
UNIT 9 PATTERNS OF TRADE, URBANISATION AND LINKAGES: PENINSULAR INDIA (C. 300 BC TO AD 300)

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9.1 INTRODUCTION: EARLY HISTORICAL URBANISM

Exchange networks in South India existed from the Proto-Historic, i.e., Megalithic period assignable to a period from the middle of the first millennium BC to the beginning of the Christian era i.e. the iron age. This is indicated by the archaeological material of the Megalithic sites excavated in various parts of south India with two diagnostic features viz., iron and the Black and Red Ware (BRW) pottery. The presence of objects identifiable as items of trade, especially in the form of precious and semi-precious objects, exotic items not known to the region concerned and also inscribed potsherds with names or graffiti point to the regional circuits within which exchange was carried out. However, a comparative study of the archaeological remains and associate finds like coins in the Megalithic context has not been systematically made and hence these exchange networks are not yet clearly definable. Yet the fact that these networks may have continued and developed into a regular exchange system in the early historical period i.e. third century BC to the third century AD, is well attested by different categories of evidence such as archaeological, epigraphic and numismatic, apart from the early accounts of foreign origin, like the Classical writings of the Greeks, Romans and Egyptians. The distribution of Ceramic industries would also provide evidence of local trade networks and their continuation in the early historical period. In the urban centres of the western Deccan and Andhra, the Northern Black Polished Ware (NBPW). BRW, Coarse Red Ware (CRW), Black Slipped Ware (BSW) and Black Ware (BW) occur marking an overland

network between the north and the Deccan with Gujarat forming an important part of the Deccan trading circuit. The Rouletted Ware (RW) of the Romans is generally more common on the east coast and north Srilanka. The Russet Coated Painted Ware (RCPW) is mainly found on the west coast (Malabar), with a concentration south of the Krishna. This points to yet another circuit, the Deccan remaining outside of it. The early historic exchange networks thus emerged out of the earlier sporadic exchanges of the Megalithic context and the systematic trade activities that developed from the Mauryan times linking the whole subcontinent through trade routes and communication channels marked by a large number of Buddhist centres and political administrative centres of the Mauryan and post-Mauryan polities of the Deccan, Andhra and Tamil regions. Trans-Oceanic trade with the western countries, especially the Mediterranean region, was a great impetus to this trade. The south Indian traders added another circuit to it, viz., the South-east Asian and Srilankan links.

The epicentre of what is called the second urbanisation in India was located in the Ganges valley, gradually spreading with the rippling effects of trade extending to the southern regions and establishing trade networks and craft and commercial centres leading to the emergence of major cities and ports. It opened up peninsular India to extensive trade links both with north India and with the outside world. The Deccan and Andhra regions thus became from the early historical period regions of intensive trade, major highways and feeder routes and commercial organisations and hence the early historic urban centres came up more often in areas of commercial importance and concentration of craft activities. For south India, however, this period represents the first urbanisation, the degree of Mauryan impact varying in different regions such as the western Deccan, eastern Deccan and the Tamil region including present Kerala. Hence it would be appropriate to look at this process in these regions separately, albeit with the larger perspectives in view.

For example, the Tamil region had less intensive inland commercial activity; while its commerce was fostered more due to maritime contacts and long distance trade in the early historical period. Markets and commercial centres were not oriented towards internal trade networks. The merchant and other commercial and craft organisations known to the Deccan and Andhra regions, especially along trade routes marked by Buddhist centres were much fewer and have not come up with such impressive urban architectural remains (Buddhist rock-cut and structural monuments) as in the Deccan and Andhra. Maritime trade seems to have been a major impetus to craft production and commercial ventures.

In the Deccan regions, north of Tamilakam (including Kerala), the degree of Mauryan political and economic influence was much greater and western, middle and eastern Deccan provide varying nature of commercial and craft production activities and also their links with the Mediterranean regions especially Roman, Egyptian and Arabian countries.

It is also important to note that the Gujarat coast played a more direct role in the regional circuits of trade in western Deccan and the Malabar coast, whereas eastern Deccan had closer links with the Bengal, Orissa and Tamil coastal trade and traffic down to Srilanka.

9.2 THE DECCAN

In the Deccan an earlier rudimentary exchange network existed which the Mauryas possibly exploited. The opening up of the peninsula may have started initially from the 6th century BC with the effects of changes in the Ganges valley trade expanding southwards.

From the Mauryan times this became more regular and intensive, both due to political and economic impact resulting in secondary state formation (i.e. the Satavahana state) and urbanisation. The spread of the Buddhist religion and ideology was a major component of this impact. Hence the routes which connected the Ganges valley with the Deccan may be identified as those passing through central India via Sanchi/Vidisa and Ujjain, which is indicated by the Baveru *Jataka* charting the route followed by a *vanija* from Varanasi to Prathishthana (Paithan) through central India. Pauni, south of Nagpur, one of the earliest Buddhist sites south of the Vindhya, may also have been on a major route as may be seen in the distribution of mid-Deccan sites (Telingana region) linking it to the Andhra sites of the Krishna-Godavari delta. Sannati could well have been another site (with Asokan edicts) marking the southern route to Karnataka. Hence, the rapid spread of Buddhism led to the emergence of Buddhist monastic establishments with *caityas* and *viharas* in almost all the sites with some centres as nodal points developing into big towns or cities such as Nasik, Sopara (port) in western Deccan and Amaravati and Nagarjunakonda in eastern Deccan (Andhra Pradesh). The proliferation of Buddhist sites in the Andhra region is an important indicator of this expansion of trade and exchange networks (nearly 400 sites are reported and major ones excavated). In fact trade was important for the monastic economies and the monetised exchange which developed during the Satavahana and post-Satavahana periods (2nd century BC to 3rd century AD). Excavation of huge rock-cut caves and building of monumental *stupas* and *caityas* in stone and brick, the provision for monastic estates by ruling families and merchant organisations, investments with guilds for regular income and cash transactions, especially purchase of necessities like cloth and sale of the produce of monastic estates made the trade network important for the monasteries. The Nasik inscriptions refer to the expenses for minor necessities and the Kanheri inscriptions (outskirts of Mumbai) record money endowments to ascetics (*pavajita*) and nuns (*pavatika*). The Kuda inscriptions record donations of both land and money for images, *vedika* and cisterns. This attests to the fact that the monks and nuns retained their worldly possessions after joining the *Sangha* order. The dichotomy between theory and practice is underlined by the fact that though the *Vinaya Pitaka* (*Cullavagga*) restrained the use of gold and silver by certain *samanas*, and the *Jatakas* denounced *bhikkhus* (monks) indulging in trade, in practice the monks did. *Buddhaghosha* expresses a liberal attitude saying that gold and silver are acceptable if the proceeds of the property and the transactions were administered by laymen i.e. a body of regular officials for administration. Apart from the monasteries the merchants themselves emerged as organised groups like the *Nigama* which led to organised trade and craft production in the Western Deccan and the Andhra region. Control and co-ordination of external exchange relations seems to have been exercised by political authority like that of the Satavahanas, through negotiations by gifts or presentation. The *Arthashastra* of Kautilya refers to state machinery (*panyadhyaksa*) fixing the prices of various commodities in what is described by Karl Polanyi as “administered trade”. The *Arthashastra* refers to the collection of *sulka* at the city gates and affording protection to the traders with caravans, when they stayed in villages. The *Jatakas* would, however, indicate only a marginal control over the economy by the state. The complex mechanism of trade, commercial transactions at different levels were to a large extent governed by the nature of the commodities handled, while the king could well have decided the price or value of the commodities he consumed.

The *Sarthavaha* or leader of merchants was the most influential of the traders and led his caravan through inhospitable regions like desert and forests probably with the help of guides and protected the merchandise with the help of mercenaries. The *sagara palagavas* mentioned in a Kanheri inscription are believed to be a community of traders. There were itinerant hawkers and peddlers. Literary texts distinguish between *vanij*, a

general merchant and the *setthi*, the financier and the *Sarthavaha*. The Satavahana inscriptions refer to the *setthi*, *vanij*, *negama* and *Sarthavaha*, the *negama* being a market town. The merchants obtained goods either at the ports or by mutual agreement with others living along the border. There were weekly markets and fairs, while regular shops existed in urban centres, as indicated by the *Jatakas* referring to the ivory workers' street, shops of perfumers and florists.

The crafts were also organised and had their own *srenis* or guilds of which the traditional number mentioned in the *Jatakas* is eighteen. References to the *senipamukha* (head of the guild), the distinction between the master craftsman (*karusasitr*) and *Jetthaka*, *Kamma jetthaka*, master garland maker and master mariner in the *Arthasastra* and the *Jatakas*, imply craft organisation with apprentices and masters. Inscriptions of the Deccan also record investments made with various guilds (*senis*) – such as *vasakara* (bamboo), *kasakara* (brazier), *havasa* (weaver), *kularika* (potter), *odayantrika* (dealers in water machines), oil millers (*Tila pisaka*). In Govardhana (Nasik), donations made by the guilds such as *dhanika seni* (corn dealers) and the bankers guild are recorded. Many more professionals are known by terms like *manikara* (jeweller), *suvarnakara* (goldsmith), *heranika* (gold worker), *lohavanij* (trader in iron goods), *sela vadhaki* (stone mason), *godhika* (perfumer) and so on. The craftsmen seem to have specialised their crafts in villages in the vicinity of towns/cities, some of whom worked on their own with a number of apprentices or else organised into guilds, which acted as banks.

The complexity of the exchange system and increased division of labour are indicators of economic growth. The development of guilds to organize and monitor complex commercial transactions are attested to by the Nasik inscriptions recording investment in two separate weavers' guilds at Govardhana, charging different rates of interest and referring to varying qualities of cloth and different kinds of textiles. Literary references also indicate a complexity of commercial transactions from the itinerant trader hawking his goods at the bottom of the scale to the guilds at the top. The *Jatakas* also speak of a combination of monetary transactions and barter in the economy, both in internal trade and in external trade.

The exploitation of the commercial network required a sound agricultural base and hence the proliferation of settlements in the fertile valleys of the western Deccan. Migrations and the development of new agricultural areas resulted in a weakening of the old social structure leading to the development of new networks of relationships. Monasteries stepped in at this juncture to fill the void and propagated the interdependence of monks and lay followers. Large donations were made by rulers to monasteries. Gift of villages to the *Bhikkhus* and the monasteries by the Satavahanas from the early 1st century BC show that monastic establishments acquired greater wealth; donations were increasingly made by rich citizens and prosperous workers. Money was invested with guilds, the interest from which was to be paid to the monasteries

The centrality of community patronage in Buddhism and to the Buddhist *Sangha* is marked by donations from various families and guilds of artisans and merchants, women donors, small-scale landowners (*gahapatis*) and others, replacing kinship networks of production and distribution (control over competition) by a network of a community identified by religious practice. From the perspective of the socio-political function of such a conversion and change (for identification with a community), there was an even more important association, that of the nexus between the ruling family, the Buddhist *Sangha*/order and the *Srenis*/guilds of artisans and traders. Donations from a member of the royal family to the *Sangha* (at Nasik) were deposited with the guild of weavers,

stipulating that the interest would go towards providing for the monks and other sundry expenses establish this nexus.

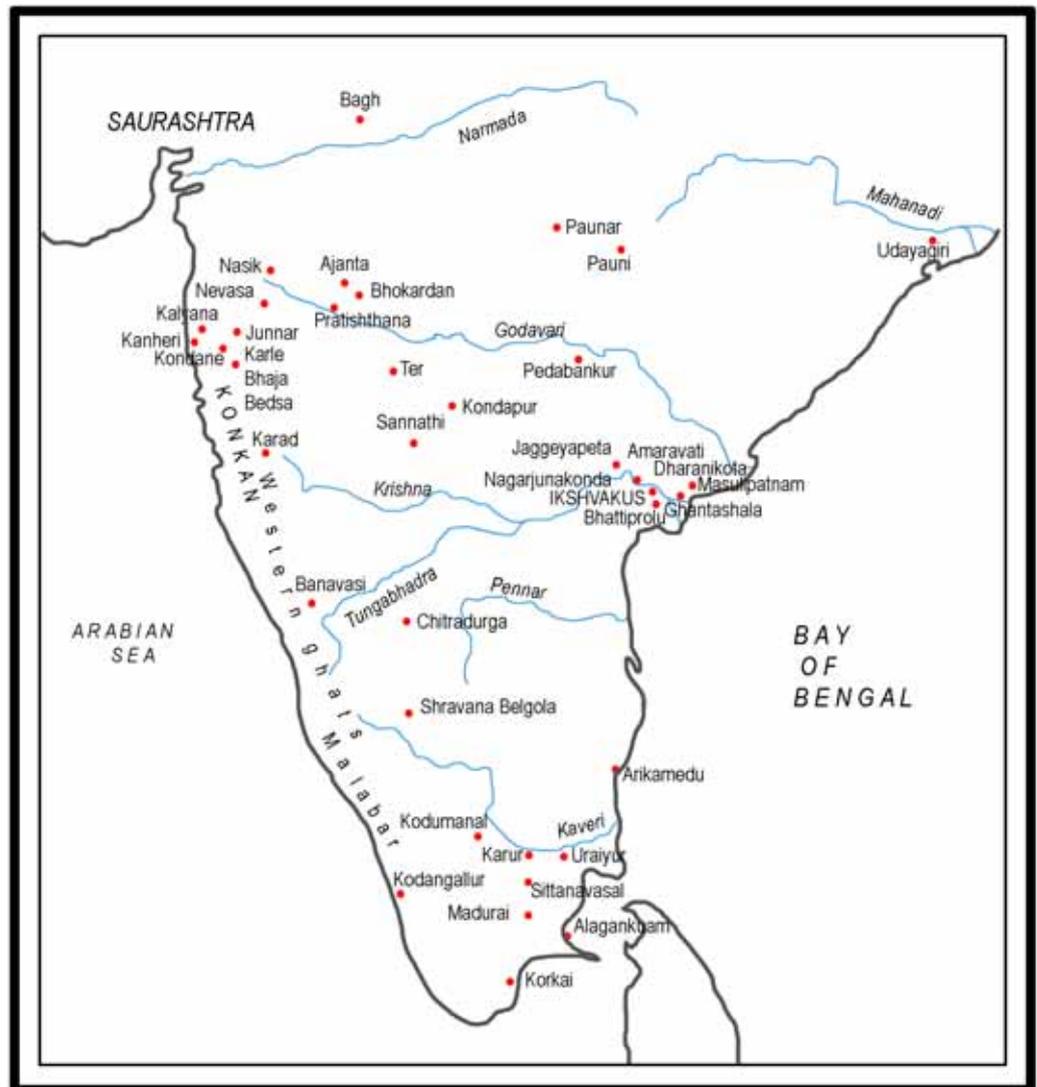
9.3 EASTERN DECCAN – ANDHRA PRADESH

The transition from the proto-historic Megalithic to the early historic culture is crucial in the developmental processes of the exchange networks, trade and urbanism. Evidence of the transition is found in a number of Andhra sites, from the pre-Satavahana levels and early historical layers of occupation. They mark the emergence of localities representing early historical sites and the transformation of society towards state societies enabling the emergence of the Satavahana state.

9.3.1 Urbanization

Internal developments and external impetus both in urbanisation and state society/structure are attested both in the form of interaction with north India, western and central Deccan, particularly the influence of the economic control of the Mauryan metropolitan state and the areas of mineral resources. The Andhra region provides equally important evidence on the expansion of trade and craft production in the pre-Satavahana period, which under the Satavahana and Ikshvaku (c. AD 227-306) rulers witnessed a transition from a clan based society to one organised on professional and occupational lines. It also marked the emergence of kingship and regional state formation as a secondary development due to Mauryan impact and commercial development, both due to inland trade and links with the other parts of Deccan and even north India in the Mauryan and post-Mauryan periods. There is evidence of an initial expansion of the agrarian base of the economy especially in the riverine plains and delta, craft specialisation and subsequently overseas trade. Some regions show a distinct pattern of crafts based on local resources, like iron and metals, which by itself provided the impetus to urbanisation and organised commerce and were hence drawn into the early historic urban processes, although they continued to be kin-based organisations, as for example, in Central Deccan, where several centres with mud fortifications and evidence of local chiefs or powerful elite groups exercised control over production. Three centres are of special significance due to systematic excavations, such as Peddabankur, Dhulikatta and Kotalingala where the transition from the proto-historic Megalithic culture to the early historic urban processes are recognisable in the archaeological material. The question of urbanisation is intrinsically related to this transition. The transition from the proto-historic to the early historic phases—i.e. the links in the excavated sites is significant, as they provide the regional perspectives, which are equally important for the broader peninsular and sub-continental developments. The antecedent cultures available in this region persist as “non-urban” forms in the early historical phase, which is when urbanisation is supposed to have reached its high watermark in the Deccan as a whole. Though several sites in different parts of the Deccan have been excavated, no integrated picture of the stages in the evolution of the second urbanisation in these parts, or the character of the individual settlements located there in, have been brought forth. At the same time considerable evidence for contact with Roman trade can be mustered and this external trade as an important variable for the stimulation and growth of Deccan urban centres cannot be denied. Nevertheless the question of stimulus from both the Mauryan intrusion and Roman contact at the micro-level needs to be understood. For in this region, evidence of the impact of the use of and distribution of iron technology over the well established Neolithic and Chalcolithic agrarian communities seems to be available. It has been observed that Andhra Pradesh is the ‘richest area so far as historical sites are concerned’ which are said to range from the 3rd century BC to early medieval times and further, that many of these are invariably noteworthy because

of Buddhist affiliation like *Stupa* complexes and *Viharas*. Other sites such as Dhulikatta, Chandavaram, Kotalingala, Satanikota, Kesaragutta and Peddabankur, have yielded common data, but coordination of the archaeological evidence from these sites is still awaited.



Map 1 : A General Map of Early Historical Peninsular India C 200 BC to AD 300
 (After Romila Thapar, *Early India from the Origins to AD 1300*, Penguin, 2002, Map 8)

Inscriptions are more numerous for the early centuries AD and literary references from Indian and classical writings as also art and architectural remains are significant for the latter half of this period i.e. the early centuries of the Christian era. Hence primacy is to be given to archaeological sources which reveal earlier settlement patterns. For example in the middle parts of the Deccan (Telangana, which is a part of Andhra Pradesh), in the above three settlements (namely, Kotalingala, Dhulikatta and Peddabankur (and also Kondapur?), uniform structural remains, religious and secular, have been noticed, such as those of a political nature in the form of remnants of fortification walls, i.e. ramparts (Dhulikatta); religious structures like *stupa* and *vihara* complexes; and heterogenous structures like dwellings, shops, storage areas, working area, irrigation related structures, burial areas and so on. At Kotalingala remains of a mud fort (rampart of pre-Satavahana times); wharf (brick structure), a palace complex, residential quarters and granaries have been noticed. The most outstanding structural monument is the Buddhist *stupa* (with limestone carvings), probably of pre-Satavahana date, marking the beginnings of Buddhism in the mid-Godavari valley. Peddabankur has no fortification but is a substantial and well inhabited site with some industrial buildings (also found at Kondapur) apart from *Caityas* and other religious structures, all plain and simple “but quite efficient and skilful”.

Residential quarters and palace complex indicate the presence of a sort of ruling class or dominant group at Dhulikatta and Kotalingala. Coin finds also indicate politically powerful groups even from pre-Satavahana times, who may have been Andhra kings. Thus, a confederation of petty and tribal rulers and other kingdoms controlled by Andhra kings may be located at Kotalingala, some of the ruling clans belonging to powerful land-owning agricultural communities. Peddabankur and Kondapur appear to be Mint centres (pre-Satavahana?).

They had an independent political and economic existence and in view of the variety of coin types at these centres, the obvious conclusion would be that the regional economy was dependent on trade and commercial transactions of a certain magnitude. Craft production in particular was evidently one of the mechanisms through which local groups participated in spheres of economic activity like trade and commodity production. Iron and metallurgy were practised as home industry. In Peddabankur a terracotta forge unearthed in excavations points to the craft of iron forging. Trade was stimulated not so much by the export of an agricultural surplus but rather by the supply of iron objects and other related commodities. As centres of production Peddabankur, Kondapur and other sites have large number of coins of various types, terracotta, bead materials, evidence of working in precious and semi-precious stones and pottery making on a large scale. In the mid-Godavari complex the artisanal groups with strong kinship ties persisted in the organisation of their work. These sites were connected to Ter and beyond to Vidisa (near Bhopal, Madhya Pradesh) and Ujjain (Madhya Pradesh). Inland trade stimulated the growth of new areas of economic activity in a region not supported by a large and extensive agrarian base. Many such historical sites are found clustered together in the mid-Godavari valley, but not all of them were urban. Interdependence among these sites show that tribal/nomadic population was also integrated into the new economic system. Heterogeneity in the social structure emerged with the changing context and references to *gahapatis*, both agricultural and merchant groups, apart from artisans. Buddhist monks formed a recognized leading group of the population. Dominant social groups in the region maintained the networks of trade and production resulting in the growing strength of certain local elite. Political power in pre-Satavahana period was necessarily segmented, but under the new forces of social change, begun as a consequence of expanding agriculture and mercantile activities which enabled the well settled tribal communities to interact with each other efficiently, it became possible for the early Satavahanas to establish a larger network of political and economic control with the mid-Godavari valley as their nucleus.

Andhra is traditionally known for its “walled towns”, some of which may well have been of pre-Satavahana date with local chiefs or powerful elite. Several such clans are known from the inscriptions of Amaravati (Dharanikota-Dhanyakataka) and Nagarjunakonda (Vijayapuri), two major urban centres of the early historical period, which were also politically important centres of the Satavahanas and Ikshvakus. Names like Dhanaka (Nagarjunakonda), Kubiraka (Bhattiprolu) and clan chiefs like the Mahatalavaras of Andhra and the Maharathis of western Deccan (Rathikas and Bhojas) may also be of similar lineage groups who later came to be subordinated by the Satavahana and Ikshvaku rulers. Frequent references to *gahapati* (important householder), *heranika* (goldsmith or dealer in gold) and *vaniya*, *sethi* (merchants of different status) as also the *Sarthvaha* (long-distance caravan trader) in the Andhra inscriptions point to the changing social context and economic organisation, i.e. from clan affiliations to organised economic groups and their professional and occupational basis. Community patronage was crucial to the development of the Buddhist *Sangha* with their *stupas* and *viharas*. Collective donations giving place to individual ones indicate the emergence of private property. Amaravati, a major nodal point in this network, with its *mahacaitya* was more

commercially oriented with the predominance of *sethis* or bankers, while Nagrajunakonda (with its Buddhist and Brahmanical structures and secular remains) had greater dependence on its agrarian base.

External trade was a second major factor in the processes of change and the western trade i.e. with Rome and the eastern Mediterranean assumed great significance for the region's urban development. Just as Sopara for western Deccan in the 2nd-1st centuries BC, the eastern Deccan ports played a more important role in the 1st and 2nd centuries in the Indo-Roman trade and continued to do so in the 3rd-4th centuries for the south east Asian trade also. Claudius Ptolemy (c. 150 AD) refers to the ports of Kontakosyla (Ghantasala), Kodura and Allosygne. Apheterion meaning point of departure was another port in the Maisolia region (Krishna delta). Other sites of commercial importance are Alluru, Adduru, Garikapada, Gudivada, Gummadidduru, Jaggayyapeta, most of which have Buddhist associations, the main centres of nodal importance being Amaravati and Nagarjunakonda. These two cities have come up with evidence of urban spaces, structures of political and religious significance, apart from inscriptions and silver Punch Marked coins, Roman gold coins, Satavahana coins, Black and Red Ware and Rouletted Ware and inscribed ivory seal among the many archaeological material remains.

9.3.2 Maritime Trade

The importance of sea trade carried on both by Indian merchants and by foreign merchants i.e., Arabian and Mediterranean merchants, in the early urbanisation process has been recognised and the Classical accounts by Greek and Egyptian geographers and travellers have proved to be of immense value as they contain details of the items of export and import as also the ports from where they were shipped or collected. The major destination of the export commodities was the Roman world, while the Persian Gulf and the Red Sea were both a destination and transit zone. From southern Arabia and Cape Gaurdafui (in modern Somalia) raw materials like iron, copper and silk were reworked and sold as finished products. To Alexandria and the Roman market, apart from timber from Bharuch, ebony, bamboo etc. were exported. Alexandria was also an important centre for the manufacture of different kinds of metal work, glassware, perfumes, unguents, and other aromatic products. Indian merchants moved between India and Alexandria. The Red Sea (Coptus, in particular) trade was important and the trading centres and ports on the Red Sea were well guarded under Roman authority. Till 297 AD Palmyra (in modern Syria) was the best documented centre of Rome's eastern frontier. (See Unit 8, Maps 4 & 5 for this trading network)

The *Periplus of the Erythrean Sea* provides evidence of the nature of commodities both of import and export. From Barygaza (Barukaccha) were exported agricultural products in exchange for frankincense, tortoise shell and rhinoceros horn. The majority of export items was in the form of raw materials and was exported through the west coast in the early phase of this inter-regional and long distance trade apart from bulk items like ebony, teak, blackwood, sandal wood, bamboo, tusks of ivory and iron, apart from aromatics—spikenard, bdellium, costus, lycium and saffron, which were easily portable; Spices like long pepper, malabathrum, and cinnabar were of medicinal value and sesame for oil and spice. Dyes such as indigo and lac, semi-precious stones like agate, red jasper, carnelian, and onyx and exotic bird are also mentioned by the *Periplus*. Manufactured items included textiles, broader Indian cloth called *monakhe*, *sagmatogenai*, garments called *gaunukai* (which appear to be Greek corruption of Indian names), mallow cloth and some muslin

these resources—both money and transportation for their procurement—were obtained. All the woods exported (ebony, blackwood, sandalwood and bamboo) are indigenous to the peninsula. Teak came from the Satpura range, blackwood from north Konkan and central India, Western Ghats, ebony and sandalwood from the Malabar coast, Bharuch being the entrepot for wood from Malabar and Indonesia.

Aromatics, a major item of export consisted of bdellium from the Tapti basin, Sind and Kathiawar; semi-precious stones—agate, red jasper and onyx—from the Deccan; muslins and mallow cloth from Ter in Deccan, a cotton growing area, (textile manufacturing attested by dyeing vats from excavations); indigo from western India; spikenard from the Himalayas and also Ujjain?; costus from Kashmir; malabathrum from the southern slopes of the Himalayas and also the north Kanara district. According to Pliny (*Natural History*), lycium was sent to Rome in rhinoceros and camel skins by Indians. Raw cotton from India reached Alexandria and cotton fabrics of India were sent from many regions of the north and south, those of the Deccan and Tamil regions in the south being of considerable variety and fine texture. Silk also a major export item, was a part of the transit trade, as the Central Asian Silk route came to be abandoned due to constant movements and hostility of the Central Asian tribes in the early centuries before and after the Christian era. Indian iron, according to the *Periplus*, was an important export item. Iron smelting has been located in several excavations, Vidarbha—Maikund and Kodumanal in Tamilnadu located near the iron ores of Salem, being a major source.

The nature of imports varied as it included both essential and luxury items. The *Periplus* refers to frankincense and tortoise shell in exchange for grains. Other items were wine, dates, glass, tin, lead, copper or antimony, realgar, coral, gold, and silver coins, vessels of silver, singing boys and maidens, beads, rings, lamps, parts of wine jugs in excavations (as at Ter), carved alabaster (Junnar), lapis lazuli (Bhokardan), a tiny fig of lapis lazuli at Brahmapuri (south Karnataka), lamps manufactured by Yavanas, Brahmi inscriptions from Alluru, Krishna district, recording gifts of such lamps. Varieties of glass beads include blue glass beads; faience and kaolin were used as raw materials for pottery, mirror handles and necks of unguent bottles. Kaolin also led to development of sculpture in western Deccan. In the western Deccan sites are found shell bangles (Nevasa, Maheshwar, Bhokardan), ivory seal matrix (Kondapur), ivory statuette (Ter), which could well be manufactured items from both indigenous and foreign sources. Similarly, metal—iron and copper—for tools and implements and also for utensils, etc. (Pitalkhora, Bhokardan, Kaundinyapura (sites in western Deccan with Buddhist associations) may be of both local and foreign sources, while antimony rods and silver found occasionally in excavations (Nevasa) seem to have been imported. Demand from Indian markets was for lead, tin, coral, glass, and wine and specific products from some areas. Ceramics from the Mediterranean or bronzes made in Campania (in modern Italy) are more likely to have come via the frequently used Red Sea route than to have tangled with Parthian hostility.

9.3.3 Transport

The *Periplus* says that goods were carried by wagon between Paithan and Ter in the Deccan and Bharuch, a distance of 150 km. The inland routes have already been mentioned, on which plied the bullock carts and wagons of the traders. The sea routes to the west lay through the Persian Gulf to the Red Sea. Indian ships sailed on a coastal route, a regular traffic for collecting and distributing goods, connecting the western ports on the one side and Arabian ships from the Persian Gulf sailed between the western coast and southern Arabia, Somalia, Axum (in modern Ethiopia) and Egypt on the other side. The major ports lay on the west coast such as Bharuch, Kalyan and Sopara on the Gujarat

and Konkan coast, Nelkunda-Kottayam, and Bakare (Vaikkarai) and Muciri (Muziris) on the Kerala coast. (See Unit 8, Map 5 for this coastal network)

9.3.4 Ships

The bulk of the cargo was shipped in Greek and Roman vessels, which were built with close set mortise and tenon joints and nails. Arab vessels were made of planks of wood fastened together and to the keel by means of coir or palm fibre threads. Indian ships followed a similar technique, the planks being stitched together by means of ropes and were also fastened by wooden dowels.

The *Periplus* refers to foreign vessels called *kotumba* and *trappaga*, Indian trading vessels called *sangara* and *kolandiphonta*. *Sangadam* in Tamil was a double canoe meant only for river traffic. *Kolandiphonta* were large vessels meant for overseas voyages to Malaysia. They were probably two masted vessels with stout outriggers (?) and were the counterparts of present day Sinhalese *yatra oruwa*.

Textual references to ships even with three masts are made in the *Jatakas* and the *Amarakosa* of Amarsimha. Satavahana coins of Yajna Sri Satakarni (AD 167-196) show a double masted ship with sail and pennant. Along the Konkan coast Arab vessels plied with the south west monsoon and their halt at Indian ports was of short duration. The voyage to India involved high risk and hence the visits had to be well planned. Possibly there was a well organised chain of brokers even in this period as later in the 17th century AD.

The main carriers of goods were the Yavana ships, particularly Greek. The *Periplus* refers to small types of vessels used by natives for coastal traffic. Tamil terms like *kalam*, *vangam* and *navay* refer to large boats and *pahri* to small ones (Puhar). However that Indian traders traded as far as the Red Sea is now known from the Quseir-al Qadim (port on the Red Sea coast) inscription on pottery with Tamil names and later early medieval sources indicate the use of their own ships to the south east Asian region by the Tamils with their captains, just as the Malaysian traders did in the early centuries of the Christian era. The Tamil texts make unambiguous references to the sea faring instincts of the Tamils and their chiefs and their knowledge of ship building.

9.4 TAMILAKAM (INCLUDING KERALA)

Inter-regional trade, overland and coastal, between the Ganges valley, Andhra and Tamil regions and between the Gujarat and Kerala coasts seems to have started even from pre-Mauryan times but is clearly attested from the Mauryan times. However the degree and nature of Mauryan influence varied from region to region and in Tamil Nadu it was minimal. It was the sea trade that led to the transition from the Megalithic to early historical periods, which marks the end phases of the Megalithic and the beginnings of urban processes.

9.4.1 Urbanization

Urbanism in Tamilakam was a secondary development. The Sangam rulers, both the Vendar, who were powerful chiefs and the Velir, who were minor chiefs, had a distinct concern with maritime trade and its control, either as active participants in it or as major consumers of luxury goods, developing ports of trade, levying tolls, and issuing coins. From Maritime trade, which appears as the crucial and determinant factor, the much needed luxury items as resources for socio-political dominance and patronage reached

the centres of the major ruling lineages like the Cheras, Cholas and Pandyas (the Vendar), who sought control over the coastal regions adjacent to their mainlands and to regulate long distance trade. In fact there existed dual centres of power for each of these ruling families. Both the three Vendar and minor chiefs like the Tiraiyar had a political centre in the interior and a port on the adjacent coast. Urbanism was thus restricted to the *marutam* (riverine plains) and *neital* (littoral) *tinai*s or eco-zones which they controlled. Craft-production (iron, other metal and gem production) developed in areas rich in mineral resources and raw materials as in the Kongu region. Weaving as a major craft may be located also in Uraiyyur (Chola capital), Madurai (the Pandya capital) and Kacci, the seat of the Tiraiyar, the later Kancipuram. Excavated remains like dyeing vats in Arikamedu and Uraiyyur provide additional evidence of the manufacture of textiles and the weavers' craft and its importance.

A major source of evidence, i.e., the Tamil Sangam literature, not known to the Deccan regions, is available for the early period, which provides interesting details of the trade with the western (Mediterranean) and eastern regions (south east Asia), which is supplemented to a large extent by the early Tamil Brahmi inscriptions and the Greek and Latin works. This corpus is of great value to an understanding of the region's socio-economic organisation and the impact of the western trade. The *tinai*, a dominant concept in these works of heroic poetry, is basic to understanding the uneven nature in the socio-economic milieu, the basic tribal character of society and its kin-based production relations. Social differentiation, the nub of the problem of urbanization, is hardly attested except in the eco-zones—*marutam* and *neital*—pointing to a non-stratified, clan or kinship based organisation with ranking only among the chiefs and ruling lineages. Redistribution was through gift of two kinds, one of subsistence level goods and the other of prestigious goods by ruling lineages to the *panar* (bards who sang the praise of their patrons) and *pulavar* (poets acknowledged for their scholarly pursuits and often at the court of the rulers). Gift (*kodai*) was an important component of the ideology of this heroic age and was made at three levels the Vendar, Velir and Kilar for their ideo-technic or socio-technic value. Resources controlled by the different chiefs were coveted by one another as a means of enhancing their power and hegemonic status through gifts. Plunder and loot of such resources and other items from trade were common and thus the items looted or traded in entered the gift exchange.

The impact of the Mauryan political structures was minimal in Tamilakam, in which the early lineages of the Cheras, Cholas and Pandyas are regarded by the Asokan edicts as neighbouring or border peoples/chiefs. The nature of patronage extended by the Deccan rulers like the Satavahanas to Buddhism, which was the dominant ideology of the early historical period and which brought about a symbiotic relationship among the political structure, commercial groups and the Buddhist monastic orders, did not exist in Tamilakam. The difference in Tamilakam is marked by the absence of Buddhist monuments of stupendous dimensions like the *stupas* and *viharas* of the Deccan, both in the rock-cut and structural modes. Institutions like the Buddhist monastery and cohesive guild organisation are also not known to Tamilakam, where merchant organisations are not visible in the inscriptional records except the *Nigama* in a single instance. Buddhism and Jainism are better attested in the post-Sangam epics, *Silappatikaram* and *Manimekalai*, in politico-commercial centres as influential ideologies. While the Tamil Brahmi inscriptions mark the presence of more numerous Jaina ascetics on the inland trade routes, Buddhism has a visible presence in the coastal sites as known from excavations. Further, the difference between the Deccan and Andhra inscriptions (Prakrit) and the Tamil Brahmi inscriptions is also significant in that the latter do not refer to *gahapatis* or householders similar to those of the Deccan. Perhaps the *kilan* or *kilavan* of the Tamil poems and

antai of the inscriptions refer to such householders, who were also patrons. However the way in which the community of Buddhists evolved in the north and the Deccan is not a part of the processes of the social transformation that was taking place elsewhere. The spread of Buddhism and Jainism in Tamilakam coincided with the increase in trade and commercial activity and led to heterogeneity in the urban centres, both interior and coastal.

9.4.2 Different Levels of Exchange

The exchange system consisted of different levels, barter (*notuttal*) and loan of goods in local exchanges (*kuri etirppai*), no concept of profit motivating such exchanges, as, for example, for items of daily consumption such as honey, fish, meat and toddy apart from grains; paddy and salt entered the larger exchange network, in which items like pepper, pearls, precious stones, (beryl, gems, etc.), aromatic wood, cotton textiles were meant for overseas exchange markets. There were more raw materials and few manufactured items for export. The Tamil region's resources passed through inter-*tinai* exchange i.e., from one eco-zone to another, either for consumption or to enter into long distance trade through the major ports. The chiefs may also have obtained them by plunder for onward transit in return for their items of import or high value goods. Money was only one category of valuables. Two distinct levels of exchange seem to have existed i.e., regular economic interaction within Tamilakam and external exchange and their inter-relationship.

Numismatic evidence also points to two levels of exchange. Goods for goods and goods for coins were exchanged at the big emporia of trade, while barter remained the main form of exchange at the local levels and day to day exchange activities i.e. purely localised subsistence exchange. The distribution of Punch-Marked coins and Roman coins shows a pattern of occurrence in hoards along the major trade routes pointing to high level exchange or major transactions with large outlays and monetisation.

The several terms occurring in the Sangam works referring to different kinds of traders are significant pointers to the prevalence of hawking, peddling and higher level of exchange systems. These are *Vilainar* (seller), *pakarnar* (hawker), *Vambalar* (way farer or itinerant new comer), *vanikar* (regular trader/merchant). The *Paratavar* were the most distinctive of such merchants in the *neital* or littoral/coastal area, where fisherman called *Paratavar*, started trade in fish and also became pearl fishers on the southern coast, gradually improving their status by directly entering into exchange with foreign merchants. Their residences in the port of Nirppeyarru, as described by the *Perumpanarruppatai* (one of the late Sangam texts, a guide to the bards seeking patronage of the chiefs), are suggestive of a prosperous community of fishers and traders, who became economically important in the 1st and 2nd centuries AD due to the increasing involvement of the east coast in the Roman and south east Asian trade. *Umanar* were salt manufacturers and sellers who traded salt for grain from the interior and moved in caravans (*Umana-c-cattu*) when necessary. There were caravans of others like the *Vambalar cattu*, who moved with their goods, protecting their merchandise with mercenary fighters. The *uppu-vanikan*, *panita vanikan*, *kolu vanikan*, *aruvai-vanikan* and *maniy-vannkkan* are specialists in trade of specific commodities and their names with place names as prefixes and items of trade as part of their identity would show that the nature of merchandise was stated clearly both in literary texts and epigraphic records. (Tamil-Brahmi inscriptions). In Madurai there were several kinds of sellers ranging from the hawker to the merchant who was part of the caravans and who traded with the foreign merchants. The Madurai streets as described in the *Maduraikkanci* and *Nedunalvadai* indicate a busy trading centre with all kinds of shops ranging from gem and jewels to every day consumption goods as also the presence of traders from outside. In the epics trade is glorified as an 'esteemed pursuit'. Except for the occasional caravans of itinerant traders who carried

goods to the hinterlands from the ports and perhaps also returned with goods to be shipped from such ports, evidence on guild organisation is tenuous, *Nigama* (merchant guild), being mentioned in a single inscription and not comparable to that of the Deccan. The story of *Silappadikaram* centres around the son of a Masattuvan, a great caravan leader.

Markets of the day (*nalangadi*) and of the night (*allangadi*) were common in major urban centres. In Puhar, the city was divided into the residential area i.e., *Maruvurpakkam* and the port area i.e., *Pattinappakkam*. The volume of trade in the ports was impressive as indicated by the reference to “the valuable merchandise stored in million bundles” in the *Pattinappalai* and *Maduraikkanci*. Puhar had a well guarded market, the Cholas controlling and promoting ports. This port would fit in with the description of a “Gateway City”, as the major inlet for all the goods from the western and eastern trade to enter the south Indian market as also the outlet for the resources which were in demand in the Mediterranean world.

As a market system and a definable power structure were essential for an inner growth of urbanism and since these were absent in the region, the markets that existed were 'peripheral markets', which were economically important to those engaged in export and import. To foreign traders, however, they were not peripheral. The presence of Yavanas in such market centres and their settlements, archaeologically attested, would suggest their role as important entry points and outlets for the overseas trade.

9.4.3 Inter-Regional Trade: Shifting Patterns

In each region, as seen earlier, the pattern of trade varied according to the nature of exchange and local circuits of trade. In Tamil Nadu it was an expansion from Megalithic circuits to regular exchange networks in the early historical period. There were early circuits between south India and Srilanka and Bengal to the Tamil coast, probably with Srilanka as the terminal point. This regular traffic on the east coast and Srilanka is attested to by the early Brahmi inscriptions with Tamil names of Velir and merchants in Srilanka and Srilankan presence in the Tamil coastal towns and Andhra Buddhist centres, perhaps even from the Mauryan period. Into this entered Roman trade with Srilanka becoming the major entrepot for the wider network of trade including south east Asian countries in the early centuries of the Christian era, the links with south east Asia being yet another circuit continuing upto the 4th-5th centuries AD and into the early medieval period even after the decline of the Roman trade. The two Tamil epics provide evidence of this expansion linking Kanci with Java, Sumatra and Srilanka, Thailand (Klong Thom inscription of the 4th-5th centuries AD and the Laos inscription mentioning a Pandya). The Andhra Buddhist sites and their links with China and Indo china are reflected in the art of Champa being considerably influenced by that of Amaravati. In the Tamil sites also are noticed small art objects like rings and seals with intaglio, recalling the style of the Amaravati art. These shifts led to the wider exchange network of terminal and transit trade and influenced intra- regional trade in Tamilakam, i.e., the inter-*tinai* exchange for procuring the resources of different eco-zones.

It has already been stated that Roman trade was spread over a long period with a large geographical reach. But it was not uniform in all regions at all times. Initially it concentrated on the west coast from Gujarat to the Kerala and Tamil coast with an overland link to the east. Direct sailing with monsoon winds (Hippalus) from the Red Sea to the west coast as also circumnavigation of the Cape, gradually shifted its movement more towards the east coast and Srilanka and from there to the Andhra and Bengal coast. Srilanka was a major entrepot in it. It was an early terminal point and picked up items from south east Asia brought to the south Indian ports by both Indian and eastern merchants. From the

Tamil coast the trade came to be more and more directed to the eastern coast i.e., to Andhra, Orissa and Bengal coasts in the centuries after the beginning of the Christian era, while ports on the west coast like Muziris did not lose their earlier status as major ports of trade.

The ports and coastal towns which were directly involved in this trade also show the nature of shifts in the trading circuits and their links with long distance western trade. The distribution of Roman republican coins and imperial issues also confirms the direction of change towards the eastern coast especially Tamil region and Andhra. The Greek and Latin texts have clear evidence of the periodical changes in the major port of entry and the coastal routes and circuits. The *Periplus of the Erythraean Sea* dated to the first century AD refers to Naura and Tyndis after the ports of the Konkan or Bombay and north Kanara coasts, Naura (Nitira of Ptolemy) identified with Cannanore or Mangalore and Tyndis with the Tondi of the Chera coast. This is followed by Nelcynda (Nelkunda of Ptolemy—present Kottayam, an Ay Velir centre under the Pandyas) and Bacare or Porakad (on the Minachilar) all on the west coast and beyond them the region called Paraliya, where Balita or Varkalai, Comari or Cape Comorin (Kanya Kumari) are located. and to the ports of Camara (Puhar) and Poduca (Arikamedu = Virai = Pondichery) and Sopatma (Marakkanam) on the east coast. Ptolemy in his *Geographia* of the 2nd century AD adds emporia of trade such as Muziris (Muciri = Kodungallur the major port of export and import throughout), Kolkhoi or Korkai of the Pandya coast on the east, Khabaris (Kaverippumpattinam or Puhar), Sabouras (Cuddalore), Podouke, Melange (Mamallapuram) and Manarpha (Mayilappur in Madras?). The importance of Puhar as a major entry point to south India is also attested by the Tamil work *Pattinappalai*, which describes the two main parts of the city, the Pattinappakkam and Maruvurpakkam, promoted by the Cholas who built the harbour, the quay and warehouses with officers for tax collection allowing foreigners to settle down in separate quarters. With circumnavigation making the approach to the eastern coast easier, the eastern ports and towns gained special importance in this trade in the 1st-2nd centuries AD. Hence if the Chera port of Muziris was the earliest port of call and functioned as the major port in the 2nd and 1st centuries BC, it continued to be so but with the addition of the eastern ports like Puhar and Korkai becoming both major ports and emporia of trade and drawing the south eastern circuit into the western trade.

The Gulf of Mannar, between south India and Srilanka with its pearl rich coastal and island centres like Epidioros (in modern Greece) and Kory or Dhanushkoti (a few miles from Rameswaram, at the edge of the Palk Straits) and the Srilankan island called Palaesimundus and Taprobane described as the land of elephants, gold, and pearls, precious stones and marble resembling tortoise shell, became more accessible and important in the western trade in the 1st to 3rd centuries AD. The place called Argaru, often identified with Uraiyur, the Chola capital on the Kaveri, as the centre of the manufacture of the cloth called Argaritic, is now believed to be located in the region near the Pandyan coast, but the picture is hazy in so far as its correct location is concerned. The unique fine cloth resembling vapour (*tuhil*) is associated with the Tamil region and was exported to the Roman world where it had great demand.

The urban centres that developed as a result of inter-*tinai* exchange and politically powerful chiefs like the Cheras, Cholas and Pandyas participating in the trade as the major consumers and patrons and by issuing dynastic coins, in addition to using Roman gold and silver coins both as prestige items of gift and for large transactions, are represented by dual centres of power. For example, the Cheras had Vanci or Karuvur (Koroura) and Muciri as their internal and coastal centres, the Cholas had Uraiyur and Kaverippumpattinam (Puhar) and the Pandyas developed Korkai in addition to Madurai

as their centres. Minor chiefs like the Tiraiyar of northern Tamil Nadu had Kacci (later Kancipuram) and Nirppeyarru (Mamallapuram? or Vasvasamudram?) as their dual centres of power and commercial importance. Other east coast centres which have come up with substantial evidence of the western- Roman trade are Alagankulam (Marungur Pattinam in *Akananauru* and Saliyur and Nellin ur), which had direct access to Srilankan coast and Arikamedu (Poduca of *Periplus* and Podouke of Ptolemy and the Virai of Tamil literature and centre of a Velir chief.), which is a major excavated site with Roman artefacts (Rouletted Ware and Arretine Ware) and other structural remains apart from a Yavana settlement, often called a Roman trading station. A large craft centre developed in Kodumanal near the Chera capital Karur and located in the Kongu region i.e. Coimbatore region. It was a gem and jewel manufacturing centre, with Padiyur and its beryl mines nearby and iron industry with iron ores located in the area (modern Salem–Erode). Roman coin hoards are found in their greatest concentration in this region and on the highway linking the west coast with the east and even the Karnataka–Tamil overland route. The excavations at this centre have been one of the most fruitful in terms of the transition from the Megalithic iron age burial and habitational settlements to the early historic commercial and craft production areas in south India. It also had close links with the Andhra sites of Amaravati as seen in the style of the intaglio on rings and ornaments found in this centre, together with the presence of the Deccan merchants with Prakrit names interacting with the local Tamil merchants.

Tirukkoyilur in the south Arcot district, yet another chiefly centre of the Malaiyamans, where an early Tamil Brahmi inscription (in a place called Jambai) mentioning the Satiyaputra or Atiyaman has been found, is also important for the Roman connections as a large hoard of Roman aurei datable to the 1st–2nd centuries AD has been unearthed in the region.

9.4.4 Articles of Trade

The *Pattuppattu* refers to long distance trade in pearls, chank, bangles, tamarind, fish, gems and horses, though specific items of export and import (as also those in transit and terminal trade) are not always clearly distinguished. The transit goods- en route to the Roman empire, some of which also entered the internal exchange of Tamilakam, were spikenard from the Ganga region; silk from China, tortoise shell from south east Asia and the islands near the Kerala coast. The Tamil anthology *Pattuppattu* (An anthology of Sangam works “*The Ten Songs*”) mentions most of the items of transit and terminal trade. When the transcontinental silk route linking China with the west became inoperative due to the disturbance caused by Parthian movements in Central Asia (see Unit 8), around the first century BC, many of the goods including silk were being deflected, along with ports on the western coast (see Maps 3, 4 & 5, Unit 8) to the Coromandel through the south east Asian ports. For this the Indian and Malay vessels must have been used to transport the merchandise from the Malacca straits to the Coromandel coast, from where the Greek ships collected them. The source and direction from which these articles came are not often known or mentioned in the Tamil texts. Silk came from China (*Periplus*) through several routes. One brought it to the Ganges valley, from where it may have reached Tamilakam and entered the internal circuit of exchange and as gifts to *panar* and *pulavar*.

Spices, a major item of export had their source in the western hills–Kerala, Kuttanadu–but increasing demand necessitated their import from south east Asia, to be shipped to the west from the Coromandel coast. Fragrant woods, though available indigenously (hilly regions of south India), were also a part of the transit trade (south east Asia). Argaritic muslins, as said earlier, were in demand in the Roman world. Due to increasing

demand Tamilakam imported *kalagam* and *kalingam* (varieties of cotton cloth) from Burma (?) and Orissa respectively. Cotton fabric from Madurai (known to the *Arthasastra*), muslins from Uraiyur (?), (*Tuhil*—fine cotton cloth, resembling steam or vapour), 32 varieties of cotton fabrics (mentioned in the *Silappatikaram*) (excavations revealing dyeing vats and spindle whorls) point to the importance of textiles as an item of export, apart from indigenous consumption.

Pearls and pepper, two other major items of export, came mainly from south India. *Muttu* (pearl) heads the categories of gems exported, the pearl rich Pandya coast (Gulf of Mannar) being the major source. *Mani*, meaning gem, was a generic term. Carnelian and agate and other gems from the Kongu region where the beryl mines in Padiyur and Vaniyambadi (*vaidurya*—*Arthasastra*) (in modern Coimbatore region) are located; diamonds, sapphires, rubies from Srilanka and Cuddapah and Kurnool regions and even from Gujarat were exported from the south Indian ports especially Muciri. The craft of jewel making, as said earlier, was next in importance only to textiles, for jewels were an important item of export.

Tamil merchants seem to have faced competition from northern merchants in this trade. Srilanka gained greater importance by the 3rd century AD as an important entrepot for which evidence comes from a Greek merchant from Alexandria, Cosmos Indicopleustus, of the 6th century AD. Tamils acted as middlemen for the Srilankan articles in the early centuries.

Spices (*kari*), was a major item of export, of which pepper was perhaps the most important, three-fourths of the total bulk of the average Rome bound cargo being spices. The *Periplus* points to the Malabar Coast – Kuttanadu – as the main source of pepper exported from Kottayam and Muciri. Sacks of black pepper at the Chola port of Puhar are mentioned in the *Pattinappalai*. Cardamom from the Travancore region inferior to that from China and south east Asia was yet another of these exports. Malabathrum from the interior (Himalayan region?); Nard—lemon grass (from the Ganga valley) called Narantam in Tamil, entered the southern ports for export. Aromatic woods from Karnataka, Malabar and Coimbatore region (sandal, teak, ebony and eaglewood) were in great demand and the indigenous sources were supplemented by those from south east Asia in the centuries after the Christian era.

Imports to south India were, according to the *Periplus*, coin, topaz, coral, thin clothing and figured linen, antimony, copper, tin, lead, wine, realgar, and orpiment apart from wheat for the Graeco-Romans in the Tamil ports. Roman wine was the most sought after item of consumption by the ruling and urban elite as stated in the *Purananuru*. The Yavana lamp was a favoured item. Needless to point out that Roman coins also came in large quantities. Tamil Nadu, though it had access to the gold mines in Karnataka, seems to have used Roman gold both as bullion and for ornaments. Horses, imported from the Arab countries, reached the Tamil ports and the description in the *Perumbanarruppatai* to the pure white horses coming into the harbour of Nirppeyarru is significant, as the trade in horses was not confined to the western ports.

9.5 THE NATURE OF INDO-ROMAN TRADE

Although Roman trade intervened in many circuits and networks of exchange and dominated some, it did not disrupt these or replace them. The pattern was one of using and intensifying the existing networks. There was no change from private entrepreneurs to state-supported trading companies or for that matter the acquisition of territory, the imposition of political authority and the re-ordering of Indian economies, as happened in the colonies of our times.

The more spectacular maritime trade was occasional, but in its interstices there was a steady small-scale contact, often coastal, which involved transporting essential supplies quite apart from luxury items. Fernand Braudel, the great French historian, talks of ships which tramped from port to port and were travelling bazaars, largely covering the more confined circuits. Links between Red Sea and India existed from early times as mentioned in Greek and Latin texts, which also attest to a spurt from the 1st cent BC to the mid-first cent AD. Tamil literature (the Sangam anthologies) and Prakrit inscriptions, and increasingly numismatics and archaeology provide evidence of this trade. Excavations are important also for examining the ecological locations and the gathering and distribution of goods. For example, domesticated pepper, the mining of chalcedonies and beryls and their manufacture into items, and the varieties of textiles can be located with the contextualisation of archaeological data.

In the context of Indian the history the Indo-Roman maritime trade has a specific meaning. It refers to the Roman demand, in particular, for pepper, pearls, semi-precious stones and textiles, all imported from South Asia and most of which were exchanged for high value coins. The term “Roman” refers to the eventual destination of the items as well as broadly to the Mediterranean participation in the trade part of the activities within the Roman empire. The Roman state does not appear to have participated in this trade, but it did exercise control by collecting substantial taxes on the cargo and protecting the routes from the Red Sea ports to Alexandria, with forts, garrisons and military camps and to establish watering places along the routes. The varied Indian systems exploited the Roman trade to their own advantage.

It has been argued that by speaking of it as Roman trade, the Indian component in this trade is under emphasised. On the contrary, we are told, the Roman and eastern Mediterranean component of this trade did not play a dominant role in the south Asian trade, for it was only a more visible pattern among the many. It has, however, gained validity due to extensive mention in the Greek and Latin texts. In Indian sources the term Yavanas refers not only to those coming from the Red sea but others from the north west and from the Gulf. Though the importance of the Roman trade cannot be minimised, it should be treated as one among the many trading patterns. Hence, it is argued that to link a general decline in urbanism in India, which is in any case controversial, to a decline in Indo-Roman trade, can hardly be taken as a causal factor, in either urban growth or decline on a generalised scale for the subcontinent. However, since the pattern varied from region to region, the impetus that the Roman trade and its intrusion into the local circuits were of varying degrees and it is precisely for this reason that its decline affected the regions of Deccan and Tamilakam in different ways, Tamilakam showing a more direct impact of the decline in this trade than any other region.

The trade was conducted largely by the merchants of Egypt and the eastern Mediterranean, but this did not preclude merchants from other parts of the Mediterranean. That the south Indian traders participated in this trade on an equal footing is clearly established by the recent discovery of a papyrus document in Vienna, recording an agreement between an Alexandrian Greek and a Tamil merchant for a large cargo of Indian goods to be shipped from Muziris and the terms of exchange. The ultimate destination was Rome.

Roman trade in the Indian context was for limited periods, with the Indian circuits affected by the trade shifting over time. When substantial, it was a long distance maritime trade, including more than one local circuit in the network of its activities and touched on others.

Not all changes in the patterns of trade were concerned solely with navigational and technical matters. Shifts and new circuits were occasioned by the availability of and demand for particular items. On the Roman side this trade was in the hands of Greek and Jewish merchants of Egypt and of the Palmyrene (modern Syria) and Levantine merchants from the Hellenistic world. Large fleets of ships plied each year according to Pliny. The ships were armed with archers as a protection against piracy (attested by Tamil sources) with mercenaries employed by the merchants or ship captains.

Detailed discussion on trade are available in Strabo's *Geography*, the *Periplus Maris Erythraei*, a manual for traders containing information on itineraries, harbours, navigation and cargoes, all relating to the ports of the Arabian Sea and their hinterlands, Pliny's *Natural History*, the *Periplus of the Erythraean Sea*, 1st cent BC-1st Century AD, and Ptolemy's *Geography* (2nd centuries AD). Pliny's comments on this trade give a different perspective. He condemns it as an agency of financial drain which he perceives offering the Roman economy, i.e., Roman empire's gold resources which threw the Roman monetary system into a crisis. Roman concern with the problem dates from the pre-*Periplus* period. Ptolemy's *Geography* is of a later date and is a compendium of existing information in the tradition of Greek Geographies, with fuller descriptions of the eastern coast of India and the Ganges Delta than the *Periplus*. Greek and Latin texts are more detailed than the Prakrit inscriptions and Tamil sources. In western Deccan, votive inscriptions recording donations by Yavanas mark the presence of eastern Mediterranean traders, while such inscriptions are not known from the Tamil region.

A re-ordering of the historiography of this trade and a re-consideration of its varied patterns in relation to other categories of trade and exchange is required, as there has been large inputs from a variety of new sources as well as our improved understanding of trade and exchange generally in South Asia.

It would be unrealistic to treat this trade (due to its geographical reach), as a uniformly active trade for all places in the Indian subcontinent and over the early centuries AD. There were smaller localised circuits with a relatively more evenly balanced continuity. There the Roman trade entered when it could use a particular circuit to advantage. Initially it was from the Red Sea to the west coast i.e., Malabar and its hinterland, in swift movements, entering the local circuits on the west coast where the availability of resources was well known. The Romans were already familiar with aromatics and spices, perhaps brought by Indian and Arab traders in smaller quantities to the south Arabian ports and trans-shipped to the Red Sea. The distribution of items does not support a uniformity of trading patterns. Barygaza was special in that. It combined both categories (local and distant products), whereas the ports of south India were, in the main, exporting items derived from local resources. The Roman demand increased the volume of productive and other activities but did not require a major re-orientation of the local economies. The discovery of the monsoon (Hippalus—the name of a wind and not the navigator) and references to navigation indicate additional facilities to this trade.

It is not easy to answer the question why the Roman input into this trade declined after the 2nd cent AD? Was it due to a greater participation of Indian traders who may have gradually edged out the earlier traders in supplying pepper and textiles to Alexandria? Or the Indian involvement in the trade with central Asia and south east Asia may have led to the tapping of new resources and products different from the earlier ones and the supply of these to Central Asia and south east Asia would have diverted attention from the Roman trade. Or did Roman objects in India become a passing fancy?

The period is marked by brisk trading activities on the western and eastern coasts with the outside world. This is particularly borne out by the availability of immense number of foreign coin hoards across the peninsula, with earlier concentration in western Tamil Nadu-Kerala border and later concentration in Andhra.

9.6.1 Roman Coins: Their Distribution in Space and Time

Roman coins are found all over south India but with a greater concentration in Tamil Nadu and next in Andhra Pradesh. Those of Augustus (c. 27 BC-14 AD), Nero (AD 54-68), Septimus Severus (AD 193-211) are more numerous in the Bijapur, Cuddapah, Guntur, Krishna, Nalgonda and Visakhapatnam districts. The paucity of Roman coins in western Deccan is attributed to direct trade contact being confined to short periods. There is a concentration in the Coimbatore region of Augustus and Tiberius coins (*denarii*) of the 1st cent BC and 1st cent AD. This region's importance as a gem and craft centre on the trade route from western coast to the east is seen in the occurrence of beryl mines in Padiyur and crafts in Kodumanal. The post-Nero debasement of Roman currency is also said to have affected the nature of the distribution. Shortage of Roman coins were supplemented by imitations. The purpose of the countermarks on Roman with symbols similar to those found on Punch Marked coins is also not clearly understood.

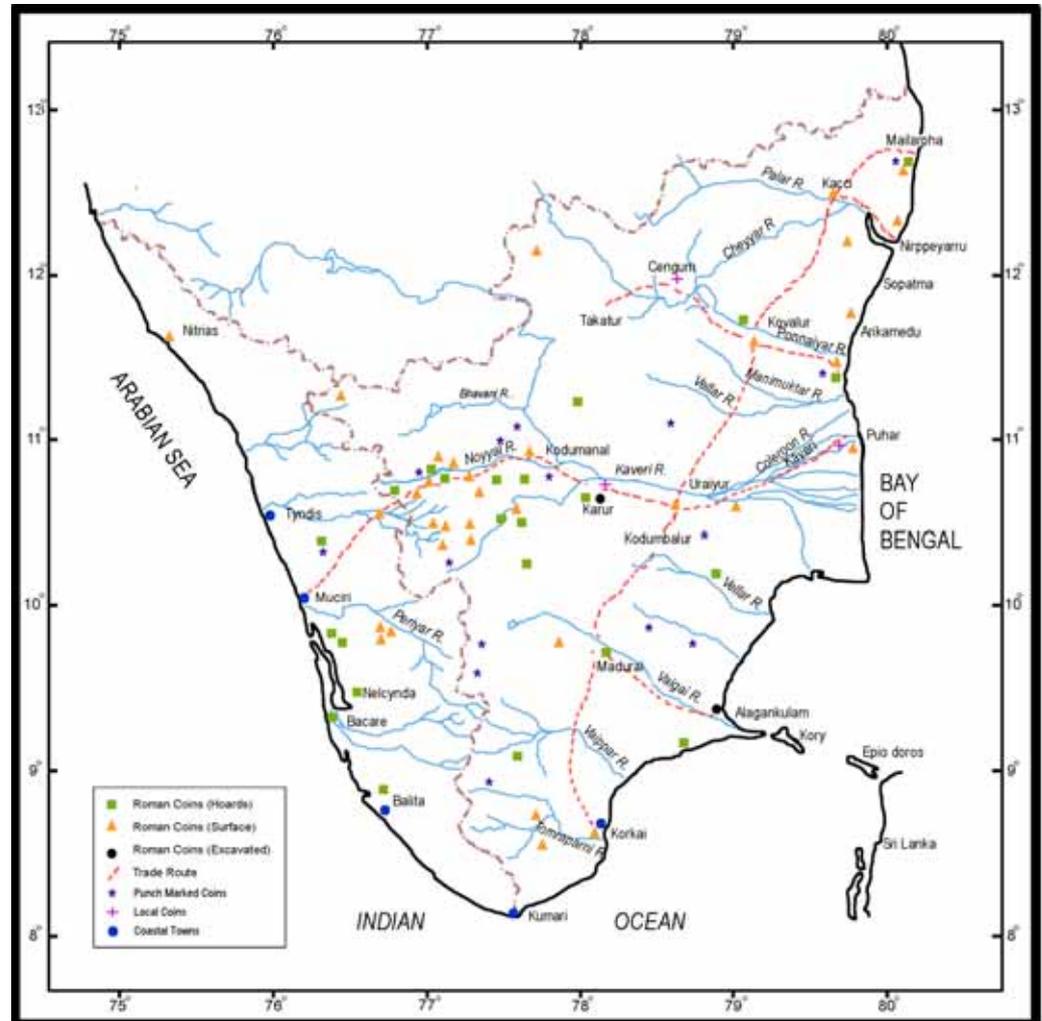
Inscriptions at Nagarjunakonda and other eastern sites recording donations of *denarii*, together with their investment with different guilds, would suggest that eastern Deccan witnessed continuous flow of Roman coins, while there was a relative dearth of coins in western Deccan. Since the duration of halts at western ports by foreign ships was short, the cargo imported by foreign ships halting at western ports was probably negotiated and bought by Indian merchants at the ports itself and foreign merchants may not have been allowed to enter into local trade transactions. Roman gold and silver may have been used as high-value coins for procurement of commodities and in local transactions.

As mentioned already, high value early imperial coins, the aurei and *denarii* of Augustus and Tiberius (AD 14-37), found in hoards in south India coincide with Roman demand for oriental luxuries and with complaints about the paucity of such coins in the empire. In the early 2nd cent AD the number of hoards increases, as do the numbers of aurei in Kerala and Andhra Pradesh, with many imitations. Later there is a slight decline and again a recurrence in Andhra Pradesh. Roman bronze coins of the late 3rd-4th centuries AD are found in Tamil Nadu.

The use of Roman coins has been the subject of an inconclusive debate. They appear to have been of limited circulation, used as jewellery mainly in the Tamil region where evidence is quite strong. They seem to have had more than a single function; as protection money to ensure the safe passage of goods, when large monetary outlays were involved for large merchandise; as deposits or sureties; the *denarii* as gift (presentation) or as prestige item (gifts to poets and others in Tamilakam). The Roman Republican issues of the 1st century BC are found mainly in Kerala, the later 1st and 2nd century coins on the east coast of Tamil Nadu and Andhra; and the 4th-5th century Byzantine coins in Tamil Nadu and Srilanka, while Roman Rouletted ware was more widespread and particularly so along the coast and riverine sites, etc.

The question why so many coins were hoarded in specific areas as bullion, or made into jewellery and ornaments; or used as protection money for the safe passage of goods; as capital by local suppliers for further transactions, as gift exchange among chiefs is difficult

to answer, unless it is assumed that the coins played a dual role—as high value currency in the trading markets but as prestige items in the hinterlands of the markets, i.e., prestige wealth necessary to both political and marital alliances. Where the imported coins were used as high value currency, there presumably a more sophisticated trade should be registered with a greater incidence of formal trade based on monetised commodity exchange and involving markets, although the simpler forms of barter and gift exchange as an additional activity need not be absent.



Map 2 : Tamilakam : Early Historical Urban Centres
(After R. Champakalakshmi, *Trade Ideology and Urbanization South India 300 BC to AD 1300*, Delhi, OUP, 1996, p.156)

9.6.2 Other Coins in the Deccan

Uninscribed cast copper coins in excavated contexts over a wide region were of pre-Satavahana origin. Clay imitations of Roman coins are also known. The use of flimsy materials for coinage is attested by 5th century evidence of coins which were made of not only bits of bamboo and palm-leaf but also of lac and gum, as also Satavahana coinage of lead, copper, and potin- an alloy of copper zinc, lead and tin. Their silver coins are primarily portrait coins. Inscriptions at cave sites in the Deccan (e.g., gift of 70000 *karsapanas* (silver coins of Satavahanas) and 2000 *suvarnas* – Nasik inscription of Usavadata) record investments of several thousands of Karsapanas. *Suvarna*, probably gold coins of Kusanas were also known and used. Silver must have been imported, as there are no pure silver ores in India State control over coin issue appears doubtful. For the silver Punch Marked coins were private issues of Guilds (*negama*) which continued in use even after the ascendancy of the Satavahanas. The duty of the State was merely to

assay all bullion brought to the mint for coinage and to return the value of the bullion in money. The famous Jogalthembi hoard (near Nasik) of silver coins (13250 in number minus the ones already melted) of which a majority were of Nahapana's (Kshatrapa ruler, c. 105-124 AD), was counter marked by Gautamiputra Satakarni and some perforated. The hoard appears to be a mercantile hoard as all the counter struck issues have a uniform set of symbols—*caitya* on the obverse and the Ujjain symbol on the reverse. Several dies were used. The recovery of mercantile hoards indicate that the essential nature of the trade necessitated the extensive use of copper, lead and potin coins in commercial transactions and the continuity of a single coin type during the reigns of several successive rulers.

9.6.3 Local Coinage in Tamilakam

Dynastic issues are known of the Cheras and Pandyas, the former with portarits and legends (Makkotai, Kuttuvan Kotai and Kollippurai with the Chera symbols of the bow and arrow, along with the double fish and tiger) and the latter with legends (Valuti along with the double fish and elephant symbols), apart from those of the minor chiefs like Nannan of Cengam (Andippatti), whose issues have legends with the name of the chief mentioned in the *Malaipadukadam*. The references in the Tamil poems to *kasu*, *panam* and *kanam* seem to refer to gold in general and to coins also. The occurrence of Punch Marked coins significantly along the trade routes and the use of the double carp and other symbols on the coins of the Bodinaickanur hoard near Madurai would suggest the prevalence of *janapada* type of coins and their use as currency.

9.7 YAVANAS AND THEIR SETTLEMENTS IN SOUTH INDIA

The presence of Yavanas does not connote the kinds of Roman townships familiar from the Mediterranean world and Europe. In India they are generally pre-existing settlements where, as in Arikamedu, some Yavana traders established a base to facilitate both the manufacture and acquisition of items required in the trade, whereas others were centres of exchange which were doubtlessly visited by Yavana traders, as they were by local traders, agents and suppliers, involved in this and other trade. More significant were, apart from coins, amphorae sherds, terra sigillata and a variety of bronze objects and also what are described by Mac Dowall as Roman and sub-Roman artefacts, available in large numbers in the south. In the Deccan inscriptions, mention is made of the places from where the Yavanas come. Most frequent is the reference to Dhenukataka with a *vaniya grama* from where they came. The degree of Indianisation of Yavanas in north

Roman and Byzantine Coins in South India



India and the Deccan is striking, most of them bearing Buddhist names, having become Buddhists.

The Indian perception of the Yavanas was not uniform. Brahmanical reaction could be severe and hostile. But respect for and borrowing from the Hellenistic theories of astronomy and astrology is reflected (*Yavana Jataka*—based on a Greek original). The Tamil Sangam poems provide a different perspective. Here the Yavanas are aliens, although some of their cargoes such as wine and gold are welcomed. Later texts show admiration for the Yavanas. That they had their homes in Kaverippumpattinam is established by the later epic *Silappadikaram* and the occurrence of the Rouletted ware and Amphora, which occur together in coastal Tamil Nadu as evidence of the use of olive oil and garum by the Yavanas. References are made to the Yavana soldiers guarding the gates of Madurai town. The Sangam texts show an ambivalent attitude to Yavanas and unlike the Yavanas of the Deccan who were Indianised and adopted Sanskritised names, the Yavanas of the Tamil region were often admired for their valour and bravery and hence used as guards at the city gates and palaces, but treated as fierce looking, distinctly alien and barbarous as they spoke a harsh tongue and are even characterised as *milecca*. They may have lived as a segregated group. The Chera's hostile attitude to a group of Yavanas is pointed out in the episode of his taking them with tied hands and pouring ghee on them. The episode is mentioned in one of the Sangam works i.e. the *Patirrupattu* (an anthology called the “*Ten Tens*”).

9.8 SUMMARY

Urbanisation in the South was comparatively a latecomer. It entered the region when North India had already entered into the second phase of its urbanisation. The beginning of urbanisation in South India coincides with the Mauryan period. Though exchange networks existed even much before the Mauryan period, from Mauryan period onwards they became more regular and frequent. While the impact of the Mauryas was distinctly visible in the Deccan, in Tamilnadu it appeared to be minimal. In Tamilkam, urbanisation was largely the result of her sea trade. Rome and the eastern Mediterranean occupied an important place in the entire process. Konkan and Malabar coasts and Coromandel and Andhra coasts were active partners in the Roman trade As a result of Roman contacts, in the years to come several Yavana settlements became visible in peninsular India. Initially, these settlers were applauded as brave but looked down upon as aliens. In the Deccan they got assimilated into Indian cultural tradition to the extent that they appropriated Sanskritized names.

9.9 GLOSSARY

Arretine Ware	Roman pottery using a special technique.
Ideo-technic or Socio-technic value of goods/ items of trade	Possession of such items and gifting them to others meant a higher social and/or political status to the grantor.
Kongu Region	Region of ancient Tamil Nadu in South India. It comprises of the present Coimbatore, Erode, Salem, Karur and a part of Dindigul districts of Tamil Nadu.

Kotalingala, Dhulikatta and Peddabankur, Kondapur	Excavated sites located in central Deccan and Andhra with evidence of craft production and trade links and mainly Buddhist remains.
Levantine Merchants	Levant is an area roughly bounded by the Mediterranean Sea in the west and the Zagros Mountains in the east. The area stretched from Suez to the Taurus Mountains, including present-day Israel, Lebanon, western Jordan, the Sinai in Egypt, and parts of Syria. The term Levantine is used for Italian (Venetian and Genoese), French and merchants of other Mediterranean origin.
<i>Maduraikkanci and Nedunalvada</i>	Sangam texts dealing with the Pandyas, Madurai city and the Pandya country in general.
Megalithic Culture	Megaliths were burials made of large stones hence the name Mega-lith (mega means big/huge; litho means stone in Greek). The culture flourished in the first millennium BC and early centuries AD in peninsular India, particularly in Andhra Pradesh, Karnataka, Tamil Nadu and Kerala.
<i>Panar and Pulavar</i>	Tamil poets and bards of the Sangam or Early Historical period.
<i>Pattuppattu</i>	An anthology of Sangam poems called the "Ten Songs".
<i>Perumpanarrupatai</i>	Tamil text of the Sangam or Early Historical period.
Rouletted Ware	A wheel turned pottery so named because of concentric rouletting in the middle of the dish/pot found in large numbers sites close to the east coast of India.
Russet Coated Painted Ware (RCPW)	A pottery found in the Megalithic and post-Megalithic contexts in South India.
<i>Silappatikaram and Manimekalai</i>	Classical Tamil texts. Known as the twin epics. The <i>Silappatikaram</i> was written by a Jaina teacher called Ilanko Atikal and <i>Manimekalai</i> by a Buddhist called Cattanar.
Vendar, Velir and Kilar	Rulers and chiefs and village chiefs of the Sangam period.
<i>Vinaya Pitaka (Cullavagga)</i>	Buddhist Pali Canon; It is first of the <i>Tripitikas</i> . It contains rules and regulations for the <i>sangha</i> (monastic order).

9.10 EXERCISES

- 1) Analyse the process of early urbanization in the Deccan.
- 2) Critically examine the nature of foreign trade during 300BC to 300 AD. In what ways did the pattern of trade differ between the Deccan and the Tamilakam.
- 3) Give a brief account of the means of exchange.
- 4) Discuss the nature of Roman trade in India. What was its long term impact?
- 5) Describe the state of coinage in the Deccan and South India during 3rd century BC to 3rd Century AD. Analyse the presence of Roman coins in the region.

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M.A. History

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