# THEORIES OF URBANISM IN ANCIENT INDIA WITH ARCHAEOLOGICAL EVIDENCES. (WITH SPECIAL REFERENCE TO ANCIENT ANDHRA 200BC TO 300AD)

#### DR.MANNEPALLI GUNDALA

**Abstract:** The growth of Cities during second urbanization in Indian history co-incided with brisk trade, especially long-distance trade of Satavahanas with areas abroad. But the generation and availability of agricultural surplus seems to have been the principal causative factor for the spurt of urban centres, to which trade provided an additional fillip. Of large centers of trade in early Andhra desa mention must be made of ports of early historic times, especially from 200 BC to AD 300.

Introduction: The non-agrarian sector of the economy is therefore often viewed as secondary to the mainstream agrarian economy. This does not however imply that the non-agrarian sector of early Indian economy has been marginally treated in the economic historiography. Crafts, trade and urban centres- the principal facets of the non-agrarian sector of the economygenerally labeled as the post-mauryan period. The spread of urban centres is viewed here as an indicator of growing complexities in society.

The other common feature this historiography is to present urban centres almost invariably as thriving commercial centres and to hold commercial exchanges as the principal causative factor towards urbanization. Without belittling importance of this conventional narrative approach to the history of trade, it must be emphasized that an understanding of trade and urban centres can hardly be delinked from the agrarian sector. Significantly enough, the expression 'agro-cities' has been used to characterize early Indian urban centres.

In this study discussion of the rural economy, an attempt was made to show how far the Agrarian system was responsible for accelerating in society. Here, I will bring out the various aspects of urban life, involving, the multibarious factors which led to the growth of these cities and their

organizations and the rise of the city man (nagaraka). Infact the emergence of cities, which is a definite mile stone in the march human progress, presupposes existence of several factors, bifurcating culture into two different segments of the rural and the urban. A comparative study of the rural and the urban economy projects a sharp contrast showing two different worlds with two different shades of culture. In the ruralite economy the family is the pivot, round which revolves the whole social competence, involving a network relationships, whereas, in the economy the individual occupies a more predominant position. The status of the rural life was determined by his relationship with the land and therefore it was more permanent, and yet altered by the vagaries of nature; the urbanite, for his status, drew largely upon wealth accurring primarily from the trade and merchandise; therefore it was more often than not, a precarious reliance upon the whims of markets. Born and bred up in the bounties of nature, the ruralite was more attached to the social station, in which he was hereditarily fixed, the urbanite, on the other hand, lived in the world of his own creation, breaking frequently the frontiers of the social order fixed by his forefathers. The rural world was marked by a closer social homogeneity, a smaller contact and a narrower geographic horizon. while the urban developed

heterogeneous social relations a much bigger and complicated contact an international outlook.

The Sanskrit dramas and Romances, present a picture of an urban life in which references are made again and again to luxury articles, such as ornaments, cosmetics, costly garments paintings and sculptures, and to architecture and life of pleasure and senses. Such a way of life was conducive to the development of arts and crafts which ultimately become an indissoluble part of city life (Moti chandra 1953, Patna, Sarthavaha p.p. 69-70).

#### **Objectives:**

- 1. To identify the archaeological remains of urban centres
- 2.To identify the related theories of urbanism in ancient times.
- 3. To identify the courses towards urban structure in ancient Andhra.
- 4. To identify the urban centres of ancient Andhra.

### Concept of Urbanization and the Related Theories

It is not so easy to define the urbanization and its distinctive characteristics features and the deference between urban settlement and rural settlements. Several attempts have been made by archaeologists, historians, sociologists and anthropologists to define a city. Several approaches were under taken to study urban history and urbanization e.g. the secular, thematics, diffusionists (Check band 1968).

Geographical locations, Regional, spaciastructural and others (Ramachandran, 1989). Archaeologists consider settlement as an urban which has buildings, few streets and non-agriculturalists residences and others, anthropologists and sociologists consider urban growth as a natural process and consider population and ecological factors as important factors. In the growth of towns (Sankalia, 1962). An economist would look in to the growth of town only in terms of economic factors. All the theories and definitions stress the role of only one or another factor and never consider other factors which are responsible for the growth of urban centres. But majority of the definitions given an idea about the nature of towns and the factors influencing their growth.

The concept of urbanization was first used by V. Gordon Childe who prescribed ten criteria for distinguishing the urban settlements from the rural ones. They are

- 1. Dense population or size of cities.
- 2. Non food producing classes like craftsmen, transport workers, merchant's officials and priests supported by the surplus produced by peasants.
- 3. Presence of deity or divine king.
- 4. Monumental buildings symbolizing the concentration of social surplus.
- 5. Existence of a ruling class.
- 6. The knowledge of writing.
- 7. Acquaintance with sciences like arithmetic, geometry and astronomy.
- 8. Artistic expressions
- 9. Foreign trade and
- 10. Communal Features among the Inhabitants of a settlement (Gordon childe 1979)

According to Childe, the distinguishes features of city is that it has more inhabitants than village settlement and majority of its inhabitans agricultural occupants like artisans and craftsmen, state officials, merchants and other persons of similar occupation. These non-agricultural people mostly depended on the surplus produced by the peasants. The surplus products were collected either by a deity or in his name by a human king. The king or the deity lived either in a place or in a temple, symbolizing the power and authority. Thus monumental buildings come into existences which are not found in rural settlements. At this juncture depending on arithemetic, the requirement script, geometry, astronomy and sciences come to developed. Because of all

development certain rural settlements grow in to a urban settlement. Childe thus, indicate the process through which rural settlements in early Mesopotamia changed their character and became urban centres (Childe, 1972) R.M. Adams (1955) has criticized the Childe's theory particularly his emphasis on the wide use of metallurgy, which was a later development during the early dynamic Mesopotamia. Further Adams criticized the social groups idea of craftsmen and merchants and the surplus idea also. According to Adams, three factors were mainly responsible for the institutional growth.

- 1) Reliance on different food resources,
- 2) Occupational Specialization and
- 3) The adoption of irrigation (Adams 1979). Wheatly also criticized the Childe idea that the technology was the motivating force behind the growth. Wheatley highlighted five approaches like reliance or ideal type constructs. Formation ecological theories, delineation of trait complexes, conceptualization of the city as a centre of dominance and size of population (Wheatley 1971) Mumford (1975) criticized the Childe's concept urbanization. According to Mumford, the transformation from village to city which has be described by Child as urban Revolution, Indicates, the important part placed by the city, does not imply the process by which these changes took place. Mumford has adopted a sociological approach to study the urbanization. He has suggested that the city came into existences as a fusion of Neolithic and Paleolithic cultures. Thus state is of primary importance while the economic considerations are of secondary importance in the urban growth. (Mumford, 1975).

According to Geiden S.J.O.Borg (1960) well organized state is essential for the existence of any city. He says that economic prosperity is important, even the economic endeavour requires the support of a well organized

power structure. The state is of primary importance and economic considerations are of secondary importance in the urban growth.

Scholars like Chakrabarti (1972, 1974), Hanser and Scenore (1965), Ghosh (1973) and others feel that surplus was not responsible for the rise of the institutions like socio-or political institutions, state king or mercantile community but surplus was the product of these institutions.

The above paragraph gives an idea about the features of urbanizations. Few scholars believe that the economic factors are responsible for the rise and growth of urbanization some scholars believe that the social and political factors were for the rise and growth of urbanization.

According to Bruce Trigger (1987), the important factors which influenced the growth were.

- 1) Increased food supply
- 2) Increasing population
- 3) Craft specialization
- 4) Marketing and trade
- 5) Land lords
- 6) Administration
- 7) Defence
- 8) Religion
- 9) Secular tourism
- 10) Education and
- 11) Retainers

(Kameshwar Prasad 1984) has emphasized few aspects of urbanization such as

- The surplus food production one of the prerequisites for the urban growth.
- 2) The craft specialization and trade led to the growth of many industrial centres.
- 3) Artisans and craftsmen began to Unite in various guilds which looked after the business of their guilds.
- 4) The merchants also helped for the growth and spread of critics.
- 5) The landlords and big agricultural magnates directly and indirectly helped for the growth of towns.

- 6) Administrative complexity led to the growth of administrative urban centres. According to Sharma YD (1964) elements which distinguish an ancient city were
- 1) Planned layout
- 2) Regular roads and streets
- 3) Public drains
- 4) Fortifications
- 5) Markets
- 6) Temples
- 7) Monasteries
- 8) Residences of Royalty and mobility and
- 9) House of responsible standards.

Apart from the above Features Sharma R.S. (1972, 1987) has identified few characteristic features of ancient cities on the basis of archaeological material. They are follows.

- The size of settlement in an important consideration. The mound measuring one square mile may indicate a dense and large population.
- 2) The congestion of houses indicates dense population ring wells used as soak-pits might suggest dense habitation.
- 3) The numerical dominance of nonagriculturalists is the distinctive feature of urban population. The presence of artifact such as axes, adzes, chisels, crucibles, ovens, furnaces and others indicates artisanal and other activities.
- 4) The presence of coins, coin moulds, dockyards or warehouses indicates presence of artisans and trades, which give clear urban colour to such sites.
- 5) Luxury objects such as precious and semi precious stone, sophisticated terracotta's thin walled and shing pottery, glassware, ivory objects, various types of Roman Pottery indicate the presence of a class of rich consumers typical of pre-industrial towns
- 6) In Childe's view, monument buildings symbolize the consumption of surplus. But such monumental Buildings have not been found. Presence of baked brick structures assure special importance of and become a trait of towns.

- 7) Granaries occur at many historical sites, which were meant to store surplus food grains for feeding the urban people.
- 8) Streets, shops, drains and fortifications give a good idea of the urban settlement.
- 9) Drains and sanitary arrangements found in a few sites suggest congested population.

The discovery of coins from sites does not indicate it to be an urban site Wheatley (1987) suggests that where excavations fail to expose the remains of dwelling houses an extensive area of thick and continuous habitation refuse indicate it to be an urban settlement.

## The Courses Towards Urbanization In Early Andhra

In Andhra Pradesh, some of the early farming rural cultures of the Neolithic followed by the megalithic Iron Age and grow into early historic urban centres. The Iron (megalithic) culture eighter overlaps or merges with the early historic phase. There was a change from the Iron /megalithic culture to early historic culture leading to development of urban centres. appearance of north Indian traits suggested by Pottery, coinage, script architecture and sculpture at this stage pre-dates nonindigenous elements at the close of the first century BC (Parabrahma Sastry 2003). The transformation of the proto-historic complexion of the Deccan culture in its initial phase may be viewed as deriving from the interaction with the expanding north and west central Indian cultural zones, dating to the pre-mauryan and mauryan periods (Ray, 1978). The megalithic burials and associated habitations have yielded Iron implements. The diagnostic peninsular India included a widely familiar "dual lone ceramic known as black and Red ware, other associated ceramics are an all black/ red ware micaceous red ware (Thapar, 1987) and Russet coated white painted ware (Sharma I.K. 2000). The back and Red ware, highly glossy wheel made,

Fired at a comparatively low temperature. Russet-coated painted ware decorated with simple rectilinear or slightly curvilinar pattern in a paste of Kaoline or lime under wash of ochre colour was found (Sharma I.K. 2000).

The transition from megalithic / iron Age to early historic phase it found in many sites like, Kesarapalli, Pedabankur, Dhulikatta, Pedamarur Yeleswaram, Dharanikota and Here in these sites in the lower layers. Black and Red ware was unearthed. Russet coated ware and handmade painted reported was in Satanikota. Chebrolu, Pusalapadu, Kanigiri, Kurnool-Cuddapah, Ananthapur areas. presence of handmade painted black on red pottery known from Kurnool, Cuddapah, Anantapur areas with extension towards the South East Coastal lines as at pusalapadu, Kanigiri. The old hypothesis that a basal neolithci folk got transformed into a Chalcolithic Semi-urban culture has gained fresh momentum (Sharma, 2000).

Mauryan impact in the early historic sites was attested by the presence of Mauryan Inscription in Amaravati, Punch marked coins and northern block polished ware in many sites. Local king, Guilds, nigamas were also played an important role for the origin of urban centres.

Fragment of an Asokapa Pillar with typical mauryan polish with inscription was found in Amaravati. Unlike the other Asokan pillars, which Northern Black Polished ware was reported from many early historic sites like Amaravati, Dharanikota, Vaddamanu and others? Large hoard of Siver Punch Coins were found in Andhra marked Pradesh in places like. Bhattiprolu, Salihundam, Amaravati, Pedabankur, Kotilingala, Karim Nagar. The Amaravati hoard which consists of 7,668 coins is the largest of the hoards of silver punch-marked coins.

After fall of the Mauryans besides the local chiefs like Rajakuberaka of the Bhattiprolu casket and Raja Somaka of Vaddamanu rock inscription, on the basis of the numismatics and epigraphics another we know that group of rulers namely Sadas established their power in the Krishna and Guntur regions with Dhanyakataka as the centre, extending their territory up to Kalinga in the north and upto Nellore in the South (Prasad, P.R.K. 1991).

All the above factors like political power use of metal, knowledge of writing large scale use of pottery of local and imported the varieties, coins, religion and others paved way for the establishment and growth of urban centres in early Andhra.

In the following paragraphs, the early Andhra Urban features will be analysed with the urban features which were proposed by R.S. Sharma (1987).

- 1. The Size of the settlement: Data relating to the size of the settlement is available only for Kondapur and Nagarjunakonda sites, Kondapur mound was spread in 8 hectares and also Nagarjunakonda.
- The congestion of houses indicates dense population Ring wells used as sock-pits might suggest dense habitation.
  - Evidence of sock pits is available from Kondapur and Yeleswaram. Terracotta ring wells are reported from Pedabankur, in Yeleswaram drains were connected to the sock pits.
- 3. The numerical dominance of non-agriculturalists is the distinctive feature of urban population. The presence of artifacts such as axes, adzes, chisels, crucibles, ovens, furnaces and others indicate artisanal and other activities Terracotta figurines are found in many sites like Peddabankur, Dhulikatta, Yeleswaram, Kondapur, Chebrolu, and other sites. Terracotta images moulds are found in Yeleswaram in large number. Terracotta seals with and

without inscription are from Chebrolu Peddabankur. Ivory and seal reported at Dharanikota. Beads and Semi precious stones are found in almost all the sites. sites like Peddabankur, Dhulikatta, Pedamarur, Kondapur, Kesarapalli, Chebrolu Nagarjunakonda have yielded in large number

- Iron objects are reported from Peddabankur, Dhulikatta, Pedamarur, Satanikota and other places.
- Copper objects are found at Pedabankur, Pedamarur and Satanikota
- Gold ornaments are found in places like Kondapur, Satanikota, Amaravati Nagarjunakonda and others. Evidence of this in Kondapur crucible in Dharanikota, and the iron forging at Pedabankur attest the importance of Smithery.
- The presence of coins and, coin moulds, dock yards, indicate the presence of artisans and trades, which give clear colour to such sites. Large hoards of Silver punch marked coins were found in A.P. in Singavaram (Krishna Dist) Amaravati (Gnt), Peddabankur, Koti Lingala (Karim Nagar Dist). In the Peddabankur excavation yielded two hoards of silver punch marked coins, consisting of 168 coins and 30 coins, respectively. The Amaravati hoard which consists of 7,668 coins is the largest of the hoards of silver punch marked coins. There are indications that punch marks coins of the mauryan and premauryan periods were in circulation about second century Satavahana coins (come into circulation from the middle of the 1st C.B.C.

In addition, thousand of gold and silver Roman coins have been discovered in about 20 places in Andhra, of which the hoards found at Akkenapalli (Nalgonda Dist) Nustulapur (Karim Nagar Dist) and Salihundam and Gummadurru (Visakha DT) are important.

The Akkanapalli hoard contained 1531 Denari, along with some silver ornaments the nandyala hoard, preserved in Madras museum, contain 32 Qurii; and from Vinukonda (Gnt) a hoard of 15 Aurii has been recovered. There are several other places in this region where Roman coins discovered in small numbers. Roman emperors Represented by the coins found the Andhra are

Augustas (29 BC-AD 14); Tiberius (AD 14-37); Caligula (AD 37-41); Claudius (AD41-54); Nero (AD4-68); Vespasian (AD 69-79); Domitian (AD 81-96); Madrian (AD 17-138) and Antoniuspius (AD 138-161), coins of the last mentioned emperor are Large in number. These successors- Marcus Aurelius (AD 161-180); Commodus (AD 180-192); and Caracalla (AD 128-217) are also represented on the several coins.

. Luxury objects such as precious and semi precious stones. Sophisticated terracottas, thin walled and shining Pottery, Ivory objects, various types of Roman Pottery Indicate the presence of a class of rich consumers typical and pre-industrial towns.

Precious and semi precious stones are from recovered sites such Peddabankur, Dhulikatta Pedamarur, Kodnapur, Amaravati, Chebrolu and Nagarjunakonda. Sophisticated terracottas for example kaolin Images reported from Kondapur, Yeleswaram and Chebrolu, Ivory objects from Dhulikatta, Kaolin ware from Kudavallu and Satanikota. Roman Pottery from Satanikota, Kondapur Dharanikota, Kesarapalli, Amaravati, Chandavaram, Cherbrolu, Salihundam and other places.

The pottery found in the early historic levels is mostly wheel made. The

important pottery types found were Red ware, Block and Red ware, Red Polished ware Russet Coated Painted ware Northern Black polished ware, Kaolin ware, Rouletted ware and others. There are graffiti marks on the early historic pottery. The ritualistic pottery stamped with auspicious symbols.

- 6) In Childe's view monumental buildings symbolize the consumption of surplus. Presence of backed brick structures assume special importance and become a trait of town.
  - Almost all the early historic sites discussed above have yielded baked bricks, used for construction of religious or secular buildings. Most of the sites take Pedabankur, Dhulikatta, Kondapur, Salihundam, Amaravati, Chandavaram, have yielded either stupas or vihara At Nagarjunakonda structures. amphitheatre with a capacity of one thousand spectators was found constructed with probably bricks inspired by the Roman tradition.
- which were meant to store surplus food grains for feeding the urban people.

  A series of brick-built rectangular chambers below. The ground levels inside the fort are in Satanikota. The

Granaries occur at many historical sites,

inside the fort are in Satanikota. The chambers might have served the purpose of granaries. In Dhulikatta huge brick built granaries in the shape of inverted pyramids narrowing towards the base were found.

Street, shops, drains and fortifications give good idea of the urban settlement. Fortification was found in towns like Nagarjunakonda Yeleswaram, and drainage in Yeleswaram. There are underground chambers in some buildings, which contained coins, coinmoulds, seals, terracotta figurines, beads, gold ornaments and others. Several shops and work shop areas were unearthed of one is a gold smiths entire

- stock in trade, one shop or house contained a hoard of gold ornaments including a necklace with a Roman coin as pendant.
- Drains and sanitary arrangements found in few sites highest congested population.

In Yeleswaram drains connected with soak pits are found in Dharanikota also sock pits are found.

### Some scholars views for courses towards urbanism:

Typologies in city-types are made with in specific historical contexts and are often attributed to factors to which a certain primary is given as causative leading to types such as political, administrative centres military centres, trade or commercial centres, religious centres and so on. ("R. Thakur, 1994").

Agricultural expansion and intensification is often a necessary pre-condition to change in which improved technology, e.g. irrigation, is a major resource social division of labour, productive labour and surplus. Storage of surplus, institutional mechanism for surplus extraction, large-scale communal monumental activity, a complex social organization and a well developed power structure contribute to the formation of cities. Population increase competition for land, warfare and tribute are recognized as outward manifestation of urbanism, in early cities. (Richard Basham 1978). Stable system and merchants of trade artisans community fixtures permanent specialization of crafts, transport innovation, (Robert M.C. Adams, 1965). All of which are often cited as urban forms, would seem to operate in different degrees and at different levels in the evolution of urban centres

Thus, causative factors may occur in different orders of primacy in creating distinctive types, while economic factors are basic to urban growth, often what is required is a focal point for mobilization and redistributive activities, which in pre-

modern societies was often provided by an ideology, usually religious. As Paul Wheatly point out (Paul Wheatley, 1972).

In the study of urban processes another useful distinction is that of primary and secondary urbanization. In urbanization the rise of cities is solely the result of internal developments, although not in compel isolation. For external influence in varying degrees could induce such development as in sharing China and to some extent in Mesopotamia and central America (Richard Bashan 1978 p. 43) wheatley would see the Character of Chinese cities as a distinct independent development i.e., sui generis-or a process of generation and not imposition of urban forms (wheatley, the pivot of the Four Quarters, p.8).

Secondary urbanization is the direct outgrowth of the expansion of empire where in forts and regional administrative centre, established for political and economic control, could act as centres of diffusion of metropolitan culture, i.e., technology and other knowledge.

working The of the sophisticated administrative and technological of the conquering society provide the skills to the locals, helping then to ultimately to assert their independence. This appears to be directly. The expansion of early empires like that of the Mauryas, characterized as a metropolitan state (R. Thapar in the Mauryas Re-visted, Calcutta, 1987) Induced secondary urbanism in region like the Deccan and Andhra, where in the past mouryan period, mauryan influence both in administrative structure and trading networks wood seen to have been predominant. (Sudarshan Seneviratne The Hague, 1981, 317-38) In the Deccan and Andhra region this period is (200 BC to 300AD) understood to be one of secondary urban generation and secondary state formation which became two inter related

processes induced by the expansion of the mauryan empire (seneviratne Ibid).

While this General assumption appears to be valid in terms of political process in the Deccan and Andhra in the post mauryan times, The generation and nature of secondary urbanism in these regions is yet to be substantiated on the basis of detailed studies of towns from the mauryan to the Ikshvaku periods (3<sup>rd</sup> BC to 3<sup>rd</sup> AD) both in the Ganges valley and peninsular India. Regional variations in this phase urbanism are crucial to an understanding of the degree and intensity of secondary urban forms in South India. Where the impact of Indo-Roman Trade was greater and the influence of mauryan polity was minimal. (Rajangurukkal 1989).

The Deccan illustrates contrastive urban experiences, particularly in emergence of trading patterns. Larger networks, guild organization of merchants and Craftsmen which facilitated a more intensive and organized commerce marked an economic system of the Deccan to which were integrated several centres of production in situation where trade was not stimulated by an agricultural surplus but by supply of manufactured items. It was this factor which sustained some of the central Deccan settlements (Alokaparashar Sen 1991). Show on the basis of Archaeological Data. The Segmented nature of political power of the pre-Satavahana times Changed under the new forces of Ganges valley urbanism and mauryan Polity, enabling interaction between traders and craft production in areas under the control of tribal communities. Attention is drawn to differences in the character of settlements in central, Southern, Western and Eastern Deccan and Andhra region in such studies (Parashar sen Alok, 1992).

Thus, the need for studying sub-regional patterns in the Andhra region still remains largely unexplored from this point of view, the importance of trade, both Inland and

maritime as the major factor. In urban growth, thus in assigning primary to economic factors and ignoring others, including the political (A Ghosh 1973), Trade, crafts and commercial activities and their institutional organization, seem to dominate studies on urbanization, both in the early historical periods. Hence in the attempt to seek overall perspectives, no difference in perceived in the basic nature of early historical urbanization (Chattopadhyaya, 1986).

Economic criteria are no doubt basic, often dominant and uniformly significant in urban particularly and useful distinguishing spaces allotted for rural and urban functions, yet a predilection for economic criteria, as capable of explaining urban forms and patterns in different periods. often results in a partial understanding of the processes and structures. It has been pointed out that even where direct correlations are found between forms of urbanism, on the one hand, and modes and stages of economic growth on the other, such relationships cannot be treated as self-explanatory (Abrahams, Towns and Economic Growth).

The other hand Buddhism, patronized by rulers, and merchant communities alike, Initiated a process of change in societal organization by providing institutions like the Sangha and a more universal ethic, atleast in theory, and a social thought cutting across, caste and creating a sense of community, a community of monks (renoncers) and lay followers. (Romila Thaper Oup Delhi, 1987).

The **Buddhist** ideal of non-caste organization and association would, no have enabled institutionalized dealings with strangers (non-kin and other caste groups) and with Foreigners. State patronage to Buddhist institutions was more in the interests of promoting trade and of resource networks movement accumulation and less on act of legitimation of their power. The complex of domination in those centres of Buddhism was distinct from the political centres, particularly those of the Satavahanas and Ikshvakus. Indeed, the Buddhist Sangha was an alternative source of authority distinct from priestly power and the coercive authority of the stage (Thaper 1987).

Ancient and early historical periods in India has shown that there were two major periods of urbanization, to which a third may now be added for the early medival period ('Chattopadhyaya' urban centre" p.11-13,1986). It is also generally accepted that the First urbanization i.e., the Indus valley urbanization of the proto historic period, left no legacy beyond the middle of the second millennium B.C. (Ibid).

The 2<sup>nd</sup> or early historical phase represents a long period of urban growth stretching from the 6<sup>th</sup> century BC to 3<sup>rd</sup> AD with its epicenter in the Ganges Valley, It spread over the whole of North India by the 3<sup>rd</sup> Cen. BC, and over central India; Deccan and the Andhra region between the 2<sup>nd</sup> cen BC to 3<sup>rd</sup> cen AD. It must be stressed, however, that it is the latter part of this long chronological span that witnessed the most clearly visible manifestations of this urbanism.

The beginning of this urbanization are placed in the 6<sup>th</sup> century BC with its epicenter in the Ganges valley, where expansion of Trade in ripples (Thaper, 1st State formation in early India (India international social science, Jou, Vol. XXXII, 655-69) around the early Janapadas assumed significant proportions by the third century BC, with a network all over the north, Central India and the Deccan and with arterial links with central Asia and West Asia. The spread of this network into the Deccan and Andhra region was undoubtedly brought about by overland trade links from the 3<sup>rd</sup> century BC and the expansion of the Mauryan State. However, It would be erroneous to assume that without the impact of maritime trade, the phenomenal

increase in the trade activities of the Deccan and Andhra regions from about the 2<sup>nd</sup> century BC to the 3<sup>rd</sup> century AD could have taken place (K. Siva thamby 1974, 20-37). The 'Surplus' of the agricultural forests organized control appears to have been acquired by any of the 'Crowned kings' over the agricultural tracts, no regular structure having been evolved. The institutional forces, which defined the 'excess' requirements, provided for appropriation and defined its utilization (R.Mc. Adams Chicago, 1966).

The river system of the Deccan Plateau shows certain restraining factors, making the region conducive only to the growth of relatively smaller areas of agriculture on the contrary.

It was less restrictive and more suitable for the growth of communication and transport networks, with the possess in the Western Ghats linking the coast to the interior and the relatively drier zones helping interrupted travel easier movement (HP Ray 1986). The expansion of these routes subsequently to include the Andhra Region in a tight commercial network took place when a larger agricultural base in the Krishna valley was acquired by Satavahanas in the latter part of their period. Satavahanas adopted brahmanical ideology for legitimating their rule, with their commitment to the varnasrama ideal probably originating from their earlier priestly affiliations. (Ibid Chapter 5). The advantage of conceding the dominance of Buddhist ideology over merchants, and other involved in commerce and production for trade, both over land and overseas, was also understood by them. In the Deccan the **Symbiotic** relationship which existed between the political structure, the commercial groups and the Buddhist order have been clearly recognized (J. Heitzman 1989, Vol. XX No. 121-137). The power structure which thus evolved reflects in many works mauryan ideological influences

or the continuation of mauryan institutions, in what may be seen as "secondary state formation" (Seneviratne the Hague 1981) and a monetary system controlled to a large extent by the ruling dynasty. Patronage of the expanding trade and a dominant Buddhist ideology, which helped evolve institutions such as the monastery and guild to support it, Mark the contrastive process in urban growth in the Deccan long distance trade may be seen both as a cause and an effect of state formation depending upon factor other than trade itself. (Ratnagar, Encounter, 240 R.A.L.H. 1981, 145P) in fact territorial expansion and political unification have been regarded as less indirect consequences of urban genesis than as functionally interrelated process at the very core of the transformation (Adams evolution)

The early historical phase of urbanism has thus been shown to be the result of external trade, an "urban revolution" (Gorden Childe, 1950, 29, 3-17 urban Revolution) in a restricted locus within which the process was concentrated (Adams evolution). Leading to the emergence of urban or, more correctly, trade enclaves. The discontinuity caused by the decline of Trade (B.N.S.YADAV, 1978 – Jan 1978, Vol, V., Nos 1-2, 61, IHR) around 3<sup>rd</sup> century A.D.

**URBAN CENTRES** IN **EARLY ANDHRA:**Many excavated and few unexcavated sites in A.P. show urban features lasting up to the 3<sup>rd</sup> A.D. These are the important Satavahana Culture sites which participated in the Indo-Roman trade. **Dharanikota:** Dharanikota is located to the right bank of the river Krishna in Guntur District. The earliest occupants of the site are people using black and red ware (neolithic). The early historic occupation of the site starts with the entry of satavahanas in 1<sup>st</sup> c. A.D Dharanikota along with Amaravati formed part of the capital Dhanyakataka of later Satavahanas (Sarkar H. et.al., 1992). The Citadel's occupation

lasted till the 4<sup>th</sup> A.D. The early historic period of Dharanikota which was fortified shows drains and soaks pits. A Brick wharf built along the inner side of an earlier navigational channel is also found (IAR, 1962, 63). A circular Brick structure with in the fortified area reported (IAR, 1964-65) Rouletted ware and Amphorae are found in different phases. Glass bangles of various colours were reported. An inscribed ivory seal showing a stupa within railing belonging to the 2<sup>nd</sup> - 3<sup>rd</sup> A.D is found (IAR, 64-65). Late Satavahana coins found in good numbers, crucibles atleast the importance of smithery. An inscribed pot shaped of 4<sup>th</sup> c A.D. suggests that the occupation of Dharanikota did not last much beyond that date.

Amaravati: Amaravati located on the right bank of the River/ Krishna in Guntur District. Amaravati was a Buddhist township till the early Christian centuries. Amaravati known for its big stupa and beautiful stone sculptures. Amaravati site period I began with N.B.P. ware around 300 BC period II is marked by Rouletted ware, which attest the Roman contact (IAR, 1958-59). Satavahana phase was a period of greater artistic effolorescence that gave the maha chaitya the most impressive form "un surn passed in the history of stupa architecture in the South India" (Sarkar et.al. 1992). Inscriptions on the sculptural slabs refer to donations made by Artisans, Merchants (Hanumantah Rao BSL, 1994) important finds from the site are hoards of silver punch marked coins.

Chandavaram:Locate on the banks of river Gundlakamma in Prakasam District. Chandavaram was a Buddhist settlement Mahastupa with a monastic establishment. Basing on the art style Chandavaram was date 2<sup>nd</sup> C. B.C. coins of the earlier satavahana ruler Sri Satakarni and lead coins with the symbols of horse and bull were found (IAR, 1974-75, 75-76) stupa with Anda, Harmika and with other details

made with the backed bricks, lime was used for plastering and concrete flooring. Near the stupa a five-meter long slate-lined drain has been reported (IAR 1975-76). The urban character of the Buddhist settlement is indicated by the use of Rouletted ware (IAR 1974-75) Chandavaram Art shows the influence of both Amaravati art and Gandhara Art (IAR 1974-75) (Hanumanta Rao, B.S.L., 1994).

Kesarapalle: Kesarapalle village located in Krishna District lies about 20 kms north-east of Vijayawada, on the Madras- Calcutta National Highway. Kesarapalle was in occupation from Chalcolithic times followed by Megalithic phase. Its historical period was attested by the presence of Rouletted ware. The Satavahana phase has not yielded any important artifacts. But the Ikshvaku Phase has yielded brick structure Ikshvaku led coins, beads of glass, stone and terracotta (Sarkar H. 1962).

Nagarjunakonda: Nagarjunakonda Guntur district has on the bank of the river Krishna Nagarjunakonda had will defence on three sides, Nagarjunakonda is Buddhist settlement which nurtured the growth of Buddhism and culture from 3<sup>rd</sup> c B.C. to 3<sup>rd</sup> A.D. (Sharma Y.D. 1953) more than 25 monasteries are reported in Nagarjunakonda (IAR, 1954-55, 56-57, 57-58). More than 30 Buddhist establishments were erected in one hundred years between, 3<sup>rd</sup>- 4<sup>th</sup>c A.D. In course of explorations and excavations, monasteries, stupas, Mahachaityas mandapas of Buddhist and brahmanical shrines and its citadel complex are found. Nagarjunakonda was built and developed in the 2<sup>nd</sup>-3<sup>rd</sup> centuries under the patronage of Ikshvakus.

In Nagarjunakonda, the city-site close to the religions settlement was called Vijayapuri "The city Area with fortification wall ditch, gates and barracks threw light on the town planning and flourishing conditions of the capital of the Ikshvakus during the 3<sup>rd</sup> c A.D. (IAR 1957-58).Nagarjunakonda was not only

a centre of politics and religious but also artisans and merchants. The majority of population lived outside the citadel in houses constructed along broad roads which were intercepted by cross roads and by lanes. Several shops and work shop areas were unearthed of one is a goldsmith's entire stock in trade, one shop or house contained a hoard of gold or ornaments including a necklace with a Roman coin as the pendant. Guilds of confectioners, sellers or growers of betel leaves, masons and artisans existed (Sarkar & Misra, 1972). Nagarjunakonda had lime stone, terracotta object, shell cutters and other Industries (IAR, 1954-55). Beads of semiprecious stones, Ivory bangles glass suggest eighter local production or trade in these goods presence of coin moulds, number of copper coins of satavahanas, and Led coins of Ikshvakus suggest that Nagarjunakonda was a mint town. In Nagarjunakonda an inscription mention that a merchant handed the citizens council (sreshthi Pramukha Nigama). There were many Guilds of traders' limes the guild of confectioners (Sarkar & Misra, 1972). Roman contacts are indicated by the coins of Tiberius (A.D. 16-31) and some others. (IAR 1956-57). A Gold coin of Hadrian (AD 117-38) has also been recovered (Sharma, 1953). Handles of the Roman Amphorae also recovered (IAR 1957-58). An Amphi theatre, with a capacity of one thousand spectators (Sarkar & Misra) 1972 was propably inspired by the Roman Tradition (Sharma R.S. 1987). Peddabankur:Peddabankur Located in Karimnagar District. The site was occupation from Megalithic phase, followed by the historical period. The excavations conducted by the Dept. of Archaeology and Museums, A.P. The excavations revealed many brick structures, a terracotta ring well cisterns, wells, elliptical rubble structures and others. Other antiquities recovered during the course of excavation were pottery, iron, copper and terracotta objects, large number of Punch marked coins

(Krishna Sastry, V.V. 1983). A Roman Silver coin of Augustus. A Terracotta Seal in scribed in early Brahmin Characters also appears (IAR 1968-69).

Dhulikatta: Dhulikatta is locates about 10 K.M.S. west of Peddabankur. The name Dhulikatta is a corrupt from of Dhulithota which literally means a mud fort, the historic site, which an extent of 18 hectares of land, enclosed in mud ramparts, raised with the earth dug out from the trenches outside the fort, which formed into a deep moat (Krishna Sastry 1983), Dhulikatta is a Satavahana site in the Dhulikatta baked bricks were used for the construction of walls and floors lime was used as mortar and plaster (IAR -1968-69, 1974-75, 1975-76). Moulds with sixteen matrices of varying shapes of coins were reported (IAR, 1976-77) which atleasts that Dhulikatta was a mint town. A hoard of 169 silver coins, several Satavahana coins made of lead, Point one silver coin were found (IAR 1976-77). A Roman coin of base Silver showing the head of Emperor Augustus also found (IAR 1975-76).

Huge Brick built granaries were reported in the shape of inverted pyramids narrowing towards the base. Near granaries coins and gold beads were recovered. This suggests the sale and purchase of food grains by wholesalers and ordinary town dwellers that paid in cash (Sarma R.S. 1987). A Terracotta Figurine wearing a circular hat seems to represent a Roman Trader (IAR, 1976, 77). Other important artifacts which may have been used by urban people include iron objects like axes, sickles, spades, lamp, nails others, beads of semi precious stones and ivory objects (IAR. 1976-77).

Pala Konda: Palakonda located in Warangal Dt. The site was in occupation from pre-Satavahana stage which was yielded black and red ware pottery. The Satavahana period has yielded storage- Jars with Finger designs in red ware. In this period brick walls were exposed. Black and

Red ware continued in the Satavahana period also (IAR 1975-76).

**Peda Marur:** Pedamarur located in the Mahaboob Nagar Dt. The Satavahana phase yielded Red polished and coarse Red ware pottery. Iron artifacts included a socketed hoe and knives (IAR 1977-78).

Kudavelli:Kudavelli located in the Mahaboob Nagar district lies the of the river confluence Krishna and Tungabhadra. Excavations site belonging to period (AD 300-600) yielded Red-slippped and dull Red ware together from nearly 82 percent of the local pottery assemblage; besides the above pottery Black and Red ware are also found. Find of Kaolin ware suggests possible Roman association. Structures of brick and stone are found (IAR 1978-79). The find of a gold coin of Roman emperor Constentain II (AD 337-61) and the other of the Byzantine emperor Anastasias (AD 491-518) are sure signs of traffic with the Roman world, Eastern and Western (Sharma R.S. 1987).

Satanikota: Satanikota located on the right Bank of Tungabhadra in Kurnool Dt. The site was in occupation right from the mesolithic times. The site was in occupation during the early historic period from c 50 BC to 300 AD. A Fort covering an area of six hectares was located in a fortified town belonging to the Satavahana period. Inside the fort brick built rectangular Chambers, below the ground level are exposed, propably served as a granary, Gateways, backed brick walls, and a brick paved plot forms have been found, Pottery Comprises russet-coated painted ware, red polished ware, black and red ware, kaolin ware and rouleted ware. In addition to iron objects and cooper bangles, A gold ring studded with a piece of lapis lazuli has been found a Lead coin with Brahmi Legged of 1st century B.C. 1st. Century AD found (IAR 1977-78). All the above features are an Indication of urban life at Satanikota.

Yeleswaram: Yeleswaram is located on the bank of river Krishna in the Nalgonda Dt. The village is located in a valley, covering approximately an area of 13 squares K.M. This site was in occupation right from the pre-historic times and continues to be in occupation during early historic and medival periods.

Yeleswaram is early historic periods is dated roughly between the 1<sup>st</sup> and 2<sup>nd</sup> c. A.D. and occupied by Satavahanas. Large bricks were used for construction. The site appears to be a rectangular citadel fortified by walls. Yeleswaram had drainage with soak pits in the low lying land. Sprinklers were found in red polished ware and in other wares. Terracottas unearthed in Yeleswaram included human and Animal figurines most female figurines were of mother goddess including those of nude goddess. Another important point is terracotta double moulds were recovered in large numbers indicating the manufacture of the same at the site of export. Glass bangles were also found. The next period at Yeleswaram saw the role of Ikshvakus the construction activities of the presiding period continued. Besides the sprinklers are also find pedestalled bowls, hollowkhobbed lids and a pointed beaker. Glass and shell bangles and terrocotta moulds were found. During the above periods, Roman contact and maritime traffic are attested by may red polished sprinklers, terracotta cost in Double moulds and a gold coin of the famous Roman emperor Septimus Serverus (A.D. 193-211). A Roman Jar pointed with black band has also been found. A wide range of Satavahana Coins show the use of local money and inscriptions show a fair amount of literary. (Waheed Khan, 1963).

Kondapur: Kondapur located in the Medak district. Part of the 8 acre mound was excavated (Yazdani, 1941). Bricks and tiles were used in both secular and religious structures. Religious remains comprise a monastery, two chaityas and Stupas. An

interesting feature of the private houses and shops in the presence of underground chambers. These chambers have yielded coins with their moulds, seals, pieces of terrocotta figurines, beads, gold ornaments and others. Bead manufacture was an important craft. Kondapur has yielded a large number of iron tools and weapons. Shops with furnaces and large earthen basins for cooling metal. Yield in the site indicate the presence of smithy work in large scale. Yazdani feels that Kondapur was a great religious centre. He feels that the terracottas were preserved in large numbers because of this reason. A part from the craft the potter manufactured of manson, decorated sophisticated pottery with **Buddhist** auspicious symbols. Beads. precious and semi precious stones thin red ware with lustrous polish ware the other findings. A hoard of nearly 2000 coins are found which include the punch marked and Satavahana varieties made of led and potin these coins along with the coin moulds clearly mark kondapur as a mint town. Baked clay imitations of Roman coins of the 1st c. A.D. as well as a gold coin of Augustus who rules from 29 BC to 14 A.D. are found Kondapur therefore may have participated in Roman trade. Regionally it supplied not only beads, tolls weapons, and other objects but also provided the people with money to purchase articles. (Sharma, R.S. 1987).

Vaddamanu located 34 Vaddamanu: km. North-east of Guntur town and 10 KM. South-East of the famous Buddhist site Amaravati. Explorations in and around Vaddamanu and excavations in Vaddamanu by Sastri T.V.G. and others (1992) of Birla Archaeological and Cultural Research institute has yielded a few coins, bangle pieces beads and pottery consisting of block and red ware Northern Black Polished ware and rouletted wares. A few brick structure and cairn cirches, were also noticed. In addition to the said early historic antiquarian remains, some prehistoric tools consisting of middle Paleolithic, Neolithic assemblages and microlithic blades were also found.

The excavations at Vaddamanu have revealed the following features the lowest level or earliest levels is characterized by the presence of megalithic black-and red and black wares, Northern Black polished ware besides common red coarse. The metal objects found are nails, rivets, fasters, rings etc. No cairn of any metal is found. The next period was marked by the occurrence of Rouletted besides ware other above mentioned pottery. The object found in that period are terracottas beads, bangles, rings coins, earn studs, coins made of lead and copper. The art notify of this periods are characterized by the depiction of stupa motifs, gateways and etc. indicating construction activities. Succeeding period shows large scale structural activity. Number of votive stupas, a pillar hall, vihara wings, a staircase, a number of vihara complexes. and bricks were used Stones constructions. Pottery consists of Red ware and few shreds of roultted ware. The other finds include stuccos, terracotta, iron, copper tools, ornaments made of shell, glass, semi-precious stones etc the large number of coins found belong to Satavahana and Ikshvaku period, hoard of Iskhvaku coins found in the excavation. The Vaddamanu was in occupation in the early historic period from 400-300 BC to 250 A.D. and almost up to 450 A.D.

Chebrolu: Chebrolu a small town south-east of Guntur City. The ancient Buddhist site is 15 k.m/ from Guntur. The present day town Chebrolu stands on the Ancient mound which rises to about ten meters from the surrounding plains. The earliest occupation here is Neolithic period (IAR 1955-56, 56-57) several structures built with brick were seen. The important finds at the site include several Satavahana, Ikshvaku coins made on tin and copper and one gold coin (Hanumantha Rao, 1964). Pottery of various

types like N.B.P. ware, Arretaine and Rouletted ware, Black and Red ware and other types. Number of terracottas (Murali Mohan, 2002), beads, pedants, votive pots, inscribed terracotta seating (Hanumantha Rao, 1987) several lime stone slabs and pillars, and lime stone rings, with lotus motifs, probably belonging to Buddhist establishment. (Rama Rao, 1939). It is probable that Chebrolu was on the high way connecting Dhanya Kataka, the later Satavahana capital with Kanchi (Hanumanta Rao, 1989).

Ghantasala: Ghantasala village located in the Krishna District, Ghantasala was an important Buddhist centre. Brick built stupas and Viharas are found copper and lead coins of Satavahanas and Ikshvakuas are found. Satavahana coin with ship symbol and Roman Gold Coins attest the foreign trade (Aiyappan, et.al., 1952).

Bhattiprolu: Bhattiprolu is one of the important Buddhist centres in Andhradesa located in Guntur Dist. The stupa and Vihara were built with bricks. Excavations carried out at the stupa and vihara area by R. Subrahmanyam have yielded artifacts, like stucco head of Buddha sculptures in lime stone, pottery in Block and Red ware and Red Polished ware (IAR, 1969-70). In course of excavators, Granite stone Relic containers with inscriptions ever found after engraving the letters (text) the rockface was subjected to the typical 'Mauryan Polish" In the Granite stone Relic conta iner silver punch marked coins are found (SARMA I.K.1988).

**Conclusion:**Developing trade and commerce, increasing specialization and proficiency in craftsmanship, industrial and

mercantile organization or guilds increased production, introduction rate monetised economy and chashnescus and many other factors led to the extension of the city boundary. Villages particularly industrial villages, were fast developing into markets and the latter into towns and cities. (Manu) In a society which had such a wide range of aesthetic tastes, certain arts and industries like those of jewelers (manikara), goldsmiths (suvarnikha) perfumers (Gandhi), garment-making weavers, tailors and garland makers, found greater scope for development. In the Kamasutra, for the first time we find that these artisans and crafts men come to be considered as a part of urban society. Vatsayayana says that artisans such as the washerman, barber, garland maker, perfumer, mine-seller beterl-seller goldsmith and a few others may be friends of the nagaraka. (Kamasutra) and play the role of intermediaries between the lover and the beloved. The lover presents to his beloved articles which are prepared by a large number of craftsman (Kama). These and numerous other references, as well as the enumeration of 64 arts, prove that by the time of Vatsyayana certain industries and crafts had come to be recognized as distinctly urban and they had become part of city life. While they were instrumental in giving a lusture, glamour, and sophistication to city life, the cities, on their part, provided opportunity suitable for further specialization and higher rate of production. Such a way of life was conducive to the development of arts and crafts which ultimately become an indissoluble part of city life.

#### **References:**

- Check band, SG, 1968: "Towards a Definition of Urban History". In Edward Arnold (Ed). The study of Urban History, London.
- 2. Ramachandran. R. (1989): Urbanization and Urban System in India. Oxford Press, New Delhi, p.2-6.
- 3. Sankalia, H.D. 1962: "From Food Collection to Urbanization" in "T.N.

- Madan and Gopala Saran (Ved) Indian Anthropology, Asia Pub. P.p. 66-104.
- 4. Gorden Childe (1979), "The urban Revolution". In Ancient cities of the Indus, Gregory posseshl (ed) pp 15-17
- 5. Adam 1979: "The Natural History of Urbanism" in Ancient Cities of the Indus., Gregory Possehl (ed).
- 6. Wheat lay, 1971, the Pivot of the Four Quarters Chicago, p. 279.
- 7. Lewis Mumford, 1975, p.42. The city in History, Pelican books.
- 8. Geiden Sjoborg (1960). The pre-Industrial city of post and present, New York, p.p. 69875.
- 9. Chakrabarthi D.K. 1972, 1974: Concept of Urban Revolution and the Indian Context" Puratatva, New Delhi, No. III, pp. 87-89.
- 10. "Some Theoretical Aspects of early Indian urban Growth" Puratattva, New Delhi, No. VII. pp. 29-30.
- 11. P.M. Hauser and L.F. Scenore (ed) 1965. The study of urbanization, London, 1965, p. 270.
- 12. Ghosh. A. (1973): The city in early Historic India, Simla, pp. 20-22.
- 13. Bruce Trigger (1987) "Determinants of Urban Growth in pre-Industrial Societies" man settlement and urbanism (ed) Peter J.UKo, Ruth Tringham & Dimblaby, GW, Duckworth Condan, p.p. 577-594.
- 14. P.R.K. Prasad (1991): "The sadas-A pre Satavahana dynasty in Coastal Andhra" Proceedings of the A.P. Hist- cong. GNT, pp. 34-39.
- 15. Kameswar Prasad, 1984- cities, crafts and commerce under the kushanas. Agamkala Prakashan, Delhi. 1-28 p.
- 16. Y.D. Sharma 1964 "Remain of early Historical cities" Archaeological Remaining, monuments and museums, Pt. 1, ed. A. Ghosh, New Delhi, pp. 44, 73. Sharma R.S. (1972, 1987)

- 17. "Decay of Gangetic Towns in Gupta and Post Gupta times PIHC XXXIII session. Muzaffarpur, p.92.
- 18. Urban Decay in India, (300AD-1000AD) Munshiram Manoharlal. Pub. Pvt. Ltd., New Delhi. Pp. 5,6,7,22,26,37,87,88,91,92,99.
- 19. Wheatley (1987) (1971) The pivot of the Four quarters Chicago, p. 279.
- 20. Parabrahma Sastry, 2003 early historic Transition. In Murthy, MLK (ed) Preproto historic A.P., Orient longman, Hyd, pp. 139-146.
- 21. Ray Amita 1978 "Beginning of Urbanization in early Andhradesa in J.S. Grewal and Inder-Banga, eds, studies in urban History, Amritsar, Dept. Of History, Gurunanak Dev University, pp. 29-42.
- 22. Thapar B.K. 1987 Recent Archaeological Discoveries in India, UNESCO, pp. 106-108.
- 23. Sharma I.K. (2000). "The megalithic Pottery ware; cultural impacts", In Roots of Indian Civilization Sundeep Prakashan, New Delhi, 2000 p. 196.
- 24. Prasad P.R.K. (1991) "The Sadas A Pre satavahana dynasty in coastal Andhra "proceedings of the A.P. History Congress, Guntur, pp 34-39.
- 25. Sharma R.S. 1987, Urban Decay in India (300C-1000C) (Munshiram Manoharlal Pub. Pvt. Ltd.,) New Delhi, pp. 5,6,7,22,26,37,87,88,91,92,99
- 26. Renu Thakur 1994 "Urban Hierarchies, Typologies and Classification in early Medival India, C. 750-1200, Urban History, Apr. 1994, Vol. 21, part 61-76 p.
- 27. Richard Basham, 1978, Urban Anthropology. The Cross Cultural Study of complex societies, Mayfield Palo Atto, California, 1978, 419.
- 28. Robert M.C. Adams, Evolution of Urban Society, Early Mesopotamia and Pre-Hispanic Mexico, Aldine, Chicago, 1965, 126-7p.

- 29. Palul Wheatly, The Pivot of the Four quarters, a preliminary enquiry in to the origins and character of the Ancient Chinese city, Edinburgh, 1971, p.379.
- 30. Basham 1978, p.43, o.p.Cit.
- 31. Paul wheatly p.8. o.p. Cit.
- 392 Romila Thapar "Towards the definition of an empire" The Mauryan State' in the Mauryas Re-visited, Calcutta, 1987.
- 33. Sudershan Seneve Ratne, 'Kalinga and Andhra, The process of Secondary State formation in early India in H.M. Classes and P. Skalnik (Eds). The study of the state, mouton, the Hague, 1981, 317-338 p.
- 34. Seneviratne Ibid.
- 35. Rajan Gurukkal, "Forms of Production and forces of change in Ancient Tamil Society" studies in History, July-Dec 1989, Vol. 5, No.2, 159-176p.
- 36. Aloka Parasher sen, Social structure and economy of settlements in the central Deccan (200 BC to 200 AD) in Indu Banga (ed) The city in Indian History; urban Demography, society and politics, Manohar, Pub. 1991, 10-46 p.
- 37. Parasher Sen 'Social Structure' idem 'Nature of Society and civilization in early Deccan; Indian economic and Social History Review, 29, 4, 1992, 437-77 page.
- 38. A Ghosh, The city in Early Historical India, Simla 1973.
- 39. B.D. Chattopadhyaya "Urban Centres in Early Medival Indian". An overview in S. Bhattacharya and Romila Thapa (eds) Situating Indian History, New Delhi, 1986, 11P.
- 40. Abraham "Towns and Economic Growth" in towns in societies, 20.
- 41. Romila Thapar, Culture transaction and early India tradition and patronage, New Delhi, 1987 28p.
- 42. Ibid Thapar 1987.
- 43. B.D. Chattopadhyaya "Urban Centres" in early medival India. An overview in S. Bhatacharya and R. Thapar (Ed)

- Situating Indian History, New Delhi 1986, p.11-13.
- 44. Romila Thaper, "State Formation in Early Indian International Social Science Journal Vol. XXXII, 655-69 p.
- 45. K. Sivathamby "Early South Indian Society". The Tinai Concep' Social Scientist 1974, 20-371.
- 46. R.M.C. Adams, The evolution of Urban society', Early Mesapotamia and Pre-Hispanic Mexico, Chicago 1966. 45-47 p.
- 47. Ray H.P. 1986, Monastery and Guild, Manohar Pub New Delhi, Chapter 1.
- 48. Ibid Chapter 5.
- 49. J. Heitzman "Early Buddhism Trade and Empire, Journal of South East Asian Studies, March 1989, Vol. XX No. 1, 121-137 p.
- 50. Sudarshan Seneveratne "Kalinga and Andhra" The process of Secondary state formation in early India, in H.M. claessen and p. Skalnik (eds) a study of the state, moton, the Hague, 1981.
- 51. Ratnagar Encounter, 240 R.A.L.H. Gunavardana "Social Function and political Power: A case study of the evolution of the state in irrigatin society' in classes and Skalnik (eds). The study of the state, 1981, 145 p.
- 52. R.M.C. Adams, The evolution urban society early mesapotomia and prehisponic Mexico Chicago 1966, 46-47 p.
- 53. V. Gordon Childe "The Urban Revolution" Town Planning Reivew 1950, 29, 3-17 p.
- 54. R.M.C. Adams evolution p. 9 op. cit.
- 55. B.N.S. Yadava "The accounts of the Kali Age and the Social Transition from antiquity to the middle ages: I H R (July 1978 Jan 1979) Vol. V, Nos, 1-2, 61 p.
- 56. Wheeler R.E.M. 1946. "Arikamedu an Indo-Roman Trading Station on the East Coast of India" Ancient India, No. 2, pp. 17-124.
- 57. Sarkhar H. et.el. 1992 Amaravati, Arhcaeologial survey of India, New Delhi, pp. 614.

- 58. IAR, 1962-63, 64-65, Indian Archaeology-A. Review.
- 59. Hanumantha Rao, BSL, 1994, Traces of Roman Contact at Chebrolu, A.P.
- 60. I.A.R. 1974-75, 75-76-3,4 p.p. 6,7,8.
- 61. Sarkar H. 1962 "Kesarapalle" Ancient Indian No. 22, p. 43.
- 62. Sharma Y.D. 1953, exploration of Historical Sites in Ancient India, No. 9 pp. 37, 138, 167, 168.
- 63. Sarkar H. & Misra BN, 1972, Nagarjunakonda, A.S.I. New Delhi, pp 20-22.
- 64. Sharma R.S. 1987, Urban Decay in India (C-300-C1000) Munshiram Manoharlal Pub. Pvt. Ltd., New Delhi, P.p. 5, 6, 7, 22, 26, 37, 87, 88, 91, 92, 99.
- 65. Krishna Sastry VV. 1983, Proto and Early Histrical cultures of A.P. Govt. of A.P., Hyd.

- 66. Waheed Khan, Md. 1963. A monograph on Yeleswaram Excavations. The Govt. of A.P.1963, Hyd. pp. 9-13.
- 67. Sastri T.V.G. 1992 et.al., Vaddamanu Excavations Birla Archaeological and Cultural Research Institute, Hyd, p.p. 18, 19, 181.
- 68. Rama Rao, M. 1939, Antiquities of Chebrolu Proceedings of All Inida Orientatl Conference.
- 69. Hanumantha Rao 1989 Inscribed Sealing from Chebrolu, proceedings of A.P. History Congress.
- 70. Aiyapan et.al. 1952, Srinivasan P.R. Guide to Buddhist Antiquitis, Madras, p. 52.
- 71. Sharma I.K. 1988 Studies in early Buddhist monumentary and Brahmi Inscriptions of AndhraPradesh. Pp 29, 37, 39, 43, Datt sons Pub. Nagpur.

\* \* \*

Dept of History & Archeology Acharya Nagarjuna University Guntur, Andhra Pradesh