and Śāhīs of Ohind are in the collection of Bhuri Singh and Himachal State Museums at Chamba and Simla respectively.


265. *EI*, vol. i, p.66.

266. *IA*, vol. xi, p.337; vol. xli, p.203.


272. Ibid., vol. xii, p.158.
276. Elliot and Dowson, op.cit., pp.3-4, these coins were also current in Gujarat. Ibn Khurdadbeh (tenth century) and Al Masudi (tenth century) support Sulaimian, ibid., pp.13, 24-5.
279. EI, vol. xiii, p.58, pana was one-tenth of a gadyâna.
  for more details, see Chattopadhyaya, op.cit., Appendix I,
282. It was generally used for the coins and in some cases used in connection with the weight of gold, cf. Chattopadhyaya, op.cit., p.137.