

HISTORY OF INDIA FROM THE EARLIEST TIMES UP TO C. 300 C.E.



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Guidelines for Study of the Course

In this Course we have followed a uniform pattern for presenting the learning material. This starts with an Introduction to the Course underlining the significant developments in a chronological order and covers 17 Units. For the convenience of study all the Units have been presented with a uniform structure. Objectives as the first section of the Unit have been included to help you find what you are expected to learn from the study of the Unit. Please go through these objectives carefully and keep reflecting and checking them after studying a few sections of the Unit. Introduction of the Unit introduces you to the subject areas covered and guides you to the way the subject-matter is presented. These are followed by the main subject area discussed through Sections and Sub-Sections for ease of comprehension. In between the text some Self-Check Exercises have been provided. We advise you to attempt these as and when you reach them. These will help you assess your study and test your comprehension of the subject studied. Compare your answers with the Answer Guidelines provided after the Summary. The Key Words and unfamiliar terms have been explained subsequently. At the end of each Unit under Suggested Readings we have also provided a list of books or articles as references. These include the sources which are useful or have been consulted for developing the material for the concerned Unit. You should try to study them; they will help you in understanding and learning the subject matter in an all-inclusive manner.

COURSE INTRODUCTION

The discipline of history is a changed field today. The historians have gone beyond studying and writing about kings, their kingdoms and personal achievements. They are moving towards new areas of enquiry and investigation and raising questions pertaining to various aspects and dimensions of society like how did it evolve and what changes took place? A large amount of new data has come to light in the past three decades, leading to fresh interpretations and perspectives in many cases. An attempt has been made in the present Course **BHIC-131: History of India from the Earliest Times up to** *c.* **300 CE** to incorporate such aspects while retaining the earlier arguments wherever valid. The chronological span of this Course closes before the Gupta period.

There can be alternative interpretations of the past. It is the historians' duty to recognize with due humility that the information which has been handed down from generation to generation is not static. They should be able to explain historical situations and such explanations should draw on analysis of the evidence and derive from logic of the argument. New sources of evidence such as archaeology are important to study in order to arrive at a more nuanced understanding of the past. The purpose of this Course is to introduce to you and familiarize you with the stages in the way the history of India has unfolded from earliest times till c. 300 CE. It not only introduces the student to new ways of looking at the existing evidence but also attempts at explaining the past human activities and their interconnections. Thus, the changes in society, economy, polity, religion, technology etc. from the earliest times till c. 300 CE have become the focus of this course.

The Course is divided into **17 Units**, each taking up a major topic, theme or development which is considered significant during the aforementioned period. The emphasis is on the transitions from one phase to another, specificities of various cultures and civilizations, evolution of regional patterns etc.

Unit 1 deals with the sources of ancient Indian history, because before we get to what happened in the past it is imperative to know about the sources on the basis of which we "re-construct" our past. Archaeology is an important source, particularly for the periods for which there are no written documents. Sometimes its purpose is to corroborate written evidence and where it does not it provides an alternative view. It is also argued that inscriptions and literary texts mostly represent voice of the elite – kings, *Brahmanas*, court-poets etc. Hence, sometimes the archaeological sources are deemed more reliable and authentic as they may voice the sentiments of what the common folks felt, saw and lived. With the aid of a historian's interpretations it becomes possible to deal with complications that arise from the nature of archaeological and literary evidence. There cannot be a one-to-one corroboration since archaeological data substantially is in the form of artefacts (material remains left by humans) whereas the textual records are more abstract.

Unit 2 discusses the nature of archaeology as a source, the sophisticated methods of excavation and exploration and how techniques from the scientific disciplines are being used in the analyses of archaeological data. They enable us in dating the evidence and understanding past human behaviour, settlements, production processes and past technologies, trade and exchange, subsistence and diet and aspects of social life such as status, religion, rituals and so on. Issues like how the archaeological sites are formed, methods of fieldwork and data collection as well as an elucidation of some of the major excavated sites of the Indian subcontinent of the period delineated by this Course have been dealt with.

Geography and its impact on the unfolding of historical processes are the concern of **Unit 3**, as for the study of the history of a country an understanding of its physical features and how it determined and influenced the birth and evolution of human cultures and civilizations are absolutely necessary. Such parameters as settlement patterns, population density and trade, formations of regions have been given due importance. Environmental settings change and how such changes affect historical evolution is a worthy subject of study. Uneven pattern of growth, both between and within macroregions, may be explained on the basis of the availability or non-availability of resource potentialities and the form and extent of human and technological intervention.

With **Unit 4** we begin tracing Indian history with the pre-historic Hunter-Gatherers. An attempt is made to make you understand the various ways to reconstruct their history; about their subsistence-pattern, the kinds of tools they used, their art such as the cavepaintings which throws light on many aspects of their lives etc. It also deals with the advent of agriculture and cultivation of crops, beginnings of the domestication of animals, beginnings of village settlements, introduction of metals and manufacturing of new types of tools, use of pottery etc.

Unit 5 and 6 offer a detailed study of the Harappan civilization: its discovery, chronology, geographical extent and climatic aspects of the settlement patterns, diffusion and decline, chief sites and material remains which characterized them, uniformities in the material features of these sites, nature of contacts with the outside world, trade and exchange networks, society and subsistence related characteristics, main occupations, nature of ruling classes, dress and food-habits, script and language, religious practices, modes of burial, problems faced by the scholars to understand its decline and the theories put forward by them for the same etc. Though many students are familiar with this civilization we have emphasized how important it was in Indian history by looking at its art and architecture, drainage system, transition from early Harappan to mature Harappan, evidence of its survival and continuities post its decline etc.

Unit 7 discusses Chalcolithic and Iron age cultures: the various post-Harappan pottery-making cultures that can be clubbed and classified differently as pre-Iron (such as Ochre Coloured Pottery culture) and Iron age cultures (such as Painted Grey Ware culture and Northern Black Polished Ware culture). Iron ushered in the PGW phase and was later associated with the 6th century BCE urban phase in north India. The Unit also deals with the early farming communities and the subsequent Iron age in south India with special reference to the Megalithic burials and their various aspects. The interplay of locality and region that underlines some of the Chalcolithic settlements becomes an important feature of the later historical change.

Units 8 and **9** throw light on the Vedic period. For the first time we have texts such as the Vedic corpus which can be studied to cull crucial information on polity, economy, society, religion etc. of the Vedic era. The economy was mainly pastoral; agriculture assuming secondary importance. Society was tribal and basically egalitarian. Clan and kinship relations formed its basis. One must remember that between *c*. 1500-1000 BCE the society was constantly evolving and newer elements in the economic, social, political and religious sphere were operating to transform its structure.

The later Vedic period encapsulated changes which can be seen in the position of *raja*, emergence of well-defined political units, stratification of society, new religious trends etc. By mid-1st millennium BCE the society was changing from a pastoral nomadic lifestyle evidenced in the *Rigveda* to a settled agricultural society, but iron was yet to play an important role in agriculture. Both literary and archaeological sources have to be interpreted together to get an overall picture of the period.

Sixth century BCE (dealt with in **Unit 10**) witnessed the shift to the establishment of kingdoms, oligarchies and chiefdoms in north India for the first time in Indian history. The changes in polity were accompanied by urbanization and the transition to kingdoms was a pronounced departure in the formation of state. The *Mahajanapadas* which emerged as regions where new kinds of socio-political developments were taking place were located in distinct geographical zones; several of them situated in middle Gangetic valley which was a rice growing area, whose output exceeded the production of wheat and which, thus, supported a greater density of population. A *Mahajanapada* like Magadha also had easy access to crucial resources like the metal ores which may be related to the emergence of middle Gangetic valley as the focus of politico-economic power. The fact that so many *Mahajanapadas* were contiguous to each other in this geographical zone meant that an ambitious leader could try and conquer the prosperous neighbouring territories, retain control over them and consolidate his power. No wonder, Magadha emerged as the most powerful kingdom in the subsequent period.

Unit 11 gives the background to the emergence of new religious ideas during *c*. 6th century BCE in north India. The contestation between established Brahmanical orthodoxy and social unrest resulting from the same intensified, giving rise to parallel religious movements/systems like Buddhism and Jainism, *Ajivikas* etc. They posed a direct challenge to the existing Vedic religion. The Unit also underlines their significance and their influence on contemporary society. They brought about a significant change in the attitude of people who now began to question the age-long supremacy of Brahmanical religion.

Meanwhile, the north-western part of the Indian subcontinent, which attracted the attention of invaders quite early in Indian history, witnessed Achaemenid ascendancy which ended with the conquest by Alexander of Macedon in 330 BCE. His invasion of India in 327 BCE marked an important phase which opened the north-west to Greek influence (subject-matter of **Unit 12**). You will know that Arrian's accounts are the main source of Alexander's campaigns. He has left in his *Indike* some factual, some fanciful account of India which is based on the accounts of other travellers.

Units 13 and 14 focus on another benchmark of early Indian history – the Mauryas. We outline the territorial expansion of the kingdom of Magadha which will provide an understanding of how and why it was possible for Magadha to become an "empire". Then, the origin and dynastic history of the Mauryas have been discussed. Constituents of the state, the vast administrative apparatus and its elaborate mechanism of administration comprising various tiers have been highlighted. Different types of sources are correlated to understand the nature of Mauryan state. The *Arthashastra* underscores essential matters pertaining to governance, Ashokan inscriptions reveal the royal proclamations of Ashoka and Megasthenes' account envisions workings of the state and society in the court of Chandragupta Maurya. Social and economic processes of the earlier period continued and expanded in this period. Royal policies that appeared to consolidate and weave the vast heterogeneous empire in one thread are discussed.

The establishment of first political empire by Chandragupta Maurya who succeeded the Nanda throne ushered in a new age. Ashoka and his *Dhamma*, his edicts, his welfare policies, his imperial ideology became the hallmarks of this period. **Unit 14** also highlights the emergence of different types of principalities such as Shungas and Kanvas, the Indo-Greeks, the Shakas and Pahlavas and Kushanas in the north-west and north; tribal polities like Yaudheyas and Arjunayanas in the Indo-Gangetic divide; the process of state formation in Odisha and Deccan i.e. during the Satavahanas and the economy and society of post-Mauryan period which can be characterized as the period of diverse and dynamic polities.

The emergence of Satavahana dynasty which founded the earliest state in Deccan and the state-formation in south India (Tamilaham/Tamilakam) becomes the theme of Unit 15. Tamilaham constituted various eco-zones (Tinais). You will know about their subsistence-pattern, the basis of clanties and kinship in the political authority, different levels of political control and various details of the chiefdom-resembling political formation. Expansion of overland and maritime trade networks provided additional revenues to the rulers and also resulted in the prosperity of a large number of towns and cities throughout the Deccan in this period. Consequently, Unit 16 discusses the spread of agrarian settlements in Deccan and south India from c. 200 BCE to 300 CE, different forms of subsistence prevalent in different parts of south India, nature of the ownership of land, revenue income from agriculture and redistribution of resources in agrarian settlements, organization of agrarian society, introduction of new elements and beginnings of change. The purpose of this Unit is also to throw light on different dimensions of the expansion of trade and urban centres during the aforementioned period with special emphasis on the nature of exchange which determined the character of trade at various levels in early peninsular and south India. It focuses on the kingdom of the Satavahanas and the regions far south under Cheras, Cholas and Pandyas as well as the less important local chieftains.

After reading the last Unit – **Unit 17** – you will know about the antiquity of Tamil language and literature, Tamil heroic poems and their main features, techniques of their composition and their classification and codification into anthologies, problems of their dating, their literary merits and other compositions of the period between c. 2^{nd} century BCE- 3^{rd} century CE known as the *Sangam* period. Another point you will be acquainted with is the level of literary and linguistic development of classical Tamil.



UNIT 1 SOURCES OF ANCIENT INDIAN HISTORY*

Structure

- 1.0 Objectives
- 1.1 Introduction
- 1.2 Literary Sources
 - 1.2.1 Vedic Literature
 - 1.2.2 Kautilya's Arthashastra
 - 1.2.3 Epics
 - 1.2.4 Puranas
 - 1.2.5 Sangam Literature
 - 1.2.6 Biographies, Poetry and Drama
 - 1.2.7 Buddhist and Jain literature
- 1.3 Archaeological Sources
 - 1.3.1 Coins
 - 1.3.2 Inscriptions
 - 1.3.3 Monuments
- 1.4 Foreigners' Accounts
- 1.5 Summary
- 1.6 Key Words
- 1.7 Answers to Check Your Progress Exercises
- 1.8 Suggested Readings

1.0 OBJECTIVES

After reading this Unit, you should be able to understand and explain:

- the different types of sources for the reconstruction of ancient Indian history;
- the problems associated with the use of literary sources;
- the difference between primary and secondary sources;
- different types of religious and non-religious texts and their utility for a historian;
- why the archaeological sources are more reliable than literary sources in the Indian context; and
- historical consciousness in early India and the sense of history among Indians.

1.1 INTRODUCTION

Writing of history is not like writing a story. It is a narration of the past based on a variety of sources. The many types of sources today are aided by various modern

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scientific techniques like Absolute dating methods (Carbon-14 dating), environmental studies, geological analysis etc. that provide a scientific basis to verify/correlate various sources. Even in the case of myths the recent discoveries have helped to authenticate their veracity. For example, in the case of the ancient city of Dwarka it was believed that it was a myth mentioned in the *Mahabharata*. However, recent underwater salvage archaeologists have unearthed the remains of a submerged city which seems to be ancient Dwarka. Similarly, in the case of Sanauli, a recently excavated archaeological site in the Baghpat district of western Uttar Pradesh the discovery of 'chariot' remains bring out new dimensions to the archaeology of *Mahabharata*. Of course, the findings are still being established and await further study. What is important to realize here is that archaeology has been adding up to our knowledge of the past and what was till now considered unchartered territory is now being subjected to scientific analysis.

The sources are an important part of writing history. It is on the basis of sources that we reconstruct our past. The praxis of history requires a historian to study and interpret them in detail. The historians continuously work on unraveling the past by discovering, investigating, exploring, analyzing, considering and reconsidering the sources. Any remnant of the past can serve the purpose of a source.

We have a variety of sources for reconstructing the history of ancient India. Broadly, they can be classified under two main categories:

- i) Literary
- ii) Archaeological

Under the literary sources can be included the Vedic, Buddhist and Jain literature, the Epics, *Puranas*, *Sangam* literature, ancient biographies, poetry and drama. Under the broad head of Archaeology we may consider epigraphic, numismatic and architectural/ archaeological remains that are recovered as the result of archaeological explorations and excavations.

In Indian history there is a primacy accorded to the written records. However, archaeological artifacts in the form of temple remains, coins, house remains, post holes, pottery, silos etc. also constitute an important category of evidence. For all the three periods of Indian history – ancient, medieval and modern – the archaeological evidence has acquired a lot of significance. It is indispensable for those periods which did not have any writing; for example, the prehistoric and proto-historic period of Indian history.

The sources can also be divided into primary and secondary. All archaeological artifacts recovered from the earth or written documents in the form of temple records; *talapatra* (palm-leaf manuscripts); inscriptions on palm leaves, pillars, rocks copper plates, pot sherds etc. together constitute what are called the **primary** sources. These are used by the historians to write articles, books or any form of written history which are used by the subsequent researchers and are, hence, called the **secondary** sources.

The written primary sources are of two kinds:

- i) Manuscript sources/Inscriptions
- ii) Published material.

1.2 LITERARY SOURCES

Certain questions have to be kept in mind while studying the ancient Indian texts. For example, why were they composed and for whom? What was their social and cultural

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context? A text may represent an ideal and may not be an accurate description of what was happening at that time. There are some crucial aspects which need to be taken care of when one is studying the ancient Indian texts for historical information. Upinder Singh has pointed out that if a text was composed at a specific period its use as a historical source is less problematic. However, the exercise becomes much more complex if its composition extends over a long period of time. For example, in the case of the epic *Mahabharata* it is difficult to bracket it as a single text composed at a specific point of time. In such cases the historian has to sift through various chronological layers and look critically into the various additions and interpolations. The language, style and content of a text have to be analyzed. In the case of both the epics – the *Ramayana* and the *Mahabharata* – critical editions have been made where different manuscripts of these texts have been analyzed and an attempt has been made to identify their original core. Such undertakings have helped historians immensely.

There has also been much debate about the reliability of ancient Indian literature for reconstructing history. Since most of the ancient Indian literature is religious in nature; for example, the Vedic, post-Vedic, Puranic and Epic literature; some scholars have claimed that the ancient Indians did not possess a sense of history. What these early western scholars were looking for was chronology, evidence, a clean narrative and dates in the Indian texts. What they found instead were fables, rituals, prayers etc. However, recent research into the historical traditions of India has made it clear that different societies embody historical consciousness in different ways. Ancient India possessed a strong oral tradition as opposed to a written tradition. The historical consciousness that we glimpse was of an embedded type which has to be prised open for analysis.

We come to know from the writings of Hiuen Tsang, the Chinese pilgrim, that each kingdom of India had its own officials and departments for the maintenance of official records which kept the records of various aspects of the kingdom including important events. This practice seemed to have continued for a long time after him as can be seen in a large number of land-grants and local chronicles which record the genealogies of the kings and their several virtuous deeds.

Since most of the early Indian literature contains much that deals with religion, theology, cosmology, cosmogony, magic, rituals, prayers and mythology there are problems associated with dating these texts. This is because their period of composition and compilation differ by a wide margin. As their subject matter is theology or religion it is difficult to understand them historically. The *Vedas*, *Upanishads*, *Brahmanas*, *Shastra* literature, *Sutras*, *Puranas* etc. deal broadly with non-secular themes. However, despite these limitations such texts have been fruitfully used to arrive at an understanding of the past.

We will now be studying these different categories of ancient Indian literature as the sources of Indian history.

1.2.1 Vedic Literature

The earliest known literature from the Indian subcontinent is the Vedic literature. The word *veda* is derived from the Sanskrit root '*vid*' which means 'to know'. *Veda* means knowledge. They are oral literature par excellence. They are traditionally regarded as *Shruti* i.e. 'heard' or revealed texts: words said to have been uttered by the god Brahma in the ears of the First Man. They were handed down from one generation to the next with emphasis on accurate memorization. Vedic literature is in a language different from the classical Sanskrit. It can be called the Vedic Sanskrit. Its vocabulary contains a

wide range of meanings and has different grammatical usages. It has a definite mode of pronunciation in which the emphasis changes the meaning entirely. This is the reason why an elaborate means to protect and preserve the mode of pronunciation of the *Vedas* was devised. By the means of *Ghana*, *Jata* and other types of *pathas* we can not only determine the meaning of the *mantras* but also can hear the original tone in which these were sung thousands of years ago. It is on account of these *pathas* that no interpolations in the *Vedas* were possible, as the emphasis was on oral transmission.

The Vedic literature consists of three different classes of literary works:

- a) The *Samhitas* or collections, namely the collections of hymns, prayers, incantations, benedictions, sacrificial formulas and litanies. The following four Vedic *Samhitas* are known to us:
- 1) Rigveda Samhita: The collection of the Rigveda. It is the knowledge of the songs of praise (rik) and consists of 1028 hymns (suktas) constituting 10 books (mandalas). Books 2-7 are of an earlier date and books 1, 8, 9, and 10 are later. They deal with a variety of issues related to the customs, social norms and formations. Despite the ritual content of the Rigveda the historians have been able to successfully build on themes like the pastoral economy, the position of the clanchief (raja), the status of vish, meanings of terms like bhaga and bali, social classes etc.
- 2) Atharvaveda Samhita: It encompasses a range of topics over its 20 books of which the first seven primarily deal with incantations, poems, spells and charms to be spoken by the one seeking some benefit or more often by the one who would pronounce them on their behalf for all sorts of healings to cure various illnesses, ailments and injuries. Books 13-18 throw light on the <u>rites of passage</u> like those for initiation into learning (*upanayana*), marriage and funerals. Royal rituals and the duties of the court-priests are also incorporated. Thus, its contents are studied to obtain information on the social and cultural mores of the Vedic period. A significant section also talks about herbs and nature-derived potions as medicine.
- 3) Samveda Samhita: The collection of the Samveda i.e. the knowledge of the songs or melodies (saman). The Indian classical music has its roots in the Samveda's sonic and musical dimensions in general and the structure and theory of chants in particular. It is also sometimes referred to as the musical version of the Rigveda because barring the musical creativity and melodic novelty reflected in the 75 verses the rest have been borrowed from the Rigveda. It also mentions instruments like Vina (lute). The rules and suggestions for playing various instruments are encoded in a separate compilation known as the Gandharva-Veda which is an Upaveda: a supplement or appendix to the Samaveda.
- 4) Yajurveda Samhita: The collection of the Yajurveda i.e. the knowledge of the sacrificial formulas (yajus) for worship-rituals like Agnihotra (welcoming the three primary seasons Spring, Monsoon and Autumn by offering butter and milk to fire), Vajapeya and Rajasuya (on victory of a king and his coronation respectively by offering butter and Sura an alcoholic drink to fire), Agnichayana (uttering incantations for building altars and hearths, largest in the shape of an outspread eagle or falcon, dedicated to the fire-god Agni) and so on. It also yields crucial information on agriculture, economic and social life. For instance, a significant

¹ The *Yajurveda* is divided into the "white" or "bright" (*Shukla*) *Yajurveda* and the "black" or "dark" (*Krishna*) *Yajurveda*. The former denotes the well arranged and clear verses whereas the latter refer to the unarranged, unclear, mingled hymns.

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verse in the *Shukla Yajurveda*¹ lists the crops deemed important in those times such as wheat, rice, barley, sesame, millets, sorghum, kidney-beans etc. It is the largest collection of primary *Upanishads* – the *Brihadaranyaka Upanishad*, the *Katha Upanishad*, the *Isha Upanishad*, the *Maitri Upanishad*, the *Taittiriya Upanishad* and the *Shvetashvatara Upanishad* – out of which the various schools of Hindu philosophy have emerged and developed. For example, the *Brihadaranyaka Upanishad* contains the earliest extensive discussions on the Hindu concept of *dharma*, *karma* and *moksha* (literally it means liberation from the vicious cycle of life and death but it is also taken to signify emancipation from sorrow, freedom or self-realization).

Six *vedangas* (limbs of the *Vedas*) were evolved for a proper understanding of the *Vedas*. These are:

- i) Siksha (phonetics),
- ii) Kalpa (rituals),
- iii) Vyakarana (grammar),
- iv) Nirukta (etymology),
- v) Chhanda (metrics), and
- vi) Jyotish (astronomy).

Each *vedanga* has developed a credible literature around it which is in the *sutra* form i.e. precepts. This is a very precise and exact form of expression in prose which was developed by the ancient Indians. Panini's *Ashtadhyayi* – a book on grammar in eight chapters – is the final culmination of this excellent art of writing in *sutras* (precepts) in which every chapter is so precisely interwoven.

Besides the *Vedas*, texts like the *Brahmanas*, the *Aranyakas* and the *Upanishads* are also included in the Vedic literature and are known as the later Vedic literature. The *Brahmanas* elaborate on Vedic rituals, and the *Aranyakas* and *Upanishads* give discourses on different spiritual and philosophical problems.

- b) *Brahmanas*: These are voluminous prose texts which contain theological matter, especially the observations on sacrifice and the practical or mystical significance of sacrificial rites and ceremonies.
- c) Aranyakas and Upanishads: The Aranyakas represent the etymologies, identifications, discussions, descriptions and interpretations associated with the ritual-sacrifices of the Vedas so that they can be properly performed. For example, the Aitareya Aranyaka contains specific statements on how one who follows the Vedic prescriptions and performs the sacrifices correctly goes to the abode of gods while the one who violates them is born into the lower worlds of existence as reptiles, insects etc. The 1st chapter of the Taittriya Aranyaka is famously called the "Surya Namaskar" which was later elaborated in the Yoga-sutras. Additionally, the Aranyakas also offer an insight into the deep philosophies of life. The word Aranya means forest or wilderness. It is believed and held by some that they were meant to be studied in a forest in the Vanaprastha (retired to forest/forest-dwelling) stage of life, hence the name Aranyaka.

The term *Upanishad* is formed by the joining and the combination of roots *upa* meaning "by" and *ni-shad* meaning "to sit down". It, thus, denotes "sitting down near", implying a pupil sitting near the preceptor, receiving the pearls of

spiritual wisdom. Other connotations include "esoteric doctrine", "secret doctrine", "mystic meaning", "hidden connections" etc. Monier-Williams in his *Sanskrit Dictionary* defines it as "setting to rest ignorance by revealing the knowledge of the supreme spirit". The *Upanishads* comprise some of the key philosophical aphorisms of Hinduism – such as the *Brahman* (highest entity or ultimate reality) and the *Atman* (soul or self) – some of which are mentioned also in the parallel heterodox religious traditions like Buddhism and Jainism. They played a momentous part in the evolution of spiritual ideas in ancient India; embodying and signifying a transition from the Vedic ritualism to new convictions on abstract philosophy and spirituality. They are synonymously known as *Vedanta*: the last parts or chapters of the *Vedas* and also stand for "the highest purpose of the *Vedas*". With their translation in the early 19th century they also began attracting the attention and impression of a western audience. Fascinated by their philosophical tenets Arthur Schopenhauer called the Upanishadic theosophy "the production of the highest human wisdom".

The *Aranyakas* are recognized as the *karma-kanda*: ritualistic action or the sacrifice-section of the Vedic literature on external sacrificial rituals, whereas the *Upanishads* are acknowledged as the *gyaan-kanda*: knowledge production or the spirituality-section of the Vedic literature on internalized philosophical doctrines.

Vasudhaiva Kutumbakam meaning in Sanskrit "the world is one family" is inscribed on the entrance-hall of the Parliament of India and has been taken from the Maha Upanishad. "Vasudha" connotes the earth, "eva" denotes indeed and "kutumbakam" implies family. It has been used in the verse which describes the characteristics of a person who has achieved the highest level of spiritual upliftment and who is capable of attending to his worldly duties without clamping on to material possessions and temptations. It is believed that Gandhi's vision of holistic development, respect for all forms of life and the conflict resolution strategy based on non-violence was derived from this ancient Indian dictum.

Atithi Devo Bhava, a mantra representing the dynamics of the guest-host relationship in the Indian value-system, literally meaning "the guest is god", is a central idea showcasing Indian hospitality. It is taken from the Taittiriya Upanishad. The worship of one's deity in traditional Hinduism involved five steps (Panchopchara Puja) which are also the five formalities deemed to be observed while receiving guests: providing pleasant fragrance (Dhoop), lighting a lamp (Dipa), offering edibles (Naivedya), smearing Tilak (religious mark on the forehead) and flower (Pushp) offering.

Satyamev Jayate, variously translated as "truth alone triumphs"/"truth alone conquers"/"truth stands invincible"/"the truth prevails", is a phrase borrowed from the Mundaka Upanishad. As a slogan it was popularized and brought into widespread national usage by Pandit Madan Mohan Malviya as the president of the Indian National Congress in 1918. It was declared as the national motto of India on the occasion of Independence. It is inscribed on the base of our national emblem: the Lion Capital of Ashoka. We also find it on the obverse of the Indian currency.

The whole Vedic literature is considered to have been revealed by god and therefore, considered sacred. Chronologically, it spans thousand years, with some belonging to an earlier period and some portions to a later period. The *Rigveda* is the oldest document of India. Books II-VII of the *Rigveda* are the earliest and are also called the Family Books because each is ascribed by tradition to a particular family of sages (*rishis*).

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When we refer to the early Vedic literature we essentially refer to Books II-VII of the *Rigveda* believed to have been composed between *c*. 1500-1000 BCE. The later Vedic literature includes Books I, VIII, IX and X of the *Rigveda*; *Sama Veda*; *Yajur Veda*; *Atharva Veda*; *Brahmanas*; *Aranyakas* and *Upanishads*. These were composed between *c*. 1000-500 BCE.

Though most of the Vedic literature contains songs, prayers, theological and theosophical matter, these have been used by historians to cull out political, religious and social data of much historical value. Information about processes like the transition from a pastoral, pre-class/caste society in the *Rigveda* to agrarian, class, caste society and formations of political territories in the later Vedic period has been obtained from these texts.

Then, there is a category of texts – the *Sutras* – which form part of the post-Vedic literature. These have been classified as *smriti*: memorized rather than heard (*shruti*) texts. The suggested meaning is that these were composed by humans – the great sages – and, as such, do not enjoy the sanctity of the *Vedas* though they are considered authoritative in their own right. The *Sutra* texts are manuals on ritualism (*c*. 600-300 BCE). These include:

- a) The *Shrautasutra*: contains rules for the performance of great sacrifices.
- b) The *Grihyasutra*: contains directions for simple ceremonies and sacrificial acts of daily life.
- c) The *Dharmasutra*: These are the books of instructions on spiritual and secular law the oldest law books.

The *Dharmasutras* and the *Smritis* are rules and regulations for general public and the rulers. They can be termed, in the modern sense, as the constitution, the law-books for the ancient Indian polity and society. These are also called the *Dharmashastras*. They were compiled between c. 600 BCE-200 CE. The *Manusmriti* is prominent among them.

Post-*sutra* texts are the *Smriti* texts which are:

- i) The Manu Smriti,
- ii) The Narada Smriti, and
- iii) The Yajnavalkya Smriti.

These were composed between c. 200 BCE and 900 CE. They prescribe duties for the different varnas as well as for the kings and their officials. They set out rules for marriage and property. They also prescribe punishments for persons guilty of theft, assault, murder, adultery etc.

1.2.2 Kautilya's Arthashastra

It is an important law-digest on economy and statecraft. The text is divided into 15 books, of which Books II and III may be regarded as being of an earlier date and seem to have been the works of different hands. These different books deal with different subject-matter concerning polity, economy and society. It was put into final form in the beginning of the Common era. However, the earliest portions reflect the state and society of the Mauryan period. It provides rich material for the study of early Indian polity and economy. It appears that even before the final version of *Arthashastra* there was a tradition of writing on and teaching of statecraft because Kautilya acknowledges his debt to his predecessors in the field.

1.2.3 Epics

The two great epics – the *Ramayana* and the *Mahabharata* (*c*. 500 BCE-500 CE) – can also be used as a historical source. They are known as *Itihaas* ("thus it was") or narratives. Vyasa'a *Mahabharata* is older and possibly reflects the state of affairs from *c*. 10th-4th century BCE. The main narrative which relates to the Kaurava-Pandava conflict may relate to the later Vedic period, the descriptive portion might be post-Vedic and the didactic portions generally relate to the post-Mauryan and Gupta periods (R.S. Sharma, 2005).

It is generally held that there have been constant interpolations in these works. Since both of them contain portions added at various points of time the historians have to be careful in sifting material and take into account their different chronological layers. They constitute popular literature which is even today regularly performed by the people of India ceremoniously. Therefore, with the increasing interest of the listeners the enthusiast story-tellers went on adding chapters to elaborate the details. That's how interpolations occurred.





LEFT: Mahabharata Scenes Made for the First Time in Sculpture, Gupta Period. Location: National Museum, New Delhi. Credit: Nomu420. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mahabharat,_Gupta_artefacts_03,_National_Museum,_New_Delhi.jpg).

RIGHT: Carving of a *Ramayana* Scene. Credit: B. Balaji. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ramayana_In_carving_(2444648102).jpg).

The *Ramayana* of Valmiki appears to be more unified than the *Mahabharata*. Some of the sites mentioned in both the epics have been excavated. Ayodhya excavations have revealed settlements going back to the Northern Black Polished Ware period. Hastinapur, Kurukshetra, Panipat, Baghpat, Mathura, Tilpat and Bairat etc. have been excavated and these date back to the Painted Grey Ware period. Both the epics are a mine of information on religious sects, how they were integrated into mainstream Hinduism, social practices and norms current at the time, philosophy etc.

1.2.4 Puranas

The *Puranas* are a category of Hindu texts attributed to Vyasa. They are dated to the Gupta and post-Gupta period. There are 18 *Mahapuranas* and numerous *Upapuranas* (supplements or appendices to the *Puranas*). Their content indicates that these were heterogeneous, encyclopedic works of various hands encompassing multifarious topics. For example, the range of topics covered by *Agni Purana* (*c*. 8th-11th centuries CE) include ritual worship, cosmology and astrology, mythology, genealogy, law, politics, education system, iconography, taxation theories, warfare and organization of army, theories on proper causes for war, martial arts, diplomacy, local laws, building public projects, water distribution methods, trees and plants, medicine, design and architecture, gemology, grammar, metrics, poetry, food and agriculture, rituals, geography and travel guide to Mithila (Bihar and neighboring states), cultural history etc.

The following five branches are considered to form the subject-matter of the *Puranas*:

- i) sarga (evolution of universe/creation of the world),
- ii) pratisarga (involution of universe/re-creation),
- iii) manyantara (recurring of time/periods of the various Manus),
- iv) vamsha (genealogical lists of gods, kings and sages), and
- v) vamshanucharita (an account of royal dynasties/life stories of some selected characters).

Later on, description of the *tirthas* (sacred places of pilgrimage) and their *mahatmya* (religious importance) was also included in the Puranic/Pauranic literature.



Krishna Raas-Leela Relief at the 12th Century Hoysaleswara Hindu Temple, Halebid, Karnataka, based on a Narrative of the Bhagvat Purana. Credit: Ms. Sarah Welch. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:12th-century_Bhagavata_Purana_Krishna_Rasa_ lila_relief_at_Shaivism_Hindu_ temple_Hoysaleswara_arts_Halebidu_Karnataka_India.jpg).

The *Puranas* contain useful information for reconstructing the history of ancient India. They throw light on the political history and genealogies of dynasties. There is much on the ancient dynasties such as the Haryankas, Shishunagas, Nandas, Mauryas, Sungas, Kanvas and Andhras. Certain kings with their names ending in the suffix '*naga*' are also mentioned who, supposedly, ruled in northern and central India. Interestingly, we do not know about these kings from any other source. The dynastic lists end with the Guptas, indicating that the *Puranas* may have been compiled by *c*. 4th-6th centuries CE. However, there are a few which are later, such as the *Bhagvat Purana* (*c*. 10th century) and *Skanda Purana* (*c*. 14th century).

They are also important for providing geographical information on rivers, lakes, mountains etc. Hence, they are crucial for reconstructing the historical geography of ancient India. Besides, they are a good source of information on the three major cults of Hinduism: Vaishnavism, Shaivism and Shaktism. Various processes like how different cults became integrated within the major religious traditions and how minor cults like Ganpatya, Krishna, Brahma, Karttikeya etc. emerged can also be gleaned from them. They have been understood as a vehicle through which the *Brahmanas* spread their social and religious values.

1.2.5 Sangam Literature

The earliest Tamil texts are found in the corpus of the *Sangam* literature (*c*. 400 BCE-200 CE). This is the work of poets who composed short and long poems over a period of three to four centuries, patronized by chiefs and kings. They assembled in colleges which were called the *Sangams* and the literature produced in these colleges was, thus, called the *Sangam* literature. There were three *Sangams* (literary gatherings): the 1st and last at Madurai and the 2nd at Kapatapuram. There is, however, some doubt about the historicity of these gatherings. Some scholars, therefore, like to use the term "the early classical Tamil literature" rather than *Sangam* literature (Upinder Singh, 2008). Though the poems of the first two *Sangams* are generally rejected as ahistorical some modern scholars do consider them of historical value.

The poems – some 30,000 lines of poetry – are on the themes of love and war. They were modelled on the bardic songs of ancient times and transmitted orally for a long time before they were compiled. They do not constitute as religious literature. The poets came from all walks of life and included teachers, merchants, carpenters, goldsmiths, blacksmiths, soldiers, ministers and kings. Due to their varied themes and authorship they are a mine of information on everyday life of the people of their times. They constitute literature of the highest quality. As just stated, they describe many kings and dynasties of south India. Many poems mention a king or a hero by name and describe in detail his military exploits. The gifts made by him to bards and warriors are celebrated. May be, these poems were recited in the royal court. It is possible that the names of the kings refer to actual historical figures. The Chola kings are mentioned as donors.

The *Sangam* literature mentions many flourishing towns such as Kaveripattinam. They also speak of the *Yavanas* coming in their own vessels, purchasing pepper for gold and supplying wine and women slaves to the natives (R. S. Sharma, 2005). The information yielded by the *Sangam* literature on trade is corroborated by archaeology and foreigners' accounts. The mention of some kings and events is supported by inscriptions also.

1.2.6 Biographies, Poetry and Drama

Early India is a repository of numerous masterpieces of drama and poetry. The historians have used them to cull information on the times in which they were composed. The earliest Sanskrit poets and playwrights include Ashvaghosha and Bhasa. Ashvagosha authored *Buddhacharita*, *Sariputraprakarna* and *Saundarananda*. Bhasa was a dramatist and wrote *Pancharatra*, *Dutavakya*, *Balacharita* and *Svapna-Vasavadatta*. The great Sanskrit writer-poet Kalidasa (c. 4th-5th centuries CE) authored dramas like *Abhijnana-Shakuntalam*, *Malavikagnimitram*, *Vikramorvashiyam* and poetic works such as *Raghuvamsham*, *Kumarasambhavam* and *Meghadutam*. They provide important insights into the social and cultural life of the Guptas. The *Malavikagnimitram* is based on events of the reign of Pushyamitra Shunga (Shunga was the dynasty that followed the Mauryas).





LEFT: Depiction of Kalidasa, One of the *Navratnas* (Nine Gems) of the Court of Gupta King Chandragupta Vikramaditya. Credit: NehalDaveND. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/Category:K%C4%81lid%C4%81sa#/media/File:Kalidas.jpg).

RIGHT: Sage Durvasa Curses Shakuntala for Being Lost in Fantasy about her Lover Dushyant: An Episode from the Sanskrit Play *Abhijnana-Shakuntalam* by Kalidasa, c. 1895. Credit: Chore Bagan Art Studio. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Durvasa_Shakuntala.jpg).

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Then, there are ancient dramas on historical themes. Mention may be made of Vishakhadatta's *Mudrarakshasa* (c. 7th-8th centuries CE). This drama is based on how Chanakya tries to win over Rakshasa – a minister of the Nandas – to Chandragupta Maurya's side. It also gives a glimpse of the then society and culture. His other play *Devichandraguptam* centers on an incident in the Gupta king, Ramagupta's reign. Shudrak is another poet who has written plays based on historical events.

The narrative literature includes *Panchatantra* (c. 5th-6th centuries CE) and *Kathasaritasagara* (Ocean of Streams of Stories). They are the collections of popular folk tales.



Panel Showing the "Monkey and Crocodile" and the "Mongoose and Snake" Fables from the *Panchatantra*, Virupaksha Temple, Pattadakal, Karnataka. *C.* 8th Century CE. Credit: Ms. Sarah Welch. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:8th_century_Panchatantra_legends_panels_at_Virupaksha_Shaivism_temple,_Pattadakal_Hindu_monuments_Karnataka_1.jpg).

Biographies of well known kings are an interesting piece of literature. These were written by the court-poets and writers in praise of their royal patrons. Banabhatta's *Harshacharita* (*c*. 7th century CE) talks in eulogistic terms about Harshavardhan of the Pushyabhuti dynasty. It is the oldest surviving biography in India. According to Bana it is an *adhyayika*: a genre of texts related to the *itihasa* tradition. It speaks highly of the king but at the same time hints at the fratricidal struggle for the throne. It throws light on many historical facts about which we could not have known otherwise. Bilhana's *Vikramankadevacharita* (*c*. 12th century) is about the later Chalukyan king Vikramaditya VI and describes his victories.

Vakpati wrote *Gaudavaho* based on the exploits of Yashovarman of Kannauj. There are some other biographical works based on the lives of different kings. The prominent among these are:

- i) Kumarapalacharita of Jayasimha,
- ii) Kumarapalacharita or Dvyasryakavya of Hemachandra,
- iii) Hammirakavya of Nayachandra,
- iv) Navasahasankacharita of Padmagupta,

- v) Bhojaprabanda of Ballal, and
- vi) Prithvirajacharita of Chanda Bardai.

But, from the historical point of view the *Rajatarangini* by Kalhana is the best illustration of history-writing appreciated by modern historians. His critical method of historical research and impartial treatment of historical facts have earned him a great respect among modern historians. He was a Kashmiri Brahmin and is regarded as Kashmir's 1st historian. Little is known about him except from what he tells us about himself in the opening verses of his book, in which he also presents his views on how history ought to be written. He says:

- Verse 7. Fairness: That noble-minded author is alone worthy of praise whose word, like that of a judge, keeps free from love or hatred in relating the facts of the past.
- Verse 11. Cite earlier authors: The oldest extensive works containing the royal chronicles [of Kashmir] have become fragmentary in consequence of [the appearance of] Suvrata's composition, who condensed them in order that (their substance) might be easily remembered.
- Verse 12. Suvrata's poem, though it has obtained celebrity, does not show dexterity in the exposition of the subject-matter, as it is rendered troublesome [reading] by misplaced learning.
- Verse 13. Owing to a certain want of care, there is not a single part in Kshemendra's "List of Kings" (Nripavali) free from mistakes, though it is the work of a poet.
- Verse 14. Eleven works of former scholars containing the chronicles of the kings, I have inspected, as well as the [Purana containing the] opinions of the sage Nila.
- Verse 15. By looking at the inscriptions recording the consecrations of temples and grants by former kings, at laudatory inscriptions and at written works, the trouble arising from many errors has been overcome.

Kalhana's work is immensely valuable as a source of information on early legends, customs and the history of Kashmir.

1.2.7 Buddhist and Jain Literature

Among the non-Brahmanical and non-Sanskritic sources of early India the Buddhist and Jain literature constitute an important category. It was written in the Pali and Prakrit languages respectively. Prakrit was a form of Sanskrit and early Jain literature is mostly written in this language. Pali can be regarded as a form of Prakrit which was in vogue in Magadha. Most of the early Buddhist literature is written in Pali. With the Buddhist monks it reached Sri Lanka where it is a living language. The Ashokan edicts are also in Pali.

Said to have been composed after the death of the Buddha, the Pali texts *Tripitakas* ("Three Baskets") tell us about the state of affairs in India at the time of the Buddha and the 16 *Mahajanapadas*. *Tripitakas* is the common name given to Buddhist canonical literature and their commentaries in Pali. The *Tripitakas* survive in Pali, Japanese, Chinese and Tibetan versions. They consist of three books:

i) the Sutta Pitaka,

- ii) the Vinaya Pitaka, and
- iii) the Abhidhamma Pitaka.

The *Sutta Pitaka* contains the discourses of Buddha on various doctrinal issues in stories, poems and dialogue form. The *Vinaya* is about 227 rules and regulations for the monks and nuns of the *sangha*. It includes explanations about the founding of each rule by the Buddha. It contains information about his life, events and the story of Buddhism down to the 1st schism. It was written in 386 BCE.



Illustrated Frontispiece of the Japanese Version of *Vinaya Pitaka*, Japan, c. 12th Century. Credit: Hiart. Creative Commons CC0 1.0 Universal Public Domain Dedication.

The *Abhidhamma Pitaka* (literally "higher *Dhamma*") contains matter related to the Buddhist philosophy in accordance with the *Theravada* school and contains lists, summaries and questions and answers. The *Sutta Pitaka* contains five *Nikayas* of which the *Khuddaka Nikaya* is a collection of discourses. It contains *Theragatha*, *Therigatha* and *Jatakas* which are important sources for a historian. The *Jatakas* contain stories – more than 550 in number – about the former births of the Buddha in the form of a *dev*, man, animal, fairy, spirit or a mythological character. They are ascribed some historical importance as they are related to the previous births of the Buddha. Many stories and motifs were borrowed from pre-Buddhist and non-Buddhist oral vernacular traditions. Due to their popularity they were transformed into sculptural *bas* reliefs at Bharhut, Sanchi, Nagarjunakonda and Amaravati. They are important as they provide a glimpse into the history of Buddhism and popular Buddhism.

Theragatha ("Verses of the Elder Monks") and Therigatha ("Verses of the Elder Nuns") are a collection of poems, with verses which were narrated by the early members of the Buddhist sangha. Therigatha is the first surviving poetry in India supposed to have been composed by women. Hence, it is important for not only Buddhism but also for gender studies. The gathas of the Therigatha strongly support the view that women are equal to men in terms of spiritual attainment.

The non-canonical Buddhist literature includes *Milindapanha* ("Questions of Milinda") dated around 1st century BCE-1st century CE. It consists of a dialogue between the Indo-Greek king Menander and a Buddhist monk Nagasena. The Sinhalese chronicles *Mahavamsha* ("Great History") and *Dipavamsha* ("History of the Island") entail the history of Buddhism from the time of the Buddha's Enlightenment.

The Jain literature constitutes another important category of texts which are in a form of Prakrit called the *Ardhamagadhi*. It contains information which helps us in reconstructing the history of different regions of ancient India. The literature of the *Digambaras* is in *Jain Shauraseni* while the *Shvetambara* literature is in two dialects of *Ardhamagadhi*. Mahavira's teachings to his disciples were 1st compiled in 14 *Purvas*. In *c*. 4th century

BCE Sthulabhadra convened a great council at Pataliputra and reconstructed the Jain canon in $12 \, Angas$. Later in c. 5^{th} century CE at a council at Valabhi the existing texts were formalized and presented in a written form.





LEFT: Depiction of *Mahakapi Jataka* at Bharhut. Credit: G41m8. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mahakapi_Jataka_in_Bharhut.jpg).

RIGHT: Sibi Jataka: during one of his previous lives the Buddha offers his own flesh to a hawk to ransom the life of a pigeon. Piece Dated Between c. 100-299 CE, Found at Gandhara (now in Pakistan). Preserved in the British Museum, London. Photographer: Marie-Lan Nguyen. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Sibi_Jataka_BM_OA_1912.12-21.1_n01.jpg).

The scriptures accepted by the *Shvetambaras* are:

- i) 12 Angas,
- ii) 12 Upangas,
- iii) 10 Prakirnas,
- iv) 6 Chedasutras,
- v) 2 Sutras, and
- vi) 4 Mulasutras.

They deal with code of conduct, various legends, Jain doctrines and metaphysics. The *Digambaras* believe that most of the original *Purvas* are lost. Hence, they do not accept the scriptures accepted by the *Shvetambaras*. They use the scriptures written by the great *Acharyas* but based on the original teachings of Mahavira for their religious practices. We can use the Jain literature for information on history and doctrine of Jainism, doctrines of the rival schools, life stories of saints and lives of monks in the Jain *sangha*.

Check Your Progress Exercise 1

1)	Discuss briefly the two categories into which the sources for knowing ancient Indian history have been divided.
2)	What is a <i>Veda</i> ? Write a short note on the four <i>Vedas</i> .

3)	Thre	ow light on the <i>Puranas</i> as a historical source.		
	•••••		•••••	
			• • • • • • • • • • • • • • • • • • • •	
4)	Mar	k the following statements as right (\checkmark) or wrong (\times) .	•••••	
	i)	The archaeological evidence has acquired significance for the ancie only.	nt perio	od)
	ii)	There has been much debate about the reliability of ancient Indian for the history of India.	iteratui (re)
	iii)	There are six <i>vedangas</i> and they were evolved for a proper under of the <i>Vedas</i> .	standin (ng)
	iv)	The <i>Vinaya Pittika</i> is a collection of 220 rules and regulations for the of the <i>sangha</i> .	member (rs)
	v)	The Harshacharita was written by Kalidasa.	()
	vi)	It is generally held that there have been constant interpolations in t	he epic (ss.
	vii)	Kalhana's Rajatarangini is a chronicle of the kings of Rajasthan.	()
	viii)	<i>Therigatha</i> is the 1 st historical literary source of India supposed been composed exclusively by women.	to hav	/е)
	ix)	The <i>Tripitakas</i> survive in the Pali canon alone.	()
	x)	Vishakhadatta's play <i>Devichandraguptam</i> throws light on the reignored Gupta king Samudragupta.	gn of th (ne)

1.3 ARCHAEOLOGICAL SOURCES



Mauryan Ruins of Pillared Hall at Kumrahar of Pataliputra laid bare by Excavations. Credit: 1912-13 Archaeological Excavation by ASIEC. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mauryan_ruins_of_pillared_hall_at_Kumrahar_site_of_Pataliputra_ASIEC_1912-13.jpg).

Archaeology is a branch of knowledge that studies material culture to understand the past. It has a close relation to the field of history. Sculptures, pottery remains, bone fragments, house remains, temple remnants, floral remains like charred grains, coins, seals, inscriptions etc. constitute the material culture that forms the subject-matter of archaeology. It is the archaeological evidence that has permitted us to study the prehistoric period. In India even the proto-historic period has been reconstructed on the basis of archaeology. However, we cannot limit the usefulness of archaeology to these periods alone; it is significant even for those periods which have the written evidence and which fall in the sphere of history proper. For example, the history of the Indo-Greeks has been reconstructed solely on the basis of coins.

The utilization of archaeological sources in reconstructing India's past is only about two centuries old. It was held till the 1920s that the Indian civilization was considered to have begun from about c. 6^{th} century BCE. But, with the excavations at Mohenjodaro and Harappa the antiquity of Indian civilization has gone back to about 5000 BCE. The finds of the prehistoric artifacts have shown that human activities had started here as early as two million years ago. Similarly, it was believed that most of the Indian subcontinent came to be populated only around the later part of the 1^{st} millennium BCE, but now with the help of archaeology we know that it was populated sparsely and thickly right from the Stone-Age periods.

Archaeological methods like excavation and exploration are important as they provide significant amount of data on trade, state, economy, societal aspects, religion and such mundane aspects like how people lived, ate and clothed themselves. The excavations have provided immense amount of data bearing on the Palaeolithic, Mesolithic, Neolithic, Chalcolithic, Iron age, Megalithic and many other cultures. Since the Harappan script is still undeciphered the information about this period has been solely obtained from archaeology. It tells us about the origin, spread, settlement patterns, town planning, trade, polity, economy, agriculture, hunting, crops, agricultural implements, technology, beads, seals, fire altars, religion and how this civilization declined.

Archaeological Source

A varied range of archaeological finds are useful for reconstructing Indian history. For example, excavated remains, standing monuments, sculptural reliefs and inscribed records. Through ground reconnaissance sites are identified which include methods like consultation of the documentary sources, place name evidence etc. Through aerial surveying which includes airborne or space-borne remote sensing those sites which can often be missed on the ground can be located. Sites once marked on the landscape can be further compared and systematically studied to arrive at settlement patterns, site formation processes and geo-archaeological analysis. A large number of experts are involved in the study of archaeological artefacts such as palaeontologists (who study fossilized animal bones), palynologists (who study and analyse fossil pollen), geo-archaeologists (who study earth formation and the soil and sediment patterns), archaeo-zoologists (who study, identify and analyze faunal species from sites); ethno-archaeologists (who study living people and tribes to arrive at hypothesis regarding the past) and many more.

Excavation

Excavations are of two types:

i) Vertical

ii) Horizontal.

Vertical excavations are conducted with the aim to reveal stratification and are cut into deep deposits. Horizontal excavations emphasize the horizontal dimension by opening up large areas of a particular layer to reveal the spatial relationships between artefacts and features in that layer. Many excavators employ a combination of excavation strategies. Through systematic studying of the artefacts which also involves lab analysis the archaeologists arrive at conclusions regarding past life-ways and events. Today, a range of material which was earlier not considered worth studying is considered important, such as the recovery of burnt seeds, plant material, pollen remains and faunal remains (to reconstruct the past ecosystem, diet); teeth and bones of both animals and humans (to reconstruct diseases and diet patterns in the past) etc.

Today the archaeologists have at their disposal a large number of dating methods through which they assign age to a particular artefact. Radiocarbon dating is the most popular and can date the most commonly occurring artefacts in the deposit such as charcoal, wood, seeds, plant material, human and animal bone remains. Other absolute dating techniques are also used; for example, Thermoluminiscence dating (dates pottery, burnt terracotta); Dendrochronology (assigns age to the different rings of a tree log) etc.

We have benefitted from the other branches like epigraphy and numismatics etc. We could not have known about most of the Indo-Greek, Shaka-Pahlava and Kushan kings without numismatic sources. Similarly, Ashoka's views on *dhamma* and the conquests of Samudragupta etc. would have remained unknown without their epigraphs.

1.3.1 Coins



Hoard of Mauryan Punch-Marked Coins. Credit: Classical Numismatic Group, Inc. http://www.cngcoins.com. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Hoard_of_mostly_Mauryan_coins.jpg).

Coins have been found either in excavations as archaeological finds or as hoards. They are mostly found in hoards, most of which have been discovered while digging a field or excavating the foundation for the construction of a building, making road etc. The study of coins is called **Numismatics**. This is considered as the 2nd most important source for reconstructing the history of India; the 1st being inscriptions. Several hundred thousands of coins have been found and deposited in different museums of India and abroad. The coins found in systematic excavations are less in number but are very valuable because their chronology and cultural context can be fixed precisely.

A coin is a metal currency and has a definite shape, size and weight standard. It also bears the stamp of the issuing authority. The side of the coin which carries the message is called obverse and the opposite side is reverse. The Second Urbanization (*c*. 6th century BCE) in the early Indian history is the 1st instance for which we find both the literary and archaeological evidence of coinage. This was the time of the emergence of

states, growth of towns and cities and spread of agriculture and trade. Coins in early India were made of copper, silver, gold and lead. Coin moulds made of burnt clay, dating to the Kushan period (first three centuries of the Common era), have been found in hundreds. They point to the increased commerce during this time. The post-Mauryan coins were made of lead, potin, copper, bronze, silver and gold. They were issued in large numbers, pointing to the increased volume of trade during this period.

Most of the coins belonging to the major dynasties have been catalogued and published. The earliest coins in the subcontinent are the **Punch-Marked coins**. These are mostly of silver and sometimes of copper. Some gold Punch-Marked coins are also reported but they are very rare and their authenticity is doubtful. The Punch-Marked coins bear only symbols on them. Each symbol is punched separately which sometimes overlaps one another. These have been found throughout the country: from Taxila to Magadha to Mysore or even further south. They do not bear any inscription or legend on them. With the expansion of the Magadhan empire the Magadhan type of Punch-Marked coins replaced those which were issued by the other states.

Next, the Indo-Greek coins are also in silver and copper and the gold ones are rare. They show beautiful artistic features on them. The portrait or bust of the king on the observe side appears to be real portraits. On the reverse some deity is depicted. It is through the coins only that we know about more than 40 Indo-Greek rulers who ruled in small regions of north-western India. As mentioned earlier, we know about several Shaka-Pahlava kings about whom we would have no information from any other source.



Deities on Indo-Greek Coins. Source: 'Alexander the Great and Bactria: The Formation of a Greek Frontier in Central Asia'. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Deities_on_the_coinage_of_Agathokles.jpg).

The Kushanas issued their coins mostly in gold and copper, rarely in silver. Their coins are found in most parts of north India up to present-day Bihar. The imperial Guptas issued mostly gold and silver coins but the gold coins are more numerous. Indian influence can be seen on them from the very beginning. The coins of Vima Kadphises bear the figure of Shiva standing beside a bull. In the legend on these coins the king calls himself Maheshvara i.e. a devotee of Shiva. Kanishka, Huvishka and Vasudeva etc. all have this depiction on their coins. We find many Indian gods and goddesses depicted on the Kushan coins besides many Persian and Greek deities.

Though the earliest coins carried only symbols the later ones had figures of the kings, divinities and also mention their dates and names. For example, the western Kshatrapa coins give dates in the *Shaka* era. The area of the circulation of coins has enabled us to reconstruct the history of several ruling dynasties. The coins offer valuable information on political organization. For instance, the coins of Yaudheyas and Malavas carry the legend 'gana' which tells us about their non-monarchical form of polity. The image of a ship on the Satavahana coins of the Deccan bears testimony to the significance of maritime trade.



A Gupta Gold Coin Depicting Queen Kumaradevi and King Chandragupta I. Location: British Museum, London. Credit: Uploadalt. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Queen_Kumaradevi_and_King_Chandragupta_I_on_a_coin.jpg).

The Guptas appear to have succeeded the Kushanas in the tradition of minting coins. They completely Indianised their coinage. They also issued a number of gold coins. Known as *dinaras* they were well-executed die-struck coins. The obverse depicts the reigning king in various poses: the kings are depicted engaged in activities like hunting a lion or rhinoceros, holding a bow or battle-axes, playing musical instrument or performing the *Ashvamedha Yajna*. The coins of Samudragupta and Kumaragupta I show them playing the *vina*.

In the post-Gupta period the gold coins declined in number and purity. This became the basis of the highly contested Feudalism theory of R. S. Sharma who believed that the debasement of coinage and the increased use of *cowries* point to the decline of trade and commerce in this period.

1.3.2 Inscriptions

One of the most important and reliable sources for writing history are the inscriptions. An inscription, being a contemporary document, is free from later interpolations. It comes in the form it was composed in and engraved for the 1st time. It is almost impossible to add something to it at a later stage, as we generally find with the works written on soft materials like birch bark, palm leaf, paper etc. which were frequently required to be copied because the old manuscripts became fragile with the course of time. At the time of copying some errors did creep in or, sometimes, even few additions were made. This is not possible with inscriptions.

The study of inscriptions is called **Epigraphy**. They are carved on seals, copper plates, temple walls, wooden tablets, stone pillars, rock surfaces, bricks or images. The script of the inscriptions also helps a historian in many ways. The oldest inscriptions are in the Harappan script of c. 2500 BCE which is still un-deciphered. The writing is carved on the Harappan seals but so far no attempt has been successful at deciphering it.

The earliest deciphered inscriptions are the Ashokan edicts which have been found on the rock surfaces and stone pillars all through the subcontinent. These are found written in four scripts. In his empire in the present-day Afghanistan he used Aramaic and Greek scripts for his edicts. In the Gandhara region *Kharoshthi* script was used. *Kharoshthi*

evolved on the *Varnamala* system of the Indian languages and is written from right to left. The *Brahmi* script was used for the rest of his empire: from Kalsi in the north in Uttaranchal up to Mysore in the south.

After Ashoka the *Brahmi* script was adopted by the rulers of the succeeding centuries. The most interesting thing about it is that its individual letters were modified century after century and through this process all the scripts of India including Tamil, Telugu, Kannada and Malayalam in the south and Nagari, Gujarati, Bengali etc. elsewhere have developed from it. This modification in the form of individual letters has an advantage. It has made roughly possible to ascertain the time/century in which the particular inscription was written. The study of the development of scripts is called **Palaeography**.

The credit to complete the chart of Ashokan alphabets goes to James Prinsep. After this the study of epigraphs became a subject in itself. He was a civil servant in the employ of the East India Company in Bengal. The Ashokan inscriptions are a class in itself. Recorded in the different regnal years of his reign they are called Edicts because they are in the form of the king's order/desire. They also give a glimpse of his image and personality as a benevolent king concerned with the welfare of not only his subjects but also of the entire humanity.

The Ashokan inscriptions are in a fairly developed script and it is assumed that writing must have existed in the earlier period too. Potsherds with short inscriptions have been found in excavations at Anuradhapura in Sri Lanka which can be dated to the pre-Mauryan period of c. 4^{th} century BCE. The earliest Sanskrit inscriptions appeared in c. 1^{st} century BCE. The Junagarh Rock inscription of Rudradaman is considered as an early example of chaste Sanskrit written in mid 2^{nd} century CE. The early inscriptions were a mixture of Prakrit and Sanskrit which by c. 5^{th} century CE were replaced by Sanskrit as the language of the royal inscriptions.

The inscriptions are of various kinds. The Ashokan inscriptions were royal orders pertaining to social, religious and administrative matters addressed to the officials or people in general. The Lumbini pillar inscription of Ashoka is a commemorative inscription as it records his visit to the Buddha's birthplace. Then, there are memorials like the *sati* stones or hero stones, some of which carry inscriptions. The donative inscriptions which record the erection of a temple or a shrine have been found in hundreds in the Deccan and south India in the early medieval period.

Besides these, we have several thousand inscriptions in the forms of royal land-grants engraved on copper plates. These are donative documents which record grants of land and other items to the *brahmanas* and other beneficiaries. Though these land-grant inscriptions deal with the sale or donations of lands to temples, deities, the *brahmanas* and so on, most of the times they contain also details of genealogy of donors and donee and other economic information. These, thus, become a great source of political, social and economic history. From them we also came to know about the grant of lands, free from all the taxes, to the learned *brahmanas*. These were called the *Agraharas*.

The inscriptions which eulogize their patrons begin with a *prashasti*. The examples are the Hathigumpha inscription of Kharavela – the 1st century BCE-1st century CE king of Kalinga (Odisha) – and the Allahabad Pillar inscription of the Gupta king Samudragupta. Inscriptions of the Kshaharatas, Shaka-Kshatraps and Kushanas adopt Indian names within two or three generations. These inscriptions show them being engaged in social and religious welfare activities. As we learnt earlier, Sanskrit came to occupy a prime

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place since the Gupta period. The Allahabad Pillar Inscription enumerates the achievements of Samudragupta. But for this sole inscription this great Gupta king would have remained unknown in the history of India. Most of the Gupta epigraphs give genealogy. This became the practice of the subsequent dynasties. They took the opportunity to give an account of their conquests and achievements of their predecessors including the mythology of their origins. The Chalukya king Pulakeshin II gives a dynastic genealogy and achievements in his Aihole inscription. Similarly, the Gwalior inscription of Bhoja gives full account of his predecessors and their achievements.

Some inscriptions record the construction of a dam, reservoir, tank, well or charitable feeding houses. The Junagadh (Girnar) inscription of Shaka ruler Rudradaman records the construction of a water reservoir called Sudarshana lake during the time-period of Chandragupta Maurya, its completion during the reign of Ashoka and its repair in c. $2^{\rm nd}$ century CE. Apart from these different kinds of inscriptions we also find miscellaneous types such as labels, graffiti, religious formulae and writing on seals etc.

The inscriptions are a good source of political, social and economic history. They are valuable tools for the historian as they tell us about contemporary events and common people. Their spread is taken as an indicator of the reigning king's domain. Many inscriptions contain useful information about genealogy, dynastic details and sometimes, names of even those kings who have been missed out in the main genealogies. The land grants of the Pallava, Chalukya and Chola period inform us about the contemporary revenue systems, agricultural details and political structures.

Inscriptions have many more uses. For example, they help us to date the sculptures on which they occur, give us information about the extinct religious sects like the *Ajivikas*, tell us about historical geography, history of iconography, art and architecture, history of literature and languages, and even the performing arts like music. They are more reliable than the literary texts as they are not always religious in nature.

1.3.3 Monuments

In addition to the epigraphic and numismatic sources there are many other antiquarian remains which speak about our past. The temples and sculptures are found all over the country right from the Gupta period up to recent times. These show the architectural and artistic history and achievements of Indian culture. Large caves, like at Ajanta and Ellora, were excavated in the hills in western India which constitute *chaityas* and *viharas*. Large temples have been carved out of rock like the Kailash temple of Ellora and the *rathas* at Mamallapuram. The monuments of medieval period show the grandeur and riches enjoyed by the ruling class. Also, they throw light on the regional styles of architecture, influences from different areas etc.

The archaeological excavations also brought to light the townships of Taxila, Kaushambi, Kashi (Rajghat), Ayodhya, Vaishali, Bodhgaya, etc. belonging to the Buddha's time. All of these places except Taxila are said to have been visited by the Buddha in c. $6^{\rm th}$ century BCE.





LEFT: The Kailash Temple at Ellora Caves, Aurangabad, Maharashtra. ASI Monument No. N-MH-A51. Credit: Rashmi.parab. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Kailas_Temple_at_Ellora_Caves.jpg).

RIGHT: The Temple of *Pancha-Rathas* (Five-*Rathas*) at Mamallapuram, Chennai, Tamilnadu. Credit: Howard Banwell. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Five Rathas Mamallapuram.JPG).



Archaeological Remains of a Monastery at Kaushambi (Prayagraj District, Uttar Pradesh). Credit: Vinod26Jan. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ghoshitaram_monastery_in_Kosambi.jpg).

1.4 FOREIGNERS'ACCOUNTS

Many travellers came to India as pilgrims, traders, settlers, soldiers and ambassadors. They have left behind accounts of places they visited and things they saw. If studied with due caution these accounts give a lot of valuable historical information. The Greek writers mention Sandrokottas who is said to have met Alexander as a young man. In the 18th century William Jones identified Sandrokottas as Chadragupta Maurya which formed the basis of Mauryan chronology.

Ambassadors were sent to Pataliputra by Greek kings. Some of them were Megasthenes, Deimachus and Dionysios. Seleucus's envoy Megasthenes wrote *Indica*: an account of his stay at the court of Chandragupta Maurya. Though this text is no longer present the subsequent writers refer to certain portions of it and it has been possible to reconstruct the administrative structure, social classes and economic activities of the Mauryan period. Megasthenes and so also the accounts of those who accompanied Alexander have been lost and are available only in fragments.

The Greek and Roman accounts give useful information about the Indian Ocean trade in early India. An anonymous Greek author settled in Egypt wrote **Periplus of the Erythrean Sea** (c. 80-115 CE) on the basis of his personal voyage of Indian coast in about 80 CE. He gives valuable information about Indian coasts. Another writer Ptolemy wrote a geographical treatise on India in 2^{nd} century CE (c. 150 CE). The **Periplus of**

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the Erythrean Sea and **Ptolemy's Geography**, both written in Greek, give information about the geography and ancient trade of India. The early Greek and Latin works by Strabo, Arrian, Pliny the Elder tell us about the Oceanic trade. Arrian wrote a detailed account of the invasion of India by Alexander on the basis of information from those who accompanied the campaign.

Most of the Greek writings about India are based on secondary sources, resulting in numerous errors and contradictions. Therefore, it is necessary to be cautious when using them. The Greeks were ignorant of the Indian languages and the customs of the country and their information is full of unbelievable facts and fancies. For instance, Megasthenes states that there were seven castes in India during the time of his stay; most plausibly confusing "castes" with "occupational classes".

India figures in the foreign inscriptions like those of Darius. Herodotus and Ctesias got their information about India through the Persian sources. Herodotus in his "**Histories**" gives us much information about Indo-Persian relations.

The Chinese travellers visited India from time to time. They came here as Buddhist pilgrims and therefore, their accounts are somewhat tilted towards Buddhism. Mention may be made of Fa-Hsien/Fa-Hien who visited India in the 5th century CE, and Hsuan Tsang and I-Tsing who came in the 7th century. These Chinese Buddhist monks have left behind fairly detailed travel accounts which have been translated into English. They visited many holy places and Buddhist shrines. Fa-Hsien's travels lasted from 399-414 CE and were confined to northern India. Hsuan-Tsang left his home in 639 CE and spent over 10 years travelling in India. Fa-Hsien has described the political, social, religious and economic conditions during the Guptas and Hsuan Tsang, those during Harshavardhan's times.





LEFT: Fa-Hien at the Ruins of Ashoka's Palace. Credit: Hutchinson's story of the nations. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Fa_Hien_at_the_ruins_of_Ashoka_palace.jpg).

RIGHT: A Depiction of the Chinese Monk Xuan-Zang/Hiuen-Tsang on his Journey to India. Location: Tokyo National Museum. Credit: Alexcn. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Xuanzang_w.jpg).

In the later periods some Arabs also left their accounts about India. These Arab scholars such as Abu Rihan better known as Al-Beruni, the most famous among them, who belonged to the region of Khive (modern Turkmenistan) and was a contemporary of Mahmud of Ghazni, visited India to learn about its people and study Indian texts in their original language. His observations are based on his knowledge of Indian society and culture which he acquired through literature. For this he studied Sanskrit. However, he does not give any political information of his times. But, his *Tahqiq-i-Hind* is truly encyclopedic in nature and covers topics like Indian scripts, sciences, geography, astrology, astronomy, philosophy, literature, beliefs, customs, religions, festivals, rituals, social norms and laws. His work is a valuable historical source for the 11th century India and he was the 1st to have identified the initial year of the Gupta era. The Arabs and Indians were involved in the Oceanic trade and the Arab accounts such as that of Sulaiman mention India.

With the beginning of the 12th century we start getting the official histories commissioned by rulers or even written by courtiers. The earliest such example is *Tabkat-i-Nasiri* by Minhaj-ud-din Siraj. Subsequently, we find such important sources of medieval history as:

- Tarikh-i-Firuz Shahi by Zia-ud-din Barani,
- Gulshan-i-Ibrahimi by Mahammad Quasim Farishta,
- Ain-i-Akbari and Akbarnama by Abu'l Fazal,
- Tabqat-i-Akbari by Nizammuddin Ahmad, and so on.

For the period of Shahjahan and Aurangzeb also we have enough court accounts. Indeed, for the modern period there is no dearth of historical material in several Indian languages as well as in English, French and Dutch.

Check Your Progress Exercise 2

()		at is archaeology? Enumerate the main archaeological sources on struction of ancient Indian history.	s for t	he
				. \
2)	Mai	rk the following statements as right (\checkmark) or wrong (\times) .		
	i)	The history of the Indo-Greeks has been reconstructed solely on the their coins.	e basis (of)
	ii)	The western Kshatrapa coins give us dates in the <i>Vikram</i> era.	()
	iii)	The earliest punch-marked coins are only in silver.	()
	iv)	Megasthenes spent time in the court of Pushyamitra Shunga.	()
	v)	The tax-free lands granted to the <i>Brahamanas</i> were called <i>Agrah</i>	ıaras.	
			()
	vi)	The Junagarh Rock inscription of Rudradaman was in a mixture of and Sanskrit.	of Prak (crit
	vii)	The Periplus of the Erythrean Sea (c. 80-115 CE) was written in C	Greek.	

)

	viii)	The coins of Vima Kadphises bear the figure of Vishnu standing beside a bull. Sources of A Indian F	
	ix)	The Ashokan inscriptions were first deciphered in 1837 by James Princep.	
	x)	The Gupta kings issued a number of gold coins known as <i>dinaras</i> . ()	
3)		rite a note on the historical development of coinage in ancient India from the ne of the Buddha till the Guptas.	
4)	Eluc	ucidate what you understand by the <i>prashasti</i> inscriptions.	
5)		row light on the historical significance of the travel accounts left by the Chinese addhist pilgrims Fa-Hien and Hsuan Tsang.	
	Duu	dunist prigrims ra-rhen and risuan rsang.	
	•••••		
	•••••		

1.5 **SUMMARY**

In this Unit you learnt about the different kinds of sources that historians use to study the past. Both archaeology and literary texts constitute important categories. Unfortunately, many of the archaeological excavations have not been published and there are thousands of inscriptions which await study. As a result, our information about the past is still not complete.

Archaeological excavations and explorations have shown that most parts of India were occupied during the Stone-Age period and the antiquity goes back to 1.6 million years. Much research has been done in the field of prehistory which shows that the human activities started in the subcontinent as early as two million years ago. Even in the Thar desert the human occupation goes back to about 90,000 years.

The discovery of the Harappan sites and the cities of Mohenjodaro and Harappa pushed back the antiquity of Indian culture and civilization by several thousand years. Similarly, the excavations and explorations in various parts of India have thrown important light on the history of agriculture in India. Now we know that agriculture began in India almost 8000 years ago. Also, the archaeological discoveries have shown that tradition of rock paintings in India goes back to more than 12,000 years.

Another important issue is that the historical texts and literary evidence cannot be dated with certainty. This is a cause for worry. Since much of ancient Indian literature is concerned with ritual and religion it becomes imperative to study them with caution and sift through the various layers to have some kind of temporal control.

1.6 KEY WORDS	
Archaeology	: The study of material remains to understand the past.
Artifact	: An object made by a human being, typically one of cultural or historical interest.
Brahmanical	: Of or pertaining to the Brahmins/ <i>Brahmanas</i> , their doctrines, precepts, ethos or worship.
Canonical	: If something has canonical status it is accepted as having all the qualities that a thing of its kind should have; prescriptive; normative.
Chalcolithic Culture	: Culture which represents an age when both stone and copper tools were used.
Classical	: Representing and showcasing an exemplary standard within a traditional and long-established form or style; relating to the ancient Greek of Latin literature, art or culture.
Critical edition	: Close reading and detailed analysis of a literary work.
Digambaras	: Members of one of the two main sects of Jainish which was formed as a result of the doctrina schism in c. 80 CE and continues till date in southern India. The male ascetic members of this sect reject property-ownership and do not wear clothes.
Eulogy	: A speech or piece of writing that praises someone or something highly; a kind of tribute.
Fratricidal	: Relating to or denoting conflict within a family or organization.
Harappan Civilization	: The bronze-age civilization which flourished (c. 3300-1300 BCE; mature period c. 2600-18800 BCE) mainly in the north-western regions of the Indian subcontinent: modern day India (Gujarat Haryana, Punjab, Rajasthan, Uttar Pradesh Jammu and Kashmir states) and Pakistan (Sindh Punjab and Baluchistan provinces), having mair cities like Harappa, Mohenjodaro, Lothal Kalibangan among many others.

Interpolation

: Later addition, usually in a text.

Kali age

: The last of the four ages (yugas) the world goes

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through as part of the cycle of time described in the Sanskrit scriptures; the other ages being *Satya*, *Treta* and *Dvapara*. It is associated with the demon Kali and is not to be confused with the goddess Kali. The "Kali" of Kali age means "strife", "discord", "quarrel" or "contention". According to the Puranic sources Krishna's departure marks the end of the *Dvapara Yuga* and the beginning of the *Kali* age.

Litany

: A tedious recital or repetitive series.

Megalithic

: Associated with the prehistoric monuments, usually burials, made of or containing large/massive stones.

Mesolithic

: The intermediate period of the Stone-Age between the Palaeolithic and Neolithic periods, characterized by the use of microliths (small, fine stone tools).

Neolithic

: The later period of the Stone-Age when ground or polished stone weapons and implements were used.

Nikaya

: It is a Pali term meaning "volume", "collection", "assemblage", "class" or "group". It is commonly used to refer to the Buddhist texts of *Sutta Pitaka* but can also be used to denote the monastic divisions of *Theravada* Buddhism.

Paleolithic

: The early phase of the Stone-Age, lasting about 2.5 million years, when primitive stone implements were used.

Pathas

: "Recitations" or ways of chanting the Vedic *mantras*.

Prehistoric Period

: The period between the use of the first stone tools about three million years ago by the Hominins and the appearance of the earliest writing systems about 5000 years ago.

Proto-historic Period

: The transition period between prehistory and history during which a culture or civilization has not yet developed its own writing but the other cultures have noted its existence in their writings. Citing an example, the Celts and the Germanic tribes in Europe are regarded to have been proto-historic when they began figuring in the earliest Greek and Roman sources.

Schism

: A split/division between strongly opposed sections/parties caused by the differences in opinion or belief.

Shvetambaras

: The ascetic adherents of this sect of Jainism wear

white clothes.

Sift : Examining something thoroughly by isolating it

from the other parts.

Silo : A tall tower or pit on a farm used to store grain.

Temporal : Related to time.

1.7 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

1) Consult Section 1.1

2) See Sub-section 1.2.1

3) See Sub-section 1.2.4

4) i) \times , ii) \checkmark , iii) \checkmark , iv) \times , v) \times , vi) \checkmark , vii) \times , viii) \checkmark , ix) \times , x) \times .

Check Your Progress Exercise 2

- 1) Refer to Section 1.3. Discuss coins, inscriptions and, monuments/monumental remains.
- 2) $i) \checkmark$, $ii) \times$, $iii) \times$, $iv) \times$, $v) \checkmark$, $vi) \times$, $vii) \checkmark$, $viii) \times$, $ix) \checkmark$, $x) \checkmark$.
- 3) See Sub-section 1.3.1
- 4) See Sub-section 1.3.2
- 5) See Section 1.4

1.8 SUGGESTED READINGS

Basham, A. L. (2004). The Wonder That Was India: A Survey of the History and Culture of the Indian Sub-continent Before the Coming of the Muslims. Vol. 1, Pan Macmillan Limited.

Sharma, Arvind (2003). Did the Hindus Lack a Sense of History? *Numen*, vol. 50 (2), pp. 190-227, Brill.

Sharma, R. S. (2005). *India's Ancient Past*. Oxford University Press (OUP), New Delhi.

Singh, Upinder (2008). A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century. Dorling Kindersley (India) Pvt. Ltd.

Thapar, Romila (2000). Historical Consciousness in Early India. *Cultural Pasts: Essays in Early Indian History*, Oxford University Press, New Delhi, pp. 155-172.

——— (2000). The Oral and Written in Early India" in *Cultural Pasts: Essays in Early Indian History*, Oxford University Press, New Delhi, pp. 195-212.

——— (2002). *The Penguin History of Early India: From the Origins to AD 1300*. Penguin Books India Pvt. Ltd., New Delhi.

Varadarajan, Lotika (1979). Oral Testimony as Historical Source Material for Traditional and Modern India. *Economic and Political Weekly*, vol. 14, No. 24, pp. 1009-1014.

UNIT 2 ARCHAEOLOGY AS A SOURCE AND PROMINENT ARCHAEOLOGICAL SITES*

Structure

- 2.0 Objectives
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2.0 OBJECTIVES

After reading this Unit, you will be able to learn:

- the nature of archaeology as a source for reconstruction of the past;
- what is an archaeological site and how it is formed;
- the methods of fieldwork and data collection in archaeology;
- about various techniques used in the examination of archaeological evidence and what they tell us about the past; and
- about prominent ancient archaeological sites in the Indian subcontinent.

2.1 INTRODUCTION

History and archaeology both share the same aim i.e. reconstruction of the past. However, they differ in the sources and methods they use to reconstruct the past. Unlike history which uses written sources for data, archaeology studies the material remains that have been created and used by humans since their appearance on earth. These material

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remains encapsulate the information about human behaviour and experience. These remains cover a wide range of things which people used and discarded, such as stone tools, structures, bricks, pottery, metal objects, sculptures, coins, inscriptions and so on which are preserved in the archaeological record both on the ground and under it. Among these the studies of coins and inscriptions have evolved their own sub-disciplines called numismatics and epigraphy respectively.

The human past is broadly divided into two parts:

- i) the historic, and
- ii) the pre-historic period.

The historic period begins from the time when writing appeared about 5000 years ago in different regions. Later on, as writing evolved it was used in a variety of ways such as maintaining records and in literary writings. However, the literate period is a very small part of the human past which helps us to investigate only the last few thousand years. Prehistory, therefore, begins from the origins of humankind over three million years ago. However, archaeology is not restricted to prehistory but studies all material remains left by humans through time. So, archaeologists study everything: from prehistoric tools to the items of daily use in the present.

The History of Archaeology

Every society engages with its past. The origins of archaeology can be traced to the fascination for beautiful old things and treasure-hunting to acquire such things. In the early stages of evolution of archaeology the Danish scholar C. J. Thomsen devised in 1817 the Three Age System of Stone age, Bronze age and Iron age. Archaeology of this time comprised of text-based archaeology and prehistoric archaeology that was not based on texts. This has, today, multiplied into several disciplines such as environmental archaeology, bio-archaeology, geo-archaeology and so on.

In India too archaeology had similar beginnings. It started with the adventurers' explorations during the colonial period that was followed by antiquarianism in which the sites and artefacts were studied without the rigorous methods of excavation and contextual analysis. In the beginning there was a dominance of text-aided archaeology. Sir Alexander Cunningham surveyed the length and breadth of northern part of the Indian subcontinent, trying to identify the cities and settlements mentioned in the accounts of the Chinese pilgrims such as Xuan Zang. In 1861 the Archaeological Survey of India (ASI) was established with Cunningham as its first Director-General. In the last decades of the 19th century a number of areas were surveyed, monuments were mapped and recorded. In the early 20th century with the efforts of Viceroy Lord Curzon due to his immense interest in archaeology and the respect for archaeological remains in the Indian subcontinent the Ancient Monuments Preservation Act was passed in 1904 for the preservation of ancient Indian monuments. The ASI conducted explorations and large-scale excavations in the Indian subcontinent under Sir John Marshall and Sir Mortimer Wheeler. After independence the ASI continued expanding its work. At the same time the discipline of archaeology began to be taught in several universities and academic institutions which were also active in the field of archaeological research. Today the ASI is a vast institution. There are also State Archaeological Departments and academic institutions like the Deccan College. Many universities teach archaeology and conduct excavations.

2.2 ARCHAEOLOGICAL SITES AND WHAT THEY ARE MADE OF

Artefacts and Ecofacts

Archaeology bases itself on the study of the artefacts which are portable objects made or altered by humans. They provide important evidence such as the process of their production, the raw material out of which they are made, the technology involved in their production, the use of such objects etc. There is another kind of evidence which is non-artefactual: the organic and environmental remains known as ecofacts which can reveal many aspects of past human activity. They include animal bones, plant remains, soils and sediments etc. They help us understand aspects related to the environmental conditions in which people lived, variations in climate and their effects on humans, what kind of food they ate and so on.

The Archaeological Site

Artefacts, ecofacts, features and structures are found together on the archaeological sites. An archaeological site is a place which contains significant traces of human activity. In other words, these are places where human beings have done some activity in the past. The range of activities performed by humans is very wide: from cave paintings to the building of pyramids, Stonehenge, cities like Mohenjodaro to a small place where hunters-gatherers made their stone tools. Therefore, the investigation of archaeological sites for retrieving information becomes primary task of the archaeologists on the basis of which the past human life ways are reconstructed.

Now the question is: how archaeological sites are formed? In other words, how do they arrive at the condition in which the archaeologists discover them? There are two ways in which an archaeological site is formed:

- i) cultural, and
- ii) natural.

These are known as the formation processes. The cultural formation processes mean the activities human beings deliberately do at a place such as making and using artefacts, building houses or abandoning them, digging pits for garbage disposal, discarding things etc. or accidental activities such as the loss of things. The natural formation processes primarily govern the burial of the site through natural events. For example, the forces of nature like wind, water or animal activities bring changes in the nature of things that are present at a site after their abandonment by humans. Wind, sun, rain erode structures away slowly. The wind-borne sand or the sediments brought by the rains are gradually deposited on the site. Sometimes, sites or part of sites are buried by sand deposit caused by flooding.

The natural formation processes, also, are the agents which, sometimes, help in survival of the archaeological record. For example, the city of Pompeii in Italy was buried under the ash of volcano Mount Vesuvius when it erupted in 79 CE. The volcanic ash preserved the city as it was in 79 CE. Similarly, extreme cold conditions such as those of snowy areas like the Alps or the Arctic, or extremely dry conditions like those found in the deserts or mountains preserve organic materials. The examples include mummies found in the Egyptian pyramids or in the Andes mountains of Peru. Wetland marshy areas also preserve organic materials such as wood, plant products etc. such as at the site of Star Carr in Britain. Tropical climatic conditions with warm temperatures, humid and rainy

climate, acidic soil, high vegetal growth and insect activity do not allow the survival of ecofacts and can hamper the preservation of artefacts as well.





LEFT: An Archaeological Mound, Kalibangan, Rajasthan. Credit: Dr. Deepak K. Nair. RIGHT: An Archaeological Excavation in Progress. Credit: Dr. Deepak K. Nair.

2.3 METHODS: ARCHAEOLOGY IN THE FIELD

Archaeological fieldwork is the first major step in the collection of archaeological evidence. There are two ways through which archaeological evidence is collected at the field:

- i) archaeological exploration or survey, and
- ii) archaeological excavation.

We will explore these below.

2.3.1 Archaeological Exploration

Archaeological exploration involves the investigation of archaeological sites on the basis of surface remains. In other words, the archaeologists investigate the sites without excavating them, on the basis of what is found on the surface. This exercise begins with trying to locate the archaeological sites. This is done by the archaeologists exploring a region or a particular area for finding these sites. For this they use different methods. Initially, the sites used to be identified through aerial surveys (using aeroplanes) by locating high mounds, crop patterns and circles etc. With the advancement of technology now this is done through satellite images and Geographic Information Systems (GIS). Even with the availability of many different ways of surveying the ground-survey is the most prominent method of finding and investigating archaeological sites. One such physical method is village-to-village survey in which a team of archaeologists goes to different villages and enquires about old settlements or remains of the past. This has been extensively used in India. Another method employs a carefully designed plan for a regional survey, dividing the whole area into a grid and subsequent divisions. The archaeologists thoroughly explore all the selected grids or sampled units for any kind of artefactual evidence or traces of human activity. Such intensive explorations help in the discovery of new archaeological sites. In the Indian subcontinent some large-scale archaeological surface surveys were:

- Vijayanagara Research Project (VRP),
- Vijayanagara Metropolitan Survey (VMS),
- Sanchi Survey Project (SSP),
- Two Rains Project etc.

The locations of sites are noted with Global Positioning System (GPS) so that their pattern of distribution can be shown on a map. The locational analysis is significant for understanding why people in the past selected certain areas for settlements. Further, the finds are carefully observed: their locations, nature, quantities are recorded, taking photographs and preparing drawings. Depending on the aims of the survey the artefacts can also be collected as samples for further analysis.

Archaeologists use a battery of scientific techniques to know the past in a better way in both explorations and excavations. In archaeological explorations the techniques such as Ground Penetrating Radar (GPR), Electric Resistivity Survey, Magnetometry are used which help us in knowing the nature of sites and buried structures or features without excavating the site. These techniques are known as "non-destructive" since they do not damage or alter the archaeological record in any way. In recent years the Light Detection and Ranging (LIDAR) method has been very significant in the discovery of buried structures. In this method an aircraft carrying a laser scanner over a particular survey area rapidly pulses laser beams to the ground. It creates an accurate picture of the ground according to its elevation. Through the help of various softwares then the buried structures are identified. This technique is immensely helpful in areas where there is very dense vegetation which is otherwise very difficult to explore. For example, the use of LIDAR has brought to light new structural complexes of Mayan civilization in Mesoamerica and a network of cities of the medieval Khmer Empire in Cambodia otherwise famous for the temple complex of Angkor Wat.

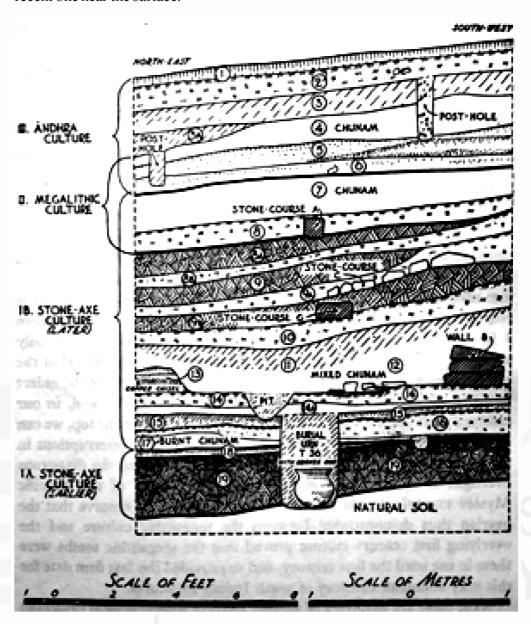
2.3.2 Archaeological Excavation

Surface explorations provide important results which can help us in answering certain questions about the past. However, the artefacts collected from the surface do not belong to their proper contexts as their appearance on the surface is a result of activities that have disturbed the original deposition. For example, erosion by rain, plowing, animal burrowing etc. may lead to displacement of the archaeological deposit near the surface. Therefore, for a deeper understanding of a site or various cultural phases in their contexts archaeological excavation is undertaken. It involves systematically digging of a site to carefully uncover material remains created and used by the human beings in the past.

At the archaeological sites the remains are found of various archaeological cultures. In 1929 V. Gordon Childe defined an archaeological culture as certain types of remains – pots, implements, ornaments, burial rites, house forms – constantly recurring together. These types of remains vary according to time and space. Therefore, they are identified as different archaeological cultures. Archaeological sites may be occupied by a single archaeological culture or in the case of longer occupation, where people lived for thousands of years, several archaeological cultures may be found. Successive occupations of different cultures reflect their chronological sequence. In the Indian subcontinent examples of various archaeological cultures include the Harappan culture, the Painted Grey Ware culture, Jorwe culture etc.

Archaeological excavation primarily employs the concept of stratigraphy to understand the chronological contexts of remains belonging to different periods. Derived from geology, the concept of stratigraphy is based on the process of stratification. In geology the sediments are deposited in layers or strata very slowly one over another. In this process the layer or stratum that was lower is considered to be deposited first and overlying successive layers deposited later. This is known as the **law of superimposition**. At the archaeological sites the strata containing cultural and natural debris build up more quickly than the geological ones but generally follow the law of superimposition.

Therefore, in archaeological sites the first signs of occupation are found at the lowest level and as the deposit reaches the top we see successive occupations with the most recent one near the surface.



Section from Brahmagiri, Karnataka, India, Showing Three Cultural Phases with Overlaps. Credit: Sir Mortimer Wheeler, *Archaeology from the Earth* (1954), Reprinted by Munshiram Manoharlal Publishers Pvt. Ltd., New Delhi, 2004, p. 50.

Depending on the aims of excavators there are two primary ways in which archaeological sites may be excavated:

- i) Horizontal, and
- ii) Vertical.

The underlying notion of this is that broadly contemporary activities take place in wide horizontal space and changes in such activities occur vertically through time. Therefore, if we want to know in detail about a particular phase of the site or how people lived the site may be horizontally excavated. In horizontal excavation a large part of the site is excavated slowly to uncover contemporary structures and activity areas of a particular phase. Conversely, in vertical excavation small areas are excavated but they cut through the deposit down to the level of natural soil or when the site was occupied first. In this way vertical excavations are able to provide a glimpse of chronological changes at the

site through time. In other words, vertical excavations tell us about successive occupation of the site in the different cultural phases. Both types of excavations have their merits and limitations

Archaeological excavation is a destructive process since it requires the removal of deposit to uncover things. It is an irreversible process in which once excavated the archaeological deposit cannot be restored. Therefore, archeologists take utmost care in excavating and recording the details of the evidence. After excavation the finds are processed for further studies.

Excavations cause a variety of material remains to be unearthed from a bygone era. These material remains tell us the kinds of houses people lived in. Several questions may be asked of this data such as:

- Were the structures made of burnt bricks or wattle-and-daub?
- Did they have wells, tanks, bathrooms, toilets, storage spaces, drainage, shrines or places of worship etc. in their settlements?
- What sort of tools did they use?
- Were they engaged in long-distance trade?
- What may have been their social and political systems?
- How did they treat their dead?

These and many more aspects of past human life are brought forth by material remains the people created and used.

The evidence collected through archaeological exploration and excavation helps us immensely in understanding the past. The first process after the collection of artefacts and other remains is classification. Classification is basically making sense of the whole material assemblage by ordering them according to various attributes such as its raw material, dimensions etc. For example, the classification of pottery according to attributes such as size, shape, the clay used, surface treatment and so on helps us in understanding the range of functions they may have served – from cooking and serving to ritualistic use. Similarly, the classification of other objects such as beads, metal objects, stone tools and so on provide us with the quantitative and qualitative information for further analysis.

2.4 ANALYZING THE EVIDENCE

You will now see how the artefacts and ecofacts are studied to draw archaeological conclusions. This section describes how the date of a site is determined, what was traded, the flora and fauna in the surroundings etc.

2.4.1 Dating Methods

The primary question that arises in archaeological research is how old a particular object or a site is? In other words, what time they belong to? Through traditional methods such as typology, stratigraphic sequence and stylistic analysis broad conclusions can be drawn about the chronology. This is known as relative dating. Annual growth of the rings in trees, also, can be used for dating which is known as the Tree-Ring Dating or Dendrochronology. However, with the availability of ever advancing new scientific techniques we are able to now date with much more accuracy. The first breakthrough took place in 1950 when Willard Libby developed a method of dating organic materials



such as wood or bone called the **Carbon-14 Dating**. The most recent and advanced method is the Accelerator Mass Spectrometry (AMS) dating technique which requires a very small sample to produce results. This technique can date organic materials that are up to 50,000 years old. There are other dating techniques such as Potassium-Argon, Uranium-series, Fission track, Thermo-luminescence (TL) and Optical dating, Electron spin resonance (ESR) and so on that use different materials and can provide dates for contexts ranging from 50,000 to five million years ago. The basic premise for dating an object or sample is to apply the dates obtained using these techniques to the whole deposit or context in which it was found. Thus, the entire deposit is as old as the sample.

Dating Method	Material	Range
Tree-ring	Wood with visible treerings	About 10,000 years BP (Varies in regions)
Radiocarbon	Organic materials that contain carbon	Up to 50, 000 years BP
Potassium- Argon/Argon-Argon	Volcanic rocks	Older than 80,000 years BP
Uranium-series	Rocks that are rich in calcium carbonate; teeth	10,000-500,000 years BP
Thermoluminescence (TL dating)	Fired ceramics, clay, stone or soil	Up to 100,000 BP
Paleomagnetic dating	Magnetized sediments, volcanic lava, clay fired to 650-700° c.	Very old deposits from hundreds of thousands years to millions of years ago
Electron Spin Resonance (ESR)	Bone, shell, tooth enamel	From thousands of years to up to about a million years ago
Fission track	Certain types of rocks, and minerals, obsidian, glass, mica etc.	From hundreds of thousands years to millions of years ago

Adapted from Renfrew, C. and P. Bahn, 2012.

2.4.2 Production Techniques and Processes

A variety of objects are recovered through exploration and excavation. Archaeology informs us how they were made i.e. their production processes and how they were used. Artefacts can be divided into two categories:

- i) unaltered, and
- ii) altered.

Unaltered objects do not experience a change in their nature after being fashioned into an object, such as stone tools, wood objects, plant and animal fibers. Altered objects include materials that change their nature and form during production process. Almost all such materials require the control of heat in their production, like pottery and metal objects.

Ethnoarchaeology and experimental archaeology help us in finding out how such objects were made and what their function was. The production process for pottery is now described as an example. Clay is malleable and is used to make pottery. The pottery production process passes through many stages of production: from acquiring the clay to ultimately achieving the finished product. With the understanding developed through ethnoarchaeology and experimental archaeology we can find out many details of the production process like whether the pottery was handmade or wheel-made? Why are some pots in shape and clay different from the others? For what purposes were the different pots used? Such questions may be answered through ethnoarchaeology and experimental archaeology.

Ethnoarchaeology

Ethnoarchaeology is a method adopted in archaeology to explain the archaeological record by studying the present communities. In this method each and every process related to a particular activity is observed. By keenly observing each detail of the process attempts are made to understand what kind of pattern these activities might generate in the archaeological record. For example, studying the traditional pottery production techniques in the present may help in understanding the ancient pottery. Especially, understanding the *Chaîne opératoire* (sequence of operations) is useful in explaining patterns on ancient pottery left by various processes during stages of production. Ethnoarchaeological methods have been employed to a wide variety of studies in archaeology that include inquiring about subsistence techniques such as hunting and gathering, and they are more popular in understanding various craft traditions. Thus, ethnoarchaeology is, essentially, studying the practices of communities in present to answer archaeological questions.

Experimental archaeology

Under experimental archaeology to understand past behavioral processes the archaeologists attempt to replicate experimental reconstructions under controlled conditions. Unlike ethnoarchaeology where the tasks done by the communities manufacturing particular objects in the present are observed the archeologists themselves perform these experiments. Experimental archaeology has been successfully applied in stone knapping which has helped in understanding how flakes were removed during the reduction of core for making stone tools. Several other studies have been done which include the reconstruction of processes such as those to explain the transporting of huge blocks of dressed rocks and erecting the structure at Stonehenge, England.

Microscopic techniques such as Scanning Electron Microscope (SEM) study the minute traces or microwear patterns left on the objects that can be compared with modern experiments to determine how they were made. Minute traces of the organic residues like plant juices may be found on tools if they were used for harvesting them. These, too, can be studied.

Different techniques can be used on the same artefacts to answer different questions. Sometimes, metal objects are made by alloying or mixing two metals. This can be found out by using Trace Element Analysis. The microscopic metallographic examination of ancient metal objects tells us the technique used to make the artefact – casting, cold hammering etc. The sheer variety in such objects informs us about ancient technology and the level of knowledge about pyrotechnology. The rustless Mehrauli iron pillar dated to c. 4^{th} century CE in the Qutub complex, Delhi is a good example of the efficiency of such technology in the past.

2.4.3 Trade and Exchange

Through archaeology we can understand how different communities engaged in trade — whether by land or sea. When we find artefacts made of raw materials that are not found locally it may be concluded that they came through trade. The distribution pattern of such objects would tell us about the geographic extent the trade was spread in. Techniques such as Petrographic Examination and Trace Element Analysis, X-Ray Fluorescence (XRF) and X-Ray Diffraction (XRD) can distinguish local from non-local objects and also point to the region they may have belonged to originally. For example, through such studies on amphorae found at sites in India which were involved in Indo-Roman empire trade around 2000 years ago we can narrow down the region within the Roman empire from where different amphorae reached India. Such studies also inform us about ancient trade routes and networks.

2.4.4 Environmental Archaeology

Human beings from the incipient stages of evolution have been living in continuously changing environments. Several Ice Ages are examples of fluctuating environments in the past that have affected them. Archaeology helps us in reconstructing past environments on a global scale. The sediments on sea floors and stratified ice sheets contain evidence of thousands of years of climatic history. Through the isotopic analysis of cores taken from deep sea-beds and stratified ice-sheets past temperatures and patterns of rain and wind can be found out.

Archaeo-botany and Archaeo-zoology: Archaeological sites contain plant and animal remains which tell us how human beings subsisted on these and coexisted with them. The study of ancient plant remains is called archaeo-botany. Plant remains found at sites can be categorized as macro and micro botanical remains.

- i) Macro-botanical remains are large enough to be seen by naked eye. They survive generally in the form of grains, seeds, fruits etc. which may have been accidentally or deliberately charred. During excavations they are found by dry or wet sieving of excavated soil through a wired mesh. Another technique is called Floatation in which soil samples are mixed in water and lighter organic materials that float are separated, dried and identified. Sometimes, the plant remains or their impressions can be seen in the clay of pottery, bricks or remains of wattle-and-daub. Wood pieces are also recovered. To identify their species their microstructure can be analyzed through Scanning Electron Microscope (SEM).
- ii) The micro-botanical remains cannot be seen by naked eye and they are extracted from soil samples taken systematically at the site. There are two major analyses of the micro-botanical remains:
 - a) pollen analysis or Palynology, and
 - b) phytolith analysis.

The study of the pollen grains provides information of fluctuations in vegetation through time, such as if there were forested lands with more trees or open grasslands. Phytoliths are minute particles of silica derived from the cells of plants which survive well in ancient sediments. They are found generally in hearths and layers of ash, pottery, plaster, stone tools and even on animals' teeth. The study of Phytoliths tells us about the uses humans made of different plants.

The environment can also be reconstructed through animal remains found at the sites. The study of ancient faunal remains is called zooarchaeology. Animal remains are divided into:

- microfauna, and
- macrofauna.

Microfauna include a wide variety of insectivores, rodents, bats, birds, fish and mollusks etc. They provide important information regarding environment and climatic change. This is concluded on the basis of environment conditions they require to breed and thrive on. Macrofauna includes remains of large animals that are commonly present at sites. They help in ascertaining the number of species present in the immediate environment of the site. They are not considered to be very good indicators of the environment as they can thrive on a wide variety of plants and can withstand wide variations in temperature.

2.4.5 Diet and Subsistence

Apart from the information about environment, plant and animal remains also provide a window into the diet and subsistence of people in the past. Diet refers to the pattern of consumption over a long period of time. Through a number of ways we can deduce what formed the diet of human beings in the past. The preserved macro-botanical remains by desiccation, water-logging or charring may include grains such as wheat, barley, maize, rice and so on. Through chemical residue analysis of cooking pots cooked food can be identified in terms of whether it belongs to cereals or legumes. For example, analysis of some amphorae sherds proves that these storage vessels actually contained wine and olive oil.



Amphorae Sherds Excavated from Pattanam, Kerala. Photo Courtesy: Kerala Council for Historical Research, Thiruvananthapuram.

Like plant remains, animal remains also provide information about human diet. However, the bones of animals may arrive due to different reasons at the site and it is not necessarily related to human consumption. Therefore, only those animal bones which show cut marks from butchering are considered to have been consumed.

In very rare instances human remains directly provide evidence of what the human beings ate as processed and prepared food. Information about individual meals can be achieved through the analysis of stomach contents and the study of fossilized human dung. The stomach contents rarely survive except in case of mummified bodies. Similarly, fossilized dung, known as 'coprolite' and its study 'coprology', provides important information about what people ate in the past. Coprolites contain a variety of macro remains such as bone fragments, plant fibers, bits of charcoal, seeds, remains of fish, birds, shell fragments and so on.

Bioarchaeology

As seen in the previous paragraph fossilized human remains can provide information on

what was eaten. Other techniques such as isotopic techniques are used on bones in order to determine the nutrition gained from food. This is based on the study of chemical signatures left by different foods in the body that are reflected in teeth and bones. The comparison of the ratio of nitrogen isotopes ¹⁵N and ¹⁴N, ¹⁵N and ¹³C indicate the vegetarian and meat-based diet. Similarly, the age of weaning in children can be determined through the analysis of nitrogen, as has been done at the site of Inamgaon which is discussed in a later section. The concentrations of element strontium also provide data on diet. Vegetarian diet is indicated by higher concentrations of strontium in bones.

Burials are a very important source of information about several elements including the status in society. Generally, burials include grave-goods that can indicate the status of an individual and their comparison can tell us about social difference. The presence of valuable objects among them suggests high status of an individual. One of the means to ascertaining value is by investigating if the grave furniture is rare, if it was traded from far-off distances. For example, in the royal graves of Ur in Mesopotamia the Harappan long-barrel carnelian beads have been found. In chiefdom and state societies this difference is highly marked. High status may be achieved by an individual during his lifetime. However, high status can also be ascribed as in the case of heredity. The child burials with rich grave goods reflect such cases.

2.4.6 Investigation of Past Societies

Archaeological methods also help to investigate the social aspects of past human societies. For comprehending the nature and scale of past societies anthropologist Elman Service devised a four-fold classification of societies:

- i) mobile hunter-gatherer groups,
- ii) segmentary society,
- iii) chiefdom, and
- iv) the state.

Although criticized by the archaeologists, this framework, with some modifications, can still be broadly used. Based on it their settlement analysis and excavations would suggest differences in the nature of societies to which they belonged. The settlements of mobile hunter-gatherer groups are temporary camps, the segmentary society's permanent villages, chiefdom's fortified centres, and the ritual centers and the state society are marked by cities, towns and frontier defenses.

Archaeology has also made progress in revealing the cognitive aspects of humans in remote past. In other words, we can now attempt to understand the ways in which people thought in past by systematically analyzing the material evidence they left behind. The development of language which requires symbols and sounds to be used in a particular manner hints towards the human beings' ability to communicate using such symbols. Some archaeologists think that some sort of language was developed by the time of Homo-habilis refined further by Homo-erectus as reflected by their symmetrical and beautiful acheulian hand-axes. The ability to produce such hand-axes in large number suggests the presence of an effective communication system. To consciously bury their dead is also considered to be an evidence of belief systems of the past.

The study of rock art provides valuable information about the past. The paintings and carvings may depict a wide range of subject matter: from subsistence practices, human figures, animals, plants, family scenes, social activities to ritualistic aspects. Paintings also depict abstract patterns which may be symbolic of their beliefs. Archaeologists have postulated several explanations regarding the rationale for making rock art.





LEFT: Paintings in Rock Shelter 8, Bhimbetka near Bhopal, Madhya Pradesh. ASI Monument No. N-MP-225. Credit: Dr. Abhishek Anand

RIGHT: Paintings in Rock-Shelter 3, Bhimbetka. Credit: Dr. Abhishek Anand.

Religion is an integral part of identities and archeology helps in understanding past religious practices. It does so using different categories of evidence from religious structures such as the temple of Apollo at Delphi, the Sanchi *stupa* etc. Some figurines and sculptures found during excavations at archaeological sites may have been worshipped. Spaces are identified such as those of worship by the presence of sculptures of deities that are, iconographically, well known. Excavations also identify scared spaces where worship may have taken place, like the prehistoric shrine of Baghor I which has been discussed in one of the following sections.

Recently, molecular genetics has impacted archaeology. The DNA analysis of ancient burials is being used to reconstruct genetic relationships of various social groups and lineages. The genographic projects based on the DNA analysis have established that the whole human population on earth has a shared ancestry which goes back to the branch of Homo-sapiens which evolved in Africa and migrated out of it. The Strontium Isotope Analysis has also been used in understanding migrations in the past. The Strontium isotopes vary in different geographical regions which leave distinct chemical signatures on teeth which help in mapping out movement of the people.

2.4.7 Underwater Archaeology

Underwater archaeology is a branch of archaeology which investigates settlements that have been submerged under water, such as settlements located near lake-sand coasts in the past. Some parts or the entire area of old ports may be submerged underwater due to rise in the levels of the sea or lake. Underwater archaeology also investigates shipwrecks. Experienced marine archaeologists take multiple dives to explore, excavate and record the remains of old settlements, ports or shipwrecks. From the Bronze age itself various geographic regions were connected through maritime trade networks. Shipwrecks of trading ships are like time capsules which sank with a wide range of products they were carrying. Many shipwrecks have been discovered in the Mediterranean sea which provide evidence of trade between the regions of Europe, north Africa and the Levant from the Bronze age onwards. Through underwater archaeology the submerged parts of old Alexandria, Egypt and shipwrecks like the Titanic have been investigated. In India also marine archaeologists have discovered a site of the late Harappan period – Bet Dwarka – where some stone structures and stone anchors were found.

Geophysical methods are also used in underwater archaeology to find sites on the seabed. Operated from a ship, techniques such as Multi-beam Side-Scan Sonar Survey produce clear images and accurate measurements of shipwrecks.





LEFT: Attribution: Hristakiev. Source: European Science Photo Competition 2015. Creative Commons Attribution-Share Alike 4.0 International License (Wikimedia Commons).

RIGHT: A Shipwreck Engine Measured by Underwater Archeology. Credit: Dwi sumaiyyah makmur. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Underwater_archaeology.jpg).

Check Your Progress Exercise 1

1)	What are the differences between archaeological exploration and excavation?		
2)	Enlist the various sources used in archaeology.		

2.5 SOME PROMINENT ARCHAEOLOGICAL SITES IN THE INDIAN SUBCONTINENT

Now we are going to look at the archaeological evidence at some prominent sites in the Indian subcontinent. It is important to remember that archaeology is not restricted to any time period and is based on material culture from its earliest creation to the contemporary.

Bhimbetka

Bhimbetka is located in Raisen district of Madhya Pradesh and 45 km. to the southeast of Bhopal. It was discovered by V. S. Wakankar in 1957. It is a complex of over 700 caves and rock shelters in the sandstone formations of the Vindhyan hills. Excavations here revealed a long sequence from the lower Palaeolithic to Mesolithic in the form of regular occupation. After Mesolithic some human presence and activities continued intermittently till the historical period. Among all the historical phases here the Mesolithic period is very well-defined with its microlithic industry and known for its magnificence of rock art which primarily consists of paintings done in red ochre; although white, yellow and green have also been used. These paintings represent naturalistic, figurative and abstract art and include a wide variety of scenes such as:

- hunting,
- fishing,
- honey collection,
- dancing, and
- also some scenes that might be related to shamanism.

The earliest dates for the Mesolithic period at Bhimbetka go back to the 7th millennium BCE. Due to its universal historic significance it was inscribed on the UNESCO's World Heritage list in 2003.

Mehrgarh

One of the earliest village settlements in the Indian subcontinent, Mehrgarh is located in the Bolan valley in the northern part of the Kacchi/Kachhi plain near Baluchistan in present-day Pakistan. Excavations here have revealed seven occupational levels scattered over an area of 200 ha. Period I and Period II are Neolithic and the subsequent ones are Chalcolithic. The beginning of the Neolithic in the early levels here has been placed in the 8th millennium BCE. People lived in the houses of small rectangular rooms made of handmade mud-bricks. Among stone tools, Neolithic ground or polished axes were found; although the blade-based microliths were abundant. Grinding stones, some bone tools such as awl, needles etc. were also found.

Elaborate burials were found at a necropolis. They had a niche cut into one side of the pit in which the body and grave goods were placed. It was sealed by a wall of mud bricks. The body was covered with red ochre which may indicate a fertility related belief. Among grave goods offered were bitumen lined baskets, copper and shell beads. A few skeletons were found with headbands and belt like waist ornaments made of shell beads and necklaces made of steatite beads. Turquoise and Lapis Lazuli beads also occur which could have come from northern Baluchistan and Afghanistan. The shell would have originated in the Makran coast, some 500 km. away. This shows that very early in history exchange networks were established.

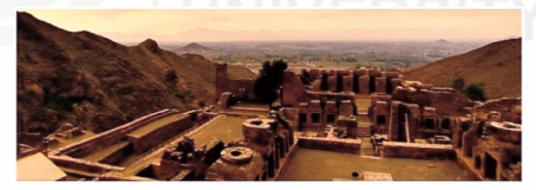
The early periods revealed remarkable information about the subsistence activities, especially the transition from hunting-gathering towards an increasing reliance on animal domestication and agriculture. A rich variety of plant remains were collected from here, the harvesting of which is also made evident by stone blades set in bitumen, probably used as sickles. The animal remains in the Neolithic period show clear transition from hunting to animal domestication.



The Archaeological Site of Mehrgarh, Photo of a Monument in Pakistan Identified as the BA-28. Credit: mhtoori. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mehrgarh.jpg).

Harappa

Harappa is located in the Punjab province of Pakistan. It was the first site of Harappan civilization to have been excavated in 1920; hence the civilization was named after it. The size of the site is about 150 ha. It was located on the bank of river Ravi but now it flows 10 km. away. Among several mounds of Harappa the citadel mound is located on a higher area and the lower mound of the lower town to its south-east. The roughly parallelogram shaped citadel was surrounded by a mud brick wall and with large towers and gates. A **Granary**, 18 circular working floors and workmen's quarters have been identified to the north of the citadel (Mound F). Areas of the lower town revealed various workshops where shell, copper, agate artefacts were made. Parts of the lower town have revealed houses, drains, bathing platforms etc. At Harappa there are two cemeteries – Cemetery H and R-37 to the south of the citadel mound.



The Archaeological Site of Harappa. ASI Monument No. N-PB-32. Credit: Shefali11011. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ancient_Harappa_Civilization.jpg).

Mohenjodaro

The largest site of Harappan civilization—Mohenjodaro—is located in the Sindh province of Pakistan, 5 km. away from the river Indus. The size of the site is about 200 ha. encompassing two mounds—the citadel and lower town. The citadel area was built over an artificial mud and mud-brick platform over an area of 400×200 m. On this mound the **Great Bath** is an outstanding structure which represents the engineering

skill of the Harappan people. It is 14.5 m. long, 7 m. wide and 2.5 m deep. at its maximum. Other structures on this mound have been identified as a **Granary**, **College of Priests** and an **Assembly Hall**. The lower town was divided into major blocks by four wider streets that ran towards north-south and east-west. Remains of many houses of different sizes were found in the lower towns, possibly indicating the difference in status. In one of these houses was found the famous **Priest-King** stone sculpture. A large number of shops and copper working, bead making, pottery making, shell working workshops were also identified. Apart from bathrooms in the houses it has been estimated that there may have been over 700 wells in Mohenjodaro which befits the estimated population of the city also.



Excavated Ruins of Mohenjodaro with the Great Bath in the Foreground and the Granary Mound in the Background. Credit: Saqib Qayyum. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mohenjo-daro.jpg).

Dholavira

Dholavira is located on an island called Khadir Bet in the Rann of Kutch, Gujarat. With over 100 ha., it is one of the largest mature Harappan sites in the Indian subcontinent. Unlike other Harappan sites at Dholavira sandstone instead of burnt bricks has been predominantly used in the construction of structures. Plan of the settlement also differs with other settlements, as instead of the dual divisions of citadel and lower town here it is divided into three:

- i) castle-bailey,
- ii) middle town, and
- iii) the lower town.

An open area between the castle-bailey and the middle town has been identified as a stadium possibly used for ceremonial purposes. The city boasted of a unique water harvesting and management system. It is located between two streams on which dams were built to channelize water into several large and rectangular reservoirs that were located around castle-bailey, middle town and the lower town. Encasing these three

divisions of the settlement and reservoirs was a fortification wall which had rectangular bastions on each corner.





LEFT: Tunnel at Dholavira. RIGHT: Meshed Well, Dholavira. Credit: Nagarjun Kandukuru. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Tunnel_(16496213599).jpg).

Taxila

Taxila is located to the east of the Indus in Rawalpindi, Pakistan. Its importance is reflected from Buddhist, Jain and Brahmanical as well as Greco-Roman texts. Archaeologically it is the most extensively excavated ancient city site in the Indian subcontinent. There are three mounds at Taxila – Bhir, Sirkap and Sirsukh – which were successively laid out in the early historic period. Bhir is the site of oldest city which began around 6^{th} - 5^{th} centuries BCE and continued up to c. 2^{nd} century BCE. During the Mauryan period the plan of Taxila was haphazard. Four streets, five lanes and associated houses have been identified. Some civic planning is indicated by the refuse bins in open spaces and streets. The 2^{nd} settlement was established at Sirkap in c. 2^{nd} century BCE. It was characterized by gird-planning with perfectly straight main street. The settlement spanned for four centuries and represented pre Indo-Greek, Indo-Greek and Shaka-Parthian periods. At the end of the 1^{st} century CE the Kushanas laid out a new city on the site of Sirsukh.



Remains of Buddhist Monastery at Jaulian, a World Heritage Site at Taxila. Photo of a Monument in Pakistan Identified as KPK-14. Credit: ClicksByMohammadOmer. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Jaulian_Buddhist_Monastery_in_Taxila.jpg).

Amaravati

Amaravati is located in Guntur district of Andhra Pradesh. It marked the site of Dhanyakataka: the capital of the later Satavahanas. It flourished from c. 3^{rd} century

BCE to 3rd century CE. There was a citadel surrounded by a huge mud fortification. There was a major Buddhist establishment here. The *stupa* here was the largest in Andhra region and was referred to as a *mahachaitya*. The site of the *stupa* has its own history of research, excavations and subsequent removal of the beautiful sculpted panels and pillars of marble in the late 18th and 19th centuries. This resulted in the dismemberment of the *stupa* and now only the remains of the drum of brick *stupa* and a few marble railings exist at the site.



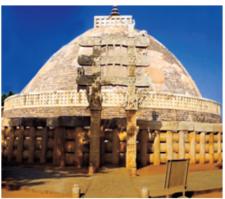


LEFT: Amravati *Stupa* Relief. Credit: Soham Banerjee. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Amaravati_Stupa_relief_at_Museum.jpg).

RIGHT: The Great Departure of Prince Siddhartha (Gautam Buddha), Amravati. Credit: sailko. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Andhra_pradesh,_la_grande_dipartita,_da_regione_di_amaravati,_II_sec.JPG).

Sanchi

Sanchi, located in Raisen district of Madhya Pradesh, is one of the most important Buddhist monastic complexes in India. It is not associated with an event in the life of the Buddha, but grew to prominence from the time of the Mauryan emperor Ashoka in c. 3rd century BCE. He is believed to have built the original stupa and installed a monolithic Ashokan column at the site. Later, it received patronage not only from royal dynasties such as the Shungas and Satavahanas but also lay devotees. In the Sanchi complex there are several stupas but three of them are conspicuous due to their large size and state of preservation. Others are smaller in size and include both structural and monolithic or votive *stupas*. *Stupa* I is the largest which is also referred to as the Great *Stupa*. In the excavations no relics were found in this *stupa* but in terms of architectural features it is the most elaborate. Its diameter is 36.60 m. and its height without the railing and umbrella is 16.46 m. The stone masonry dome of the stupa encases an earlier brick stupa that was probably constructed by Ashoka. It is surrounded by a stone railing (vedika) which has four toranas (monumental gates) on four cardinal directions. These toranas were erected by the Satavahanas. There is a variety of subjects carved on each torana which include scenes from the Jatakas, scenes from the life of the Buddha, events in the subsequent history of Buddhism and so on.

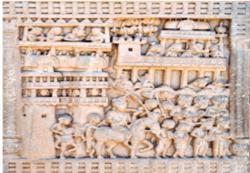




LEFT: The Great *Stupa* at Sanchi which contains the Relics of the Buddha, Eastern Gateway. Credit: Raveesh Vyas. Source: https://www.flickr.com/photos/32392356@N04/3311834772. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Sanchi_Stupa_from_Eastern_gate,_Madhya_Pradesh.jpg).

RIGHT: Ornamental Pillar Leading to the Sanchi Dome. ASI Monument No. N-MP-220. Credit: Amigo&oscar. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ornamental_Pillar_leading_to_Sanchi_Dome_(_N-MP-220).jpg).





LEFT: Depiction of Maya's Dream at Sanchi, *Stupa* 1 Eastern Gateway. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Maya%27s_dream_Sanchi_Stupa_1_Eastern_gateway.jpg).

RIGHT: Procession of King Prasenajit of Koshala Leaving Shravasti to Meet the Buddha, Sanchi Stupa 1 Northern Gateway. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Procession_of_Prasenajit_of_Kosala_leaving_ Sravasti to meet the Buddha.jpg).

Stupa II is located little away from the main complex. Its *vedika* is elaborately carved with decorative motifs but it is devoid of any *toranas*. The excavations yielded relics of several Buddhist teachers. From *stupa* III the relics of Sariputra and Maudgalayana – the two foremost disciples of the Buddha – were found. Apart from these monuments there are remains of a large monastery. Sanchi lay along an important trade route near a very prosperous merchant town of Vidisha. The patronage it enjoyed is evident by numerous donative inscriptions. That it remained important in the Gupta period also is attested by the presence of early structural temples at the complex. It flourished till the 13th century CE and after that fell into desolation until it was discovered by General Taylor in the early 19th century CE.

Archaeology does not limit itself to the ancient period. Apart from the above mentioned archaeological sites there are some excavated sites belonging to later periods as well. Lal Kot and Vijayanagar are prominent among such sites. The excavation at Lal Kot, Mehrauli, Delhi revealed two cultural periods:

i) Period I dated from the middle of the 11th century to the end of the 12th century CE

ii) Period II belonged to the early Sultanate period dated from the end of the 12th century to the end of the 14th century CE. The first Turk Sultans made their capital in the Lal Kot area itself, which was later known as *Dihli-i-kuhna* (meaning Old Delhi) when new capital cities were constructed in the plains of Delhi. The remains of medieval Vijayanagar have been unearthed at its capital Hampi, Karnataka. The Vijayanagara Research Project (VRP) and Vijayanagara Metropolitan Survey (VMS) were two large scale archaeological projects that focused on the research on Vijayanagar.

Archaeology as a Source and Prominent Archaeological Sites

Check Your Progress Exercise 2

1)	What evidence do we have of early centres of domestication of barley and rice in the Indian subcontinent? Discuss in the context of Mehrgarh.		
2)	Describe various features of art and architecture at the prominent archaeological sites related to Buddhism.		

2.6 SUMMARY

Archaeology helps in reconstructing the past through the study of material remains left by humans. The data is collected in the field by surface explorations by field-walking and employing a wide range of non-destructive scientific methods. Excavation at the archaeological sites informs us about artefacts and ecofacts in their proper contexts. After excavations, the analysis of a wide variety of evidence is done through methods and techniques adopted from social sciences and natural sciences. They enable us in dating the evidence, understanding past human behaviour, settlements, production processes and past technologies, trade and exchange, subsistence and diet, and aspects of social life such as status, religion, rituals and so on. The importance of archaeology as a source is not limited to the ancient period but it can be extended to the material remains of the medieval and even contemporary periods.

2.7 KEY WORDS

CE

: Common Era. It is used in the place of *Anno Domini* (AD): the year in which Jesus Christ was born. Since the use of this era is not only restricted to the Christian world but used commonly worldwide it was labeled as the Common Era.

BCE

: Before Common Era. It is used in place of Before Christ (BC).

BP

: Before Present. Used in the radiocarbon dating the present has been fixed at year 1950. For example, 4950 BP will be converted as 3000 BCE.

Acheulian

: A widespread early stone-age culture named after the site of St. Acheul in France. It included multipurpose stone tools such as hand-axes and cleavers. It was spread in Africa, Europe and Asia. It is dated from about over 1.65 million years ago to 100,000 years ago.

Assemblage

: A group of artefacts found together in a single context. It may also refer to the entire collection of artefacts belonging to an archaeological culture, like Harappan assemblage or a particular type of artefact like pottery assemblage.

Debitage

: Waste material generated during production of stone tools and other crafts such as stone beadmaking.

Microwear

: Patterns of edge damage due to use, polishing or abrasion that can be analyzed only through the microscope. Microwear analysis indicates how the tools may have been used.

Petrography

: The study of the composition of rocks. In archaeology it is generally used in the analysis of ceramics by identifying mineral components of clay to find out from where the clay was brought.

Pyro-technology

: The intentional and controlled use of fire by humans. Heat treatment is essential in various craft productions for which certain temperatures are to be achieved and maintained as required.

Typology

: It is a method of arranging types of artefacts into sequences according to improvements in design and efficiency in the case of functional tools and changes in form and decoration in the case of pottery and jewellery.

Wattle-and-daub

: House walls that are made of wicker or reeds woven around upright wooden posts and thick layers of mud are applied on it.

2.8 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

1) You should be emphasizing on the non-destructive aspect of surface survey and

mention the techniques used in it. A limitation of exploration is that the surface finds are not in their original contexts. To understand the artifacts and ecofacts in their proper context the sites are excavated. See the Section on exploration and excavation.

2) You should be enlisting various methods and techniques which help in extracting information from evidence. See Section 2.4.

Check Your Progress Exercise 2

- 1) Consult the Sub-sections on Mehrgarh within Section 2.5.
- 2) Consult the Sub-sections on Amravati and Sanchi within Section 2.5.

2.9 SUGGESTED READINGS

Chakrabarti, D. K. (2001). *India, an Archaeological History: Palaeolithic Beginnings to Early Historic Foundations*. New Delhi: Oxford University Press.

Drewett, P. L. (1999). Field Archaeology: An Introduction. London: UCL Press.

Greene, K. (2002). Archaeology: An Introduction. London and New York: Routledge.

Renfrew, C. and P. Bahn. (2012). *Archaeology: Theories, Methods and Practice*. 6th ed. London: Thames & Hudson.



UNIT 3 INDIAN HISTORY: PHYSICAL FEATURES, FORMATIONS AND CHARACTERISTICS*

Structure

3.0	Objectives
7 11	Unnechives
2.0	

- 3.1 Introduction
- 3.2 Physical Geography and History
 - 3.2.1 Environment and Human Settlements
 - 3.2.2 Arguing Against Geographical Determinism
- 3.3 Basic Physiographical Divisions of India
- 3.4 Regional Physical Features
 - 3.4.1 The Himalayan Uplands and the Western Frontier
 - 3.4.2 The Indus Plains
 - 3.4.3 Gangetic Northern India
 - 3.4.4 Eastern, Western and Central India
 - 3.4.5 Peninsular India
 - 3.4.6 The Extreme South
- 3.5 The Dynamics of Regional Transformation
 - 3.5.1 Uneven Patterns of the Emergence of Historical Regions
 - 3.5.2 The Ceramic Evidence
 - 3.5.3 The Literary Evidence
- 3.6 Force of Regions in Indian History
 - 3.6.1 Notion of the *Chakravartin*
- 3.7 The Hierarchy of Regions
 - 3.7.1 Major Geographical Influences
 - 3.7.2 Nuclear Regions
 - 3.7.3 Settlement Structure in Time and Space
- 3.8 Formation of Some Regions in Early India
 - 3.8.1 The Gangetic Basin
 - 3.8.2 The Tamil Country
 - 3.8.3 The Deccan: Andhra and Maharashtra
 - 3.8.4 Kalinga and Ancient Odisha
 - 3.8.5 The North-West
- 3.9 Summary
- 3.10 Key Words
- 3.11 Answers to Check Your Progress Exercises
- 3.12 Suggested Readings

^{*} This Unit has been adopted from EHI-02, Block 1.

Indian History: Physical Features, Formations and Characteristics

3.0 OBJECTIVES

After reading this Unit, you should be able to grasp and explain:

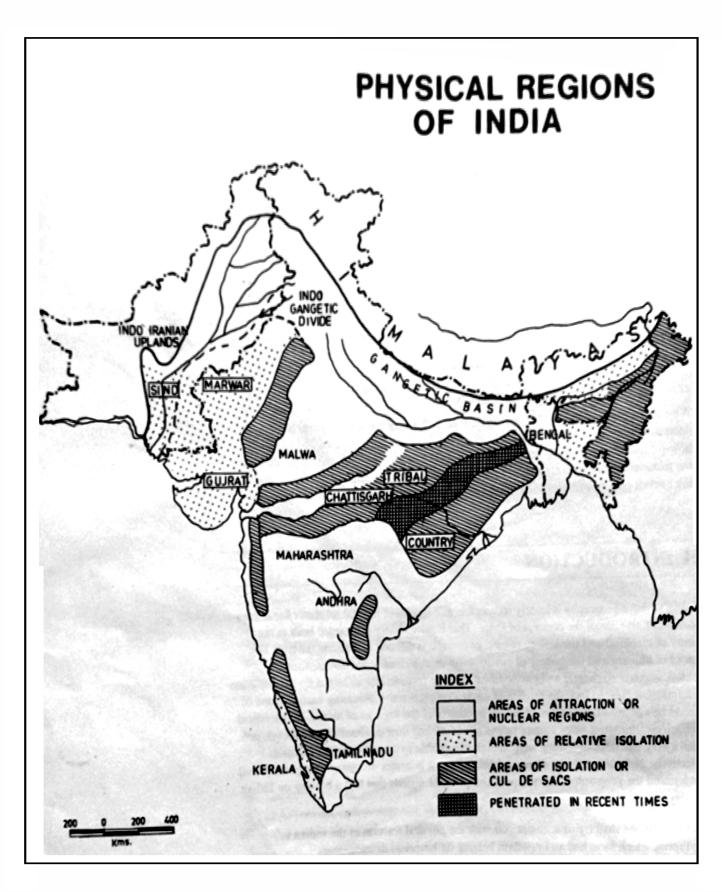
- why in the study of the history of a country an understanding of its physical features is necessary;
- how we look at the physical features of India as students of history;
- the relationship between environment, geography and history;
- uneven pattern of historical growth in the Indian subcontinent;
- Why it is necessary to know about regions if one has to understand the different stages of Indian history;
- How regions emerged; and
- In what way the nature of a region could differ from that of the other.

3.1 INTRODUCTION

History without geography is largely incomplete and devoid of its vital substance, for it loses focus in absence of the concept of space. That is why history is regarded both as the history of mankind and the history of environment. It is difficult to separate the two. The history of humans and the history of environment mutually influence one another. Soil, rainfall, vegetation, climate and environment exercise considerable influence on evolution of human cultures. In fact, the essence of human progress is the increasing emancipation of human beings from the clutches of nature or control of the vagaries of nature. In this regard, technological progress helps human beings in conquering their environment. However, not until a very late stage in history were the human beings able to control their environment effectively. Naturally, thus, as we move back in time it becomes necessary to appreciate and understand the geography, environment and physical regions that had a bearing on Indian history. In this Unit we will try to acquaint you with physical features of the Indian subcontinent which have had an important bearing on its historical developments.

The Indian subcontinent is constituted by a number of regions and each region has some special characteristics of its own. In the course of historical evolution of the country the regions came to acquire special cultural features and in many ways — in the sense of shared historical tradition, language, social organization, art forms etc. — it is possible to recognize the differences between one region and another. In Indian history, therefore, there have been dual processes of the evolution of common social and cultural norms and institutions as well as consolidation of the structures of recognizable regions.

It has also to be remembered that in history the processes of the emergence of regions have been uneven. Therefore, in the past, as induced even today, great dissimilarities in the pattern of historical change existed between different regions, although no region has ever remained completely isolated. This Unit is also concerned with elucidating the processes of the formation of regions in Indian history and showing how they differed from one another. An understanding of the nature of regions constituting the Indian subcontinent is necessary to understand how the stages of the evolution of Indian society varied in space and time.



Source: EHI-02, Block-1, Unit-1.

Indian History: Physical Features, Formations and Characteristics

Variations of soils, topography, rainfall and climate have created a number of distinctly different regions with their separate characteristics and identities. Physical regions often correspond to the culture zones or regions i.e. they tend to differ from one another in the context and light of language, food, dress, crop pattern, population density, caste structure etc. For example, in some areas like Uttar Pradesh and northern Bihar – the fertile plains of Ganga Valley – population concentration is very high, while the mountainous tribal central India is sparsely populated. Similarly, certain areas like Magadha, Koshala, Avanti, Maharashtra, Andhra, Kalinga and the Chola country emerged earlier as developed pockets while the others lagged behind. Historically, the emergence of regions has, therefore, been uneven and different regions have been characterized by differential characteristics which are largely related to and influenced by geography and environment. To give another example, we find that wheat is the staple food of people in Punjab, Haryana and western Uttar Pradesh while rice is the principal crop and main component in the diet of people in eastern India viz. Bengal, Bihar and Odisha. This is so because:

- different crops have different natural habitat zones,
- they tend to grow in specific natural environments, and
- in course of time they influence the dietary habits of people there.

Similarly, forms of irrigation differ from region to region:

- rivers and canals have been the most important form of irrigation in northern India,
- ponds have been very useful in eastern India, and
- tank irrigation has played a significant role in south Indian agriculture.

These variations do not mean that the rivers are unimportant in eastern and southern regions. But, what they reflect is that people take recourse to different methods to augment additional water sources in different regions, depending on what method is most suitable for that particular region.

Geography and environment play a major role in the pattern of dresses also. For example, we can compare and contrast the dress styles of the people of Kashmir, Rajasthan and those living along the coasts. This, again, reflects the climatic and environmental effects.

While the riverine plains and deltas have given birth to and sustained advanced cultures through the ages, the mountainous intermediate zone of central India has retained heavy concentration of tribal population in various pockets. Thus, while the riverine plains are liberally endowed by nature and have lives of their own, the isolated regions remained unaffected by the advances made in other regions. Coexistence of different forms of dress, food-habits and cultures in the subcontinent, therefore, can largely be explained with reference to physical geography.

Regional differences and identities, greatly fostered by geography, have stood in the way of the rise of durable, pan-Indian states in Indian history. Never was the whole subcontinent a single political unit. This holds true for the Mauryan kingdom, the Delhi sultanate, the Mughal empire as well as British India. At the same time it needs to be emphasized that though these differences between regions, which are geographically structured, have prevented the rise of pan-Indian states in our history yet at no period have they created separate nationalities.

3.2.1 Environment and Human Settlements

The relationship between physical geography, human settlements and settlement patterns is yet another important theme which deserves attention. For example, the Sindh region

today is relatively warm and dry because of very low rainfall. However, we know that the Harappan civilization flourished over large parts of the same region in the past. Some scholars opine that the region in the past had wetter climate with, possibly, higher rainfall and this enabled the civilization to give itself a high standard of living. It has also been argued by some scholars that over-utilization of natural resources leading to depletion of the natural vegetation cover, together with the onset of a drier climate, led to collapse of the civilization by adversely affecting its subsistence basis (You will learn about it in Unit 5). The inhospitable topography, together with a possible population pressure on the land and resources, forced people to migrate out of core area of civilization. The civilization, thus, faded out.

On the other hand, one is struck by the success of the Magadhan empire and by the kind of political ascendancy it achieved. We can say that it was a product of convergence of a number of factors:

- highly fertile soils,
- sufficient rainfall ensuring a rich annual paddy crop,
- proximity to iron ore mines and the sources of stone and timber of the Chhota Nagpur plateau which is towards the south of Magadha,
- rivers provided for comfortable communication and trade,
- the closeness and continuity of settlements, facilitated in no small way by these natural advantages, indicating great population density.

A combination of these factors helped the comfortable conquest of the northern Gangetic plain. In fact, due to these reasons the Indo-Gangetic plains were way ahead of other regions in terms of agricultural productivity and population base. The territorial expansion over these plains provided the basis for the exercise of unquestionable political supremacy. All this fits into a neat sequence – one deriving itself from the other. The unquestionable political supremacy achieved by Magadha around 6th century BCE was based on conquest of the northern plains which was blessed by favourable convergence of necessary geographical factors such as soil, rainfall, vegetation, easy communication lines and the availability of natural resources.

With the political ascendency of Magadha its capital Pataliputra became the capital of northern India and continued to remain the imperial capital for many centuries. Geographical reasons have been put forward to explain both the rise and fall of Pataliputra. While in its early history surrounding rivers like Ganga, Son and Gandak provided for natural defence and easy trade and transport, by the middle of the 1st millennium CE they had become positive liabilities owing to perennial floods. It is known that the Gupta and post-Gupta period was characterized by decline of trade and decay of towns. With decline of the north Indian trade and commerce in the Gupta and post-Gupta periods, the curtailed human movements and shifting away of the course of Ganga the usefulness of rivers was reduced. One may add that to explain the decay of towns in Gangetic northern India in the same period geographical explanations such as deforestation of the hinterland and consequent reduction of rainfall have also been suggested. These explanations may not always be correct but the examples definitely suggest that the interrelationship between historical processes and geographical features was always close.

3.2.2 Arguing Against Geographical Determinism

At this point it is important to remember that it is one thing to view the interrelationship between physical features and unfolding of historical processes in a region but it is an entirely different matter to perceive history in terms of geographical determinism.

Indian History: Physical Features, Formations and Characteristics

Recognition of geographical factors helps in a better understanding of cultural developments. This also largely explains different patterns of growth and development in divergent regions. However, geography and environment cannot be taken as some kind of prime movers, for, after all, the natural regions are only areas of possibilities and these possibilities are actualized through human intervention at the stage of their technological attainments. It has been argued, "Nature determines the route of development while man determines the rate and the state". Thus, neither is the influence of nature fixed nor is the man-environment relationship static. The limits set by nature are conquered by human experience and by human being with their tools. This is an ongoing process which continuously enriches the realm of human experience and expands the frontier of man's control over environment. Physical features and environmental conditions that may appear unfavourable or difficult at one stage may prove to be potentially rich at another. For example, the hunter-gatherers preferred to live on edge of the forests while the incipient farmers had to come down to riverine plains. Here again, the early farmers, in absence of an iron-ploughshare, preferred to restrict themselves to lighter soils to the west of the Ganga-Yamuna doab. Only with the coming of iron technology the peasantry could venture to open up the rich alluvial plains of Gangetic north India and conquer thick vegetation and heavier, fertile soil.

3.3 BASIC PHYSIOGRAPHICAL DIVISIONS OF INDIA

Let us now define physical features of the subcontinent and characteristics of the regions created by them. The basic physiographic divisions are three:

- i) Himalayan uplands,
- ii) Indo-Gangetic plains and,
- iii) Peninsular India.

Each one of these can be further subdivided. The Himalayas are considered to be still rising. Large quantities of alluvium are continuously carried down into the plains from these mountains owing to weathering and erosion. Fed by the Himalayan snows the three great river systems – Indus, Ganga and Brahmaputra – tend to flow perennially. Alluvial plains of northern India extend in the form of an arc for about 3,200 km. from the mouth of the Indus to the mouth of the Ganga. This stretch of land, about 320 km. wide, is full of potentialities. Indus plains threw up first civilization of the subcontinent while the Ganga plains have sustained and nurtured city life, state, society and imperial fabrics from the 1st millennium BCE.

Northern plains and Peninsular India are separated by a large intermediate zone which, in the absence of a better terminology, may be called Central India: extending from Gujarat to western Odisha over a stretch of about 1600 km. The Aravali hills in Rajasthan separate Indus plain from the peninsula. The intermediate zone is characterized by the presence of Vindhyan and Satpura ranges and the Chhota Nagpur plateau covering portions of Bihar, Bengal and Odisha. It can be divided into four sub-regions:

- i) land of the Rajputs between Udaipur and Jaipur,
- ii) Malwa plateau around Ujjain which was more popularly known as Avanti in ancient times.
- iii) Vidarbha or the sub-region around Nagpur, and
- iv) Chhattisgarh plains in eastern Madhya Pradesh which bore the name *Dakshina Koshala* in the ancient period.



Although, generally speaking, communication and movement across the intermediate zone were never easy there have been contacts between these four apparently isolated pockets and between this region and the other physiographic divisions.

On southern edge of the intermediate zone or central India begins the formation called the Peninsular India. It is an old land mass with every sign of stability. The rocky formation gently slopes from west to east and four major rivers – Mahanadi, Godavari, Krishna and Kaveri – flow into Bay of Bengal. They have produced alluvial plains and helped the creation of nuclear areas in plains and deltas, enabling the sustenance of cultural growth for a prolonged period continuously through the ancient, medieval and modern times.

Narmada and Tapti, however, have a westward flow and run into Arabian sea in Gujarat after traversing a long distance in the hilly central India. The well known feature of the region is the Deccan plateau which extends from Vindhyas in the north to the southern limits of Karnataka. The black soil in Maharashtra and in the adjoining parts of central India is especially rich, for it retains moisture and is considered to be "self ploughing". Therefore, it helps in overcoming other kinds of limitations imposed by less annual rainfall and irrigational difficulties. The soil yields good crops of:

- cotton,
- millets,
- peanuts, and
- oil seeds.

ii)

Not surprisingly, therefore, the early farming cultures (Chalcolithic) in western and central India emerged in this area. In the west the plateau terminates with the Western Ghats and in the east its contours are marked by the Eastern Ghats which separate it from the eastern coastal plains which are wider compared to the narrow plains in the west. Nilgiris and the Cardamom hills are considered to be off-shoots of the basic peninsular formation.

Check Your Progress Exercise 1

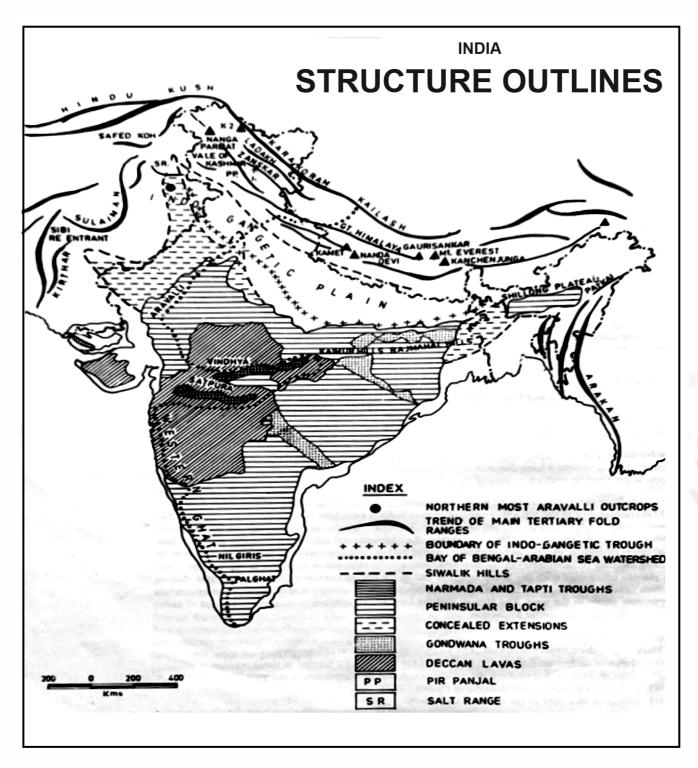
- 1) Mark (\checkmark) the correct statements. The knowledge of physical geography:
 - i) helps in understanding the life patterns of people who resided in those regions,

	ii)	is of no help in determining the nature of cultural developments in the past,	
	iii)	is not at all relevant for the students of history,	
	iv)	confines you only to the study of regions.	
2)	Discuss the physical features responsible for the rise of Magadha.		
3)	Fill in the blanks:		
	i)	Geographical factors	

Human beings..... (attempt to/successfully) control nature.

- iii) The basic physiographic divisions in India are..... (five/two/three).
- iv) The intermediary zone may consist of..... (basic physiographic/subregions).

3.4 REGIONAL PHYSICAL FEATURES



Source: EHI-02, Block-1, Unit-1.

So far we have considered features of the broad geographic divisions at a general plane. Let us now take up specific major geographical units which, at instances, conform to the linguistic divisions and look into their physical traits from a historical perspective.

3.4.1 The Himalayan Uplands and the Western Frontier

The Himalayan mountains can be divided into three zones or units, each having their own specific characteristics:

- eastern,
- western, and
- central.

The eastern mountains run to the east of Brahmaputra, extending from Assam to south China. Although routes through the eastern mountains are difficult, that has not prevented the flow of cultural influences from south-east Asia and south China in prehistoric and historic times. The central Himalayan range, extending from Bhutan to Chitral, lies at the fringe of the great table-land of Tibet. There have been trade and cultural contacts between India and Tibet across this frontier.

The narrow Hindu Kush range extends south-westward from the Himalayas deep into Afghanistan, covering ancient Gandhara. Geographically and culturally, western Afghanistan has affinities with eastern Iran but south Afghanistan has been culturally close with the Indian subcontinent since Neolithic age. The Khyber and other passes and the Kabul river link it with the Indus plains. It is no surprise, therefore, that the site of Shortugai in this part of Afghanistan was a trading out-post of Harappan civilization. Ancient towns like Kabul and Kandahar are situated on this route between Iran and India.

The desert conditions of south-western Afghanistan are noticed in a more intense form as one enters Baluchistan. Pastoralism has been a more profitable adaptational strategy in the region since Neolithic times. The coast of Baluchistan, called the Makran coast, is harsh and inhospitable for human settlements. When Alexander, on his way back to Babylon from his Indian campaigns, led a section of his army across the Makran coast he suffered heavy loss of his men because of the paucity of food and water. The region has been some kind of a nodal point, for routes to central Asia and China on the one hand and Persia and farther west, on the other, cut through it.

The great routes connecting Indian plains with Iran and central Asia through Afghanistan run through the Gomal, Bolan and Khyber passes. These routes have brought in traders, invaders and varied cultural influences all through the historic times and even before. Greeks, Shakas, Kushanas, Hunas and others made their entry into India through these routes. In a vice-versa manner, Buddhism and other cultural influences of Indian civilization, too, entered Afghanistan and central Asia through these passes. Thus, historically, the Afghan and Baluchistan hills have acted as an important frontier-zone.

3.4.2 The Indus Plains

The passes lead to the rich plains of Indus which can be divided into two regions:

- Punjab, and
- Sindh.

Punjab (as it exists today divided between India and Pakistan) literally means the land of five rivers. These five tributaries of the Indus, flowing across a vast alluvial plain, have made the region the bread-basket of the subcontinent. The eastern part of these plains merges into the Ganga basin. Punjab has been a meeting place and melting pot of cultures. Pre-existing and intrusive elements of cultures have fused here. Strategic location and prosperity of Punjab has always invited invaders.

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The lower Indus valley and the delta constitutes Sindh. Geographically, it is situated between the Baluchistan hills on the north-west and Thar desert on the south-east. There is evidence of its historical links with Gujarat. Rainfall in the region is extremely low but the alluvial soil is very fertile. It produces large quantities of rice and wheat. As mentioned earlier, the Indus plain had nurtured the subcontinent's first urban culture during $3^{\rm rd}$ - $2^{\rm rd}$ millennium BCE. Two of its major cities – Harappa and Mohenjodaro – are located in Punjab and Sindh respectively.

3.4.3 Gangetic Northern India

The Ganga basin, climatically, is more humid than the Indus region and annual rainfall starting with 50 cms. in the Indo-Gangetic divide steadily rises to 200 cms. by the time it reaches Bengal. The Ganga plains can be divided into three sub-regions:

- Upper
- Middle, and
- Lower.

The Upper plains in western and central Uttar Pradesh largely include the *Doab*. This has been an area of conflict and cultural synthesis. There is increasing evidence of the extension of the Harappan culture into this zone. It was also the centre of the Painted Grey Ware culture and pulsating activity in the later Vedic period.

At the confluence of the Ganga and Yamuna at terminal point of the Doab is the city of Prayagraj. The Middle Ganga plains correspond to eastern Uttar Pradesh and Bihar. This is where ancient Koshala, Kashi and Magadha were situated. It was the centre of city life, money economy and trade since c. 6^{th} century BCE. This region provided the basis for Mauryan imperial expansion and it continued to be politically important till the Gupta period (c. 6^{th} century CE).

The Upper and Middle Ganga plains are geographically defined by Himalayas on the north and Central Indian hills on the south. Middle portion of the plains corresponds roughly to the present-day state of Bihar and eastern Uttar Pradesh. The Lower plains are co-terminus with the province of Bengal. The wide plains of Bengal are formed by alluvium brought by Ganga and Brahmaputra. High rainfall in low-lying plains created forest and marshy conditions which made early settlements in Bengal a difficult proposition. The fertility of heavy alluvial soil could be exploited only with greater utilization and control of iron technology. Urban culture spread into this region from the Middle plains relatively late. Given the kind of environment, the ponds in Bengal have been an observable feature from ancient times and fish has become staple diet of all sections of people.

Ganga plains have nurtured maximum number of settlements and sustained highest population density than any other physiographic region of the subcontinent. It has been the heartland of Indian civilization from the 1st millennium BCE, through the classical phase, up to the present. Adjoining the Bengal plains is the long Assam valley produced by Brahmaputra. It spreads over more than 600 km. Culturally, Assam is close to Bengal but in terms of historical development it emerges as a late starter like Odisha.

3.4.4 Eastern, Western and Central India

Central India, as we have noticed earlier, is an entirely different region and does not have a central focal point. It is a hilly region where hills do not rise to any great height but are broken by steep slopes and intersected by valleys. They normally run in an



east-west orientation. However, the Aravalis in north-western part of this physiographic division extend from south-west to north-east. They almost bisect Rajasthan, the desert state. South-eastern part of the state to the east of the Aravalis is part of a sub-region called Malwa. Because of fertility of the soil it yields good crops even in absence of irrigation. Chalcolithic settlements are distributed in good numbers here. Given its geographical location, it must have acted as a bridge between Harappans and other Chalcolithic communities in central India and northern Deccan. Culturally, it emerged as an extension of northern plains in later periods. In the east the Chattisgarh plains on upper Mahanadi is a fertile minor region with good rainfall and paddy yield. From c. 4^{th} - 5^{th} century historical developments there were akin to those in the rolling uplands of western Odisha. There have been cultural and political interactions between the areas due to geographical contiguity.

Most of what we have designated as Central India constitutes present Madhya Pradesh. Movement from north to south is impeded by the Vindhya and Satpura ranges and by Narmada and Tapti rivers. The Central Indian belt, especially southern Bihar, western Odisha and eastern Madhya Pradesh, has been an area of tribal concentration. Nevertheless, it has also been a zone of slow and steady penetration. Cultural influences from adjoining regions have influenced and integrated tribals into the dominant castepeasant base of Indian society from early historic times and more so, from the Gupta period.

Gujarat is situated on western fringe of the Central Indian belt. It consists of three natural divisions:

- Saurashtra,
- Anarta (Northern Gujarat) and
- Lata (Southern Gujarat).

Semiarid wind blown soils characterize Anarta and the fertile area on western coast constitutes Lata. The central peninsula of Gujarat is called Kathiawar. The low-lying Rann of Kutch is another feature which during the monsoons turns into a swamp. In spite of these physical sub-divisions Gujarat has a cultural identity and unity because it is broadly bounded by the Vindhyas and Western Ghats in the east and by the desert on the north. Although it appears to have been a zone of isolation, actually it is a region of continuous ancient settlements dating back from the Harappan period. Saurashtra, on account of its geographical closeness to the Indus, experienced an extension of Harappan civilization. It has often been a transition zone between Sindh and lands farther west and India. The plain here is enriched by alluvium brought from central Indian hills by the Narmada, Tapti, Sabarmati and Mahi rivers. Because of its protected position and the lengthy coast line Gujarat has been the focus of coastal and external trade for more than 4000 years.

To the south-west of the delta of Ganga at the eastern end of the hills of Central India are the coastal plains of Odisha. They are centred largely on Mahanadi delta though there are some other rivers too joining the Bay of Bengal on the same littoral. Western Odisha is an extension of the central Indian hills and as mentioned earlier in the context of Chhattisgarh plain it shares some of the same features. Thus, there are two physiographic divisions in Odisha exhibiting uneven patterns of growth. The fertile coastal plain with a richer agrarian base has provided a focal point and has been the centre of socio-cultural development. Odisha began to develop her linguistic and cultural identity late in the 1st millennium CE.

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3.4.5 Peninsular India

Deccan Plateau and the surrounding coastal plains define the contours of Peninsular India. Coastal plains in the east and extreme south are broad while those in the west are narrow. They are at their narrowest between Bombay and Palghat. The plateau is divided into three major regions which largely correspond to the states of Maharashtra, Andhra and Karnataka. Maharashtra, in addition to other areas, includes northern Deccan plateau. Cultural influences have been diffused to south from Deccan and this must have been possible because barring the Western Ghats there are no other dense forests there. Maharashtra seems to have a natural boundary with Andhra, for the boundary line coincides with the distribution of fertile black soil. Across the boundary one encounters red soil of Telangana which fails to retain moisture. Therefore, Telangana has become a land of tanks and other forms of artificial irrigation. The environmental difference with a bearing on growth of early settlements and cultures could not have been more striking. While the early Neolithic settlers in south-western Andhra based themselves on pastoralism as an adaptational strategy, Chalcolithic communities of the northern Deccan increasingly relied on agriculture. Karnataka includes south-western Deccan which, except for small areas, is not covered by Deccan lava. In addition, a part of Western Ghats and western coastal plain are included in the state. Southern part of the state is better watered and more hospitable for human settlement than north. The dividing line between Maharashtra and Karnataka is not marked by any natural features. The limitations imposed by environment are amply borne out by the comparatively poor cultural remains of Neolithic folks of the region.

Among the four south Indian states Andhra is the largest. It includes a number of subregions like the rich coastal plains, Rayalaseema etc. North-western part of Deccan plateau, as already mentioned, is called Telangana which is now a separate state. The reddish soils are not rich and the main crops are:

- millets,
- pulses, and
- oil seeds.

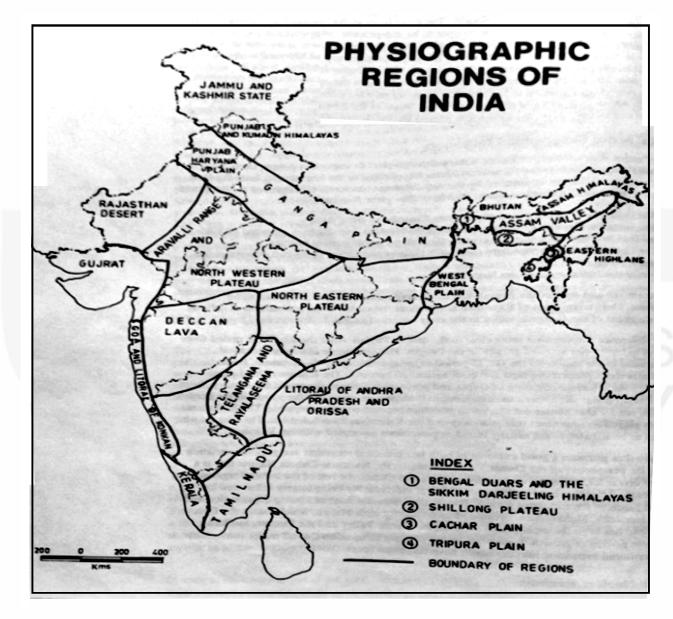
In the eastern part of Eastern Ghats and Eastern coastal plain, from near about Mahendragiri on borders of Odisha in the north to Tamil Nadu in the south, with the combined Krishna-Godavari delta as its epicenter, are included in Andhra. It is essentially a rice growing area. The area between two rivers on the coast, known in early times as Vengi, is considered a ricebowl. Like the Raichur doab, between Krishna and Tungabhadra it was fought over frequently all through ancient history.

3.4.6 The Extreme South

Deccan plateau fragments into isolated blocks like Nilgiri and Cardamom hills in extreme south. They roughly divide western and eastern coastal plains. The wide eastern coastal plain in south and its adjoining hinterland constitute Tamil Nadu. The littoral districts produce an abundance of rice and the Kaveri plain and its delta constitute its epicentre. Rivers in the region being seasonal, the peasants of the region have relied on tank irrigation since Pallava-Chola times. The unirrigated pockets produce:

- millets,
- pulses, and
- oil seeds.

Interestingly, these ecological variations which supported alternative, at times interrelated, ways of life are attested to in the earliest literature of the land: the *Sangam* literature. Geographically, linguistically and culturally the region has evolved an individuality of its own. The western coastal plain too broadens in extreme south and corresponds to the region known as Malabar or the present state of Kerala. In addition to rice and other crops Kerala produces pepper and spices which have been traded with the West since post-Mauryan times. From Tamil Nadu the littoral is accessible through Palghat gap and southern end of the Western Ghats. Relatively isolated by land, Kerala has been open to sea and interestingly, first Christian and then the Muslim influence here came by sea. It may be noted that both Kerala and Tamil Nadu are densely populated like the plains of Ganga.



Source: EHI-02, Block-1, Unit-2.

Check Your Progress Exercise 2

- 1) Mark following statements as right (\checkmark) or wrong (\times) .
 - i) Eastern Himalayan region was not affected by cultural influences from China.
 - ii) Harappa is located in Punjab.

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- iii) Ganga plain has nurtured the greatest number of human settlements.
- iv) The coastal plains of Deccan plateau are very broad between Bombay and Palghat.

2) Fill in the blanks.

- i) The Himalayas can be divided into...... (five/three) broad...... (regions/units).
- ii) Rann of Kutch turns into a..... (sea/swamp) during (Monsoon/Autumn) season.
- iii) Unirrigated lands in extreme south produce...... (wheat/barely/millets) and....... (oilseeds/rice).
- iv) Telangana has become a land of...... (rivers/tanks) and forms of artificial...... (cultivation/irrigation).

3.5 THE DYNAMICS OF REGIONAL TRANSFORMATION

Differences between regions and regional cultures go back in time and can possibly be dated to the beginnings of adaptive subsistence strategies i.e. food production. Beginnings of agriculture and agrarian economy in main river basins of the subcontinent, being essentially a process and not an event, were spread over several millennia. While Mehrgarh in Kachhi plain (now in Pakistan) experienced early agricultural activities before *c*. 6000 BCE and Indus region experienced it in the 4th-3rd millennia, Gangetic valley saw the advent of agriculture at Koldihwa (UP) in *c*. 5000 BCE, at Chirand (Bihar) in second half of third millennium BCE and at Atranjikhera (in the *Doab*) in the first half of the second millennium BCE. In Ganga valley, however, the beginning of fulfledged, settled agricultural activity, farming villages and other associated traits like emergence of towns, trade and state system go back to the middle of 1st millennium BCE.

There were various pockets in central and Peninsular India where this transition took place only in the concluding centuries of 1st millennium BCE. Similarly, in the river basins of Ganga, Godavari, Krishna and Kaveri agricultural communities flourished and carried forward the civilizational process. At the same time, however, large pockets in areas such as Assam, Bengal, Odisha, Gujarat and central India, being relatively isolated or isolated regions, remained for a long time in a stage of primitive economy, largely untouched by any such development. Finally, when transition to the historical period took place in some of the relatively isolated regions there was not only a time gap but also perceptible differences in the nature and formation of regions. Cultural influences from the already developed regional epicentres had a formative bearing on development processes in these isolated areas. It is no surprise therefore, that some regions have advanced more rapidly than others and there are still others which have lagged behind.

3.5.1 Uneven Patterns of the Emergence of Historical Regions

Uneven pattern of cultural growth and differential configuration of historical forces in numerous regions were, as we have seen, greatly influenced by geography. The uneven

development of regions can be demonstrated through interesting historical situations. For example, in the second half of the 3rd millennium BCE one encounters Mesolithic cultures in Gujarat and at the same time Neolithic cattle-keepers were traversing the landscape of Deccan. What is striking is that the mature, advanced Harappan civilization coexisted with these cultures in other regions. Consequently, there is evidence of interaction between cultures and regions at different levels of growth. Such tendencies have persisted all through Indian history. To put it differently, while Indus and Saraswati basins were colonized in *c.* 3rd millennium BCE the first large-scale agricultural communities of Deccan, Andhra, Tamil Nadu, Odisha and Gujarat belong essentially to Iron age and can be placed in second half of the 1st millennium BCE.

With the advent of iron we see rapid horizontal spread of material culture based on settled agriculture. By c. $3^{\rm rd}$ century BCE we see a certain homogeneity in material culture of Gangetic northern India and fringes of central India. Although on the basis of geographical distribution of Ashokan inscriptions (dealt with in Units 13 and 14) a certain measure of cultural uniformity is normally assumed for the subcontinent the process of emergence of the early historical, literate period with a complex social structure in area south of the Vindhyas acquired momentum during and after the Mauryas.

In fact, post-Mauryan period i.e. c. 200 BCE-300 CE was the formative period for most of the Deccan and south India. Archaeological date from excavations at historic settlements in these regions support this line of argument. It may be added that vast areas of the intermediate zone or forested hills of central India were never thoroughly colonized and, therefore, they continue to provide shelter and isolation to the tribes at different stages of primitive economy. In the subcontinent civilization and a more complex culture with hierarchical social organization reached different regions in different periods and regional spread of a more advanced material culture was unevenly balanced.

3.5.2 The Ceramic Evidence

Pottery, because of its indestructible quality, is a reliable identifying mark of a culture and an important archaeological source. Different cultures are identified by their characteristic pottery. Ochre-Coloured Pottery Ware (OCPW) is dated earlier than c. 1000 BCE, Painted Grey Ware (PGW) is roughly dated between c. 800-400 BCE, Black and Red Ware (BRW) lies in between the two, and Northern Black Polished Ware (NBPW) is dated between c. 500-100 BCE. First three pottery types are largely found in the Indo-Gangetic divide and upper Ganga valley including the *doab*. NBPW has its centre of origin in middle Gangetic plain and spread out into central India and Deccan during Mauryan period.

Distribution of pottery types gives us some idea of territorial limits of a culture and the stages of its expansion. Indo-Gangetic divide and upper Ganga basin experienced the emergence of a new cultural pattern first in the second half of 2nd millennium BCE and then, there was a gradual eastward spread which, during the Mauryan period, seems to have gone beyond the Gangetic heart land.

3.5.3 The Literary Evidence

The early Indian literature also provides evidence regarding geographical zones and their expansion. The geographical focus of the Rig Vedic period was the *Saptasindhu* (land of Indus and its tributaries) and Indo-Gangetic divide. In later Vedic period the *doab* became epi-centre and in the age of the Buddha around 600 BCE middle Gangetic valley (Koshala and Magadha) came into prominence. It may be mentioned that the stages of geographical spread coincided with progress in material culture. The term

rashtra in the sense of territory came into use in later Vedic period and we see rise of small monarchies and states in areas such as Kuru and Panchal. In the age of the Buddha 16 Mahajanapadas (large territorial kingdoms) emerged. With the exception of Gandhara in the north-west, Avanti in Malwa and Asmaka in the Deccan the Mahajanapadas were mostly concentrated in upper and middle Gangetic valley. Regions such as Kalinga (ancient coastal Odisha), Andhra, Vanga (ancient Bengal), Rajasthan and Gujarat find no mention in literature of that period, suggesting thereby that they were yet to emerge on the historical stage.

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Kingdoms to south of the Vindhyas like Kalinga were mentioned for the first time by Panini in c. 5^{th} century BCE. Tamil country in far south was yet to register its transition to the historical period. Emergence and formation of the various regions, therefore, was a long drawn out process. Hence, it is not surprising that difference in technological intervention and socio-economic development of various regions has been at the root of later cultural divergences.

Check Your Progress Exercise 3

1)	Wh	sich of the following statements are right (\checkmark) or wrong (\times) ?		
	i)	Uneven development of regions cannot be described through hist situations.	toric (al)
	ii)	Cultural developments in the already developed regions made a bear isolated regions.	ring (on)
	iii)	The process of emergence of regions has been even all over.	()
	iv)	Different cultures are identified by their characteristic pottery.	()
	v)	Literature is of no help in identifying regions.	()
2)	Dis	cuss various kinds of pottery and the period they are associated with.		

3.6 FORCE OF REGIONS IN INDIAN HISTORY

Village has been the basic socially organized unit in all regions, securing subsistence for its inhabitants, supporting urban life, state structures and so on. However, some regions exhibit a greater density of population, rural settlements and urban centres and have regularly given rise to strong expansive states. They are also characterized by a continuous record of settlement and habitation from Neolithic-Chalcolithic times. By contrast, other regions do not share these traits. The difference between regions may be explained in terms of:

- geography,
- manner and period of the spread of material culture, and

• overall configuration of historical forces such as population, technology, social organization, communications etc.

A combination of these factors helped in shaping and development of the personality of regions.

Owing to the development of distinct and strong regional personalities and strength of regional forces the Indian subcontinent was never completely politically united. Some regions, owing to their inner strength, tried to expand and attain pan-Indian or supraregional status but such experiments were not entirely unqualified success stories. The Mauryas, Tughlaqs, Mughals and British provided a semblance of political unity. However, it must be noted that none of them succeeded in imposing political unity on all geographic units and culture areas, though the British came very close to it. Central India or broadly speaking, the intermediate zone and extreme end of Peninsular India have always remained outside the pale of any strong, expansive pan-Indian power. Again, the Vindhyas, as noticed earlier, have somewhat succeeded in separating the histories of northern India and Deccan peninsula. Similarly, the Aravalis extending from the mouth of Gulf of Cambay to the Delhi gap constitute another frontier line. In fact, this has been a very effective border.

Nevertheless, the lower Indus basin and Gujarat have been historical and cultural centres of activity for very long periods. Thus, while the large-scale centralized states did not endure for long periods, the ancient kingdoms of Magadha, Koshala, Avanti, Andhra, Kalinga, Maharashtra, Cheras, Pandyas, Cholas etc. continued to thrive under one dynasty or the other and under one regional name or the other. Their remarkable persistence may be explained in terms of the convergence of political and cultural boundaries over most periods in these natural regions.

3.6.1 Notion of the *Chakravartin*

Chakravartin (universal emperor) which was an important ideal in ancient Indian political theory sheds further light on the problem under discussion. The ideal Chakravartin was supposed to become a universal conqueror and achieve universal dominance. The realm of such a king (Chakravarti Kshetra) is equated by Kautilya's Arthashastra with the region between Himalayas and the sea. The said area, interestingly, is coterminous with the Indian subcontinent. Later, many other writings also echo this ideal again and again. The Ashvamedha sacrifice was performed by a ruler who claimed the status of a universal monarch. In ancient Indian political ideas the Chakravartin concept remained a vital force and kingship was always associated with universal dominion.

However, neither Kautilya nor his successors describe how a pan-Indian empire was to be administered. What seems possible is that the *Chakravartin* ideal meant subordination of rivals, extension of authority over their territories and, thereby, expansion of the empire. This does not mean that the subjugated territories always became a part of a uniform administrative system or that a strict control was exercised over them. In other words, it meant the exercise of a superior political power which had nothing to do with such aspects as administrative regulation, management and organization.

In spite of such limitations of the ideal what is important is that its realization was prevented by strong personality of natural regions and the strength of regionalism. However, the desire to politically unite the subcontinent continued to linger on even if such aspirations remained largely unfulfilled. This is largely borne out by inscriptions of the early historic period when even petty rulers performed *Ashvamedha* sacrifices as evidence of their

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might and made tall claims about the extent of their sovereignty and kingdom. This, in fact, is a clear-cut example which highlights the difference between actual and ideal, and emphasizes the existence of a range of differentiated natural regions all through our history.

3.7 THE HIERARCHY OF REGIONS

The term 'region', like the word 'country', is a broad inclusive term and in the present context its meaning has to be clearly specified. Geographers and social scientists have defined and delineated the regions differently, keeping in view the requirements of their investigation. We have, thus, such expressions as 'linguistic regions', 'caste regions', 'physical regions', 'natural regions', 'cultural regions' etc. However, these regional frontiers broadly correspond and appear to be co-terminus, though not always very neatly. The boundaries of physical and natural regions converge. Natural regions happen to be independent culture areas with their own configurations of language, caste, family and kinship organization, and historical tradition. However, there need not be any uniformity between two adjoining regions. Even in the geographically proximate regions, as we have seen above, diverse forms of culture coexisted throughout history. The patterns of historical development in the country and the regional unevenness of transition to the historical stage suggest the existence of a hierarchy of regions. An understanding of this hierarchy may focus on differential characteristics of regions and explain their chronologically phased formation and emergence.

3.7.1 Major Geographical Influences

The "major structure-lines of Indian historical geography" or important geographical features of Indian history such as the Narmada-Chhota Nagpur line or the line running from Gulf of Cambay to Mathura, constituted by the Aravalis, have considerably influenced the pattern of cultural diffusion in the subcontinent. We have four great divisions:

- Indus plains, prone to the influences from central and west Asia,
- Gangetic plains, which begin on the Delhi-Mathura line and have absorbed all kinds of political and cultural influences coming through the north-western frontier,
- Central Indian intermediate zone, with Gujarat and Odisha as the two extreme points, and
- Peninsular India, south of Narmada.

To north and west of the Aravali line the overall cultural landscape appears to be different. Only some areas of Rajasthan and Gujarat responded to the mainstream of cultural development of Gangetic valley in the early historical period.

The difference is somewhat clearer in the case of Punjab. After the Rigvedic period there seems to have been an arrested growth in Punjab. The persistence of non-monarchical *janapadas* in the region till the Gupta period suggests autonomous development. It also indicates weak property in land and poor agricultural growth. Absence of land-grant inscriptions – a feature common in Gupta and post-Gupta times in rest of the country – from Punjab plains strengthens this assumption. Brahmanism never had deep roots in Punjab plains, nor for that matter did the *Varna* structure become wholly acceptable. The *Brahmanas* rarely played an important role in society and the *Kshatriyas* soon faded out. The Khatris who claim to be *Kshatriyas* are usually found in professions associated with the *Vaishyas*.

Punjab, thus, provides a good example of both late historical transition and regional variation from the perspective of Ganga Valley. Similarly, the Narmada-Chhota Nagpur line is a major divide, for barring Gujarat, Maharashtra and Odisha the rest of cultural regions to the south of this line have a somewhat different individuality, being largely influenced by Tamil plains in the formative period. They share a separate zone of kinship organization and caste hierarchy. Maharashtra, because of its contiguity with Malwa which shares the Deccan lavas and has been great bridge between Ganga valley and Deccan, has had a different pattern of growth. It may not be out of place to mention that all major movements and territorial expansion into south have taken this route.

3.7.2 Nuclear Regions

In Indian history we see the early emergence of some regions as perennial bases of power. In such regions we observe an uninterrupted succession of powerful kingdoms. In contrast, there were other less favoured regions too. Geographers and historians, thus, speak in terms of perennial nuclear regions, areas of relative isolation and areas of isolation. The perennial nuclear regions correspond to the major river-valleys such as the Ganga, Mahanadi, Godavari, Krishna and Kaveri, and they have been areas of attraction for human settlements. Availability of resources and convergence of trade and communication routes have added to their importance. Logically, they have emerged as important centres of power. Let it, however, be remembered that geography and resource potentials only provide possibilities or set limitations and the nuclearity or otherwise of a region is linked with how the historical factors converge on it. There are historical examples of the Kakatiya state of Warangal or the Chalukya state of Gujarat emerging outside the nuclear regions and such examples can be multiplied. Areas of relative isolation such as country of the Bhils, Bastar and Rajmahal hills, in terms of the structure of settlements, agrarian history, social organization and state systems, differed from the nuclear regions. Because the regions developed historically, the distinction between the three types of regions was not unalterably fixed once for all. Transformation from one category to the other was possible at a certain point.

3.7.3 Settlement Structure in Time and Space

Settlement structure of regions did not remain static. They comprised villages, hamlets, towns and cities. Some regions like middle Ganga plain and Deccan were endowed with a greater number of towns. As we proceed to post-Gupta period the urban centres die out. There is an increasing evidence of agrarian expansion and emergence of new rural settlements. In some cases the earlier tribal hamlets were transformed into peasant villages. There were differences between the Brahmana and non-Brahmana settlements at the level of economic activity and social stratification. These differences gradually extended to areas which had initially remained peripheral to mainstream developments. They experienced transition from tribalism to more complex social structures. For example, the basis for rise of organized religion and state and of class society was laid in these regions. This transition would imply a proliferation of new settlements in these regions and a rise in population. Regions with a higher population density have always played a leading role in Indian history. Ganga valley, Tamil plains and the east coast were all regions with a higher density of population. Areas with resource potential and other attractions were naturally densely populated and a steady supply of manpower always added to the military strength of the state.

Check Your Progress Exercise 4

Indian History: Physical Features, Formations and Characteristics

1)	Dis	cuss the factors which hindered political unification of the Indian subcontinent. and Chara
	••••	
2)	Dis	cuss what you understand by the concept of <i>Chakravartin</i> .
	••••	
	••••	
3)	Fill	in the blanks:
	1)	Natural regions happen to be (independent/dependant) culture areas.
	ii)	Diverse forms of culture (never existed/co-existed) in history.
	iii)	Cultural developments in Punjab were (different/similar) to those of Gangetic valley.
	iv)	Regions with a (higher/lesser) population density have played a

3.8 FORMATION OF SOME REGIONS IN EARLY INDIA

leading role in Indian.....(Astronomy/History).

Ganga-Yamuna *doab*, Middle Ganga valley, Malwa, Northern Deccan, Andhra, Kalinga (coastal Odisha) and Tamil plains are major perennial nuclear regions which emerged quite early as bases of power. But, there have been smaller areas as well (which may be called sub-regions) which have preserved their individuality. Konkan, Kanara and Chhattisgarh fall in this category. Some areas such as the Raichur *doab* between Krishna and Tungabhadra and Vengi between Godavari and Krishna have been continuously fought over for their agricultural resource potential which could add immensely to strength of the adjoining regions. Major nuclear regions have been major agricultural areas with vast expanses of fertile alluvial. Let us now look into dynamics and pattern of the formation of regions by taking up a few illustrative examples.

3.8.1 The Gangetic Basin

Ganga plain, by virtue of its high agricultural productivity and rich population base, has

enjoyed a dominant position in the Indian subcontinent. No other region has had a comparable power base. However, the entire plain, as mentioned earlier, is not a homogeneous geographical piece. We have already seen that middle Ganga plains, for a variety of reasons, emerged more successful than the upper and lower plains and by the time of the Mauryas had attained undisputed hegemony in the subcontinent. During the Rig Vedic period the centre for this was Indo-Gangetic divide. In the later Vedic period around 1000 BCE the geographical focus shifted to Ganga-Yamuna *doab*. With it the eastward movement of Vedic people had begun. However, the more important developments were beginnings of settled agrarian life with the help of plough yoked to oxen and consequently, emergence of the idea of territory and territorial kingdoms (*Rashtra*, *Janapada*). Kuru and Panchala are good examples of such territories. By 6th century BCE process of the emergence of *Janapadas* tended to accelerate. For the first time we come to see growth of *Mahajanapadas* which incorporated smaller *Janapadas* and the contemporary literature puts their total number at 16.

Dense jungles had to be cleared for habitation by fire and metallic tools. In the paddy growing middle Ganga valley surplus-generation was made possible by the deep ploughing iron ploughshare. It was necessitated by growing population, a section of which like the rulers, officials, monks and priests did not engage in any kind of direct production. Agricultural surpluses helped in rise and growth of towns. Distinctive pottery of the period was the NBP which appeared around 500 BCE. Simultaneously, we come across the first system of coinage. The need for it was generated by regular trade and commerce. The spread of NBP from Koshala and Magadha to such far-flung areas as Taxila in north-west, Ujjain in western Malwa and Amaravati in coastal Andhra suggests existence of organized commerce and a good communication network which linked these towns among others. These developments were accompanied by sweeping social changes. Settled life helped in shedding pastoral arid tribal traits. Later Vedic people came into closer touch with the autochthons and there is evidence in later Vedic literature of this interaction and inter-mingling. These developments together with some kind of division of labour first and next, the diversification and specialization of occupations produced conditions congenial for the rise of caste system within the fourfold varna frame.

The emergence of *Janapadas* and *Mahajanapadas* (explained later in Unit 10) signalled sweeping social, economic and political changes. *Grama* (village), *nigama* (a bigger settlement where commercial exchange also took place) and *nagara* (town) were usual components of the *Janapada*. Woods and jungles (*vana*) were also parts of it. A *Janapada* was basically a socio-cultural region. It provided the basis for state formation which actualized in 6th century BCE. Together with the rise of *Mahajanapadas* we notice the growth of *Mahanagaras* (big cities) and concomitant affluent and impoverished social categories. The process under discussion came into its own and blossomed fully in middle Ganga valley during Mauryan period. State society had, thus, arrived and the state was willing to make use of powerful religious systems such as Brahmanism, Buddhism, Jainism and so on to maintain itself and the social order. With these developments the Gangetic northern India emerges into full view of history.

3.8.2 The Tamil Country

Anthologies of early Tamil poems collectively known as the *Sangam* literature provide a vivid account of transition to a state-society in the ancient Tamil country (*Tamilakam/Tamilaham*) from an earlier tribal-pastoral stage. They indicate simultaneous existence

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of different ecological regions and suggest how different but interrelated life-ways ranging from food gathering, marginal agriculture, fishing and cattle-tending to intensive agriculture co-existed. In fertile river valleys (*Marutam* regions) of Kaveri, Periyar and Yaigai agricultural surpluses were produced and these precisely were the stronghold of three ancient clan chiefs: Cholas, Cheras and Pandyas. Although the scene in the centuries preceding the Common Era was dominated by warrior chiefs, cattle-raids, war and booty, slowly people began to settle down as peasants and gradually a stratified society emerged with the peasants, bards, warriors and chieftains as principal categories. Cult of war catapulted warrior groups under their chiefs to a dominant position. The peasantry looking for protection and immunity from raids and plunder tended to be absorbed into a system in which a rudimentary state came into existence. The process of state formation was accelerated by:

- i) Roman trade in early centuries of the Common Era,
- ii) Rise of towns, and
- iii) Penetration of northern Sanskritic (Aryan) culture along with the *Brahmanas*.

In early centuries of the Common Era there was growing importance of Roman trade. Simultaneously, there was a rise in inland trade within *Tamilakam* and between *Tamilakam* and the Deccan. Kerala was an integral part of *Tamilakam* during this early period. Numerous minor chieftaincies in hilly, marginal agricultural zones were increasingly brought within spheres of the three kingdoms. Socially, the process is reflected in formation of caste society with peasants being reduced to the *Shudra* status. The basis of the emergence of state was, thus, laid in early Tamil Nadu.

3.8.3 The Deccan: Andhra and Maharashtra

In Andhra and northern Deccan the iron-using Megalithic communities which followed the Neolithic-Chalcolithic cultures provided base for settled agriculture and helped in the transformation of these regions. High yielding paddy cultivation was resorted to in the occupied coastal tracts of Andhra during 5th-3rd century BCE. Megalithic burials have produced evidence of:

- rudimentary craft specialization,
- a rudimentary exchange network which transported mineral resources to northern Deccan, and
- status differentiation

There is evidence of a profusion of Black-and-Red ware sites suggesting a possible rise in population. The transformation of Megalithic phase from around the 3rd century BCE marks the beginnings of change in a largely egalitarian, ranked society into a stratified society. By 2nd century BCE there is evidence of metallic money, Roman trade and urbanization. Both inscriptions and archaeology reveal the existence of a number of towns in Andhra and Maharashtra during this period. By this time Buddhism had spread in Deccan and we see the growth of monasteries and Buddhist centres. In the meantime another kind of development had begun in the form of the historical spread of the Mauryan state which accelerated the pace of these developments.

With the coming of Mauryas the Megalithic culture gave way to early historical settlements. Many urban centres and monasteries in Deccan, some of which emerged as nodal

points, date to that period. It is precisely this interaction that led to the emergence of localities in Deccan. Localities may be taken to approximate, to use a north Indian parallel, the term *Janapada*. The emergence of localities seems to be a significant development by the time of Satavahanas. They provided basis for early historic state formation in Deccan. From 2nd century BCE we see gradual expansion of agricultural settlements and integration of new communities. First, the monasteries and Buddhism and later, the *Brahmanas* and Brahmanism helped the process of social integration. There developed a triangular relationship between settled communities, state and the monasteries and or the *Brahmanas*. The historical process advanced further under Ikshvakus in coastal Andhra, Kadambas in Karnataka and Vakatakas in Maharashtra. By the middle of 1st millennium CE the two regions registered their distinct individual presence.

3.8.4 Kalinga and Ancient Odisha

The land of Odisha, like Deccan, experienced significant changes from around 4^{th} - 3^{rd} century BCE. Between c. 300 BCE and c. 300 CE the history of Odisha is one of the internal transformations of tribal society. The transition was partly autonomous and partly stimulated by contracts with Sanskritic culture of Gangetic plains the beginnings of which can be traced back to the times of Nandas and Mauryas. The subsequent period i.e. 4^{th} - 9^{th} centuries experienced emergence of a series of sub-regional states in different pockets of the region. Specificities of the emerging pattern were well laid by 10^{th} century CE. The process, however, was not uniform nor evenly spread.

Littoral zone of the deltaic coast experienced transition to historical stage earlier than the inland forest tracts and rolling uplands which have much in common with the adjoining Chhattisgarh and Bastar sub-regions. Tribal situation in central and western Odisha accounted for the arrested and uneven process of transformation in the region. Large concentration of tribals and physiography of the land prevented a repetition of the Gangetic socio-economic pattern. Caste society within the *varna* structure was late to emerge in Odisha and when it did, there was a difference in broad essentials. In terms of social structure Odisha presents an interesting case of regional variation.

3.8.5 The North-West

It must be clear that very little has been said so far about Sindh and Baluchistan in north-west. This is mainly because of their peripheral location. For much of the early historical period they were cut off from the mainstream of cultural development by the Great Indian Desert. This is not to argue that the area was culturally barren. In our period of study whenever anything of consequence happened there it was mostly in relation to central Asia, Afghanistan or Persia (Iran). It was only from the Kushana period that these areas formed a part of a supra-regional political system which included a major part of northern India. However, in north-west the Gandhara region was an exception.

As early as the 6th century BCE Gandhara was listed among the 16 *Mahajanapadas*. Bimbisara, the king of Magadha, had diplomatic contacts with the king of Gandhara. Taxila – the capital of Gandhara – was a centre of learning and trade. It had a wide economic reach. There is evidence of its trade with Mathura, central India and the Romans. Owing to its geographical location Gandhara continued to be a meeting place of various people and cultures. In the last quarter of 6th century BCE the region was politically a part of Achaemenid (Persian) empire. There is evidence of continuous

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urban life at Taxila from c. 500 BCE to c. 500 CE. However, the urban life was at its peak between 2^{nd} century BCE- 2^{nd} century CE. This is the period when the celebrated Gandhara school of art flowered which is generally described as Graeco-Buddhist in content because it is seen to be a product of interaction between Hellenistic art and Buddhism. However, increasingly it is being realized that the Gandhara school had a Bactrian substraction too. Therefore, the influence of Bactrian school in the formation of Gandhara school cannot be brushed aside. The point that we are trying to make is that:

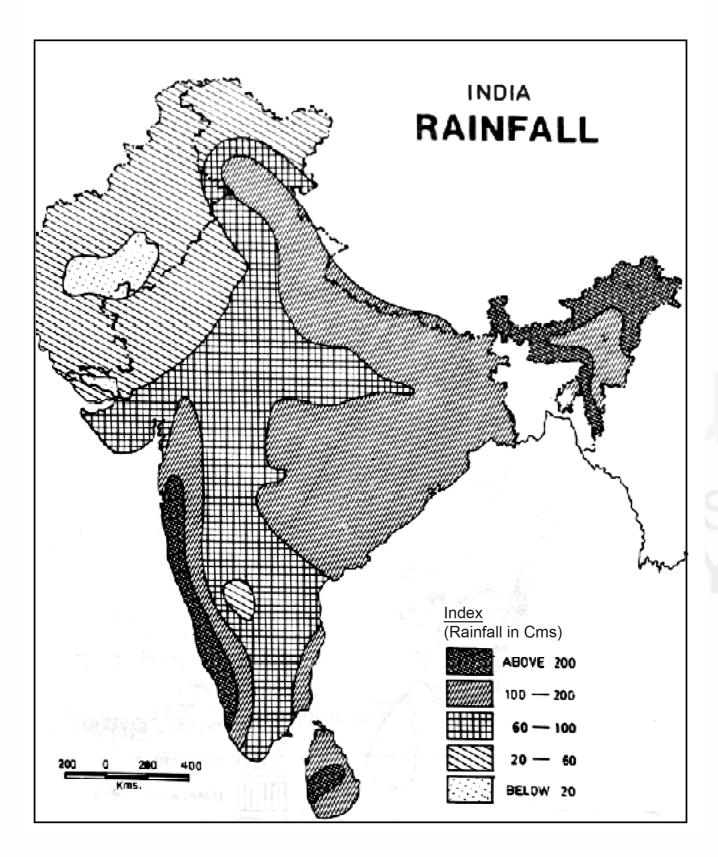
- i) Firstly in the north-west, Gandhara provides a different picture of development which contrasts with Sindh and Baluchistan, and
- ii) Secondly, in early centuries of the Common Era the personality of the region was shaped by different influences because of its very geographical setting.

Check Your Progress Exercise 5

1)	Wh	ich of the following statements are right (\checkmark) or wrong (\times) ?			
	i)	Gangetic basin is a homogeneous geographical base.	()	
	ii)	The need for coinage was generated through trade and commerce.	()	
	iii)	Janapada provided the basis for state formation.	()	
	iv)	Sangam literature throws no light on state formation in the ancient country.	Tar (nil)	
	v)	Development of Gandhara region was shaped by different cultural influ	ienc (es.	

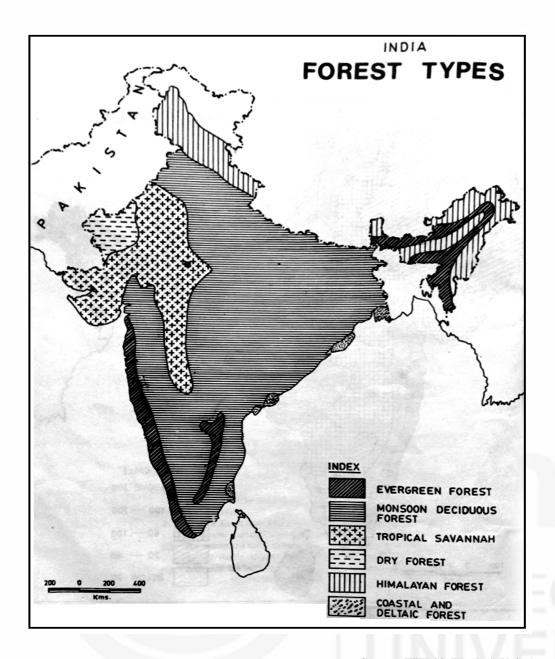
2) Fill in the blanks:

- i) Agricultural surpluses helped in the...... (growth/decay) of towns.
- ii) Rise of...... (*Janapadas/Mahajanpadas*) led to the growth of *Mahanagaras*.
- iii) High yielding...... (wheat/paddy) cultivation was taken up in coastal Andhra during...... (5th-3rd/1st-2nd) century BCE.
- iv) The...... (non-tribal/tribal) situation in Odisha arrested the transformation in the (sub-continent/region).



Source: EHI-02, Block-1, Unit-1.

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Source: EHI-02, Block-1, Unit-1.

3.9 SUMMARY

Physical divisions in the subcontinent are often roughly co-terminus with linguistic regions. The latter, in turn, have developed and asserted their cultural identities. People of different physical divisions have varied tastes, food-habits and dress sense. This is derived from environmental setting, mode of life and the manner of resource utilization that has evolved within their frontiers. Uneven pattern of growth both between and within macro-regions may be explained with reference to the availability or non-availability of resource potentialities and form of human and technological intervention. Major river basins of the country which have an annual rainfall between 50 and 100 cm. and are capable of sustaining agricultural communities on a large scale have been fully colonized through the ages. Areas with lesser or greater rainfall suffer from problems of aridity and thick jungle vegetation respectively and are not best suited for agriculture. There is a striking correlation between the optimal rainfall zone and the areas cleared for cultivation in the subcontinent. The unfolding of historical process, therefore, has neither been even nor uniform all over.

Himalayas in the north and ocean in the south, south-west and south-east create a superficial view of isolation of the subcontinent. Cultural influences have been exchanged across these frontiers and there have been maritime contacts with west, west Asia and south-east Asia. Internally even the rugged, difficult terrain of central India has not really impeded the movement of ideas and influences between varied regions of the country. Admittedly, geography and environment influence historical developments considerably even if they do not determine it entirely.

A general survey of the problem of regions and regionalism in our history and the examples cited in this Unit trying to explain the process of formation of regions very clearly show that the socio-cultural differentiation of regions is historically old. The emergence of natural physical regions as historical/cultural regions can be traced back to the formative period of Indian history. Subsequently, these regions evolved their distinct socio-cultural ethos leading to the emergence of separate socio-political entities. Some regions surfaced earlier and faster than the others owing to the early convergence of certain historical forces in them. Developments in other areas were triggered off by interaction with and cultural diffusion from these primary centres. This may partly explain differential traits of varied regions.

The regional variation expressed itself more conspicuously in many forms such as language, architecture, sculpture and caste system in the Gupta and post-Gupta centuries. Almost all regional languages evolved during the said period. Simultaneously, region-specific caste structures emerged. Such differences existed not only between regions but also within regions. Although the regions tend to be somewhat homogeneous units the persistence of sub-regions within regions cannot be ignored either. Already we have seen that the Gangetic north India is not all one homogeneous region. Ecological variations within ancient *Tamilakam/Tamilaham* (Tamilnadu) also need to remembered. The same holds true for Andhra, Odisha, Punjab and Gujarat. Sub-regions had their ancient names too. However, changing political patterns and the configurations of sub-regions were responsible for grafting new inclusive broad-based names on areas that earlier had different names. Regions as territorial units emerge through historical process and to understand Indian history one has to understand their characteristics and the process of their formation.

3.10 KEYWORDS

Chalcolithic Settlements

Adaptational Strategy

: Manner in which adjustments are made to a new environment or culture by human beings.

Autochthons

: Indigenous, native, aboriginal.

Alluvial Plains

: Plains formed by deposition of silt, sand etc. by a river.

Caste-peasant Base

: Referring to the early settled agricultural society

: Referring to the early settled agricultural society whose members were socially classified along caste lines. These members were dependent on the produce of those of their counterparts engaged in cultivation.

: Settlements which represent an age when both stone and copper artifacts were used.

Colonized : Settle in a colony.

Concomitant : Along with.

Dynamics : Pattern of change; development and growth in

any field.

Epicentre : Centre of the origin of an earthquake.

Ethos : Character, disposition of a community or culture.

Formative : Giving shape, moulding.

Frontier-Zone : Area at the outskirts of an agricultural settlement.

Normally, such an area has some socioeconomic links with the main settlement. For example, the nomads moving around such an area will supply milk, sheep skin, wool etc. to the main

settlement.

Geographical Contiguity : Areas physically adjacent or side by side.

Littoral : On the sea coast.

Painted Grey Ware Culture : Culture associated with grey coloured pottery

found in the Ganga doab region.

Pastoralism: It relates to the occupation in which animals are

reared.

Physiographical Divisions: Refers to physical/geographical divisions of India.

Social Stratification : Division of society according to rank, caste and

strata.

Static : Lacking vitality.

Technological Intervention: Impact of new techniques and knowledge in

developing resource potential of a region.

3.11 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) i)
- 2) Your answer should include high fertile soils, irrigation facilities, proximity to various resources like stone, timber etc. See Sub-sec. 3.2.1
- 3) i) helps us, rise and decline
 - ii) attempt to
 - iii) three
 - iv) sub-regions

Check Your Progress Exercise 2

- 1) i) \times , ii) \checkmark , iii) \checkmark , iv) X
- 2) i) three, units

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- ii) swamp, monsoon
- iii) millets, oilseeds
- iv) tanks, irrigation

Check Your Progress Exercise 3

- 1) i) \times , ii) \checkmark , iii) \times , iv) \checkmark , v) \times
- 2) Hint: OCP, PGW and give their dates. See Sub-sec. 3.5.2

Check Your Progress Exercise 4

- 1) Your answer should include the development of strong regional personalities; strength of regional personalities; strength of regional forces etc. See Section 3.6
- 2) See Sub-section 3.6.1
- 3) i) independent, ii) coexisted, iii) different, iv) higher, history.

Check Your Progress Exercise 5

- 1) i) \times , ii) \checkmark , iii) \checkmark , iv) \times , v) \checkmark
- 2) i) growth, ii) *Mahajanapadas*, iii) paddy, 5th-3rd, iv) tribal, region.

3.12 SUGGESTED READINGS

Chakrabarti, D. K. (2014). Aspects of Historical geography. In D. K. Chakrabarti and Makkan Lal (eds.) *History of Ancient India*. Volume 1, Prehistorica Roots, Vivekananda International Foundation and Aryan Books International, Delhi, pp. 3-21.

Chattopadhyaya, B. D. (1984). A Summary of Historical Geography of Ancient India. Calcutta.

Chaudhuri, S. B. (1948). Regional Divisions of Ancient India. In *Annals of the Bhandarkar Oriental Research Institute*, Vol. 29, No. 1/4, pp. 123-146.

Gadgil, Madhav and Guha, R. (1992). *The Fissured Land: an Ecological History of India*. New Delhi.

Gadgil, Madhav and Thapar, Romila (1990). Human Ecology in India: Some Historical Perspectives. In *Interdisciplinary Science Reviews*, Vol. 15, no. 3.

Law, B. C. (1954). Historical Geography of Ancient India, Paris.

Singh, R. L. (ed.) (1971). *India. A Regional Geography*. Varanasi.

Spate, O. H. K. and Learmonth, A. T. A. (1972). *India and Pakistan, A General and Regional Geography*. 4th edn., London.

Subbarao B. (1958). The Personality of India. Baroda.

UNIT 4 HUNTER-GATHERERS: ARCHAEOLOGICAL PERSPECTIVE, ORIGIN OF AGRICULTURE AND DOMESTICATION OF ANIMALS*

Structure

- 4.0 Objectives
- 4.1 Introduction
- 4.2 Palaeolithic Age
 - 4.2.1 Palaeolithic Tools
 - 4.2.2 Palaeolithic Sites
 - 4.2.3 Subsistence Pattern
- 4.3 Mesolithic Age
 - 4.3.1 Mesolithic Tools
 - 4.3.2 Mesolithic Sites
 - 4.3.3 Subsistence Pattern
- 4.4 Neolithic Culture
- 4.5 The Earliest Farmers
 - 4.5.1 Nile Valley
 - 4.5.2 Early Farmers of Western Asia
- 4.6 Early Farmers of the Indian Subcontinent
 - 4.6.1 North-Western Region
 - 4.6.2 Neolithic Culture of Kashmir Valley
 - 4.6.3 Early Farmers of Belan Valley
 - 4.6.4 Neolithic Culture of Bihar/Mid-Ganga Valley
 - 4.6.5 Early Farmers of Eastern India
 - 4.6.6 Early Farmers of South India
 - 4.6.7 Neolithic Cultures of Upper, Central and Western Deccan
- 4.7 Summary
- 4.8 Key Words
- 4.9 Answers to Check Your Progress Exercises
- 4.10 Suggested Readings

4.0 OBJECTIVES

After reading this Unit, you will be able to learn:

- the various ways to study the pre-historic hunter-gatherers;
- about the archaeological evidences which enable us to reconstruct their history;
- about their subsistence-pattern; and
- about the kinds of tools they used, and to what extent pre-historic art helps us in knowing about their organization.

^{*} This Unit has been adopted from EHI-02, Block 1.

This Unit also deals with the origins of agriculture and the beginnings of domestication of animals before the age when metals came to be used. Cultivation of cereals and developments in agriculture transformed the nomadic hunter-gatherer into a sedentary farmer. This led to the beginning of village settlements and manufacturing of new types of tools. This stage of human development is referred to as the Neolithic Age. After studying this Unit you will also be able to learn about:

- the characteristic features of the Neolithic culture,
- the archaeological evidence in the forms of new types of stone tools, cultivated plants etc. which demonstrate the beginning of cultivation,
- the patterns of agriculture in West Asia and the Indian subcontinent, and
- the various crops which were cultivated in different regions of the Indian subcontinent.

4.1 INTRODUCTION

It may seem unbelievable to us, living in the 21st century, but it is true that human societies, during more than 99% of their existence on earth, have lived as hunter-gatherers. This means that before human beings started producing food about 10,000 years ago they lived off the resources of nature. This they did by gathering various edible items like roots, fruits, sudd, honey and so on which nature had to offer and by killing animals, birds and fish available in the surroundings in which they lived. Their total dependence on nature or their environment during major part of human existence has many implications. It means that the way they acquired their food influenced the character of their relationship with nature and also how they viewed nature. Secondly, the huntergatherers existed in groups that were also related to the mode of acquiring food. What may be noted is that the formation of groups among them was much more flexible than in other societies.

Considering the very, very long span of time for which the human societies have been in the hunting-gathering stage it is important that we learn about this stage of human history. There are various areas in the world where human beings still live as hunter-gatherers. It is, thus, necessary that we learn something about their cultures in addition to learning about how culture changes in human history. How do we learn about hunter/gatherers? We get considerable amount of information about different aspects of the huntergatherers' way of life, their social organization and their environment from the works of ethnographers/anthropologists who study living human communities. Their works provide us with useful insights into the conditions of life of hunting-gathering communities. However, for the past communities we depend primarily on the works of those archaeologists and scientists who have specialized in discovering, studying and analyzing the tools these communities made, the remains of animals they killed and ate, and the kind of environment they lived in. This method which involves coming together of many academic disciplines takes into consideration many categories of evidence including study of animals, plants and other organic remains when archaeologists associate them with human communities of the hunting-gathering stage and this gives an insight into the character of the immediate physical environment of the early man and the way it was utilized.

Since the tools made by hunter/gatherers have survived in the form of stone tools, archaeologists use different terms like paleoliths, mesoliths to classify tools of different types and periods. The stones which were used for making them and the techniques employed in giving them shape are also studied in detail by archaeologists. The faunal study or the study of animal remains provides a framework which can serve as a reference point for measuring variations in the pattern of pre-historic faunal exploitation. Rock

carvings and paintings also give us an idea about economy and society of the prehistoric people.

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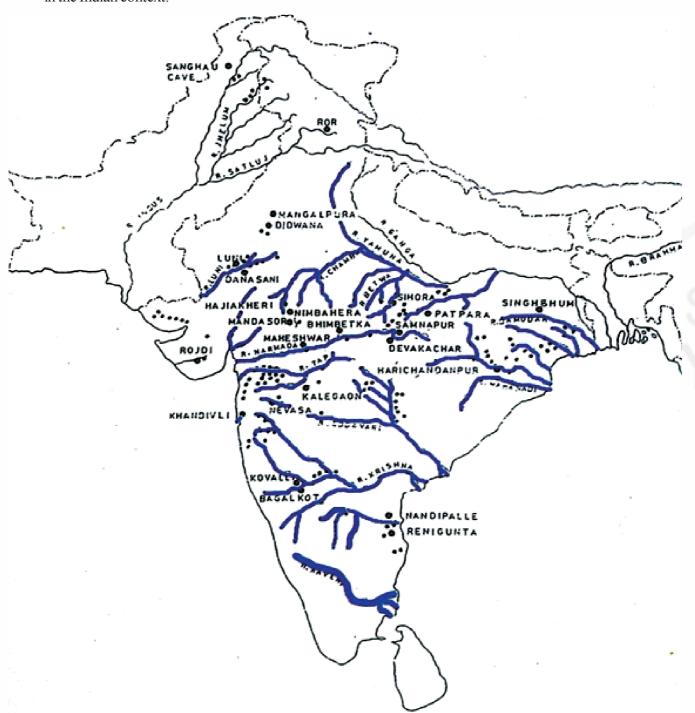
Archaeological Perspective, Origin of Agriculture and Domestication of Animals

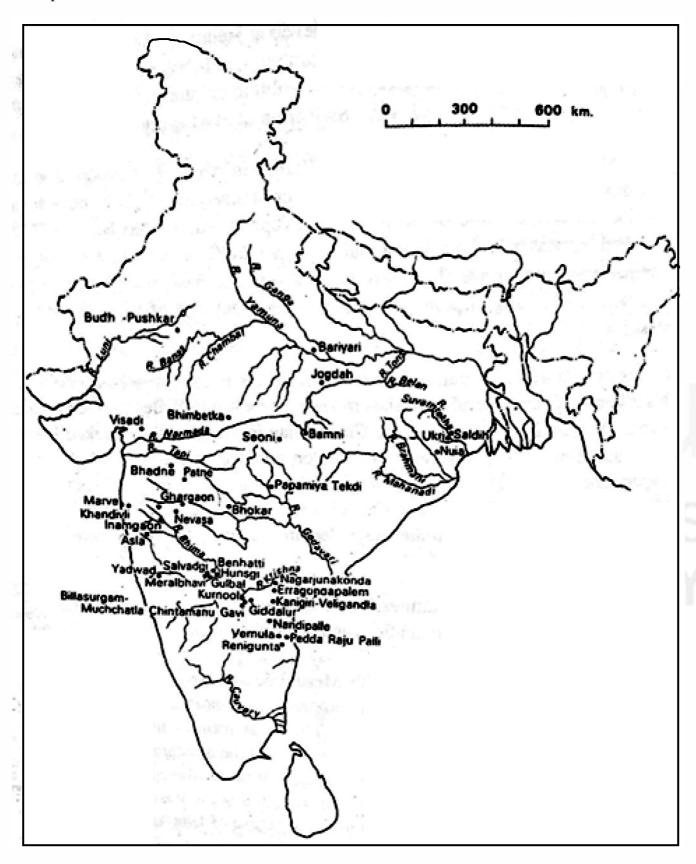
Hunter-Gatherers:

4.2 PALAEOLITHICAGE

Palaeolithic culture developed in the Pleistocene period (about two million years ago). It is the geological period referring to the last or the Great Ice Age. It was the period when ice covered the earth's surface. In India there has been considerable discussion among archaeologists regarding the terms denoting stone tools of the Palaeolithic phase:

- One group of scholars wanted to introduce the term 'Upper Palaeolithic' for denoting the phase characterized by tools like blade and burin;
- The other group considered the term 'Upper Palaeolithic' specific to European Palaeolithic culture. Now the term 'Upper Palaeolithic' has been widely accepted in the Indian context.





Distribution of Upper Palaeolithic Sites in India. Source: MAN-002, Block-5, Unit-3.

4.2.1 Palaeolithic Tools

Palaeolithic culture has been divided into three phases on basis of nature of stone tools made by human beings as well as due to changes in climate and environment:

Tools of lower Palaeolithic phase include mainly:

- hand-axes,
- cleavers,
- choppers, and
- chopping tools

Middle Palaeolithic industries are based upon flakes, and the upper Palaeolithic is characterized by

- burins, and
- scrapers

Let us discuss in detail some of the tools of this period and to what use were they put:

- 1) **Handaxe:** Its butt end is broader and the working end is narrower. It might have been used for cutting and digging purposes.
- 2) **Cleaver:** This has a biface edge and is more or less transversal. It was used for clearing and splitting objects such as the trunks of trees.
- 3) **Chopper:** A massive core tool in which the working edge is prepared by unifacial flanking and used for chopping purposes.
- 4) **Chopping Tool:** It is again a massive core tool like chopper but the working edge is bifacially prepared by alternate flanking. Used for similar purpose as the chopper, it was more effective due to its edge being sharper.
- Flake: A desired crude shaped tool produced by applying force on the stone. The flake carries positive bulb of percussion on its surface and the core has a corresponding negative bulb of percussion. The point at which the hammer-stone strikes is called the point of percussion and on the flake struck off there is round, slightly convex shape around this point called the positive bulb of percussion. On the core there is corresponding concave bulb called the negative bulb of percussion. There are many flaking techniques like:
 - free flaking technique,
 - step flaking technique,
 - block-on-block technique,
 - bipolar technique etc.
- 6) **Side Scraper:** It is made of a flake or blade with continuous retouch along a border. It might have been used for scraping barks of trees and animal skins.
- 7) **Burin:** It is like flake or blade and the working border is produced by the meeting of two planes. The burin's working border does not exceed 2-3 cm. in length. It was used for engraving on soft stones, bones or walls of rock shelters and cores.

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Palaelolithic Tools: A) Cleavers; B) Choppers; C) Chopping tools; D) Side scrappers; E) Burin; F) Flakes

4.2.2 Palaeolithic Sites

Let us now see in which regions of India archaeologists have found these tools fashioned by the hunter-gatherers. The distribution of their tools will tell us not only about the areas in which they lived and moved but also about their environment.

Let us start from the extreme north:

- The Kashmir valley is surrounded by Pir Panjal hills on the south-west and the Himalayas on the north-east. A hand-axe was discovered near Pahalgam in Kashmir on the river Lidder. However, Palaeolithic tools are not found in large number in Kashmir because Kashmir was intensely cold during the glacial times. The Potwar region (present-day west Punjab and Pakistan) lies between Pir Panjal and the Salt Range. This area was experiencing tectonic movement and the rivers Indus and Sohan originated in this process. The Sohan valley yielded hand-axes and choppers and the important sites which have yielded such tools are:
 - Adial,
 - Balwal, and
 - Chauntra.

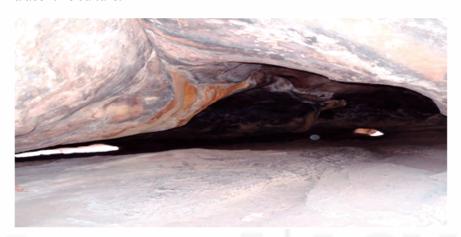
The banks of the rivers Beas, Bangange and Sirsa have also yielded Palaeolithic tools

- ii) The Luni river complex (Rajasthan) has many Palaeolithic sites. The river has its source in the Aravalis. Chittorgarh (Gambhirs basin), Kota (Chambal basin) and Negarai (Berach basin) have yielded Palaeolithic tools. The Wagaon and Kadamali rivers in Mewar are rich in middle Palaeolithic sites. A variety of scrapers, borers and points have been discovered in this area.
- iii) Rivers Sabarmati, Mahi and their tributaries (Gujarat) have yielded many Palaeolithic artefacts. Sabarmati rises in the Aravalis and flows into the Gulf of

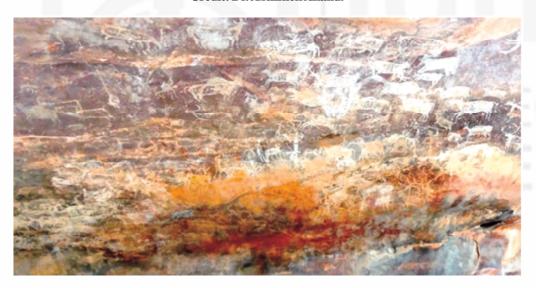
Cambay. Middle Palaeolithic artefacts have been reported from Bhandarpur near Orsang valley. River Bhader in Saurashtra is rich in Palaeolithic assemblage and hand-axes, cleavers, chopping tools, points, borers and scrapers have been reported from its banks. Kutch area has produced many Palaeolithic tools like cleavers, hand-axes and choppers.

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iv) Narmada rises in the Maikal range and flows into the Gulf of Cambay. Its terraces are rich in Palaeolithic sites. Many hand-axes and cleavers have been reported. Bhimbetka (near Bhopal) located in the Vindhyan range is a site in which tools representing Acheulian tradition were replaced at a later stage by the middle Palaeolithic culture.



Pre-Historic Rock Shelter at Bhimbetka. ASI Monument No. N-Mp-225. Credit: Dr. Abhishek Anand.



This cave is called the Zoo-Rock Cave due to copious drawings of animals. Bhimbetka. Credit: Dr. Abhishek Anand.

- v) Rivers Tapti, Godavari, Bhima and Krishna have yielded a large number of Palaeolithic sites. The distribution of Palaeolithic sites is linked up with ecological variation like erosional features, nature of soils etc. The Tapti trough has deep *regur* (black soil) and the rest of the area is covered mostly by medium *regur*. There is scarcity of Palaeolithic sites in the upper reaches of Bhima and the Krishna. From Chirki near Nevasa in Maharashtra Palaeolithic tools like hand-axes, chopper, cleavers, scrapers and borers have been reported. The other important Palaeolithic sites are Koregaon, Chandoli and Shikarpur in Maharashtra.
- vi) In eastern India, river Roro (Singhbhum, Bihar) is rich in Palaeolithic tools like hand-axes, bifacial chopping tools and flakes. From Singhbum many Palaeolithic

sites have been reported and the main artefacts are hand-axes and choppers. Palaeolithic tools have also been reported from the valleys of Damodar and Suvarnarekha and distribution pattern of the Palaeolithic culture here is, again, conditioned by topographical features.

Baitarani, Brahmani and Mahanadi rivers form the deltaic region of Odisha and some Palaeolithic tools have been found in this area. The Buharbalang valley in Mayurbhang (Odisha) has many early and middle Palaeolithic tools like:

- hand-axes,
- scrapers,
- points,
- flakes, etc.
- vii) From Malprabha, Ghatprabha and affluents of the Krishna a number of Palaeolithic sites have been reported. In Ghatprabha basin in Karnataka Acheulian hand-axes have been found in large numbers. Anagawadi and Bagalkot are two most important sites on the Ghatprabha where both early and middle Palaeolithic tools have been found. Rivers Palar, Penniyar and Kaveri in Tamil Nadu are rich in Palaeolithic tools. Attirampakkam and Gudiyam (Tamil Nadu) have yielded both early and middle Palaeolithic artefacts like:
 - hand-axes,
 - flakes,
 - blades,
 - scrapers, etc.

4.2.3 Subsistence Pattern

There is a rich assemblage of animals both of indigenous and foreign origin. Primates, many giraffe-like forms, musk-deer, goats, buffaloes, bovids and pigs seem to be of indigenous origin. The camel and horse had North-American connection. Hippopotamus and elephants migrated to India from central Africa. The migratory routes lay east and west of the Himalayas. However, the wave of migration of most of the immigrant animals was along the north-west borders. There was great deal of interaction between India and Africa.

As regards the relationship between the Palaeolithic human beings and their resources faunal remains give us some idea about their subsistence-pattern. These remains suggest that people were primarily in a hunting and gathering stage. It is likely that the balance between number of human and the animal population of the area in which they lived and moved to ensure food supply would have been maintained. The people would have made extensive use of faunal and floral resources in their immediate vicinity. Hunting practices were concentrated on large and middle sized mammals, especially ungulates (a type of animal). At the same time, deer, rhino, and elephant seem to have been hunted. There is no evidence of selective hunting in this period. In some assemblages few species dominate; it is so because of their abundance in the area and also because they were easy to hunt. It seems that the subsistence patterns of hunter-gatherers were geared to a dry season/wet-season cycle of exploitation of plant and animal foods. It is likely that the Palaeolithic people subsisted on such animals as:

- OX,
- bison,

- nilgai,
- chinkara,
- gazelle,
- black buck antelope,
- sambar,
- spotted deer,
- wild boar,
- a variety of birds, and
- tortoises and fishes,

and on honey and plant foods like fruits roots, seeds and leaves.

It is argued that items which were gathered and constituted their diet are generally far more important than the animals which are hunted in the context of modern surviving hunter-gatherers. It has been also observed that debris from the gathered part of the diet normally survives far less than the debris from the hunted part. It is difficult to work out on this basis the diet pattern of the Palaeolithic people because we do not have much evidence of people and plant relationship for the past as we have for present day hunter-gatherers. It is likely that Palaeolithic people would have been taking animal diet along with products of wild plants.

Rock paintings and carvings also give us an insight into the subsistence-pattern and social life of Palaeolithic people. The earliest paintings belong to the upper Palaeolithic age. Bhimbetka located in the Vindhyan range is well known for continuous succession of paintings of different periods. Period-I belongs to the upper Palaeolithic age and paintings are done in green and dark red colours. The paintings are predominantly of:

- bisons,
- elephants,
- tigers,
- rhinos, and
- boars.

They are usually large, some measuring two-three meters in length. There is need to work out the frequency of different types of animals to have a more precise idea about the hunting life of Palaeolithic people. But, hunting is reflected as the main subsistence pursuit in the carvings and paintings. It is sometimes possible to distinguish between men and women on the basis of anatomical features. These paintings also reflect that the Palaeolithic people lived in small band (small groups) societies whose subsistence economy was based on the exploitation of resources in the form of both animal and plant products.

Check Your Progress Exercise 1

Note: Read the following questions carefully and mark the right and most appropriate answers.

- 1) Which period of social evolution represents the hunting-gathering stage?
 - a) Palaeolithic Age
 - b) Mesolithic Age

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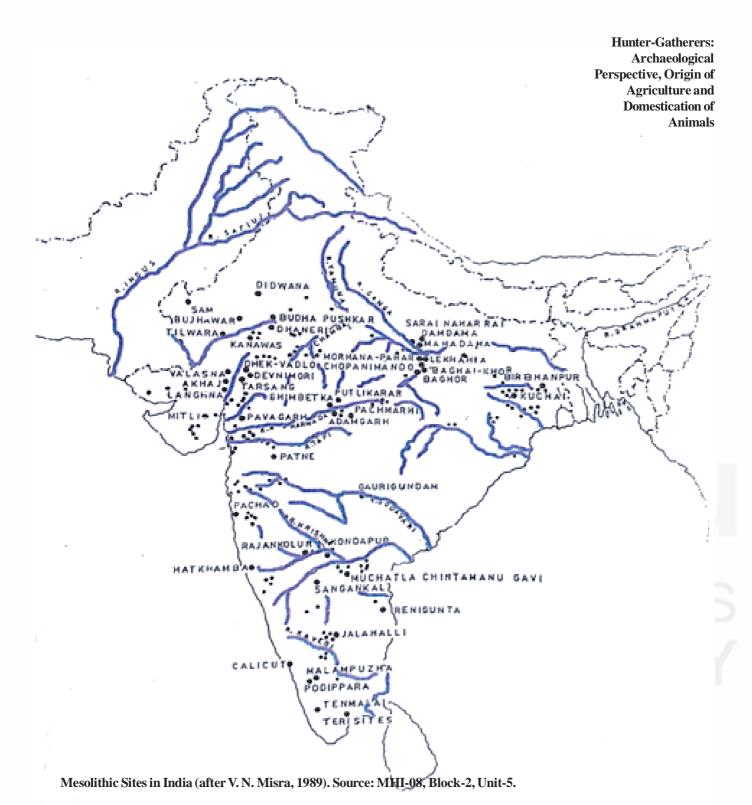
- c) Palaeolithic and Mesolithic Age
- d) Neolithic Age
- 2) How are prehistoric hunter-gatherer societies studied?
 - a) With the help of literary sources
 - b) With the help of numismatic sources
 - c) With the help of epigraphic sources
 - d) With the help of archaeological remains
- 3) Pleistocene period was:
 - a) Very cold
 - b) Very warm
 - c) Temperature was mild
 - d) Very dry
- 4) The Palaeolithic culture has been divided into three phases on the basis of:
 - a) Change in the climate
 - b) The nature of stone tools
 - c) Faunal remains
 - d) Nature of stone tools and change in climate and faunal remains
- 5) Palaeolithic economy was based on:
 - a) Food Production
 - b) Hunting
 - c) Gathering of products of wild plants
 - d) Hunting of animals and gathering of products of wild plants

4.3 MESOLITHICAGE

The Mesolithic age began around 8000 BCE. It was the transitional phase between Palaeolithic and the Neolithic age. There was rise in temperature and climate became warm and dry. The climatic changes affected human life and brought about changes in fauna and flora. The technology of producing tools also underwent change and small stone tools were used. Man was predominantly in hunting-gathering stage but there was shift in the pattern of hunting from big game to small game hunting and to fishing and fowling. These material and ecological changes are also reflected in rock paintings. Let us examine some of the tools used during this period.

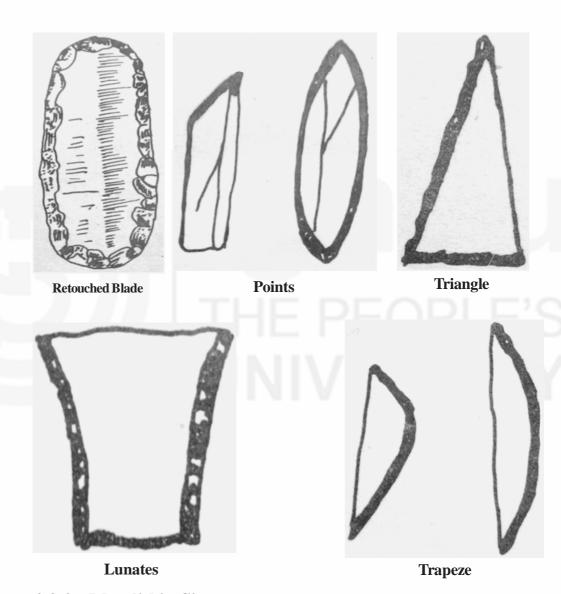
4.3.1 Mesolithic Tools

The Mesolithic tools are microliths or small stone tools. They are very small in size and their length ranges from one to eight cm. Some microliths have even geometric forms. Blade, core, point, triangle, lunate and trapeze are the main types of Mesolithic tools. Besides these, Palaeolithic tools like scraper, burin and even choppers also continue during the Mesolithic age. Let us have a look at the characteristics of Mesolithic tools:



- i) Blade: Blade is a specialized flake with parallel to sub-parallel to lateral edge, its length at least twice its width. It might have been used for cutting purposes. The technique of Mesolithic blade production is called fluting. Here, the pressure is delivered on the core from the edge of the striking platform. We also find some retouched blades which are broad, thick and long. The retouching process sharpens the blade and we find blades with retouching along one or two borders or even at two ends. These blades are more sharp and effective than ordinary blades.
- ii) **Core:** Core is usually cylindrical in shape with fluting marks along its length and a flat striking platform at the distal horizontal end.
- iii) **Point:** Point is a broken blade in a triangular form. It is retouched along one or

- both slopping borders and the border can be rectilinear or curvilinear. Points were used as arrow-heads and spearheads.
- iv) **Triangle:** It has usually one border and base, and the border is retouched. These were used for cutting purposes or as arrowheads.
- v) **Lunate:** Lunate is like a blade and one of the borders is prepared by semicircular retouching. It looks like a segment of a circle. It could be used to obtain concave cutting edge or two of these could be halved back to back to form an arrowhead.
- vi) **Trapeze:** Trapeze looks like a blade and usually more than one border is retouched. Some trapezes have retouches on three borders. Trapezes could have been used as arrowheads.



4.3.2 Mesolithic Sites

Let us discuss some of the prominent Mesolithic sites in India:

Pachpadra basin and the Sojat area (Rajasthan) are rich in microliths. A significant habitation site discovered is Tilwara. Tilwara has two cultural phases. Phase-I is Mesolithic and is characterized by the presence of microliths. In Phase-II wheelmade pottery and pieces of iron are found together with microliths. Bagor (Rajasthan) on the river Kothari is the largest Mesolithic site in India and has been

horizontally excavated. Bagor has three cultural phases. On basis of radiocarbon dating phase-I or the earliest phase of this culture has been placed between c. 5000-2000 BCE.

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- ii) Rivers Tapti, Narmada, Mahi and Sabarmati (Gujarat) have also yielded many Mesolithic sites. Sites like Akhaj, Valasana, Hirpur and Langhnaj are situated east of Sabarmati. Langhnaj has been extensively studied and it has revealed three cultural phases. Phase-I has produced microliths, burials and animal bones. The microliths are mostly:
 - blades,
 - triangles,
 - crescents,
 - scrapers, and
 - burins.
- vindhya and Satpura mountain ranges are rich in Mesolithic sites. In Prayagraj-Pratapgarh area (Uttar Radesh) Sarai Nahar Rai is an extensively studied site. Morhana Pahar and Lekhahia (both in Uttar Pradesh) are two significant Mesolithic sites in the Kaimur range. Bhimbetka (Madhya Pradesh) has yielded many microliths. This site has a favourable ecological set-up. Adamgarh in Hoshangabad and lying to the south of Bhimbetka is another significant Mesolithic site.
- iv) Microliths have been reported from coastal Konkan and inland plateau. Sites like Kasushoal, Janyire, Babhalgo and Jalgarh have been reported from Konkan. The Deccan basaltic plateau has many Mesolithic sites and microliths have been reported from Dhulia and Pune districts.
- v) Chhota Nagpur plateau, coastal plains of Odisha, Bengal delta, Brahmaputra valley and Shillong plateau have yielded microliths. Pre-Neolithic and Neolithic associated microliths have been reported from Chhota Nagpur plateau. Mayurbhanj, Keonjhar and Sundergarh in Odisha have microlithic assemblage. Kuchai in Odisha is an excavated microlithic site. Birbhanpur located on the river Damodar in West Bengal is another excavated microlithic site. Sebalgiri-2 in the Garo hills of Meghalaya has yielded pre-Neolithic microliths.
- vi) Krishna and Bhima rivers have produced many microliths. In many cases they survive to the phase of Neolithic cultures. Sangankallu situated on the western fringe of the Karnataka plateau has produced:
 - cores,
 - flakes,
 - points, and
 - crescents.

Godavari delta is rich in microliths. Here, they are associated with Neolithic culture. Kurnool area has many microliths. Microliths have also been reported from Renigunta in the Chittoor district in Andhra Pradesh.

Since the Mesolithic age covers a long span of time and there are many Mesolithic sites in India, an attempt has been made to classify different sites chronologically and on the basis of material remains. Some sites are real Mesolithic sites because of the abundance



of microliths and chronological sequence, and some sites are chronologically of later time and reflect influence of Mesolithic culture and these sites fall in the category of the sites of Mesolithic tradition. Sites like Bagor, Sarai-Nahar-Rai, Mahadaha and Adamgarh are truly Mesolithic sites because of their early dates and the associated material culture.

4.3.3 Subsistence Pattern

The early Mesolithic sites have yielded the faunal remains of:

- cattle,
- sheep,
- goat,
- buffalo,
- pig,
- dog,
- boar,
- bison,
- elephant,
- hippo,
- jackal,
- wolf,
- cheetah,
- sambal,
- barasingha,
- black-buck,
- chinkara,
- hog deer,
- hare,
- porcupine,
- mongoose,
- lizard,
- tortoise, and
- fish.

Many of these species continued during the range of Mesolithic tradition. However, wild sheep, wild goat, ass, elephant, bison, fox, hippo, *sambar*, *chinkara*, hare, porcupine, lizard, rat, fowl and tortoise are absent at sites falling in the category of Mesolithic tradition. Wild buffalo, camel, wolf, rhinoceros and *nilgai* are present at the sites of Mesolithic tradition but these species are absent in the early Mesolithic period. The appearance and disappearance of animals has to be understood in context of changing climatic and environmental conditions.

The diet of the people during Mesolithic age included both meat and vegetal food. The remains of fish, tortoise, hare, mongoose, porcupine, deer and *nilgai* have been found



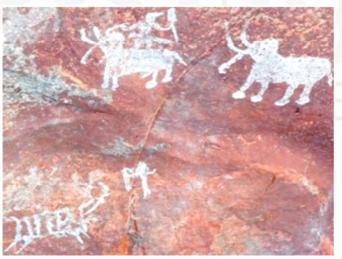


from different Mesolithic sites like Langhanaj and Tilwara and it seems these were consumed as food. Besides hunting and fishing Mesolithic people also collected wild roots, tubers, fruits, honey etc. and these constituted important elements in the overall dietary pattern. The plant food seems to have been more easily available than hunted animal food. Some areas seem to have been rich in grass, edible roots, seeds, nuts and fruits, and people would have used them as food resources. It is argued in the context of surviving hunter-gatherers that major portion of the food comes from plant sources, supplemented by hunting. It is difficult to establish co-relation between animal meat and vegetal food in the context of Mesolithic age because plant remains are perishable in nature. It can be suggested that hunting provided a significant portion of food resource.

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The paintings and engravings found at the rock shelters of Mesolithic people give us considerable idea about their social life and economic activities. Sites like Bhimbetka, Adamgarh, Pratapgarh and Mirzapur are rich in Mesolithic art and paintings. Hunting, food-gathering, fishing and other human activities are reflected in these paintings and engravings. Bhimbetka is extremely rich in paintings in which animals like boar, buffalo, monkey and *nilgai* are frequently depicted. The paintings and engravings depict activities like:

- sexual union,
- child birth,
- rearing of child, and
- burial ceremony.



Mesolithic Rock-Painting, Bhimbetka. Credit: Dr. Abhishek Anand.

All these indicate that during the Mesolithic period social organization had become more stable than the Palaeolithic times. It seems that religious beliefs of the Mesolithic people were conditioned by ecological and material conditions.



Mesolithic Rock Paintings (Bhimbetka). Source: EHI-02, Block-1, Unit-3.

Check Your Progress Exercise 2

- 1) The Mesolithic tools are primarily:
 - a) Hand-axe and cleaver
 - b) Cleaver, chopper and chopping tools
 - c) Blade, core, point, and lunate
 - d) Chopping tool and flake.
- 2) Mesolithic sites have been reported from:
 - a) River Kothari
 - b) River Tapti
 - c) Godavari delta
 - d) Rivers Kothari, Tapti and Godavari delta.
- 3) Which one of the following statements is most appropriate? Subsistence-pattern of the Mesolithic people was based on:
 - a) Hunting of animals
 - b) Gathering of wild fruits and seeds
 - c) Hunting of animals and gathering of wild fruits
 - d) Surplus food production.

what do Mesolithic tools and paintings suggest in terms of subsistence-pattern and social organization?

4.4 NEOLITHIC CULTURE



A Dolmen Erected by the Neolithic People in Marayur, Kerala. Credit: Sanandkarunakaran. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:MarayoorDolmen.JPG).

In the previous section you have seen that human communities in general survived for the longest span of their existence as hunter-gatherers. This stage of their existence is revealed by their stone tools classified by the archaeologists as Palaeolithic and Mesolithic as also by the remains of animals hunted and eaten by them.

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Human communities entered a new stage of culture when, instead of depending entirely on the resources of nature for survival, they started producing their own food by cultivating cereals like:

- barley,
- wheat, and
- rice

They started domesticating some species of animals both for supplies of milk and meat as well as for harnessing their labour for various purposes. Beginnings of this stage of human culture are revealed by new type of stone tools which are called Neolithic tools or tools of the New Stone Age. Neolithic tools and various aspects of human life associated with the stage when these tools were produced constitute various elements of the culture in which Neolithic communities lived. The characteristics and spread of Neolithic culture in the Nile valley and West Asia have been dealt with briefly in this section as a background to the study of Neolithic Age in the Indian subcontinent.

Domestication of plants and animals has been considered as one of the main characteristic features of Neolithic culture. The term Neolithic was coined by Sir John Lubbock in his book *Prehistoric Times* (first published in 1865). He used this term to denote an age in which the stone implements were more skillfully made, more varied in form and often polished. Later on, V. Gordon Childe defined Neolithic-Chalcolithic culture as a self-sufficient food producing economy and Miles Burkitt stressed that the following characteristic traits should be considered to represent the Neolithic culture:

- practice of agriculture,
- domestication of animals,
- grinding and polishing of stone tools, and also
- the manufacture of pottery.

The concept of what is Neolithic has been undergoing some change in recent years. One study states that the term Neolithic should represent a culture of pre-metal stage where inhabitants had an assured supply of food by the cultivation of cereals and domestication of animals and led a sedentary life. However, ground stone tools remain the most essential characteristics of the Neolithic culture.

The domestication of plants and animals led to:

- i) Emergence of village communities based on sedentary life,
- ii) Beginnings of agriculture technology, and
- iii) Greater control over nature by exploitation of natural resources.

However, before discussing the evidences and specificities of the Neolithic age in our own subcontinent we shall briefly discuss the beginning of the process of domestication of animals and plants by human beings in areas outside India and in the Indian subcontinent. Chart-1 describes the approximate time period in which the domestication of plants and animals seems to have begun.



Chart-1

Region	Age	Cultivation of
Nile valley	c. 12,500 BCE	Wheat and barley
West Asia	c. 8500 BCE onwards	- do -
Baluchistan	From c. 6000 BCE	- do -
Belan valley in Uttar Pradesh	c. 5440-4530 BCE	Rice
South India	c. 2500-1500 BCE	Ragi

4.5 THE EARLIEST FARMERS

Till recently it was believed that the beginning of domestication of plants and animals took place in West Asia and from there it spread to various other regions of the world through diffusion. But now, on the basis of archaeological evidences obtained from Nile valley in Egypt and other regions such views may have to be modified. Let us have a look at such regions:

4.5.1 Nile Valley

Evidence regarding the earliest cultivation of wheat and barley comes from excavations conducted at:

- Wadi Kubbaniya (located at a short distance north of Aswan in south Egypt),
- Wadi Tuska (near Abu Simbel now under water),
- Kom Umbo (to the north of Aswan about 60 km from Kubbaniya sites), and
- a group of sites near Esna.

What is significant about this evidence is that they are all upper Palaeolithic sites located in the Nile valley and are not Neolithic sites.

These sites are dated between c. 14500-13000 years before present by the archaeologists.

The evidence obtained from the Nile valley raises the following important issues:

- As there is no evidence of domestication of animals at the Egyptian sites it may be concluded that the cultivation of cereals preceded the domestication of animals in this region. Domestication of plants and domestication of animals are, thus, not necessarily inter-related. As the cultivation of cereals is associated with late Palaeolithic tools it may be concluded that food production, in some cases, may have preceded the Neolithic culture with which ground stone tools are associated.
- Cultivation of cereals gave rise to the Neolithic revolution and preceded it.
- As the Kubbaniya sites lie far outside the known range of both wild wheat and wild barley it may be concluded that food production did not necessarily originate in areas where the plants existed in wild forms.
- Domestication of plants did not originate in Western Asia as believed earlier.

4.5.2 Early Farmers of Western Asia

Let us now consider the process of evolution in West Asia. The region embraces:

- Palestine,
- Syria,
- Turkey,
- Iraq,
- Caspian basin, and
- the adjoining regions of Iran.

These are modern countries where archaeologists have identified the earliest farming village settlements. It is now well-known that farming began in Palestine, Syria and Turkey in 9th-8th millennium BCE. Significantly, hunter-gatherers of this region gave up their movements and began a sedentary life first in some areas depending upon the exploitation of wild resources. On sites such as Mureybat, north of Abu Hureyra on the Euphrates in north Syria and Suberde in southern Turkey on the same river permanent settlements could flourish entirely on hunting and gathering. Transition to farming was a slow process but from about the 9th millennium BCE evidence is found that settled communities were emerging, with farming as the essential basis of the pattern of their settled life. There are a number of sites which demonstrate settled communities of farmers in West Asia:

- i) Between c. 8500-7500 BCE Jericho in Palestine became a large village where agriculture is evidenced but there is no evidence of animal domestication (which developed later). During excavations it was found in the later levels that Jericho was surrounded by a two meter wide stone wall with rounded towers. This is one of the earliest instances of fortification in the world.
- ii) Catal Huyuk in southern Turkey was a large village. Here wheat, barley and peas were grown. Animals like cattle, sheep and goat were domesticated. The mud houses which were supposed to be entered through the roof consisted of two rooms and were built back to back. The walls of the houses were found painted with:
 - leopards,
 - erupting volcano, and
 - vultures devouring human corpses without heads.

Evidence of material culture at this place has been found in the forms of:

- pottery,
- stone axes,
- stone ornaments,
- bone tools,
- wooden bowls and
- basketry.
- iii) In Iraq at Jarmo there is also evidence of permanently established farming villages (c. 6500-5800 BCE) with about 20-30 mud houses, each with a courtyard and several rooms associated with ground stone axes, querns, pottery, etc. The people grew wheat and barley and domesticated sheep and goat.
- iv) In Iran farming began in the region of Khuzistan during 8th millennium BCE, almost

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the same time as in Palestine and Anatolia. At Ali Kosh in south Iran (from about 7,500 BCE) we have the evidence of a winter camp of people who were cultivating wheat and barley. They were also domesticating sheep. It appears that in this region herding and agriculture were inter-related.

In West Asia crop cultivation and domestication of animals are inter-related at certain sites whereas in some regions agriculture came before the domestication of animals.

Ch	eck Y	Your Progress Exercise 3
1)	Dis	cuss the main characteristics of Neolithic culture.
2)		cuss some of the main issues relating to early farming which excavation in the valley have raised.
2)		in the blanker
3)	ГШ	in the blanks:
	a)	According to Gordon Childe, Neolithic culture represents a
	b)	(Ground stone/copper) tools remain the essential characteristic of Neolithic culture.
	c)	Jericho is the earliest known village with a (water-tank/mud-fortification).
	d)	Catal Huyuk was a(large/small) village in(Turkey/Iran).

4.6 EARLY FARMERS OF THE INDIAN SUBCONTINENT

The history of domestication of plants and animals in the subcontinent practically began with the emergence of Neolithic cultures. Except for ground stone axes all the Neolithic cultures of the subcontinent can be classified into geographical regions as mentioned in the following chart:

Chart-2: Regions of the Indian Subcontinent

North-western region – including Afghanistan and western Pakistan, particularly the Kacchi/Kachhi plains in Baluchistan.

Northern region – covering the Kashmir valley.

South-eastern UP – covering the Vindhyan outcrops in the districts of Prayagraj, Mirzapur, Reva and Sidhi, particularly Belan Valley.

Mid-eastern region – northern Bihar.

North-eastern region – covering Assam and adjacent sub-Himalayan region.

Central-eastern region – covering Chhota Nagpur plateau with extensions in Odisha and West Bengal.

Southern region – covering peninsular India.

We shall discuss the characteristics of Neolithic cultures in these regions separately.

4.6.1 North-Western Region

It was in this region (present-day Afghanistan and Pakistan) that we find the earliest evidence of the origin of wheat and barley cultivation. In northern Afghanistan caves occupied by hunters and gatherers have been discovered by archaeologists which contained the bone remains of:

- wild sheep,
- cattle, and
- goat.

By about 7000 BCE sheep and goat were domesticated in Afghanistan. It is believed that central Asian region and its peripheries comprising the present-day Punjab, Kashmir, west Pakistan, Afghanistan and Soviet Republics of Tajikistan and Uzbekistan and west Tian Shan were the original places of bread-wheat and spelt-wheat cultivation.

The beginning of agriculture and domestication of animals in Baluchistan (Pakistan) are attested by archaeological excavations. The Kacchi/Kachhi plains in Baluchistan have several advantages which contributed to the appearance of early farming economy in the region. Located between the barren ranges of inner Baluchistan small valleys consisting of fertile alluvium brought by the streams from the hills and perennial river systems make irrigation easy on stretches of land which had vegetation.

It is in this ecological setting that the ancient site of Mehrgarh is located at about 150 km. from Quetta. Excavations here have revealed a long cultural history ranging from the pre-pottery Neolithic to the mature Harappan period. The Neolithic levels at Mehrgarh have been classified into two phases:

- i) Early aceramic without pottery, and
- ii) Later phase.

Cereals cultivated here included two varieties of barley and three varieties of wheat. Charred seeds of plum and also of date were found from the very beginning of the settlement. During excavations the earliest layers of the Neolithic period (Period-I) yielded bones of wild animals like:

- gazelles,
- swamp deer,
- antelope,
- sheep,
- goat, and
- cattle.

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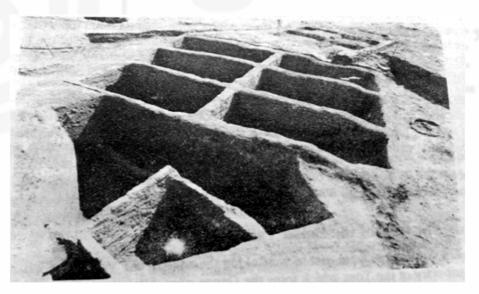
cattle, sheep and goat besides bones of wild gazelle, pig and onager. Thus, there is clear-cut evidence that the process of domestication of sheep and goat was done locally. Here, the beginning of pre-pottery settlement phase has been fixed to about 6000 BCE.

Subsistence pattern of the Neolithic period is characterized by a mixed economy based on early farming and domestication of animals supplemented by hunting. The inhabitants lived in rectangular houses of mud-bricks. Some of the structures were divided into small square compartments and used for storage. The tool kit included:

- one stone axe,
- five stone adzes,
- 25 grinding stones and
- 16 mullers

supplemented by abundant microliths of typical blade industry. Some of the blades show sheen which is characteristic of flint used to cut grains.

On the basis of the evidence from Mehrgarh it appears that the Kacchi/Kachhi plains may have been an independent epicentre (centre of origin) for cattle and sheep domestication and for cultivation of wheat and barley. Period-II at Mehrgarh represents the Chalcolithic phase (c. 5000 BCE) from which cultivation of cotton and grape is attested in addition to the cultivation of wheat and barley. Probably, the Harappans inherited the knowledge of wheat, barley and cotton cultivation from their early ancestors at Mehrgarh (for the Harappans read the next Unit). The idea that farming and the domestication of animals spread from West Asia to the direction of the Indian subcontinent may, thus, have to be given up in the light of the evidence which Mehrgarh provides.



Neolithic Houses at Mehrgarh. Source: EHI-02, Block-1, Unit-4.

4.6.2 Neolithic Culture of the Kashmir Valley

Village settlements appeared in the Kashmir valley by about 2500 BCE. Excavations at Burzahom and Gufkral throw significant light on the Neolithic culture of this region. The Neolithic stage of this region has been classified into:

- two phases at Burzahom, and
- three at Gufkral.

At the latter site the earliest phase is aceramic (pre-pottery) discovered for the first time in India. The Neolithic culture of Kashmir valley is characterized by pit-dwellings with well made floors smeared with red-ochre as well as dwellings in the open. The presence of a large number of unique bone tools suggests that the economy was predominantly a hunting economy.

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At Gufkral in phase-I charred wild grains of lentil, *masoor*, pea, wheat and barley were found besides bones of wild animals such as:

- cattle.
- sheep,
- goat,
- ibex,
- red deer, and
- wolf.

Phases II and III are characterized by the presence of domesticated plants and animals. Other notable objects found from later phases are:

- long celts,
- stone points,
- sophisticated bone tools (harpoons, arrowheads etc.), and
- perforated harvesters.

Dog burials placed along some of human burials have also been reported. These findings indicate how an essentially hunting- gathering economy of Phase-I gradually developed into a well settled agricultural economy in Phase-II.

It is worth mentioning here that the Neolithic culture of Burzahom displays affinities with Sarai Khola and Ghaligai of Swat valley in:

- pottery,
- bone remains, and
- stone objects.

Pit-dwellings, harvesters and dog burials are characteristics of north Chinese Neolithic culture. Contact with the pre-Harappans is also indicated by the pottery found at Burzahom.

Available C-14 dates from the two sites indicate a time range of *c*. 2500-1500 BCE for the Neolithic culture of Kashmir valley.

4.6.3 Early Farmers of Belan Valley

River Belan flows down from east to west along the edge of the Vindhyan plateau outcrop. It is a tributary of the Tons which joins the Ganga near Prayagraj. This region is part of the monsoon belt. It is covered with thick forest of teak, bamboo and *dhak*. The forests are the natural habitat for wild animals like tiger, *nilgai*, chital etc. The vegetal cover is provided by thickly grown grasses including wild rice. The area was a favourite hunting ground of early stone-age people down to the epi-Palaeolithic period. Relevant excavated sites of the Belan valley which indicate transition from the foodgathering stage to food-producing stage are:

- Chopani-Mando,
- Koldihawa, and
- Mahagara.

At Chopani Mando a three-phase sequence from epi-Palaeolithic to late Mesolithic or proto-Neolithic period has been established by archaeologists. Phase-III (advanced Mesolithic) is characterized by semi-sedentary community life and specialized hunting-gathering economy. Beehive type of hutments, common hearths, unportable anvils, geometric microliths, large number of ring-stones and hand-made impressed pottery were found here. Querns and mullers of wide range in forms and sizes indicate emphasis on food-gathering. The phase also yields significant evidence of the presence of wild rice and bones of:

- wild cattle,
- sheep, and
- goat.

A single culture site refers to an archaeological site which was occupied for a single phase of culture like Neolithic or Chalcolithic. There are, however, other sites which were occupied through different cultural phases. If a site, after excavations, shows that it was under occupation during the Neolithic, Chalcolithic and Iron-using phases then it would be considered a multi-culture site and the Neolithic phase would be called Period-I, the Chalcolithic phase period-II and the Iron-using phase period-III. These periods would show chronological sequence of cultures at the site.

The excavations at Koldihwa revealed a three-fold cultural sequence (Neolithic, Chalcolithic and Iron age). Mahagara is a single culture (Neolithic) site. The combined evidence from two sites indicates sedentary life, domestication of rice (*oriza sativa*) and of cattle and sheep/goat. Other objects throwing light on the life of people living in this area are:

- Cord-impressed pottery,
- Round celts and adzes with rectangular or oval cross-section and chalcedony blades.
- Circular/oval floors littered with artefacts,
- A large cattle-pen with hoof-marks of cattle.

The Neolithic culture of the Belan valley shows a developed and advanced sedentary life with:

- defined family units,
- standardization of pottery forms,
- portable size of food-processing units like querns and mullers,
- specialized tools like chisels, celts and adzes,
- cultivation of domesticated rice,
- domestication of cattle, sheep/goat and horse.

It has been suggested that the Neolithic farmers of Belan valley emerged as the earliest rice farming community in India (c. 6th millennium BCE), although the suggestion is not accepted by all. The transition from gathering to farming economy is also clearly documented in this region. However, pottery makes its appearance in the late Mesolithic/

proto-Neolithic phase at Chopani Mando (c. 9th-8th millennium BCE). This is indicative of the primacy of the manufacture of pottery over the domestication of plants (rice) and animals (cattle, sheep/goat and horse).

Chopani-Mando provides the earliest evidence of the use of pottery in the world.

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4.6.4 Neolithic Culture of Bihar/Mid-Ganga Valley

The lower central Gangetic valley with all its flora and faunal resources was occupied by sedentary village settlements much later (c. 2000-1600 BCE). Excavations at Chirand, Chechar, Senuwar, Taradib etc. throw significant light on the life pattern of Neolithic people of this region. At Senuwar (dist. Rohtas) the Neolithic farmers cultivated:

- rice,
- barley,
- field pea,
- lentil, and
- some millets.

A variety of wheat and grass pea have also been found from the upper levels of habitation at this site. The Neolithic levels at Chirand (dist. Saran) situated on the left bank of the Ganga revealed the remains of:

- mud floors,
- pottery,
- microliths,
- ground celts,
- bone tools,
- beads of semi-precious stones, and
- terracotta human figurines.

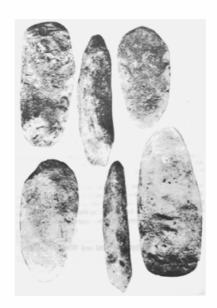
Both Chirand and Senuwar are known for their remarkable bone tools. The grains cultivated at Chirand were:

- wheat,
- barley,
- rice, and
- lentil

Later Neolithic-Chalcolithic people at Senuwar also started cultivating gram and *moong* in addition to crops raised by the earlier people.

4.6.5 Early Farmers of Eastern India

The area comprises the hills of Assam including north Cachar, the Garo and the Naga hills. Ecologically the area falls in the monsoon zone with heavy rainfall. The Neolithic culture of this region is characterized by shouldered celts, small ground axes of rounded form and cord-impressed pottery, heavily tempered with quartz particles. Excavations at Deojali Hading in north Cachar hills have yielded all the objects noted above. These objects are the types which have extensive distribution in China and south-east Asia with a long ancestry there. Yet, the affinity of Assam Neolithic traits with China or south-east Asia has not been finally settled, as there is a wide chronological gap. The Assam Neolithic culture phase has been tentatively dated around 2000 BCE.



Stone Axes from Garo Hills (Assam). Source: EHI-02, Block-1, Unit-4.

Early Farmers of South India

The problem of transition from the stage of advanced hunting to that of food producing economy in south India has not yet been clearly established. Neolithic settlements are found on the hilly and dry Deccan plateau drained by the Bhima, Krishna, Tungabhadra and Kaveri rivers. These settlements flourished particularly in those areas where normal rainfall is below 25 cm. per annum. Excavated sites which throw light on the various aspects of the Neolithic culture of south India are:

- Sangankallu,
- Nagarjunakonda,
- Hallur,
- Palavoy,
- Hemmige, and
- T. Narsipur.

South Indian Neolithic culture has been classified into three phases by archaeologists. The earliest phase is represented at Sangankallu and Nagarjunakonda. Faint traces of dwellings, crude handmade pale reddish brown pottery with slipped outer surface, blade tools of chert and ground stone tools found at Nagarjunakonda demonstrate that the people had only rudimentary knowledge of cultivation. Probably, they did not domesticate animals. This phase can be dated to c. 2500 BCE or earlier.

In Phase-II besides the continuation of the features of Phase-I, pottery is mainly of red ware fabric. However, lapidary art and domestication of animals are new features. Now microliths were made of quartz crystals.

In phase-III (datable to around 1500 BCE) grey ware pottery is predominant. The red ware and short blade industry of quartz crystals of Phase-II continued into this phase.

Neolithic tools of various types are also found in this phase. These indicate greater practice of agriculture with food-gathering and hunting now assuming a subsidiary role.

The latter two phases are characterized by dwelling pits at Nagarjunakonda with roofs supported by wooden poles. Wattle-and-daub houses are reported from other sites.

Millet (*ragi*) was one of the earliest crops cultivated by the Neolithic farmers of south India. It is cultivated even today and forms an important source of food for the poor classes. It is also used as fodder for the cattle. It is generally believed that domesticated *ragi* came from east Africa. The wild *ragi*, which grew as weeds along with the domesticated variety, was not the direct ancestor of the latter. But, it was ancestrally associated with the African variety. Other crops cultivated by the Neolithic farmers of south India were:

- wheat,
- horse gram, and
- *moong* (green gram).

Date palm was also grown. Terracing seems to have been an important feature of the method of cultivation during this period. It was employed for making tiny fields for growing crops.

The nature of animal bones found from excavations indicates that animals were used for draught-work or putting heavy material and ploughing the fields. It is clear from excavations at Nagarjunakonda that domestication of plants preceded the domestication of animals. Domesticated animals like cattle, sheep and goat, buffalo, ass, fowl, swine and horse are also reported from some sites. Sambar, deer, *barasinghaa*, spotted deer and gazelle were hunted and pond snails and tortoise were caught for food.

Abundance of cattle and other kinds of food articles suggest sedentary agriculture-cum-pastoral economy of the Neolithic people. On the basis of C-14 dates the Neolithic culture of south India has been placed between *c*. 2600 and 1000 BCE.

Many ashmounds (composed of ash) are found in the vicinity of Neolithic sites like:

- Utnur,
- Kodekal, and
- Kupgal.

Some of them are also found in forests, remote from any settlement. It has been suggested that these ashmounds were sites of Neolithic cattle-pens. From time to time the accumulated dung was burned either by design as a part of some ritual or by accident. Some of the ashmounds in remote areas may suggest seasonal migrations to forest grazing grounds by people.

4.6.7 Neolithic Cultures of Upper, Central and Western Deccan

In the midde and the upper reaches of the Krishna and the Godavari and their tributaries the picture is somewhat different. In these regions besides the ground stone tools made on black trap a large number of parallel-sided blades and microliths of agate, chalcedony and carnelian (all semi-precious stones) were found along with grey ware and Chalcolithic-type painted pottery. No clear-cut Neolithic phase has been recorded in this region. But the evidence from Chandoli on the Bhima (a tributary of the Krishna)

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and Nevasa and Daimabad on the Pravara (a tributary of the Godavari) suggests that Neolithic farmers in this region had moved into the Chalcolithic phase.

Further northwards in the Tapti and Narmada valleys of north Maharashtra, Madhya Pradesh and Gujarat no clear-cut Neolithic phase was found. Only a small number of triangular axes with pointed butt-end of south Indian affiliation found at Eran in the Bina valley and at Jokha in south Gujarat are Neolithic finds from this region.

In the Chambal, Banas and Kali Sindh valleys there is scarcely any evidence of the presence of ground stone tools. In spite of the fact that during an earlier Mesolithic context domestication of animals had started, sedentary settlements started in this region only after copper-bronze implements became known.

Ch	eck Y	Your Progress Exercise 4		
1)	Dis	cuss the main characteristics of Neolithic cultures in the north-western	regio	on.
2)	Wh	nich of the following statements are right or wrong? Mark (×) or (\checkmark).		•
	a)	It can be said that the Harappan people inherited the knowledge of barley and cotton cultivation from the earlier inhabitants of Mehrgar		-
	b)	In Gufkral there is no presence of domesticated plants and animals.	()
	c)	Excavations at the Belan valley sites have helped us in determining the of transition from food-gathering to food-producing stage.	natı (ıre)
	d)	A single culture site means a combination of various cultures into one c site.	ultu (ral)
	e)	The earliest crop cultivated in south India was millet.	()
	f)	Excavations at Cachar hills have yielded no traces of Neolithic co	ultu: (re.
3)		nat do finds of pottery, ground tools and mud hutments etc. indicate in te development in human society?	erms	of
			•••••	
			•••••	•

4.7 SUMMARY

remains with help of anthropological theories. Palaeolithic and Mesolithic ages represent the hunting-gathering stage of social evolution. The Palaeolithic culture has three phases in terms of the nature of stone tools and changes in climate. Hand-axes, cleavers, choppers and chopping tools were, predominantly, early Palaeolithic artefacts. The middle Palaeolithic tools were mainly flakes. The upper Palaeolithic culture is characterized by burins and scrapers. Mesolithic age started around 8000 BCE and the age is associated with changes in climatic conditions. There was further technological development reflected in the production of microliths and small-stone tools. The Mesolithic tools are mainly blade, core, point, triangle and lunate.

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Faunal remains give us considerable idea about the subsistence-pattern of the Palaeolithic and Mesolithic people. During the Palaeolithic age people were primarily in the hunting and gathering stage. People seem to have hunted large and middle sized mammals such as elephant, ox, deer, wild bear and a variety of birds. At the same time they also exploited plant foods like fruits, seeds etc. The hunting-gathering pattern continued during the Mesolithic age. However, some animals like wild goat, fox etc. appeared during this time. From Palaeolithic to Mesolithic Age there seems to have been a shift from big animal hunting to small animal hunting and fishing. Pre-historic paintings give us insight into the economic, social and cultural life of the people.

This Unit has also made you aware of the basic characteristics of the stage characterized by transition to cultivation of plants and domestication of animals. The transition from hunting-gathering to cultivation brought about many changes. Generally speaking, these included fashioning of pottery which was, obviously, needed for storing grains as well as eating food processed from them; refined tools which were ground and effective for agricultural operations, settled villages communities etc.

Recent evidence seems to suggest that the earliest farming operations started in the Nile valley and west Asia. These operations emerged at a later date. In certain regions the process of cultivation of crops and domestication of animals went side by side whereas in some regions cultivation of crops preceded domestication of animals.

You have also been familiarised with the geographical regions in which the evidence of the Neolithic culture has been found in the Indian subcontinent. The Neolithic cultures in these regions emerged at different points of time and their duration were also different. Due to ecological variations within the subcontinent the crops grown also varied. The emergence of Neolithic cultures and the variations between them have been shown by archaeologists through extensive excavations at various ancient sites.

4.8 KEY WORDS

Acheulian

: It is used for describing a particular type of handaxe. Such hand-axes were first found in France in the deposits of the early part of glaciation.

Artefact

: Any object that has been made, modified or used by human beings. It may range from a coarse stone used in the manufacture of flint to anything of high technical accomplishment in any material.

Assemblage

: A group of objects of different types found in close association with each other. Where the assemblage is frequently repeated and covers a reasonably full range of human activity it is described as a culture.

Calibration

: In the context of radiocarbon dating this term refers to the adjustment of dates in radiocarbon years by means of dendrochronological date so that a date in real i.e. calendar years is achieved. Un-calibrated dates are raw dates in radiocarbon years and this is the way that most dates from this technique are published.

Concave : Curving inward

: Curving inwards and thinner at the centre than at the edges.

Convex : Curving outwards and thicker at the centre than

the edges.

Ethnography : The subject that deals with descriptive recording

of cultures.

Ecology : Interrelationship between animal and plant life.

Epigraphy : The study of inscriptions.

Epi-Palaeolithic: Early Palaeolithic period.

Flora : Plant life of an area.

Fauna : Stands for animal life.

Geology : The subject that deals with the composition,

structure and history of earth.

Glaciation : A period of cold climate during which the area

covered by the ice caps increased. Several glaciations may go to make up an 'Ice Age'.

Hunter-gatherers : Refers to that stage of human development when

human beings procured their foods through

hunting and collecting from nature.

Hunting-gathering Economy: Refers to that stage of economy which was

dependent on hunting and gathering of foods.

Mammal: The animal that feed their young with milk from

the breast.

Numismatics: The study of coins.

Pleistocene : The geological period corresponding with the last

of the Great Ice Age. The onset of the Pleistocene

is marked by an increasingly cold climate.

Pollen Analysis: This technique is used in establishing relative

chronology. It is the analysis of the pollens of the

flowers.

Primate : Age of the highest order of mammals (including

human beings, apes, monkeys and lemur).

Proto-Neolithic : The stage before the beginning of the Neolithic

period.

Rectangle : A quadri-lateral with right angles between all four sides.

Rectilinear : Consisting of straight line.

Radiocarbon : One of the best known chronometric dating

techniques which can be used for dating of most organic material up to 70,000 years old. Plants and other living organizms consume carbon from the atmosphere during their life time. This carbon also includes carbon 14 (14c) which is a radioactive element. After the death of plants and the living organizms the accumulated 14c starts decaying at a known rate and by measuring its present concentration we can determine the age of the organizms which became extinct a long

time ago.

Sedentary life : Refers to that stage of human development when

human beings started settled life.

Transverse : Cross-wise, in a direction at right angles to the

length of the body.

: A platform of land created by river. It is formed **Terrace**

beside the river.

Terracing : The method of cultivating crops by which the hilly

lands are divided into steps for cultivation.

ANSWERS TO CHECK YOUR PROGRESS 4.9 **EXERCISES**

Check Your Progress Exercise 1

i) (c), ii) (d), iii) (a), iv) (d), v) (d).

Check Your Progress Exercise 2

1) (c), 2) (d), 3) (c)

You have to use imagination for your answer, like whatever the human beings painted reflects their life-pattern and surroundings. For example, a painting which shows a mammal hunted by human beings indicates the formation of small social groups to carry the hunt; it also reflects their food habits as to what animals they ate and the type of tools they used for hunting.

Check Your Progress Exercise 3

- Your answer should include the shift from hunter-gatherers to food producingprocess through cultivation of wheat, barley etc.; settled village life; advances made in making of stone tools; emergence of pottery etc. See Section 4.4.
- These were: the domestication of plants and animals are not necessarily interrelated; 2) food-production might have preceded Neolithic cultures etc. See Sub-Sec. 4.5.1
- i) Self sufficient, ii) Ground stone, iii) Mud fortification, iv) large, Turkey. 3)

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Check Your Progress Exercise 4

- 1) See Sub-sec. 4.6.1
- 2) i) \checkmark , ii) \times , iii) \checkmark , iv) \times , v) \checkmark , vi) \times
- 3) You have to apply your imagination to answer this. Well, all these indicate a process during which human beings were moving from simple to complex societies; division of labour; advances in technology; need-based inventions etc. are some hints for your answer.

4.10 SUGGESTED READINGS

Allchin, Bridget and Raymond (1988). *The Rise of Civilization in India and Pakistan*. (Indian edition), Select Book Service, New Delhi.

Malik, S. C. (1968). Indian Civilization: The Formative Period. Shimla.

Sahu, H. P. (1988). From Hunters to Breeders. Anamika Prakashan, Delhi.

Sankalia, H.D. (1962). *Prehistory and Protohistory in India and Pakistan*. University of Bombay.



UNIT 5 HARAPPAN CIVILIZATION: CHRONOLOGY, GEOGRAPHICAL SPREAD, DIFFUSION AND DECLINE*

Structure

Struc	aure
5.0	Objectives
5.1	Introduction
5.2	An Old City is Discovered
5.3	Age of the Harappan Civilization
5.4	Why it is Called the Harappan Civilization
5.5	Antecedents of Harappan Civilization
5.6	Geographical Features
5.7	Origins of Agriculture and Settled Villages
5.8	Early Harappan Period 5.8.1 Southern Afghanistan 5.8.2 Quetta Valley 5.8.3 Central and Southern Baluchistan 5.8.4 The Indus Area 5.8.5 Punjab and Bahawalpur 5.8.6 Kalibangan
5.9	Emergence of the Harappan Civilization
5.10	Decline of Harappan Civilization: Archaeological
5.11	Theories of Sudden Decline 5.11.1 Floods and Earthquakes 5.11.2 The Shifting Away of the Indus 5.11.3 Increased Aridity and Drying-Up of Ghaggar 5.11.4 Barbarian Invasions
5.12	Ecological Imbalance: Theory of Gradual Decline
5.13	The Tradition Survives 5.13.1 Sindh 5.13.2 Indo-Iranian Borderlands 5.13.3 Punjab, Haryana and Rajasthan 5.13.4 Kutch and Saurashtra
5.14	Transmission of the Harappan Tradition
5.15	What Survives from Harappan Civilization?
5.16	Summary
5.17	Key Words
5.18	Answers to Check Your Progress Exercises
5.19	Suggested Readings

Evidence

5.0 OBJECTIVES

After reading this Unit, you will be able to learn:

- how the Harappan civilization was discovered;
- how its chronology was determined;
- how the village communities gradually evolved into the Harappan civilization;
- about the geographical spread of Harappan civilization;
- about the problems faced by scholars to understand the decline of Harappan civilization:
- about the theories put forward for the decline of Harappan civilization;
- that why, over the years, scholars have stopped looking for the causes of the decline of Harappan civilization; and
- that, instead, scholars are trying to look for evidence of survival and the continuities of the Harappan civilization.

5.1 INTRODUCTION

In the previous Unit you learnt about the evolution of mankind from hunting-gathering societies to agricultural societies. The invention of agriculture led to far-reaching changes in human societies. One important result was the emergence of cities and civilizations. In this Unit you will be made familiar with the birth of one such civilization, namely the Harappan civilization and various aspects related to its origin and growth. The disappearance of the various aspects of its maturity i.e. writing, town planning, etc. in the subsequent phase of Indian history is rather mysterious. In this Unit we will also examine various arguments put forward to solve this mystery.

5.2 AN OLD CITY IS DISCOVERED

In 1826, an Englishman Charles Masson visited a village named **Harappa** in western Punjab (now in Pakistan). He noted the remarkably high walls and towers of a very old settlement. He believed that this city belonged to the times of Alexander. In 1872 a famous archaeologist, Sir Alexander Cunningham, came to this place. The people of the surrounding areas told him that the high mounds of Harappa were parts of a thousand years old city. It had been ruined because of the wickedness of its king. Cunningham collected some archaeological objects from this site, but he could not determine to which period of history they really belonged. He simply believed that these objects were probably from outside India. Thus, he concurred with the opinion of the people of the village that the city was about a thousand years old. However, in 1924, when another archaeologist, Sir John Marshall, reported about Harappa he talked about the discovery of a long forgotten civilization which was as old as the civilizations of Egypt and Mesopotamia. Is it not curious? The people of the surrounding regions were indifferent to the remains of the city. Then, a British archaeologist came and informed us that the city was about 5000 years old. How could the people and the scholars form such different ideas? What could be their methods of dating an old site?

5.3 AGE OF THE HARAPPAN CIVILIZATION

Archaeologists use various methods for finding out how old various settlements are. Let us see how Marshall concluded that the Harappan civilization was about 5000 years old and not one 1000 years old, as believed by Cunningham. Marshall found that

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seals, sealings, written script and works of art found in Harappa were totally different from those with which scholars were already familiar and which belonged to a much later period. Similar finds were reported in another place called **Mohenjodaro** in Sindh. In Mohenjodaro the settlement lay underneath a Buddhist monastery belonging to the Kushan period. It has been found that in ancient times if a house was destroyed for some reason people would generally use the brick or mud of the house to prepare a plinth and make another house on top of it. Thus, if an archaeologist excavates an area and finds remains of a house beneath another house, he can figure out that the one below is older than the one above. That is why the deeper he digs the earlier he moves in time scale. Thus, Marshall could find out that the houses below the Buddhist monastery must have been older than the Kushan period. Then, there was the evidence that people living in these settlements did not know the use of iron. This meant that these cities were part of an age when iron was unknown. Iron came in use in the beginning of the 2nd millennium BCE. When Marshall published his discoveries, some other archaeologists found objects similar to those found at Harappa and Mohenjodaro in Mesopotamia. Mesopotamian cities came into existence in the early 3rd millennium BCE. Thus, if anything Harappan was discovered in the ancient cities of Mesopotamia, it would indicate that the people of Harappa lived at the same time. With these evidences scholars could figure out that the conclusions of the local population and Cunningham were incorrect. Marshall's chronology of Harappa has been further supported by new methods of dating, such as Radio carbon-dating. Thus, scholars accept the following chronology for the pre-Harappan and Harappan cultures:

5500 2500 PGE	NT-1'/1 '	X 75 1 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
c.5500-3500 BCE	Neolithic	 In Baluchistan and Indus plains, settlements like Mehrgarh and Kili Ghul Muhammad came up.
		Beginning with pastoralism with limited cultivation and seasonal occupation of villages,
		permanent villages emerged.
		 Knowledge of wheat, barley,
		dates, cotton and sheep, goat and cattle.
		• Evidences of mud houses, pottery and craft-production found.
c.3500-2600 BCE	Early	Many more settlements
	Harappan	established in hills and plains.
	Period	Largest number of villages occur in this period.
		• Use of copper, wheel and plough.
		Extraordinary range of pottery
		forms showing beginning of many regional traditions.
		Evidence of granary, defensive
		walls, and long-distance trade.
		Emergence of uniformities in
		pottery tradition throughout the
		Indus valley. Also, origins of such
		motifs as <i>Pipal</i> , humped bulls,
		Cobras, horned- deity etc.

c.2600-1800 BCE	Mature Harappan Period	 Emergence of large cities, uniform types of bricks, weights, seals, beads and pottery. Planned township and long- distance trade.
c.1800 BCE onwards	Late Harappan period	 Many Harappan sites abandoned. Interregional exchange declines. Writing and city life abandoned. Continuation of Harappan crafts and pottery tradition. The village cultures of Punjab, Sutlej-Yamuna divide and Gujarat imbibe Harappan crafts and pottery traditions.



View of Granary and Great Hall at Mound Fin Harappa. Monument in Pakistan Identified as the PB-137. Credit: Muhammad Bin Naveed. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Another_view_of_Granary_and_Great_Hall_on_Mound_F.JPG).



Dholavira, another Harappan Site, with Stepwell Steps to reach the Water Level in Artificially Constructed Reservoirs. Credit: Rama's Arrow. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Dholavira1.JPG).

5.4 WHY IT IS CALLED THE HARAPPAN CIVILIZATION?

Beginning with the discovery of Harappa, nearly 1000 settlements having similar traits have been discovered. Scholars named it the "Indus Valley Civilization" because initially,

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most of the settlements were discovered in the plains of the Indus and its tributaries. Archaeologists, however, prefer to call it the "Harappan Civilization" because in archaeology there is a convention that when an ancient culture is described, it is named after the modern name of the site which first revealed the existence of that culture. We do not know what those people called themselves, because we have not been able to read their writing. Thus, we call them Harappans after the modern place Harappa where the evidence of this forgotten civilization was first unearthed in our times.

5.5 ANTECEDENTS OF HARAPPAN CIVILIZATION

When we use the term "Harappan Civilization" we are referring to a large number of cities, towns and villages which flourished in c. 3rd millennium BCE. These cities and villages had formed a network of interaction over a large geographical space which would roughly cover the areas of modern-day Rajasthan, Punjab, Gujarat, Pakistan and some of the surrounding areas. If we study the remains left by the people who lived in these areas before the emergence of the Harappan civilization, we can have some idea of how Harappan cities emerged. Scholars believe that there was a time in human past when cities did not exist and people lived in small villages. One might ask what the ancestors of Harappans were doing before they built up these cities. There are evidences to suggest that the forefathers of Harappans were living in villages and small towns. Some of them were engaged in pastoral nomadic activities and some went in for trade. The Harappan civilization represents the culmination of a long period of evolution of agricultural and semi-nomadic communities. So, let us review the pre-history of the Harappan civilization. We start with an understanding of their geography.



Sites of Early Harappan Period. Source: EHI-02, Block-2, Unit-5.

5.6 GEOGRAPHICAL FEATURES

The areas of present day Pakistan and north-western India formed the core region of the Harappan civilization. These areas are characterized by dry weather and scanty rainfall. However, there are some important variations among these areas. Whereas the areas of Punjab and Sindh are dominated by alluvial plains of the Indus river system, areas of Baluchistan are characterized by steep craggy hills. In north-eastern Baluchistan

valley floors might provide some possibilities of agriculture. This area has been inhabited by another set of people also, namely the pastoral nomads who with their herds of sheep, goat and cattle kept shifting from uplands to low lands in search of pastures for their herd. The areas of these borderlands which cut out into the Indus plains are a continuation of eastern Iranian plateau. These hilly regions are fractured by many passes like those of Khyber, Gomal and Bolan which have acted as highways of traffic for nomads, merchants, warriors and various groups of people. The interaction among the population of the uplands of Baluchistan and the plains of the Indus, on the one hand, and the communities of Iran, on the other, seems to be related to this geographical feature. The similarities in climate and landscape of the Harappan civilization and those of Iran, Iraq borderlands had led scholars to hypothesize that agricultural communities must have emerged in these areas in roughly the same period. In Iran and Iraq, agriculture began around *c*. 8000 BCE. Let us see what are the evidences for the beginning of agriculture in and around the Indus river system?

5.7 ORIGINS OF AGRICULTURE AND SETTLED VILLAGES

The earliest evidence of the emergence of agricultural communities comes from a place called **Mehrgarh** near the Bolan pass in the Baluchistan province of Pakistan (as we have seen in the previous Unit). Beginning as a seasonal camp, the place turned into a settled village in c. 5th millennium BCE. People at this place were growing wheat, barley, cotton and dates and tending sheep, goat and cattle. Mehrgarh is located at the place where the alluvial plains of the Indus join the uneven hilly plateau of the Indo-Iranian borderland. People of Mehrgarh lived in mud houses which could sometimes have five to six rooms. By the middle of 3rd millennium BCE many small and large villages had sprung up around the Indus, Baluchistan and Afghanistan area. The better known settlements among them are Kili Ghul Muhammad in Baluchistan and Mundigak in Afghanistan. In the Indus flood plains villages like **Jalilpur** near Harappa had come into existence. Once these agriculturists learnt to exploit the highly fertile flood-plains of the Indus there was a sudden expansion in size and numbers of villages. These agriculturists gradually learnt to exploit the Indus plains and control the flooding of Indus. Richer returns per acre resulted in larger surpluses. This led to an increase in the number of settlements in Sindh, Rajasthan, Baluchistan and other areas. They also managed to exploit stone-quarries and mines useful to them. There are indications of the existence of pastoral nomadic communities in this period in the form of seasonal settlements. The interactions with these groups seem to have helped agriculturists exploit resources from other regions, as the pastoral nomads are known to engage in trading activities over the areas they covered during their travels. All this led to the development of small towns. The period of this new development is called 'the Early Harappan Period' because of certain uniformities found all over Indus.

Check Your Progress Exercise 1

- 1) Read the following statements and mark right (\checkmark) or wrong (\times).
 - i) John Marshall said that the Harappan civilization was 5000 years old. ()
 - ii) People of the Harappan settlements were aware of the use of iron. ()
 - iii) The Harappan civilization is so called because Harappa was the first site to be discovered.
 - iv) We have evidence to suggest that the forefathers of Harappans were living in large cities.

2)	Write on geographical features of the early Harappan civilization.	Harappan Civilization Chronology
		Geographical Spread Diffusion and Declin

5.8 EARLY HARAPPAN PERIOD

We shall review the conditions of some of the settlements just before the emergence of the Harappan civilization. Many scholars call this period 'Early Harappan Period' because they believe that this was the formative epoch of the Harappan civilization when certain trends of cultural unification are perceptible.

5.8.1 Southern Afghanistan

In southern Afghanistan there is a place called Mundigak. It seems to have been located on a trade route. That is why in the early Indus period the inhabitants of this place were using artifacts which show affinities with some Iranian towns on the one hand and some Baluchistan towns on the other. Making a humble beginning as a camping site of some nomadic groups, the place grew into a township of impressive proportions. There is evidence of a defensive wall with square bastions of sun-dried bricks. A large building with rows of pillars has been identified as a palace. Another large structure looks like a temple. A variety of potteries have also been discovered at this place. They were using naturalistic decorations showing birds, ibex, bull and *Pipal* trees. Terracotta female figurines similar to those found at contemporary sites in Baluchistan have also been found. They were also using bronze shaft-hole axes and adzes. Such semi-precious stones as lapis-lazuli and steatite show their contacts with Iran and central Asia, since these stones are not available locally.

5.8.2 Quetta Valley

To the south-east of Mundigak is Quetta valley. Here, in a place called **Damb Sadaat**, large houses having brick walls belonging to the beginning of 3rd millennium BCE have been discovered. Varieties of painted potteries similar to those of Mundigak have also been found. These people were using clay seals and copper objects also. These discoveries indicate the presence of a prosperous community which had solved its food problem and established trading contacts with regions faraway. Similarly, from the surrounding areas there are reports of distinct art and pottery traditions. In a place called **Rana Ghundai**, people were using finely made painted pottery with friezes of humped-bulls in black. The pottery showed distinct parallels with those of Quetta valley. Another excavated site **Periano Ghundai** has yielded female figurines of a distinctive type.

5.8.3 Central and Southern Baluchistan

In central and southern Baluchistan, sites like **Anjira**, **Togau**, **Nindowari** and **Balakot** give us some idea of early Harappan societies. These small villages and townships seem to fan out in conformity with the valley systems. At Balakot remains of large buildings have been discovered. Many of the sites in this area show evidences of contact with the Persian Gulf. In Balakot the people who first inhabited the place were using potteries similar to those used in other contemporary villages in Baluchistan. However, in course of time they started using potteries similar to the ones used in the Indus alluvial

plain. What is important to us is that people of the entire Baluchistan province were using similar kinds of pottery. They show distinct influences from Persian Gulf towns, on the one hand, and from Indus valley towns, on the other. They were using motifs on their pottery like the humped-bull and *Pipal* which continued into the mature Harappan phase.

5.8.4 The Indus Area

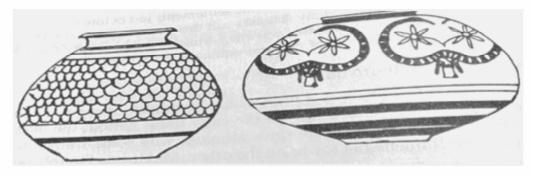
By the middle of the 4th millennium BCE the Indus alluvial plains became the focal point of change. Many small and large settlements came into existence on the banks of the Indus and Ghaggar-Hakra. This area became the core region of Harappan civilization. In the present discussion we shall try to show how these developments anticipate many of the characteristics of Harappan civilization.

i) Amri

The Sindh province corresponding to the lower Indus plains showed interesting development. At the site of Amri the habitations show people living in houses of stone and mud brick. They had constructed some kind of a granary also. They painted such animal motifs as the humped Indian bulls on their pottery. This motif was very popular during the mature Harappan phase. They were using wheel-made pottery. Similar finds have been reported at places like **Tharro** and **Kohtras Buthi**. They had fortified their settlements before the coming of the Harappan civilization.

ii) Kot Diji

Opposite Mohenjodaro on the left bank of the Indus is the site of Kot Diji. The people living here in the early Harappan period had a massive defensive wall built around their settlement. The most interesting finds are their pottery. They were using a wheel-thrown pottery having decorations of plain bands of dark brownish paint. This kind of pottery has been reported from pre-Harappan habitations in far flung places like Kalibangan in Rajasthan and Mehrgarh in Baluchistan. The Kot Diji variety of pottery has been found along the entire stretch of Indus where settlements belonging to pre-urban and urban phase of Harappan civilization have been reported. This movement towards similar methods of decorating pottery indicates greater communication among the people of Indus plains. It also anticipates the process of the convergence of cultures seen in the Harappan civilization. Many of the designs on pottery were carried over to the urban phase. At the same time certain other earthen vessels showed similarity with those of Mundigak. This shows enlarged interaction sphere of the early Harappan sites. In Mohenjodaro itself archaeologists have discovered occupation deposits to a depth of 39 feet below the modern level of the plain. Similarly, at the site of **Chanhu-daro**, early Harappan habitation has been reported. At Mohenjodaro the early levels could not be excavated, but many archaeologists believe that these occupation levels represented an early Harappan culture, probably similar to that of Kot Diji.



Early Indus Pottery: Kot Diji Source: EHI-02, Block-2, Unit-5.

Early Indus Pottery: Kalibangan

iii) Mehrgarh

Earlier we talked about the site of Mehrgarh. In the period preceding Harappan urbanization, the people of Mehrgarh had established a prosperous township. They used to make various kinds of beads of stone. Lapis-lazuli, one of the precious stones used by them is found only in the Badakshan region of central Asia. Many seals and sealings have been reported. Seals are used as a mark of authority in situations of interpersonal exchange. Mehrgarh seals were probably used by merchants for guaranteeing the quality of goods that were being sent to faraway lands. Similarities in designs of potteries, terracotta figurines and objects of copper and stone indicate that these people were in close contact with neighbouring towns of Iran. However, most of the pottery used by the people of Mehrgarh was similar to the ones used in the neighbouring settlements of Damb Sadaat and the Quetta valley. Similarly, a large number of female terracotta figurines are also found which are very similar to the ones found in Zhob valley. These parallels indicate a close interaction among surrounding communities.

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iv) Rahman Dheri

If we follow Indus northwards we come across some more settlements which give us an idea of how people lived in the early Harappan times. At a place called Rahman Dheri an early Indus township has been excavated. Oblong in shape with houses, streets and lanes laid out in a planned fashion, it is protected by a massive wall. Here too, beads of turquoise and lapis-lazuli have been found. This shows their contact with central Asia. A large number of graffiti found on pot-sherds could be the forerunners of the Harappan script. The independent pottery tradition in this area was gradually modified and supplemented by a pottery similar to that of Kot Diji. Seals, tools made of stone, copper and bronze have also been found.

v) Tarkai Qila

In Bannu area, in North-West Frontier Province, the site of Tarkai Qila has also yielded evidence of fortification. Archaeologists have discovered large samples of grains which included many varieties of wheat and barley, lentils and field pea. Tools for harvesting have also been found. In the same area, at a site called **Levan**, a huge factory site for making stone tools was discovered. The Harappans and their predecessors did not know about iron and copper was rare. So, most of the people used tools made of stone. That is why in some places where good quality stone was available tools would be made on a large scale and then sent to distant town and villages. The people in Levan were making ground stone axes, hammers, querns etc. for which they were importing suitable rocks from the surrounding areas too. The presence of lapis-lazuli and terracotta figurines indicates links with central Asia. At the site of **Sarai Khola** which is located on the northern tip of western Punjab another early Harappan settlement has been discovered. Here too the people were using the pottery of the Kot Diji type.

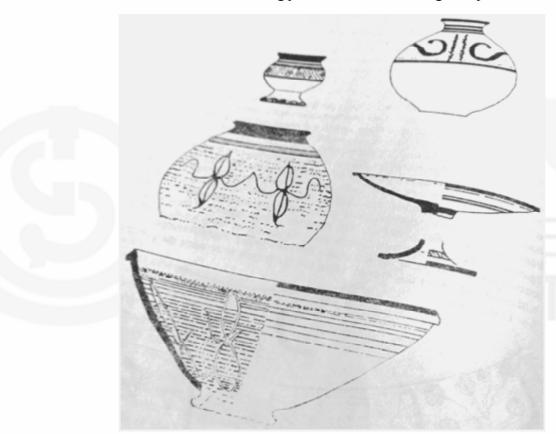
5.8.5 Punjab and Bhawalpur

In western Punjab, Harappa is well-known. During one of the excavations, habitations preceding the urban phase have been discovered. Unfortunately, they have not been excavated as yet. The pottery found here seems to have similarities with Kot Diji type ware. Scholars believe that these habitations represent the early Harappan phase at Harappa. In the Bahawalpur region about 40 sites of the early Harappan period are located in the dry bed of the Hakra river. Here too, the early Harappan phase is characterized by Kot Diji type of pottery. A comparative analysis of settlement pattern of these sites shows that in the early Harappan period itself a variety of habitations had come up. Whereas most of the sites were simple villages, some of them were carrying

out specialized industrial activities. That is why we find most of the sites averaged about five to six hectares in size. However, **Gamanwala** spreads over an area of 27.3 hectares. This means that Gamanwala was larger than the Harappan township of Kalibangan. These larger townships must have carried administrative and industrial activities apart from agricultural activities.

5.8.6 Kalibangan

The site of Kalibangan in north Rajasthan has also yielded evidence of the early Harappan period. People lived in houses of mud bricks of standard sizes. They also had a rampart around the settlement. The pottery used by them was different in shape and design from that of other areas. However, some of the pottery was similar to that of Kot Diji. A few varieties of potteries like the 'offering stand' continued to be used during the urban phase. Aremarkable find was that of a ploughed field surface. This proves that even at this stage the cultivators already knew about the plough. In more primitive situations the farmers either simply broadcast the seeds or used hoes for digging the fields. With plough one can dig deeper using much less energy. That is why it is considered an advanced tool of cultivation having potentialities of increasing food production.



Early Indus Pottery: Kalibangan. Source: EHI-02, Block-2, Unit-5.

In the dry bed of Ghaggar several early Harappan settlements have been found. They seem to line the now extinct water ways of the region. Sites like **Sothi Bara** and **Siswal** have reported ceramic styles similar to those of Kalibangan. The exploitation of Khetri copper mines in Rajasthan might have begun in the early Harappan period itself.

We have stressed on the similarities found in cultural traditions of diverse agricultural communities living in and around the Indus regions in the early Harappan period. Beginning with small agricultural settlements the areas of Baluchistan, Sindh, Punjab and Rajasthan saw the emergence of distinct regional traditions. However, the use of similar kinds of potteries, representations of a horned deity and finds of terracotta mother goddesses show the way to the emergence of a unifying tradition. The people of

Baluchistan had already established trading relations with the towns of Persian Gulf and central Asia. Thus, the early Harappan phase anticipates many of the achievements of the Harappan civilization.

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We have seen the developments that took place over a period of nearly 3000 years. Cultivators colonized the alluvial plains of the Indus during this period. These communities were using tools of copper, bronze and stone. They were using plough and wheeled transport for greater productivity of labour. Also, unlike in Iran where sheep and goat rearing was prevalent, the Indus people reared cattle. This gave them better possibilities of harnessing animal power for transportation and, possibly, cultivation. At the same time a gradual unification too took place in the pottery tradition. In the early Harappan period a particular kind of pottery, first identified at Kot Diji, spread over almost the entire area of Baluchistan, Punjab and Rajasthan. Terracotta mother goddesses or the motif of horned-deity could be seen at Kot Diji or Kalibangan. Some of the communities surrounded themselves with defensive walls. We do not know the purpose behind the construction of these walls. It could be defense against other communities or it could be, simply, a bund against flooding. All these developments were taking place in the context of a much larger network of relationships with the contemporary sites of Persian Gulf and Mesopotamia.

5.9 EMERGENCE OF THE HARAPPAN CIVILIZATION

In the backdrop of these processes of technological and ideological unification emerged the Harappan civilization. The particular mechanisms of the birth of the civilization are obscure, because we have not read their script and a lot many more excavations need to be carried out. Some of the general processes have been outlined above. The increasingly efficient technology and exploitation of the fertile plains of the Indus must have given richer returns of grain production. This created the possibilities for larger surpluses. It would also lead to an increase in population. At the same time, trading contacts would be established with distant communities by richer section of society who would like to possess precious commodities. The larger surpluses would also permit the elaboration of non-farming specialization. That is how the village priest could become the part of a clan of priests spread over the entire region. Similar processes will occur in the case of metallurgists, potters and craftsmen. In villages small silos for keeping grains would be transformed into elaborate granaries.

The existence of umpteen agricultural groups and pastoral nomadic communities in close contact with each other could lead to conflict among them. Once the agriculturalists had become prosperous they would attract other groups which might be less fortunate. The pastoral nomads are known to engage in trading and looting, depending on their own economic conditions.

The agricultural communities, too, could fight with each other for the control of more fertile tracts of land. Probably that is the reason why some of the communities surrounded themselves with a defense-wall. We know that at the time of the emergence of the Harappan civilization many sites like Kot Diji and Kalibangan were destroyed by fire. We do not know the reasons behind this. They could simply be accidental conflagrations. However, what seems more plausible is the fact that among the various competing communities in the Indus region, one set of people established their power over others. This signaled the beginning of the mature Harappan phase. Thus, the mature Harappan period would not begin on one particular date, considering the large geographical space covered by the Harappan civilization. It is likely that the city, as the centre of evolution,

emerged over a long span of time covering hundreds of years, but the city had arrived and it was there to dominate the entire north-west for the next 700-800 years.

Check Your Progress Exercise 2

1)	Read the following statements and mark right (\checkmark) or wrong (\times).					
	i)	People of the early Harappan period were involved in active trade with and central Asia.	th I	rar		
	ii)	Many characteristics of the mature Harappan phase had already taken in plains of the river Indus.	n sha	ape		
	iii)	There is no evidence of any communication between different areas Indus plains.	s of (the		
	iv)	The pottery used in Kalibangan was the same in shape and design as other areas during the early Harappan period.	useo	d in		
2)		nat were the Early Harappan settlements and their conditions beforegence of Harappan civilization?	ore	the		
				••		

5.10 DECLINE OF HARAPPAN CIVILIZATION: ARCHAEOLOGICAL EVIDENCE

Cities like Harappa, Mohenjodaro and Kalibangan experienced gradual decline in urban planning and construction. Houses made of old dilapidated bricks and shoddy construction encroached upon the roads and streets of towns. Flimsy partitions subdivided the courtyards of houses. The cities were fast turning into slums. A detailed study of the architecture of Mohenjodaro shows that many entry points to the 'Great Bath' were blocked. Sometimes later, the 'Great Bath' and the 'Granary' fell into total disuse. At the same time, the late levels (i.e. later habitations) at Mohenjodaro showed a distinct reduction in the number of sculptures, figurines, beads, bangles and inlay works. Towards the end, the city of Mohenjodaro shrank to a small settlement of three hectares from the original 85 hectares.

Before its abandonment Harappa seems to have witnessed the arrival of a group of people about whom we know through their burial practices. They were using a pottery which was different from those of the Harappans. Their culture is known as the 'Cemetery H' culture. Processes of decline were in evidence also in places like Kalibangan and Chanhu-daro. We find that buildings associated with power and ideology were decaying and goods related to displays of prestige and splendour were becoming increasingly scarce. Later on, cities like Harappa and Mohenjodaro were abandoned altogether.

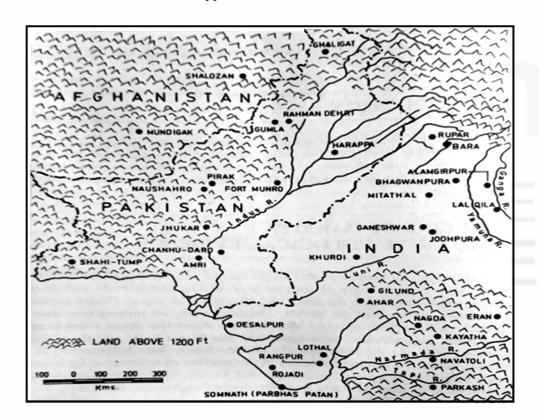
A study of the settlement-pattern of the Harappan and late-Harappan sites in the Bahawalpur area also indicates a trend of decay. Along the banks of the Hakra the number of settlements came down to 50 in the late-Harappan period from 174 in the mature Harappan period. What seems likely is that in the last 200-300 years of their

life, the settlements in the core region of the Harappan civilization were declining. The population seems to have either perished or moved away to other areas. Whereas the number of sites in the triangle of Harappa, Bahawalpur and Mohenjodaro declined, the number of settlements in the outlying areas of Gujarat, east Punjab, Haryana and upper Doab increased. This indicates a phenomenal increase in the number of people in these areas. This sudden increase in the population of those regions can be explained by the emigration of people from the core regions of Harappa.

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In the outlying regions of Harappan civilization, i.e. the areas of Gujarat, Rajasthan and Punjab, people continued to live. But life had changed for them. Some of the important features associated with Harappan civilization – writing, uniform weights, Harappan pottery and architectural style – had disappeared.

The abandonment of the cities of the Indus is roughly dated to about 1800 BCE. This date is supported by the fact that Mesopotamian literature stops referring to **Meluhha** by the end of 1900 BCE. However, even now, the chronology of the end of the Harappan cities remains tentative. We do not as yet know whether major settlements were abandoned at one and the same or at different periods. What is certain, however, is the fact the abandonment of the major cities and the de-urbanization of other settlements indicates the decline of the Harappan civilization.



Sites of late Harappan Period. Source: EHI-02, Block-2, Unit-9.

5.11 THEORIES OF SUDDEN DECLINE

Scholars have given different answers to the question as to why did the civilization end? Some scholars, believing in a dramatic collapse of the civilization, have looked for evidences of a calamity of catastrophic proportions, which wiped out the urban communities. Some of the more plausible theories for the decline of the Harappan civilization are:

a) that it was destroyed by massive floods,

- b) that the decline took place because of the shift in the course of rivers and the gradual drying up of the Ghgggar-Hakra river system,
- c) that barbarian invaders destroyed the cities,
- d) that the growing demands of the centres disturbed the ecology of the region and the area could not support them anymore.

Let us discuss these explanations on their merits.

5.11.1 Floods and Earthquakes

Among the causes spelled out for the decline of the Harappan civilization scholars have used the evidence of flooding in Mohenjodaro. It appears from the records of the principal excavators that in Mohenjodaro various periods of occupation were separated by evidences of deep flooding. This can be inferred from the fact that the houses and streets of Mohenjodaro were covered with silty clay and collapsed building material many times in its long history. This silty clay seems to have been left by the flood-waters which had submerged the streets and houses. The people of Mohenjodaro again built up houses and streets on top of the debris of previous buildings, after the floods had receded. This kind of catastrophic flooding and rebuilding on top of the debris seems to have happened at least thrice.

Borings in the occupation deposit indicated successive phases of occupation levels spanning a vertical distances of 70 feet which is equivalent to the height of a seven-storied building. Many occupation deposits were divided by silt deposits. Thick silt deposits have been noticed at points as high as 80 feet above the present-day ground level. Thus, many scholars believe that the evidences are indicative of abnormal floods in Mohenjodaro. These floods led to temporary desertion and reoccupation of the city throughout its history.

That these floods were catastrophic is shown by silt deposits 80 feet above the present ground-level, meaning that the flood waters rose to such great heights in this area. The Harappans at Mohenjodaro tired themselves out, trying to cope with the recurring floods. A stage came when the impoverished Harappans could not take it anymore and they simply abandoned the settlement.

Raikes's Hypothesis

The theory of catastrophic flooding has been carried further by a famous hydrologist R.L. Raikes. He argued that such flooding, which could drown buildings 30 feet above the ground-level of the settlement, could not be the result of normal flooding in the Indus. He believes that Harappan civilization declined because of catastrophic flooding causing prolonged submergence of cities located on the bank of the Indus. He has shown that geomorphologically speaking, the Indus area is a disturbed seismic zone. Earthquakes might have raised the level of flood plains of the lower Indus. This uplift of the plain along an axis roughly at right angles to that of the Indus blocked the passage of the river-water to sea. This led to the ponding of the waters of Indus. A lake was formed in the area where cities of the Indus had once flourished. And, thus, the rising water levels of the river swallowed up the cities like Mohenjodaro.

It has been pointed out that sites like Sutkagedor and Sutka-koh on the Makran coast and Balakot near Karachi were seaports of the Harappans. However, at present, they are located far away from sea-coast. This has happened because of the upliftment of the land on sea-coast possibly caused by violent tectonic uplifts which, some scholars believe, took place somewhere in the 2nd millennium BCE. These violent earthquakes, damming rivers and burning the towns destroyed the Harappan civilization. This led to the disruption of commercial life based on river and coastal communication.

Criticism

This grand theory of the catastrophic fall of the Harappan civilization is not accepted by many scholars. H.T. Lambrick points out that the idea that a river would be dammed in such a manner even by tectonic uplifts is incorrect due to two reasons:

- i) Even if an earthquake artificially raised a bund down-stream, the large volume of water from the Indus would easily breach it. In recent times, in Sindh a swell of ground raised by the earthquake of 1819 was breached by the first flood it faced from one of the smaller streams of the Indus called Nara.
- ii) Silt deposition would parallel the rising surface of water in the hypothetical lake. It would take place along the bottom of the former course of the river. Thus, the silt of Mohenjodaro might not be the deposition of a flood.

Another criticism of this theory is that it fails to explain the decline of settlements outside the Indus system.

5.11.2 The Shifting away of the Indus

Lambrick has offered his own explanation for the decline. He believes that changes in the course of the Indus could be the cause of the destruction of Mohenjodaro. The Indus is an unstable river system which keeps shifting its bed. Apparently, it shifted about 30 miles away from Mohenjodaro. The people of the city and the surrounding food production villages deserted the area because they were starved of water. This kind of thing happened many times in the history of Mohenjodaro. The silt observed in the city is actually the product of wind action, blowing in lots of sand and silt. This, combined with the disintegrating mud, mud-brick and baked-brick structures, produced what has been mistaken for silt produced by floods.

This theory, too, cannot explain the decline of the Harappan civilization in totality. At best, it can explain the desertion of Mohenjodaro. And, if the people of Mohenjodaro were familiar with those kinds of shifts in the river-course why could not they themselves shift to some new settlement and establish another city like Mohenjodaro? Obviously, it appears that some other factors were at work.

5.11.3 Increased Aridity and Dying up of Ghaggar

D .P. Agarwal and Sood have introduced a new theory for the decline of the Harappan civilization. They believe that the Harappan civilization declined because of increasing aridity in this area and the drying up of the Ghaggar-Hakra. Basing their conclusions on the studies conducted in the U.S.A., Australia and Rajasthan they have shown that there was an increase in arid conditions by the middle of the 2nd millennium BCE. In semi-arid regions like those of Harappa, even a minor reduction in moisture and water availability could spell disaster. It would affect agricultural production which, in turn, would put the city economies under stress.

They have discussed the problem of unstable river-systems in western Rajasthan. As stated earlier, the Ghaggar-Hakra area represented one of the core regions of the Harappan civilization. The Ghaggar was a mighty stream flowing through Punjab, Rajasthan and the Rann of Kutch before debouching into the sea. The Sutlej and the Yamuna used to be its tributaries. Because of some tectonic disturbances, the Sutlej stream was captured by Indus and the Yamuna shifted east to join the Ganges. This kind of change in the river regime, which left the Ghaggar waterless, would have catastrophic implication for the towns located in this area. Apparently, the ecological disturbances brought by increased aridity and shift in drainage pattern led to the decline of the Harappan civilization.

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Interesting though this theory is, it has some problems. The theory about the onset of arid conditions has not been fully worked out and one needs more information. Similarly, the drying up of the Ghaggar has not been dated properly as yet.

5.11.4 Barbarian Invasions

Wheeler believed that the Harappan civilization was destroyed by the Aryan invaders. It has been pointed out that in the late phases of occupation at Mohenjodaro, there are evidences of a massacre. Human skeletons have been found lying on streets. The *Rig Veda* time and again refers to the fortresses of the *Dasas* and the *Dasyus*. The Vedic god Indra is called *Purandara* meaning 'destroyer of forts'. The geographical area of the habitation of the Rig Vedic Aryans included Punjab and the Ghaggar-Hakra region. Since there are no remains of other cultural groups having forts in this area in this historical phase, Wheeler believed that it was the Harappan cities that were being described in the *Rig Veda*. In fact, the *Rig Veda* mentions a place called Hariyupiya. This place was located on the bank of Ravi. The Aryans fought a battle here. The name of the place sounds very similar to that of Harappa. These evidences led Wheeler to conclude that it was the Aryan invaders who destroyed the cities of Harappa.

Attractive though this theory is, it is not acceptable to a host of scholars. They point out that the provisional date for the decline of the Harappan civilization is believed to be c. 1800 BCE. The Aryans, on the other hand, are believed to have arrived here not earlier than a period around 1500 BCE. At the present state of knowledge, it is difficult to revise either of these dates and so, the Harappans and the Aryans are unlikely to have met each other. Also, neither Mohenjodaro nor Harappa yield any other evidence of a military assault. The evidence of human bodies lying exposed in streets is important. This, however, could have been caused by raids by bandits from the surrounding hilly tracts. In any case, the big cities were already in a state of decay. This cannot be explained by the invasion hypothesis.

Theories of Decline I: Sudden (Catastrophic) Theories

Flo	ood and Earthquake	Mohenjodaro Destroyed by Shifting of the Indus			Barbarian or Aryan Invasions Destroyed	
					Harappa	
Floa) b) c)	Occupation levels divided by silt deposits. Houses and streets covered by silt up to 30 ft. above ground level. Houses built on silt covered debris.	Evidence Silt is there in Harappa because of wind action which brought sand and silt. Sand silt not due to floods.		idence Middle of 2 nd millenniun BCE – a period of increased arid conditions. In such a situation, a semi-arid region (like Harappa) would be affected most – decline of agriculture would be the result. Tectonic movement would affect river system like the	Ha	Arappa ridence Human skeletons have been found lying on streets. The Rig Veda refers to fortresses of dasas which god Purandara (Indra) destroys. The geographical area of the RigVeda Aryans includes Punjab and the Ghaggar region. The Vedas mention a place called
				Ghaggar which would dry up.		Hariyupiya on the bank of Ravi where Aryans fought a battle. Name similar to Harappa.

Ear	thquake: Evidence			
a)	The Indus area is a			
	disturbed earthquake			
	zone.			
b)	Earthquakes raised the			
	level of flood plains,			
	blocking the passage of			
	river-water to sea,			
	forcing water into			
	cities.			
c)	Earthquakes caused			
	shift of land away			
	from the sea-coast,			
	affecting commercial			
	cities.			
Cri	ticism	Criticism	Criticism	Criticism
a)	The decline of	This can explain only the	a) Not fully worked out.	The decline of Harappa
	settlements outside	desertion of	b) Drying-up of the	occurred around 1800
	Indus valley will not be	Mohenjodaro, but not its	Ghaggar not dated	BCE, whereas the Aryans
	explained by this	decline.	yet.	were not earlier than
	theory.			c.1500 BCE. So, the
b)	A river cannot be			theory of the Harappans-
	dammed by			Aryans clash seems
	tectonic effects.			difficult to accept.

Check Your Progress Exercise 3

- 1) The decline of the Harappan civilization cannot be explained by floods and earthquakes theory because:
 - i) it explains the decline of settlements outside the Indus valley.
 - ii) it cannot explain the decline of settlements outside the Indus valley.
 - iii) the Harappans knew how to face floods and earthquakes.
 - iv) none of the above.
- 2) The increased aridity in the Harappan area cannot explain the decline of Harappan Civilization because:
 - i) it is a fully worked out theory.
 - ii) it is not a fully worked out theory.
 - iii) drying-up of the Ghaggar is not dated yet.
 - iv) both (ii) and (iii).

3)	Discuss in about 50 words the evidence for and against the theory of the Barbaria invasions having destroyed Harappa.

5.12 ECOLOGICAL IMBALANCE: THEORY OF GRADUAL DECLINE

Scholars like Fairservis tried to explain the decay of Harappan civilization in terms of problems of ecology. He computed the population of the Harappan cities and worked out food requirements of the townsmen. He also computed that the villagers in these areas consumed about 80% of their produce, leaving about 20% for the market. If similar patterns of agriculture existed in the past, a city like Mohenjodaro, having a population of about 35,000, would require very large number of villages producing

food. According to Fairservis's calculation the delicate ecological balance of these semiarid areas was being disturbed because human and cattle population in these areas was fast depleting the scanty forests, food and fuel resources. The combined needs of the Harappan townsmen, peasants and pastoralists exceeded the limited production capacities of these areas. Thus, a growing population of men and animals confronted by scanty resources wore out the landscape.

With the forests and the grass cover gradually disappearing, there were more floods and droughts. This depletion of the subsistence-base caused strain on the entire economy of the civilization. There seems to have been a gradual movement away to areas which offered better subsistence possibilities. That is why the Harappan communities moved towards Gujarat and eastern areas, away from the Indus.

Of all the theories discussed so far, Fairservis's theory seems to be the most plausible one. Probably, the gradual deterioration in town-planning and living standards was a reflection of depleting subsistence base of the Harappans. This process of decline was completed by raids and attacks from the surrounding communities. However, the theory of environmental disaster also has some problems, which are as follows:

- The enduring fertility of the soils of the Indian sub-continent over subsequent millennia disproves the hypothesis of soil exhaustion in this area.
- Also, the computation of the needs of the Harappan population is based on scanty information and a lot more information would be needed to make a calculation of the subsistence needs of the Harappans.

Thus, any theory based on such scanty information will remain a hypothesis, unless substantiated by more evidence in its favour.

The emergence of Harappan civilization involved a delicate balance of relations between cities, towns and villages, rulers, peasants and nomads. It also means a fragile but important relationship with the communities of neighbouring areas who were in possession of minerals crucial for trade. Similarly, it meant maintenance of contact with contemporary civilizations and cultures. Apart from this, we have to take into account the ecological factor of relationship with nature. Any breakdown in these chains of relationships could lead to the decline of the cities.

5.13 THE TRADITION SURVIVES

Scholars working on the Indus civilization no longer look for the causes of its decline. This is because of the fact that the scholars who studied the Harappan civilization right up to the 1960s believed that the collapse of the civilization was sudden. These scholars concentrated their work on the studies of the cities, town planning and large structures. Such problems as the relationship of Harappan cities with contemporary villages and continuity of various elements of Harappan civilization were ignored. Thus, the debate about the causes of the decline of the Harappan civilization became more and more abstract. It was towards the end of 60s that scholars like Malik and Possehl focused their attention on various aspects of the continuity of the Harappan tradition. These studies have yielded more exciting result than the debate about the causes for the decline of the Harappan civilization. It is true that Harappa and Mohenjodaro were abandoned, and the urban phase came to an end. However, if we take a perspective covering the entire geographical spread of the Harappan civilization, quite a few things seem to continue in old style.

Archaeologically speaking, some changes are observable – some of the settlements were abandoned but most other settlements remained in occupation. However, the tradition of uniform writing, seals, weights and pottery was lost. Objects showing intensive

interaction among far-flung settlements were lost. In other words, the activities associated with city-centered economies were given up. Thus, the changes that came about simply indicated the end of the urban phase. Small villages and towns continued to exist and the archaeological finds from these sites show many elements of Harappan tradition.

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In most of the sites in Sindh it is difficult to observe any change in pottery tradition. In fact, in the areas of Gujarat, Rajasthan and Haryana, vibrant agricultural communities emerged in large numbers in the succeeding period. Thus, from a regional perspective, the period succeeding the urban phase can be treated as one of the flourishing agricultural villages which outnumber those of the urban phase. That is why scholars now discuss issues like cultural change, regional migrations and modifications in the systems of settlement and subsistence. After all, no one talks about the end of the ancient Indian civilization in early medieval India when most of the cities of the Gangetic valley declined. Let us see what kinds of archaeological remains survive after the end of the urban phase.

5.13.1 Sindh

In Sindh, i.e. at the Harappan towns Amri, Chanhu-daro, Jhukar etc., people continued to live as of old. They were still staying in brick houses but they gave up the planned lay out. They were using a slightly different pottery called Jhukar pottery. It was a buffware with red slip with paintings in black. Recent studies have suggested that this pottery evolved from mature Harappan pottery and as such, need not be considered as something new. At Jhukar certain distinctive metal objects have been found which might be indicative of trade links with Iran or what is more likely—the influx of a migrant population having Iranian or central Asian influences. A shaft-hole, axes and copper pins with looped or decorated heads have parallels in Iranian settlements. Circular stamp seals of stone or faience and a bronze cosmetic jar are also indicative of contacts with cultures to the west of Indus.

5.13.2 Indo-Iranian Borderlands

The areas to the west of Indus – Baluchistan and the Indo-Iranian borderlands – also show the presence of people using copper stamp seals and copper shaft-hole axes. Sites like Shahi Tump, Mundigak, Naushahro and Pirak indicate movements of people and contacts with Iran. Unfortunately, the dating of these settlements is still not clearly worked out.

5.13.3 Punjab, Haryana and Rajasthan

In the areas of Punjab, Haryana and Rajasthan, several settlements have been reported where people continued to live in the same old way after the decline of cities. However, Harappan influences on the pottery tradition gradually declined and the local pottery traditions which were always present along with Harappan pottery gradually replaced the Harappan pottery altogether. Thus, the decline of urbanizm was reflected in the reassertion of regional traditions in these areas. The sites of Mitathal, Bara, Ropar and Siswal are well known. Brick houses have been reported from Bara and Siswal. In many of these sites, Ochre Coloured Pottery has been found. This pottery underlay many early historical sites in ancient India. As such, these village cultures of Punjab, Haryana and Rajasthan are linked with Harappan tradition of the past and anticipate the early Indian tradition. In the upper Gangetic valley, 139 late Harappan settlements were established. They show remote late Harappan influences. This area became the heartland of the subsequent phase of the Indian civilization.



Late Harappan Pottery from Haryana. Source: EHI-02, Block-2, Unit-9.

5.13.4 Kutch and Saurashtra

In Kutch and Saurashtra, the end of urban phase is clearly documented in places like Rangapur and Somnath. Even during the urban phase, they had a local ceramic tradition co-existing with Harappan pottery. This tradition continued in later phases. Some sites like Rangapur seem to have become more prosperous in the succeeding period. They were using potteries called Lustrous Red Ware. However, the people stopped using Indus weights, script and tools imported from distant areas. Now they were using stone tools made of locally available stones.

In the mature Harappan phase there were 13 settlements in Gujarat. In the subsequent late Harappan period dated to about 2100 BCE the number of settlements went up to 200 or more. This increase in the number of settlements indicating an increase in population cannot be explained by biological factors. In pre-modern societies population could not increase so much in a space of a few generations that 13 settlements would multiply into more than 200 or more settlements. Thus, there is a distinct possibility that people inhabiting these new settlements came from other areas. Late Harappan settlements have also been reported from Maharashtra where their culture merged into those of the emerging agricultural communities.

5.14 TRANSMISSION OF THE HARAPPAN TRADITION

The end of cities did not mean the end of the Harappan tradition. It is evident from our discussion that archaeologically speaking, the Harappan communities merged into surrounding agricultural groups. However, the centralized decision-making in the polity and economy had ended. The Harappan communities which continued after the urban phase would have definitely retained their older traditions. It is likely that the Harappan peasants would retain their forms of worship. The priests of the Harappan urban centres were part of a highly organized literate tradition. Even if literacy ended they are likely to have preserved their religious practices. The dominant community of the subsequent early historic period called itself 'The Aryans'. Possibly, the priestly groups of Harappans merged into the ruling groups of the Aryans. As such, the Harappan religious tradition would be transmitted to historical India. The folk communities also retained the traditions of craftsmanship as is evident from pottery and tool-making traditions. Once again, when literate urban culture emerged in early India, it absorbed elements of folk cultures. This would provide a more effective channel of transmission of the Harappan tradition.

Theories of Decline II: Gradual Decline Theories

Decline Due to Ecological Imbalance

Evidence

- 1) The calculation that ecological balance in these semi-arid areas was being disturbed because the human and cattle population was depleting scarce forests, food & fuel resources.
- 2) With the forests disappearing, there were more floods and droughts.
- 3) Townsmen moved away to Gujarat and eastern areas.
- 4) This process of decline was completed by raids and attacks by nearby settlements.

Criticism

- 1) The soil continues to be fertile till today in this area. This disproves the soil-exhaustion hypothesis.
- 2) The calculation of the needs of Harappan towns requires more information before this hypothesis is substantiated.

The No-Decline or Continuity Hypothesis

The ecological argument has focused on the relationship between humans and nature in Indus valley. The problems in explaining decline has led the scholars to:

- a) abandon the search for the causes of decline.
- b) look for continuities of Harappa in a geographical perspective.
- c) accept that the cities declined and certain traditions like seals, writing, pottery were lost.

5.15 WHAT SURVIVES FROM HARAPPAN CIVILIZATION?

The cults of *Pashupati* (*Shiva*) and of the mother goddess and phallic worship seem to have come down to us from the Harappan tradition. Similarly, the cult of sacred places, rivers or trees and sacred animals show a distinct continuity in subsequent historic civilization of India. The evidence of fire-worship and sacrifice at Kalibangan and Lothal is significant. These were the most significant elements of the Vedic religion. Could the Aryans have learnt these practices from Harappan priesthood? This hypothesis would require more evidence, but it is not unlikely.

Many aspects of domestic life like house-plans, disposition of water supply and attention to bathing survived in the settlements of subsequent periods. The traditional weight and currency system of India, based on a ratio of 16 as the unit, was already present in the Harappan civilization. It might well have been derived from them. The techniques of making potter's wheel in modern India are similar to those used by the Harappans. Bullock-carts and boats used in modern India were already present in the Harappan cities. As such, we can say that many elements of Harappan civilization survived in the subsequent historical tradition of India.

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Archaeological Remains of Washroom Drainage System at Lothal. Credit: Abhilashdvbk. Source:

	imedia .othal_2	Commons (https://commons.wikimedia.org/wiki/File:The_drainage_s	yste	m_
Ch	eck Yo	ur Progress Exercise 4		
1)		ifficult to accept the theory of ecological imbalance because: (Mark (et statement).	(√)1	the
	i) it	t does not explain why soil continues to be fertile in the Indus valley	area (ı)
	ii) v	we do not have adequate data to tell us about the needs of Harappan	tow (/ns
	iii) t	he townsmen continued to stay on in Harappa	()
	iv) b	ooth (i) and (ii)	()
2)	Mark	(✓) the correct statement.		
	Schola	ars today:		
	i) a	are looking for fresh causes of the decline of the Harappan civilization	n ()
	ii) h	nave stopped looking for fresh causes of the decline of Harappan civil	izat (ior)
	iii) a	are looking for what survived from Harappan civilization in the later settle	eme (nts)
	iv) b	ooth (ii) and (iii)	()
3)	Write civiliza	in about 50 words about the importance of what has survived from Ha ation.	rapp	oar
				•

5.16 SUMMARY

The discovery of the Harappan civilization holds a very special significance for the study of Indian history. It altered the notions about the origins of Indian history and stretched it much further back so as to put it at par with other oldest civilizations of the world, namely Egypt and Mesopotamia. The discovery of Harappan civilization was a result mainly of archaeological sources. In this Unit, you learnt about the process through which the civilization came to be discovered, various details about the stages through which the early Harappan civilization passed, its gradual evolution and spreading out into many areas.

In this Unit we also saw that scholars have offered various theories of the sudden decline of Harappa. But all these theories had to be given up because of lack of adequate evidence. Gradually, scholars have given up looking for causes of the decline of Harappa. Now the focus is on understanding the late phases of Harappan civilization. This is looked into to expose the continuities of Harappan civilization which might have survived in to the flourishing agricultural communities of the time. And, no doubt, there have been certain characteristics of Harappan civilization which transcended down to the subsequent historic phase.

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I G I O U
THE PEOPLE'S
UNIVERSITY

Perforated Jar. Source: EHI-02, Block-2, Unit-9.

5.17 KEY WORDS

Alluvial Plain : The area bordering the river-bank on which fine

material is deposited by the river at the time of

flood.

Arid : Dry.

Catastrophic : Disastrous.

Chronology : The method of computing time.

Dasa and Dasyu: Peoples mentioned in the Rig Veda. The Aryans

were in conflict with their chiefs.

Ecology : Study of plants or animals or peoples and

institutions in relationship to environment.

Late Levels : An excavated archaeological site is divided into

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layers or settlement levels according to their ages. Accordingly, the late or the youngest settlement level will be somewhere near the top of the site and the oldest will be at the bottom-most layer.

Nomadism

: A way of life associated with cattle-herders and foraging communities. People do not stay at one place but keep moving from one place to another.

Occupational deposits

: At each level of the excavated site, there will be evidence in form of pottery etc. to show that the site was occupied. These deposits are called occupational deposits.

Ochre Coloured Pottery

: A kind of pottery found in the upper Gangetic plains. It has been found at levels that underlie early Indian historical pottery.

Pastoral Nomadism

: A social organization associated with cattle, sheep and goat herders who move from one place to another in search of pastures.

Radio-Carbon Dating

: It is also called C-14 dating. It is a method of measuring in dead organic matter the radio-active isotope C-14 which disappears at a known and calculable rate.

Seal

: A piece of wax or stone or some other material, on which some design is carved. It is used as a means of authentication.

Sealing

: The object carrying the stamp of the seal.

Silt

: Material deposit from a flowing river on the banks.

Tectonic Uplift

Relating to the process which elevates large areas of the earth's surface

5.18 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) (i) \checkmark , (ii) \times , (iii) \checkmark , (iv) \times
- 2) See Section 5.6

Check Your Progress Exercise 2

- 1) (i) \checkmark , (ii) \checkmark , (iv) \times
- 2) See Section 5.8 and Section 5.9.

Check Your Progress Exercise 3

1) (ii), 2 (iv), 3) See Sub-sec. 5.11.4. Your answer should include both material and written evidence.

Check Your Progress Exercise 4

1) (iv), 2) (iv), 3) See Sec. 5.15. Your answer should tell us how this points to the continuity of Harappan tradition.

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5.19 SUGGESTED READINGS

Agrawal, D. P. and Chakrabarti, D. K. (1979). [Ed] *Essays in Indian Proto-History*. New Delhi.

Allchin, Bridget and F.R. (1988). *The Rise of Civilization in India and Pakistan*. New Delhi: Select Book Service.

Kosambi, D. D. (1987). *The Culture and Civilization of Ancient India in its Historical Outline*. New Delhi: Vikas.

Lal, B. B. and Gupta, S. P. (1982). [Ed.] Frontiers of the Indus Civilization. New Delhi.

Marshall, John (1973). *Mohenjodaro and the Indus Civilization*. Volumes I and II. (Reprint).



UNIT 6 HARAPPAN CIVILIZATION: MATERIAL CHARACTERISTICS, NATURE OF CONTACTS, SOCIETY AND RELIGION*

Structure

6.0	Objectives
กบ	Uniechives

- 6.1 Introduction
- 6.2 From Villages to Towns and Cities
- 6.3 Sources to Know About the Harappan Civilization
- 6.4 Geographical Spread
- 6.5 Important Centres
 - 6.5.1 Harappa
 - 6.5.2 Mohenjodaro
 - 6.5.3 Kalibangan
 - 6.5.4 Lothal
 - 6.5.5 Sutkagen-Dor
- 6.6 Material Characteristics
 - 6.6.1 Town-Planning
 - 6.6.2 Pottery
 - 6.6.3 Tools and Implements
 - 6.6.4 Arts and Crafts
 - 6.6.5 The Indus Script
 - 6.6.6 Subsistence Pattern
- 6.7 Establishment of Trading Networks
- 6.8 Intra-Regional Contacts
 - 6.8.1 Cities
 - 6.8.2 Villages
- 6.9 Source of Raw Materials
- 6.10 Exchange System
- 6.11 Trade with the Persian Gulf and Mesopotamia
 - 6.11.1 Archaeological Evidence of Contacts
 - 6.11.2 Literary Evidence
- 6.12 Mode of Transport
- 6.13 Society
 - 6.13.1 Dress Styles
 - 6.13.2 Food Habits
 - 6.13.3 Language and Scripts
 - 6.13.4 Warfare
 - 6.13.5 Main Crafts/Occupations

^{*} This Unit has been adopted from EHI-02, Block 2.

- 6.14 Who Ruled Them?
- 6.15 Religion and Religious Practices
 - 6.15.1 Places of Worship
 - 6.15.2 Objects of Worship
 - 6.15.3 Burial of the Dead
- 6.16 Summary
- 6.17 Key Words
- 6.18 Answers to Check Your Progress Exercises
- 6.19 Suggested Readings

6.0 OBJECTIVES

This Unit deals with the geographical extent and material features of the Harappan civilization. It describes main sites of the civilization as well as the material remains which characterized these sites. It also throws light on different aspects of society and religious practices of the Harappan people. After reading this Unit you should be able to:

- understand that there was continuity of population and material traditions between the early-Harappan cultures and Harappan civilization;
- know about the geographical and climatic aspects of the settlement pattern of the Harappan civilization;
- describe the specific geographical, climatic and subsistence related characteristics of important centres of the Harappan civilization;
- learn about the material features of the important Harappan sites and especially, the uniformities in the material features of these sites;
- explain why the Harappans tried to establish links with faraway lands;
- know about the nature of contact among Harappan towns and the surrounding areas:
- learn about trade and exchange activities of the Harappans with contemporary west Asian civilizations;
- know about our sources of information on this nature of contact and exchange network;
- know about dresses and food habits of the Harappans;
- discuss the controversy about their script and language;
- list their main occupations;
- understand the nature of ruling classes;
- recall their religious practices and prominent gods; and
- know about their burial practices.

6.1 INTRODUCTION

In this Unit we discuss the geographical spread and the material characteristics of the Harappan civilization which arose on the foundation of pastoral and agricultural communities and small townships. It refers to the continuity of population and material traditions between the early-Harappan cultures and Harappan civilization. It, then, attempts to familiarize you with town planning, important structures, arts and crafts,

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housing patterns, pottery, tools and implements, subsistence patterns and script of the civilization. This Unit also brings out the uniformities in the material characteristics of Harappan sites.

The civilization was characterized by the presence of a large number of small and large towns. Apart from the cities like Harappa and Mohenjodaro even very small settlements like Allahdino (near Karachi) have yielded material characteristics of an urban economy. An urban economy is characterized by a vast network of relationships which transcend its physical space. You will see in this Unit how the people of Harappa were in active interaction with other cities and towns located at a distance of hundreds of miles from Harappa. This Unit goes on to explain the reasons why did the cities establish trading networks and also forms of inter-regional trade. It also takes into account the sources of raw materials and extent of contact with contemporary west Asian civilizations. Of course, all this knowledge about the Harappan civilization is gained through various historical sources and they have been explained in the Unit as well.

Finally, in this Unit we will discuss the society and religion of the Harappans. One might ask what the Harappans looked like. What was their clothing pattern? What did they read and write? What kinds of jobs did their townsfolk do? What language did they speak? What food did they eat? Did they play games and did they fight? Who ruled over them? What were their temples and gods like? These are some very simple questions which the scholars find difficult to answer. This is because of the nature of sources available for knowing about this period. The main sources available are in the form of archaeological findings excavated from different sites. Answers to many of the questions related to the realm of ideas and feelings are difficult to provide with our present knowledge about this civilization. Even an innocuous question like—whether a Harappan was feeling a sense of pleasure while making a carnelian bead?—cannot be answered. In this Unit we will try to derive some answers from the silent objects which had been lying abandoned for thousands of years.

6.2 FROM VILLAGES TO TOWNS AND CITIES

In the previous Unit we saw how pastoral nomadic and agricultural communities established themselves in the Indus plain and how some small townships, having contacts with faraway lands, had come into existence. On the foundation of these agricultural communities and small townships emerged the Harappan civilization. By the term 'Harappan Civilization' we mean that the Harappan society was characterized by the presence and domination of large cities in this phase of history. This would also mean the presence of specialized craftsmen, long-distance trade, existence of rich and poor people and presence of kings. Apart from these general features common to all civilizations, there were some particular features of the Harappan civilization. In the geographical space where the remains of the civilization have been found communities were using the same written script. A Harappan community, whether it was staying in Rajasthan or Punjab or Sindh, would be using the same sets of weights and measures. The copper-bronze tools used by them were also uniform in design, shape and size; the bricks they used had a proportion 4:2:1. Some of their towns were also characterized by uniformities in the planning of buildings, citadels etc. The seals, shell (shankha) bangles, carnelian beads and disc beads of steatite were also uniformly designed in the entire geographical space covered by the cities of the civilization. Most of the time, a Harappan site is identified by the use of a pinkish pottery with bright red slip, having standard representations of trees, animals, birds and geometric motifs in black. These uniformities in material features of the Harappan sites were the characteristic traits of Harappan civilization.

6.3 SOURCES TO KNOWABOUT THE HARAPPAN CIVILIZATION

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The information about the civilization comes from reports of excavations at places like Harappa and Mohenjodaro. The excavations at Harappa began in 1921. Many Harappan settlements have been located and excavated since then. Famed archaeologists like Sir John Marshall and Sir Mortimer Wheeler conducted excavations at Harappan settlements. These scholars, by carefully studying material remains, have made the relics of the past speak. Since we cannot read the written words of the Harappans we have to draw conclusions on the basis of the study of artifacts used by them. By now, more than 1000 settlements bearing Harappan material have been discovered. However, most of these settlements have not been excavated. According to one estimate only 3% of reported Harappan settlements have been excavated. Even at sites where excavationwork has been carried out not more than one-fifth area has been excavated. Some sites like Ganweriwala in the Hakra valley and Furukslan in Punjab, which are reported to be nearly as large as Mohenjodaro, have not even been touched by the excavators. This is because excavation involves a very large investment of money and manpower. At present the Governments of India or Pakistan do not have sufficient money to fund these excavations. However, one thing is clear: when we are making generalisations about Harappan civilization we have to be extremely cautious. Any new discovery or excavation report can substantially modify our views about the Harappans. For example, scholars like Mortimer Wheeler, who wrote nearly 20 years ago, believed that the civilization appeared fully developed in the Indus valley and it had little in common with the people who lived in these areas in the preceding period. However, a careful analysis of the available materials and new excavation reports have convinced the archaeologists that the civilization developed over a long period of time in and around Indus valley region itself. We have studied the developments in the 'early-Harappan' period in the preceding Unit: we find that there was a continuity of population and technical skill between the 'early-Harappan' and the Harappan periods. A process of evolution was evident in agricultural settlements, and basic crafts and distinct Indus style itself were probably carried over from earlier regional traditions. Since the study of Harappan civilization remains, in many respects, incomplete, therefore, it is one of the most challenging areas of study and research for the students and historians of ancient Indian history.

6.4 GEOGRAPHICAL SPREAD

Scholars generally believe that Harappa-Ghaggar-Mohenjodaro axis represents the heartland of Harappan civilization. Most of the Harappan settlements are located in this region. It is characterized by certain uniformities. The entire zone is a flat stretch of land having similar subsistence pattern. Snowmelt from the Himalayas and monsoon rains define its flooding pattern. This would create similar kinds of possibilities for agriculture and pastoralism. The Kachhi plain to the west of Indus system is in the transitional zone of Iranian borderlands. It is a flat alluvial outwash located at the foot of Bolan pass and lake Manchar. It is an inhospitable country and, except for its periphery, is completely dry. Sites like Nowsharo, Judeirjodaro and Ali-Murad have been reported from this area. The settlements of Sutka-koh and Sutkagen-Dor on Makran coast represent the driest part of the hilly Baluchistan region. They are the known western boundaries of the Harappans. The Harappan settlements at Shortughai in north-eastern Afghanistan seem to have been isolated colonies of the Harappans.

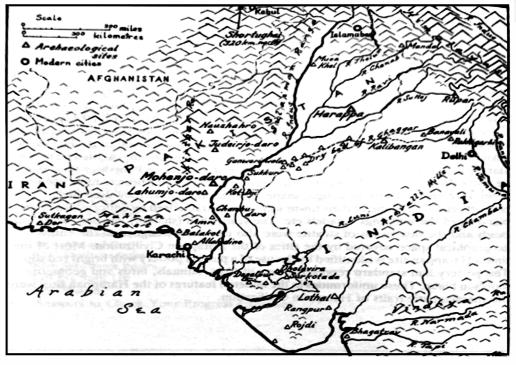
The eastern borderlands of the civilization are represented by such settlements as Bargaon, Manpur and Alamgirpur in UP. The subsistence system of these sites located

in the Ganga-Yamuna *doab* was in conformity to their geographical location. This area had higher rainfall and denser forests. It falls outside the zone of pastoral nomadism and falls in the wheat-producing area. Therefore, it would pose different kinds of problems of settlement. This is why some scholars believe that this area represents an independent cultural province receiving stimulus from the Harappans. Manda in Jammu and Ropar in Punjab represent the northern extremities of the Harappans in India. The settlements of Daimabad in Maharashtra and Bhagatrav in Gujarat might have formed the southern frontier of the Harappans.

In Gujarat too the settlement pattern was not uniform. There were small dissected plateaus and scraplands in Kutch and Kathiawad. On the other hand, this area had a large seacoast in Gulf of Cambay and Rann of Kutch. The Harappans in Gujarat were familiar with rice and millet.

The Harappan civilization seems to have covered a very large area. Its area was larger than those of contemporary civilizations of Mesopotamia and Egypt. In Mesopotamia settlements were spread out all across the riverine plains in dense clusters. However, except in the Ghaggar-Hakra region the Harappan settlements were very thinly spread out. Sites in Rajasthan and Gujarat could be divided by hundreds of kilometers of deserts and marshes. The nearest Harappan neighbour of Shortughai would be about 300 km. away. These vacant spaces might have been inhabited by primitive communities who were still surviving by hunting-gathering or by pastoral nomadism. Similarly, we get some idea of the size of population that lived in any of the Harappan cities from the studies conducted in this field. Scholars believe that the largest Harappan city, i.e. Mohenjodaro, had a population of about 35,000. The smallest towns of modern India would have a larger population than the biggest towns of Harappans. We have to remember that in Harappan period the fastest means of transport was bullock-cart, iron was unknown and the use of plough was considered a revolutionary discovery. With such primitive technology a civilization which managed to bring together far-flung areas in a complex web of socio-economic relationship was a stunning achievement in those days.

6.5 IMPORTANT CENTRES



One might ask why the Harappans tried to occupy such faraway places as Shortughai in Afghanistan or Surkotada in Gujarat. We may find the answer to this question if we try to examine the details of the location and characteristics of some important sites.

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6.5.1 Harappa

Harappa was the first site to be excavated. From the 1920s onwards archaeologists like Dayaram Sahni, M.S. Vats and Mortimer Wheeler carried out excavations at Harappa. It is located on the bank of Ravi in western Punjab. In terms of its size and variety of objects discovered it ranks as the premier city of the Harappan civilization. The ruins of the city cover a circuit of about three miles. What is intriguing, however, is the fact that there are no clusters of sites around Harappa. A substantial section of the population here was engaged in activities other than food production. These activities could relate to administration, trade, craft work or religion. Since these people were not producing food for themselves someone else would have to do it for them. Productivity was low and transportation was quite difficult. Thus, for maintaining these non-food producers the community would have to mobilize a very large number of people for procuring and transporting food from food-producing areas. However, these areas would not have been very far from the city because the transportation of grains was done by bullock-carts and boats. Some scholars have suggested that the surrounding villages might have been engaged in shifting cultivation in meander flood plains of the rivers. Villages had to keep shifting according to changes in the flood plains of the rivers. The location of Harappa in isolation can be explained by the fact that it was located in the midst of some important trade routes which are still in use. These routes connected Harappa with central Asia, Afghanistan and Jammu. Its pre-eminent position was linked to its ability to procure exotic items from faraway lands.



A Fortification Wall, Harappa. Monument in Pakistan Identified as the PB-138. Credit: Haseeb Ur Rehman malik. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Fortification_Wall.JPG).

6.5.2 Mohenjodaro

Mohenjodaro, located in the Larkana district of Sindh on the bank of Indus, is the largest site of Harappan civilization. Most of the information regarding town planning, housing, seals and sealings of this civilization comes from this site. Excavations began here in 1922, with Rakhal Das Banerjee and Sir John Marshall taking up the work. Later on, Mackay and George Dales also conducted excavations. Small scale excavations and plotting of the site have continued up to the 80s.

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LEFT: City Walls, Mohenjodaro. Author: Quratulain. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:City_walls_Moenjodaro.jpg).

RIGHT: 'Proto-Shiva' Seal from Mohenjodaro, c. 2600-1900 BCE. Source: http://www.columbia.edu/itc/mealac/pritchett/00routesdata/bce_500back/indusvalley/protoshiva/protoshiva.jpg. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Shiva_Pashupati.jpg).

Excavations show that people lived here for a very long time and went on building and rebuilding houses at the same location. As a result of this the height of the remains of building and debris is about 75 feet. Ever since the time of occupation there were regular floods at Mohenjodaro which caused deposition of alluvial soil. The continuous deposition of silt over the centuries has raised the level of the land around Mohenjodaro by about 30 feet. The ground water table has risen correspondingly. Thus, the oldest buildings in Mohenjodaro have been found to be about 39 feet below the level of modern level at the plain. Archaeologists have not been able to excavate these levels because of the rise in water table.



LEFT: Painting of the Skeletons found during the Digging at Mohenjodaro. Author: Soban. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Painting_of_the_skeletons_found_during_the_digging.jpg).

6.5.3 Kalibangan

The settlement of Kalibangan is located in Rajasthan along the dried up bed of Ghaggar. As pointed out earlier, this area has had the largest concentration of Harappan settlements. Kalibangan was excavated in the 1960s under the guidance of B. K. Thapar. This

place has yielded evidence of the existence of pre-Harappan and Harappan habitations. It shows significant variation from Harappa in the sphere of religious beliefs. Some scholars have suggested that Kalibangan might have been part of the 'Eastern Domain' of Harappan civilization. In the areas of present-day Haryana, east Punjab and western U.P., Harappan sites like Bara, Siswal and Alamgirpur have been discovered. They give evidence of the presence of distinct local traditions in pottery along with Harappan pottery. Kalibangan might have been a mediator between the Harappan cultural zone and eastern provinces.

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6.5.4 Lothal

In Gujarat, settlements such as Rangapur, Surkotada and Lothal have been discovered. Lothal is located in the coastal flats of Gulf of Cambay. This place seems to have been an outpost for sea-trade with contemporary west Asian societies. Its excavator S. R. Rao claims to have discovered a dockyard here.

6.5.5 Sutkagen-Dor

Sutkagen-Dor is located near Makran coast which is close to Pakistan-Iran border. At present the settlement is land-locked in dry inhospitable plains. The town had a citadel surrounded by a stone wall built for defence. Its location in an inhospitable area can only be explained by the need of sea-port for trading.

Discuss the geographical location of important centres of the Harappan civilization.

Check Your Progress Exercise 1

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	•••••					
•						
2)	Ma	tch the following sites with the	ır pres	sent-day geographical location.		
	1)	Harappa	a)	Rajasthan		
	2)	Kalibangan	b)	Sindh (Pakistan)		
	3)	Mohenjodaro	c)	Makran coast (Pakistan-Iran bo	rder)
	4)	Sutkagen-Dor	d)	West Punjab (Pakistan)		
3)	Ma	rk right (,) or wrong (×) agai	nst the	e following statements:		
	i)	Harappa, located in west Pur	njab, i	s the largest site of Harappan civil	izatio	on.
					()
	ii)	Mohenjodaro was the first H	Iarapp	pan site to be excavated.	()
	iii)	Excavations at Harappa we John Marshall.	ere fire	st conducted by R. D. Banerjee	and (Sir)
	iv)	Scholars believe that Harapp heartland of Harappan civilization	-	naggar-Mohenjodaro axis represe	ents 1 (the

6.6 MATERIAL CHARACTERISTICS

In this section we discuss the material characteristics of Harappan civilization. We will take into account town planning, pottery, tools and implements, arts and crafts, scripts and subsistence pattern of the civilization.

6.6.1 Town-Planning

Archaeologists like Mortimer Wheeler and Stuart Piggot believed that Harappan towns had a remarkable unity of conception. This was suggested by the division of each town into two parts. In one part was a raised citadel where the rulers were staying, in the other part of town lived the ruled and poor. This unity of planning would also mean that if you were walking on the streets of Harappa – houses, temples, granaries and streets themselves will be almost identical to those of Mohenjodaro or any other Harappan town for that matter. The entire idea of unity of conception was derived from the notion of a community of foreigners suddenly conquering the Indus valley and building new towns. Such towns were designed to separate the natives from the rulers. Thus, the rulers built citadels which kept them in glorious isolation. Such ideas of the sudden emergence of Harappan towns and unity of planning are being increasingly rejected by new scholars. The Harappan towns were located on the flood-plains of rivers, on fringes of deserts or on sea coast. This meant that people living in these different regions faced different kinds of challenges from nature. Their adaptation to environment would introduce diversity in their town-planning and life style too. Also, many large and seemingly important buildings were located in the lower city.

The settlements of Harappa, Mohenjodaro and Kalibangan show certain uniformities in their planning. These cities were divided into a citadel on the west side and a lower town on the eastern side of the settlement. The citadel was built on a high podium of mud brick. It seems to have contained large structures which might have functioned as administrative or ritual centres. The lower city contained residential areas. In Mohenjodaro and Harappa, the citadel was surrounded by a brick wall. At Kalibangan, both the citadel and the lower city were surrounded by a wall; streets ran from north to south in the lower city and cut at right angles. Obviously, this kind of alignment of streets and houses represents conscious town-planning. However, the resources of town planners in those days would be very limited. This assumption is based on finds from Mohenjodaro and Kalibangan where the streets stagger from block to block and the alignments of streets and buildings in one part of Mohenjodaro (Moneer area) are quite different from the rest of the areas. Mohenjodaro was not constructed in homogeneous horizontal units. In fact, it was built in different times. At Harappa and Mohenjodaro, baked bricks were used for buildings. At Kalibangan mud bricks were used. In settlements like Kot Diji and Amri in Sindh there was no fortification of the city. The site of Lothal in Gujarat also shows a very different layout. It was a rectangular settlement surrounded by a brick wall. It did not have any internal division into citadel and lower city. Along the eastern side of the town was found a brick basin which has been identified as a dockyard by its excavator. The site of Surkotada in Kutch was divided into two equal parts and the building materials were basically mud bricks and lumps of mud. Harappans were using baked and unbaked bricks of standard size. This shows that it was not the individual house owners who made their own bricks, but that brick-making was organized on a large scale. Similarly, cities like Mohenjodaro showed excellent arrangements for sanitation. Waste water from houses would pass through chutes connected with public drains aligned to the margin of the streets. This, again, indicates the presence of a civic administration which would take decisions for the sanitary requirements of all townsmen.

Some Large Structures

• In Harappa, Mohenjodaro and Kalibangan, the citadel areas contained monumental structures which must have had special functions. This is clear from the fact that they stood on a high mud-brick platform. Among these structures is the famous 'Great Bath' of Mohenjodaro. This brick built structure measures 12 m. by 7 m. and is about 3 m. deep. It is approached at either end by flights of steps. Bed of the bath was made water-tight by the use of bitumen. Water was supplied by a large well in an adjacent room. There was corbelled drain for disgorging water too. The bath was surrounded by porticoes and sets of rooms. Scholars generally believe that the place was used for ritual bathing of kings or priests.

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The Great-Bath at Mohenjodaro. Credit: Saqib Qayyum. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Great_bath_view_Mohenjodaro.JPG).

- Another important structure discovered in the citadel mound of Mohenjodaro is the 'Granary'. It consists of 27 blocks of brickwork crisscrossed by ventilation channels. Below it lie the brick loading bays from which grains were raised into the citadel for storage. Though some scholars have questioned the identification of this structure with a granary, it is certain that this large structure must have had some important function.
- To another side of the Great Bath is a long building (230 × 78 feet) which has been identified as the 'residence' of a very high official. It includes an open court of 33 square feet on to which three verandas open.
- Another significant building was an 'Assembly hall'. It had four rows of five brick plinths upon which wooden columns were erected. In a row of rooms to the west of it was found a seated male statue.
- Among the well known buildings of Harappa is the 'Great Granary'. It consisted of a series of brick platforms forming the base of two rows of six granaries. To the south of the granary were found rows of circular brick platforms. That they were used for threshing grains is clear from the fact that chaffs of wheat and barley were found in the crevices of the floors.
- Kalibangan was a smaller city compared to Mohenjodaro and Harappa. The

most significant discoveries here have been those of fire-altars. A series of brick platforms were discovered. On one of them was found a row of seven fire altars as well as a pit containing animal bones and antlers.

Housing Pattern

The average citizen seems to have lived in blocks of houses in the lower city. Here too there were variations in the sizes of houses. It could be single room tenements meant for slaves like the ones discovered near the granary at Harappa. There were other houses complete with courtyards and having up to 12 rooms. The bigger houses were provided with private wells and toilets. These houses had much the same plan – a square courtyard around which were a number of rooms. The entrances to the houses were from the narrow lanes which cut the streets at right angles. No windows faced the street. This meant that the road ward facing of the house would be like a row of brick walls.

The description of houses and townships of the Harappan civilization indicates that there were people who owned large houses. Some of them bathed in an exclusive swimming pool (the Great Bath). There were others who lived in barracks. One can say with certainty that those who lived in larger houses belonged to the rich class whereas those living in barracks might have been part of a servile class of labourers.

The houses in the lower city also contained a large number of workshops. Potters kilns, dyers vats and shops of metal workers, shell-ornament makers and bead makers have been recognized.

6.6.2 Pottery

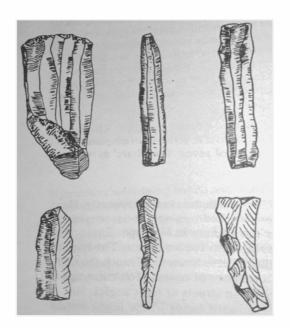
Among the remains discovered at Harappan settlements, pottery forms an important category. It represents the blending of ceramic traditions of Baluchistan and cultures east of the Indus system. Most of the Harappan pottery is plain, but a substantial part is treated with a red slip and black painted decoration.

The painted decorations consist of horizontal lines of varied thickness, leaf patterns, scales, chequers, lattice work, palm and *Pipal* trees. Birds, fishes and animals are also shown. Among notable shapes found in the Harappan pottery are pedestal, dishes, goblets, cylindrical vessels perforated all over, and various kinds of bowls. The uniformity in forms and paintings on pottery is difficult to explain. Normally, the explanation of this uniformity is the fact that local potters made the pottery. But in areas like Gujarat and Rajasthan a variety of other kinds of potteries continued to be produced along with Harappan pottery. Some of the pottery has shown marks of stamp which might indicate that a few varieties of vessels were traded also. However, it is still unclear how such a large area exhibited a uniform pottery tradition.

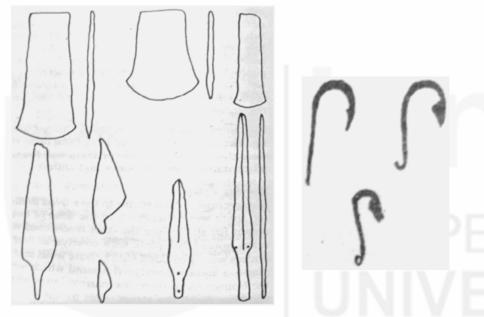
6.6.3 Tools and Implements

The tools and implements used by Harappans also show a striking degree of uniformity in designs and technique of production. They were using tools made of copper, bronze, and stone. The basic tools types were flat axe, chisels, knives, spear heads and arrowheads for copper and bronze implements. In the later stages of the civilization they were also using daggers, knives, and flat tongs. They were familiar with the techniques of casting bronze and copper. Stone tools were also in common use. They were produced on a large scale at factory sites like Sukkur in Sindh and then sent to various urban centres. Only this could explain the uniformity in tool types. Unlike the 'early Harappan' period when there were various tool making traditions, the 'mature Harappans' concentrated on making long regular blades. They indicate a high level of competence and specialization with little or no concern for beauty and innovation.

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Stone-blade tools found at Mohenjodaro. Source: EHI-02, Block-2, Unit-6.



LEFT: Copper and Bronze tools used by the Harappans. Source: EHI-02, Block-2, Unit-6.

RIGHT: Hooks for Fishing. Source: EHI-02, Block-2, Unit-6.

6.6.4 Arts and Crafts

Works of art give us an insight into how society relates itself to its surroundings. They also give us an idea of how it views nature, human beings and divinity. In pre-modern societies it is difficult to separate arts and crafts. That is why we shall study them together.

Probably, the most famous art piece from Harappan civilization is the bronze dancing nude figure discovered at Mohenjodaro. With head drawn backwards, drooping eyes, right arm on hip and the left arm hanging down, the figure is in a dancing stance. She is wearing a large number of bangles, and her hair is plaited in an elaborate fashion. It is considered a masterpiece of Harappan art. The bronze figurines of a buffalo and ram have beautifully caught the stance of animals. The two little toy-carts of bronze are also fairly well known objects. Although one was discovered at Harappa and the other at Chanhudaro, a distance of over 650 km., they are identical in design.





LEFT: Bronze Dancing Girl found at Mohenjodaro. Source: EHI-02, Block-2, Unit-6.
RIGHT: Bearded Man (Mohenjodaro). Source: EHI-02, Block-2, Unit-6.

The stone sculpture of a bearded head found at Mohenjodaro is another well known piece of Harappan art. Face is bearded with the upper lip shaved. The half closed eyes might indicate a state of meditation. Across the left shoulder is a cloak carved in relief with trefoil pattern. Some scholars believe that it is the bust of a priest.

The two small male torsos discovered at Harappa are sometimes believed to have belonged to later periods. The refined and wonderfully realiztic modeling of the fleshy parts is extraordinary. However, the Harappans do not seem to have used stone or bronze for their artistic creations on a large scale. The findings of such works are rare.

Terracotta figurines have been found in large numbers from Harappan settlements. They were used as toys or cult figures. A variety of birds, monkeys, dogs, sheep and cattle are represented in these forms along with humped and humpless bulls. A large number of male and female figurines have also been found. Various models of terracotta carts are remarkable for the vivacity of modeling. These models show that the bullock-carts used in those times are ancestors of the actual bullock carts used in modem times.

The Harappans used remarkably beautiful beads made of such precious and semiprecious stones such as agate, turquoise, carnelian, and steatite. The processes of making these beads are clear from the finds of a workshop at Chanhudaro. In these processes the stone was first sawn into an oblong bar, then flaked into a cylindrical shape and polished. Finally, it was bored either with chert drills or with bronze tubular drills. Gold and silver beads have also been found. The commonest material used for making beads was steatite.

The barrel shaped beads with trefoil pattern are typically associated with the Harappan culture. Carnelian beads are also quite common. At Mohenjodaro was also discovered a hoard of jewellery consisting of gold beads, fillets and other ornaments. Small dishes of silver, too, have been found.

More than 2000 seals have been found from Harappan settlements. They are considered 'the outstanding contribution of the Indus civilization' to ancient craftsmanship. They were generally square in shape and made of steatite, but some round seals have also been found. The designs on the seals include a wide range of animals associated with groups of signs in a semi-pictographic script. Some seals have only scripts carved on them and some others bear human and semi-human forms. Some seals show the use of various kinds of geometric patterns. The animal motifs used are Indian bison, Brahmani bull, rhinoceros, tiger, and elephant. A series of composite animals are also shown. One such recurrent representation is that of a face of a man with trunk and tusks of an elephant, horns of bull, fore-part of a ram and hind-quarters of a tiger. These kinds of seals might have been used for religious purpose. Seals could have also been used for exchange of goods between distant cities. The seal of a horned deity sitting in a yogic posture and surrounded by animals has been identified with the god *Pashupati*.

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Some Seals of Harappan Civilization. Source: EHI-02, Block-2, Unit-9.

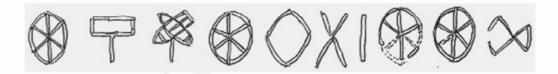
However, the artworks of the Harappans leave us a little disappointed on two counts:

- i) The finds are very limited in number, and
- ii) They do not seem to have the variety of expression seen in the artworks of contemporary civilizations of Egypt and Mesopotamia.

Stone sculptures were rare and undeveloped compared to those fashioned by the Egyptians. The terracotta pieces, also, cannot be compared with those of Mesopotamia in quality. It is possible that the Harappans were using less durable medium like textile designs and paintings for their artistic expression which have not survived.

6.6.5 The Indus Script

The seals used by the Harappans carried some form of writing. This script is still a mystery to us because we cannot read it. So far, the other forgotten scripts like those of ancient Egypt could be read again because scholars found some inscriptions written in the forgotten script, followed by some of its forms in a known script. We have not discovered any bilingual inscription at any Harappan site so far. Thus, we do not know what language the Harappans spoke and what they wrote. Unfortunately, the inscriptions discovered so far are short, usually engraved on seals. This makes the task of decipherment all the more difficult. All we know is that they used ideograms and wrote from right to left. However, scholars are still struggling to unveil the mystery of the script. If this is successfully done, it might reveal much more about the civilization.



10 Indus Characters from the Northern Gate of Dholavira, called the "Dholavira Signboard". Credit: Siyajkak. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:The_%27Ten_Indus_Scripts%27_discovered_near_the_northern_gateway_of_the_Dholavira_citadel.jpg)

6.6.6 Subsistence Pattern

The Harappan urbanizm was based on agricultural production. During various excavations a large volume of information has emerged about the dietary habits of Harappans. Apart from sheep and goat, humped cattle seem to have been domesticated. Bones of boars, buffaloes, elephants and camels have also been found from many settlements. We do not know as yet whether these animals had been domesticated or hunted wild. However, a representation of a caparisoned elephant on some seals indicates that this animal had been domesticated. Bones of fowls have also been found. Possibly, they had been domesticated. Bones of a large number of the following wild animals have been found:

- deer,
- rhinoceros,
- tortoise etc.

Horse seems to have been unknown to the Harappans.

Two varieties of wheat are frequently found at Harappan sites. Barley has been frequently found. Other crops include dates and varieties of leguminous plants such as peas. Besides these, mustard and sesamum were also grown. At Lothal and Rangapur, rice husk was found embedded in clay and pottery. We do not as yet know whether they represented variety of wild rice or rice domesticated and regularly cultivated. India has traditionally been famous for its cotton clothes. At Mohenjodaro was found a fragment of cotton cloth. This indicates that the Harappans had already mastered the art of growing and wearing cloth.

The evidence of a furrowed field at Kalibangan indicates that the Harappans were using some sort of wooden plough. The pattern of crossed furrows, widely spaced in one direction and closely spaced in another, is still followed in this area. The modern cultivator furrows his field in this pattern for sowing horse gram or sesamum in one direction and mustard in another. This was probably true of the Harappans also.

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Thus, we find that the Harappan subsistence system was based on the exploitation of a fairly wide range of crops, domesticated animals and wild animals. This variety would account for the strength of the subsistence system. They were probably already growing two crops annually. They also grew two or more kind of crops simultaneously. This provided strength to the economy to support the large population which lived in the cities and did not produce its own food.

Che	eck Y	Your Progress Exercise 2		
1)	Disc	cuss the material characteristics of the Harappan civilization.		
2)	Mai	k right (\checkmark) or wrong (\times) against the following statements:		
	i)	The Great Bath is a brick built structure excavated at Harappa.	()
	ii)	Great Granary is an important building discovered at Mohenjodaro.	()
	iii)	The discovery of fire altars has been made at Lothal.	()
	iv)	The Harappans used tools made of iron.	()
	v)	The Harappan script has not yet been deciphered.		
3)	Fill	in the blanks with the correct answers:		

The bronze dancing girl discovered at..... (Mohenjodaro/Harappa/

At Lothal.....(rice/wheat/barley) was found embedded in clay.

Among the animals..... (elephant/camel/horse) seems to have been

The evidence of cotton comes from..... (Harappa/Mohenjodaro/

6.7 ESTABLISHMENT OF TRADING NETWORKS

Kalibangan) is considered a masterpiece of Harappan art.

unknown to the Harappans.

Kalibangan).

i)

ii)

iii)

It is believed that active interaction among far-flung areas did not exist in the pre-urban society. One might ask why did the townsmen establish contacts with faraway lands and how do we know that they had contacts? In urban centres a significant part of population is engaged in non-food producing activities. These people perform administrative, religious, trading and manufacturing functions. At the same time, if they are not producing their own food, someone else has to do it for them. That is why towns are dependent on the surrounding countryside for food supplies.

What is important for us is the fact that the relationship between the city and village was unequal. By developing as centres of administration or religion the cities attracted wealth of the entire country. This wealth was siphoned off from the hinterland in the form of taxes, tributes, gifts or purchases of goods. In the Harappan society this wealth was controlled by the most powerful section of urban society. At the same time, the rich and well-off sections in the city led a luxurious life. Their social superiority was reflected in the buildings constructed by them and the acquisition of luxury items which were not locally available. This indicates that a major reason for the cities to establish contacts with faraway lands was to cater to the needs of the rich and powerful. This may be one of the factors behind the Harappans attempting to establish links with faraway lands.

The area formed by Harappa, Bahawalpur and Mohenjodaro seems to have been the core region of Harappan civilization. However, settlements showing overwhelming Harappan influence have been found in an area of approximately 1.8 million square km.

A pertinent question to ask here is that how some Harappan out-posts are found in such far flung areas as Shortughai in Afghanistan and Bhagatrav in Gujarat? The plausible answer seems to be the economic inter-dependence and trade network between different regions. Differential access to basic resources was crucial in linking various regions of the Indus valley. These resources included agricultural products, minerals, timber, etc. and this could be achieved by establishing trade routes. Emerging in the fertile Indus-Hakra plains, the rich Harappans wanted possession of more and more luxury items. In quest of this they strengthened ties that already existed with central Asia and Afghanistan. They also established settlements in places like Gujarat and Gangetic valley.

6.8 INTRA-REGIONAL CONTACTS

In the following sections we shall try to assess the nature of contact among the Harappan towns themselves and with other cities and societies of that period. Our information on such contacts is based on the reports of objects found during excavations of Harappan towns. Some of this information is substantiated by references found in literary sources of the contemporary Mesopotamian civilization.

6.8.1 Cities

We could begin with the evidence of the existence of granaries at Harappa and Mohenjodaro. These large structures were meant for storing grains. As pointed out earlier, urban centres depend on villages for their foods. The presence of granaries indicates the attempt of the rulers to possess an assured source of food supply. Presumably, food grains were brought from surrounding villages and stored here. This, in turn, would be redistributed to the townsmen. Grains are a bulk commodity which is consumed every day. Vast quantities of grains would have to be collected and transported in bullock-carts and boats. It would be difficult to haul up large quantities of food over a great distance. That is why it has been found that the towns were usually located in the most fertile areas that were available in region, and probably grains were collected from surrounding villages.

For example, Mohenjodaro was located in the Larkana district of Sindh. Even in modern times this is the most fertile area of Sindh. However, some other settlements sprang up on important trade routes or industrial sites. In such cases, the location was determined not so much by the presence of fertile agricultural tracts as by the possibilities of trade and exchange.

That is why, when scholars analyze the causes for the location of large cities they look for:

- the potentialities of the place for food-production, and
- its proximity to trade routes and mineral sources.

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If we go by these considerations, Harappa is very well located. The entire geographical space to its north-west has not yielded evidence of any other Harappan settlement. Even in the 19th century this area was largely inhabited by pastoral nomads. Some scholars are of the opinion that Harappa was located at a point which separated the zone of agricultural settlements to its south and a zone of pastoral nomads to its north-west. This way Harappa could exploit the resources of both the neighbouring communities. It has also been suggested that although Harappa did not have any advantage in terms of food production, it grew into a large city because of its strategic location as a trading settlement. If we place Harappa in the centre and draw a circle around it covering an area of about 300 km. we can see that Harappa had a very advantageous location:

- i) Harappans would have access to the Hindukush and north-west frontier. This meant that within a distance covered by about 10 days of travelling, Harappans had access to such precious stones as turquoise and lapis lazuli which were brought through these routes.
- ii) They could get mineral salt from the salt range.
- iii) Tin and copper were accessible to them from Rajasthan.
- iv) Probably, they could also exploit the sources of amethyst and gold in Kashmir.
- v) This 300 km. circle would give them access to the point where all five rivers of Punjab joined into a single stream. This means that the Harappans could control the river transport of all the five rivers of Punjab. River transportation was far easier in those times when concrete roads did not exist.
- vi) This could provide them access to timber from the mountains zones of Kashmir.

That is why it has been found that Harappa is located at a place which is crossed by many trade routes from the west and east even in modern times.

The settlements at Mohenjodaro and Lothal also had their own logic in terms of location. Some scholars believe that the apparently religious nature of large structures at Mohenjodaro might indicate that it was a ritual centre. Whether it was a ritual centre or not, the rich people here were using gold, silver and all kinds of precious articles which were not locally available. Mohenjodaro was closer to the sea compared to Harappa. This would give it easier access to the Persian Gulf and Mesopotamia which were, probably, the chief suppliers of silver. Similarly, Lothal was drawing resources from southern Rajasthan and Deccan. The people of Lothal probably helped Harappans procure gold from Karnataka where contemporary Neolithic sites have been discovered near gold mines.

6.8.2 Villages

The villages supplied essential food grains and other raw materials to towns, but what were the Harappan towns giving to the villages in return? We have few clues for an answer. One answer is that the rulers of the towns used force to collect grains — calling it tax which was to be given in return for administration. However, one important ingredient of this rural-urban relationship was the ability of urban centres to collect a whole range of items that were not available locally and supply them to rural hinterland.

One item of interest was stone-tools. People in almost all Harappan towns and villages were using parallel-sided stone blades. These blades were made out of very good quality stone not found everywhere. It has been found that such stone was brought from sites like Sukkur in Sindh. This hypothesis is proven by the fact that at sites like Rangapur in Gujarat people were using stone tools brought from distant areas during the urban phase of Harappa. Once the Harappan civilization declined, the people in these areas started using tools made of local stones. Other such items would be copper and bronze. Copper is available only in certain pockets. However, almost all Harappan sites have yielded copper-bronze tools. These tools also show uniformity in design and execution at almost all Harappan sites. This indicates that their production and distribution must have been handled by centralized decision making bodies who could be the merchants or the administrators residing in towns.

Apart from these items which were strategically important in terms of economic activities, the Harappan settlements – big and small – have yielded objects of gold, silver and many precious and semi-precious stones. These metals and stones were procured by merchants and rulers of the cities. With the inception of urbanizm the volume of trade within Harappan civilization increased in scale and variety to an unprecedented scale. Sites like Mohenjodaro reveal evidence of extensive bead-making. These products filtered down to the rich and powerful in small villages and towns.

What emerges from the preceding discussion is:

- That the location of villages could, primarily, be determined by the availability of fertile soil and irrigation facilities.
- The location of towns will be determined by such additional factors as their proximity to mining districts or trade routes.
- Sometimes, the factor of trade became so important that towns were established in inhospitable plains where agricultural yields were very poor. For example, Sutkagen-Dor on the Makran coast was one such site. It is located in an inhospitable area and its prime activity was a trading post between the Harappans and Mesopotamians.

Similarly we can look at the functions performed in other cities of the Harappan civilization:

- Balakot on the coast of Baluchistan and Chanhu-daro in Sindh were centres for shell-working and bangle making.
- Lothal and Chanhu-daro were producing beads of carnelian, agate etc.
- Some unfinished beads of lapis lazuli found at Chanhu-daro might indicate that the Harappans imported precious stones from faraway places and then worked them before selling them.
- Mohenjodaro has yielded evidence for the presence of a large number of craft specializts like, stone-workers, potters, copper and bronze-workers, brick-makers, seal-cutters and bead-makers etc.

6.9 SOURCE OF RAW MATERIALS

Excavations at different Harappan sites provide us with large number of bangles, beads, potteries, various copper, bronze and stone objects. This range of objects indicates that they were using many kinds of metals and precious stones which would not be uniformly available in every region. The interesting thing is that even in very small Harappan sites precious stones and metal tools have been found. This indicates an intensive

exchange network among the Harappans catering to the needs of the rich. What were the sources of the minerals and metals used by the Harappans? The answer can be summarized as follows:

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- They acquired copper from Khetri mines of Rajasthan.
- The settlements of Jodhpur, Bagor and Ganeshwar in central Rajasthan, which are generally considered contemporary with the Harappans, might have supplied copper ore to them.
- At Ganeshwar over 400 copper arrowheads, 50 fish-hooks and 58 copper axes were found.

At the same time the people in these settlements were subsisting with a combination of pastoral nomadism and hunting-gathering. They do not indicate influences from the Harappan civilization. This adds complexity to our problem of trade linkages. Archaeologists believe that the Harappans were importing copper tools from an area where people were still pastoralists and hunters. However, we do not know the mechanism through which these two groups, one representing an advanced urban civilization and the other representing a pastoral tribe, interacted. Probably, the contacts were indirect.

The Harappans might have met some of their needs of copper from sources in Baluchistan and North-West Frontier Provinces also. Gold was, most probably, obtained from Kolar gold fields of Karnataka and Kashmir. Some Neolithic sites have been located in this region that were contemporary with Harappans. Gold washing is reported from Jaipur and Sirohi in Rajasthan, Hazara, Kangra and Jhang in Punjab and along Kabul and Indus rivers.

Silver vessels are frequently found at Harappan sites. However, there are no known sources of silver in this area. It might have been imported from Afghanistan and Iran. Probably, the Indus merchants also exchanged their goods with the Mesopotamians for silver. Lead may have come from Kashmir or Rajasthan. Some minor sources were located from Punjab and Baluchistan also.

The precious stone —lapis-lazuli —was available only in Badakshan in north-east Afghanistan. That the Harappans exploited this source is confirmed by the discovery of Harappan sites like Shortughai and Altyn-Depe in this area. Turquoise and Jade could have been obtained from central Asia alone. Agate, chalcedony and carnelian were from Saurashtra and western India. Sea-shells, so very popular with Harappans, must have come from the sea-coast of Gujarat and western India. Manda in Jammu is located at a point where river Chenab becomes navigable. Probably, good quality timber was acquired from the regions further up and sent to central Indus valley down the rivers. At Shortughai large quantity of lapis lazuli was discovered in association with Harappan remains. This indicates that the Harappans were colonizing far-flung areas for the exploitation of mineral resources. This also indicates that trading and procurement of exotic materials was an important concern for Harappans.

Trading seems to have been more an administrative activity than an exchange activity between traders, since establishing a colony at a distance of around 500 km would not be possible for a trader. It were the administrators of Harappa who were trying to bring under direct control resources of distant areas.

6.10 EXCHANGE SYSTEM

The Harappans had established an extensive network of inter-regional trade inside and outside the Indian subcontinent. However, we do not know what were the actual

mechanisms of exchange between the Harappans and non-Harappans. Such a large area of interaction would inevitably involve communities having divergent life styles. In those times large areas of the country were inhabited by hunter-gatherers. Some other areas were occupied by pastoral nomads. Still others were just beginning cultivation. Compared to them the Harappans represented an advanced stage of civilization. If the Harappans had to exploit some mineral sources from the regions inhabited by huntergatherers or some other communities, how would they go about it? In some cases, the Harappans established their settlements in those areas. But this would not be feasible in every case. Probably, these non-Harappan communities would be given items which they considered valuable. In such cases, the exchange might not have been a regular affair. Rather, it would be determined by seasonal migrations and gatherings of these communities. The Harappans would send their merchants to spots where such seasonal gatherings took place. The pastoral nomads, too, could have brought goods from distant regions, in course of their migrations. These kinds of exchange activities are known from modem examples in India. However, we know very little about the Harappan exchange system.

The Exchange System among the Harappan Towns

The Harappans had made distinct attempts at regulating trade and exchange amongst themselves. Even far flung Harappan sites have yielded uniform systems of weights and measures. The weights followed a binary system in the lower denominations: 1,2,4,8, to 64, then going to 160 and then, in decimal multiples of 16, 320, 640, 1600, 3200 etc. Made of chert, limestone, steatite, etc. they are generally cubical in shape. The measures of length were based upon a unit of foot of 37.6 cm and a unit of cubit of about 51.8 to 53.6 cm. Such uniform system of weights and measures indicates an attempt by the central authorities to regulate exchange among the Harappans themselves and, possibly, with non-Harappans too.

Seals and sealings have been discovered in large numbers at Harappan settlements. They are marks of ownership meant to guarantee the quality of product being sent to faraway lands. That they were used for trade is confirmed by the fact that many of the sealings bear impressions of cords and matting behind them. This indicates that the sealings bearing these impressions, were originally stuck to bales of merchandise. At Lothal many sealings were discovered lying among the ashes in the ventilation shafts of warehouses. They must have been discarded and thrown away after the imported goods had been unpacked. The seals carried intaglio designs of various animals and writing which has not been deciphered as yet. However, their use in long-distance exchange seems certain.

Ch

design.

1)

eck Y	Your Progress Exercise 3		
Sta	te whether the following statements are true or false.		
a)	The Harappan towns were self-sufficient.	()
b)	The motive behind the colonization of far-flung areas by Harappan basically economic.	s w (as
c)	The location of large cities was decided only by the potentialities of production.	foo	od)
d)	River transportation was the cheaper and easier means of communication	tior	1.
		()
e)	The tools found at different Harappan sites do not show any uniform	nity	in

)

f) The Indus merchants exchanged their goods with the Mesopotamians for silver Fill in the blanks. 2) The Harappans obtained gold from..... (Kashmir/Rajasthan). i) (Iron/tin)was not known to the Harappans. ii) Lapis Lazuli was discovered in large quantity at.....(Kalibangan/ iii) Shortughai) Copper was obtained from.....(Rajasthan/Gujarat). (Suktagen-Dor/Kalibangan).....was important as a trading port v) between the Harappans and Mesopotamians. 3) Discuss about the exchange system among the Harappan towns.

6.11 TRADE WITH THE PERSIAN GULFAND MESOPOTAMIA

So far, we have talked about the inter-regional exchange activities of the Harappans. In these activities Harappans were the dominant partners. Now we shall discuss the trade and exchange activities of Harappans with contemporary west Asian civilizations. Mesopotamia was located thousands of miles away from the Harappan heartland. Yet these two civilizations had some kind of trade linkage.

6.11.1 Archaeological Evidence of Contacts

Our information about the exchange comes from the finds of typical Harappanseals in Mesopotamia. About two dozen seals, either Harappan or made in imitation of Harappan seals, have been found at the Mesopotamian cities like Susa, Ur etc. Recently, some of the Persian Gulf ancient sites like Failaka and Behrain have also yielded Harappan seals. In the Mesopotamian city of Nippur a seal has been found with Harappan script and a unicorn shown on it. Similarly, two square Indus seals with unicorn and Indus script were reported from the Mesopotamian city of Kish. In another city called Umma was found a sealing from Indus valley, implying that some goods had been received here from Indus valley.

In the settlement of Tell Asmar were found certain Harappan ceramics, etched carmelian beads and kidney shaped bone inlay. All of these indicate trade linkages between Mesopotamia and Harappans. A distinctive type of terracotta figurines generally found in the Indus valley has been found at Nippur in Mesopotamia. These figurines depicting a male nude with obese stomach, animal like faces, stubby tails and shoulder holes for the attachment of movable arms are common at Harappan sites. The finds of three similar figurines at Nippur are indicative of some Harappan influence. Again, it has been found that the Indus dice types (1/2, 3/6, 4/5) were found at the Mesopotamian cities of Ur, Nippur and Tell Asmar. Apart from these, beads having distinctive designs have been found in Mesopotamia and they seem to have been brought from the Indus valley.

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Beads from Chanhudaro with single, double or triple circular designs closely resemble some beads discovered at Kish in Mesopotamia. Harappan weights have been found in Persian Gulf and Mesopotamian sites.

From Harappan civilization the finds of objects of Mesopotamian origin are almost non-existent. At Mohenjodaro three cylinder seals of the Mesopotamian type have been found. However, they too seem to have been made at some centre of Harappan civilization. Some metal objects might have been derived from Mesopotamia. At the settlement of Lothal was found a circular button seal. This seal has been found in large numbers in the excavations at the port at Behrain. These seals seem to have originated in the Persian Gulf ports. Also, bun-shaped copper ingots have been found at Lothal. These are similar to the ones found in the Persian Gulf islands and Susa.

Given the scarcity of material objects which could show contacts between the Harappans and Mesopotamians, some scholars have questioned the notion of direct trade exchange between these civilizations. It is believed that the Harappans might have taken their wares to the settlements in the Persian Gulf. Some of these were further transported to Mesopotamian towns by the merchants of Persian Gulf ports like Behrain.

6.11.2 Literary Evidence

In Mesopotamia some ancient writings have been discovered which give us an idea of their trade linkages with Harappan civilization. The famous king Sargon of Akkad (c. 2350 BCE) in Mesopotamia boasts that the ships of Dilmun, Magan and Meluhha were moored at his capital. Scholars have generally identified Meluhha with the coastal towns of Harappans or the region of the river Indus. Some scholars have suggested that Magan referred to the Makran coast. Some other documents used by the merchants of the city of Ur have also come down to us. They indicate that the merchants of Ur imported copper, carnelian, ivory, shell, lapis lazuli, pearls and ebony from Meluhha. All these objects seem to have been available in plenty at Harappan sites.

In some cases, like copper, we are not aware of any major sources of supply to the Harappans. However, we should remember that the Harappans were exploiting a very large geographical zone extending up to central Asia. They might have captured the trading networks that had existed in central Asia and Afghanistan in the early Harappan period. Early Mesopotamian literature also refers to a community of merchants from Meluhha living in Mesopotamia. In another instance, written documents from Mesopotamia refer to an official interpreter of the Meluhhan language. All these examples indicate that links between the Harappans and the Mesopotamians were not indirect. Given the distance between these societies, we cannot expect regular interaction. However, the relations were fairly close for the Mesopotamian kings to boast about the ships from Meluhha coming to their ports.

The absence of Mesopotamian goods in Harappa can be explained by the fact that traditionally, the Mesopotamians exported items like:

- garments,
- wool,
- perfumed oil, and
- leather products.

All these items are perishable and as such, they have not left any trace. Silver might have been one of the items of export. Silver was not available at any known Harappan

source. However, they were using it in large quantities. This could be an import from Mesopotamia.

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6.12 MODE OF TRANSPORT

The discussion about the nature of contact and exchange brings in the question of transportation. Many representations of ships and boats are found on seals found at Harappa and Mohenjodaro. At Lothal was found a terracotta model of a ship with a stick impressed socket for mast and eyeholes for fixing rigging. At Lothal was also discovered a brick basin 219 by 37 m. in length, with brick walls of 4.5 m. in height. The excavator believed that it was a dockyard. Apart from this site the seashore of Arabian sea seems to have been dotted with many sea-ports. Places like Rangapur, Somnath and Balakot would have functioned as outlets for the Harappans. Even in the inhospitable Makran coast Harappan sites like Sutkagen-Dor and Sutkakoh have been discovered. The primary reason for their location in those inhospitable tracts was that they were safe from the dangerous monsoon storms and currents hitting the sea-coast in western India and Sindh. In the monsoon months they could function as outlets for the Harappans. Sutkagen-Dor is located on the borders of present-day Pakistan and Iran. It is likely that even in the Iranian side there were some Harappan settlements. They have not been explored so far. But this kind of extension along the sea-coast would provide the Harappan ships points of anchorage right up to the Persian Gulf.

The inland transport was done with bullock-carts. Many terracotta models of bullock-carts have been found at Harappan settlements. At Harappa was found a bronze model of a cart with a seated driver and also models of little carts which are very similar to the modem *Ikka* used in Punjab. For longer journey through wooded country, caravans of pack-oxen would be the chief means of transport. In historical times a large number of goods were transported by pastoral nomadic communities. Possibly, the Harappans also engaged in similar practices. However, in those times river systems would have been the channels of transportation because they were cheaper and safer.

Check Your Progress Exercise 4

4	0 1 1 1	1 C 11 '		C 1
	\ \tata \whathar t	ha tallawing et	atamante ara trua	Or talca
1	1 State whether t	HC TOHOWINE SIG	atements are true	UI Iaisc.

- a) The literary sources of the contemporary Mesopotamian civilization do not mention any contact with the Harappan civilization. ()
- b) The discovery of Harappan seals in Mesopotamian cities proves contact between the Harappan and the Mesopotamian civilizations. ()
- c) The discovery of a dockyard at Lothal refers to maritime trade of the Harappans.
- d) Bullock-cart was not known to Harappans as means of transport. ()

2) Mark (\checkmark) the right answer.

- i) What was exported from the Harappan cities to Mesopotamia?
 - a) Garments, Perfumed oil, leather products.
 - b) Silver, gold, bronze.
 - c) Copper, ivory, lapis lazuli.

- ii) Some of the important ports of the Harappan period were:
 - a) Dilmun, Magan, Meluhha
 - b) Kalibangan, Banawali, Lothal
 - c) Ur, Nippur, Chanhu-daro
- iii) Some important Mesopotamian sites where Harappan seals have been found are:
 - a) Susa, Ur, Kish
 - b) Tell Armar, Behrain, Akkad
 - c) Dilmun, Magan, Meluhha.

3)	Write in five sentences on the transportation system of the Harappans.

6.13 SOCIETY

Archaeological finds from Harappan sites help us in reconstructing the society of that period. We get an idea about their dress styles and food habits. We also get clues about trade and crafts and various social groups. Let us first examine the external appearance and dresses of the Harappans.

6.13.1 Dress Styles

How did the Harappans look like? The only way of finding out an answer for this would be examining the terracotta figurines and stone sculptures surviving from that period. Another way of knowing would be examining the skeletal remains found at some of the Harappan settlements.

The study of skeletal types shows that the Harappans looked like the present day north Indians. Their faces, complexion and height were more or less similar to the presentday people living in those areas. But the similarities end here. They did not wear the shirts and trousers or Salwar-Kameez like the modern men and women. We can have some clue about their dresses and fashions by a study of their sculptures and terracotta figurines. Men are mostly shown wearing a dress which would be wrapped round the lower half of the body with one end worn over the left shoulder and under the right arm – like the modern *saree*. The other dress was a kilt and a shirt worn by both men and women. The men arranged their hair in various ways, sometimes making buns and using headbands. They used many more ornaments than the modern Indians. They would be wearing rings, bracelets and ornaments around their neck and hands. Growing beard was fashionable, but they would shave their moustaches. Women seem to have used ornaments on their waist. They wore a large number of necklaces. Bangles, too, were in fashion and of course, there was no end to the number of ways in which hair was arranged. Men and women, alike, had long hair. We know that they used cotton clothes, also that in one sculpture the cloth was shown as having trefoil pattern and red colour. However, for all his fashionableness if we saw a man from Harappa walk on the road – to our eyes he will probably resemble a mendicant more than anyone else.

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Harappan Jewellery of Gold and Precious-Stones. Source: EHI-02, Block-2, Unit-8.

6.13.2 Food Habits

What did they eat? Again, we know very little. The Harappans of Sindh and Punjab ate wheat and barley as their staple food. Those who stayed in towns of Rajasthan had to be content with barley only. The Harappans of Gujarat in places like Rangpur and Surkotada preferred rice and millet. They got their supply of fat and oil from sesame seeds, mustard and possibly, *ghee*. We do not know whether they were familiar with sugarcane to supply them sugar. They might have used honey to sweeten their food. Seeds of jujube and dates found at Harappan sites indicate their preference for these fruits. It is likely that they also ate bananas, pomegranates, melons, lemons, figs and of course, mangoes. They seem to have consumed a whole range of wild nuts and fruits but it is difficult to identify them. They were eating peas too. Apart from this, the Harappans seem to have relished non-vegetarian food. Bones of deer, bears, sheep and goats have been frequently found at Harappan settlements. Fish, milk and curd, too, would have been known to them. However, they had neither tea nor potato-chips. Could you yourself find out the reason for this?

6.13.3 Language and Scripts

What language did they speak and what did they read and write is, again, not clear to us. We have discovered the written script of Harappans. But, as pointed out earlier, we have not deciphered it as yet. Some scholars believe that the language written there is ancestral to the Dravidian group of languages like Tamil. Some other writers like to think that it was ancestral to an Aryan language like Sanskrit.

However, no one has proved this case beyond doubt. However, one noticeable thing about their script is that it did not change all through the life of the civilization. All the other ancient scripts have showed distinct changes over a period of time. This indicates that the Harappan script was not in common use. Perhaps, a very small section of privileged scribes had a monopoly over the written word. About what they learnt and how they learnt — we have no answers. Whether they had some kind of school for teaching, as was the case in contemporary Mesopotamia, is not known to us.

6.13.4 Warfare

Did they play and fight? We know that they played dice. But beyond that we again draw a blank. They did fight – there is enough evidence for it – possibly because the archeologists who were digging up the various Harappan sites were looking for evidences of war and not of sport. One important indicator, of course, is that at the time of the emergence of Harappan civilization many early Harappan sites like Kot Diji and Kalibangan were burnt down. However, an accidental fire could destroy large towns, but it is more likely that some of the settlements were burnt down by victorious human

groups. Then, there is the evidence of some skeletons lying scattered on the streets of Mohenjodaro. Human societies, from times immemorial, have disposed off the bodies of their dead in some ordered fashion. As such, it is natural that the Harappans would not leave their dead to rot on the streets. So, obviously, some extraordinary conflict is indicated when the Harappans did not get an opportunity to bury their dead. The presence of citadels and fortification around many Harappan towns also indicates a need for protection against outsiders. Some of the protection walls might have been bunds for protection against floods. But, given the opulence of Harappan townships in contrast to the surrounding rural communities it is likely that the Harappans wanted to protect their wealth and life by fortifying their settlements. Many copper and bronze weapons have also been reported at sites.

6.13.5 Main Crafts/Occupations

What did the Harappans do for a living? We are on surer grounds in answering this question. This is because studies of pre-modern civilized societies show that most of the people in those societies were engaged in agriculture. However, quite a few Harappan townsmen were engaged in various other kinds of activities. Bead-making was one of the favourite activities of the Harappans. At settlements like Mohenjodaro, Chanhudaro and Lothal a fairly large number of Harappans were engaged in this work. Since a variety of stones like carnelian, lapis lazuli, agate and jasper were used for making beads it is likely that there were specialized bead-makers for each type of stone. Some other Harappans specialized in making stone tools. Apart from them, groups of potters, copper and bronze workers, stone workers, builders of houses, brick-makers and seal-cutters must have lived in Harappan towns. When we talk about Harappan civilization we are basically referring to seals, bricks, pots and other such objects surviving from those times which presuppose the existence of their makers.

Che	eck Y	Your Progress Exercise 5		
1)	Wh	ich of the following statements are right (\checkmark) and which are wrong (\times) ?		
	i)	The Harappan script underwent a number of changes during the periodivilization survived.	od t	his)
	ii)	The Harappans were strict vegetarians.	()
	iii)	Generally the Harappan towns were fortified.	()
	iv)	The Harappan men were fond of wearing ornaments.	()
2)	Fill	in the empty spaces given in the following sentences.		
	i)	We get information about the dresses and fashions of Harappan people the their	rou	ıgh
	ii)	was used to make Harappan metallic tools.		
	iii)	The staple food of the Harappans was in Rajasthan, in Sindh and Punjab, and in Gujarat.		
	iv)	A large number of beads found in Harappan settlements are made of		
3)	Wri	ite five lines on Harappan script.		

6.14 WHO RULED THEM?

At the top of pyramid of Harappan society were three invisible categories of people – administrators, traders and priests. Their presence can be presumed on the basis of an understanding of the problems of organization. The rise of a civilization is associated with the emergence of centralized decision-making system called the State. In the Harappan civilization we can perceive the presence of a decision-making authority for running the municipal system that can be described as follows:

- The construction and maintenance of elaborate drainage system and streets would require a municipal authority in cities.
- Similarly, the granaries indicate the presence of an authority which would collect food grains from the surrounding hinterland and redistribute it among the citizens.
- As pointed out earlier, the tools, weapons, bricks etc. show a remarkable uniformity of design. Some of the tools and weapons seem to have been mass-produced at one place and then distributed to various cities and settlements. The organization of production and distribution of these objects over an area covering thousands of km. would give tremendous power to those who decided how much to produce and where to send the products. If these people were to stop the supply of goods to a particular town, that town would be starved of tools and implements.
- The sheer range and volume of products consumed by residents of the larger cities indicate that some kind of ruling class resided in them. Many of the objects were rarities brought from faraway lands. The possession of such precious stones or metals would give immense prestige to owners vis-a-vis rest of the population.
- Similarly, the larger size of the cities did not simply indicate that a larger number of people lived there but also the fact that they contained many monumental structures like temples, palaces etc. The people who lived in these structures exercised political, economic or religious authority. No wonder, the seals which are considered marks of authority of traders, priests or administrators are found in largest numbers at Mohenjodaro where largest numbers of monumental structures have also been found.

However, we are not suggesting that Mohenjodaro functioned as the capital of the civilization. It is possible that the civilization consisted of two or even five independent political units. All we are suggesting is that the city had emerged as the centre of politicoeconomic power. We do not know who the rulers of the Harappans were. They may have been kings, priests or traders. However, we know that in many pre-modern societies economic, religious and administrative spheres were not clearly demarcated. This means that the same person could be the head-priest, king and the wealthiest merchant. But all these evidences indicate the presence of a ruling authority. What was the form of this authority is not, however, yet clear to us.

6.15 RELIGIONAND RELIGIOUS PRACTICES

Who did the Harappans worship? This is one question about which there has been considerable discussion among the scholars. The mute survivors of the Harappan past do not tell us anything. So, we have to fit in our logic and our fancies to understand their religious beliefs. One major problem is that without written information it is difficult to differentiate their sacred and secular activities. Thus, it seems that any or every find from Harappa might have a sacred content. However, we shall try to understand the religious beliefs of the Harappans with the help of modern parallels.

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6.15.1 Places of Worship

A number of large buildings in the citadel and lower town at Mohenjodaro are believed to have been temples of gods. This view is supported by the fact that most of the large stone sculptures were found in these buildings.

In the lower city at Mohenjodaro a large building has been discovered. This building has a monumental entrance and double stairway leading to a raised platform on which was found a stone sculpture 16 ½ inches high. It is a seated man with hands on knees. It has a bearded face with a fillet passing over receding forehead and hanging down in two strands at the back. Another stone statue was discovered in the same building. This is why the scholars have identified this building with a temple.

At Mohenjodaro several structures are reported from the citadel-mound which seem to have had some ritual significance. Among them the Great Bath is the most famous. Such elaborate bathing arrangements were made at very sacred ritual spots in the subsequent historical phases in India. So, it is likely that the Great Bath was not simply a swimming pool, but that it had prominent ritual significance.

Near the Great Bath was found another large structure $(230 \times 78 \text{ feet})$ which has been identified as the residence of some high priest or college of priests. Similarly, an oblong assembly hall has also been reported from the citadel area. To the west of this structure was found a complex of rooms in one of which was discovered a seated male statue. This, too, has been identified as part of some religious structure. These ritual structures seem to provide us with a glimpse of the religious practices of the people in Mohenjodaro. We can conjecture that some of the ritual performances took place in large temple like structure.

6.15.2 Objects of Worship

The evidence of the objects of worship comes from the study of Harappan seals and terracotta figurines. Amongst evidences that come from the seals, the most famous is a deity who has been identified as proto-*Shiva*. On a series of seals a deity wearing a buffalo-horned head-dress is shown sitting in a yogic posture. He is surrounded by these animals:

- goat,
- elephant,
- tiger, and
- antelope.

Marshall identified him with the god *Pashupati* (Lord of Beasts). In several instances he has a sprouting plant emerging between his horns. In another case a deity with horns and flowing hair is standing nude between the branches of a *Pipal* tree. A worshipper is kneeling in front of him. Behind the worshipper is a man-faced goat and below are seven other human figures having long pigtails and tall head-dresses. In one seal are shown snakes accompanying the yogic figure. Each of the features associated with the horned deity are attributes of *Shiva* of the later Indian mythology or religious history. Moreover, at some Harappan settlements the phallic emblem of *Shiva* (*Lingam*) has been found. All these evidences have led scholars to believe that *Shiva* was the most important male god of the Harappans. Perhaps, the temples were dedicated to the same god. The other objects of veneration seem to have been the following:

i) The Mother Goddess

The Harappan settlements have yielded a very large number of terracotta figurines. Among them are the representations of females adorned with wide girdle, loin cloth and necklaces. They wear a fan-shaped head-dress. Sometimes, they are shown with an infant. The general notion of fertility is indicated by many representations of pregnancy. These evidences indicate the prevalence of cults of fertility and Mother Goddess worship.

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ii) Tree Spirits

The Harappans also seem to have worshipped tree spirits. Several seals depict the *Pipal* tree. In many cases a figure is shown looking through the branches. Scholars believe that this represents the tree-spirit. In many cases the worshippers are shown standing in front of the tree. In many other cases a tiger or some other animal is shown in front of the tree. In one case seven human figures are shown standing in front of it, with a horned-figure standing in it. As discussed earlier, the horned figure, probably, is *Shiva*. *Pipal* tree has been worshipped in India for ages and in many cases, the *Pipal* tree and *Shiva* are worshipped together. The seven figures have sometimes been identified with the seven great sages or seven mothers of the Indian mythology (*sapta-matrikas*).

iii) Some Mythical Heroes

Some other human figures which seem to have a religious significance are those found on seals and amulets. Human figures with horns on head and long tails are frequently shown on seals. Sometimes, they have hoofs of cattle and hind legs. Some other seals remind us of Mesopotamian mythology. For example, a man grappling with a pair of tigers immediately brings to mind a brave warrior called Gilgamesh who is said to have killed two tigers.

iv) Animal Worship

A large number of animals also seem to have been worshipped. Again, our information comes from their representation on seals and sealings and in terracotta. A seal has been reported from Chanhudaro depicting a bull-bison with erect penis, fecundating a supine human figure. A plant is sprouting from the head of the human figure. This, obviously, is indicative of some fertility cult. The Brahmani bull with its heavy dewlap is frequently represented on seals. It is possible that the present day reverence for bulls and cows had its beginnings in the Harappan civilization.

v) Mythical Beasts

Many composite animals are depicted on seals. There are animal representations of creatures with the foreparts of humans and the hind-quarters of tigers. Similarly, composite creatures combining various portions of rams, bulls and elephants are a frequent occurrence. They, obviously, represent objects of worship. The conception of composite creatures like *Narasimha* was very much part of the mythology of later Indian tradition. One important animal frequently represented on the Harappan seals is the unicorn. It is a horse-like beast with a horn issuing from the middle of its head. In front of the animal occurs a curious object which is not shown in association with any other animal. It consists of a bowl on a central post carrying a cage like object. We do not know its function — it has been taken for a sacred manger or an incense-holder. On another seal impression a unicorn is shown being carried in a procession between two other objects, one of which was similar to the one discussed above. Obviously, the unicorn was a mythical animal, since there is no such real beast. It is likely to have been a cult object.

The Harappans at Kalibangan and Lothal seem to have followed different religious

practices. At Kalibangan in the citadel were found a series of raised brick platforms crowned with fire altars, i.e. a series of brick-lined pits containing ash and animal bones. This area also had a well and bathing places. This complex seems to have represented some kind of ritual centre where animal sacrifice, ritual ablution and some sort of fire rituals were performed. Many houses in the lower town also contained a room having fire altars. Several other fire altars are also reported. At Lothal, too, fire altars have been found. These evidences are very important because:

- a) they show that the Harappans staying in different geographical areas followed different religious practices, and
- b) the fire ritual was central to the Vedic religion.

The Vedic Aryans are believed to have been a different set of people. The evidence from Kalibangan might indicate that the Aryans adopted the religious practices of the Harappans when they came and settled down in these areas.

6.15.3 Burial of the Dead

Disposal of the dead has been an important activity of human groups. This is because the attitude towards the dead is linked up with human beliefs regarding this life and the life after death. The Harappan civilization has not yielded any monuments for the dead which could equal the pyramids of Egypt or the Royal Cemetery of the Mesopotamian city of Ur in its grandeur. However, we have certain evidences about the burial practices of Harappans.

At Harappa many graves have been discovered. Dead bodies were generally placed in north-south orientation. Bodies were laid on their back. A large number of earthen pots were placed in the grave. In some cases the dead were buried with ornaments like shell bangles, necklace, and ear ring. In some cases copper mirrors, mother of pearl shells, antimony sticks etc. were kept in the grave. A number of graves were constructed with bricks. A coffin burial has been found at Harappa. At Kalibangan some other kinds of burial practices were encountered. Small circular pits containing large urns and accompanied by pottery have been found. But they did not have any skeletal remains. Some other burial pits with collected bones have also been found. From Lothal some pairs of skeletons with male and female in each case buried together have been found.

These practices show that disposal of the dead among Harappans was different from the one followed subsequently. In the subsequent historical phases, the predominant system seems to have been cremation. At the same time the careful placement of bodies provided with ornaments and toiletries is indicative of some belief in life after death. What that belief was is unknown to us.

A study of various kinds of objects found in excavations shows that different regions of the Harappan civilization followed different kinds of religious practices. Fire worship was prevalent in Kalibangan and Lothal but unknown in Harappa and Mohenjodaro. Ritual bathing evidenced at Mohenjodaro might have been absent in Harappa. The burial practices show wide variation ranging from extended inhumation to double-burials and pot-burials. Finds at Kalibangan also show that different kinds of burial practices were being followed in the same settlement. This kind of diversity of religious beliefs and practices, even in the same settlement, reflects the complex nature of urban centres. Unlike tribal societies where every member of the tribe follows similar kinds of religious practices, the urban centres were characterized by the presence of people following different kinds of religious practices. This apparently means that the urban centres were formed by political and economic integration of varied social groups. Also, an urban

centre means the presence of traders from different regions with their own religious practices. These groups retained their social mores and customs but lost their political and economic independence.

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Check Your Progress Exercise 6

	amber of finds in Harappan excavations indicate the presence cical authority. What are these finds?	of civic
	ch of the Harappan religious structures indicate the prevalen ective worship or rituals?	ice of so
	ch of the following statements are correct?	
Wh		(
 Whi	ch of the following statements are correct?	(
 Whi a) b)	ch of the following statements are correct? Shiva seems to be the most important Harappan god.	(
	ch of the following statements are correct? Shiva seems to be the most important Harappan god. Female deities were absent in Harappan religious objects.	((
Wh: a) b) c) d)	ch of the following statements are correct? Shiva seems to be the most important Harappan god. Female deities were absent in Harappan religious objects. Trees also seem to be worshipped by the Harappans.	((
Wh: a) b) c) d)	ch of the following statements are correct? Shiva seems to be the most important Harappan god. Female deities were absent in Harappan religious objects. Trees also seem to be worshipped by the Harappans. No animals were worshipped by the Harappans.	((
Wh: a) b) c) d)	ch of the following statements are correct? Shiva seems to be the most important Harappan god. Female deities were absent in Harappan religious objects. Trees also seem to be worshipped by the Harappans. No animals were worshipped by the Harappans.	((

6)	What significant points emerge from the study of burial practices of the Harappar people?

6.16 SUMMARY

In this Unit you have studied about the geographical location and material characteristics of Harappan sites. The uniformities in geographical characteristics created similar subsistence patterns in the Harappa-Mohenjodaro-Ghaggar axis. However, there were other sites where the settlement pattern varied in accordance with varying geographical features of these sites. The town planning of Harappans was extremely efficient. The houses and drainage system of Harappan towns is indicative of remarkable material achievements of their people. Generally the Harappan pottery, tools and implements show a uniformity of tradition. The seals and beads are beautiful works of craftsmanship, but the stone sculpture and terracotta figurines cannot compete with those of contemporary Egypt and Mesopotamia in technical excellence. The subsistence system was based on the cultivation of a number of crops and domestication of animals. This gave strength to the economy to sustain the city population which did not produce its own food which, in it turn, had to be transported from nearby areas.

We have also seen in this Unit that the Harappan civilization seems to have carried a brisk internal trade which would mean exchange activities carried over an area of 1.3 million square km. This exchange activity is clear from the fact that even very small Harappan sites like Allahdino have yielded seals, sealings, many kinds of beads of semi-precious stones and metal utensils. Most of these objects were imported from outside. The location of Harappan settlements along navigable waterways and traditional land routes also indicates deep involvement of Harappans in exchange activities. Their linkages with contemporary west Asian cultures are also well documented now. No wonder we call them a city-centred community.

In this Unit we have also discussed the religious and social aspects related to their life pattern. Their main dress was a big unsewn cloth like the modern day *saree* and was wrapped on the body. Men and women, both, were fond of ornaments. Their food included a large variety of items depending on the inhabited areas. The main items included rice, barley, millet and wheat. A number of fruits, vegetables and non-vegetarian items were also used. We hope you found the answer to the question raised in subsection 6.13.2. Well if not, it is because tea and potato were not grown in the region at that time.

The Harappan script is still a mystery for archaeologists and linguists. It has not been deciphered yet. The fortification of their settlements and weapons found indicate that they were often engaged in combats. Pottery, metal-work, bead-making and a number of crafts were practiced by the Harappans. This signals the presence of artisans and an urban labour force. The society seems to have been divided into classes. There are indications of the presence of some kind of political structure. Administrators, priests and traders along with a large number of workmen seem to have constituted the society in towns.

Some large structures indicate the prevalence of some collective worship or rituals. A number of gods, goddesses and objects seem to have been worshipped. The prominent were Mother Goddess, Shiva and a number of trees and animals. Some composite mythical beasts also seem to have had some significance in religious practices. The most prevalent system for disposing the dead seems burial rather than cremation. A number of ornaments and other objects are also found in burial pits. All these give us, if not a total, but a nearer view of Harappan society.

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6.17 **KEY WORDS**

: A thing made by human workmanship. **Artefacts**

A small piece of stone pierced in the middle for **Bead**

stringing.

: A passage for sending down dirty water. Chute

Citadel The fortress in city.

Eastern Domain of : Specifically refers to the Harappan sites in the Harappans

Rajasthan, Haryana, Punjab and U.P.

: The act of digging an ancient site. **Excavation**

Fertility Cult : A system of worship in which the reproductive

aspects of nature and mankind are emphasized. The worship is expected to ensure the production

of abundant crops or children.

Fire Altars Brick-lined pits found at Kalibangan. They

contained ash and animal bones. In many societies, fire is worshipped. In the Vedic society, similar kinds of pits were dug for lighting fire and

worshipping it.

The storehouse for grains. Granary

Hinterland A region lying inland from a port of centre of

influence.

Meander : Curve of a river, where it is flowing sluggishly

with many twists and bends leading to the

deposition of silts.

Mesopotamia : Ancient name of Iraq.

Pictographic Script The script which uses pictures as symbols.

Plateau An extensive area of elevated land.

Region : An area having specific characteristics of

landscape which differentiate it from other areas.

Royal Cemetery of Ur : A cemetery discovered at the Mesopotamian city

of Ur belonging to $c.3^{\rm rd}$ millennium BCE. It

contained the graves of many kings.

Script : System or style of writing.

Terracotta

: A composition of clay and sand used for making statues. It is baked in fire and is brownish-red in colour

Unicorn

: A mythical animal having a body of a horse with one straight horn.

6.18 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

1) Your answer should include the following:

The description of the geographical location and subsistence-pattern of Harappa, the discussion of the geographical location of Mohenjodaro, Kalibangan, Lothal and Sutkagen-Dor. See Section 6.5 and Sub-secs. 6.5.1 to 6.5.5

- 2) i) d, ii) a, iii) b, iv) c
- 3) $i) \times, ii) \times, iii) \times, iv) \checkmark$

Check Your Progress Exercise 2

1) Your answer should include the following:

Discussion of the town planning of the Harappans; description of their pottery, tools and implements, arts and crafts, Indus script and subsistence-pattern. See Section 6.6 and Sub-Secs. 6.6.1 to 6.6.6.

- 2) i) \times , ii) \times , iii) \times , iv) \times , v) \checkmark
- 3) i) Mohenjodaro, ii) rice, iii) horse, iv) Mohenjodaro.

Check Your Progress Exercise 3

- 1) a) False, b) True, c) False, d) True, e) False, f) True
- 2) a) Kashmir, b) Iron, c) Shortughai, d) Rajasthan, e) Sutkagen-Dor
- 3) Your answer should include the uniform systems of weights and measures, the binary system of weight, seals and sealings on the products to ensure quality and ownership etc. See Section 6.10.

Check Your Progress Exercise 4

- 1) a) False, b) True, c) True, d) False
- 2) i) c, ii) a, iii) a
- 3) Your answer should include the archaeological evidence in support of transportation system, river transport, inland transport. See Section 6.12.

Check Your Progress Exercise 5

- 1) i) \times , ii) \times , iii) \checkmark , iv) \checkmark
- 2) i) Terracotta human figures, ii) Copper, iii) barley, wheat and barley, rice and millet iv) stone.
- 3) Your answer should include which present language seems to have descended

from the Harappan script, the changes it underwent and whether we are able to read it or not.

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Check Your Progress Exercise 6

- 1) Your answer should include things like large number of brick structures spread in a big area, number of craft products, drainage system etc. Also see Section 6.14
- 2) Your answer should include things like well planned towns, big houses, presence of granaries, their management and other such things. Read Section 6.14 again.
- 3) Big temple like structures with a number of sculptures, common baths, assembly halls, structures with a number of fire pits etc. Read Section 6.15 and Sub-sec. 6.15.1
- 4) i) \checkmark , ii) \times , iii) \checkmark , iv) \times
- 5) In Harappan settlements like Kalibangan and Lothal number of findings such as fire altars indicate the presence of fire-worship in apparently public worship places and even houses. See Sub-section 6.15.2 last paragraph.
- 6) The most significant point is that burying the dead was accompanied by some rituals. It appears that the Harappans believed in some sort of life after death, because a number of items of every-day use or ornaments are also placed alongside the dead. Sometimes, it is a paired burial with one male and one female. In some cases, urns containing bones are also found buried.

6.19 SUGGESTED READINGS

Agrawal, D.P. and Chakrabarti, D.K. (eds.) (1979). *Essays in Indian Proto-History*. New Delhi.

Allchin, B and F.R. (1988). *The Rise of Civilizations in India and Pakistan*. New Delhi: Select Book Service.

Kosambi, D.D. (1987). *The Culture and Civilization of Ancient India in its Historical Outline*. New Delhi: Vikas Publishers.

Lal, B.B.and Gupta, S.P. (eds.) (1982). Frontiers of the Indus Civilization. New Delhi.

Marshall, John (1973). *Mohenjodaro and the Indus Civilization*. Volumes I and II,(Reprint).

Wheeler, R. E. M. (1968). The Indus Civilization. London.

UNIT 7 CHALCOLITHIC AND EARLY IRON AGE*

Structure

- 7.0 Objectives
- 7.1 Introduction
- 7.2 Ochre Coloured Pottery (OCP) Culture
- 7.3 The Problems of Copper Hoards
- 7.4 Black and Red Ware (BRW) Culture
 - 7.4.1 Pottery
 - 7.4.2 Other Objects
 - 7.4.3 BRW in the *Doab* and Other Regions
- 7.5 Painted Grey Ware (PGW) Culture
 - 7.5.1 Pottery
 - 7.5.2 Structures
 - 7.5.3 Other Objects
 - 7.5.4 Crops and Animal Remains
 - 7.5.5 Trade Practices and Linkages
- 7.6 Northern Black Polished Ware (NBPW) Culture
 - 7.6.1 Structures
 - 7.6.2 Pottery
 - 7.6.3 Other Objects
 - 7.6.4 Ornaments
 - 7.6.5 Terracotta Figurines
 - 7.6.6 Subsistence Economy and Trade
- 7.7 Chalcolithic Cultures of Western, Central and Eastern India
 - 7.7.1 Pottery: Diagnostic Features
 - 7.7.2 Economy
 - 7.7.3 Houses and Habitations
 - 7.7.4 Other Characteristics
 - 7.7.5 Religion/Belief Systems
 - 7.7.6 Social Organization
- 7.8 Early Farming Settlements in South India
 - 7.8.1 Cultural Phases
 - 7.8.2 Subsistence Economy
 - 7.8.3 Material Culture
 - 7.8.4 Burial Practices
- 7.9 Neolithic Surface Finds in South India
- 7.10 Iron Age in South India
 - 7.10.1 Megalithic Cultures
 - 7.10.2 Origins of Megalithic Cultures
 - 7.10.3 Material Culture
 - 7.10.4 Subsistence Economy

^{*} This Unit has been adopted from EHI-02, Block 3.

- 7.11 Summary
- 7.12 Key Words
- 7.13 Answers to Check Your Progress Exercises
- 7.14 Suggested Readings

7.0 OBJECTIVES

In previous two Units you learnt about antecedent stages and various aspects of Harappan culture and society. You also read about its geographical spread and reasons for its decline and diffusion. In this Unit you will learn about various post-Harappan, Chalcolithic and early Iron Age cultures of northern, western, central and eastern India. This unit also deals with early farming communities and the subsequent Iron Age in the region of south India, with special reference to Megalithic Burials and their various aspects. After reading this unit you, will be able to know about:

- geographical location and adaptation of the Chalcolithic communities across Indian subcontinent to local conditions;
- the kind of houses they lived in, the varieties of food they grew and the kinds of tools and implements they used;
- the varieties of potteries used by them;
- the kinds of religious beliefs they had;
- nature of their settlements, their economy and other traits;
- changes occurring during early Iron Age;
- successive phases of the early farming culture of southern India and their salient features; and
- characteristic features of the early Iron Age in south India.

7.1 INTRODUCTION

By 2nd millennium BCE several regional cultures sprang up in different parts of Indian subcontinent. These were non-urban, non-Harappan and were characterized by the use of stone and copper tools. Hence, they are termed as Chalcolithic cultures. They are identified on the basis of their geographical location. Thus, we have:

- Banas culture (located in the Banas basin) in Rajasthan,
- Kayatha culture (type site Kayatha on the bank of river Kalisindh, an affluent of Chambal) and represented by other sites in Central India (in Narmada, Tapi and Mahi valleys),
- Malwa culture (Malwa, and extending into other parts of Madhya Pradesh and Maharashtra), and
- Jorwe culture (Maharashtra).

With the excavations of type-sites of these cultures we have been able to form a detailed idea about such dimensions of them as:

- pattern of settlement,
- pattern of economy,
- mortuary practices, and
- religious beliefs.

In addition to cultural material of this phase found at excavated sites, in parts of Uttar Pradesh, Haryana, Rajasthan, Bihar, West Bengal, Odisha and Karnataka are found catches of copper/bronze objects. As these have been found in hoards (about a thousand objects altogether from 85 sites in above mentioned states) these sites were thought to represent a distinct Copper Hoard Culture. At Saipai (Etawah distt.) – a site in Uttar Pradesh – a copper harpoon has been found in association with a pottery known as Ochre Coloured Pottery (OCP). Though some of the other Copper Hoard sites have yielded OCP, the copper objects are not found in direct association with OCP. As more than 100 sites have yielded this characteristic pottery in the Ganga-Yamuna doab, these sites are described as belonging to the OCP culture. OCP culture is succeeded by Black- and- Red Ware (BRW) and Painted Grey Ware (POW) cultures which are distinguished by diagnostic pottery types. In North India, there is a distinct concentration of Painted Grey Ware sites in Haryana and Upper Ganga Valley, of which 30 have been excavated. Iron makes its appearance in the Painted Grey Ware Culture, and in the ensuing phase, known as Northern Black Polished Ware (NBP) culture, its use becomes more widespread. Starting from 6th century BCE we also see the beginnings of urbanization.

Terms like BRW Culture, PGW Culture and NBP Culture need to be clarified here. These cultures are described by the pottery types only because that particular pottery happens to be a distinctive feature of that culture, though there may be many other aspects of that culture. The pottery type is used only to give an identity or name to a specific culture. For example, in a particular region where Painted Grey Ware is found, the culture of that site is referred to as the PGW culture.

To understand cultural developments after the decline of Harappan civilization, we should begin with northern India, especially Ganga-Yamuna *doab*.

7.2 OCHRE COLOURED POTTERY (OCP) CULTURE

A pottery type was discovered in trial excavations conducted in 1950 at Bisauli (Badaun district) and Rajpur Parsu (Bijnor district) in Uttar Pradesh, both of them being Copper Hoard sites. This pottery is made of medium grained clay, underfired, and has a wash of ochre (which has a tendency to rub off), ranging from orange to red. Hence, those sites associated with this ware are ascribed to OCP culture. More than 100 OCP sites have been discovered, which extend from Mayapur in Saharanpur district to Saipai in Etawah district (U.P.).

On the basis of Thermoluminiscence dates obtained from the OCP pottery, the culture has been ascribed to c. 2000-1500 BCE.

Chalcolithic and Early Iron Age

OCP sites are generally located on river banks. They are small in size and the mounds have a low height at many of the sites (e.g. Bahadarabad, Bisauli, Rajpur Parsu, Saipai). This indicates a relatively short duration of these settlements. The distance between settlements varies from five to eight kms. At some of the sites (e.g. Ambkheri, Baheria, Bahadarabad, Jhinjhana, Lal Qila, Atranjikhera, Saipai) excavations have revealed no signs of regular habitation. At Hastinapur and Ahichchhatra there is a break in occupation between OCP culture and the succeeding PGW culture, while at Atranjikhera, the OCP settlements are succeeded by BRW culture. More than 100 sites have yielded this characteristic pottery in Ganga-Yamuna *doab*. OCP culture is succeeded by BRW and PGW cultures, which are distinguished by diagnostic pottery types.

Material remains of OCP culture are largely in the form of pottery which consists of:

- jars (including storage jars),
- bowls, particularly ring-footed bowls,
- flasks,
- handled pots,
- miniature pots,
- basins,
- spouts etc.

The other objects found comprise:

- terracotta bangles,
- beads of terracotta and carnelian,
- terracotta animal figurines and cart wheels with a central knob,
- stone querns and pestles,
- bone points,
- a copper harpoon has been found in the OCP stratum at Saipai.

Not much evidence is available regarding structures. From the evidence recorded at Lal Qila, which is scanty, it is known that floors were made of rammed earth. Structures consisted of wattle- and- daub houses. This is suggested on the basis of burnt mud plaster and clods with reed and bamboo impressions being found at Lal Qila.

Archaeobotanical remains recovered at Atranjikhera and related to this culture indicate that rice, barley, gram and kesari were grown. On the basis of similarity in pottery types some scholars believe that OCP represented a degenerated form of late-Harappan pottery.

7.3 THE PROBLEMS OF COPPER HOARDS

First discovery of a copper object (copper harpoon) that belonged to the Copper Hoard culture was made as early as 1822 at a place called Bithur in the Kanpur district of U.P. Since then, nearly 1000 copper objects have been found in herds from 85 sites.

State-wise Copper Hoard Sites

STATE	NUMBER OF SITES
Haryana	5
Rajasthan	6
Uttar Pradesh	33
Bihar	19
West Bengal	6
Orissa	7
Madhya Pradesh	8
Karnataka	1

It is possible that copper hoard objects have been found in other states like Gujarat and Andhra Pradesh, but have not been properly reported.



Copper-Hoard Artefact from Rewari, Haryana (probably not a use-object but more likely had a religious function). Credit: Pyule. Source: "Metalwork of the Bronze Age in India", 1981. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Rewari_Cu_hoard_object,_1075.jpg)

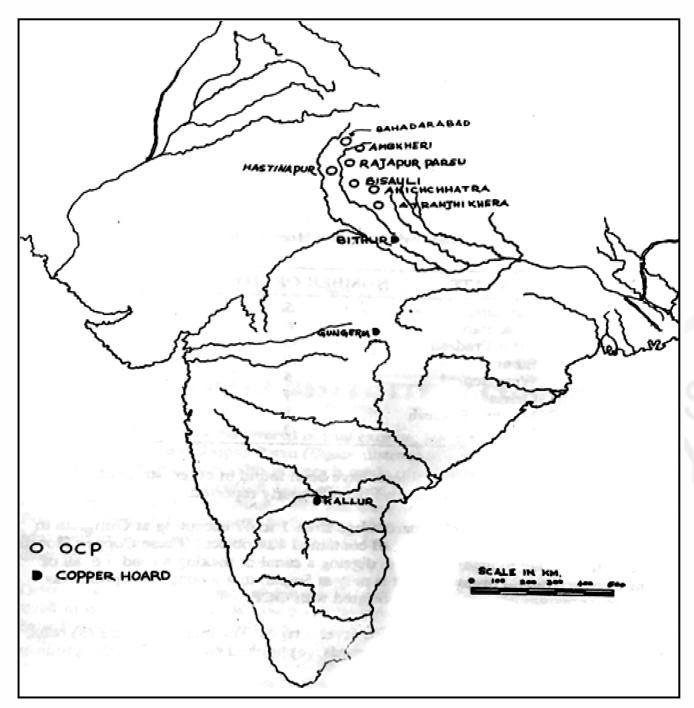
The copper objects found in a hoard range from 1 to 47 except at Gungeria in Madhya Pradesh where a single hoard contained 424 objects. These Copper Hoards came to light while ploughing a field, digging a canal or making a road, i.e. all of them were accidental discoveries. It is only at Saipai that a copper harpoon was found in excavation in a stratum associated with OCP.

These copper objects are of following types:

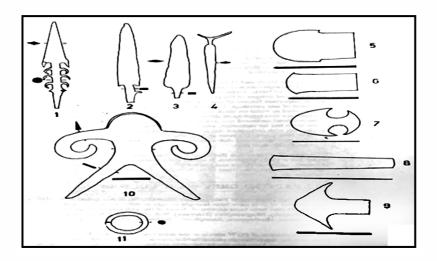
- a) celts,
- b) rings,
- c) harpoons,

- d) antennae swords,
- e) hooked swords,
- f) anthropomorphs, and
- g) double-axes.

Considering the occurrence of a copper harpoon in association with OCP at Saipai, and the fact that Copper Hoards have been found at other OCP sites (though not in a direct archaeological association), they can be related to the OCP culture. In this way, the period of Copper Hoards can also be ascribed to *c*. 2000-1500 BCE.



OCP and Copper Hoard Cultures. Source: EHI-02, Block-3, Unit-10.



Copper hoard objects: 1. harpoon; 2. hook sword; 3. sword; 4. Antenna sword; 5, 6. celts; 7. double-axe; 8. bar celt; 9. shouldered axe; 10. anthropomorph.

Source: EHI-02, Block-3, Unit-10.

Check Your Progress Exercise 1

1)	DIS	cuss main characteristics of OCP culture.		
2)	Wh	ich of the statement is right or wrong? Mark (\checkmark) or (\times) .		
	a)	OCP sites are located in mountains.	()
	b)	Material remains of OCP culture are mainly house structures.	()
	c)	The period of Copper Hoards is c. 2500 BCE.	()
	d)	Most of the Copper Hoards found were accidental discoveries.	()

7.4 BLACK AND RED WARE (BRW) CULTURE

Excavations at Atranjikhera in early 1960s revealed a distinct horizon, sandwiched between OCP and PGW levels. This horizon has a characteristic pottery called BRW. A similar stratigraphic sequence was discovered in 1970s at Jodhpura and Noh in Rajasthan. But at Ahichchhatra, Hastinapura and Alamgirpur, the BRW is found associated with PGW.

7.4.1 Pottery

Characteristic features of this pottery are: black colour inside and near the rim on outside, and red colour over rest of the body. This colour combination, it is believed, has been produced by inverted firing. The pottery is mostly wheel-turned, though some pots are also handmade. It is made of fine clay and has a fine fabric with thin walls. BRW pottery with paintings has also been found at sites in Rajasthan, Madhya Pradesh, Bihar and West Bengal. But, in BRW of the *doab* area, there is an absence of paintings.

7.4.2 Other Objects

Excavations at Atranjikhera have yielded:

- fragments of stones, waste flakes, chips;
- cores of quartz, chalcedony, agate and carnelian;
- one bead each of carnelian, shell and copper;
- a copper ring; and
- a fragment of comb made of bone.

No stone or metal tools have been found. Jodhpura has yielded a bone spike. From Noh a shapeless piece of iron, a terracotta bead and a bone spike have been discovered.

7.4.3 BRW in the *Doab* and Other Regions

Some scholars see affinities between BRW of Atranjikhera and Gilund and Ahar of southern Rajasthan on the basis of a comparison of fabric, texture and burnishing. But, there are differences as well in the shape and designs of the potteries found in these areas.

- The important feature of *doab* BRW (also of that at Noh) is its plain surface, devoid of any paintings. The BRW found at Gilund and Ahar, on the other hand, is painted in white on black surface.
- There are also typological differences. The painted BRW from Ahar has pronounced carinated concave sides, and the fabric is coarse. Plain BRW of the *doab* has no carination, and the fabric is fine.
- The dish with featureless rim and concave sides present in large numbers in BRW of the *doab* is absent at Ahar and Gilund.
- Bowls with spouts and dish-on-stand present at Ahar and Gilund have not been found in *doah* sites.

It is important to note that BRW with some variation from region to region has a wide distribution. It occurs from Ropar in north to Adichanallur in south, and from Amra and Lakhabhwal in west to Pandu-Rajar-Dhibi in east. It also covers a vast time span: from c. 2400 BCE to early centuries of the Common era.

7.5 PAINTED GREY WARE (PGW) CULTURE

Since the first discovery of PGW at Ahichchhatra in 1946, a large number of sites, that show a distinct concentration of PGW sites in Haryana and upper Ganga valley, have been brought to light in different parts of north India. Out of these, 30 sites have been excavated. Some of the well known excavated sites are:

- Ropar (Punjab),
- Bhagwanpura (Haryana),
- Noh (Rajasthan),
- Alamgirpur, Ahichchhatra, Hastinapura, Atranjikhera, Jakhera and Mathura (all in Uttar Pradesh).

The concentration of PGW sites is in:

• Indo-Gangetic divide (Haryana),

- Sutlej basin, and
- Upper Ganga plains.

Settlements are located along river banks. Average distance from one site to the other is about 10-12 km., though in some cases it is also 5 kms. Settlements at these sites are mostly small villages (1-4 hectares), with the exception of Bhukari (Ambala district, Haryana) which is an extensive settlement covering 96,193 sq.m.



Painted Grey Ware from Sonkh (UP). Government Museum, Mathura. Credit: Biswarup Ganguly. Source: Wikipedia Commons (https://commons.wikimedia.org/wiki/File:Painted_Grey_Ware__Sonkh_-_1000-600_BCE_-_Showcase_6-15_-_Prehistory_and_Terracotta_Gallery__Government_Museum_-_Mathura_2013-02-24_6461.JPG).

Let us examine various objects that are found associated with the PGW culture:

7.5.1 Pottery

Pottery is wheel-made, out of well lavigated clay and has a thin core:

- It has a smooth surface, grey to ash-grey in colour.
- It is painted in black and sometimes in a deep chocolate colour on outer as well as inner surface
- It has nearly 42 designs and the most common types are bowls and dishes.

7.5.2 Structures

Houses and other structures were of wattle- and-daub. This is indicated by the occurrence of patches of burnt earth, mud bricks, burnt bricks, mud platforms and mud plaster pieces with reed and bamboo impressions in excavations at:

- Ahichchhatra,
- Hastinapura,
- Atranjikhera, and
- Iakhera

Excavations at Bhagwanpura (Haryana) revealed different structural phases. Post-holes in the first phase indicate circular and rectangular huts. In the second phase, one house has 13 rooms with a corridor between two sets of rooms. This house also has a courtyard.

7.5.3 Other Objects

A variety of objects made of copper, iron, glass and bone were found in excavations. These consist of:

- axes,
- chisels,
- fish hooks, and
- arrowheads.

Chalcolithic and Early Iron Age

Spearheads are made only of iron. Among agricultural implements, only a sickle and a hoe, made of iron, have been found at Jakhera. Iron objects are found at all sites except Hastinapura. Atranjikhera alone has yielded 135 objects, a furnace, iron slag close to the surface, and a pair of tongs. At Jodhpura, there is evidence of two furnaces. It has been suggested that iron ore was procured from other regions.

People were fond of ornaments. Beads of terracotta, agate, jaspar, carnelian, chalcedony, lapis lazuli, glass and bone have been found. Two glass bangles were found at Hastinapura and copper bangles have been found at Jakhera.

Terracotta objects comprise:

- human (male and female) and animal (bull and horse) figurines,
- discs,
- balls,
- potter's stamps, etc.

7.5.4 Crops and Animal Remains

Evidence of cultivated crops is available only at:

- Hastinapura, and
- Atranjikhera.

At the former site, remains of only rice were found and the latter has yielded remains of wheat and barley.

Bones of horse, cattle, pig, goat and deer have been found at:

- Hastinapura,
- Allahpura, and
- Atranjikhera.

These include both wild as well as domesticated animals.

7.5.5 Trade Practices and Linkages

Beads made of a variety of semi-precious stones (like agate, jasper, carnelian, chalcedony, lapis lazuli) are found at different PGW sites in the *doab*. None of these stones, as raw material, are available in the *doab*. Thus, it could be cogently stated that these items could have been obtained by trade. Agate and chalcedony are found in Kashmir, Gujarat and Madhya Pradesh whereas lapis lazuli is to be found in the Badakshan province in Afghanistan. People inhabiting the PGW sites must have obtained these stones through trade or exchange with these regions.

Certain parallels in shape and size have been found between PGW and potteries found in north-western India. Especially, the Grey Ware found in association with iron seems to indicate some links with PGW cultures.

Check Your Progress Exercise 2

1)	What are the characteristic features of BRW? Discuss in about five lines the difference of the BRW found in various regions.			

History of India
from the Earliest
Times Upto C. 300 C.E.

2)	On what basis we can say that the people inhabiting PGW sites had trade links with other regions? Answer in about five lines.			

7.6 NORTHERN BLACK POLISHED WARE (NBPW) CULTURE

Like the preceding cultures the NBPW culture is identified by its distinctive pottery. This ware was first discovered at Taxila in 1930 and because of its black luster its discoverer then took it as 'Greek Black Ware'. Since then, nearly 1500 NBP sites have come to light. They extend from Taxila and Udgram in north-west to Talmuk in east Bengal and Amravati (Andhra Pradesh) in south. Out of these, about 74 have been excavated.

Important Excavated NBP sites

NAME OF SITE	STATE
Ropar	Punjab
Raja-Karna-ka-Qila	Haryana
Jodhpura	Rajasthan
Noh	Rajasthan
Ahichchhatra	U.P.
Hastinapura	U.P.
Atranjikhera	U.P.
Kaushambi	U.P.
Sravasti	U.P.
Vaishali	Bihar
Pataliputra	Bihar
Sonepur	Bihar
Chandraketugarh	W. Bengal

Excavations have revealed that:

- at several sites NBPW culture succeeded PGW levels, and
- at some sites NBP succeeded BRW, and NBP is succeeded by Red Slipped Ware

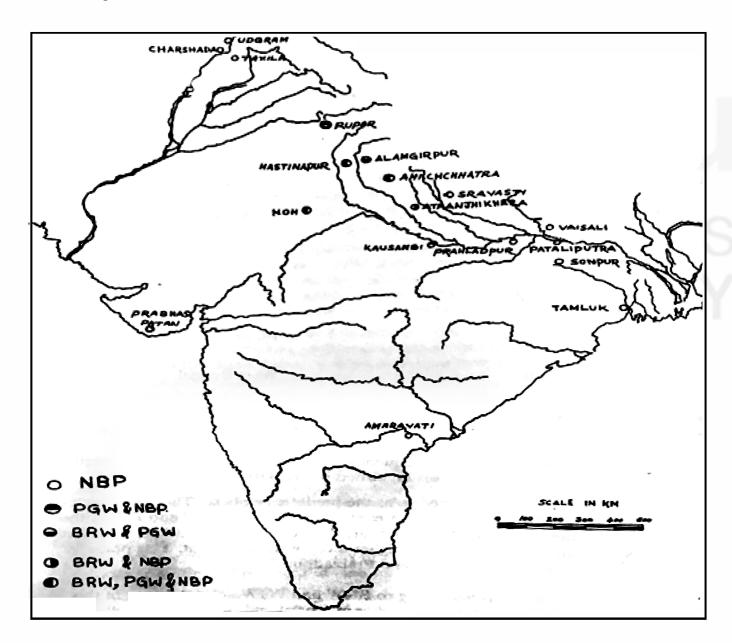
On the basis of the kind of pottery frequency and associated objects it has been suggested that two phases can be distinguished in NBPW culture:

- Phase I: This phase is also referred to as the pre-defence phase. It is characterized by a predominance of NBPW and presence of sherds of BRW and PGW, though in meager quantities. In this phase there is an absence of punch-marked coins and burnt brick structures, which signify a higher level of development. This phase is represented in:
- Atranjikhera,
- Sravasti, and
- Prahladpur.

- **Phase II:** Pottery specimens belonging to BRW and PGW are not found in this phase. The NBPW is of poor quality (thicker in fabric) and is found in smaller numbers. A coarse grey ware comes into greater use. Punch-marked coins and burnt bricks make their first appearance. This phase is represented in:
- Hastinapura,
- Atranjikhera,
- Sravasti II, and
- Prahladpur.

Taking into account the similarities between NBP and PGW, some scholars have suggested that the former is a refined form of the latter, and that the difference between the two appears to be confined only to the surface treatment. This has been proved through chemical analysis carried out on PGW, BRW and NBPW.

As the concentration of NBPW is in eastern Uttar Pradesh and Bihar, it is held that its origin lies somewhere in this region. It spread beyond the Ganga plains in later times, and such a spread is attributed to the activities of Buddhist monks and traders.



7.6.1 Structures

From the excavations at Hastinapura, Atranjikhera and Kausambi it becomes evident that during this period building activities began on a large scale and that cities began to emerge. Excellent evidence of settlement layout was unearthed at Kaushambi. Here were found lanes and bylanes with brick floorings. One road, which was first laid around 600 BCE, was relaid several times (varying in width between 5.5ms. and 2.5ms.) and continued to function up to *c*. 300 CE. Houses were made of burnt bricks, and use of timber in house construction is evidenced by post-holes and sockets for door jambs. Roofs of houses were covered with tiles. Rooms were square as well as rectangular. All this indicates a fairly planned building activity. This is further demonstrated from excavations at Hastinapura which have revealed an elaborate drainage system.

Some of the settlements were fortified with a mud or brick wall and moats were constructed encircling the fortification. The fortification wall at Kausambi had guard rooms, towers and gates at regular intervals.

An important question to be asked here is that do these structures tell us anything about social or political life in that period? They do. For example:

- fortifications signify defensive measures against invasion and speak of political tensions,
- drainage system not only indicates concern of the people towards hygiene, but also the advance they had made in this regard, and
- large buildings like the fortifications require that a large number of people participate in construction activities. This might need an authority to mobilize the workers.

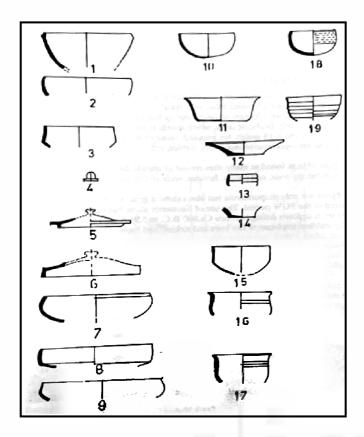
7.6.2 Pottery

The most characteristic feature of NBPW is its glossy surface. It is turned on a fast wheel and is made of well levigated clay. Core of the pottery, in some cases, is as thin as 1.5mms. In addition to glossy black surface, the NBPW is also found in golden, silver, white, pinkish, steel blue, chocolate and brown colours. Recovery of rivetted pots (i.e. made by joining broken pieces) from some sites (e.g. Ropar, Sonepur) indicates how valuable NBPW was. This, along with the presence of other pottey types, leads us to assume that NBPW was a luxury ware not accessible to everybody and suggests to us that in the society in which NBPW was used the society was divided into unequal groups.

Though NBPW is generally unpainted, some painted shreds too occur. Painting is done using yellow and light vermilion colours. Common designs are:

- simple bands,
- wavy lines,
- dots,
- concentric and intersecting circles,
- semi-circles,
- arches, and
- loops.

Most common pottery shapes are bowls and different kinds of dishes.



NBP Pottery. Source: EHI-02, Block-3, Unit-10.

7.6.3 Other Objects

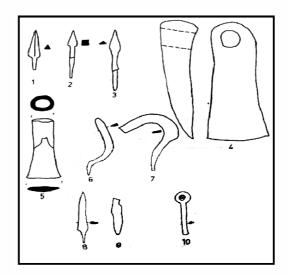
Several kinds of tools, weapons, ornaments and other objects made of copper, iron, gold, silver, stone, glass and bone have been recovered from NBPW sites. They reveal the technological progress achieved during this period, which is further corroborated by early Buddhist texts which mention a number of arts and crafts. The *Jatakas* refer to about 18 guilds, for instance, those of workers in wood, metal, stone, precious and semi-precious stones, ivory textiles, etc.

The copper objects found at many sites consist of:

- chisels,
- knives,
- borers,
- pins,
- needles,
- antimony rods,
- nail parers,
- ferrules,
- reels, and
- bangles.

Iron objects not only preponderate but also exhibit a great variety in form when compared to the PGW period. The site of Kausambi alone has yielded 1,115 iron objects from deposits dating between c. 800 BCE to c.550 CE. These consist of:

- a) Agricultural implements like hoes and sickles, and tools of craftsmen such as axes, adzes, chisels and screw rods.
- b) Weapons like arrowheads, javelin heads and spearheads.
- c) Miscellaneous objects which include knives, handles of different kinds, hooks, nails, rivets, fishplates, rings and miniature bells.



Iron Implements: 1-3. Arrowheads; 4. Adze; 5. Hoe; 6-7. Sickles; 8. Dagger; 9. Chisel

Source: EHI-02, Block-3, Unit-10.

Silver punch-marked coins have been found from the middle phase of the NBP culture. These indicate a possible shift from barter system to a system of exchange of goods through metallic currency.









Punch-Marked Coins. Source: EHI-02, Block-3, Unit-10.

7.6.4 Ornaments

Beads made of semi-precious stones, glass, clay, copper shell and bone are most commonly found. The usual shapes are:

- circular,
- spherical,
- biconical,
- cylindrical,
- barrel, and
- square.

Some beads are also etched. A single bead of gold is known from Kausambi (*c*. 300 BCE).

Among the other ornaments are:

• bangles made of terracotta, faience, glass, shell, stone and copper;

- finger rings of copper, iron, horn and clay; and
- pendants of terracotta, agate and carnelian.

All these finds tell us about the:

- use of ornaments in that society,
- existence of specialized craftsmen to make them,
- level of technology for making them, and
- trade or exchange activities with other regions to procure various semi-precious stones.

7.6.5 Terracotta Figurines

These comprise human and animal figurines and miscellaneous objects. Human figures, in most cases, are cast in moulds. Male figurines are usually plain, excepting a few with a head dress. Female figurines have:

- elaborate head dress,
- ear ornaments,
- necklaces, and
- girdles.

Animal figurines are hand-modeled but well executed. These consist of:

- horse,
- bull,
- ram, and
- elephant.

Miscellaneous terracotta objects are:

- toy carts,
- simple and animal headed gamesman,
- discs,
- balls,
- flesh rubbers, and
- potter's stamps.

At a later stage of this culture are found seals and sealings bearing inscriptions in Brahmi script. All these finds tell us a lot about people who inhabited these sites. For example, toy carts tell us that carts were used as means of transportation.

7.6.6 Subsistence Economy and Trade

Archaeobotanical remains indicate that rice, wheat, barley, millet, pea and black gram were cultivated. And animal remains found from some of the sites suggest dependence on:

• cattle.

- sheep,
- goat,
- pig, and
- fish.

Occurrence of a diverse variety of beads, found to be common at several sites, is seen as evidence of trade. On this basis, it has been suggested that trade links existed between Taxila, Hastinapura, Ahichchhatra, Shravasti and Kaushambi during c. 600 to 200 BCE. Such a view is strengthened by references made in the Buddhist texts to trade guilds and caravans of camels, horses, mules, oxen and buffalos. Between sixth and third centuries BCE there was trade between India and countries to the west. The main items of export were:

- textiles,
- spices, and
- probably, finished goods of iron and steel.

Check Your Progress Exercise 3

From the *Arthashastra* (Book-II), it would appear that the state not only exercised control over trade but also had a monopoly over industries like gold, copper, iron, lead, tin, silver, diamond, gems and precious stones.

1)	Fro	m where does the NBPW culture get its name? Answer in three lines	S.	
2)	Wh	sich of the following statements are right or wrong? Mark (\checkmark) or (\times) .	_	
	a)	NBP was a luxury ware.	()
	b)	It has been suggested that NBP culture had four phases.	()
	c)	Literary evidence supports archaeologists' conclusions of trading a	activit	ies
		during NBP period.	()
	d)	None of the NBP settlements had fortification.	()

7.7 CHALCOLITHIC CULTURES OF WESTERN, CENTRAL AND EASTERN INDIA

There were several local Chalcolithic early farming cultures in western, central and eastern India which flourished during the 2nd and the 1st millennia BCE. These cultures were basically village settlements and they shared certain common elements. Distinctive features of these cultures were:

- painted pottery, which is mostly Black-on-Red, and
- a highly specialized stone blade/flake industry of siliceous stones.

Copper was known but its use was on a limited scale, as the metal was scarce. The

settlements consisted of circular and rectangular huts and, in some cases, pit dwellings are also known. Economy was based on farming and animal husbandry. These cultures are named after their type sites.

Chalcolithic Cultures

Name of the Culture	Period
Kayatha	c. 2000-1800 BCE
Ahar or Banas	c. 2000-1400 BCE
Savalda	c. 2000-1800 BCE
Malwa	c. 1700-1200 BCE in central India and c. 1700-1400 BCE in Maharashtra
Prabhas	c. 1800-1500 BCE
Rangapur	c. 1400-700 BCE
Chirand	c. 1500-750 BCE

In Tapi valley of Maharashtra, late Harappan, non-urban habitations (about 50) are known (*c*. 1800-1600 BCE). Excavations at Daimabad have shown that late Harappans moved further south into Pravara valley (Maharashtra).

Kayatha culture is named after the site of Kayatha (25 kms. east of Ujjain) located on the bank of Kalisindh, an affluent of the river Chambal. Ahar or Banas culture is named after the river Banas and its type site is Ahar (Udaipur in Rajasthan). More than 50 sites of this culture are known in the valleys of Banas and Berach in south-east Rajasthan. The type site of **Savalda** culture is Savalda (Dhulia district, Maharashtra). It is mostly confined to Tapi valley but evidence from Daimabad suggests that it reached up to Pravara valley. Malwa culture was discovered in excavations at Maheshwar and Navadatoli (Nimar district, Madhya Pradesh) on the banks of Narmada. This culture is so named as a large number of sites were brought to light in Malwa region. Malwa people began to migrate to Maharashtra around 1600 BCE, and several settlements have been discovered in Tapi, Godavari and Bhima valleys. Prakash (Dhulia district), Daimabad (Ahmednagar district) and Inamgaon (Pune district) were most extensive settlements of the Malwa culture in Maharashtra. **Prabhas** and **Rangpur** cultures, respectively, are known after the type sites Prabhas Patan and Rangpur in Gujarat. The type site of **Jorwe** culture is Jorwe (Ahmednagar district) in Maharashtra. Extensive occupations of Jorwe culture succeed Malwa culture at Prakash, Daimabad and Inamgaon.

Stone and copper using agricultural communities have been reported from eastern India too. In northern Bihar at a place called Chirand remains of an ancient village settlement have been found. People lived in small houses made of bamboo and mud plaster. They ate rice and fish and hunted many wild animals. They too used Black- and Red- Ware pottery. Similar kinds of settlements have been reported from Sahgaura in Gorakhpur (U.P.) and Sonpur in Gaya (Bihar) where people seem to have grown wheat and barley also. In West Bengal, the sites of Pandu-Rajar-Dhibi in Burdwan district and Mahisdal in Birbhum district have yielded similar evidences. All these settlements have been dated between *c*. 1500-750 BCE.



Chalcolithic sites in Western and Central India. Source: EHI-02, Block-3, Unit-10.

Let us examine various characteristics of these cultures.

7.7.1 Pottery: Diagnostic Features

We will briefly review the pottery of these Chalcolithic cultures.

Kayatha ware is characterized by three fabrics:

- a thick and sturdy red slipped ware painted with designs in dark brown,
- a red painted buff ware (this ware is thin with a fine fabric), and
- a combed ware having incised patterns, and generally without a slip.

Majority of the pots of the sturdy red slipped ware have a ring base. The ring base recalls the pre-Harappan Sothi types.

Sothi culture (in Rajasthan) is known from several sites in the valley of Ghaggar (Sarasvati) which have yielded a pottery that is akin to the pre-Harappan pottery of Kalibangan.

There are seven kinds of wares in Ahar pottery but its most characteristic type is the Black-and-Red Ware painted in white. Savalda culture is characterized by a Black-on-Red Painted pottery which is decorated with naturalistic designs such as:

- birds,
- animals, and
- fishes.

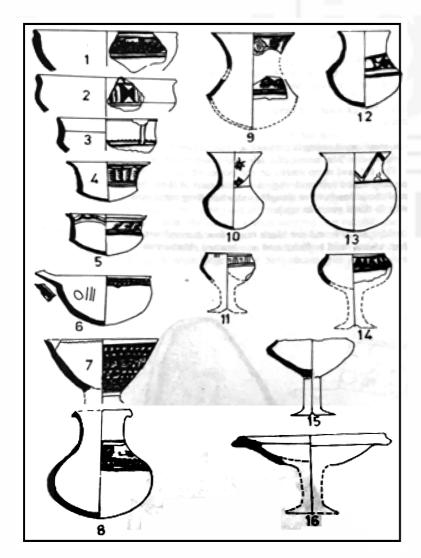
Chalcolithic and Early Iron Age

Malwa ware is, to some extent, coarse in fabric and has a thick buff slip over which patterns are executed in black or dark brown colour. Prabhas and Rangpur wares are both derived from the Harappan Black-on-Red painted ware, but since the latter has a gloss, it is referred to as lustrous Red Ware. Jorwe Ware is painted Black-on-Red, and has a matt surface treated with a red wash. In addition to these characteristic forms, all these cultures have other associated wares which are mostly red or grey. Pottery is wheel-made, but there are also hand-made forms. The pottery shapes which are usual to these cultures are:

- bowls,
- basins,
- globular jars with concave necks,
- dishes,
- *lotas* (a small pot with a carinated body, a bulbous bottom and a flaring rim) etc.

A distinctive feature of Malwa pottery is seen in the series of small goblets on solid pedestals. Distinctive forms of Jorwe culture are:

- carinated bowls,
- spouted jars with flaring mouths, and
- high-necked globular vases.





7.7.2 Economy

A greater part of the region in which these Chalcolithic cultures flourished is the zone of black cotton soil. Climate is semi-arid and rainfall varies between 400 to 1000 mm. Mainstay of the economy of these Chalcolithic cultures was subsistence agriculture and stock-raising. Dependence on wild game and other food sources, such as fish, is also attested to at several sites.

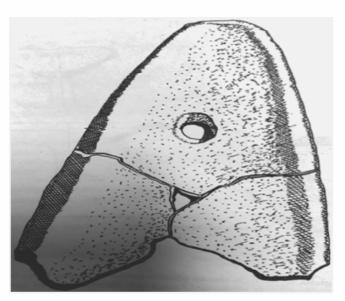
- i) **Cultivated Crops:** Carbonized remains of seeds recovered in excavations at some of the sites indicate that a variety of crops were raised by these farming communities. Main crops were:
 - a) barley,
 - b) wheat,
 - c) rice,
 - d) bajra,
 - e) jowar,
 - f) lentil,
 - g) horsegram,
 - h) haycinth bean,
 - i) grass pea,
 - j) pea,
 - k) black gram, and
 - l) green gram.

The other plants utilized were:

- Jaamun,
- Behada,
- wild date,
- ber,
- Myrobalan.

Barley was the principal cereal during this period. Evidence from Inamgaon suggests the practice of crop rotation, harvesting of summer and winter crops, and artificial irrigation. A massive embankment (240 m. long and 2.40 m. wide) was built at Inamgaon during early Jorwe period (*c*. 1400-1000 BCE) to divert flood water through a channel (200 m. long, 4m. wide and 3.5 m. deep).

That the black cotton soil was ploughed for farming operations is suggested by the find of an ard (prototype of ploughshare) made from the shoulder bone of cattle at Walki (not very far from Inamgaon).



Bone Ard from Walki. Source: EHI-02, Block-3, Unit-10.

- ii) **Animals:** Excavations have revealed evidences of both domesticated as well as wild animals.
 - a) Domesticated animals during the chalcolithic period were:
 - cattle,
 - sheep,
 - goat,
 - dog,
 - pig,
 - horse.

Bones of cattle and sheep/goat predominate at most of the sites. Cut and chop marks on bones of these animals indicate that they were slaughtered for food. Age determination of these bones has indicated that most of the animals were slaughtered when they were young (ranging from three months to three years in age).

- b) The wild species found are:
 - black buck,
 - four-horned antilope,
 - Nilgai,
 - Barasingha,
 - Sambar,
 - *Chital*,
 - wild buffalo, and
 - one-horned rhinoceros.

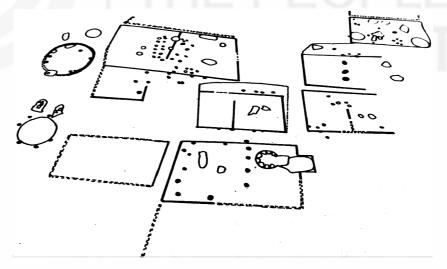
Bones of fish, waterfowl, turtle and rodents have also been found at some of the sites. Bones of marine fish species have been found at Inamgaon and the source of these fish could be either Kalyan or Mahad, the nearest creek ports, 200 km. west of Inamgaon.

Charred bones of both domestic and wild species indicate that they were cooked in open fire.

7.7.3 Houses and Habitations

Let us briefly examine the housing patterns of these cultures. Rectangular and circular houses with mud walls and thatched roofs are the most common types, though there are variations in house sizes from site to site.

- Most of the houses of Savalda culture were single roomed rectangular houses, but there are some with two or three rooms. Ahar people built houses on plinths made of schist. Walls were built on these plinths with mud or mud brick and walls were decorated with quartz cobbles, and floors were made of burnt clay or clay mixed with river gravels.
- ii) Sizes of the Ahar houses ranged between 7m × 5m and 3m × 3m, and the longest house measured more than 10m in length. Bigger houses had partition walls, and *chulahs* (hearths) and quartzite saddle querns in kitchen.
- iii) Malwa settlements, such as those found at Navadatoli, Parkash, Daimabad and Inamgaon, were quite large. Evidence at Inamgaon suggests that some kind of planning was adopted in laying out of the settlement. Of the 20 odd houses exposed at Inamgaon, majority were aligned in a roughly east-west orientation. Though these houses were built close to each other, they had an intervening space of about 1-2m in between, which might have served as a lane. These houses at Inamgaon were large (7m × 5m) rectangular structures with a partition wall. Houses had a low mud wall and gabled roof. Inside the house was a large oval fire-pit with raised sides for keeping fire under control. Houses at Navadatoli were provided with one or two mouthed *chullahs* in the kitchen. Grain was stored in deep pit silos (1m in diameter and 1m deep). Circular mud platforms (1.5m in diameter) inside the houses suggest that they probably served as bases to keep bins of wicker work for grain storage.



Plan of Houses at Inamgaon during Malwa period. Source: EHI-02, Block-3, Unit-10.

iv) A significant feature of Jorwe culture (of which more than 200 sites are known so far, though majority of them can be classified as villages ranging from one to four hectares) is the presence of a large centre in each region. These centres are Prakash, Daimabad and Inamgaon respectively in the valleys of the Tapi, the Godavari and Bhima. Jorwe settlement at Daimabad was the largest, covering an area from more than 30 hectares. Prakash and Inamgaon cover about five hectares each.

Chalcolithic and Early Iron Age

v) A noteworthy feature of Jorwe (both Early and Late) settlement at Inamgaon is that the houses of the artisans such as potter, goldsmith, lapidary, ivory-carver etc. were located on the western periphery of the principal habitation area, whereas those of well-to-do farmers were in the central part. The size of artisans' houses is smaller than those of the well-to-do. Both these aspects, i.e. position and size of the houses, demonstrate social differentiation in terms of a lower position for the artisans in the society.

Interestingly enough, some of these Chalcolithic sites have fortification walls around the settlement. For example, Eran and Nagda (Madhya Pradesh) of Malwa culture, and Inamgaon (during Jorwe period) have a fortified mud wall with stone rubble bastions and ditch around the habitation

At Inamgaon the following change has been noticed in house types from Early Jorwe (c. 1400-1000 BCE) to Late Jorwe period (c. 1000-700 BCE):

The Early Jorwe houses were large rectangular structures with low mud walls (about 30 cm. high) surrounded by wattle-and-daub constructions. These houses were laid out in rows with their longer axis in a roughly east-west orientation. They have an open space in between (approximately 1.5m wide) which might have served as a road or lane. Late Jorwe houses, on the other hand, depict a picture of poverty. Large rectangular huts were no more built, and instead there were small round huts (with a low mud wall) in clusters of three or four. The pit silos were replaced by a four-legged storage jar supported on four flat stones.

The overall evidence indicates that this shift from Early Jorwe to Late Jorwe was due to decline in agriculture as a result of drop in rainfall. Investigations in western and central India have disclosed that at the close of 2nd millennium BCE, there was a drastic climatic change in this region that led to increasing aridity, forcing people to resort to a seminomadic existence. This conclusion is based on calculations of percentages of animal bones found from different phases. It seems that increasing aridity during Late Jorwe period led to the decline of agriculture, and economy based on farming changed over to sheep/goat pastoralism.

7.7.4 Other Characteristics

All these cultures are characterized by a stone blade/flake industry based on siliceous stones such as:

- chalcedony,
- chert,
- jasper, and
- agate.

Tools include:

- long parallel sided blades,
- blunted black blades,
- serrated blades,
- pen knives,
- lunates,

- triangles, and
- trapezes.

Some of these blade-tools have a shine on the sharp edge, suggesting that they were used for harvesting. Polished stone-axes, which are typical of the Neolithic-Chalcolithic cultures of Karnataka-Andhra, have also been found at some of these sites, though they are not plentiful.

The copper objects consist of:

- flat axes or celts with convex cutting edges,
- arrowheads,
- spearheads,
- chisels,
- fish-hooks,
- mid-ribbed swords,
- blades,
- bangles,
- rings, and
- beads.

Among the finds at Kayatha, one pot contained 28 copper bangles. Some of these objects, like axe, were cast in mould, while others were hammered to shape. Most prolific items among the ornaments are beads made of carnelian, jasper, chalcedony, agate, shell etc. A necklace made of 40,000 microbeads of steatite has been found in a pot belonging to Kayatha culture. At Inamgaon were found beads of gold and ivory, a spiral ear-ring of gold and anklets of copper.

Terracotta objects are found frequently at majority of these sites. These are in the form of human and animal figurines. Stylized terracotta bulls (which are mostly miniature-sized) found in the Chalcolithic levels at Kayatha, some with a prominent hump, some with horns twisted backward, and some with horns projecting forward horizontally, are of special interest. Considering the occurrence of numerous terracotta bull figurines at several of these Chalcolithic sites, it can be suggested that bull was a sacred animal, though the possibility that some of them could have been toys cannot be ruled out.

Daimabad Hoard: By a chance discovery, four objects on the top of a mound (below which is a 1.2m thick deposit belonging to Jorwe period) came to light at Daimabad. These are massive, all solid cast, and weigh over 60 kg:

- i) **Elephant:** This is the heaviest (25 cm in height \times 27 cm in length), and stands on a cast copper platform with four brackets beneath, pierced, to take axles.
- ii) **Rhinoceros:** This is slightly smaller, and also stands on a cast platform. The brackets contain two solid copper axles with cast wheels attached. This rhinoceros recalls the one inscribed on Indus seals.
- iii) **Two Wheeled Chariot with a Rider:** The chariot is attached by a long pole to yoked oxen which stand on two cast copper strips, but there are no brackets for wheels. The chariot has two uprights supporting a cross-bar behind which the rider stands. This piece has no parallels.

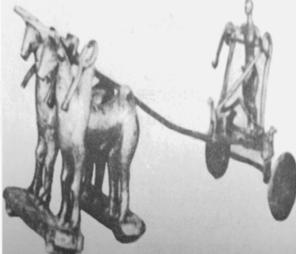
iv) **Buffalo:** This also has wheels and axle in position. This has some parallels in the figures of buffalos in both terracotta and case copper or bronze found from Mohenjodaro. Copper of the Daimabad hoard compared with that of other copper objects found in excavations, and spectrometric analysis of this metal has revealed that it is unalloyed by tin or other metals. According to one view, the Daimabad hoard is datable to Late Harappan period (*c*.1600-1300 BCE). Another suggestion is that they could probably belong to same technological group as the Kallur hoard.





LEFT: Copper Elephant, Daimabad Hoard. Source: EHI-02, Block-3, Unit-10. RIGHT: Copper Rhinoceros, Daimabad Hoard. Source: EHI-02, Block-3, Unit-10.





LEFT: Copper Buffalo, Daimabad Hoard. Source: EHI-02, Block-3, Unit-10. RIGHT: Copper Chariot, Daimabad Hoard. Source: EHI-02, Block-3, Unit-10.

7.7.5 Religion/Belief Systems

Finds in the excavations also shed light on religious practices and beliefs of people, which can be elucidated as follows:

i) **Mother Goddess:** That these Chalcolithc communities had a belief in the Mother Goddess and worshipped her, is attested by finding of female figures of clay (both baked and unbaked). These female figures are both with heads and without heads. From lower levels of occupation (dated to the middle of 2nd millennium BCE) at Nevasa comes a large headless female figure which is made without clearly showing

physical features. Inamgaon has also yielded similar terracotta female figurines which show no physical features except breasts.

Evidence for the worship of Mother Goddess has been recorded in excavations of an early Jorwe house (c.1300 BCE) at Inamgaon. Here, buried under the floor in a comer was found an oval shaped clay receptacle with a clay lid. Inside this receptacle was found a headless female figurine having large pendant breasts and also a bull figurine. These female figurines, including the one from Inamgaon, point to the worship of the goddess of fertility. These figurines (especially the headless ones), according to one opinion, may represent goddess Sakambhari (of early historic period), the goddess of vegetative fertility who was worshipped for warding off draughts.

- ii) Gods: Male figurines are rare in Chalcolithic settlements. It has been suggested that figurines of clay (two of them being unbaked, and one baked) found in the late Jorwe levels (c. 1000-700 BCE) at Inamgaon may possibly be identified as gods.
 - In this context, a painted jar of Malwa period (c. 1600 BCE) is considered to be of some religious significance. This pot has two panels. In the upper panel is painted a scene depicting a human figure wearing a garment of twigs covering the loin, and is surrounded by stylized animals such as stag, deer, peacocks etc. The lower panel shows springing tigers or panthers, which are also stylized. This vessel, richly decorated with elaborate paintings, was probably meant for some ritualistic use. Likewise, finds of solid cast copper elephant, buffalo, rhinoceros etc. at Daimabad could have religious functions.
- iii) **Burial Practices:** Disposal of the dead by burial was a common custom. Adults as well as children were usually buried in a north-south orientation; the head towards north and the legs towards south. Adults were, in a majority of cases, buried in an extended position, whereas children were buried in urn-burials either in single pots or, more often, in two pots placed horizontally mouth-to-mouth in a pit.

Adults, and also children, were buried in a pit which was dug into the house floor, and rarely in courtyard of the house. It is interesting to note that during the Jorwe period, in the case of adults, portion below the ankle was purposely chopped off. These practices, like burying the dead within precincts of the house, and chopping off the feet, could possibly suggest a belief in which the dead were restrained from turning into ghosts who could become malevolent.

Adult burials, in several cases, contain offerings (grave goods) which are usually two pots, or sometimes more in number. One adult burial of Late Jorwe period contained 15 pots. It was also common to bury the dead with personal ornaments. In an adult burial of Late Jorwe period, a large copper ornament was found near the neck of the skeleton. A child in a twin urn-burial of the same period had a necklace consisting of twelve beads of copper and red jasper alternately.

The Jorwe period has also disclosed some unusual burials at Inamgaon. Here has been found a four legged urn-burial made of unbaked clay, and its southern face resembles a human body. This urn (80 cm. in height and 50 cm. in width), having a wide mouth with a featureless rim, contained the skeleton of a male of about 30-40 years in a sitting posture. In this case, portion below the ankle is not chopped off. The burial offerings were a spouted pot with painting of a boat design having long oars. What this boat design reminds one is the present day Hindu belief that the departed soul has to cross waters in a ferry to reach the heavenly abode. This person who was given such an elaborate burial could be:

- of high status, or
- ruling chief of the settlement, or
- belonging to a social group that practiced a different kind of burial.

7.7.6 Social Organization

In the Chalcolithic culture regions, a study of the distribution pattern of the sites seems to suggest that these sites were of two types, one type representing regional centres and the other type representing village settlements. This difference, or hierarchy, has been taken to suggest that some form of administrative organization was present in Chalcolithic cultures. This also suggests that Chalcolithic social organization was characterized by ranking. Presence of an administrative authority is further supported by existence of public structures such as fortifications, rampart and moat, granaries, embankment and canals (well documented at Inamgaon) etc. found at different sites.

Seen in the larger context of post-Harappan developments, these Chalcolithic cultures betray discernible influences of Harappan culture, though in a residual form. All the same, they are marked by strong regional elements, and also display trade links and cultural contacts between each other.

These metal-using farming communities which flourished in 2^{nd} millennium BCE disappeared around 1^{st} millennium BCE (excepting Late Jorwe which continued till c.700 BCE). One possible reason attributed for such decay (on the basis of analyses of soil sample overlying these Chalcolithic horizons) was increasing aridity and unfavourable climatic conditions. Many of these settlements in Godavari, Tapi and other valleys were deserted, and were reoccupied after a gap of five or six centuries in 5^{th} - 4^{th} centuries BCE, heralded by urbanization.

Check Your Progress Exercise 4

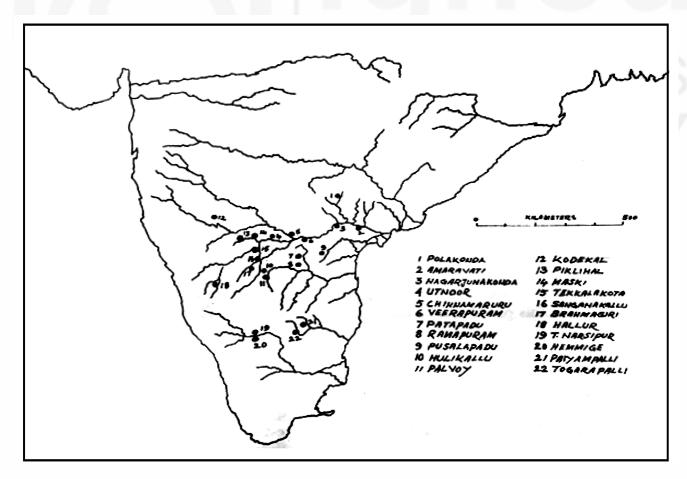
1) Which of the following statements are right (\checkmark) or wrong (\times) ?				
	a)	Chalcolithic cultures of western and central India were city settlemen	ts. ()
	b)	Carbonized remains of seeds found in excavations indicate the var crops raised by the people.	iety (of)
	c)	Smaller size of artisan's house at Inamgaon demonstrates social different	tiatio (on.)
	d)	There is no evidence of Mother Goddess worship.	()
	e)	At certain sites, urns were used for burials.	()
2)	Wh	nat are the characteristics of Malwa settlements?		
3)	Dis	scuss in about five lines the characteristics of Daimabad Hoard.		

7.8 EARLY FARMING SETTLEMENTS IN SOUTH INDIA

By now you must be well familiar with the evolution of human beings from hunter-gatherers into settled agricultural communities. You have also learnt about Harappan civilization and the various aspects related to it. Till now in this Unit, you have seen how different cultures emerged following the decline of Harappan civilization, covering the time span from 2nd to 1st millennium BCE. Now, we will review the developments in south India during the same period. The focus of study will be on the nature of changes that came about in this period in material culture, settlement patterns and social organization.

Settlements of early farming communities in south India make a rather sudden appearance in 3rd millennium BCE. There is no evidence to discern a gradual evolution (as in west Asia) from a hunting-gathering economy to a food-producing economy. Evidence for this region indicates some sort of colonization of favourable habitats in the Godavari, Krishna, Tungabhadra, Penneru and Kaveri river systems. These settlements, in majority of the cases, are scattered in the semi-arid, low rain fall and sandy loamy regions which are suitable for dry farming and pastoralism (cattle, sheep and goat). Distinguishing features of these settlements are:

- i) Sedentary village settlements with semi-permanent to permanent structures, the latter consisting of wattle- and- daub.
- ii) Stone axes (made of hard rock like dolerite and basalt) manufactured by grinding and polishing. Because of this technique, the stone-tool industry of these early farming cultures is referred to as the polished stone-axe industry.



Important Neolithic-Chalcolithic sites in south India. Source: EHI-02, Block-3, Unit-11.

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- iii) Long and thin blades made of fine grained rocks like chert, jasper, chalcedony and agate. These artefacts have a sheen on the cutting edge, indicating that they were used for harvesting crops.
- iv) Pottery which is hand-made in the early stages and wheel-made in the later stages.
- v) An economy based on millet farming, and cattle and sheep/goat pastoralism. The economy, thus, is basically agro-pastoral.
- vi) Dietary needs are supplemented by wild game.

7.8.1 Cultural Phases

On the basis of overall evidence, we can distinguish three broad phases in the growth of the early farming communities in south India:

Phase I: Earliest settlements of these farming communities represent this phase. These were made on tops of granitoid hills, or on leveled terraces on hill sides, or in the valleys between two or more hills. The material culture consists of:

- a polished stone axe industry,
- blade industry, and
- hand-made pottery.

In pottery, grey or buff-brown ware is most common. A ware, which is less common, has a black or red burnished slip, often with purple painted decorations. These earliest settlements are associated with ash-mounds, some of which were excavated. These excavated ash-mound sites like Utnur, Kupgal, Kodekal, Pallavoy, Piklihal, Maski and Brahmagiri have all revealed the first phase of settlements of these agro-pastoral communities. This phase can be ascribed between c. 2500-1800 BCE on the basis of radiocarbon dates.

Phase II: The settlement pattern of phase-I continues without any change:

Settlements were still made on top of granitic hills, or on leveled surfaces on hillsides. Nonetheless, there are some important developments. The settlements had circular hutments of wattle- and- daub on wooden frames with mud floors. Some of the larger pits at Nagarjunakonda (in coastal *Andhradesha*) which are circular, oval, oblong and irregular, with post-holes, are interpreted as semi-subterranean pit dwellings. Pit dwellings were also found at Paiyampalli and Veerapuram. In this phase, new pottery types like perforated and spouted vessels appeared. The discovery of such pottery types reveals contacts with regions in the north, as similar pottery types have been found there. The technique of roughening outer surface of pottery during this phase is reminiscent of technique employed in the early Harappan period.

Polished stone axe and blade industries proliferated in this phase. Copper and bronze objects were also discovered for the first time and their numbers increased towards the end of this phase. Some of the sites where phase-II settlements were discovered are:

- Piklihal,
- Brahmagiri,
- Sanganakallu,
- Tekkalakota,
- Hallur, and
- T. Narsipur.

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The available radiocarbon dates for this phase suggest a time span covering c.1800-1500 BCE.

Phase III: Important development in this phase is increase in the number of copper and bronze tools. Such an increase is seen at:

- Tekkalakota,
- Hallur,
- Piklihal,
- Sanganakallu,
- Brahmagiri, and
- Paiyampalli.

Stone axe and blade industries continue. In pottery, a new grey and buff ware with a harder surface becomes common. Another ceramic type which is wheel-made, unburnished and with purple paint also appears. This ware has affinities to the Chalcolithic Jorwe ware of Maharashtra. On these grounds, this phase can be ascribed to the period c.1400-1050 BCE.

These three phases reveal how gradually the early farming-cum-pastoral settlements in south India emerged and expanded. There is continuity of occupation from phase I to phase III (as revealed at some sites in the excavations) and with no significant change in the economy. The only important difference is absence of copper/bronze tools in phase I. As the occupation of phases II and III have yielded these metal tools, they are designated as Neolithic-Chalcolithic.

From the distribution of these settlements, it can be seen that the preferred landforms are low hill ranges away from major watersheds but in proximity to streams; the soil zones are tropical black clays, tropical red and black sandy loams, sandy or sandy loamy ferruginous tropical soils, and deltaic alluvium. The average annual rainfall in which these settlements are located, as at present, falls in the range of 600-1200 mm. These sites are commonly dispersed in castlellated hills and the habitations are usually on the tops of hills or at the foot of hills.

7.8.2 Subsistence Economy

In view of location of the sites in relation to physiography, it would appear that areas which were suited largely for gravity flow irrigation were generally colonized. However, there are some sites like Veerapuram on the bank of the Krishna, Hallur on Tungabhadra, T. Narsipur at the confluence of Kaveri and Kapila, and those in the alluvial zones of Krishna where there is scope for water management through canal irrigation. The available archaeobotanical evidence indicates that millets and pulses were main cultivated crops. These are various kinds of millet, horse gram, green gram and black gram. Hyacinth bean and barley have been recently identified at Ramapuram.

Coming to the fauna, almost all the excavated Neolithic-Chalcolithic sites have yielded remains which belong to both domesticated and wild species.

The Domesticated species consist of:

- cattle,
- buffalo,
- sheep,
- goat,

- pig,
- dog, and
- fowl.

Cattle predominate at majority of the sites, indicating its importance in the economy of these communities. For instance, in the Neolithic levels at Veerapuram, the faunal remains of which were subjected to meticulous study, cattle represent 48.68% of the domesticated animals, whereas sheep/goat form only 5.4%. If such was the case at Veerapuram situated on the right bank of Krishna with potential for irrigation agriculture, then one should expect cattle-pastoralism to have played a major role in scores of sites located in the uplands. As the economy of these communities was a combination of agriculture and animal husbandry (cattle predominantly and sheep/goat to some extent), it can be termed agro-pastoral.

In addition to these domesticated species, these settlements have also yielded remains of wild game. These wild species are:

- porcupine,
- black naped hare,
- nilgai,
- chinkara,
- blackbuck,
- sambar, and
- chital.

This would indicate that their meat requirements were supplemented by wild game.

7.8.3 Material Culture

The material remains of this period include:

- pottery,
- stone artefacts, and
- copper/bronze objects.

i) Pottery

Pottery in phase I (c.2500-1800 BCE) was predominantly handmade, grey or buff-brown. This grey ware is characterized by the use of bands of red ochre, applied after firing. What is interesting is that some of these pottery forms have applied ring feet and hollow pedestals which recall the pre-Harrappan types known from Amri and Kalibangan. The other ceramic type of phase I had a black or red burnished slip, with a purple painted decoration.

In phase II (c. 1800-1500 BCE), the red and black slipped wares disappear and new types occur, such as perforated vessels, and vessels with spouts. In ceramic manufacture, the technique of roughening the outer surface of vessels is used, and this recalls the one employed in the pre-Harappan levels of Baluchistan.

In Phase III (c. 1400-1050 BCE), new ceramic types occur:

a) a grey and buff ware with a harder surface, and

- b) a wheel-thrown unburnished ware with purple paint. This latter type displays affinities with the Jorwe type of Maharashtra, thus, indicating cultural contacts between southern Deccan and northern Deccan. The pottery forms are:
 - various kinds of bowls (bowls with lips, lugs and spouts),
 - handled and hollow footed bowls,
 - jars,
 - dishes on stand,
 - perforated and spouted vessels.

ii) Stone Tools and Bone Artefacts

The stone blade industry consists of long and thin parallel sided blades, some of which are finished into other forms by retouch. These finished forms are:

- crescents,
- triangles,
- trapezes,
- serrated blades etc.

Some of the parallel sided blades show a gloss on the cutting edge which is due to their use in harvesting activities.

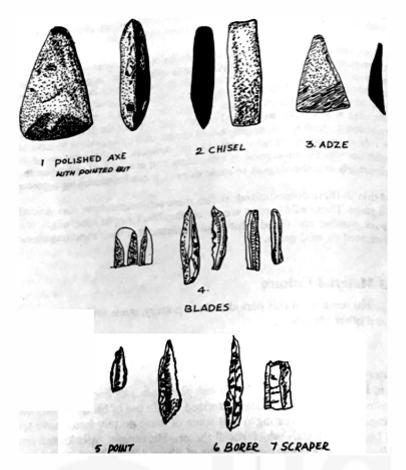
Many stone tools were also polished. Most common type of the polished or ground stone axe industry is the triangular axe with a pointed butt and oval cross section. The other forms are:

- adges,
- scrappers,
- wedges,
- chisels and
- pointed tools (termed as picks).

Besides these, the other stone objects comprise:

- hammer stones,
- sling balls,
- grinding stones,
- rubbing stones, and
- querns (used in food-grain processing).

Among the bone-artefacts, worked bone, horn and occasionally antler and shell have been found at some of the excavated sites. The most common artefacts are a variety of points and chisels. One site (Pallavoy) has yielded bone axes made from cattle scapulae, finished by grinding at the worked edge.



Neolithic blade and polished stone axe industry in south India. Source: EHI-02, Block-3, Unit-11.

iii) Metal Objects

As noted earlier, copper and bronze tools appear in phase II and increase in phase III. Most important of these are flat axes and chisels which are reminiscent of those of Malwa and Maharashtra. The other interesting find is the antenna sword found at Kallur (discussed earlier in the context of Copper Hoards).

The other items of copper/bronze, which are known from various excavated sites are:

- bangles
- spiral ear-rings, and
- antimony rods.

A fish-hook has been recovered from Hallur. The site Tekkalakota has yielded a spiral ear-ring of gold.

iv) Beads and Terracotta Figurines

Beads made of semi-precious stones have occasionally been found at some of the excavated sites. For example, circular disc beads of paste and steatite were discovered at Nagarjunakonda.

Terracotta figurines, predominantly of humped cattle, have been recovered from excavated sites like Piklihal.

These, seen in the context of paintings, of cattle around the settlements at Kupgal, Maski, Piklihal etc. are suggestive of the significance attached to cattle in their culture. These paintings show cattle, singly and in groups, and depict humped bulls and long horned cattle. Some show cattle with decorated horns.

7.8.4 Burial Practices

The dead were commonly buried within the houses. Adult burial practices include extended inhumation. Infants were buried in urns. Excavations at Tekkalakota revealed (in phase III) multiple pot burials, which recall the Jorwe burials of Maharashtra. A Neolithic cemetery is reported at Nagarjunakonda. Offerings for the dead (grave-goods) usually consisted of pots, including spouted vessels, and in some cases stone-axes and stone-blades.

7.9 NEOLITHIC SURFACE FINDS IN SOUTH INDIA

Apart from being found in habitation sites, polished stone-axes occur in small isolated assemblages in forested regions. Such occurrences are common in south India, and often, there is a habitation site nearby. What do such occurrences indicate? Such find spots probably represent activity loci. This is to say, considering functional use of the tools (axes for tree felling), these find spots indicate vegetation clearance in the hilly forested zones for dry farming operations.

Such isolated Neolithic stone axe clusters are common in wooded hill ranges of Tamil Nadu: Slevory, Javadi and Tirumalai hilly zones. Such a distribution of Neolithic axe clusters from wooded uplands of southern extensions of the Western Ghats to lowland Tamil plains is suggestive of shifting cultivation practices which were prevalent till recently in southern part of Western Ghats.

South Indian Neolithic phase is also associated with ash-mounds which are distributed in the semi-arid parts of the Bhima-Krishna-Tungabhadra *doab*. More than 60 ash mounds are known and some of them are quite extensive. It was suggested by some archaeologists that these mounds were produced by burning of cow-dung by Neolithic communities and that they were the sites of cattle-pens where dung was allowed to accumulate. Raymond Allchin, in the light of evidence he obtained from his excavations at Utnur (an ash-mound site), concluded that they were associated with forest cattle stations of Neolithic people and that the burning probably had ritualistic significance.

As mentioned earlier, there is no evidence to prove the evolution of village farming communities from the preceding hunting-gathering economy in south India. As we have seen, a sudden spurt in the emergence of village settlements started from around the middle of 3rd millennium BCE in these areas. How did these farming settlements come into existence? According to some archaeologists, the Grey ware exhibits broad similarities with that found at sites like Hissar, Turang Tepe and Shah Tepe in north-east Iran; and the Red- and- Black painted pottery has affinities with the pre-Harappan pottery of Baluchistan and Indus system. On the basis of these similarities, and considering some other features, they have suggested that the origin of south Indian Neolithic cultures may have had links with some centres in Indo-Iranian borderlands.

Check Your Progress Exercise 5

- 1) Read the following statements and mark right (\checkmark) or wrong (\times).
 - i) It is not possible to divide the material culture of settlements in south India into various phases.
 - ii) Among the domestic species, cattle played a very important role in the economy of early farming communities of south India.
 - iii) The burial practices were same for infants as well as grown-ups.
 - iv) We get no evidence of any bone artefacts from any of the excavated sites.



2)	Write five lines on cultural phases of early farming communities in south India.	Chalcolithic and Early Iron Age
2)		
3)	Can the economy of farming communities of south India be characterized as agropastoral? Write in five lines.	
4)	What do the ash-mounds discovered at various sites signify? Write in five lines.	

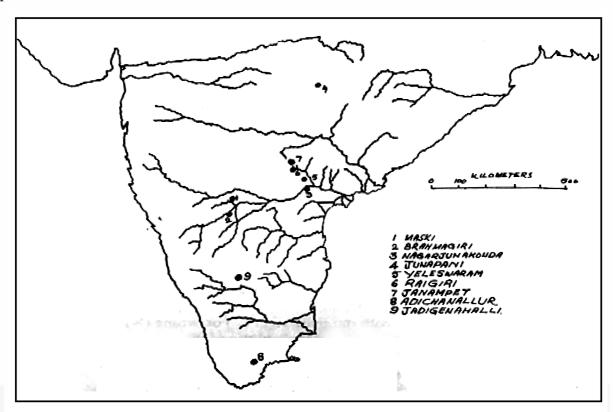
7.10 IRONAGE IN SOUTH INDIA

The use of iron in south India began sometime around *c*. 1100 BCE. This date has been suggested on the basis of radiocarbon analysis of objects found at Hallur. However, at some of the other sites discussed earlier, we find that the Neolithic-Chalcolithic cultural horizons overlap with Iron Age levels. In northern Deccan (Maharashtra) also, occupations at several Chalcolithic settlements continue into the Iron Age and it is same case at sites like Brahmagiri, Piklihal, Sanganakallu, Maski, Paiyampalli, etc. in southern Deccan.

The earliest phase of Iron Age in south India is recovered in excavations at Piklihal and Hallur and possibly by the burial pits at Brahmagiri. These early burials yielded the first iron objects, Black-and-Red ware, and a matt painted buff and Red Ware. To some extent, the latter is similar to Jorwe ware. Similar evidence has been recorded in the burials at Tekwada (Maharashtra). At some sites, in the habitations, stone-axes and blades continued to be used. The succeeding phase is characterized by a predominance of burnished unpainted Black-and-Red ware, and red or black wares.

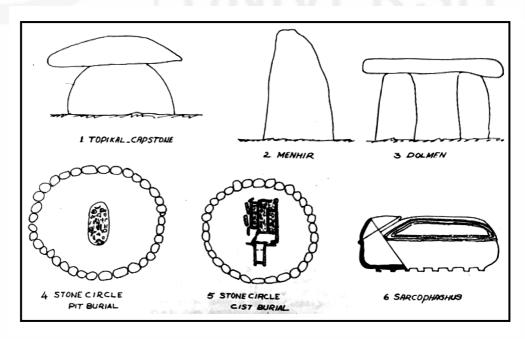
7.10.1 Megalithic Cultures

Most of the information about Iron Age in south India comes from excavations of megalithic graves. Megaliths usually refer to the burials amidst stones in graveyards, away from the habitation area. In south India, this kind of elaborate burial system came with Iron Age. Megalithic burials have been reported in large numbers from:



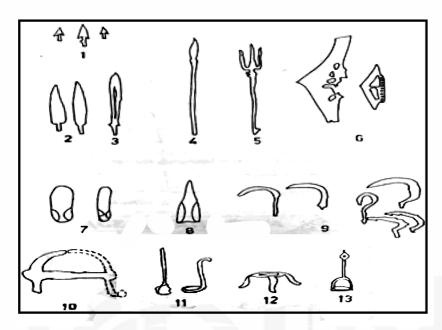
Important Iron Age Sites in South India. Source: EHI-02, Block-3, Unit-11.

- Maharashtra (around Nagpur),
- Karnataka (sites like Maski),
- Andhra Pradesh (Nagarjunakonda),
- Tamilnadu (Adichanallur), and
- Kerala.



Megalithic Burial Types in South India. Source: EHI-02, Block-3, Unit-11.

Megalithic burials have showed a variety of methods for disposal of dead. In some cases, bones of the dead were collected in large urns and buried in a pit. The pit was marked by a stone circle, or a capstone, or both. Pits and urn also contained gravegoods. In some other cases, pottery sarcophagi have been found. In other cases, pit circles have been formed with stones for burying the dead. Cist graves made with granite slabs have also been reported. In Kerala, rock-cut chambers have been made for burial. Yet another kind of megalithic burial is stone-alignment, comprising rows of standing stones set in diagonal or square plan.



Iron Implements from South Indian Megalithic Graves: 1. Arrowhead; 2. Daggers; 3. Sword; 4. Spearhead; 5. Trident; 6. Battle axe; 7. Hoes; 8. Plough Share; 9. Sickles; 10. Stirrup; 11. Laddles; 12. Tripod; 13. Lamp.

Source: EHI-02, Block-3, Unit-11.

7.10.2 Origins of Megalithic Cultures

Megaliths emerged around the end of 2^{nd} and beginning of 1^{st} millennium BCE and this practice continued for many centuries subsequently. Some scholars are of the opinion that megaliths cannot be associated with a single cultural group and that the south Indian graves appear as a developing complex with several streams of influences combining in them. Firstly, some of the megalithic burials are reminiscent of those of central Asia, Iran or the Caucasus, and might represent traditions introduced from these areas by Indo-European speaking immigrants. Secondly, some appear as developments of indigenous Neolithic-Chalcolithic burial customs of the Deccan.

Scholars have variously identified the megalithic complex with remains of the Aryans or the Dravidians. However, these claims are not acceptable. What seems certain is that these burial complexes emerged in a situation of greater interaction among various communities in south and north India. As pointed out earlier, a large number of agropastoral groups existed in these areas prior to the introduction of iron. Many of the burial customs of some of these communities continued in the Iron Age. Pottery burial was already practiced in Chalcolithic Inamgaon. Other features of the megalithic burials might have developed as local cultural innovations. However, some of the objects found in graves indicate contacts with areas to the north-west of India. Particular kinds of pottery, like bowl-on-stand, found in these graves are very similar in shape to those of some earlier graves found in north-west India and Iran. Similarly, finding of bones of

horses and implements used for horses indicates that horse riding people had arrived in these areas. Horses could have been brought from Central Asia only because wild horses are not found in India. Horse burial has been reported from Junapani near Nagpur. In place like Maski and Piklihal, rock paintings show groups of horse riders carrying metal axes. All this is indicative of greater contact with communities to the north-west of India. So, it could be convincingly stated that the Iron Age burials indicate a combination of indigenous and foreign influences.

7.10.3 Material Culture

As noted earlier, the material remains of Iron Age are represented by pottery with certain specificities, besides iron and other metal objects.

i) Pottery

The pottery that we discover from all the excavated graves is Black-and-Red ware. The characteristic types are:

- shallow tray bowls and deep bowls, both with a rounded base,
- conical lids with knobs or loops on the apex,
- pottery ring stands, and
- larger water pots with rounded bases, etc.

ii) Iron and other metal objects

Iron objects have been found universally in all megalithic sites right from Junapani near Nagpur in Vidharbha (central India) down to Adichanallur in the south: a distance of nearly 1500 km. They show use of identical tools. There is an array of iron objects:

- flat iron axes often with crossed iron bands for hafting,
- different types of flanged spade, hoe, and spud or pick axe,
- sickles,
- bill hooks,
- wedges,
- cowbars,
- spears,
- knives,
- chisels or adzes,
- iron tripods,
- pot rests,
- saucers,
- hook lamps,
- many armed lam-pendants,
- daggers,

- swords (some with oranamental bronze hilts),
- arrowheads and spearheads with hollow sockets,
- ceremonial scalloped axes,
- iron tridents etc.

In addition to these, there is a special group of objects which consists of horse furniture such as snaffle bits and two simple bar-bits with looped ends (which were recovered from Junapani), a kind of bar-bit with looped nose-and-mouthpiece (known from Sanur), etc. Among other metal objects, the most numerous are bells of copper or bronze, which might have served either as horse or cattle bells. Beads of semi-precious stones and gold objects have also been reported.

7.10.4 Subsistence Economy

Excavated habitation sites of the Iron Age are few. So it is difficult to form a clear picture of the economy of south Indian megalith builders. Some of the excavated sites have yielded remains of sheep/goat and cattle, and also millets and pulses.

An important feature of the iron objects which are grave-goods recovered from excavated burials is the uniformity in types. Such a wide distribution of identical types of iron objects right from Junapani (near Nagpur) to Adichanallur in the south, testifies to the movement of a fairly tightly knit group of iron workers. According to one scholar, the megalithic people of Tamil Nadu and Karnataka were proficient in tracing iron ore deposits and in the manufacture of a variety of iron objects. They were trading in these items, and gradually took to settled life. Yet another scholar has put forward the view that these groups were nomadic pastoralists with a greater reliance on sheep/goat herding.

The settlements found near megalithic complexes have very thin debris of occupation. This would indicate that these people were living in one area for very short time. May be, with the knowledge of iron they could colonize new areas. Thus, some of the population was nomadic and some settlements might indicate colonization of new areas. Where the settlements continue from the preceding period, people continued to live in their old ways. Use of iron tools enabled them to use granite stones for their graves. It is these agro-pastoral groups that enter the historical phase in early centuries of the Common era. They are mentioned in *Sangam* literature. Some of the graves have yielded Roman coins which suggests their entry into history and that their participation in trade networks spread over a large area.

Check Your Progress Exercise 6

1)	Write about the Iron Age in south India.		
2)	Write five lines on the economy of south Indian Megalith builders.		

History of India from the Earliest	
Times Upto C. 300 C.E.	

7.11 SUMMARY

By about *c*. 2000 BCE, agricultural communities came into existence in different parts of India. These agriculturists used tools and implements made of stone and copper. In north India, these communities used various kinds of potteries like OCP and BRW. A variety of copper tools have also been discovered. In central India and Maharashtra, black soil zone excavations have shown the existence of Kayatha, Malwa and Jorwe cultures. By about *c*. 750 BCE, many of these agricultural communities adopted iron technology. The Chalcolithic communities showed distinct variations in their pottery tradition. The Iron Age potteries called PGW and NBPW were used over a larger area. During this period, there was greater interaction among various communities and a transition towards urbanization was taking place. Finds at the sites belonging to different cultures give detailed information about settlement patterns, trade links, types of tools and ornaments, religious beliefs etc.

Farming communities emerged in south India around the middle of 3^{rd} millennium BCE. A large number of pastoral nomadic communities also came into existence in this period. Agriculturists grew various kinds of millet, grain and barley. Pastoral communities tended cattle, sheep and goats. Around the beginning of 2^{nd} millennium BCE, these communities started using copper and bronze tools. Some of these bronze tools show parallels with the tools found in north-western India. Iron was introduced in this zone towards the end of 2^{nd} millennium BCE. This period also saw the beginning of Megalithic burials. This introduced a change in settlement pattern for some of the communities, because they started burying their dead away from habitation areas. However, farmers continued to grow same crops and pastoralists continued with their old life style. This phase merged into early historic south India when the literate tradition began.

7.12 KEY WORDS

Archaeobotany	:	Study of remains of plants.
Arthashastra	:	A book traditionally attributed to Kautilya, minister of Chandragupta Maurya who ruled in 4 th -3 rd centuries BCE.
Arya	:	People who composed the <i>Vedas</i> and spoke Indo-European languages.
Brahmi Script	:	The earliest known script of historical India. Ashoka's inscriptions were written in the same script. Most of the modem Indian scripts like Tamil, Devanagri etc. are derived from it.
Burnishing	:	A form of pottery decoration in which surface of the pot is polished before firing.
Chalcolithic	:	Refers to communities which used copper and stone tools

Dravidian : People who spoke Dravidian languages.

Dry Farming : A system of tillage in dry countries, surface soil being kept constantly loose, so as to retain scanty

rains and reduce evaporation.

JatakasStories relating to previous births of the Buddha.

Jorwe Ware : A late 2nd millennium red painted pottery first

identified in Jorwe, Maharashtra.

Mound : Remains left by people of the past which look

like heaped up embankment on the relief.

Pit-Dwelling : A practice of making homes beneath surface of

the earth. Dwelling spaces used to be dug beneath

the floor.

Punch-Marked Coins : Coins made of copper and silver which came to

be used around 6^{th} - 5^{th} centuries BCE. They are

the earliest known coins of India.

Mortuary Practice: The practice of disposal of the dead.

Sedentary : Communities living in settled villages.

Thermoluminiscence Dating: A scientific method of dating ceramic material.

Type Site : Site where a particular culture was first identified.

7.13 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) Your answer should include the kind of pottery and its features; structures; crops; area of this culture etc. See Sec. 7.2
- 2) a) \times , b) \times , c) \times , d) \checkmark

Check Your Progress Exercise 2

- 1) Your answer should include colour of the pottery, its making-technique and difference in BRW of different regions, like the *doab* BRW is of plain surface while Gilund and Ahar BRW is painted. See Sec. 7.4
- 2) Here, take for example, the kind of semi-precious stones found. Since these were not available locally they were obtained through trade. See Sec. 7.5

Check Your Progress Exercise 3

- 1) The NBP Ware Culture got its name from the distinctive pottery type which is associated with this period. See Sec. 7.6
- 2) a) \checkmark , b) \times , c) \checkmark , d) \times

Check Your Progress Exercise 4

1) a)
$$\checkmark$$
, b) \times , c) \checkmark , d) \times , e) \checkmark

Chalcolithic and

Early Iron Age

- 2) There are quite large settlements, with evidence of layout planning. You should mention their planning and other features like oval fire pits, deep pit sites etc. See Sub-sec. 7.7.3.
- 3) This was a chance discovery. Mention the objects and their characteristics. See Sub-sec. 7.7.4.

Check Your Progress Exercise 5

- 1) i) \times , ii) \checkmark , iii) \times , iv) \times
- 2) See Sub-sec. 7.8.1
- 3) Since the economy depended on a combination of agriculture and grazing of cattle, it can be characterized as ago-pastoral. See Sub-sec. 7.8.2.
- 4) Your answer should include the following: these mounds were originally the sites for cattle pens where dung accumulated; they were created because of the burning of cow dung; and that this burning was perhaps a part of the rituals performed by Neolithic communities. Also see Section 7.9.

Check Your Progress Exercise 6

- 1) See Sub-sec. 7.10.1. Write the characteristics which distinguish one phase from the other.
- 2) See Sub-sec. 7.10.3

7.14 SUGGESTED READINGS

Deo, S. B. (1973). Problem of South Indian Megaliths. Dharwar.

Dhavlikar, M. K. (1988). The First Farmers of the Deccan. Pune.

Gururaja Rao, B. K. (1981). The Megalithic Culture in South India. Prasaranga.

Kennedy, K. A. R. and Possehl, G. L. (1984) (Eds.) *Studies in the Archaeology and Paleoanthropology of South Asia*. New Delhi.

Moorti, U. S. (1994). Megalithic Culture of South India. Varanasi.

Roy, T. N. (1983). The Ganges Civilization. New Delhi.

Sundara, A. (1975). The Early Chamber Tombs of South India. Delhi.

Tripathi, V. (1976). The Painted Grey Ware: An Iron Age Culture of Northern India. Delhi.

UNIT 8 THE EARLY VEDIC SOCIETY*

Structure

- 8.0 Objectives
- 8.1 Introduction
- 8.2 Sources
 - 8.2.1 Literary Sources
 - 8.2.2 Archaeological Sources
- 8.3 The Aryan Invasion A Myth or Reality?
- 8.4 Economy
- 8.5 Society
- 8.6 Polity
- 8.7 Religion
- 8.8 Summary
- 8.9 Key Words
- 8.10 Answers to Check Your Progress Exercises
- 8.11 Suggested Readings

8.0 OBJECTIVES

After studying this Unit, you will be able to:

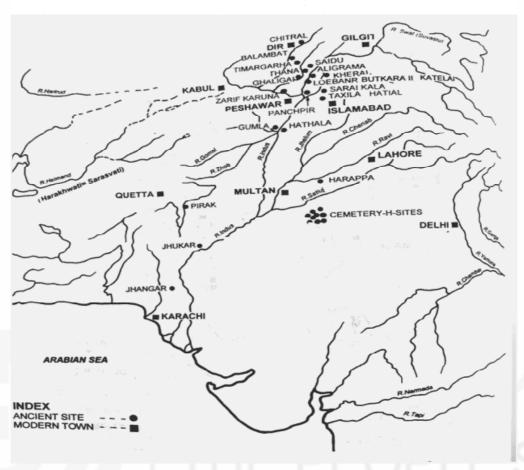
- learn about the various sources through which we can attempt to know about the Early Vedic period;
- examine the theory of a large scale migration by the Indo-Aryans through these sources: and
- know about the nature of economy, society, polity and religion of the Early Vedic people.

8.1 INTRODUCTION

In the previous Unit you saw that in the different regions of India communities of different stages of cultural development were present during c. 2000-1000 BCE. Their cultures were essentially agro-pastoral and our understanding of these cultures is based entirely on archaeological remains because, with the exception of Harappa culture, none of these cultures have left behind any written records. In this Unit and in the one following it, however, we will be focusing on the evidence provided by a voluminous body of what are considered to be the earliest literary records of India: the Vedic corpus, a vast sacerdotal literature. The *Vedas* were looked upon as not being created by humans (*apaurusheya*) but as divine revelations that were heard (*shruti*) by sages and seers (*rishis*). Not being written at the time of their being revealed they were handed down to posterity by a near perfect memorization almost syllable by syllable. This process is beautifully and strikingly analogized in the frog-hymn (*bhekastuti*) of the *Rigveda*. It

^{*} This Unit has been adopted from EHI-02, Block 3.

says that the students were supposed to memorize the hymns following the lead given by one, just like many frogs croak during the monsoons by imitating the first croaking frog. They were remembered meticulously and transmitted orally over multiple centuries, which depended on the correct pronunciation and articulation of the sound without any modification, addition or subtraction, till they were written down.



Early Indo-Aryan Sites. Adapted from R. S. Sharma, *India's Ancient Past*, Oxford University Press, New Delhi, 2005, p. 95.

We shall also try to supplement this literary evidence with, wherever relevant, the archaeological evidence. The *Rigveda* is regarded as the earliest collection of hymns available and so, we will start by examining this text for an understanding of the Early Vedic period and then go on to the other *Vedas* and allied texts which are dated later. This exercise is necessary for two reasons:

- Firstly, the *Vedas* are thought to have been composed by the Aryans and it was long believed that the Aryans played a major role in civilizing the Indian subcontinent. The contents of the *Rigveda*, if they are analyzed carefully, do not give the impression of a very advanced material culture. On the other hand, many of the material traits which are the characteristics of Indian civilization are already present in the non-Vedic archaeological cultures in different parts of India.
- Secondly, when the contents of the *Rigveda* are compared with those of the Later *Vedas* and allied texts it becomes clear that significant changes took place in the Vedic society itself. This means that there was no fixed cultural pattern which can be called Vedic culture or Aryan culture.

The *Rigveda* belongs to and is the only literary source for the Early Vedic period. The rest three *Vedas* are all dated later and, thus, labelled as the Later Vedic texts. Hence, what we understand by the expression the 'Vedic period' or the 'Vedic age' has two broad chronological divisions:

- Early Vedic/Rigvedic
- Later Vedic.

The core geographical area to which the evidence of the *Rigveda* relates was *Sapta Sindhava/Sapta Sindhu* (land of seven rivers) which corresponds to the whole of Punjab and its neighbouring regions, Haryana, the Gomal plains, southern Afghanistan and southern Jammu and Kashmir.

Earlier interpretations regarding the Early Vedic society are based on the theory of Indo-Aryan migration from west Asia into the Indian subcontinent. These migrants, who are regarded as the authors of the *Vedas*, are called the Vedic people. According to this historical interpretation the Aryans came to India in several stages or waves. The urban centers of Indus civilization perished by mid-2nd millennium BCE and the politico-administrative and economic system slowly withered away; the focus now shifting to rural settlements. It was perhaps around this time that the Indo-Aryan speakers entered north-western India from Indo-Iranian borderlands, migrating in small numbers through the passes in the north-western mountains and bringing with them their language, rituals and social customs; later merging with the local populace. They are considered to represent a linguistic group speaking Indo-European languages.¹ They are distinguished by traditional historians and archaeologists from non-Aryan Harappans of the preceding period.

However, in making certain observations on Early Vedic society it may be fruitful to see if literary texts and archaeological evidence can supplement each other. If both types of sources belong to the same region and to the same period they can collectively give us more detailed ideas on the economic, social, political and religious life.

Let us begin by referring to these sources.

8.2 SOURCES

8.2.1 Literary Sources

We must begin by referring to the following four Vedas:

- Rigveda,
- Samaveda,
- Yajurveda, and
- Atharvaveda

The word *Veda* is derived from the Sanskrit word *Vid* which means 'to know'. The *Vedas* are essentially compilation of prayers and hymns offered to various gods. Though they are primarily about religious life, rites, rituals and philosophical questions and issues, the invocations dedicated to various deities often throw light on many aspects such as victory in wars, long life, freedom from diseases, availability of cattle, horses, food etc. desire for male offspring and so on. However, it must not be forgotten that the Vedic corpus evolved over many centuries, almost a millennium. As such, it cannot be taken as a mirror image of a static society and culture. There were identifiable changes in the polity, economy, society and cultural life of the Vedic populace from the Rigvedic to the Later Vedic times.

¹ The term 'Indo-European' signifies the common, original family of languages of hoary antiquity from which Sanskrit, Iranian, Latin, Greek, German and other European languages spoken in south Asia, south-west Asia, Eurasia and Europe have descended. These languages, thus, share affinity and commonalty.

The four Vedas are also Samhitas in the sense that they represent the oral tradition of the time. Since the hymns were meant to be recited, learnt and transmitted orally they were not written when they were composed. Due to this reason none of the Samhitas can be dated with absolute certainty. In fact, each Samhitas represents a period of many centuries. As such, an absolute dating of the Vedic literature is out of question. Relative dating in terms of the context of these four Samhitas has led scholars to believe that the period represented in the Rigveda – the earliest of the Vedas – can be placed between c. 1500-1000 BCE (2^{nd} half of the 2^{nd} millennium BCE).

Rigvedic Samhita contains 1028 hymns (*suktas*) divided into 10 books (*Mandalas*) of unequal sizes of which books II to VII are considered to be the earliest and belong specifically to the Early Vedic phase. They are referred to as the "Family Books" after the name of the family or clan of poets who composed the hymns in them. Books I, VIII, IX and X are considered to be later additions. Among the commentaries on the *text* the best known is that of Sayana of the 14th century CE who lived in the Vijayanagara dominion. Without Sayanacharya's commentary it would have been impossible for Max Mueller to prepare the edited version of *Rigveda* in the 19th century.

The scholars found similarities in the language used in the *Rigveda* and *Avesta* – the oldest Iranian text – which is older to the *Rigveda*. The linguistic and cultural parallels between the *Avesta* and *Rigveda* occur not only in words but also in concepts. For example, the interchangeability of 'h' and 's' – *haoma*, *daha*, *hepta hindu*, *ahura* in the former and *soma*, *dasa*, *sapta sindhu*, *asura* in the later. In the context of deities the attributes of gods are often reversed. The *asuras* are projected in the *Rigveda* as demons and enemies of the Gods (*devas*). In the *Avesta* the *daevas/devas* such as Indra are demonic whereas *ahura/asura* is the supreme deity. Based on these similarities and taking into account the chronological precedence of the *Avesta* over the *Rigveda* they suggested that:

- i) The people represented in both these books belonged to a common linguistic group and they migrated from West Asia and Iran to the Indian subcontinent. These people were called the 'Aryans'. This has led to the assumption that the old Iranian and the Indo-Aryan speakers were, originally, a single group whose dissensions resulted in their branching up. Considering the geographical proximity of Iran with north-western borderland of the Indian subcontinent it could be suggested that the Indo-Aryan speakers, following a dissention, migrated to the Indian soil. They created the *Rigveda* upon coming to India.
- ii) The Aryans had a common original home from where different groups migrated to Europe and the East. According to Bal Gangadhar Tilak and Georg Biedenkapp, the Arctic zone was the original home of the Aryans. However, this theory is not accepted at large.

However, the debate regarding their original home is no longer valid since the concept of a common racial identity for the Aryans has now been proved false. But a common linguistic identity is still believed by the historians and on this basis some of them still insist upon the theory of Aryan migration.

8.2.2 Archaeological Sources

Excavations in Punjab, Uttar Pradesh, northern Rajasthan along the Indus and Ghaggar rivers over the last 40 years have unearthed many post-Harappan Chalcolithic settlements which have been dated from *c*. 1700 to 600 BCE. You have read about these centuries in Unit 7. You have seen that these Chalcolithic cultures are also called late Harappan,

The Early Vedic Society

OCP (Ochre Coloured Pottery), BRW (Black- &- Red Ware) and PGW (Painted Grey Ware) cultures.

However, we must remember that the pottery types do not reflect an entire culture. Different pottery types do not necessarily mean that the people who used these pots also differed. Pottery analysis only helps in defining a specific trait of the cultural assemblage, nothing more. Some scholars have made attempts to examine whether the evidence provided by some of these cultures of north-western and northern India can be compared with what we know from a study of Vedic texts.

8.3 THE ARYAN INVASION – A MYTH OR REALITY?

Was the Aryan invasion a myth or a reality? Let us see to what extent does archaeological evidence help us in answering this question.

The archaeologists have attempted to relate the various post-Harappan cultures with the Aryans. The Painted Grey Ware Pottery, which has been dated between c. 900-500 BCE, has been repeatedly connected with Aryan craftsmanship. Their argument is based on inferences which the historians make from their analysis of literary texts. Hence, the archaeologists, following linguistic similarities found between the *Rigveda* and *Avesta*, tried to find similarities in pottery forms, paintings on ceramics and forms of copper objects etc. between post-Harappan and West Asian/Iranian Chalcolithic assemblages. Such similarities were magnified to support the view that the Aryans were a group of people who migrated from West Asia to the Indian subcontinent. Thus, the literary and archaeological sources were made to support one another in order to validate the notion of migration.

Linguistic similarities between the *Rigveda* and *Avesta* are well established as we have seen. But, such similarities do not really suggest large-scale migration of people into the Indian subcontinent. Secondly, the similarities which have been found between the Chalcolithic artefacts of India and those of Western Asia are only occasional. They also do not suggest large-scale migration of people. The concept of an "Aryan", as stated before, cannot be equated with any particular type of pottery. It also does not have any ethnic or racial significance. The 'Aryan' is, therefore, at best, a vague concept related to linguistic similarities between people.

In this context you should take into account the following points suggested by archaeological excavations at various sites:

- i) Earlier scholars believed that Indo-Aryans caused the downfall of Harappan civilization by destroying the Harappan towns and cities. They quoted Rigvedic hymns which invoke Indra to destroy the dwellers of forts. But, archaeological evidence has shown that the decline of Harappan civilization was not caused by any large-scale destruction brought about by an alien invading group (See Unit 5 Harappan Civilization: Chronology, Geographical Spread, Diffusion and Decline).
- Attempts to identify the makers of Painted Grey Ware with the Aryans also do not receive strong support from archaeological evidence. If the PGW cultures were related to the Aryans then keeping the theory of invasion in mind we should have found this pottery type in areas of Bahawalpur and Punjab i.e. along the route taken by the so-called Aryan migrants. However, we find these pottery types confined to a particular geographical region comprising Haryana, upper Ganga basin and eastern Rajasthan.

iii) It was earlier thought that there exists a time gap and hence, a cultural discontinuity between the late Harappan and the post-Harappan Chalcolithic period.

However, the recent excavations at Bhagwanpura and Dadheri (Haryana) and Manda (Jammu) have shown that late Harappan and Painted Grey Wares could be found together without any breaks. Hence, "invasion" cannot be proved on the basis of excavated sites.

What disappeared after c. 1750 BCE were the urban centres of Harappan civilization and such artefacts as seals, weights, measures etc. – i.e. articles connected with trade and urbanizm. The rural structure of the earlier period continued into the 2^{nd} and the 1^{st} millennium BCE. The variation found in the archaeological remains of the post-Harappan period – in pottery, metal implements and other objects – may also represent "regional" variations in the Indian Chalcolithic cultures.

Archaeological evidence relating to the period between 2^{nd} millennium and 1^{st} millennium BCE has, thus, helped us modify existing views regarding the Vedic 'Aryans' in several ways:

- Firstly, there is no substantial proof in archaeology that there was large-scale migration of people from central or western Asia into the Indian subcontinent around 1500 BCE.
- Secondly, archaeologically there is no proof that the Aryans destroyed the Harappan civilization and laid the foundation of a new Indian civilization. In fact, although the *Rigveda* repeatedly refers to hostilities, skirmishes and wars between different groups; some between those who called themselves *aryas* and some among the *aryas* and *dasas*. But, the so-called clashes between Aryan and non-Aryan communities and cultures are not documented in archaeology. However, since the *Rigveda* is the earliest collection of religious hymns available to us its importance as a document of history is immense. The hymns provide such insights into various aspects of Early Indian society as would not be available in archaeological evidence. From them we get insights regarding the nature of economy, social organization, kingship and political organization, religious and cosmological beliefs and so on. Much of this information is relevant and useful also for understanding the nature of Indian society at later stages. We, therefore, now turn to what we learn from *Rigveda* about the Early Vedic society.

Check Your Progress Exercise 1

1)	What are the four <i>Vedas</i> ? Which <i>Veda</i> belongs to the Early Vedic period?			
2)	Is the theory of Aryan invasion acceptable in the light of archaeological excavations? Give arguments of the archaeologists in about 100 words.			



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- 3) Write 'Yes' or 'No' against each sentence.
 - i) Our knowledge of the Early Vedic period is based on only the literary sources.
 - ii) The *Vedas* are essentially compilations of prayers and hymns offered to various gods.
 - iii) The Avesta is the oldest Iranian text.
 - iv) The linguistic similarities between the *Rigveda* and *Avesta* are enough grounds to validate the notion of 'Aryan' migration into the Indian subcontinent.

8.4 ECONOMY

The Early Vedic society was pastoral; cattle-rearing being the dominant occupational activity. A pastoral society relies more on its animal wealth than agricultural produce. Pastoralism is a subsistence strategy adopted by people who live in areas where large-scale agriculture is not feasible due to some environmental and, to a certain extent, cultural constraints

The hymns of *Rigveda* yield extensive evidence of the importance of cattle. Many linguistic expressions in it are associated with cow (*gau*). It was a measure of wealth and value. A wealthy man who owned many cattle was called *gomat*. The terms used for conflicts and battles are:

- gavishti,
- gavesana,
- gavyat etc.

The former literally means "to search for cows". These terms themselves suggest that possession of cattle was the bone of contention between groups and led to occasional inter-tribal fights and disputes. The *Panis* – enemies of the Vedic people – are stated in the *Rigveda* to have hidden their wealth – mostly cows – in mountains and forests. The Vedic god Indra was invoked to release these cattle. This reference suggests that cattle raids and armed conflics for cattle were common. The *raja* or the chief is called *gopati*, one who protects the cows. In the text *Godhuli* is used as a term for a measure of time. Distance is called *gavyuti*. A daughter is called *duhitr*: one who milks the cows. Kinship units are labeled as *gotra*. A person rich in cattle (*gomaan*) was considered wealthy (*maghavan*) and eligible for membership of the *sabha* (*sabhasad*). All these terms are derived from *gau* and suggest that social, religious and all other important areas of Rigvedic life centered round the rearing of cows. Literary references to pasture lands, cow-pen, dairy products and domesticated animals are also found in most of the hymns and prayers. It appears that cow was looked upon as a totem animal and also an object of veneration.

Besides cow, horse was also immensely important as this animal was crucial to movement in search of pastures and in war. In mythology it is projected as drawing not only the chariots of men but also those of gods. And where the grazing grounds were extensive it was easier to herd cattle from horseback.

Compared to the very substantial linguistic evidence for cattle rearing in *Rigveda*, agricultural activities find very few references. Most of the references to agriculture are of a later date. Apart from Yava (barley) no other grains are mentioned. The Early Vedic people were not familiar with iron technology. Copper, with which they were familiar, did not have as much value in agricultural operations as iron implements. Stone tools like axes were used and these are mentioned in the Rigveda. Shifting agriculture was practiced. Further, the region under discussion receives low rainfall and all the rivers mentioned in the Rigveda i.e. the Sutlej, the Indus, the Ghaggar, the Ravi etc. are known to change their courses frequently. Without the facilities of large-scale irrigation which were not developed in this period the alluvial lands near the rivers could not be cultivated on a permanent basis. Thus, hoes, sickles and axes mentioned in the text were probably used for slashing purposes or shifting cultivation. The evidence of pastoralism as well as shifting cultivation suggests that people were either nomadic or semi-nomadic. They moved out of their villages with their herds for a certain period in order to feed their cattle. The literary and the archaeological sources do show that they did not lead a fully sedentary life. The mobile character of the population is seen in the term vish which implied a settlement. The suffixes Punar (vish), Upa (vish) and Pra (vish) are constantly used and the settlements were qualified by them to mean settling near (a settlement), re-entering (a settlement) or coming back (to the settlement).

Gift exchange and redistribution had an important economic role in society. Tribal conflicts led to the payment of tributes and prestations — bali — to the victorious chief by the defeated or subordinated groups. The term later came to mean an offering to the gods. There was no regular tax that he could claim, nor did he have any rights on the land. He was entitled to a part of the booty from successful cattle-raids after bhaga (shares) had been distributed and he, obviously, claimed a larger one. There is also the mention of shulka meaning the value or worth of an item. The rest of the clansmen of the victorious tribe had a share in the spoils and booty won in war. The chief also fed and gave gifts to his clansmen during ceremonial occasions to acquire prestige. Evidence of trade and commerce in the Early Vedic society is meager. There was no concept of private property based on land-ownership.

8.5 SOCIETY

The Early Vedic society was a tribal society in which the social relations based on kinship ties were predominant. The society was not divided according to caste lines and even *rajas* (kings), *purohits* (priests), artisans etc. were part of clan networks. The tribe was referred to as *jana* and many references to different tribes are found in the *Rigveda*. Inter-tribal conflicts, chiefly related to cattle raids and thefts, were frequent; an example being the Battle of 10 Kings mentioned in the *Rigveda*. Some of the tribes who fought in this battle were:

- i) The Bharatas,
- ii) The Purus,
- iii) The Yadus,
- iv) The Druhyus,
- v) The Anus, and
- vi) The Turvasus.

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The chief of tribe was the $raja^2$ or gopati. He was the military leader in battle and protector of the tribe. His office was not based on heredity but he was selected from amongst the clansmen. His skills lay in safeguarding the settlement and winning booty: both crucial to his status. The warrior category was the rajanya. Many clans (vish) formed a tribe. The clans settled in villages (grama). The basic social unit was Kula (family) and Kulapa (one who protects the family) denoted the eldest male member or the head of the family. A number of kulas made a grama, suggesting the settlements based on kinship ties. The Family Books suggest that the family, as a social unit, extended over three generations, with the sons often living collectively in parental home.

Tribe (*Jana*), Tribal Unit (*Vis*), Village (*Grama*), Family (*Kula*), Head of the family (*Kulapa*).

The society was patriarchal. The birth of a son was the common desire of people and was especially welcome, as a son's presence became increasingly significant in various ceremonies. The importance given to male members is reflected in hymns where the desire for a son is a constant prayer. However, the women had also important position in society. They were educated and had access to assemblies. There are also instances of women who composed hymns. They had a right to choose their partners and could marry late. But, they were always thought to be dependent on their fathers, brothers or husbands. Education was imparted orally but the tradition of education was not very well developed in this period.

The authors of *Rigveda* distinguished themselves from other groups whom they called the *Dasas* and *Dasyus*. The term *dasa* is deployed in *Rigveda* to denote the other person of different culture. The *Dasas* are described as dark, full-lipped, snub-nosed, worshippers of phallus and of hostile speech. They are admonished in the *Rigveda* for not observing the rituals but rather practicing a fertility cult. They were rich in cattle and lived in fortified strongholds. We learn about another people called the *Panis* who were wealthy in cattle treasures. The term *Pani* came to be associated with merchants and wealth in subsequent ages. These groups fought and befriended each other from time to time and one cannot define them as separate racial or linguistic groups. The most famous chief mentioned in the *Rigveda* is Sudas who led the Bharata tribe in the Battle of 10 Kings. The *Dasa* ending in his name might suggest some links with the *Dasas*. However, the presence of different groups in the same area might have contributed to the emergence of *Varna* system.

Various occupational groups such as weavers, smiths, carpenters, leather workers, chariot-makers, priests etc. are also mentioned. The chariot-makers occupied a special social status. There are no references to beggars, wage-earners or wages in *Rigveda*. However, the society was economically stratified and we do find references to rich people possessing chariots, cattle etc. and making generous gifts of them.

There were no legal institutions. Custom was law and discretion of the tribal chief and priest was final. However, the elders of the community seem to have had a say too. Theft, particularly cattle-stealing, were the commonest crimes. The retribution for killing a man was 100 cows.

² The word *raja* is derived from the root which means 'to shine' or 'to lead'. However, its etymology in the Epics is associated with another root –'to please' – implying that the *raja* gratifies the people.

Check Your Progress Exercise 2

	at do you understand by 'pastoral society'? Why was it the dominant upational activity of the Early Vedic people?
•••••	
Wh	at was the importance of cattle in the Early Vedic Society? Answer in 50 ds.
Dis	cuss five important characteristics of the Early Vedic society.
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•••••	
Fill	in the blanks with appropriate word.
i)	In the Early Vedic society the <i>raja</i> or chief was called (<i>gomat/gopati</i>).
ii)	The chief cause of occasional inter-tribal fights and conflicts of this period was possession of (cattle/land).
iii)	Except (yava/rice) no other grains are mentioned in the Rigveda.
iv)	The basic social unit was (kula/clan).
v)	The Early Vedic society was based on (polygamy/monogamy).

8.6 POLITY

The tribal polity was not completely egalitarian. A division is found in the *Rigveda* itself, which is seen in the references to two groups – the *Rajanyas* or those who fought the wars and are credited to be the senior lineage, and the rest of the clansmen or the *vish* who formed the junior lineage. Though none of the groups occupied a distinct social hierarchy, constant conflicts and inter-tribal wars helped to create a division in society. The growing needs for more pasture lands and cattle, for protection of people and their settlement, all probably contributed to an increase in inter and intra-tribal conflicts and

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warfare. The clans held large *yajnas* (sacrifices) to ensure the victory of warrior groups in skirmishes. In these *yajnas* the officiating priest (*purohita*) acted as the mediator between his clansmen and the gods. He invoked the gods' blessings for the tribal chief, for his success in wars. Initially the whole clan participated in these *yajnas* on an equal footing. Large scale distribution of wealth, food etc. was made during these sacrifices and the members got an equal share. But, with the growing incidence of conflicts and fights the *yajnas* also became important and the *purohita* assumed a special status in society. In the later part of our period they received a major share of the gifts from the *rajas* and assumed a superior position vis-à-vis the other clan members.

The office of the *raja* assumed importance on account of wars. The division between senior and junior lineages became sharper. At what point of time these political distinctions became apparent is difficult to state but we must remember that the 10th book of *Rigveda* contains the *Purusha-Sukta* hymn on the origin of the four *varnas*, and in the Later Vedic texts we find evidence of the superior *rajanya* groups assuming the status of *Kshatriya* – a separate *varna* by itself. These developments took place after *c*. 1000 BCE. This does not mean that the society was stagnant during our period of study. In fact, it was changing slowly but surely leading to the development, in the Later Vedic phase, of a complex socio-political structure (see Unit 9).

Tribal assemblies e.g. the *gana*, *vidatha*, *sabha* and *samiti* are mentioned in the *Rigveda*. The *sabha* may have been the council of select clan members. As such, it was exclusive. The *samiti* comprised the whole clan. The *vidatha* was the gathering at which, among other things, the booty acquired in a raid was distributed. These assemblies performed the functions of the government and administration and were also involved in the selection of *raja* from amongst the clansmen. They, thus, kept the power of the warriors in check. However, as stated before, though we do not find well-defined political hierarchy in the Early Vedic set-up the changes during the period gave rise to a socio-political hierarchy which manifested itself in the origin of the *varna* system during the Later Vedic phase. The Early Vedic society was governed by tribal values and norms and was largely egalitarian.

8.7 RELIGION

The religious ideas of the Vedic people are reflected in the hymns of the *Rigveda*. They venerated the natural forces around them like wind, water, rain, thunder, fire etc. which they could not control and invested nature with divinity conceived in human forms which were mostly masculine. Very few female deities were venerated. The religion, thus, reflected the patriarchal society and was that of primitive animism.

Indra was the god of strength who was frequently invoked to destroy the enemies. He was venerated as the ideal hero, foremost in war, always ready to strike down the demons, to destroy the settlements of the *dasas* and to aid those who propitiated and worshipped him. He was the god of storms and thunder and was the rainmaker who was requested periodically to release the rains. He could not be vanquished. Therefore, thunder and rain (natural phenomena) were related with strength which was personified in a masculine form, represented in the god Indra. The concept of a tribal chief, who was a war-lord, is also found represented in the character of Indra.

Agni, next in importance to Indra, was the god of fire. Some beautifully evocative hymns in the *Rigveda* are dedicated to him. He was the epicenter of many domestic rituals such as marriage. Deemed as the purest of the five elements, he was considered to be an intermediary between heaven and earth i.e. between gods and men. He

dominated the domestic hearth and marriages were solemnized in his presence. The worship of Agni ascribed symbolic significance to the hearth as the most venerated part of the homestead and the nucleus of the household. Fire destroyed dirt and germs and hence, Agni was considered to be pure. The importance of Agni can be related to that of the *yajna* in the Early Vedic society. It was believed that the oblations offered to Agni were carried to the gods in the form of smoke.

Varuna personified water and he was the upholder of the natural order of the universe. Yama was the god of death and had an important place in the Early Vedic religious belief.

There were many other gods e.g. Surya (Sun), Soma (a drink), Savitri (a solar deity to whom the most popular *Gayatri Mantra* is dedicated), Rudra etc. and hosts of celestial beings like *Gandharvas*, *Apsaras*, *Maruts*, *Vishvadevas* to whom prayers are addressed in the *Rigveda*. The *soma* sacrifice was a key ritual which has been believed to be specific only to Iran and India. The *soma* plant was stated to grow in the northwestern mountains. The juice of *soma* plant was drunk on solemn occasions and it served as a hallucinogen. An entire book of the *Rigveda* is dedicated to *soma* and entails a complicated symbolism.

The Vedic religion was sacrificial. Sacrifices (yajnas) were performed to:

- invoke the gods, and
- ask for boons like victory in battles; acquisition of cattle, sons etc.

Small oblations were confined to the domestic sacrifice but from time to time large sacrifices were conducted for which the clan brought substantial prestations. Public sacrifice was regarded a solemn occasion. The wealth procured and collected by the *raja* by means of voluntary tribute and prestations from the *vish* was invested and consumed in the *yajna*. Gifts were also given on such occasions to other *rajas* and to the *purohita*. Fire altars varied from small domestic structures to impressively large structures especially constructed for more elaborate sacrifices. *Yajnas* took place on specific days and at specific times believed to be auspicious. The patron (*yajamana*) was consecrated for the period of the sacrifice. The sacrificial ground was also first consecrated and then de-sanctified at the close of the sacrifice, leaving no permanent location for conducing rituals. There is no mention of the worship of images at this time.

We find some hymns dedicated to the power residing in the sacrificial implements, especially to the sacrificial altar, to the stones used for pressing the *soma* plant, to the plough, weapons of war, drums, mortars and pestles. Hymns were recited in these sacrifices and generally the priests performed these *yajnas*. The growing importance of sacrifices in the Vedic society resulted in the growing importance of priests as well. The ritual of sacrifice also led to the growth and development in the knowledge of mathematics. Elementary mathematics was necessary to make the calculations which were required to establish the positions of various objects in the sacrificial area. Basic geometry was needed to sort out the number and size of mud bricks required for building the sacrificial altars. It has been suggested that the use of bricks and mathematical calculations may have been derived from a Harappan tradition harking back to the construction of platforms. However, the rituals described in the *Rigveda* did not need large-scale brick made altars and these find mention in the later corpus of the Vedic literature.

Also, the frequent sacrifices of animals led to a knowledge of their anatomy. For the Vedic people the world grew out of a vast cosmic sacrifice and was maintained by the proper performance of sacrifices. Religion was not based on magico-ritual formulae,

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rather it stressed direct communication with gods through sacrifices, hymns etc. Gods were worshipped neither for the spiritual upliftment of the people nor for any other abstract philosophical concept, but were invoked to grant material gains.

Sacrificial religion is a religion of the pastoral people. Animal sacrifice is rampant in pastoral society where older animals who can no longer produce milk or meat, or used for breeding purposes, i.e. those who are no longer economically viable, are killed in order to lessen the burden on their owner. Hence, animal sacrifice was one way of getting rid of old animals and, thus, had an important role in society. In agrarian society, however, older animals are employed in fields, used for traction purposes and, hence, the destruction of animals is frowned upon by a society which primarily depends on agricultural activities. Thus, the Vedic religion reflected the patriarchal pastoral society and was materialistic in perspective.

Check Your Progress Exercise 3

1)		at was the position of the <i>Rajan</i> in the Early Vedic polity? Answer itences.	ın fi	ive
	••••			
	••••			
2)	Dis	cuss the nature of religion of the Early Vedic people.		
	••••		••••	
	••••		••••	
	••••			
	•••••		••••	
3)	Rea	and the following statements and mark right (\checkmark) or (\times).	••••	•
	a)	The <i>purohita</i> (priest) had no special place in society.	()
	b)	The sabha and samiti had no power in the selection of the raja.	()
	c)	Indra – the god of strength – was the most important god of the Early people.	Vec	dic)
	d)	Gods were worshipped for the spiritual upliftment of people.	()
	e)	Religion was not based on magico-ritual formulae.	()

8.8 SUMMARY

In this Unit you have learnt about literary and, to some extent, the archaeological sources which help us in reconstruction of the Early Vedic society. In the light of archaeological evidence it is difficult to accept the notion of a large-scale Aryan migration. Also, we cannot look at the early 1st millennium BCE as a period of Aryan conquest that led to

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the spread of a homogeneous Aryan culture over northern India. The archaeological excavations do not support the theory of a conquest.

The Early Vedic economy was mainly pastoral and cow was the most important form of wealth. Agriculture had secondary importance in the life of the Early Vedic people.

The Early Vedic society was tribal and basically egalitarian. Clan and kinship relations formed the basis of society and family was the basic social unit. Social divisions based on occupations had started but there was no caste division.

In the Early Vedic polity the tribal chief or *rajan* and priest or *purohita* had important positions. Among several tribal assemblies the *sabha* and *samiti* played very important roles. Though there was no well-defined political hierarchy in the Early Vedic set up the tribal polity was not completely egalitarian.

The Early Vedic people personified the natural forces e.g. wind, water, rain etc. and worshipped them as god. They worshipped god not through any abstract philosophical concept but for material gains. There was growing importance of sacrifices (*yajnas*) in the Vedic religion.

What you must remember is that this society was not static but dynamic. Between about 1500-1000 BCE the society was constantly evolving and newer elements in economic, social, political and religious sphere were operating to transform its structure.

8.9 KEY WORDS	
Artefact	: Something made by human being, e.g. a simple tool or weapon, of archaeological interest.
Bali	: Tributes and prestations paid to the victorious chiefs by the defeated groups.
Clan	: Large family group found in tribal communities.
Kinship	: Relationship by blood.
Nomad	: Member of a tribe that wanders from place to place and who has no fixed home.
Patriarchy	: Male-dominated family or tribe.
Animism	: The attribution of a soul to natural objects and phenomenon.
Semi-Sedentism	: Settlers who do not settle in a place permanently and move to a new settlement.
Shifting Agriculture	: After the use of a land for cultivation for a short period it is left and fresh land is used.
Stratigraphy	: Layers detected in excavation. The basis for detecting these layers could lie in the different soil types or different artefacts found in the excavated profile.

8.10 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) Rig, Sama, Yajur, Atharva. Rigveda
- 2) The archaeological sources do not support the theory of Aryan invasion or large scale migration. Your answer should include the arguments of the archaeologists against the notion of large-scale destruction of the Harappan civilization by the Aryans, cultural discontinuity between the late Harappan and the post-Harappan Chalcolithic period etc. See Section 8.3
- 3) i) No, ii) Yes, iii) Yes, iv) No

Check Your Progress Exercise 2

- 1) A society which is basically dependent on cattle wealth. Because large-scale agriculture was not possible due to some environmental and cultural constraints. See Sec. 8.4
- 2) Cattle was the basic source of wealth in the Early Vedic society. You have to write about the importance of cattle in different spheres of life. See Sec. 8.4
- 3) Your answer should include that it was a tribal society, the society was patriarchal, family was the basic social unit, caste division was not there etc. See Sec. 8.5
- 4) i) *gopati*, ii) cattle, iii) *yava*, iv) *kula*, v) monogamy

Check Your Progress Exercise 3

- 1) Your answer should include that *Raja* was the chief of the tribe, frequent wars made him important, he was the protector of the tribe, his position was not always hereditary etc. See Sec. 8.6
- 2) The Vedic people worshipped various forces of nature as god, stress was on sacrifice but not on magico-ritual formulae, the religion was driven towards material gains etc. See Sec. 8.7
- 3) i) \times , ii) \times , iii) \checkmark , iv) \times , v) \checkmark

8.11 SUGGESTED READINGS

Bryant, E. (2000). The Quest for the Origins of Vedic Culture. Delhi.

Deshpande, M. M. and Hook, P. (1979). (Eds.) *Aryan and Non-Aryan in India*. Ann Arbor.

Kuiper, F. B. J. (1991). Aryans in the Rigveda. Amsterdam.

Lincoln, B. (1981). *Priests, Warriors and Cattle*. Los Angeles.

Mallory, J. P. (1989). *In Search of the Indo-Europeans: Language, Archaeology and Myth.* London.

Masica, C. P. (1976). Defining a Linguistic Area: South Asia. Chicago.

Pargiter, F. E. (1922). The Ancient Indian Historical Tradition. London.

Rau, W. (1976). The Meaning of 'Pur' in Vedic Literature. Munich.

UNIT 9 CHANGES IN THE LATER VEDIC PHASE*

Structure

- 9.0 Objectives
- 9.1 Introduction
- 9.2 Sources
 - 9.2.1 Literary Sources
 - 9.2.2 Archaeological Sources
- 9.3 Iron Technology and its Impact
- 9.4 The Nature of Economy
 - 9.4.1 Importance of Pastoralism Declines
 - 9.4.2 Changes in the Functions of Rituals
 - 9.4.3 Emerging Importance of Land
- 9.5 Polity and Society
 - 9.5.1 Polity
 - 9.5.2 Society
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 - 9.6.1 Priestcraft
 - 9.6.2 The Changing Gods
 - 9.6.3 Folk Tradition
- 9.7 Summary
- 9.8 Key Words
- 9.9 Answers to Check Your Progress Exercises
- 9.10 Suggested Readings

9.0 OBJECTIVES

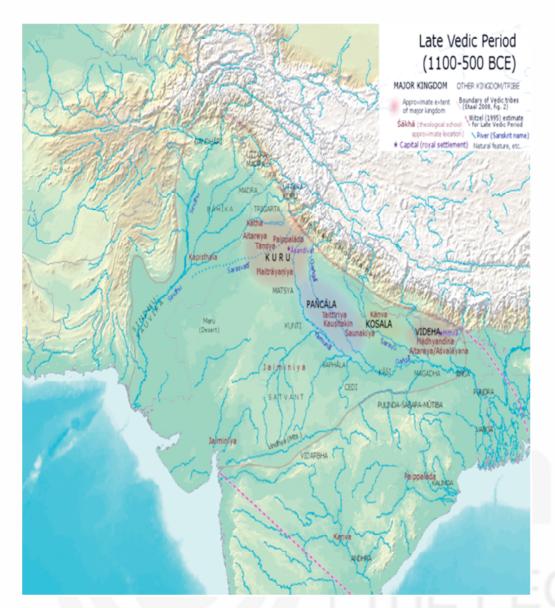
After reading this Unit, you will be able to know about:

- the sources which enable us to study the Later Vedic society;
- changes in the social, political, economic and religious structure during the Later Vedic period; and
- the socio-economic implications of change in technology with the introduction of a new metal, i.e. iron.

9.1 INTRODUCTION

The period which you are going to study now extends roughly from c. 1000 BCE to c. 600 BCE. By this period some of the Vedic tribes had moved from the *Sapta Sindhava/Sapta Sindhu* region to the upper Ganga valley and other adjacent regions. During the period of this shift a number of changes in their social, political, economic and religious structure took place. In this Unit we will discuss the major aspects of these changes.

^{*} This Unit has been adopted from EHI-02, Block 3.



Later Vedic Period Map showing the Boundaries of *Aryavarta* with *Janapadas* in Northern India, Beginning of Iron Age Kingdoms in India – Kuru, Panchala, Koshala, Videha. Credit: Avantiputra7. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/Vedic_period#/media/File:Late_Vedic_Culture_(1100-500_BCE).png).

9.2 SOURCES

We have both literary as well as archaeological sources to investigate and study this period.

9.2.1 Literary Sources

Later additions, especially the 10th mandala of the Rigveda and Sama, Yajur and Atharva Veda are the other Vedic texts which are ascribed to the Later Vedic phase.

- Sama Veda is a book of prayers and chants which are from the Rigveda, modified and set to tune for the explicit purpose of singing them during the rituals.
- *Yajur Veda* elaborates the rituals which accompany the recitation of hymns.

The rituals and the hymns in this *Samhita* document the social and political milieu of this period.

• Artharva Veda contains the folk tradition of this period and represents the popular

religion. It is a good source for understanding the socio-religious conditions of the common people.

These *Samhitas* are followed by a series of texts called the *Brahmanas* which are commentaries on the *Vedas*. They explain the social and religious aspects of the rituals and throw light on the Vedic society. Although it would be wrong to take any period of early Indian history as the "Epic" period as such, the two Sanskrit Epics – the *Mahabharata* and *Ramayana* – are rich in information on different aspects of the early Indian society. Historians believe that the core of what is reflected in these epics can be traced to the Later Vedic phase. The geographical focus of this phase was on the territories of the upper and middle Ganga basin, although other regions are also mentioned. In the Epics also the major events took place in this region. We must, however, remember that there is nothing to prove that the stories narrated in the Epics were actual historical events. Secondly, both the Epics took many centuries to reach their present shape. So, there are many types of societies which we may find simultaneously reflected in the Epics.

9.2.2 Archaeological Sources

Literary sources repeatedly refer to the areas of present western UP, Haryana and Rajasthan. The period assigned to the Later Vedic phase is circa 1000 BCE to 600 BCE. Many communities and cultural groups are mentioned in the texts. Thus, particular pottery forms cannot be identified with some tribe or group. However, in the same geographical region some agricultural communities flourished in roughly the same time bracket. These communities used a particular kind of pottery called the Painted Grey Ware (PGW). Thus, these archaeological finds would reflect the material conditions of the Later Vedic society.

More than 700 PGW sites have been found along the upper Ganga basin. Their distribution extends from the dry beds of the river Ghaggar in Bahawalpur and northern Rajasthan, to the watershed of the Indus and Ganges and the Ganga-Yamuna doab. The eastern limits of this Ware are restricted to the northern plains of the Ganges, as the site of Sravasti indicates. Some important PGW sites are:

- i) Atranjikhera,
- ii) Ahichhatra,
- iii) Noh,
- iv) Hastinapura,
- v) Kurukshetra,
- vi) Bhagwanpura, and
- vii) Jakhera.

The Banas culture of southern Rajasthan, which has been dated at *c*. 2000-1400 BCE may have possibly extended to the Ganges valley around 800 BCE. Thus, these Black-and- Red Ware users can also be related to the present period. Archaeology does not document the eastward shift of the "Vedic Aryans" – a shift which is suggested in the literary texts. Archaeology does not document any single culture shifting eastwards. Thus, there remains a large gap between the nature of literary and archaeological sources. There is, however, the general point that the Later Vedic society as well the society reflected in archaeology was a society which had used iron.

Iron objects are common to most of the PGW sites. The Carbon-14 dates from Atranjikhera, Jodhpura and Noh suggest that in the context of Gangetic plains this

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metal was introduced around 1000-800 BCE. The exploitation of iron ore in UP, Himachal and Punjab, and later in south Bihar, was an indigenous phenomenon. The *Rigveda* mentions "ayas" which may refer to iron, though the archaeological evidence relates iron to the Later Vedic period. The literary sources provide ample corroboration of this. The *Yajurveda* qualifies "ayas" as *Shyam ayas* and the *Brahmanas* speak of *Krishna ayas*. Both words refer to a black metal which means iron. Recent excavations suggest that the Megalithic people of south India, too, were familiar with iron technology. Hence, we can no longer talk in terms of the introduction of iron technology into the Indian subcontinent by the migrant Aryans.

9.3 IRON TECHNOLOGY AND ITS IMPACT

An important question to be asked here is: does the knowledge of iron lead to any advancement in the metal technology of the period? Similarly, one would also like to know the extent to which the introduction of a new technology changes the material milieu of society.

The evidence of the Later Vedic period suggests a transition from a pastoral society to a sedentary agrarian society. It was earlier suggested that the socketed axes made of iron were extensively used to clear the forests and the Gangetic doab for permanent cultivation. It was also believed that iron-tipped ploughshares and hoes increased the efficiency of agricultural implements which furthered agricultural activities. Thus, scholars believed that the knowledge of iron technology was an important factor for the development of agrarian economy. However, we now know that the Later Vedic period was neither purely agrarian nor was it well advanced in iron technology. The rich iron ore mines of Bihar were still not exploited and the technology of smelting iron was primitive.

The objects which are found in excavations are iron-tipped arrowheads, spearheads etc. i.e. weapons of which the largest number comes from the Ahichhatra excavations. Sickles, hoes, axes are rarely found in the excavations. One ploughshare has been reported from Jakhera which probably belongs to the end of this period. Thus, from excavations it appears that the use of iron was restricted to making weapons. Iron did not influence the agricultural technology until the 2nd half of the 1st millennium BCE when the marshlands and monsoon forests in the middle Gangetic valley were gradually cleared.

In the Later Vedic period the clearing of forests by burning was carried out in the upper doab. We have the description of the burning of Khandavavana in *Mahabharata* to establish the city of Indraprastha. Iron-tipped weapons and horse chariots helped military activities which were rampant in this period and have been extensively documented in the *Mahabharata*. However, in subsistence- related activities iron technology had practically no role.

Check Your Progress Exercise 1

- 1) Tick (\checkmark) the right sentence.
 - i) We can definitely say that the Vedic society shifted eastwards.
 - ii) It is impossible to say that the Vedic society shifted eastwards.
 - iii) We can guess that the Vedic society shifted eastwards.
 - iv) None of the above.

- 2) Through *Atharvaveda*: tick (\checkmark) the right sentence.
 - i) We can understand the folk traditions of the Later Vedic period.
 - ii) We can understand only the elite tradition of the Later Vedic society.
 - iii) We can understand the socio-religious conditions of the common people.
 - iv) Both (i) and (ii).
- 3) In the Later Vedic period: tick (\checkmark) the right sentence.
 - i) Iron technology was mostly used for agriculture.
 - ii) Iron technology was mostly used for weapons of war.
 - iii) Iron techonology was not there at all.
 - iv) Steel was being used.

4)	Write in 50 words the impact of iron technology on Later Vedic society.

9.4 THE NATURE OF ECONOMY

The growth of agriculture in the Later Vedic period was made possible by the availability of vast tracts of fertile alluvial lands of the Ganga-Yamuna doab and the middle Ganga valley – an area which was slowly settled throughout the 1st millennium BCE. However, the Later Vedic texts reflect the continued importance of pastoralism.

Both archaeological and literary sources document the introduction of rice as the staple diet of people. The PGW and Banas culture yield charred grains of rice from excavated sites. The Vedic texts mention *Vrihi*, *Tandula* and *Shali* – all denoting rice. It appears that cropping was practised now and the fields grew both barley and rice. The elaborate sacrifices of this period, e.g. the *Rajasuya*, include offerings of grain along with milk, *ghee* and animals. The 12 sacrifices prescribed in the *Atharvaveda* for acquiring material benefits recommend the gifts of cows, calves, oxen, gold, cooked rice, thatched houses and well-cultivated fields to the *Brahmanas*. The items of the offerings are a clear indication of the growing importance of sedentary settlements and agriculture. Later Vedic texts also refer to eight, twelve and even twenty-four oxen yoked to the plough. Though the number of oxen mentioned is, possibly, symbolic, the reference suggests that plough cultivation was familiar in this period.

9.4.1 The Importance of Pastoralism Declines

Pastoralism was no longer the main subsistence activity of the people as it was in the Early Vedic period. Mixed farming, which included cultivation and herding, was the occupational norm of this period. The agricultural activities in this phase were not labour-intensive. The sites from where rice remains are found in excavations are located on the elevated areas of the doab. This suggests that wet rice cultivation, which is labour-intensive, was not practised as yet.

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Mixed farming led to the rise of sedentary settlements. The PGW deposits are generally two to three m. deep and indicate that the people were living in the same spot for a long time. At Bhagwanpura and Jakhera the excavations show that the earlier phase of circular huts made of wattle- and- daub or wood were replaced in this period by more substantial houses with earth walls. Thus, durable materials were being used for house construction owing to the adoption of a sedentary life style.

9.4.2 Changes in the Functions of Rituals

In the Early Vedic society, rituals were performed to bring about the welfare of the entire tribe. Gods were worshipped for ensuring victory over other tribes, granting cattle and sons. It was also an occasion for the chiefs to distribute wealth. In the Later Vedic society the function of rituals underwent a subtle change. The rituals became much more complicated which could continue for years. Thus, only the rich could perform them. The spirit of collectivity was reduced. Sacrifices were performed to ensure control over rest of the tribe. Gifts were no longer given to the entire tribe. Rather, the chief gave gifts to the *Brahmanas* who performed sacrifices for him. The rituals were so complicated that it needed expert *Brahmanas* to perform them, since it was believed that a wrong incantation could bring disaster to the performer. The performer of the sacrifices was supposed to grant "super-human" status to the chiefs, meaning that they were superior to the rest of the tribe. For this service the chief passed on a large part of his wealth to the *Brahman* priest. Thus, the rituals became a mechanism for ensuring the material and spiritual superiority of chiefs and *Brahmanas*.

9.4.3 Emerging Importance of Land

The land was cultivated through family labour and the help of domestic servants and slaves. In this period initially the land was owned by the clan (*vish*). When clan ownership gradually changed to family ownership the *grihapati* (householder) became a man of wealth. The *vaishyas* (those who originally belonged to the *vish*) were the producing class in society and they became the source of wealth and subsistence for the *Kshatriyas* and *Brahmanas* who did not actively participate in food production. The *vaishyas* had to give prestations to the *Kshatriyas* in lieu of the latter protecting their lands, and *dana* and *dakshina* to the priests for their moral upliftment. The *vish/vaishya*, characterizing the house-holding economy, became the mainstay of the economy. Prestations and *dana* to the non-producing classes helped in the distribution of subsistence goods. There are no references to sale of land. Vishvakarma Bhauvana, a ruler, was rebuked by Prithvi (earth) when he tried to make a grant of land. This textual reference suggests communal ownership of land over which the *vish* had major participatory rights.

9.5 POLITYAND SOCIETY

The transition from a predominantly pastoral to a mixed farming economy had great impact on the character of the Later Vedic society and polity. The main trends of changes were:

- i) Tribal identity of the Early Vedic society gradually gave way to territorial identity and consequently, the nature of chiefship changed.
- ii) The social structure, which was based on relations within a clan and was largely egalitarian in the Early Vedic period, became much more complex. This type of society was marked by inequality. Even the same clan was divided into groups, some of which could have high status in society while some had low status.

9.5.1 Polity

Jana was used in the sense of people or tribe in the Rigvedic period, but now the concept of Janapada emerged. Janapada meant the area where the tribe settled. The word Rashtra was also used for the first time in the Later Vedic texts. However, it was still not used in the sense of a state with well defined territories.

The Kurus, who were formed from the union between two major Vedic tribes – the Bharatas and the Purus, are mentioned in the texts as occupying the area in the upper portion of the Ganga-Yamuna doab. Similarly, the Panchalas are mentioned as people who occupied the middle portion of the doab called the *Panchala desh*. This indicates that tribal identities were merging with territorial identities. It is also stated that when the Kurus and Panchalas came together their authority over the upper and middle reaches of the Ganga-Yamuna doab was complete. These changes in the relationship between the *Jana* and the area over which it wielded control helped towards the formation of *Mahajanapadas* and *Janapadas* by *c*. 6th century BCE.

Tribal Chiefs and Warriors: When tribal groups came to be associated and identified with particular territories it also brought about a change in the status and functions of tribal chiefs. The *rajan* (tribal chief) was no longer involved only in cattle raids but emerged as the protector of the territory where his tribesmen settled. The *rajanya*, which already was a superior lineage during the Rigvedic period, now became the *Kshatriya* i.e. those who held power over dominions, which is the literal meaning of the word *Kshatriya*. The *Kshatriya* class based their power on their role as the protector of their tribes and the land over which their tribes settled. The *vish* had to pay prestations to the *Kshatriya* in lieu of the latter's protection and thus, the status of the *vish* was progressively subordinated to the *Kshatriya* lineage. *Bali* and *Bhaga* no longer meant prestations given at will, but gradually assumed the forms of regular tributes and taxes.

Tribal Assemblies: The change in the status of *Kshatriya* (warrior class) is also reflected in the changing nature of tribal assemblies. The *sabha* became more important than *samiti* during this period. References to *rajas* in the assembly (*sabha*) suggest that they helped the king in his duties. The office of the *raja* (the chief) was not based solely on birth but the choice of *raja* was restricted to *Kshatriyas*.

Raja's Legitimacy: In the absence of firmly established principles of heredity and primogeniture, consecratory rituals became very important for the ruler in order to assert this authority. Hence, ceremonial sacrifices like *rajasuya*, *ashvamedha* and *vajapeya* were performed on lavish scale. In the Rigvedic period the *ashvamedha yajna* was a small affair. But, in this period this was performed to subjugate other areas and legitimize the ruler's hold over alien lands. The other *yajnas* included prayers for rulers' health and all three were, in essence, legitimizing methods employed by the *raja* to proclaim his superiority and power. For instance, the sacrificer was proclaimed as a *raja* in the course of the *rajasuya*. These sacrifices were found to be of relevance in the later periods also when new kingdoms and monarchs emerged. They used sacrifices to give religions legitimacy to their power.

The *raja* was also required to integrate his territory with resources, economic production and distribution which enhanced his status considerably from a mere raider or a leader of battles. However, he was not yet the sovereign. The fact that he was elected and could be removed put severe constraints on him, since he was answerable to the clan. Also, he did not appoint the other *rajas* who helped him with his duties. They were chiefs in their own right. What is important is that the *Kshatriya* lineage gained a distinctly superior status during this period, the reason being that the concept of territorial identity

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was established now. Thus, territory became the physical manifestation of the ruler's power to rule.

Tribal Conflicts: The nature of intra-tribal conflicts and conflicts within tribes also changed. The fights were no longer mere skirmishes over cattle, now the acquisition of land was an important element in these disputes. The necessity of increasing territory can be connected with the growth of population within tribes. Iron weapons and light wheeled chariots driven by horses raised the efficiency of fighters. The *Mahabharata* depicts an intra-clan warfare between the Kauravas and Pandavas of the Kuru clan.

The Priest: With the rising importance of the *rajanya Kshatriya*, the *Brahmanas*, too, became important since they legitimized the office of the ruler through consecratory rituals. The redistribution of wealth through *dana* and *dakshina* on such occasions was primarily from the *Kshatriya yajamana* to the *Brahman* priests. The elaborate consecratory rituals suggest that initially, the power of the *raja* was not so secure and hence, he had to provide proof of his ability to rule. The status of the officiating priests became at par with the gods in the later period. It was felt that the gods had to be propitiated with *yajnas* and the officiating *Brahman* had to be satiated with *dana*. Thus, the channel of redistribution was between these two higher status groups and political supremacy was slowly becoming the domain of *Kshatriyas*.

9.5.2 Society

We have already read about the declining status of *vish* and the ascendancy of *Kshatriyas* and *Brahmanas*. The society was, thus, composed of unequal groups. The following hymn describes the origin of four *varnas*, i.e. *Brahmana*, *Kshatriya*, *Vaishya* and *Shudra*, from the body of the universal creator, Prajapati. This "Hymn of the Primeval Man" comes from the later portion of the *Rigveda*. It says,

"When they divided the Man, into how many parts did they divide him? What was his mouth, what were his arms, what were his thighs and his feet called?"

"The *Brahmana* was his mouth, of his arms made the *Kshatriya*, his thighs became the *Vaishya*, of his feet the *Shudra* was born".

The symbolism which is projected in this hymn is that *Brahmana*, *Kshatriya*, *Vaishya* and *Shudra* are limbs of the society. However, these limbs did not have equal status. The *Brahmana* was compared to the head whereas the *Shudra* was compared to the feet. In social life the *Brahmanas* were considered the highest *varna* because it was believed that the society could communicate with the gods with the help of the *Brahmanas* only. The *Shudras*, on the other hand, performed menial tasks and included slaves captured in wars.

Concept of Varna: The system of varna had the following features:

- a) status by birth,
- b) hierarchical ordering of the *varnas* (*Brahmana*, *Kshatriya*, *Vaishya* and *Shudra*) with *Brahmana* at the top and *Shudra* at the base),
- c) rules of endogamy and ritual purity.

The *Varna* system is further tied with the concept of *Dharma* i.e. universal law, and the *varna dharma* was an attempt to establish a social law for a systematic functioning of the society. However, the *varnadharma* system was not properly developed in the Later Vedic society. The division of social groups was based on occupation alone and the society was still flexible where one's occupation did not depend on birth.

Even in the later times i.e., post-Vedic, the *varnadharma* described the ritual status of each group. The *varna* system did not prevent the non-*kshatriyas* from claiming *kshatriya* status and becoming rulers (examples being the Nandas and the Mauryas), nor the *Brahmanas* from claiming political suzerainty (e.g. the Shunga kings). (You will read about these in one of the subsequent Units.)

Thus, the theoretical model of the *varna* system could never be rigidly enforced in the post-Vedic period.

It is likely that during the Later Vedic period, with the shift in the geographical focus, the Vedic people encountered many non-Vedic tribes and considerable interaction must have helped in the formation of a composite society. At least the *Atharvaveda* depicts a host of non-Vedic religious practices which were sanctioned by the priests. However, tribal endogamy through strict marriage rules was the aim in order to maintain the purity of the tribe. Also, the growing importance of the *Kshatriyas* and the *Brahmanas* in the society made it imperative to maintain their exclusive superior status as compared to the rest. During the Later Vedic period, however, the concept of *varna* was rudimentary in nature. The notion of untouchability, for instance, is absent.

Gotra: The institution of *gotra* (literally meaning cow-pen) appeared during this period. As against tribal endogamy (marriage within the tribe) the people practiced *gotra* exogamy (marrying outside the *gotra*). *Gotra* signified descent from a common ancestor and marriages could not take place between couples belonging to the same *gotra*.

Family: The patriarchal family was well established and the *grihapati* acquired a special status. Since house-holding economy was gaining predominance the position of the householder, too, acquired economic importance. The rights on land were based on usage and communal ownership of land prevailed. The *grihapatis* were wealthy and their ritual role was that of a *yajamana* (i.e. he who orders sacrifice). Their wealth did not come from gifts but was produced by their own efforts. Through *yajnas*, which they were bound to perform to gain merit, a part of their wealth got channelled to the *Brahmanas*. Despite the presence of some women philosophers and the references to a few queens participating in coronation rituals, the women were considered subordinate to men and were not involved in any major decision making.

Three Stages of Life: The three *ashramas*, i.e. stages of life, were prescribed, represented by the *Brahmacharya* (studentship), *Grihastha* (householder), *Vanaprastha* (partial retirement from house-holding life by living in the forest). It seems that the fourth i.e. the *Sanyasa* (complete retirement from active participation in the world) stage was not known till the time the *Upanishads* were written. The *Sanyasis* (the ascetics) in the later periods were individuals who protested either passively or actively against the Vedic social structure.

Check Your Progress Exercise 2

- 1) In the Later Vedic period: tick (\checkmark) the right statement.
 - i) Pastoralism can be said to be the main subsistence activity.
 - ii) Mixed farming, which included cultivation and herding, was the main subsistence activity.
 - iii) Only labour-intensive agriculture was practised.
 - iv) Industry was the main activity.

In the Later Vedic period: tick (\checkmark) the right statement. **Changes in the Later** 2) **Vedic Phase** i) Tribe was the only basis for organizing the society. Land became more important and the tribe ownership of land gradually ii) changed to family ownership. The ownership of land was outside the tribe. iii) iv) None of these. During the Later Vedic period: tick (✓) the right statement. i) Sabha became more important than samiti. Samiti became more important than sabha. ii) The importance of both sabha and samiti declined. iii) None of the above. iv) The Later Vedic period people: tick (\checkmark) the right statement. i) Began to marry within their own gotra. ii) Married outside their gotra. Did not care whether they married within their own *gotra* or outside. <u>iii</u>) None of the above. What was the family in the Later Vedic phase? Answer in about 50 words.

9.6 RELIGION

The texts of this period indicate two different religious traditions:

i) the Vedic, which is documented in the *Samaveda*, *Yajurveda* and *Brahmanas*, and

.....

ii) the non-Vedic or perhaps, the folk tradition extensively documented in the *Atharvaveda*.

The fact that the Atharvan religious tradition was considered to be part of the Vedic discourse suggests assimilation of different cultures and beliefs into the Vedic religious system. The *Yajurveda* and *Brahmanas* document the sacrificial religion of the period. Sacrifices became very important during this period and they assumed both a public and private character. The public sacrifices e.g. the *Rajasuya*, *Vajapeya*, *Asvamedha* were conducted on a massive scale, wherein the whole community participated. Some of the rituals performed in these sacrifices show elements of a fertility cult. For instance, the *Asvamedha yajna* required the chief queen to lie next to the sacrificial horse, where the queen represented the earth and this ritual was thought to ensure the prosperity

for the king. A number of agricultural rituals were performed in the *Rajasuya* and *Vajapeya*. The periodical rejuvenation of the earth and its fertility are some of the themes which were included in the ceremonial *yajnas*.

9.6.1 Priestcraft

The Later Vedic texts reveal the elaboration of rituals which were complicated and needed professional men trained in the art of performing them. *Vidhis* (rules for performing the sacrifices) were formulated and Vedic sacrifices no longer meant simple offering of food/oblations into the fire. The types of offering, types of sacrifices etc. differed according to the needs of the patron (*yajamana*). The sacrifices were now endowed with mystical symbolism and every ritual act was endowed by mysterious power. A new science of priestcraft emerged because of the complexities involved in the performance of these *yajnas* whether private or public. Thus, a class of priests became specializts in the performances of *yajnas*. There were even different sets of priests for performing different stages of the same sacrificial ritual.

9.6.2 The Changing Gods

The two prominent Early Vedic gods, Indra and Agni, lost their importance. Prajapati, the creator became important. This phenomenon also represents the importance of sedentism now, since creation myths are important in agrarian groups. Rudra, a minor deity in the *Rigveda*, became important now and Vishnu was conceived as the creator and protector of the universe. Pushan, who protected cattle in the former period, now became the god of the *Shudras*. The changing status of the deities is an indication of the change in the character of the tribes: from pastoral groups to sedentary agriculturist groups. The Early Vedic gods who represented natural phenomena were slowly discarded and the personification of natural elements as divine beings became very complex. It was no longer easy to find the natural element which represented a particular god from the hymns of the Later Vedic period.

9.6.3 Folk Tradition

The *Atharvaveda* is a mine of information regarding folk tradition. Its contents are radically different from the Vedic sacrificial religion and it is concerned more with magic. The contents of this *Veda* cover different aspects of human life. The hymns deal with:

- i) the cure for diseases,
- ii) prayers for health,
- iii) charms for the prosperity of home and children,
- iv) cattle and fields,
- v) charms to produce harmony,
- vi) charms concerned with love and marriage or conversely, rivalry and jealousy etc.

Atharvaveda, thus, documents the kinds of superstitions and beliefs which were prevalent. The term Atharvan indicates a magical formula and the Atharvan priests officiated in this religion. Gods of the Vedic tradition were invoked but the reasons for which they were invoked were trivial and individualistic. Many godlings and spirits such as *pishachas*, *rakshasas* and so on (some malevolent and some benevolent) were invoked either to bring good fortune or to cause havoc and destruction to one's friends and foes respectively. The invocations and chants related to the domestic and the household and were close to the daily cycles of existence of the common man. For

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example, Indra was asked to kill the house-robber, the worm in the body and the wolf devil. The Ashvins were entrusted with the protection of agriculture and the killing of rats. Savitri was summoned to fix a place where a new home could be built. Pushan was invoked to bring harmony and safe delivery of babies while Surya was invoked to remove demons.

Towards the end of this period a strong reaction against priestly domination and against complexities involved in the *yajnas* resulted in the formulation of a philosophical doctrine which is enunciated in the *Upanishads*. These texts emphasized the knowledge of the *atman* (soul) as against the ritualistic practices and wasteful expenditure which accompanied sacrifices. Thus, the materialistic aspect of religion was discarded and it was raised to the realm of philosophy. The *Upanishads* emphasized the changelessness and indestructability of soul which, in a way, seemed to emphasize the need for stability and integration in a period when the *janapadas* and the *mahajanapadas*, i.e. republics and monarchies, were emerging.

Thus, we find that a great change in the religious beliefs and practices had taken place between the Early and Later Vedic period. This change was partly related to shift from pastoralism to agriculture. The religious changes of this period parallel and reflect the socio-political and economic changes that had taken place from the Early to the Later Vedic phase.

Check Your Progress Exercise 3

- 1) In the Later Vedic period: tick (\checkmark) the right statement.
 - i) Public and private sacrifices became very important.
 - ii) Sacrifices had no role.
 - iii) Sacrifices became important because priests came to play an important role.
 - iv) Both (i) and (iii).
- 2) It can be said that: tick (\checkmark) the right statement.
 - i) The important Later and Early Vedic gods were the same.
 - ii) The important Later and Early Vedic gods were different.
 - iii) The gods in the Later Vedic period reflected the change in the character of society from nomadic to a settled one.
 - iv) Both (ii) and (iii).

3)	What does the changing status of gods in the Later Vedic phase indicate?

9.7 SUMMARY

In this Unit you got to know:

- i) that the Vedic society was changing from pastoral nomadic lifestyle to a settled agricultural society, but iron was yet to play an important role in agriculture;
- ii) that in the process well-defined political units were established, laws were codified and a distinct social stratification emerged;
- that the Vedic and the folk religious tradition of this period were increasingly coming together while maintaining their identity;
- iv) that in this process of change some minor gods of the Early Vedic period, e.g. Rudra, became more important while the earlier important gods, e.g. Indra, became less important;
- v) that both the literary and archaeological sources of this period have to be interpreted together to get an overall picture of the period.

		7
0	KEY WORDS	
9. A	RETURNS	

9.8 KEY WORDS	S
Consecration	: The process of giving importance or legitimacy.
Double Cropping	: To grow two crops on one piece of land simultaneously.
Endogamy	: Marrying within e.g. within a tribe, caste or <i>gotra</i> etc.
Exogamy	: Marriage outside e.g. a caste, <i>gotra</i> etc.
Fertility Cult	: A ritual/religious practice where human birth or the process of birth is emphasized.
Folk Tradition	: Traditions of the common people.
Gift Economy	: An economy in which gifts play an important role in maintaining its institutions.
Labour Intensive	: An activity where labour or manpower is used relatively more than technology.
Prestation	: Service or offering required by custom or promise.
Sedentary	: Stationary or remaining at one place.
Stratification	: Division into levels; e.g. social stratification means division of society into different kinds according to some criteria e.g. caste, wealth etc.
Subsistence Activity	: Activity relating to economic survival.

9.9 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

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4) See Section 9.3. Your answer should comment on whether iron had become important for war or daily use and why?

Check Your Progress Exercise 2

- 1) ii, 2) ii, 3) i, 4) ii
- 5) See Sub-sec. 9.5.2. Your answer should comment on the importance of family, importance of householder, position of women in family.

Check Your Progress Exercise 3

- 1) iv, 2) iv
- 2) See Sub-sec. 9.6.2. Your answer could comment on whether the new gods indicated a new kind of society.

9.10 SUGGESTED READINGS

Agrawal, D.P. and Chakravarti, D. K. (eds.) (1979). *Essays in Indian Protohistory*. New Delhi.

Allchin, Bridget and Raymond (1988). *The Rise of Civilizations in India and Pakistan*. New Delhi.

Basham, A. L. (1986). The Wonder that was India. New Delhi.

Jha, D. N. (1986). Ancient India: An Introductory Outline. New Delhi.

Kosambi, D. D. (1987). The Culture and Civilization of Ancient India in Historical Outline. New Delhi.

Sankalia, H. D. (1962). Prehistory and Protohistory of India and Pakistan. Poona.

Thapar, Romila (1983). History of India. Vol. I, New Delhi.

UNIT 10 JANAPADAS AND MAHAJANAPADAS: RISE OF URBAN CENTRES, SOCIETY AND ECONOMY*

Struct	ture			
10.0	Objectives			
10.1	Introduction			
10.2	The Vedic Age and the Sixth Century BCE			
10.3	What is an Urban Centre?			
10.4	The Background to the Sixth Century BCE			
10.5	Our Sources of Information			
10.6	Cities of the Sixth Century BCE			
	10.6.1 Types of Cities and Towns in Literature			
	10.6.2 The Image of the City in Ancient India			
	10.6.3 A Walk through the City			
	10.6.4 Items of Exchange			

- 10.7 The City in Archaeology
- 10.8 Units of Settlement-I: The Janapada
- 10.9 Emergence of New Groups
 - 10.9.1 Gahapati
 - 10.9.1 Merchants
 - 10.9.2 Ruler and the Ruled
- 10.10 Units of Settlement-II: The Mahajanapada
 - 10.10.1 The Story of Jivaka
 - 10.10.2 Villages
 - 10.10.3 Towns and Cities
- 10.11 The Sixteen Mahajanapadas
- 10.12 Society
 - 10.12.1 Kshatriyas
 - 10.12.2 Brahmanas
 - 10.12.3 Vaishyas and the Gahapati
 - 10.12.4 Shudras
 - 10.12.5 Wandering Ascetics
 - 10.12.6 Condition of Women
- 10.13 Economy
 - 10.13.1 Factors in the Growth of Food-Producing Economy
 - 10.13.2 Rural Economy
 - 10.13.3 Urban Economy
 - 10.13.4 Urban Occupations
 - 10.13.5 Trade and Trade Routes

^{*} This Unit has been adopted from EHI-02, Block 4.

10.14 Summary Mahajanapadas: Rise 10.15 **Key Words** of Urban Centres, **Society and Economy** 10.16 Answers to Check Your Progress Exercises

10.0 **OBJECTIVES**

10.17

After reading this Unit, you will be able to:

Suggested Readings

- distinguish between society of c. 6th century BCE and that of the earlier period;
- discover real meaning of an urban settlement and distinguish it from the rural centres;
- learn main factors which led to the urbanization during c. 6th century BCE;
- know what kind of cities existed at that time:
- list various features of city life in c. 6th century BCE;
- get a detailed information about various Janapadas and Mahajanapadas which came into prominence; and
- learn about the emergence of new groups in the society during c. 6^{th} century BCE.

You will also get to know in general about main social and economic changes which crystallized by the period of second urbanization and especially about:

- main segments of the society, social order and the disabilities imposed on the shudras;
- evidences and the causative factors for the growth of food-producing economy;
- main features of rural and urban economy; and
- main crafts and occupations along with the nature of trade and trade routes during the period.

10.1 INTRODUCTION

You must have observed that people around you speak same language. The entire surrounding region celebrates same festivals. People of the entire region have similarities in their marriage customs too. The food they cook is similar. How did areas having cultural homogeneity come into existence? Beginnings of this process go back to the emergence of Janapadas. It signified the birth of geography in Indian history. Remember when we discussed the Vedic society we did not talk about specific geographical regions. That was because the Vedic people were not attached to any area. With the settlements of agriculturists coming up, the settlers formed enduring ties with their surrounding landscape. They observed the hills and rivers, birds, animals and fruits that were found in that area. Not only this, this was the time when they learnt to call a particular geographical space as their own. This geographical space was separated from those of the other communities (Janapadas) who might be friendly or hostile to them. These Janapadas, characterized by cohesion inside and separation from the outside world, proved to be a seminal development in ancient India. They became the centres of the development of uniform language, customs and beliefs.

Janapadas and

10.2 THE VEDIC AGE AND THE SIXTH CENTURY B.C.E.

When we talk about the *Janapadas* we have to refer to a number of things associated with their emergence. Since they are known from about 6th century BCE we can say that in regions in which the *Janapadas* of this period are found, many changes took a concrete shape. Villages, towns and cities were the units where the people lived in a *Janapada*. You may have noticed that when we discussed various aspects of Early Vedic and Later Vedic society we did not refer to people living in such varieties of settlements as villages, towns and cities, although they did live in modest settlements. Further, this was the time when kings and monarchs emerged on the stage of history. This was also the age of intense philosophical speculation. Buddhism, Jainism and many other heterodox sects emerged during this period. Monks, monarchs and merchants crowd the canvas of history. Thus, in various respects the period that we will be studying now (approximately 6th century to 4th century BCE) will reveal to us the changes that continued to take place in Indian society after what we have discussed in previous Units.

10.3 WHAT ISAN URBAN CENTRE?

The period starting with c. 6th century BCE saw the emergence of cities in ancient India for the second time. This urbanization was more significant, in the sense that it endured for a longer time and saw the beginnings of a literate tradition. This tradition, embodied in Buddhism, Jainism and many important strands of Hinduism, looks back on this period as its formative epoch. The contemporary literature is full of references to cities like Rajagriha, Shravasti, Kashi, etc. The Buddha and Mahavira were preaching to urban audiences most of the time.

After the end of Indus cities, settled agricultural villagers and wandering people inhabited the plains of India. Small village settlements with humble dwellings dotted the landscape of the country. All this was undisturbed by the din and bustle of market places and the domination of kings and merchants. You must have heard the story of king Harishchandra famous for his truthfulness and keeping his vows. Here is the earliest version of his story from a text called the *Aitareya Brahmana* which can roughly be dated to 8th-7th century BCE.

Thus goes the story: King Harishchandra did not have a son. He went up to god Varuna and prayed, "Let a son be born to me, with him let me sacrifice to thee." To him a son was born Rohit by name. Varun demanded his sacrifice. The king made various kinds of excuses and kept postponing the sacrifice. However, when Rohit grew up Harishchandra told him, "O my dear one, this one (Varuna) gave thee to me. Come let me sacrifice to him with thee." "No", he said and taking his bow went to the wild and for a year he wandered in the wild. Varuna was angry and as such Harishchandra was inflicted with dropsy. Rohit heard of this and decided to go back from the wild to his village. Six times he started for the village and six times he was persuaded by Indra to go back to the wild. In the seventh year he bought a *Brahmana* boy called Sunahsepa from his father for 100 coins. As such, he came back to the village of Harishchandra where Sunahsepa was to be sacrificed to Varuna. When Sunahsepa was about to be sacrificed he chanted some incantation which pleased Varuna and he was saved. The king's dropsy also disappeared.

What is significant for a historian of urbanizm is that king Harishchandra was not living in a city, not even in a small town but in a village adjacent to the wilds. All this changed

in *c*. 6th century BCE. You will further read in this Unit that kings of the monarchical *Mahajanapadas* and the *Kshatriya* chiefs of *Gana-Samghas* used to live in cities like Kausambi, Champa, Shravasti, Rajagriha and Vaishali. It is not only the big cities which emerged at this time. Along with agriculture-based villages, there existed market centres, small towns, big towns and other types of settlements.

Many scholars have tried to define an urban centre. On the face of it, it seems fairly easy to define it. But, when we get down to details the problem becomes complicated. For example, some writers believe that it is characterized by a large population. However, it has been pointed out that some modern Indian villages have populations larger than those of some Australian towns. Similarly, some scholars argue that urban centres are larger in size than the villages. However, it is difficult to determine a standard size for the towns. We know that some of the villages today are larger in size than, say, a Harappan town like Kalibangan. Thus, number of people or size of the settlement cannot be reliable criteria for defining an urban or rural centre. Hence, it is important to identify the kinds of activities the people in a settlement are performing. In a village most of the people are engaged in food-production. So, the social landscape of villages is dominated by fields and farmers. In towns, on the other hand, the dominant people are either rulers, merchants or priests. It is possible that many people in the town might engage in agricultural activities but it is essentially the non-agricultural activities that define a town.

Let us take the example of Benaras (Kashi) which is among the oldest surviving cities of India. Its fame rests not on the very good quality rice produced there but on its being a very important pilgrimage centre. It attracts pilgrims from all over India who offer various kinds of gifts to deities in the temples. In this way keepers of the temples are able to draw upon resources of the people coming from all over the country. Thus, the other characteristic of an urban centre is that it functions in relationship to a large hinterland. Residents of the city might provide administrative, economic or religious services to a population residing in an area much larger than physical space of the city. This relationship with population of the hinterland is advantageous to the urban centre. This means that residents of the city are able to harness resources of the people living in the hinterland. This might be done in the form of taxation in kind or tribute. Merchant living in the city is also able to appropriate a share of the resources of rural areas by controlling the supply of metals, minerals or some luxury items. This means that the classes of kings, priests and merchants living in cities have more wealth than a common man. These classes use their wealth for acquiring more wealth, prestige and power. Now, the rich and powerful in every society have their own way of showing off. The rich in some societies build large palaces, others build beautiful temples, still others perform grand sacrifices. Some others are content with the possession of precious metals and stones.

Apart from kings, priests, merchants and farmers various groups of craft specializts also stay in the city who produce luxury items for the city and other objects needed by people outside the city. These craft specializts need not enjoy same privileges as the rich. For example, the administrator or the merchant might be very rich but blacksmiths or masons or carpenters might be quite poor. Thus, the city is characterized by the presence of rich and poor people.

We can say that an urban centre refers to a place where most powerful and visible sections of the population are engaged in activities other than food production.

Such diverse socio-economic activities create the problem of proper coordination among those engaged in them. For example, the blacksmith would need food from the cultivator or the merchant will need protection from robbers while transporting his goods to and from distant areas. In a situation where each of the groups cannot survive without the



other there is a need for a centralized agency coordinating their activities. The need to keep in check hostilities between rich and poor and the need for mobilizing agricultural produce for urban consumption also creates the possibilities for emergence of a centralized political/administrative power. The emergence of centralized decision-making groups coincides with the emergence of groups exercising monopoly over the use of force. This kind of social structure also implies the coming into being of a state society.

Thus, urban society is characterized by the presence of craft specializts, rich and poor people and a state administration.

10.4 THE BACKGROUND TO THE SIXTH CENTURY B.C.E.

We will soon discuss the emergence of *Mahajanapadas* and centralized polities in ancient India. We will see how over a period of time the *Brahmanas* emerged as a caste category that specialized in ritual activities. Then came the class of *Kshatriya* warriors and landowners who gradually started levying taxes over cultivators and merchants. Later Vedic chieftains seem to have burnt up or distributed their wealth during sacrifices. Competition among the chiefs to perform more and more sacrifices on a larger and larger scale meant that they had to look for more and more booty, taxes and tribute. In this settled agricultural society agricultural produce and cattle were the most important forms of wealth. Especially, agricultural produce was one form of wealth which could be augmented from year to year by either extending the cultivable land or adopting more intensive agricultural practices. The rulers' desire for more and more wealth probably led to the cultivation of more land and settling down of many more pastoralists and foragers. Archaeological records indicate that many agricultural settlements came into existence between *c*. 8th to 6th centuries BCE. Two factors which proved to be of great help in increasing agricultural production were:

- increasing use of iron tools, and
- practice of wet rice cultivation in middle Gangetic valley.

Use of Iron and Wet Rice Cultivation

By about 1000 BCE Indians had learnt the art of smelting iron. Over next three-four centuries, iron came into increasing use. That is why a large number of iron tools and implements have been found from Ujjain, Shravasti and Hastinapura. Iron weapons, in particular, have been found in large numbers. These would have increased the power of warrior classes vis-a-vis peasants. With more powerful weapons the former could extract more wealth from the latter. Iron weapons also increased their desire for war, conquest and booty.

Iron had a direct impact on economy too. Iron axes could be used to clear forests and iron plough shares could facilitate agricultural operations. This was especially useful in middle Gangetic valley (areas between Prayaga [Prayagaraj] and Bhagalpur) where wet rice cultivation was practiced. Paddy transplantation had been learnt by this period. It is a well known fact that yields per acre in wet rice cultivation is substantially higher than those of wheat or millet in traditional agriculture. As such, there was much larger output of food grains in the rice producing middle Gangetic valley than the wheat producing upper Gangetic valley. It has been observed that varieties of rice and paddy fields are repeatedly mentioned in the early Buddhist texts. This indicates a decisive shift to wet rice cultivation. Larger food production made it possible to sustain increased population, which is reflected in an increase in number of settlements in the archaeological records

of this period. All this created the possibility of the emergence of social groups not engaged in food production.

The Vedic sacrifices meant that most of the surplus accumulated by the chiefs was gifted away at the time of performing sacrifices. In the areas of middle Gangetic valley the Vedic rituals and sacrifices did not have the kind of hold as in the upper Gangetic valley. This meant that surpluses which were collected by the chiefs were not spent away during sacrifices. The groups that grew up controlling this surplus wealth became the ruling class of newly emergent kingdoms. And, on the foundation of this wealth were born the cities of c. 6^{th} century BCE.

10.5 OUR SOURCES OF INFORMATION

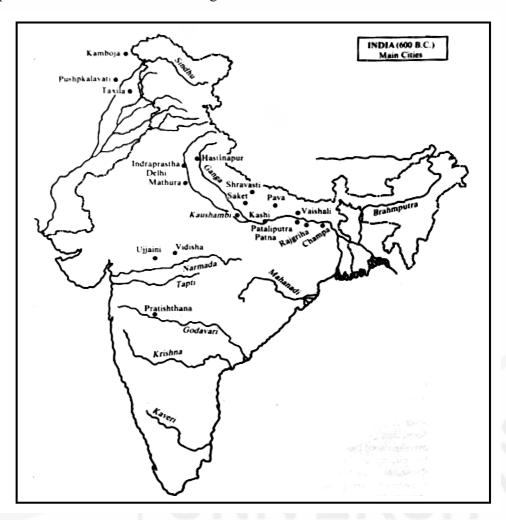
We find information about Janapadas and Mahajanapadas from some Vedic and Buddhist texts. The Brahmanas refer to a category of Vedic texts which deal with the methods of performing Vedic rituals. Similarly, the Upanishads dealing with philosophical problems are also considered a part of Vedic literature. These texts were composed from c. 800 BCE onwards. They refer to many Janapadas and Mahajanapadas and provide us insights into the settlement of agricultural communities. Another category of sources providing us information about this period are texts composed by the Buddhists. The Vinaya Pitaka dealing with rules of the Buddhist order (sangha), the Sutta Pitaka a collection of Buddha's sermons and the *Abhidhamma Pitaka* discussing problems of metaphysics tell us about preachers, princes, rich, poor, towns and villages of that period. The Jatakas dealing with stories of previous births of the Buddha are part of the Sutta Pitaka. They give us graphic descriptions of contemporary society. These texts have clear references to various regions and geographical divisions. Archaeologists also contribute to our understanding of this period. They have dug up various places like Ahichchhatra, Hastinapura, Kaushambi, Ujjaini, Shravasti, Vaishali and many more which are mentioned in the texts of this period. They have discovered remains of houses, buildings, towns and objects used by people. For example, archaeological finds from this period indicate the use of a deluxe pottery called Northern Black Polished Ware (NBPW) to which reference has already been made in Unit 7. In settlements of the previous period the people either did not know the use of iron or used it sparingly. In c. 6th century BCE people were using iron tools on a large scale. Prosperous agricultural settlements and towns have also been reported in excavations. Thus, archaeological and literary sources, put together, provide us with a more complete picture of Indian society between c. 6th and 4th centuries BCE.



Remains of Ancient City Ahichchhatra (or Ahi-*Kshetra*), capital of Northern Panchala, a Northern Indian Kingdom mentioned in the *Mahabharata*, Bareilly District, Uttar Pradesh. Credit: Suneet87. Source: Wikipedia Commons (https://en.wikipedia.org/wiki/Janapada#/media/File:Ahichchhatra_Fort_Temple_Bareilly.jpg).

10.6 CITIES OF THE SIXTH CENTURY B.C.E.

As we have just seen, our information about the cities of c. 6^{th} century BCE comes from many sources. This is because it was the period which saw the beginnings of the written tradition in ancient Indian history. Brahmanical, Buddhist and Jain texts refer to the conditions of this period. Excavation reports of many urban and rural centres of this period also enrich our understanding.



Main Cities during c. 600 BCE. Source: EHI-02, Block-4, Unit-15.

10.6.1 Types of Cities and Towns in Literature

The terms that are frequently used to denote cities in ancient Indian literature are:

- Pura,
- Durga,
- Nigama,
- Nagara, etc.

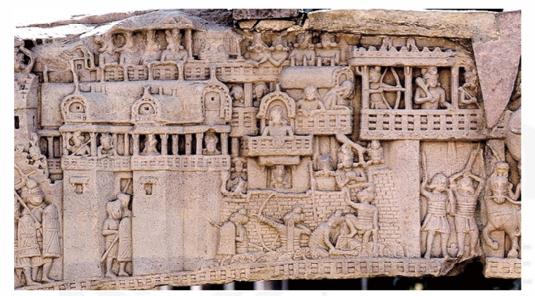
Let us see how ancient Indians defined them.

Pura: this term is mentioned even in Early Vedic literature where it referred to fortified settlements or temporary places of refuge or cattle pens. Later on, it is often used for the residence of the king and his retinue or for families of the ruling group in *Gana-Samghas*. Gradually, the connotation of fortification became less important and it came to mean a city.

Durga: this is the other term used for denoting fortified capital of a king. Fortifications protected urban centres and separated them from surrounding rural areas. Also, they made it easier for ruling classes to control activities of the population residing in the city.

Nigama: it is frequently used in Pali literature to denote a town. It probably meant a merchant town where the sale and purchase of goods used to take place. In fact, some scholars believe that some of the *Nigamas* evolved out of villages specializing in pottery, carpentry or salt making. That they were market towns is also proved by the fact that certain coins of a later period carrying the legend *Nigama* have been found which indicate that they were minted by the *Nigama*. Sometimes, literary texts would refer to a particular section of a city as *Nigama* where craft specializts would live and work.

Nagara: it is the most commonly used word for a town or city in literature of the period we are talking about. This word is used for the first time in the *Taittiriya Aranyaka* roughly dated to 7th-6th century BCE. Another word *Mahanagara* also referred to cities. These centres combined political functions of *Pura* and commercial functions of *Nigama*. Kings, merchants and preachers resided in these cities.



City of Kushinagara in c. 5th Century BCE according to a 1st Century BCE Frieze in Sanchi Stupa's Southern Gate. Credit: AsitJain. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:City_of_Kushinagar_in_the_5th_century_BCE_according_to_a_1st_century_BCE_frieze_in_Sanchi_Stupa_1_Southern_Gate.jpg).

Buddhist literature refers to the following six *Mahanagaras*, all of them located in middle Gangetic valley:

- Champa,
- Rajagriha,
- Kashi,
- Sravasti,
- Saket, and
- Kausambi.

Other terms like *Pattana*, *Sthaniya*, etc. are also used to refer to towns and cities. It appears that the terms *Pura* and *Durga* are amongst the earliest terms used in Indian literature for denoting a town. Others came in use in subsequent phases. What is significant for us is that both these terms referred to fortified settlements. This might indicate that

kings and their followers lived in fortified settlements. They extracted taxes from surrounding population. Their ability to store wealth and collect luxury items might have stimulated trade. Thus, these fortified settlements led to the development of a network of relationships which led to the emergence of urban centres. This idea is supported by the fact that the Brahmanical tradition ascribes the foundation of almost all the cities to certain kings. For example, a king called Kushamb is said to have founded Kaushambi. Similarly, Hastin founded Hastinapura and Shravasta founded Shravasti. In Buddhist literature cities are associated with sages, plants and animals. For example, Kapilavastu is said to have been named after sage Kapila, and Kaushambi was named after Kushamba trees growing in that region. However, the tradition of cities being founded by kings is quite strong. The Pandavas are said to have founded Indraprastha. In the *Ramayana* also princes of the ruling family are supposed to have founded various cities.

Some of the political centres also became great commercial centres in subsequent period. Soon, the centres which were important for both political and commercial reasons overshadowed those which were only political centres. For example, capital cities like Hastinapura never experienced the kind of prosperity that we associate with Kashi or Kaushambi. Once long-distance trade prospered, political leaders tried to enrich their treasuries by taxing traders. At least in two cases political capitals were relocated in areas connected with important trade routes. The capital of Koshala was shifted from Ayodhya to Shravasti and the capital of Magadha was shifted from Rajagriha to Pataliputra. This indicates importance of emerging trading networks with an important section of the ancient *Uttarapatha* stretching along the Himalayan foothills and finally connecting Taxila with Rajagriha. Similarly, Pataliputra was located at a point where it could exploit the trade route passing through the Ganges. It was the patronage of kings and merchants that led to the development of cities in ancient India. The literature of this period is full of descriptions of caravans of merchants going to distant areas to conduct trade. Rich merchants, along with princes, are described as main supporters of the Buddha.

10.6.2 The Image of the City in Ancient India

The following reconstruction is based on references in the Buddhist and Brahmanical literature of slightly later period. Texts like the *Divyavadana* and *Apastamba Dharmasutra* provide us with an idea of the city in those times. Ancient Indian literature gives an idealized view of cities. Ayodhya described in the *Ramayana* or Vaishali described in Buddhist texts would be almost identical if one goes by their description. Ideally, the cities were to be laid out on a chess-board pattern and surrounded by defensive walls and moats. Streets were to be earmarked for various craftsmen. Wide streets, high mansions with colourful banners, busy markets, flowering gardens, ponds filled with lotus and geese are parts of their description in texts. Well dressed men, beautiful women dancing and singing complete the picture of the city. This timeless description of an idealized city gives us an unsatisfactory idea of what ancient Indian cities actually looked like. Other incidental references may help us get a better view.

10.6.3 A Walk through the City

Towns seem to have grown around the intersection of two highways or along river banks. When you entered the city streets, what would you see? Well, the contemporary literary sources give a vivid description in this regard: The haze of dust raised by horses hoofs and caravans of merchants which the pious *Brahmanas* disliked so much. The crowds of people clamouring around shops selling various kinds of eatables such as fruits like mangoes, jack fruits and bananas, sugar candy, cooked rice etc. The din and

bustle created by women selling trinkets and bangles of conch shell and by flower sellers filled the air. If one had taste for liquor, shops selling various kinds of them would be found. Houses were generally made of earth or timber with tiled roofing – the kind of houses still visible in the countryside of Gangetic plains. In some cases the houses might be made of stone or burnt brick. One could see women looking down from their balconies. Sometimes, one might come across a prostitute. If you were fond of gambling, there were arrangements for that too. On the roads you could also come across processions of the king and his retinue seated on their elephants and chariots. In some parts of the city you could see king's armymen practicing archery, training elephants and improving their skills of warfare. The other kind of procession you were likely to encounter was that of wandering mendicants clad in brown or white robes, sometimes not wearing anything at all. These wandering ascetics, belonging to various sects that emerged in this period, could be seen lecturing on various religious problems in groves and gardens given to them. The audiences could be varied. Sometimes, it was the exclusive assembly of rich merchants or powerful princes, at other times it could be groups of people who came from the poorest sections of society. The rich lavished their wealth upon these monks. Gardens and monasteries meant for the exclusive use of monks were also a part of urban landscape.

10.6.4 Items of Exchange

Markets involved buying and selling of commodities. People could be seen buying utensils and tools made of metals like iron, copper, tin and silver. Groups of merchants specializing in procurement and selling of salt could be seen in the streets earmarked for them. The cotton cloth of Kashi attracted quite a large numbers of buyers. Woolen blankets brought from the distant north-western province of Gandhara could attract only the rich. Horses brought from Sindh and Kamboja would also be on sale. Here, the buyers were only the super-rich of those days. Bangles of conch shell, beautiful ornaments of gold and combs and ornaments made of ivory and various kinds of precious stones were also in high demand among the aristocracy.

Literary sources also point out that each item was sold in a separate street. Those who manufactured or brought them also sold them. There were no shops selling a variety of items. There were various kinds of traders:

- shopkeepers (apanika),
- retailers (kraya-vikrayika), and
- money investors (*setthi-gahapati*).

At least the richer people were using coins. Coin of highest value was the silver satamana. This was followed by the karshapana. The copper masas and kakani were coins of smaller denomination. Amidst this glitter of the cities was hidden a whole category of poor people who went unnoticed. In a Buddhist story it is said that the daughter of a merchant on seeing a chandala (i.e. of the outcaste category) washed her eyes for fear of pollution. With the emergence of cities a class of washermen, scavengers, beggars and sweepers also came into existence. Services of sweepers and people involved in cremating corpses were essential for the cities. They were the most impoverished and deprived sections of society. These outcastes had to stay on fringes of the city with no hopes of economic or social improvement in their condition. The group of beggars also emerged as a result of the breakdown of kin-based society and increasing demands on the produce by the rulers. There is a story which says that king's men looted the village in day time and the robbers at night.

10.7 THE CITY IN ARCHAEOLOGY

Literary sources of c. 6^{th} century BCE have undergone several alterations and additions in subsequent periods. Written manuscripts of these texts which are available to us are less than a thousand years old. Thus, it is difficult to sift out the material of the later phases of history from the early phases. As such, the information derived from excavation reports gives us a more dependable idea regarding cities of the period. This is because the archaeological data can be dated with greater certainty. Also, literary sources exaggerate the opulence and splendour of the cities. Excavated material does not have such a bias. Let us see what kind of information is provided by excavation reports.

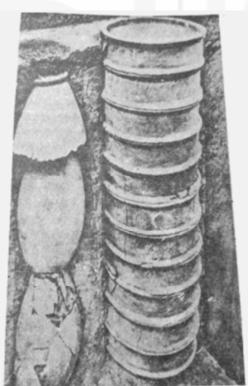
By about 700 BCE in places like Ayodhya, Kaushambi and Shravasti small settlements came into existence. People living in these settlements used various kinds of potteries. Among them a particular kind of pottery called Painted Grey Ware (PGW) is important because many people living in upper Gangetic valley were also using this pottery. People in other settlements of middle Gangetic valley were using a pottery called Black- and-Red Ware. By about 6th century BCE people of this entire zone started using, along with other varieties of pottery, a particular kind of pottery having glossy surface. This pottery is called Northern Black Polished Ware (NBPW). This deluxe pottery is one of the indicators of broad cultural uniformity in the Gangetic valley towns of c. 6th century BCE. Probably, this pottery was made in a few places and exported over large areas by merchants. Another item which starts appearing at the archaeological sites at this phase is coins. Coins came into use in this period for the first time in ancient India. They were made of silver and copper and were commonly those that are now called the punch-marked coins. They bear various kinds of symbols on one side and were, probably, initially issued by the merchants. The introduction of coinage promoted organized commerce. In addition, copper cast irons which, like the punch-marked coins, did not have any writings on them appear in this phase at some sites.



Punch-Marked Coins. Koshala *Karshapana*, c. 525-465 BCE. Credit:Classical Numismatic Group. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/Karshapana#/media/File:Kosala_Karshapana.jpg).

Barter system requires two persons willing to exchange their produce. Suppose, a person has a cow which he wants to exchange for hay. There is a person who has hay but he wants to exchange it for rice. In that case barter cannot take place. Coins, on the other hand, carry standard values for buying and selling. Besides, it is easier to carry coins than to carry cows for buying something. Introduction of money also led to the emergence of the class of money-lenders.

Larger settlements in this period show use of baked bricks for housing. Soaked pits made from superimposed jars or rings of terracotta used for the disposal of dirty water have also been reported. They indicate some kind of planning. In the preceding phase people lived in mud brick hutments. There is also evidence of a large number of settlements of larger size. This would indicate a higher density of population. In some sites drains and refuse bins have been reported. However, excavated materials indicate that many details regarding cities given in literature are either highly exaggerated or that they belong to a later period. None of the cities of c. 6^{th} century BCE show evidence of a planned layout, whereas literary works always talk about planned layouts of the cities. Large scale excavations at the ancient site of Taxila show that this town might have come into existence by 8th-7th century BCE. However, planned township came into existence only around c. 2nd century BCE. Similarly, literature repeatedly mentions that cities like Ayodhya and Vaishali covered anywhere between 30 to 50 square km. However, excavations indicate that none of these cities would exceed four to five square km. Likewise, descriptions of large palaces and wide streets seem to be exaggerated. So far, except at Kaushambi, no palatial structure has been reported of c. 6th century BCE. Houses were more like humble hutments. No monumental buildings are in evidence. Many early cities like Ujiaini, Kaushambi, Rajagriha etc. show evidences of fortification. Fortifications are indicative of increased apprehension of warfare. Also, fortifications are a way in which the urban community is demarcated from rest of the population which could be easily controlled by the king. This also supports the literary evidence that *Pura* meaning fortified settlement was the earliest form of urban settlement in ancient India.



Soaked Pits found at Ancient Cities. Source: EHI-02, Block-4, Unit-15.

It is now believed that prosperous cities with large palaces came into existence during Mauryan period. The literature available to us seems to have used Mauryan cities as standard description for the cities of the preceding period too.

Check Your Progress Exercise 1

1) Mark the correct answer.

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- a) disobedience of the son Rohit.
- b) buying of Sunahsepa.
- c) fact of king Harishchandra living not in a city but in a village.
- d) different roles played by the gods Varuna and Indra.

2)	Read the following statements and mark right (\checkmark) or wrong (\times) .
,	, , , , , , , , , , , , , , , , , , ,) - · · · · · · · · · · · · · · · · · ·

- a) An urban centre can be distinguished from a rural centre on the basis of the number of people and size of the settlement.
- b) Increasing use of iron tools helped in increasing agricultural production.

c) The wheat producing upper Gangetic valley produced more food grains than the rice producing middle Gangetic valley. ()

)

- d) The making of iron weapons increased the power of ruling classes. ()
- 3) Write five lines on the kind of cities referred to in the contemporary literature.
- What do the archaeological sources tell about the cities of c. 6^{th} century BCE?

- 5) Read the following statements and mark right (\checkmark) or wrong (\times).
 - i) There was a tradition of cities being named after name of the kings as well as trees.
 - ii) We do not get an accurate picture of the cities from ancient texts. ()
 - iii) With the coming of the cities the groups of beggars, sweepers and other impoverished sections completely disappeared. ()
 - iv) Introduction of coins made the barter system redundant and facilitated organized commerce. ()

10.8 UNITS OF SETTLEMENT-I: THE JANAPADA

The contemporary texts indicate that changes in society and economy were taking place in a well-defined geographical space. The literature relating to the period that we

are discussing refers to various kinds of units of settlement. They are referred to as *Janapada*, *Mahajanapada*, *Nagara*, *Nigama*, *Grama* etc. Let us first see what the *Janapadas* were.

Janapada, literally meaning place where people place their feet, is often referred to in the texts of this period. You remember the meaning of Jana? In the Vedic society it referred to members of a clan. In early Vedic society the members of *Jana* were pastoral groups roaming in search of pastures. However, in later Vedic phase the members of Jana took up agriculture and began to settle down. These agricultural settlements were called Janapadas. In initial phases they were named after the dominant Kshatriya lineages settled in that area. For example, the areas around Delhi and upper U.P. were known as Kuru and Panchala janapadas after the names of dominant Kshatriya lineages. Once they settled down at one place there was an expansion of agriculture, especially with the use of iron axes and plough shares that could clear forests and dig deeper than the stone or copper tools available to agriculturists of the preceding centuries. The middle Gangetic valley i.e. area east of Prayaga (modern Prayagraj) was suited to wet rice cultivation. Rice yields are higher than wheat yields per acre. All this would lead to gradual agricultural expansion as also growth of population. Chiefs of the lineages, at war with each other, had more to loot and defend. This was because besides cattle, now agricultural and other products were also available in larger quantities. Through the process of agricultural expansion, war and conquest, the Vedic tribes had come in closer contact with each other and with the non-Aryan population. This, in fact, had led to the formation of larger territorial entities. For example, Panchalas represented the coming together of five smaller tribes.

Some of the *Janapadas* were to develop into *Mahajanapadas* by *c*. 6th century BCE. This happened as a result of a series of changes in internal socio-political structure of the *Janapadas*. One such important change was the expansion of agricultural communities which is indicated by the fact that the contemporary texts list agricultural land as a very important economic asset. These texts discuss varieties of rice in as much detail as did the Vedic texts about the varieties of cows. Let us see what the changes were.

10.9 EMERGENCE OF NEW GROUPS

One very important change was the emergence of new categories and groups of people in the society. Let us look at this aspect in some details.

10.9.1 Gahapati

A Gahapati was the master of an individual household which owned land. A Brahmana Gahapati is said to have owned so much of land that he needed 500 ploughs to get it cultivated. In Later Vedic society it was the vish which performed agricultural activities. Land was jointly owned by the lineage. With the emergence of agricultural society land became an important form of wealth. As such, the ruling clans of Kshatriyas and Brahmanas brought it under their control. Out of these groups emerged the Gahapati who signified disintegration of joint ownership and emergence of big individual landowners. They got their land cultivated by slaves (dasa), hired labourers (karmakara) and shudras. People captured during war were made slaves. Impoverished members of the tribe also joined the ranks of labourers. Use of dependent labour was indicative of the emergence of a deprived class whose labour was being used to produce surplus food. The product of the land would not go to the shudra or the dasa but to the master i.e. the Gahapati.

10.9.2 Merchants

It was, possibly, from the ranks of the *Gahapatis* that an important class of traders emerged. Through the sale of their produce they built up a certain amount of capital which was used for trading. The word frequently used for trader in the Buddhist sources is *Setthi*, meaning 'a person having the best'. It shows that the people who dealt with money matters had acquired considerable prestige and power. The Brahmanical sources generally looked down on trading and the *vaishyas* who were generally associated with trading. However, by *c*. 6th century BCE trade and merchandise became an independent sphere of economic activity. The traders lived in cities and their emergence is related to the emergence of towns and cities in this period. These merchants traded over very large areas. By trading among different principalities they created a possibility for kings to try and control larger areas visited by them. Thus, by *c*. 6th century BCE a class of free peasants and merchants had emerged. They had freed themselves from clan obligations of sharing surplus food or wealth with other members of the lineage as was the case earlier. Private property in farm animals, in land and its produce had emerged as dominant economic reality of the time.

10.9.3 Ruler and the Ruled

Combined with developments in the socio-economic field were changes in the nature of polity in the *Mahajanapadas*. In the preceding period the word *Raja* referred to the chief of a lineage. For example, Rama, whose legends are related to this period, is often referred to as Raghukularaja meaning one who rules over the Raghu clan. Similarly, Yudhishthira is called Kuru raja. They ruled over their lineage and the notion of a ruler ruling over a territory had not emerged. The taxes collected from the kinsmen were largely voluntary tributes. The king was considered a generous father figure ensuring the prosperity of the lineage. He did not have an independent taxation system or army. References to the king in c. 6th century BCE, on the other hand, indicate his rule over a territory with a regular taxation system and army. There are references to Krsaka i.e. peasants who paid taxes to the king. Now, the peasant and the army were not linked in any kinship ties with the Raja. The distinction was now between Raja and Praja. The *Praja* included people from the non-lineage groups also. A standing army implied control over local peasantry through force and an attitude of permanent confrontation with the people and kings of neighbouring territories. Cattle raids of the preceding period were replaced by organized campaigns in which territory was annexed and agriculturists and traders were forced to pay taxes. Officials entrusted with the work of tax collection are repeatedly mentioned. An official called Bhagadugha collected bhaga i.e. a share of the agricultural produce. Survey of the agricultural land was done by an official called Rajjugahaka. The Jatakas mention royal officials measuring out grain to send it to king's granary. The *Mahajanapadas* did not bear the name of dominant *Kshatriya* lineage in most of the cases. For example, Koshala, Magadha, Avanti and Vatsa were not named after any Kshatriya lineage.

Thus, we see that a new kind of political system had emerged by 6th century BCE. Chief of the tribe who used to raid enemy territory and distribute the loot among his followers was transformed into a king having an army unfettered by tribal loyalties. Army was paid out of revenues collected from the cultivators. The Vedic chief's desire for glory and sacrifices led to his breaking away from the lineage. The tribe would not be interested in fighting wars in distant areas and would oppose any regular tax for maintenance of the army. This the king needed for his glory and power. His authority was not based on distribution of wealth among fellow tribesmen. It was based on breaking coherent lineage groups and recognizing individuals and groups who would

produce wealth. Some of this wealth was taken away from its producers in the form of taxes. In a lineage society where everyone was regarded as everyone else's relative such arbitrary taking away of wealth by the chief would not be allowed. The new king levied taxes and protected peasants and merchants from internal and external aggression.

Check Your Progress Exercise 2

1)		w have the historians combined archaeological and literary evidences regarding material culture in 6 th century BCE?
2)	Wri	te a note on new groups that emerged in this period.
3)	Rea	and the following statements and mark right (\checkmark) or wrong (\times).
	i)	People in c . 6^{th} century BCE did not know the use of iron. ()
	ii)	According to the contemporary texts no important changes were taking place in the society of that period.
	iii)	The <i>Janapadas</i> were essentially agricultural settlements and were named after the main <i>Kshatriya</i> lineages in that area.
	iv)	Some of the <i>Mahajanapadas</i> soon developed into <i>Janapadas</i> . ()

10.10 UNITS OF SETTLEMENT-II: THE MAHAJANAPADA

A new type of society marked by the presence of *Gahapati*, the merchant and the relationship between the ruler and the ruled was reflected in new kinds of politicogeographical units called the *Mahajanapadas*. The word *Mahajanapada* means large *Janapadas* like those of Magadha, Koshala etc., ruled by powerful kings or oligarchies. In fact, many of the *Mahajanapadas* of *c*. 6th century BCE came up by incorporating *Janapadas* which were previously autonomous. For example, Koshala *mahajanapada* included the *janapada* of the Shakyas and of Kashi. Magadha came to include the *Janapadas* of Anga, Vajji. etc. even before it grew into an empire. The new society which is reflected in contemporary Buddhist texts can be seen in the story of Jivaka. Historians read these stories to understand the hopes, ambitions and struggles of men of those days and their contemporary social milieu.

10.10.1 The Story of Jivaka

The story of Jivaka, the famous physician, comes to us from the time of the Buddha. In the city of Rajagriha (Rajgur, near present-day Patna) there was a prince named Abhaya. He saw an abandoned baby on a street. He brought him home and ordered the maid servants to take care of the child. The boy was called Jivaka. When Jivaka grew up, he wondered what he should do for a living. He decided that he would become a physician (vaidya). In those days Taxila was a famous centre of learning. Jivaka decided to go there to learn medicine. He stayed there for seven years. He studied hard under the guidance of a famous medicine man. At the end of his apprenticeship his teacher took a test. He asked Jivaka to look around the surroundings at Taxila and bring some plants which could not be used for medicinal purposes. Jivaka went out and looked about as carefully as he could for some plants which were useless for medicine. When he returned the teacher asked him, "How many plants did you find?" Jivaka said, "Sir, I could not find a single plant which did not have any medicinal value". The teacher was very pleased and said that his education was complete.

Jivaka set out for Rajagriha. He ran out of money after he had covered half the distance only. He looked for some work and found out that the wife of a wealthy merchant had been ill for seven years. He cured her. The merchant gave him lots of money. Thus, Jivaka came back to Rajagriha. In Rajagriha he became the private physician of king Bimbisara. Bimbisara was so impressed with his skill that he used to send him to look after the Buddha. Thus, Jivaka came in contact with the Buddha. He gave lots of gifts to Buddhist monks.

Just compare the setting of the story with happenings in Early Vedic society. No cattle raids, no sacrifices and no priests. The story points to the existence of flourishing urban settlements and important characters of the story are an abandoned child who chooses to become a physician, a merchant (*Sresthin*), a king (Bimbisara) and the Buddha, the exponent of a new doctrine. And look at the geographical range – the Early Vedic Aryans seem to have been ranging the plains of Punjab in search of pastures. Jivaka travels all the way from the present-day Bihar to the north-western border of Punjab. This would mean that he covered a distance of more than 2000 km. to be able to learn the practice of medicine. These new kinds of settlements, new kinds of occupations and new networks of roads are symptomatic of a changed historical situation.

Jivaka moved in a world of new kinds of settlement i.e. the city. The city flourished in a universe of prosperous villages. Village was the basic unit of the socio-political organization of the *Mahajanapadas*. And, so, we take a round of the village of c. 6^{th} century BCE.

10.10.2 Villages

In the *Mahajanapadas* the basic unit of settlement was the *Gama* (which in Prakrit and Pali languages is the equivalent of Sanskrit *Grama*, meaning a village). Remember the *Grama* of Early Vedic times. It used to be a mobile unit of people and when two *gramas* came together it led to *Sangrama* (literally, coming together of villages) i.e. battle. This was because they were mobile units and when two hostile *gramas* met it led to attempts at snatching away each other's cattle. Villages of *c*. 6th century BCE were settlements where people generally pursued agricultural activities (this signifies a shift from pastoral to agricultural activities). There were various kinds of small and large villages inhabited by a single household or many families. Households seem to have been part of an extended kin group, meaning that everyone was related to everyone else in the villages. However, with the emergence of families who had large

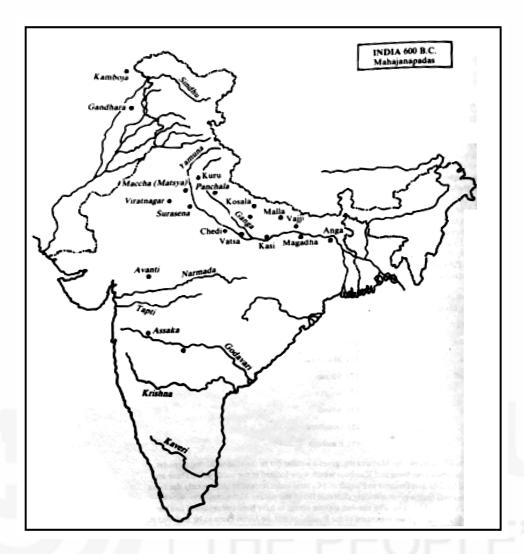
landholdings and who employed the labour of dasas, karmakaras and porisas, villages inhabited by non-kinship groups also came into existence. There are references to land ownership and tenancy rights of varied kinds. Kassaka and Ksetrika denoted common peasants who were generally shudras. Leaders of the villages were called Gamini. The Gamini are also referred to as soldiers, elephant and horse-trainers and stage managers. The trend towards increasing craft specialization is evident from references to villages of cattle-keepers, ironsmiths, wood workers etc. These references to villages specializing in activities other than agricultural operations are indicative of increasing trade and prospering economy. This is because the villagers who were not producing their own food must have got their food from other villages. This suggests that regular exchange of goods had become an integral part of the economic life of the people. Also, their specialization in one craft is indicative of the fact that there was a large scale demand for the goods produced by them.

10.10.3 Towns and Cities

Towns and cities dominated by kings and merchants but at the same time containing a heterogeneous population were the new kinds of settlements which came into existence during this period. As we have seen, they are variously referred to as *Pura*, *Nigama* and Nagara. Differences among these settlements are not clear. They probably referred to size as well as varying features of the settlements. These towns and cities were substantially larger than villages. Contemporary literature refers to big cities like Ayodhya and Varanasi covering anywhere between 30 to 50 square km. of area. These accounts are exaggerated as the excavations conducted in these cities show modest settlements in this period. In no period did the size exceed five square km. in circuit. However, this historic phase is associated with settlements using a deluxe pottery called Northern Black Polished Ware (NBPW). The settlements witnessed an increase in trade and population. Massive fortifications have been found around the cities of Kaushambi, Ujjaini, Rajghat (Varanasi) and Rajgir. What is clear from the references in literature is the fact that the cities had emerged as the focus of power and control over the Mahajanapada. Kings ruled from their cities. The newly emerging merchant class controlled trade from these centres, especially after the introduction of coinage.

10.11 THE SIXTEEN MAHAJANAPADAS

In the previous section we discussed the literary and archaeological evidences for the presence of the basic units of settlement in c. 6th century BCE. Now we will discuss references to 16 Mahajanapadas in ancient literature. Buddhist sources refer to the presence of 16 Mahajanapadas in the period when the Buddha lived. The Mahajanapadas and their major settlements are found mentioned repeatedly when references to the Buddha are made in the Buddhist texts. Exact dates of his life are still disputed by historians. It is, however, generally believed that his life spanned parts of both 6th and 5th centuries BCE and the Buddhist texts referring to his life are, therefore, taken to reflect the society of this period. The list of Mahajanapadas varies from text to text. However, we can get a fair idea of the political and economic conditions of various regions of India by studying these lists. These Mahajanapadas represented a conglomerate of thousands of villages and a few cities. They extended from northwestern Pakistan to east Bihar and from submontane regions of the Himalayas to the river Godavari in south.



Mahajanapadas. Source: EHI-02, Block-4, Unit-14.

The Buddhist text *Anguttara Nikaya*, which is a part of the *Sutta-Pitaka*, gives the following list of 16 *Mahajanapadas* in the time of the Buddha:

1)	Kashi	9)	Kuru
2)	Kosala	10)	Panchala
3)	Anga	11)	Maccha (Matsya)
4)	Magadha	I 2)	Surasena
5)	Vajji	13)	Assaka
6)	Malla	14)	Avanti
7)	Chedi	15)	Gandhara
8)	Vatsa	16)	Kamboja

Another Buddhist work, the *Mahavastu* gives a similar list of 16 *Mahajanapadas*. However, it omits Gandhara and Kamboja which were located in north-west. These are substituted by Sibi and Dasarna in Punjab and central India respectively. Similarly, the Jaina work *Bhagavati Sutra* gives a widely different list of 16 *Mahajanapadas* which includes Vanga and Malaya. The number 16 seems to have been conventional

and the lists varied because the regions important to Buddhists and Jainas came to be included in their lists. The lists indicate a gradual shift of focus to middle Gangetic valley because most of the *Mahajanapadas* were located in this area. Let us survey the history and geography of these *Mahajanapadas*.

1) Kashi

Of the 16 Mahajanapadas, Kashi seems to have been the most powerful in the beginning. Located in and around the present-day Varanasi, its capital Varanasi is referred to as the foremost city of India situated on the confluence of the Ganges and Yamuna and in the midst of fertile agricultural tracts. Kashi was famous for its cotton textiles and market for horses. Excavations at the site of Rajghat which has been identified with ancient Benaras have not yielded any impressive evidence for urbanization in *c*. 6th century BCE. It seemed to have emerged as a major town around 450 BCE. However, we know that the orange brown robes of Buddhist monks were called *Kashaya* in Sanskrit which was made in Kashi. This indicates that Kashi had emerged as a cloth manufacturing centre and market by the time of the Buddha.

Several kings of Kashi are mentioned as having conquered Kosala and many other kingdoms. Interestingly enough, the earliest available version of the Rama story 'the Dasaratha Jataka' mentions Dasharatha, Rama etc. as kings of Kashi and not of Ayodhya. The father of Parsva, the 23rd teacher (*Tirthankara*) of the Jainas, is said to have been the king of Benaras. The Buddha also delivered his first sermon at Sarnath near Benaras. All important religious traditions of ancient India associated themselves with Kashi. However, by the time of the Buddha, Kashi *Mahajanapada* had been annexed by Koshala and was a cause of war between Magadha and Koshala.

2) Kosala

The Mahajanapada of Kosala was bounded on the west by river Gomati. To its east flowed the river Sadanira which separated it from Videha janapada. Towards the north it skirted the Nepal hills while the river Syandika defined its southern boundary. Literary references indicate how Kosala emerged out of an assimilation of many smaller principalities and lineages. For example, we know that the Shakyas of Kapilavastu were under the control of Kosala. The Buddha calls himself a Kosalan in the Majjhima Nikaya. But, at the same time, the Kosalan king Vidudhaba is said to have destroyed the Sakyas. It would only indicate that the Sakya lineage was under the nominal control of the Kosalas. The newly emergent monarchy established a centralized control and, thus, destroyed the autonomy of the Sakyas. Names of kings like Hiranyanabha, Mahakasala, Prasenajita and Suddhodana are mentioned as the rulers of Kosala in c. 6th century BCE. These rulers are said to have ruled from Ayodhya, Saket, Kapilavastu or Shravasti. Probably, in the early years of 6th century BCE the area of Kosala was under the control of many smaller chiefships ruling from small towns. Towards the end of the century kings like Prasenajita and Vidudhabha managed to bring all other chiefships under their control. They ruled from Shravasti. Thus, Kosala became a prosperous kingdom having three big cities under its control:

- Ayodhya,
- Saketa, and
- Shravasti.

Kosala also annexed the kingdom of Kashi in its territory. The kings of Kosala favoured both Brahmanism and Buddhism. King Prasenajita was a contemporary and a friend of

the Buddha. In the succeeding phases Kosala proved to be one of the most formidable adversaries of the emergent Magadhan empire.

3) Anga

Anga comprised the districts of Bhagalpur and Monghyr in Bihar. It may have extended northwards to river Kosi and included some parts of the district of Purnea. It was located to the east of Magadha and west of Rajamahal hills. Champa was its capital. It was located on the confluence of rivers Champa and Ganga. Champa has been considered one of the six great cities in *c*. 6th century BCE. It was noted for its trade and commerce, and traders sailed further east through the Ganga from here. In the middle of 6th century BCE Anga was annexed by Magadha. Excavations at Champa near Bhagalpur have yielded NBPW in large numbers.

4) Magadha

Magadha consisted of the areas around Patna and Gaya in south Bihar. It was protected by rivers Son and Ganga on its north and west respectively. Towards the south it reached up to the Chhota Nagpur plateau. In the east Champa separated it from Anga. Its capital was called Girivraja or Rajagriha. Rajagriha was an impregnable city protected by five hills. The walls of Rajagriha represent earliest evidence of fortification in historical India. The capital was shifted to Pataliputra somewhere in 5th century BCE. They bear testimony to the power of early Magadhan monarchs. In the Brahmanical texts the Magadhans were considered people of mixed origin and inferior type. This was probably because the people in this area did not follow the *varna* system and the Brahmanical rituals in early historical times. Buddhist tradition, on the other hand, attaches great importance to this area. The Buddha achieved enlightenment in this area. Rajagriha was one of his favourite haunts. The Magadhan monarchs Bimbisara and Ajatshatru were his friends and disciples. With its fertile agricultural tracts suited to wet rice cultivation, control over the iron ores of south Bihar and relatively open social system, Magadha became the most important kingdom in subsequent history. Its control over trade routes of the Ganges, Gandak and Son rivers could provide it substantial revenues. The Magadhan king Bimbisara is said to have called an assembly of the Gaminis of 80, 000 villages. The number might be fictitious but it indicates that his administration was based on the village as a unit of organization. The Gamini were not his kinsmen but representatives and chiefs of villages. Thus, his power was based not on the goodwill of his kinsmen. Ajatshatru usurped the throne and starved Bimbisara to death. Magadha as a kingdom kept prospering, with the extension of its control over the Vajjis of Vaisali. This was to culminate in Mauryan empire in 4th century BCE.

5) **Vajji**

Centred on the Vaishali district of Bihar, the Vajjis (literal meaning is 'pastoral nomads') were located north of the Ganga. This *Mahajanapada* extended up to the hills of Nepal in the north. It was separated from Kosala by river Gandak. Unlike the *Mahajanapadas* previously discussed, the Vajjis had a different kind of political organization. Contemporary texts refer to them as a *Gana-sangha*, a term which has been variously translated as a republic or an oligarchy. The *Ganasanghas* of this period represented a rule not by an all-powerful king but a joint rule by a group of *Kshatriya* chiefs. This ruling class, members of which were called *rajas*, were now differentiated from different non-*Kshatriya* groups.

The Vajjis represented a confederacy of eight clans of whom Videhas, Licchavis and Jnatrikas were the most well known. Videhas had their capital at Mithila. It has been identified with Janakpur in Nepal. Although the *Ramayana* associates it with king Janaka

the Buddhist sources consider it a chiefship. Licchavis, the most well known of the ancient Indian *Ganasanghas*, had their headquarters at Vaishali which is said to have been a large and prosperous city.



Stupa with Relics of Ananda (Buddha's attendant monk and cousin), with Ashokan Pillar, Built by the *Licchavis* at Vaishali, present Bihar. Credit: mself. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/Licchavi (clan)#/media/File:Anandastupa.jpg).

The Jnatrikas were another clan settled somewhere in the suburbs of Vaishali. This was the clan which produced Mahavira, the Jain teacher. Other members of the confederacy were the clans of:

- Ugras,
- Bhogas,
- Kauravas, and
- Aiksavakas.

Vaishali seems to have been the metropolis of entire confederacy. They conducted their affairs in an assembly. Accordingly to a *Jataka* story the Vajjis were ruled by many clan chiefs. This *Mahajanapada* was a major power in c. 6th century BCE. However, they do not seem to have possessed a standing army or a system of revenue collection from agriculture. The Magadhan king Ajatshatru is supposed to have destroyed this confederacy. He sowed discord among the chiefs with the help of his minister Vassakara and then attacked the Licchavis.

6) Malla

The Mallas were another *Kshatriya* lineage referred to as a *Ganasamgha* in ancient texts. They seem to have had several branches of which two had their headquarters in the towns of Pava and Kusinagar. Kusinagar has been identified with the site of Kasia in the Gorakhpur district of U.P. There is no unanimity among scholars about the location of Pava. The Malla territories are said to have been located to the east and south-east of the territory of Sakyas. They are supposed to have been ruled by 500 chiefs. The Buddha died in the vicinity of Kusinagar and his last rites were performed by the Mallas.

7) Chedi

The Chedi territory roughly corresponds to eastern parts of the modern Bundelkhand. It might have stretched up to Malwa plateau. Sisupala, the famous enemy of Krishna, was a Chedi ruler. According to the *Mahabharata* the Chedis seem to have been in close touch with the chiefs of Matsya beyond Chambal, the Kasis of Benaras and the Karusas in the valley of river Son. Its capital was Sotthivati (Suktimati) probably located in the Banda district of M.P. Other important towns in this territory were Sahajati and Tripuri.

8) Vatsa

Vatsa, with its capital at Kaushambi, was one of the most powerful principalities of *c*. 6th century BCE. Kaushambi has been identified with modem Kosam on the Yamuna near Prayaga (modern Prayagraj). This means that the Vatsas were settled around modern Prayagraj. The *Puranas* say that the descendant of the Pandavas – Nichaksu – shifted his capital to Kaushambi after Hastinapura had been washed away by floods. The dramatist Bhasa has immortalized one of the kings of the Vatsas named Udayana in his plays. These plays are based on the story of romantic affair between Udayana and Vasavadatta, the princess of Avanti. They also indicate conflicts among the powerful kingdoms of Magadha, Vatsa and Avanti. Vatsa, however, seems to have lost the ensuing struggle as the subsequent texts do not give them much importance.

9) Kuru

The kings of Kuru were supposed to belong to the family of Yudhishthira. They were centred around the Delhi-Meerut region. The *Arthashastra* and other texts refer to them as *Rajasabdopajivinah*, i.e., carrying the titles of kings. This indicates some kind of a diffused structure of chiefship. That they did not have absolute monarchy is also proved by references to many political centres in this area. Hastinapura, Indraprastha, Isukara are each mentioned as the capital of the Kurus having their own chiefs.

We all know about the Kurus through the Mahabharata. It relates the story of the war of succession between Pandavas and Kauravas. The epic has enthralled generations of Indians with its superb interweaving of themes relating to love, war, conspiracy, hatred and larger philosophical issues relating to human existence. Historians treat it more as Epic literature than an actual description of events. Large-scale wars started only with the emergence of *Mahajanapadas*, the earlier phase being characterized by cattle raids. The Mahabharata also mentions Greeks who came into contact with India only around 5th century BCE. Thus, a war involving them could take place only in 1st millennium BCE. Probably, the Mahabharata story relates to an internecine war between two Kshatriya lineages which became a part of singing tradition of the bards. With the emergence of early historic period the social, economic and political interaction increased among the *Mahajanapadas*. Singing bards and *brahmanas* brought in every region of India in the story of *Mahabharata*. This pleased the monarchs who could boast of an ancestor who fought in the *Mahabharata* war. Thus, the Epic became a mechanism for the spread of the Brahmanical religious system. This is clear from the fact that in the prologue of the Epic it is said that an earlier version having 24,000 stanzas was still current. The present Epic has one lakh stanzas.

10) Panchala

The Panchala *mahajanapada* was located in Rohikhand and parts of central *Doab* (roughly Bareilly, Pilibhit, Badaun, Bulandshahr, Aligarh etc.) Ancient texts refer to the presence of two lineages of the Panchalas i.e. northern Panchalas and southern Panchalas, with river Bhagirathi forming the dividing line. Northern Panchalas had their capital at

Ahichchhatra located in Bareilly district of U.P. Southern Panchalas had Kampilya as their capital. They seem to have been closely linked to the Kurus. Although one or two Panchala chiefs are mentioned we have very little information about them. They too are called a sangha. By c. 6^{th} century BCE they seem to have become an obscure power.

11) Matsya

The Matsyas were located in the Jaipur-Bharatpur-Alwar region of Rajasthan. Their capital was at Viratnagar famed as the hiding place of the Pandavas. This region was more suitable for cattle rearing. That is why in the *Mahabharata* story when the Kauravas attacked Virat they took away cattle as booty. Obviously, Matsya could not compete with the powers that emerged on the basis of settled agriculture. It was absorbed in the Magadhan empire. Some of the most famous edicts of the king Ashoka have been found in Bairat (Jaipur district), the ancient Virat.

12) Surasena

The Surasenas had their capital at Mathura on the bank of Yamuna. In *Mahabharata* and the *Puranas* the ruling family of Mathura is referred to as the Yadus. The Yadava clan was divided into many smaller clans like Andhakas, Vrishanis, Mahabhojas, etc. They too had a *sangha* form of government. The epic hero Krishna is associated with these ruling families.

Mathura was located at the junction of two famous ancient Indian trade routes i.e. *Uttarapatha* and *Dakshinapatha*. This was because Mathura represented transitional zone between Gangetic plains having settled agriculture and the sparsely populated pasture lands jutting into Malwa plateau. That is why Mathura emerged as an important city. However, because of the splintered political structure and varied landscape, the chiefs of this area could not carve out a powerful kingdom.

13) Assaka

The Assakas were inhabiting the banks of Godavari near modern Paithan in Maharashtra. Paithan has been identified with ancient Pratisthana, the capital of the Assakas. The *Dakshinapatha* (southern route) is supposed to have connected Pratisthana with cities of the north. There are vague references to the kings of the Assakas but our information regarding this region is very limited.

14) Avanti

Avanti was one of the most powerful *mahajanapadas* in *c*. 6th century BCE. Core area of this kingdom would roughly correspond to the Ujjain district of M.P., extending up to river Narmada. It had another important city Mahishmati which is sometimes mentioned as its capital. Several other small and big towns are mentioned as dotting the Avanti region. The *Puranas* attribute the foundation of Avanti to one of the clans of Yadus called the Haihaya. Located in a very fertile agricultural tract and controlling the trade coming from south, this clan of the Yadus here developed into a centralized monarchy. In *c*. 6th century BCE a powerful king named Pradyota was ruling over Avanti. He seems to have conquered Vatsa and even Ajatshatru was afraid of him.

15) Gandhara

Gandhara was located between Kabul and Rawalpindi in North-Western Province. It might have included some parts of Kashmir. Although it was an important area in Early Vedic period it lost its importance in the Brahmanical and Buddhist traditions of later phases. The capital Taxila was an important city where people from all the *janapadas* went for learning and trading. In *c*. 6th century BCE Gandhara was ruled by a king

named Pukkusati. He was friendly with Bimbisara. In the later half of $6^{\rm th}$ century BCE Gandhara was conquered by the Persians. Excavations at the modem towns of Taxila show that this site was occupied since 1000 BCE and some kind of township emerged subsequently. By c. $6^{\rm th}$ century BCE a city having similarities with the Gangetic valley cities had emerged.

16) Kamboja

Kamboja was located somewhere close to Gandhara, probably around the present day Punch area. Already by c. 7^{th} century BCE the Kambojas were regarded as uncultured by the Brahmanical texts. The Arthashastra calls them varta-shastropajivin sangha meaning a confederation of agriculturists, herdsmen, traders and warriors.

Check	Your	Progress	Exercise 3
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		rour riogress Enerch						
1)	Ify	ou were a historian, wh	at inf	Gerences would you draw from the story of Jivaka?				
2)		w does archaeology o tury BCE?	corre	ct the literary evidence about the cities of c . 6^{th}				
3)	Ma	Match the name of the rulers with the name of the <i>Mahajanapadas</i> .						
	i)	Ajatshatru	A.	Kosala				
	ii)	Pradyota	B.	Magadha				
	iii)	Udayana	C.	Avanti				
	iv)	Prasenajita	D.	Vatsa				
4)	Ma	Match the name of the <i>Mahajanapadas</i> with the name of their capital.						
	i)	Kashi	A.	Vaisali				
	ii)	Anga	B.	Varanasi				
	iii)	Vajji	C.	Kaushambi				
	in)	Votce	D	Champa				

10.12 SOCIETY

Before we discuss the major aspects of society and economy in the period between 6th and 4th century BCE, it is necessary, as an introduction, to recapitulate some of the points already discussed.

- First, the Later Vedic society seems to reflect a shift to a new geographical region
 i.e., the upper and middle Ganga valley, as well as the consolidation of agrarian
 economy.
- Second, the appearance of rulers and others who enjoyed shares of wealth produced by society without producing any wealth themselves, and institutionalised inequality in society. This institutionalisation of inequality meant the emergence of State and the state apparatus. It also meant further consolidation of the theory of the division of society into four *varnas*, because the *varna* theory elaborated the ways in which different sections in society should perform their duties.

We have a variety of texts which provide us with information about society and economy of 6th to 4th century BCE period. There are many Brahmanical texts meant to instruct people in the performance of day-to-day rites and rituals. They are called the *Grihyasutras*, *Shrautsutras* and *Dharmasutras*. Among these manuals some texts like those of Apastamba belong to this period. The grammar of Panini provides brief references to many communities in those times. However, our primary sources of information about this period are various Buddhist texts. Written in the Pali language, the early Buddhist canons date back to the period between *c*. 6th and 4th centuries BCE. Our knowledge about the contemporary society is also enriched by the study of archaeological sites related to Northern Black Polished Ware.

The society of 6th to 4th century BCE is a society undergoing tremendous change. Preachers, princes and merchants vie for our attention. This was the time when cities came into existence for the second time in historical India. This was also the time when a literate tradition began. Towards the end of this period the society had acquired the knowledge of writing and the earliest script of ancient India is called the *Brahmi* script. The invention of writing expanded the horizon of knowledge. Socially acquired knowledge had been transmitted through memorization from one generation to another. There was a possibility of lots of things being forgotten or changed over a period of time. The invention of writing meant that knowledge could be stored without tampering with it. This fact heightened the consciousness of change. This was because the social structure and beliefs kept changing in time. Once things were written down those changes became observable to the people of subsequent period when ideas and beliefs had changed. Let us discuss about the various sections of society who are caught in the flux of change.

10.12.1 Kshatriyas

The Kshatriyas appear to be the most visible and powerful section of society in the contemporary literature. The Buddha and Mahavira belonged to this group. In the Brahmanical texts the Kshatriyas have been equated with warrior caste. This is the second highest caste in the varna order. They were supposed to be rulers of the society. However, the Buddhist literature gives a different picture of them. They did not have the compactness and strict rules of marriage which characterize a caste. They are mentioned as ruling lineages of the Ganasamghas like those of Vaishali and Kapilavastu, referred to as the Sakyas, Licchavis, Mallas etc. They were groups who owned land collectively. Their land was cultivated by slaves and labourers called Dasas and Karmakaras. They do not seem to have performed the Brahmanical rituals. As such, we find that the

Buddhist literature generally talks of only two groups in the *Ganasamghas*. They are the high caste and the low caste. In these areas, instead of the four-fold Brahmanical caste structure there is a two-fold division. The *Brahmanas* and *Shudras* are missing. These Kshatriya clans practiced various kinds of marriage customs which included cross-cousin marriage. In fact, they were so particular about whom to marry and not to marry that the Sakyas are supposed to have been destroyed because of this. According to a story their overlord, the king of Kosala called Prasenajit, wanted to marry a Sakya girl. The Sakyas could not refuse the offer. So, they sent a Sakya slave girl who was married to the king. The progeny of this marriage succeeded to the throne. Upon discovering this ruse played by the Sakyas, he destroyed them in anger. Although both, the Kosalan monarch and the Sakyas were *Kshatriyas* they did not inter-marry. This indicates that the Kshatriyas were not a caste in the sense we understand it. They were very proud of their lineage and status. The Sakyas, Licchavis, Mallas and other such clans jealously guarded their rights of entry in their assemblies and other people were not allowed into these places. These assemblies decided most of the socio-political issues of their society. They did not pay land taxes and did not have a standing army. In times of war the entire lineage would take to arms.

In the kingdoms of Kosala, Kashi etc. the rulers are referred to as *Kshatriyas*. However, unlike the Brahmanical sources the Buddhist sources place them at the top of the fourfold caste structure. In one of the discourses the Buddha says, "Even when a *Kshatriya* has fallen into the lowest depths, he is still the best and the *Brahmanas* are low in comparison to him." Some of the *Kshatriyas* are shown as learned teachers and thinkers. Some others are described as taking to trade. As such, one can say that the Brahmanical notion of *Kshatriya* as the warrior caste was applicable to only some princely families in the upper and middle Gangetic plains. They performed a variety of activities like:

- preaching,
- trading, and
- supervising agriculture.

Especially in eastern India the *Kshatriyas* did not exist as a caste. Rather, there were many separate groups who called themselves *Kshatriyas*.

10.12.2 Brahmanas

The *Brahmanas* mentioned in the contemporary texts seem more like a caste group. The *Brahmana* is one who is born a *Brahmana*. He may change his profession still he remains a *Brahmana*. The Brahmanical texts give them the privilege of mediation between man and god. They had the exclusive rights of performing sacrifices. This group was imbued with a consciousness of being the highest caste. They also seem to have followed certain rules of avoiding impure food and habitations. The *Shatapatha Brahmana*, a contemporary Brahmanical text, mentions the following four important marks of a *Brahmana*:

- brahmanical parentage,
- suitable behaviour,
- attainment of fame, and
- teaching of men.

For doing this they were supposed to enjoy certain privileges. They were to be respected, given presents and were given immunity from death sentence. Many *Brahmanas* did

follow the life of renouncement and teaching. Buddhist literature is generally critical of them. However, it is critical of those who had deviated from pious ethical life. They criticized excessive ritualism and greediness of the Brahmanas. Many Brahmanas embraced Buddhism. It had been found that among the early followers of the Buddha the Brahmanas were present in largest number. However, Pali literature also indicates that they had taken to various kinds of professions. In the Dasabrahmana Jataka we are told a story which will give us an idea of Buddhist attitude towards the *Brahmanas*. In ancient times there reigned in the city of Indpatta in the kingdom of Kuru king Koravya of the family of Yuddhitthila. He was advised by his minister Vidhura in worldly and spiritual things. He (the king) gave him a seat and asked his advice. "Seek *Brahmanas*, Koravya, who are virtuous and learned, who, eschewing sensual pleasures, would enjoy my gifts, gifts, O friend, we will make where, what is given will bear rich fruit." "Very difficult to find are the *Brahmanas*, O king, who are virtuous and learned, who, eschewing sensual pleasures, would enjoy your gifts." "Verily, there are 10 classes of Brahmanas, Oking. Here when I distinguish and classify them clearly: Provided with roots, they gather herbs, bathe and mutter aphorisma. Physicians they resemble, O king, even if they call themselves *Brahmanas*, they are now known to you, O great king, to such we will go." "Strayed have they" replies king Koravya..... "Little bells they carry before you and ring, messages also they carry and they know how to drive wagons, servants they resemble"..... "Carrying a water-pot and a bent stick they run behind the kings into the villages and the country towns, saying 'If nothing is given, we will not leave the village or the forests'. Tax collectors they resemble"... "With long nails and hair on the body, filthy teeth, filthy hair, covered with dust and dirt, they go out as beggars. Wood-cutters they resemble".... "Myrobalans, mango and jack fruits, baskets made of sugar, scents, honey and ointment, the most diverse wares they sell, O lord. Tradesmen they resemble" ... "Agriculture and trade they carry on, they breed goats and sheep, their daughters they give away (for money), marriages they arrange for their daughters and sons. The Ambattha and versa they resemble" ... "Some Purohits eat food brought from outside, many people ask them (regarding omens), animals they castrate and lucky signs they prepare. Sheep are also slaughtered there (in the houses of the *Purohits*), as also buffaloes, swine land goats; slaughterer they resemble"... "Armed with the sword and the shield axe in hand, they stand in the roads of the varsas (i.e., in the business streets) lead the caravans (through roads exposed to robbers). Cowherds they resemble and *nishadas*"... "Building huts in the forest, they make nooses; hares, cats, lizards, fish and tortoises they kill. Hunters are they"... "Others lie for love of money under the bed of kings; the latter bathe over them after a Soma offering is ready. Bathers they resemble"...

(Names of persons and places as given in the original text have been retained.)

This story gives us an idea of the variety of activities performed by the *Brahmanas*. It also gives us a glimpse of the range of professions present in contemporary society. Even with changes in profession they are considered worthy *Brahmanas*. They do not lose their caste. References to learned *Brahmanas* are also given. So are the references to *Brahmana* agriculturists who cultivated their own land or got their land cultivated by slaves and servants. However, their primary identity as a caste concerned with the divine, had already been formed.

10.12.3 Vaishyas and the Gahapati

In the Brahmanical *varna* system *Vaishya* was the third caste in the ritual order. They were entrusted with:

• cattle herding,

- agriculture, and
- trade.

Buddhist literature, on the other hand, uses the term *Gahapati* more frequently. *Gahapati* literally means master of the household. This community of land-holders cultivated its land with family labour or the labour of slaves and servants. They seem to have emerged out of the *rajanya* and groups mentioned in the Vedic literature. Their emergence represents the emergence of family and individual ownership of wealth. Earlier, wealth was collectively owned by the entire lineage. Apart from the *Gahapatis* the Buddhist literature mentions a whole range of professionals and merchants who would fall under the category of *Vaishyas* of the Brahmanical texts. Each of them were closed kinship groups who would not inter-marry. Their identity was defined by the kind of professions they followed and by their geographical location. As such, there never was a *Vaishya* caste in the Brahmanical sense of the term. Rather, there were many groups having caste-like formations. Let us look at some of these groups.

As already mentioned, the *Gahapatis* form a prominent category of landowners. Interestingly enough, they are rarely found in the *Ganasamghas* where land was owned by *Kshatriya* lineages. They are frequently mentioned in monarchies of the middle Gangetic valley. They were the primary exploiters of agriculture and the source of revenue for the kings. They included men of wealth who were also associated with carpentry, medicine etc. *Pali* texts use another term *Kutumbika* in a synonymous sense which would mean head of the household (*Kutumba*). They are shown as rich landowners, dealing in corn or money transactions.

It was from the class of rich landowners that a section of rich traders evolved. The *Gahapatis* are mentioned in trading towns too. Individual ownership of wealth and weak Brahmanical influence helped the *Gahapatis* use their wealth for trade. In western Gangetic valley this wealth would have been used for sacrifices. Thus, out of this branching off emerges the class of *Setthi*. The word *Setthi* literally means "a person having the best". The *Setthi-Gahapati* referred to very rich merchants and bankers having close contacts with the king. Anathapindika who donated the Jetavana in Shravasti to the Buddha was one such rich *Setthi*. A *Setthi* in Benaras engages in trade and drives a caravan of 500 wagons. Their profession as bankers flourished with the invention of coined money. Coins called *Shatamana*, *Karshapana* etc. are mentioned in the contemporary literature. Excavations have also shown that coins had come in use by this period. Long distance trade is frequently mentioned.

Apart from big merchants and landlords many small scale traders are also mentioned. Among them shopkeepers, retailers, traders, pedlars selling pots and pans, carpenters, ivory-carvers, garland makers and smiths can be mentioned. These groups formed professional unions. No one else but a family member could take up that profession. This local division of different kinds of works and the hereditary character of various professions gave them the character of guilds. They used to have a head who would look after their interests. The king was supposed to respect internal rules of the guild and protect it. The presence of guild indicates increased trading and manufacturing activity. It meant that groups identified specifically on the basis of their economic activity came into existence. These groups did have the character of caste. Each of these groups would marry inside the group only and their rules were considered inviolable.

10.12.4 *Shudras*

The *Shudras* were lowest caste in the Brahmanical order. Their only duty was service to the other three castes. The non-Brahmanical texts give us a picture of many oppressed

and poor people who are bracketed as *Shudras*. Pali literature frequently mentions *dasas* (slaves) and *karmakaras* (wage labourers). The term *Dalidda* is used for denoting extremely poor people who did not have anything to eat and no covering for their back. So, for the first time we have references to the rich living in luxury and the poor destitute. The process of such impoverishment and the formation of *Shudra* caste may be attributed to the appropriation of land and other resources by powerful groups. The *Shudras*, without any resources, were reduced to servility and forced to work on land of the rich. The more general reference to them included artisans and craftsmen also. The *Dharmasutras* ascribe the origins of various groups of the *Shudras* by the notion of *Sankirna jati*, which means that if there is an inter-caste marriage, their progeny would be of a very low caste. This was the counterpart in ritual status to the economic and social deprivation of peasants, slaves and craftsmen. They had the most to lose from the erosion of kinship ties characterizing Vedic society.

Dasasudda is frequently mentioned in contemporary literature. They were slaves who did not have any legal status. Prisoners of war and people who could not pay back their debts seemed to be chief sources of supply of *Shudra* labour. They were forced to work on land of the rich. Dasas, karmakaras and kassakas were the sources of labour supply in rural areas. With the emergence of cities the inequality between rich and poor further increased.

All the groups mentioned above, by no means exhaust the list of social categories present in the time of the Buddha. Wandering dancers and musicians moved from village to village and impressed their audiences with their skills. Tricksters, tramps, elephant tamers, stage managers, soldiers, writers, archers, hunters and barbers were some of the groups which come in our view. It is difficult to place them in the caste order. Probably, they would be considered out castes. Most of them were outside the pale of the newly emerged agrarian society. As such, they were generally despised. Sometimes these groups rose in revolt. Jataka stories are full of descriptions of war. Poor Shudras are mentioned as living outside the city. The logical outcome of this process was the emergence of untouchability. The *chandalas* are described in living in separate villages. Their presence was believed to be so polluting that the daughter of a Setthi washes her eyes on seeing a chandala. Similarly, a Brahmana is disturbed about the fact that a breeze blowing past a *chandala* would touch him. They were supposed to wear garments of the dead and eat their food out of broken pots. Other such despised groups were Pukkusas, Nishadas and Venas. One of the justifications of the king's rule was that he protected villages from the plundering, pillaging tribes. These were primitive communities who were gradually evicted from their homes in the forests. They either became slaves or robbers. There are references to villages of robbers too.

10.12.5 Wandering Ascetics

One very visible group in this period was of the *Paribrajakas* and *Sramanas*. These were people who had renounced their homes. They travelled from place to place and held discussions on meaning of life, society and spirituality. Among them were people like the Buddha and Mahavira.

10.12.6 Condition of Women

Changes in the economy and society of c. 6^{th} century BCE also affected the condition of women. Since property was inherited from father to son, there was obsession with the need to prevent adultery. The books of this period repeatedly say that two most important functions of the king are punishing the violation of property and of the family. The meek slave-like wife was considered ideal wife. However, this was true of wives



of the rich. For them the main function of a wife was producing legitimate heirs. However, there were a larger number of women who spent their lives labouring for their masters and mistresses. Women were looked down in comparison to men. They were described as incapable of sitting in a public assembly. They were permanently in the charge of men – father, brother or son. Even if they joined the *samgha* they were treated as inferior to men.

10.13 ECONOMY

We have seen that the process of state formation and social stratification gathered momentum and assumed significance in the middle of $1^{\rm st}$ millennium BCE. The two phenomena which were closely interlinked appeared because the new agriculture could not only sustain agriculturists but also many others who were not engaged directly in this vital task of primary production. Literary and archaeological sources, which reflect economic pattern of the country during c. $6^{\rm th}$ - $5^{\rm th}$ centuries BCE, contain evidence of the enhanced production of agricultural wealth (sources of these have been noted earlier in this Unit). Besides:

- 1) The growth of monastic orders living exclusively on alms and donations, presupposes enough agricultural produce.
- 2) The establishment of 16 *Mahajanapadas* along with their capital cities and standing armies would not have been possible if agricultural produce could not sustain non-agriculturists.
- 3) The location of capital towns of this period having a variety of crafts and trades in the river-valleys with broad flood plains and on main trade routes also presupposes some surplus food production.

Let us discuss some of the important aspects of economic life during this period.

10.13.1 Factors in the Growth of Food-Producing Economy

Some of the main causative factors which seem to have influenced the agricultural growth were as follows:

- Crucial role of iron implements in clearing thick vegetation cover of Ganga plains from about 600 BCE onwards. Cereals like rice, barley, wheat and millets were produced over wider areas of land.
- 2) The Buddhists insisted on protection of cattle and *Suttanipata* clearly states that they should not be slaughtered because they constituted a source of grain and strength. Thus, preservation of cattle wealth for agricultural purposes was encouraged.
- 3) What further distinguishes the force of production in the age of the Buddha from those in Later Vedic times is the beginning of paddy transplantation.
- 4) Rice producing economy was supplemented by domestication and hunting of animals. This was another major means of their economic life and the source of livelihood. Archaeologists have recovered large number of bones of cattle, sheep, goat, horses and pigs from a number of archaeological sites. Thus, animals were not only used for draught and the plough of fields but a section of the society was also probably non-vegetarian.

10.13.2 Rural Economy

As a rich agricultural hinterland was cultivated, trade too received an impetus. Transition was being made from a subsistence economy to a market economy. Introduction of

coinage facilitated this development. It led to greater mobility, accelerated trade and commerce and facilitated intercourse over a vast area which resulted in the growth of a complex rural and urban economic system.

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That the village centres had their own economic pattern is revealed from a number of literary sources belonging to our period of study. It was based on a system of village communities of peasant proprietorship. Pali texts speak of three types of villages:

- 1) typical village inhabited by various castes and communities.
- 2) suburban villages were in the nature of craft villages. These served as markets for other villages and linked the town with countryside.
- 3) border villages consisting of hunters, fowlers etc. who were leading a simple life.

Rural economy developed through the establishment of new settlements by shifting surplus population from overpopulated areas, and also by rehabilitating decaying villages. In such cases cattle, seed, money and irrigational facilities were given by the rulers. Remission of taxes and other concessions were allowed. Retired officials and priests were granted lands in such areas which could not be sold, mortgaged or inherited. Grassland was owned in common. They had an independent internal economy. Chief occupation in rural area remained to be agriculture. Village supplied surplus produce to the towns and the towns supplied other necessities to the villagers.

Whereas agriculture was the main occupation, cattle rearing and certain small crafts connected with land, forest and animals catering to local requirements, were other features of rural economy.

10.13.3 Urban Economy

Urban economy was dominated by traders and craftsmen who produced goods for a wider market on a larger scale. Necessary concomitants for the growth of urban economy were:

- surplus food production,
- crafts specialization,
- trade,
- centres of exchange,
- use of metallic money,
- political organization ensuring order, and
- a literate society.

Urban economy revolved found two important features:

- Firstly, industry with a larger number of professionals and craftsmen.
- Secondly, trade both internal and external.

We will discuss each factor one by one.



An Artist's Impression of a City Market in c. 6th Century BCE. Source: EHI-02, Block-4, Unit-16.

10.13.4 Urban Occupations

Urban occupations can be broadly categorized into two groups:

- those connected with productive activities, and
- those which had nothing to do with production as such.

The second group, which was mainly composed of administrative officials, had hardly any direct impact on urban economy. The merchants, however, who belonged to this category, were an intermediary group playing a vital role in the system of distribution. Material remains discovered from various archaeological sites of northern India such as pottery (particularly NBPW); terracotta animal and human figurines; terracotta objects of games and amusement; objects of bone and ivory; coins; stone and glass objects; beads; copper and iron objects; etc. attest to the existence of various important crafts industries which can be classified under following heads:

- 1) clay working like pottery, terracotta figurines, modeling and to some extent also brick-making etc.;
- 2) carpentry and wood-working;
- 3) metal-working;
- 4) stone-working;
- 5) glass industry;
- 6) bone and ivory-working;
- 7) other miscellaneous industries like garland-makers, makers of bows and arrows, comb, baskets, perfume, liquor oil and musical instruments.

10.13.5 Trade and Trade Routes

Linked with the growth of specialization of crafts is the development of trade. In those days trade, both inland and foreign, was fairly brisk. Merchants made fortunes by dealing in articles like:

- silks,
- muslin,
- amour,
- perfumes,
- ivory and ivory works,
- jewellery etc.

They travelled long distances up and down great rivers of the country, and even undertook coastal voyages to Burma and Sri Lanka from Tamluk in the east and from Broach in the west. Inland, they followed certain well established routes. One of them ran from Shravasti to Pratisthana; another linked Shravasti with Rajagriha; a third skirted along the base of Himalayas from Taxila to Shravasti; and a fourth connected Kashi with the ports of western coast. Long distance trade was, however, centred in towns rather than at rural sites because the former were centres of production and, consequently, of distribution besides being better protected.

Age of barter was almost drawing to a close. Now the ordinary medium of exchange was a coin called *Kahapana* (*Karsapana*). It was of copper and silver and marks were punched on it by merchants' or ruler's guilds, guaranteeing its standard. Banks were unknown, and surplus money was either converted into ornaments, or hoarded in jars and buried in the ground, or put in the custody of a friend.



Marks on the Punch-Marked Coins of c. 6th Century BCE. Source: EHI-02, Block-4, Unit-16.

Check Your Progress Exercise 4

1)	What kinds of conclusion can you draw from the story of the <i>Dasabrahmana Jataka</i> ?					
2)	What were the dissimilarities between the <i>Khsatriyas</i> and the <i>Brahmanas</i> ?					

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	3)	Account for the deteriorating condition of <i>Shudras</i> .
	4)	What were the main factors which influenced agricultural growth in c. 600 BCE?
	5)	How did the rural economy develop?
	6)	What were the important trade routes during the period under review?

10.14 SUMMARY

We have reviewed the political conditions prevailing in India of c. 6^{th} century BCE. The *Mahajanapadas* which emerged as regions where new kinds of socio-political developments were taking place were located in distinct geographical zones. What seems to be very significant is the fact that seven of them i.e. Anga, Magadha, Vajji, Malla, Kashi, Kosala and Vatsa were located in middle Gangetic valley. This is a rice

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growing area whereas the upper Gangetic valley is a wheat growing zone. It has been observed that in the traditional agricultural system of India, rice output exceeded wheat output. The rice producing areas had a greater density of population too. Further, the *Mahajanapadas* like Magadha had easy access to crucial resources like metal ores. These factors might be related to the emergence of middle Gangetic valley as the focus of politico-economic power. The fact that so many *Mahajanapadas* were contiguous to each other in this area meant that an ambitious leader could try and conquer prosperous neighbouring territories. Also, it would be easier to retain control over a neighbouring territory. Rulers of the *Mahajanapadas* of Punjab or Malwa would have to traverse empty geographical zones before they came across some prosperous territory. Thus, flat terrain and contiguity of settlements provided a better chance for a ruler in the middle Gangetic valley to consolidate his power. No wonder, Magadha, one of the powers in this zone, emerged as the most powerful kingdom in subsequent period.

Emergence of the city was a result of two crucial processes. One was in relationship with the nature i.e. by the use of iron and mastering the technique of paddy transplantation the people of Gangetic valley achieved greater mastery over the process of agricultural production. The other process was changes in the internal structure of *c*. 6th century BCE society. This meant that the ruling castes like *Kshatriyas* and *Brahmanas* along with the class of the *Gahapatis* could extract surplus food and other social products. The place where the rich and powerful lived was called the city. Of course, the presence of these people meant the presence of a large number of poor people. That is why some scholars have said that the emergence of Buddhism was a response to urban misery. Ancient Indian literature describes cities of various kinds like *Pura*, *Pattana* and *Nagara*. However, it seems to exaggerate the size and opulence of cities. This was found out by archaeologists who excavated the ancient sites of these cities.

In our study, a good portion of what is said about the social and economic condition of India is based on early Pali texts and archaeology of NBPW phase. The process of state formation and social stratification gathered momentum and assumed significance in the middle of 1st millennium BCE. Renewed emphasis was given to four different roles that the Brahmanas, Kshatriyas, Vaisyas and Shudras were called upon to. The nature of later Vedic society/PGW culture in which only the Brahmanas and Kshatriyas played important roles got disturbed due to the rise of a trading class – the Vaisyas – whose strength emerged from the money earned. All kinds of restrictions were imposed on Shudras. Food-producing economy was immensely strengthened by the use of iron implements, transplantation of paddy, and by religious sanction for the preservation of cattle. The transition was from subsistence economy to market economy. Trade and the system of coinage also played its role in development of urban economy. Whereas agriculture, cattle rearing and certain small crafts connected with land, forest and animals were chief features of rural economy, the urban economy was dominated by a large number of professionals and craftsmen who produced for wider circulation and more consumption. This led to greater mobility, increased trade and trade routes and resulted in the growth of a complicated rural and urban economic system.

10.15 KEY WORDS

Heterodox Sects

: Religious movements which emerged during c. 6^{th} century BCE. They provided a challenge to Vedic religion.

Hinterland

: Region lying inside the area of influence of a town.

Kinship

: Relationship by birth or marriage.

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Literate tradition

: Refers to the traditions in which writing was known.

Mortgage

: Give a money-lender a claim on property as a security for the money borrowed.

NBPW

: The abbreviation stands for Northern Black Polished Ware which was a very glossy, shining type of pottery found in a variety of colours.

Paddy transplantation

: The practice of removing the seedling where it has grown and planting it at another place.

Pali

: Language spoken in the areas of Magadha and Kosala. Buddhist literature was written in this language.

PGW

: The abbreviation stands for Painted Grey Ware. This pottery was grey in colour and painted with black pigment in several designs.

Prakrit

: Language spoken at the time of Ashoka in Magadha. The first written material in historical India is found in this language.

Progeny

: Son/daughter.

State Society

: Society characterized by the presence of rulers and ruled, rich and poor.

Subsistence

: Means of supporting life.

Surplus

: Refers to the produce which is siphoned off by the rulers from the producers.

Taxation

: Contribution exacted by the rulers from individuals or groups on a regular basis.

Tribute

: An irregular payment in acknowledgment of subjection.

Urban Settlement

: Place where a significant proportion of population is engaged in activities other than food production.

Wet Rice Cultivation

: The practice of cultivation in which paddy seedlings are transplanted into fields which are water-logged. This is distinct from dry rice cultivation in which the seeds are simply broadcast in fields. Wet rice cultivation is immensely more productive.

10.16 ANWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) c
- 2) a) \times , b) \checkmark , c) \times , d) \checkmark

Janapadas and Mahajanapadas: Rise of Urban Centres, Society and Economy

- 3) In your answer you should refer to following points: a dominant non-agricultural population functioning in an advantageous relationship with a large hinterland; centre for governing religious, administrative and economic activity; greater differentiation in wealth and status and the existence of a centralized administrative agency. See Section 10.3
- 4) You should refer to the use of a new kind of pottery (NBP Ware), introduction of coins and the use of baked bricks for housing. Also, point out how an extremely exaggerated picture given by the literary sources has been corrected by archaeology. See Section 10.7.
- 5) i) \checkmark , ii) \checkmark , iii) \times , iv) \checkmark

Check Your Progress Exercise 2

- 1) In your answer you should show how the literary references to specific geographical locations help archaeologists excavate towns of those times. See Section 10.5
- 2) See Sec. 10.9
- 3) i) \times , ii) \times , iii) \checkmark , iv) \times

Check Your Progress Exercise 3

- 1) As a historian you should emphasize on: a) emergence of new groups like merchants and heterodox sects, b) emergence of new kinds of settlements, and c) long journeys undertaken by the people.
- 2) See Sub-sec. 10.10.3
- 3) i) B, ii) C, iii) D, iv) A
- 4) i) B, ii) D, iii) A, iv) C

Check Your Progress Exercise 4

- 1) See Sub-sec. 10.12.2. Your answer could indicate that the *Jataka* tales reflect flexibility in the choice of professions of the *Brahmanas* and varieties of professions they were engaged in.
- See Sub-sec. 10.12.1. Your answer could include different roles assigned to the two groups by literature of the period. Also focus on different functions they performed.
- 3) See Sub-sec. 10.12.4. Your answer could indicate how the appropriation of land by more powerful groups, chronic indebtedness, lack of legal status and origin, notion of purity (of upper caste-groups) and pollution (of *Shudras*) contributed to the deteriorating conditions of the *Shudras*.
- 4) See Sub-sec. 10.13.1. You answer could indicate the crucial role of iron in food production, preservation of cattle wealth for agricultural purposes, the technique of paddy transplantation as factors contributing to enhanced agricultural growth.
- 5) See Sub-sec. 10.13.2. Your answer could indicate as to how the rural economy developed through establishment of new settlements.
- 6) See Sub-sec. 10.13.5. Your answer should indicate foreign trade routes from Tamluk and Broach to Burma and Sri Lanka. The four inland trade routes from Shravasti to Pratisthana; Shravasti to Rajagriha; Taxila to Shravasti and Kashi to Western ports should be referred.

10.17 SUGGESTED READINGS

Gonda, J. (1969). Ancient Indian Kingship from the Religious Point of View. Leiden.

Lal, Makkhan (1984). Settlement History and the Rise of Civilization in the Ganga-Yamuna Doab from 1500 BC-AD 300. Delhi.

Law, B. C. (1973). Geography of Early Buddhism. Repr, Varanasi.

Roy, Kumkum (1994). The Emergence of Monarchy in North India. Delhi.

Sharma, R. S. (1983). *Material Culture and Social Formation in Ancient India*. Delhi.

Sharma, R. S. (1991). *Aspects of Political Ideas and Institutions in Ancient India*. 3rd edn., Delhi.

Thapar, Romila (1996). From Lineage to State. 2nd edn., Delhi.



UNIT 11 BUDDHISM, JAINISM AND OTHER RELIGIOUS IDEAS*

Structure

11	Λ	01-:4:
11	.U	Objectives

- 11.1 Introduction
- 11.2 The Rise of New Religious Ideas
- 11.3 Gautama Buddha and the Origin of Buddhism
- 11.4 Teachings of the Buddha
- 11.5 Development of Buddhism
 - 11.5.1 The Spread of Buddhism
 - 11.5.2 The Institution of the Sangha
 - 11.5.3 Buddhist Councils
 - 11.5.4 Buddhist Schools
- 11.6 Origins of Jainism
 - 11.6.1 Parsvanatha
 - 11.6.2 Mahavira
- 11.7 Teachings of Mahavira
- 11.8 Development of Jainism
 - 11.8.1 Spread of Jainism
 - 11.8.2 Jaina Councils
 - 11.8.3 Sects
- 11.9 Other Heterodox Ideas
 - 11.9.1 The Ajivikas
 - 11.9.2 Other Ideas
- 11.10 Impact of the New Religious Movements
- 11.11 Summary
- 11.12 Key Words
- 11.13 Answers to Check Your Progress Exercises
- 11.14 Suggested Readings

11.0 OBJECTIVES

After studying this Unit, you should be able to know about:

- the background to the rise of new religious ideas during c. 6^{th} century BCE;
- the emergence and growth of Buddhism and Jainism;
- the main tenets of these religions;
- the influence these religions came to wield on the contemporary society;
- the other heterodox ideas prevalent in c. 6^{th} century BCE; and
- the significance of these religious movements.



^{*} This Unit has been adopted from EHI-02, Block 4.

11.1 INTRODUCTION

The 6th century BCE was an important stage in Indian history as far as the development of new religions is concerned. In this period we notice a growing opposition to the ritualistic orthodox ideas of the *Brahmanas*. This ultimately led to the emergence of many heterodox religious movements. Among these, Buddhism and Jainism developed into well-organized popular religions. This Unit attempts to analyze the emergence and significance of these new religious ideas.

Firstly, it deals with the factors that were responsible for the emergence and growth of these heterodox ideas. Then, it goes on to explain how the Buddha and Mahavira tried to find a solution in their own ways to end human suffering. Since the causes for the emergence of these two religions are common in nature there is some similarity in the principles adopted by these religions. However, they differ completely on some of the basic principles. We will discuss these points in this Unit.

The other heterodox religious ideas which were current during c. 6^{th} century BCE have also been dealt with. Finally, we examine the impact of these religious movements on the contemporary economy and society.

11.2 THE RISE OF NEW RELIGIOUS IDEAS

The new religious ideas during this period emerged out of the prevailing social, economic and religious conditions. Let us examine some of the basic reasons which contributed to their emergence:

- i) The Vedic religious practices had become cumbersome and the society of the period had become full of meaningless ceremonies. Sacrifices and rituals increased and became more elaborate and expensive. With the breakup of communities the participation in these practices also became restricted and as such, irrelevant to many sections in the society.
- ii) The growing importance of sacrifices and rituals established the domination of *Brahmanas* in society. They acted both as priests and teachers and through their monopoly of performing sacred religious rites they claimed the highest position in society which was now divided into four *varnas*.
- The contemporary economic and political developments, on the other hand, helped the emergence of new social groups which acquired considerable economic power. You have seen that the merchants living in cities or even rich agricultural householders possessed considerable wealth. Similarly, the Kshatriyas, whether in monarchies or in gana-samphas, came to wield much more political power than before. These social groups were opposed to the social positions defined for them by Brahmanas on the basis of their heredity. As Buddhism and Jainism did not give much importance to the notion of birth for social status they attracted the Vaishyas to their folds. Similarly, the Kshatriyas, i.e. the ruling class, were also unhappy with Brahmanical domination. Briefly put, it was basically the discontent generated by the dominant position of Brahmanas in society which contributed to the social support behind the new religious ideas. It is worth remembering that both the Buddha and Mahavira came from the Kshatriya class but in their search for answers to the pressing problems of society they went beyond the boundaries set by their birth. Further, when we try to find out how their ideas were received by their contemporaries we notice that they had a range of people responding to them: kings, big merchants, rich householders, Brahmanas and even courtesans. They all represented the new society which was emerging in c. 6th century BCE and the Buddha, Mahavira

Buddhism, Jainism and other Religious Ideas

and other thinkers of those times, in their own ways, responded to the problems of a new social order. The Vedic ritualistic practices had ceased to be of much relevance to this new social order.

Having said that, the Buddha and Mahavira were, by no means, the first to criticize the existing religious beliefs. Many religious preachers before them, like Kapila, Makkali Gosala, Ajita Kesakambalin and Pakuda Kachchayan had already highlighted the evils of the Vedic religion. They also developed new ideas on life and god. New philosophies were also being preached. However, it was the Buddha and Mahavira who provided an alternative religious order.

This was the background which helped the emergence and establishment of new religious orders in c. 6^{th} century BCE. Among these, Buddhism and Jainism were most popular and well-organized. We will now discuss the origin and development of Buddhism and Jainism separately.

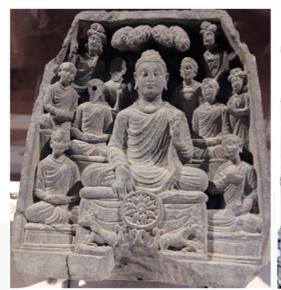
11.3 GAUTAM BUDDHA AND THE ORIGIN OF BUDDHISM

Buddhism was founded by Gautama Buddha who had been given the name Siddhartha by his parents. His father was Suddhodana, the chief of Shakya clan and his mother was Maya, the princess of Koliya clan. He was born in the Lumbini grove (modern Rumindei) in Nepal *tarai*. We know this through an inscribed pillar of Ashoka. The date of birth of the Buddha is a matter of dispute but most of the scholars place it at about 566 BCE. Though his life was spent in royal splendour it failed to attract his mind. As traditions describe it, he was deeply affected by the sight of an old man, a sick person, a dead body and an ascetic. The misery of human life cast a deep spell on him. In order to find a solution to the misery of mankind he left home at the age of 29. He spent six years as a wandering ascetic. From a sage named Alara Kalama he learned the technique of meditation and the teachings of the *Upanishads*. However, since these teachings did not lead Gautama to the final liberation he left him with five *Brahmana* ascetics.



Representation of the Buddha in the Greco-Buddhist art of Gandhara (Pakistan), 1st-2nd Century CE. Tokyo National Museum, Japan. Credit: World Imaging (talk), 2004. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Gandhara Buddha (tnm).jpeg).

He practiced rigid austerities and resorted to different kinds of self-torture to find the truth. Ultimately, abandoning this he went to Uruvela (near modern Bodhgaya on the banks of Niranjana river) and sat under a *Pipal* tree (Bodhi tree). Here, he attained the Supreme Knowledge (Enlightenment) on the 49th day of his continuous meditation. Since then he was called the Buddha (the Enlightened One). From here he proceeded to the deer park at Sarnath near Varanasi and gave his first sermon which is known as **Dharmachakra Pravartana** (setting in motion the wheel of *Dharma*). Ashvajit, Upali, Mogallan, Sariputra and Ananda were his first five disciples. He laid the foundations of the Buddhist *Sangha*. He preached most of his sermons at Shravasti. Anathapindika, the rich merchant of Shravasti, became his follower and made liberal donations to the Buddhist order.





LEFT: Buddha Delivering his 1st Sermon in the Deer Park at Sarnath, Prince of Wales Museum, Mumbai. Credit: AKS.9955. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Gautama_Buddha_first_sermon_in_Sarnath.jpg).

RIGHT: Buddha Preaching in Tushita Heaven. Piece belonging to the Satavahana Period (c. 2nd Century CE) found at Amaravati, Telengana. Preserved in the Indian Museum, Calcutta. Credit: G41m8. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Buddha_Preaching_in_Tushita_Heaven._Amaravati,_Satavahana_period,_2d_century_AD._Indian_Museum,_Calcutta,jpg).

Soon, he started visiting various places to propagate his sermons. He visited Sarnath, Mathura, Rajgir, Gaya and Pataliputra. Kings like Bimbisara, Ajatshatru (Magadha), Prasenajit (Kosala) and Udayana (Kausambi) accepted his doctrines and became his disciples. He also visited Kapilavastu and converted his foster mother and his son Rahul to his faith. At the age of 80 (486 BCE) he died at Kusinagar (Kasia in Deoria district in Uttar Pradesh), the capital of the Mallas.



Buddha's Cremation *Stupa*, Kushinagar. Author: Prince Roy. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Buddha%27s_cremation_stupa,_Kushinagar.jpg).

Let us now examine his teachings which became popular and gave new direction to the religious ideas of the time.

11.4 TEACHINGS OF THE BUDDHA

The basic teachings of the Buddha are contained in:

- a) Four Noble Truths, and
- b) Eight-Fold Path.

The following are the Four Noble Truths:

- i) The world is full of suffering.
- ii) All suffering have a cause: desire, ignorance and attachment are the causes of suffering.
- iii) The suffering could be removed by destroying its cause.
- iv) In order to end suffering one must know the right path. This path is the Eight-Fold Path (**Ashtangika Marga**).

The Eight-Fold Path consists of the following principles:

- i) Finding the right view. It is to understand that the world is filled with sorrow generated by desire. The ending of desire will lead to the liberation of soul.
- ii) Right aim. It seeks to avoid enjoyment of the senses and luxury. It aims to love humanity and increase the happiness of others.
- iii) Right speech, which seeks to emphasize the speaking of truth always.
- iv) Right action, which is understood to be unselfish action.
- v) Right livelihood. It instructs that a man should live by honest means.
- vi) Right effort. It is the proper way of controlling one's senses so as to prevent bad thoughts. It is through correct mental exercises that one can destroy desire and attachment.
- vii) Right mindfulness. It is the understanding of the idea that the body is impermanent and meditation is the means for removal of worldly evils.
- viii) Right concentration. The observation of it will lead to peace. Meditation will unravel the real truth.

Buddhism laid great emphasis on the law of *karma* according to which the present is determined by past actions. The condition of man in this life and the next depends upon his own actions. Every individual is the maker of his own destiny. We are born again and again to reap the fruits of our *karma*. If an individual has no sins he is not born again. Thus, the doctrine of *karma* is an essential part of the Buddha's teachings. He preached *nirvana*: the ultimate goal in the life of man. It means the shedding of all desires and ending of sufferings, which finally leads to freedom from rebirth. By a process of elimination of desire one can attain *nirvana*. Therefore, the Buddha preached that annihilation of desire is the real problem. Prayers and sacrifices will not end desire. So, unlike emphasis on rituals and ceremonies in Vedic religion he laid emphasis on moral life of an individual. He neither accepted nor rejected the existence of god. He was more concerned about the individual and his actions. Buddhism also did not believe in the existence of soul.







LEFT: Buddha Seated in *Abhaya-Mudra*, Kushana Period (c. 1st-3rd Century CE), Mathura Museum, Uttar Pradesh. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Inscribed_Seated_Buddha_Image_in_Abhaya_Mudra__Kushan_Period_-_Katra_Keshav_Dev_-_ACCN_A-1_-_Government_Museum_-_Mathura_2013-02-24_5972.JPG).

CENTRE: Buddha, c. 4^{th} Century CE, Amravati Archaeological Museum, Telengana. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File: Buddha_-_Limestone_-_Circa_4th_Century_AD_-_Amravati_-_Archaeological_Museum_-Amravati_-_Andhra_Pradesh_-_Indian_Buddhist_Art_-_Exhibition_-Indian_Museum_- Kolkata_2012-12-21_2342.JPG)

RIGHT: Preaching Buddha (Gupta Period). Source: EHI-02, Block-4, Unit-17.

Besides these, the Buddha laid stress on certain other aspects:

- i) He emphasized on the spirit of love. Love could be expressed on all living beings by following *ahimsa* (non-killing). Though the principle was well understood it was not emphasized as much as in Jainism.
- ii) An individual should pursue the middle path and both severe asceticism as well as luxurious life are to be avoided.

The teachings of the Buddha put forward a serious challenge to the existing Brahmanical ideas:

- i) The Buddha's liberal and democratic approach quickly attracted people of all sections. His attack on caste system and supremacy of Brahmins was welcomed by the people of lower orders. Irrespective of caste and sex people were taken into the Buddhist order. In Buddhism salvation lay in one's good deeds. So, there was no need of a priest or middle man to achieve *nirvana*: the ultimate goal of life.
- ii) The Buddha rejected the authority of the *Vedas* and condemned animal sacrifices. He protested against the complicated and meaningless rituals. He said that neither sacrifice to gods can wash away sin nor any prayer of any priest do any good to a sinner.

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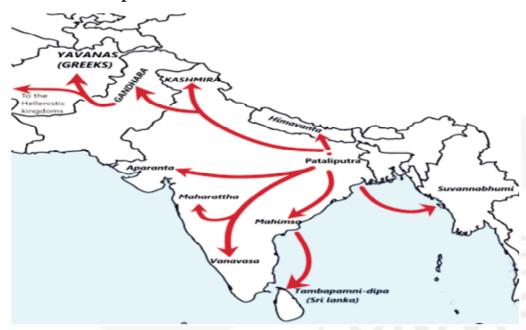
Buddhism, in a very short period, emerged into an organized religion and the Buddha's teachings were codified. The Buddhist canons (the collection of teachings) are divided into three sections namely:

- i) The *Sutta Pitaka* consists of five sections (*Nikayas*) of religious discourses and sayings of the Buddha. The 5th section contains the *Jataka* tales (the previous birth stories of the Buddha).
- ii) The *Vinay Pitaka* contains the rules of the monastic discipline.
- iii) The *Abhidhamma Pitaka* contains the philosophical ideas of the teachings of the Buddha. It is written in the form of questions and answers.

11.5 DEVELOPMENT OF BUDDHISM

Let us examine the factors which contributed to the popularity of Buddhism.

11.5.1 The Spread of Buddhism



Map of Buddhist Missions during the Reign of Ashoka. Credit: Javierfv1212. Soure: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Asoka%CC%A0_Buddhist_Missions.png).

Even during the life time of its founder Buddhism was accepted by a large section of people. For example, the people of Magadha, Kosala and Kaushambi had embraced Buddhism. The republics of Shakyas, Vajjis and Mallas also followed the process. Later on, Ashoka and Kanishka made Buddhism their state religion and it spread into central Asia, West Asia and Sri Lanka. This appeal of Buddhism to a large section of population was because of the following factors:

- Emphasis on practical morality, an easily acceptable solution to the problems of mankind and a simple philosophy attracted the masses towards Buddhism.
- The ideas of social equality laid down in the codes of Buddhism made many lay followers accept Buddhism.
- The merchants like Anathapindika and courtesans like Amrapali accepted the faith because they got due respect in this religion.
- The use of popular language (*Pali*) to explain the doctrines also helped in the

- spread of this religion. This was because the Brahmanical religion had limited itself to the use of Sanskrit which was not the language of the masses.
- The patronage extended by the kings was another important reason for the rapid growth of Buddhism. For example, according to tradition Ashoka sent his son Mahendra and his daughter Sanghamitra to Sri Lanka to preach Buddhism. He also established many monasteries and contributed liberally to the *Sangha*.
- The institution of *Sangha* helped to organize the spread of Buddhism effectively.



Worship of *Buddha-Padas* (footprints of the Buddha) by People, *c*. 2nd Century CE, Amravati Archaeological Museum, Guntur District, Telengana. Credit: Krishna Chaitanya Velaga. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Worship_scenes_stone_at_ASI_Museum,_Amaravathi.jpg).

11.5.2 The Institution of the Sangha



An Early Buddhist Triad. From Left to Right: a Kushana devotee, Bodhisattva Maitreya, the Buddha, Bodhisattva Avalokiteshvara and a Buddhist Monk. 2nd-3rd Century, Gandhara. Credit: No machine-readable uploader provided. World Imaging assumed (based on copyright claims). Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:BuddhistTriad.JPG)

The *Sangha* was the religious order of the Buddhists. It was a well-organized and powerful institution which popularised Buddhism. Its membership was open to all persons, irrespective of caste, above 15 years of age. However, criminals, lepers and persons affected by infectious diseases were not given admission. Initially, the Buddha was not

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in favour of admitting women. However, he admitted them at the repeated requests of his chief disciple Ananda and his foster mother Mahaprajapati Gautami.

On admission the monks had to ceremonially shave their head and wear yellow or saffron robes. They were expected to go on a daily round in order to preach Buddhism and seek alms. During four months of the rainy season they took up a fixed abode and meditated. This was called the retreat or *vasa*. The *Sangha* also promoted education among people. Unlike Brahmanism, people of different orders of the society had entry to education. Naturally, the non-Brahmins who were deprived of education got access to education in Buddhism and thus, education reached wider sections of the society.

The *Sangha* was governed by democratic principles and was empowered to enforce discipline amongst its members. There was a code of conduct for the monks and nuns and they were bound to obey it. The *Sangha* had the power to punish erring members.

11.5.3 Buddhist Councils

According to tradition shortly after the death of the Buddha the 1st Buddhist Council was held in 483 BCE in the Saptaparni cave near Rajgriha. Mahakassapa presided over the assembly. All the teachings of the Buddha were divided into two *Pitakas* namely:

- a) Vinaya Pitaka, and
- b) Sutta Pitaka.

The text of *Vinaya Pitaka* was established under the leadership of Upali and that of *Sutta Pitaka* was settled under the leadership of Ananda.



First Buddhist Council. Mural in the Nava Jetavana Temple, Shravasti, Uttar Pradesh. Credit: Photo Dharma. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Nava_Jetavana_Temple_-_Shravasti_-_013_First_Council_at_Rajagaha_ (9241729223).jpg).

The 2nd Council was held at Vaishali in 383 BCE. The monks of Vaishali and Pataliputra had accepted certain rules which were declared as contrary to the teaching of the Buddha by the monks of Kausambi and Avanti. The Council failed to bring about a compromise between the two opposing groups. Hence, it ended in a permanent split of the Buddhist order into *Sthaviravadins* and *Mahasanghikas*. The former upheld the orthodox *Vinaya Pitaka* while the latter favoured the new rules and their further relaxation.

The 3rd Council was held at Pataliputra during the reign of Ashoka under the chairmanship of Moggaliputta Tissa. In this Council philosophical interpretations of the doctrines of the Buddha were collected into the 3rd *Pitaka* called the *Abhidhamma Pitaka*. An

attempt was made in this Council to free the Buddhist order from dissidents and innovations. Heretical monks numbering 60,000 were expelled from the order. The true canonical literature was defined and authoritatively settled to eliminate all disruptive tendencies.

The 4th Council was held during the reign of Kanishka in Kashmir. It was a gathering of *Hinayanists* of north India. It compiled three commentaries (*Vibhashas*) of the three *Pitakas*. It decided certain controversial questions of differences that arose between the *Sarvastivada* teachers of Kashmir and Gandhara.

11.5.4 Buddhist Schools

In the 2nd Council held at Vaishali the Buddhist order was split into two schools namely:

- a) Sthaviravadins, and
- b) *Mahasanghikas*

The *Sthaviravadins* followed strict monastic life and rigid disciplinary laws as originally prescribed. The group which followed the modified disciplinary rules was called the *Mahasanghikas*.

The *Mahayanism* developed after the 4th Buddhist Council. In opposition to the group (the *Hinayana* sect) who believed in orthodox teachings of the Buddha those who accepted the new ideas were called the *Mahayana* sect. They made an image of the Buddha and worshipped it as god. In *c*. 1st century CE during the period of Kanishka some doctrinal changes were made.

Check Your Progress Exercise 1

1)	Exp	olain the Buddhist philosophy of <i>Nirvana</i> and <i>Karma</i> .					
				c			
				Ç			
2)		41 C 4		T			
2) List the factors responsible for the growth of Buddhism during c . 6^{th} century B							
	•••••		•••••	•			
3)	Ma	rk the following statements as right (\checkmark) or wrong (\times).					
	i)	The growth of trade and commerce helped in the emergence of hete	erod	ox			
		ideas.	()			
	ii)	The Buddha delivered his 1st sermon at Bodhgaya.	()			
	iii)	Severe asceticism was preached by the Buddha.	()			
	iv)	The Buddha did not believe in rebirth.	()			
	v)	The Buddha believed in the existence of god.	()			

11.6 ORIGINS OF JAINISM

According to Jaina tradition 24 Tirthankaras were responsible for the origin and

Buddhism, Jainism and other Religious Ideas

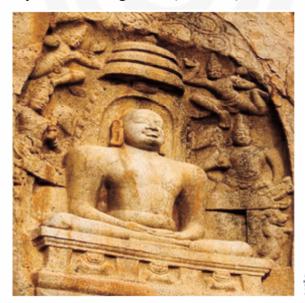
development of Jaina religion and philosophy. Of these, the first 22 are of doubtful historicity. In the case of the last two – Parsvanatha and Mahavira – the Buddhist works also confirm their historicity.

11.6.1 Parsvanatha

According to Jaina tradition the 23rd *Tirthankara* – Parsvanatha – was the son of king Ashvasena of Varanasi and his Queen Vama. Parsvanath abandoned the throne at the age of 30 and became an ascetic. He received enlightenment after 84 days of penance. He died at the age of 100; nearly 250 years before Mahavira. He believed in the eternity of "matter". He left behind him a good number of followers. His followers wore a white garment. Thus, it is clear that even before Mahavira some kind of Jaina faith existed.

11.6.2 Mahavira

The 24th *Tirthankara* was Vardhaman Mahavira. He was born in Kundagrama (Basukunda), a suburb of Vaisali (the present-day Muzzaffarpur district, Bihar) in 540 BCE. His father, Siddhartha was the head of *Jnatrikas*, a *Kshatriya* clan. His mother was Trishala, a Lichchhavi princess. He was given a good education and was married to Yashoda. He had a daughter by her. At the age of 30 he left his home and became an ascetic. At first he wore a single garment which he abandoned after 13 months and began to wander as a 'naked monk'. For 12 years he lived the life of an ascetic, following severe austerities. In the 13th year of his asceticism, at the age of 42, he attained the "supreme knowledge". He was later known as "Mahavira" (the supreme hero) or *Jina* (the conqueror). He was also hailed as "Nirgrantha" (free from fetters). For the next 30 years he moved from place to place and preached his doctrines in Kosala, Magadha and further east. He wandered for eight months in a year and spent four months of the rainy season in some famous town of eastern India. He often visited the courts of Bimbisara and Ajatshatru. He died at Pawa (near Rajagriha) in present-day Patna at the age of 72 (468 BCE).





LEFT: Vardhamaan Mahavira Sculpture at Keezhakuyilkudi, Madurai, Tamilnadu. Credit: Francis Harry Roy S. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Vardhaman_Keezhakuyilkudi.jpg).

RIGHT: Mahavira Attended by *Devas* (Heavenly Beings) Hovering in the Air and Offering Garlands. Source: "The Jaina *Stupa* and Other Antiquities of Mathura" (https://archive.org/details/cu31924012251140). Credit: V. A. Smith. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Vardhaman.jpg).

11.7 TEACHINGS OF MAHAVIRA

Mahavira accepted most of the religious doctrines laid down by Parsvanatha. However, he made some alterations and additions to them. Parsvanatha advocated the following four principles:

- a) Truth,
- b) Non-violence,
- c) Non-possession, and
- d) Not to receive anything which was not voluntarily given.

To these Mahavira added celibacy (*brahmacharya*). He believed that soul (*jiva*) and matter (*ajiva*) are the two basic existing elements. According to him the soul is in a state of bondage created by desire accumulated through previous births. By means of continued efforts the soul can be relieved of bondage. This is the final liberation of the soul (*moksha*). The liberated soul, then, becomes "the pure soul".

According to Jainism man is the creator of his own destiny and he could attain *moksha* by pursuing a life of purity, virtue and renunciation. *Moksha* (*nirvana*) can be attained by observing the following three principles (*ratnatraya*):

- i) Right belief,
- ii) Right knowledge, and
- iii) Right action.

Mahavira advocated a life of severe asceticism and extreme penance for the attainment of *nirvana* (the highest spiritual state). He believed that the world was not created by any supreme creator. It functions according to an eternal law of decay and development. He thought that all objects — animate and inanimate — had a soul. He believed that they feel pain or the influence of injury. He rejected the authority of the *Vedas* and objected to Vedic rituals and the supremacy of the *Brahmanas*. A code of conduct was prescribed both for the householders and monks. For the purpose of avoiding evil *karmas* a householder had to observe the following five vows:

- i) Non-injury,
- ii) Non-stealing,
- iii) Non-adultery,
- iv) Speaking the truth, and
- v) Non-possession.

It was also prescribed that a householder should feed cooked food to the needy every day. He preached that the lay worshippers should not take to agriculture, since this involved the destruction of plants and insects. A monk had to observe certain strict rules. He had to abandon all worldly possessions. He had to root out every hair of his head by his own hands. He could walk only during the day, taking care that he did not kill or injure any being. He had to train himself so as not to be affected by objects of the senses. Jainism believed that the monastic life was essential to attain salvation and a householder could not attain it.

According to tradition the original doctrines taught by Mahavira were contained in 14 old texts known as the *Purvas*. In the 1st Council at Pataliputra, Sthulabhadra divided the Jaina canon into 12 *Angas* (sections). This was accepted by the *Shvetambaras*. However, the *Digambaras* refused to accept this, claiming that all the old scriptures

Buddhism, Jainism and other Religious Ideas

were lost. At the 2nd Council held at Vallabhi new additions were made in the form of *Upangas* (minor sections). Among the 12 *Angas* the *Acharanga Sutta* and the *Bhagavati Sutta* are the most important. While the former deals with the code of conduct which a Jaina monk was required to follow, the later expounds the Jaina doctrines in a comprehensive manner.

11.8 DEVELOPMENT OF JAINISM

Mahavira's teachings became very popular among the masses and different sections of society were attracted to it. Like Buddhism, in Jainism also with the change of time a lot of changes came in. We will now see what contributed to the spread of this religion and what were the developments in it?

11.8.1 Spread of Jainism

Mahavira had 11 disciples known as *Ganadharas* (heads of schools). Arya Sudharma was the only *Ganadhara* who survived Mahavira and became the 1st *Thera* (chief preceptor) of the Jaina order. He died 20 years after Mahavira's demise. The Jaina order in the days of the late Nanda king was administered by two *Theras*:

- a) Sambhutavijaya, and
- b) Bhadrabahu.

The 6th *Thera* was Bhadrabahu, a contemporary of the Mauryan king Chandragupta Maurya.

Mahavira's followers slowly spread over the whole country. In many regions royal patronage was bestowed upon Jainism. According to the Jaina tradition Udayin, the successor of Ajatsatru was a devoted Jaina. Jaina monks were seen on the banks of the river Indus when Alexander invaded India. Chandragupta Maurya was a follower of Jainism and he migrated with Bhadrabahu to south and spread Jainism there. During the early centuries of the Common era Mathura and Ujiain became great centres of Jainism.

Jainism's success was more remarkable than that of Buddhism. One of the important causes for its success was the popular dialect – Prakrit (the Jaina religious literature was also written in *Ardhamagadhi*) used in place of Sanskrit by Mahavira and his followers. The simple and homely morals prescribed to the masses attracted the people. The patronage extended by the kings helped Jainism to gain a prominent place in the minds of the people.

11.8.2 Jaina Councils

Towards the close of Chandragupta Maurya's rule a terrible famine broke out in south Bihar which lasted for about 12 years. Bhadrabahu and his disciples migrated to Shravanabelgola in Karnataka. Other Jainas remained in Magadha with Sthulabhadra as their leader. They summoned a council at Pataliputra around 300 BCE in which Mahavira's teachings were divided into 12 *angas*.

The 2nd Jaina Council was held at Vallabhi (Gujarat) in 512 CE and was presided over by Devardhi Kshemasarmana. Its purpose was to collect the sacred texts and write them down systematically. However, this time the 12th *anga* drawn at the 1st Council were lost. All the remaining *angas* were written in Ardhamagadhi.

11.8.3 Sects

The split in the Jaina order is widest from c. 3^{rd} century BCE. The difference over wearing a garment was apparent even during Mahavira's times. The followers of Bhadrabahu, after their return from Shravanabelgola to Magadha, refused to

acknowledge the canon, holding that all the 14 *purvas* were lost. Moreover, a wide gulf had developed between those who emigrated and those who stayed in Magadha. The latter had become accustomed to wearing white garments and made a departure from Mahavira's teachings while the former still continued going naked and strictly followed his teachings. Hence, the 1st split in the Jaina order was between the *Digambaras* (sky clad or naked) and the *Shvetambaras* (clad in white).

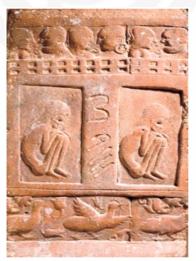
During the later years further splits took place among both the sections; the most important of them being the one that renounced idol worship altogether and devoted itself to the worship of the scriptures. They were called the *Terapanthis* among the *Shvetambaras* and the *Samaiyas* among the *Digambaras* (this sect came into existence around 6th century CE).

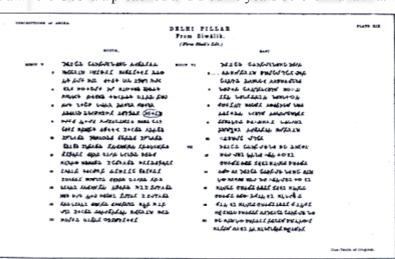
11.9 OTHER HETERODOX IDEAS

Many other non-Vedic ideas were prevalent in this period which later developed into small sects. Among them the *Ajivika* sect had a considerable number of followers with a recognized organization.

11.9.1 The Ajivikas

The *Ajivikas* are said to be the *shudra sanyasins*. This sect is said to be established by Nanda Vachcha who was followed by Kisa Sankichcha. The 3rd religious chief was Makkhali Goshala or Manthaliputra Goshalak who popularised this sect. He denied the theory of *karma* and argued that man is subject to the laws of nature. The *Ajivikas* believed that the thought and deed of an individual were predetermined (decided before birth). They did not believe that there was any special cause for either the misery of human beings or for their deliverance. They did not believe in human effort and held that all creatures were helpless against destiny. Goshala maintained that all creatures had to face misery and it would end after the completion of fixed cycles. No human effort would reduce or lengthen the period. His followers were mostly centred around Sravasti, the capital of Kosala where Goshala preached and died 16 years before Mahavira.





LEFT: Tile Possibly Representing the *Ajivika* Ascetics, *c*. 4th Century, Jammu and Kashmir. Los Angeles County Museum of Art, California, USA. Source: http://collections.lacma.org/sites/default/files/remote_images/piction/ma-31397564-O3.jpg. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Tile_with_Ajivaka_(%3F)_Ascetics_LACMA_M.82.152.jpg).

RIGHT: Ashoka's 7th Pillar-Edict Mentions the *Ajivikas*, *c*. 3rd Century BCE. Source: https://archive.org/details/inscriptionsaso00hultgoog. Credit: Ashoka, Alexander Cunningham, Eugen Hultzsch. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ashoka pillar delhi2.png).





The c. 3rd Century BCE Mendicant Caves of the *Ajivikas* (Barabar near Gaya, Bihar). Source: British Library, London. Author: Thomas Fraser Peppé. Photo Courtesy: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Sudama_and_Lomas_Rishi_Caves_at_Barabar,_ Bihar,_1870.jpg, https://commons.wikimedia.org/wiki/File:Lomas_Rishi_entrance.jpg).

11.9.2 Other Ideas

The *Charvakas* believed in complete materialism. They held that an individual's body is formed of matter and finally would end in matter. Therefore, the aim of human life should be to enjoy all the material pleasures of life. Purana Kassapa preached the doctrine of *Akriya* (non-action). He was a *Brahmana* teacher whose main doctrine was that action did not lead to either merit or demerit. According to him even if a man killed all the creatures on earth he would not incur any sin. Similarly, he would not earn any merit through a good deed or even by standing on the bank of the Ganges. Similarly, self-control, gifts and truthfulness would not earn him any credit. Ajita Kesakambalin preached that everything ended with death and there is no further life after death. He did not believe in the fruits of good or bad acts or persons possessing higher or supernatural powers. According to this sect there is nothing wrong in enjoying the pleasures of the world and there is no sin in killing. Pakudha Kachchayna preached the doctrine of *Ashasvatavada* according to which there are seven elements which are immutable and do not in any way contribute to pleasure or pain. The body is ultimately dissolved into these seven elements.

11.10 IMPACT OF THE NEW RELIGIOUS MOVEMENTS

The rise and development of new religious ideas brought in some significant changes in contemporary social life. They were:

- i) The idea of social equality was popularised in this period. The Buddhists and Jainas did not give any importance to the caste system. They accepted members of different castes in their religious order. This was a great threat to the age-long domination of the *Brahmanas* in the society. Acceptance of women in the Buddhist order, also, had an important impact on the society because this gave women equal status with men.
- ii) The Brahmanical texts had assigned an inferior position to traders. Sea voyages were also condemned. But, as Buddhists and Jainas did not give any importance to caste and did not look down upon sea voyages, so the trading community was very much encouraged by these new religious ideas. Moreover, the emphasis on

- *karma* by these new religious ideas for future life also indirectly favoured the activities of the trading community.
- iii) The new religions gave importance to languages like Prakrit, Pali and *Ardhamagadhi*. The Buddhist and Jaina philosophies were discussed in these languages and later, canons were written in the local languages. This paved the way for the development of vernacular literature. For example, the Jainas, for the 1st time, gave a literary shape to the mixed dialect *Ardhamagadhi* by writing their canons in this dialect.

Check Your Progress Exercise 2

1)	What are the basic principles of Jainism? Answer in 100 words.						
				-			
			••••	•			
				•			
			••••	•			
2)			• • • • •	•			
2)	Wn	no were the <i>Ajivikas</i> ? What were their ideas? Answer in five lines.					
				. «			
3)	Ma	rk the following statements as right (\checkmark) or wrong (\times) .					
	i)	Mahavira added the idea of celibacy to the four principles of Parsvar	nath	a.			
			()			
	ii)	Mahavira did not believe in the supreme creator.	()			
	iii)	The concept of Nirvana is same in Buddhism and Jainism.	()			
	iv)	The original texts of the doctrines of Mahavira are known as <i>Purvas</i> .	()			
	v)	The rise of the heterodox sects in c . 6^{th} century BCE resulted development of vernacular literature.	in t	he)			

11.11 SUMMARY

In this Unit you have seen the emergence and establishment of new religious ideas in *c*. 6th century BCE in north India. The contemporary socio-economic needs largely contributed to the emergence of these new religions. Among these, Buddhism and Jainism became very popular. In spite of some differences both of them put emphasis on humanity, moral life, *karma* and *ahimsa*. Both were highly critical of caste system, domination of the *Brahmanas*, animal sacrifices and the idea of god. This was a direct challenge to the existing Vedic religion. Besides this, you have also learnt about other heterodox sects like the *Ajivikas* and their philosophy. All these brought about a significant change

in attitude of the people and they, as a result, began to question the age-long supremacy of the Brahmanical religion.

11.12 KEY WORDS

Ahimsa : Non-killing or non-violence.

Heterodox : Non-orthodox.

Karma : Action of an individual.

Pitakas : Buddhist religious texts.

Purvas : Jaina religious texts.

Schism : Division of an organization into two or more

groups.

Sect : A group of people united by beliefs or opinions.

Tirthankara : Refers to the Jaina preachers who acquired

supreme knowledge.

11.13 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) You have to write here what the Buddha meant by *Nirvana* and *Karma*. See Section 11 4
- 2) Your answer should include the practical aspect of Buddhism, its emphasis on social equality, popular language etc. See Sub-sec. 11.5.1.
- 3) i) \checkmark , ii) \times , iii) \times , iv) \checkmark , v) \times

Check Your Progress Exercise 2

- 1) You have to discuss the five principles i.e. truth, non-violence, non-possession, not to receive anything, celibacy and then how one can attain *nirvana* by following the principles of right belief, right knowledge and right action. See Sec. 11.7.
- 2) The sect founded by Nanda Vachcha and is said to be of *Shudra Sanyasins*. They believed that man is subject to the laws of nature. See Sub-Sec. 11.9.1.
- 3) i) \checkmark , ii) \checkmark , iii) \times , iv) \checkmark , v) \checkmark

11.14 SUGGESTED READINGS

Allchin, Bridget and Raymond (1988). *The Rise of Civilization in India and Pakistan*. New Delhi.

Ghosh, A. (1973). The City in Early Historical India. Shimla.

Kosambi, D. D. (1987). *The Culture and Civilization of Ancient India in Historical Outline*. New Delhi.

Sarao, K. T. S. and Long, Jeffery D. (Eds.) (2017). Buddhism and Jainism. In *Encyclopaedia of Indian Religions*. Springer.

Sharma, R. S.(1983). *Material Cultures and Social Formations in Ancient India*. New Delhi.

Sharma, R. S. (1995). *Perspectives in the Social and Economic History of Ancient India*,. New Delhi.

Wagle, N. (1966). Society at the Time of the Buddha. Bombay.



UNIT12 ALEXANDER'S INVASION*

Structure

- 12.0 Objectives
- 12.1 Introduction
- 12.2 Sources
- 12.3 Alexander of Macedonia
- 12.4 Arrian's *Indike*
- 12.5 Alexander's Successors and Seleucus Nicator
- 12.6 The Impact of Alexander's Invasion
- 12.7 Summary
- 12.8 Key Words
- 12.9 Answers to Check Your Progress Exercises
- 12.10 Suggested Readings

12.0 OBJECTIVES

In this Unit you will:

- learn about Alexander's invasion of north-western India;
- understand the different sources about Alexander and their significance;
- know about Alexander's battle with various principalities of India including that of Porus;
- learn about Arrian's *Indike*;
- learn about the impact of Alexander's invasion on India;
- get informed about Megasthenes who was a Greek ambassador to Chandragupta Maurya's court; and
- learn about the developing contacts between India and the Greek world.

12.1 INTRODUCTION

In one of the previous Units you learnt about the *Janapadas* and *Mahajanapadas* which emerged in northern India in c. 6^{th} century BCE. In this Unit we will focus on north-western region of the Indian subcontinent and learn how it became a vibrant seat of activity due to the events related to Alexander's invasion in 4^{th} century BCE.

In 6th century BCE India's north-west was a site of conflict between various principalities. The Kambojas, Gandharas and Madras fought with each other. Since there was an absence of an overarching powerful kingdom the principalities of north-west could not be organized into one kingdom. Due to its political disunity the Achaemenian kings of Persia were attracted to this region. In 516 BCE the Achaemenian ruler Darius invaded

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it and annexed Punjab, west to the Indus river and Sindh. At this time Iran had a total of 28 satrapies of which India's north-west constituted the 20^{th} province. The Indian *satrapy* included Sindh, the north-west frontier and part of Punjab that lay to the west of Indus. It paid a hefty tribute in gold which accounted for one-third of the total revenue Iran received from its Asian provinces. Indian provinces provided mercenaries for Persian armies fighting against the Greeks in c. 5^{th} century BCE. This part of Indian territory continued to be a part of the Iranian empire till Alexander invaded it in 330 BCE.

As a result of invasions by the Iranians there were lot of cultural exchanges between Iran and the north-west. A new script was introduced by the Iranian scribes called Kharoshthi script. It was written from right to left like Arabic. It was derived from Aramaic current in the Achaemenid empire. Trade also existed between the two regions, as corroborated by the finds of Persian type of coins in the North-West Frontier Province.

12.2 SOURCES

The period of Alexander is well attested by a number of sources. At first instance these sources seem impressive and remarkable. There are full length histories of his reign by Arrian and Curtius Rufus, a formal biography by Plutarch, a whole book of Diodorus Sirculus' Bibliotheca and substantial passages in the later books of Strabo's "Geography". However, despite giving an impression of being substantial their value as primary sources is put to question as they are all of a later period. For instance, Diodorus's works are dated to the 3rd quarter of 1st century BCE; Plutarch and Arrain in c. 2nd century CE. Thus, there is a distance of two to three centuries between Alexander's death and the first connected narratives of his reign. Some of these works are accused of being imaginatively fictitious, preoccupied with rhetoric, full of trivial details, grossly exaggerated and are without checks to test their authenticity. Despite all these handicaps the scholars have been able to sift significant information that is both credible and useful in the context of India. Arrian's account is the most sober rendition of Alexander's reign. Arrian was a simple soldier who paid his tribute to the memory of Alexander by selecting the best possible sources and reproducing them faithfully. His seventh book 'History of Alexander' was based on Ptolemy, Aristobulus, Nearchus and Eratosthenes. Ptolemy, Aristobulus and Nearchus were all eyewitnesses to the campaigns of Alexander and were, sometimes, active participants. The companion work *Indike* deals with India and the voyage of Alexander's fleet in southern ocean and is based on sources by writers such as Eratosthenes, Megasthenes and Nearchus.

Quintus Curtius Rufus – (probably 1st century CE). He is the author of the only extant Latin monograph on Alexander the Great, usually called *Historiae Alexandri Magnii*, the liveliest account of Alexander's exploits in Asia.

Plutarch – Plutarches in Greek (born 46 CE) was a biographer and author whose works strongly influenced the evolution of history-writing in Europe from 16th-19th centuries.

Strabo – Born 64 BCE. He was a Greek geographer and historian whose 'Geography' is the only extant work covering the whole range of peoples and countries known to both the Greeks and the Romans during the reign of Augustus (27 BCE-114 CE).

Aristobulus of Cassandreia – He accompanied Alexander on his campaigns. He served throughout as an architect and military engineer.

Diodorus Siculus – Greek historian (1st century BCE).

Nearchus – Born 312 BCE. He was an officer in the Macedonian army under Alexander, who on Alexander's orders, sailed from the Hydaspes river in western India to the Persian Gulf and up the Euphrates to Babylon.

Erastosthenes – Full name: Erastothenes of Cyrene (born 276 BCE). He was a Greek scientific writer, astronomer and poet.

12.3 ALEXANDER OF MACEDONIA

There was a distinction in the ancient Greek world between those who lived south of the Mount Olympus and those who lived to its north, the Macedonians. The latter were called 'Makedones', a Greek word in origin. As late as by the end of the 4th century BCE the Greeks referred to them as 'Barbarians', indicating that they did not see them as Greeks.

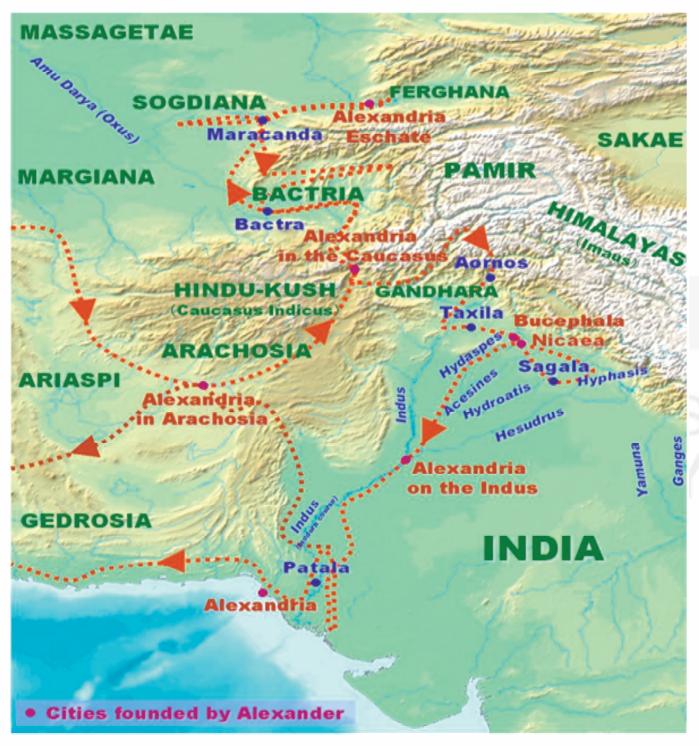
Macedonia: Macedonia is sometimes called Macedon. It was an ethnically mixed region in the ancient past, surrounded by Greek states to the south and tribal kingdoms in other directions. In the north and the west the mountainous terrain of the Balkans defined the landscape, while the southern region was fertile alluvium. Both these regions were mired in conflict with each other and it was Philip – father of Alexander – who united these territories for the first time. In 4th century BCE the Macedonians and Greeks were engaged in ethnic rivalry. The two people were distinct and separate. It was Philip II who consolidated his control over the Greeks in 337 BCE. Though Alexander, mistakenly, is referred to as a Greek, he was not! He was always wary of the Greeks. The Greeks were more sophisticated than the Macedonians and did not share same cultural heritage.

Alexander was born in July 356 BCE. He was the son of Philip II, the ruler of Macedonia. By 337 BCE Philip II had consolidated his control over the Greeks by creating a union of Greek states called the "League of the Corinth". The union was bound together under the hegemony of the Macedonian king and owed allegiance to the League. Philip announced his intention to invade Persia in order to avenge on behalf of the Arthenians for having faced sufferings and destruction to their temples during the Persian war and to liberate the Greek cities of Asia Minor. He was assassinated in 336 BCE. Upon his death Greek states revolted from the Macedonian rule. They were suppressed by Alexander after his accession. Alexander invaded Persia in 334 BCE with a mighty army and defeated king Darius of Persia.

A. K. Narain, citing Tarn's work, says that since India was part of the Iranian empire Alexander's interest in India was inevitable result of the completion of his conquest of Persian empire. However, Arrian says that Alexander was more ambitious than that and he harboured zeal to conquer India. Had it not been so he would not have crossed Indus river which was the boundary between India and Ariana. Ariana was situated to the west of India and at this time was under the possession of the Persians. Indus was the eastern-most boundary of Darius I's empire.

Among his many victories his campaigns in India are most noteworthy. In 327 BCE Alexander marched from Bactria through the Hindukush mountains and advanced towards the plains of Indus. One section of his advancing force secured communication route of the Hindukush and the other section under his own control entered Swat. He subjugated Swat after fighting fierce battles with the people of these mountain tracts. In 326 the two forces met at the Indus and after crossing the Indus marched to Taxila. The political condition in north-west was suitable for Alexander as it was divided into small independent monarchies and tribal republics. Among the more famous was Porus who ruled a kingdom between Jhelum and Chenab. The confrontation between Porus and Alexander has become legendary. Coming back to the Indus Alexander crossed it and was met by Ambhi, the prince of Taxila. Both Ambhi and Porus together could have defeated Alexander but they could not put up a joint front. Ambhi did not oppose him, rather welcomed him with lavish gifts. Alexander decided to leave his kingdom in peace but appointed Phillipus as a *Satrap* and left a garrison there. He was keen to meet Porus who had refused to submit to him and proceeded to Jhelum (Hydaspes). The

weather conditions were very unfavourable as the entire region was covered under snow. He, facing great adversity, managed to cross Jhelum and mounted an attack on Porus' army which was stationed at the opposite bank. Porus was wounded and retreated. However, Alexander was very impressed by his military prowess and persona and decided to reinstate Porus who, then, became his ally. Alexander's victory was momentous and he celebrated it by the founding of two cities—Nicaea and Bucephala. The latter was founded after his horse Bucephalus who had died due to exhaustion following the battle. Alexander also issued a commemorative coinage at a mint in Babylon.



Conquests of Alexander in India. Source: The Loeb Classical Library, Arrian "Anabasis of Alexander". Photo Courtesy: Wikimedia Commons (https://en.wikipedia.org/wiki/File:AlexanderConquestsInIndia.jpg).

Alexander's Invasion



'Alexander and Porus': A Painting by Charles Le Brun (1673) Depicting Alexander and Porus (Puru) during the Battle of Hydaspes. Source:

http://www.ibiblio.org/wm/paint/auth/le-brun/. Photo Courtesy: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Le_Brun,_Alexander_and_Porus.jpg).



Victory Coin of Alexander the Great, Minted in Babylon in c. 322 BCE, Following his Campaigns in the Indian Subcontinent. Obverse: Alexander being Crowned by Nike. Reverse: Alexander Attacking King Porus on his Elephant. Silver. British Museum, London. Credit: PHGCOM. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:Alexander_victory_coin_Babylon_silver_c_322_BCE.jpg)

Alexander continued his march and crossed Chenab and Ravi (Acesines and Hydraotes). He defeated many principalities and fought a fierce battle with the Kathas of Punjab. The Kathas did not submit and fought valiantly. Alexander was able to capture Sagala, the hill fortress of Kathas and razed it to ground. Thereafter, he was informed by a nearby king about the might of the Nandas, east of the Beas. His information was corroborated by Porus too. Alexander wanted to proceed but his troops refused to advance.

Hence, he was forced to return to Jhelum. He handed all the country between Jhelum and Beas to Porus and sailed down Jhelum for his return journey. Below the confluence of Jhelum and Chenab he fought his last important campaign against the Malavas (Malloi). The republican states of Malavas and Kshudrakas wished to form a confederacy against him, but he was successful in preventing Kshudrakas from joining with the Malavas. The Malavas fought bravely but were defeated. The Kshudrakas, also, could not stand anywhere before him.

It is believed that during the last days of Alexander in Babylon, Chanakya and Chandragupta Maurya, along with Porus, attempted to unify the Punjab. Later, the Mauryas established themselves by bringing a major onslaught upon the Nandas of Ganga valley.

Three years after his campaigns in India, in 324 BCE, Alexander was back at Susa in Persia. In the following year he died at Babylon. Upon being asked at his death-bed as whom his empire should be bequeathed to, he supposedly replied "to the strongest". Thereafter ensued a long series of struggles between his generals and governors for control of his vast empire. The struggle among the Diadochis, his successors, was a prelude to the establishment of Hellenistic suzerainty in the region. By 317 BCE even the Greek outposts in India were given up.



Ptolemy Coin with Alexander Wearing an Elephant Scalp: the Symbol of his Conquests in South Asia. British Museum, London. Credit: PHGCOM. Source: Wikimedia Commons (https://en.wikipedia.org/wiki/File:PtolemyCoinWithAlexanderWearingElephantScalp.jpg).

Arrian

Lucius Flavius Arrianus or Arrian, as he is usually called in English language, was born in Nicomedia, one of the Greek towns in the Roman empire, between 85 and 90 CE. It is important to remember that all accounts about Alexander date from three centuries after his death. All these accounts are based on now lost primary accounts which are flawed and biased to begin with. For the events between 334-323 BCE the scholars depend on Arrian's account. He was a commander of a large army in the service of the Roman empire. He had literary leanings and authored texts on hunting, cavalry tactics and wrote the biography of Alexander. He claimed that for his work on Alexander he had relied on most trustworthy of the primary sources viz. Ptolemy and Aristobulus who were part of the Alexander's staff in his campaign to the east. He authored *Anabasis* ('Journey Up Country') of Alexander which consisted of seven books. *Indike* (his book on India) was a shorter companion work of Anabasis. Source: Alexander the Great. Selections from Arrian, Diodorus, Plutarch and Quintus Curtius. Edited by James Romm. Hackett Publishing Co. Inc. Indianapolis/ Cambridge.

12.4 ARRIAN'S INDIKE

Arrian described himself as a philosopher, statesman, soldier and historian. He is best known for the Asiatic expedition of Alexander, the narrative of which is remarkable in accuracy and clarity. His work on India – *Indike* – is written in the Ionic dialect. It consists of three parts:

- The first part gives a general description of India, based chiefly on the accounts of India by Megasthenes and Eratosthenes,
- the second is an account of Nearchus' journey on Indus, and
- the third contains proofs showing that southern parts of the world were inhabitable due to excessive heat.

The first part of *Indike* has been translated by J. W. Mc. Crindle and is richly supplemented with notes regarding history, geography, archaeology and the identification of Greek proper names with Sanskrit originals.

Based on the accounts of Megasthenes and Nearchus, Arrian manages to weave succinct and interesting details about India. He begins by describing the boundaries of 'India Proper' which, he says, lies to the east of Indus. He delineates the boundary of the lands of India by mentioning Hindukush in the north, river Indus in the west and Pattala in the south (Alexander Cunningham identifies Pattala with Nirankol or Haidarbad). The old name was Patasila. He says that Patala is the designation bestowed by the *Brahmanas* on all the provinces in the west, in antithesis to Prasiaka [the eastern realm] in the Ganges land. For Patala is the mythological name in Sanskrit of the underworld and consequently, of the land of the west.

Mc. Crindle feels that the measurements given by Strabo are more accurate than those of Arrian. However, Cunningham remarks that Arrian's measurements are in close agreement with actual size of the country and this is very remarkable as it shows that Indians, even at that early date in their history, had a very accurate knowledge of the form and extent of their native land.

His account of the different tributaries of Indus and Ganges, tribes of India, castes of India has been borrowed from Megasthenes' description. Arrian writes much detail on rivers, mentions barbarous Indians of the old times, their dependence on nomadism; how Dionysos, the conqueror of India who came even before the mighty Alexander, taught the Indians agriculture and introduced them to the plough and laws.

Arrian also spends some time in describing Pataliputra which he calls "the greatest city of Palimbothra" (Cunningham says that Strabo and Pliny agree with Arrian in calling the people of Palibothra by the name *Prasii* which modern writers have referred to as the Sanskrit *Prachya* or 'eastern'. But, Cunningham feels that *Prasii* is the Greek form of *Palasa* which is the actual and well-known name of Magadha, of which Palibothra was the capital).

Arrian writes about absence of slavery in India, modes of hunting elephants, and, of course, of gold-digging ants which he himself is not sure about, since Megathenes' account of the gold-digging ants was based on hearsay.

12.5 ALEXANDER'S SUCCESSORS AND SELEUCUS NICATOR

systematic fashion. As part of his arrangements most of the conquered states were restored to their rulers who accepted his authority. His territorial possessions were divided into three parts and placed under Greek governors. Soon, destabilization and anarchy marked the period. Successor kingdoms emerged under various *satraps* and Macedonia lost its importance.

At Alexander's death the number of *satrapies* was 20. By 308 BCE they terminated all contacts with the Macedonian kingdom and coalesced into three separate groupings under Antigonus, Seleucus and Ptolemy. Seleucus Nicator was at the helm at the *satrapy* of Babylonia. After being thrown out of Babylon by Antigonus he reclaimed it and was successful in expanding his dominions right down to the Indus, placing all eastern *satraps* under his sway. In the meantime, Chandragupta Maurya was busy capturing the Ganga plains. He proceeded to north-west to exploit the power vacuum created by Alexander's departure. Once he reached Indus he came face-to-face with Seleucus Nicator who had a stronghold in that region. The battle between the two was won by Chandragupta, as evident from the terms of the Treaty of 303 BCE. The Seleucid territories of eastern Afghanistan, Makran and Baluchistan were ceded to Chandragupta. In return, Seleucus obtained 500 elephants. Seleucus also gave his daughter in marriage to Chandragupta. With this victory the routes and important regions of north-west region came under Mauryan control.

Friendly relations seem to have been established between Sandracottos (Chandragupta was referred to by the Greeks by this name) and the Seleucids. Seleucus's envoy Megasthenes spent time at the court of Chandragupta and left an account titled *Indica*. The original account is lost and paraphrases of this text are preserved in the writings of later writers such as Diodorus, Strabo and Arrian. Friendly relations were carefully cultivated. Several Greek ambassadors visited his court such as Megasthenes, Daimachos, Hegesandros.

12.6 THE IMPACT OF ALEXANDER'S INVASION

As mentioned earlier, Alexander's campaigns in India were not as significant as he would want to believe. In fact, R. K. Mukherjee believes that his campaigns in India were not an example of brilliant military achievement, as he did not come face-to-face with any powerful Indian monarchs. The effects of his campaigns were, at best, indirect. According to A.K. Narain the people of north-west realized that small states and principalities were no match to the disciplined and organized campaigns of Alexander. Chandragupta was quick to realize the importance of erecting a huge empire. He went about to unite the whole of Punjab and, later, the northern India after overthrowing the Nandas. He not only added the southern states but also integrated the four *satrapies* of Aria, Arachosia, Gedrosia and Paropamisadae which were ceded by Seleucus to Chandragupta after the demise of Alexander.

Friendly contacts were maintained between Greeks and Indians. According to a Greek writer Athenaeus, an Indian ruler Amitrochates wrote to Antiochus I of Syria to send him sweet wine, figs and a sophist, to which the Syrian king replied that he would happily send sweet wine and figs but a sophist cannot be sold in Greece. Stabo refers to the sending of Deimachus to the court of Allitrochades, son of Sandrokottos; Pliny mentions another envoy Dionysius from Ptolemy II of Egypt. Besides this, Ashoka also maintained close relations with the *Yavanas* of west Asia and Egypt. His 13th Rock Edict, the version of which has been found in Greek at Kandahar, refers to his *Dhammavijaya* in the kingdoms of Antiochus II of Syria, Ptolemy Philadelphus II of Egypt, Antigonus Gomatas of Macedonia, Magas of Cyrene and Alexander of Corinth.

Alexander's Invasion

Ashoka is also supposed to have arranged for the medical treatment of cattle and men in the kingdom of Antiochus II and his neighbours. Not only does his description of himself as *Devanampriya Piyadassi* reflect the practice of deification current among Greek kings in the Hellenic west, but also the style of his edicts were influenced by the edicts of Darius. Kautilya and Megasthenes, both, refer to a state department looking after the welfare of foreigners who were mostly *Yavanas* and Persians. Taxila, Sarnath, Basarh and Patna have yielded terracotta motifs with distinct Hellenistic influence.

Alexander's invasion also allowed for the establishment of Greek paramouncy in Bactria and in the regions that are called today as Afghanistan and Pakistan. Some 41 rulers of *Yavana* descent are known from the coins. Strabo refers to these kings as those who subdued large number of tribes, more than that by Alexander. Menander and Demetrius who was the son of Euthydemus and the king of Bactrians, were the most notable. The Indo-Greek kings were equally influenced by Indian religion and culture. Many of their coins carried Indian legends. An inhabitant of Taxila, and the son of Dion – Heliodorus – was an envoy from the court of Antialcidas, an Indo-Greek king, to the court of the Indian king Bhagabhadra. The details are known from the Heliodorius Besnagar Inscription (Besnagar near Bhilsa in Madhya Pradesh) which mentions that he was a follower of the *Bhagavat* sect of Hinduism. Some of the coins of Menander carry the image of wheel, which, scholars believe, is the Buddhist emblem of *Dharmachakra*, the wheel of righteousness.

Alexander's campaigns in the north-west India brought this part of the world in direct contact with the Greek world. Land and routes by sea opened up through which Greek merchants and craftsmen came to have access to these faraway lands. Greek settlements were established in this region, for example, Alexandria in the Kabul region, Boukephala on Jhelum and Alexandria in Sindh. Alexander also initiated geographical explorations of the harbours and coasts from the mouth of Indus to that of the Euphrates. His historians have left valuable information of the geographical merit of his campaigns. Besides providing a corrective to Indian chronology, the Greek accounts tell us about Indian practices such as *sati*, sale of girls in the market place by poor parents and good breed of oxen. In fact some 2, 00,000 oxen were sent from India by Alexander to Macedonia. The Greeks also found that Indians excelled in the art of carpentry and they built brilliant chariots, boats and ships.

Check Your Progress Exercise 1

1)	Write few lines about Alexander's invasion of the north-west India.
2)	Write few lines about Arrian's <i>Indike</i> .
<i>-)</i>	write iew iiies about zurian s <i>mai</i> ke.

12.7 SUMMARY

In this Unit we learnt that India's north-west was a region which attracted the attention of invaders quite early in Indian history. After the Achaemenid invasions Alexander conquered principalities and kingdoms of north-western India. He was successful in subjugating Indian powers despite the valiant struggle that was put against him. He was able to cross Hydaspes (Jhelum) at night and met Porus who was defeated, but he was so impressed by his valour that he allowed Porus to retain his kingdom. Alexander was not able to go beyond Chenab and Ravi (Acesines, Hydraotes) as his troops refused to march any further. We also leant that Arrian's accounts are the main source of Alexander's campaigns. Arrian has left in his *Indike* some factual, some fanciful account of India which is based on the account of other travellers. Among Alexander's successors the most notable was Seleucus Nicator who fought with Chandragupta Maurya but was defeated. He sent Megasthenes, a Greek ambassador, to the Mauryan king's court. Megasthenes has left an interesting account of Chandragupta's reign in his *Indica*.

12.8 KEY WORDS

	- 1				•	
Δ.	Րh	19	en	ner	117	10

: Members of Achaemenian dynasty who are also called the Achaemenids (Persian – Hakhamanishiyas). 559-330 BCE. This was the ancient Iranian dynasty whose kings founded and ruled the Achaemenid empire.

Diadochi

: According to the English Oxford Dictionary Diadochi refers to the six generals of Alexander the Great – Antigonus, Antipater, Cassander, Lysimachus, Ptolemy and Seleucus among whom his empire was eventually divided after his death in 323 BCE. It is derived from the Greek word *diadokhoi* meaning 'successor'.

Hellenistic

: Comes from the word 'Hellazein' which means 'to speak Greek or identify with the Greeks'. The word pertains to ancient Greece.

Satrapy

: Governors of the provinces of ancient Persian empire.

Yavanas

: In early Indian literature this term refers to either a Greek or another foreigner.

12.9 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

- 1) See Section 15.3
- 2) See Section 15.4

12.10 SUGGESTED READINGS

Bosworth A. B. (1996). The Historical Setting of Megasthenes's *Indica*. In *Classical Philology*. Volume 91(2), April 1996, pp. 113-127.

Bosworth A. B. (2002). *The Legacy of Alexander: Politics, Warfare and Propaganda under the Successors*. Oxford University Press.

Alexander's Invasion

Mc. Crindle, J. W. (1877). *Ancient India as Described by Megasthenes and Arrian*. Being a translation of the fragment of the *Indica* of Megasthenes collected by Dr. Schwanback and of the first part of the *Indike* of Arrian, Thacker Spink and Co.

Narain, A. K. (1965). Alexander and India, Greece and Rome. In *Alexander the Great*. Volume 12, no. 2, October 1965, Cambridge University Press, pp.155-165.

Romm James (ed.) (2005). *Alexander the Great: Selections from Arrian, Diodorus, Plutarch and Quintus Curtius*. Indianapolis/Cambridge: Hackett Publishing Co. Inc.

Schwarz Franz Ferdinand (1975). Arrian's *Indike* on India: Intention and Reality. In *East and West*, 25, no ½ (March-June 1975), pp. 181-200

Tarn, W. W. (1948). *Alexander the Great*. Volume 1 – Narrative, Cambridge University Press.

Worthington, Ian (ed.) (2003). *Alexander the Great: A Reader*. Routledge.



UNIT 13 ESTABLISHMENT OF MAURYAN RULE AND MAGADHAN TERRITORIAL EXPANSION*

Structure

- 13.0 Objectives
- 13.1 Introduction
- 13.2 Location of Magadha
- 13.3 Note on Sources
- 13.4 Political History of Pre-Mauryan Magadha
- 13.5 Notion of 'Empire'
 - 13.5.1 Modern Views on Definition of 'Empire'
 - 13.5.2 Indian Notion of Chakravarti-Kshetra
- 13.6 Origin of Mauryan Rule
- 13.7 Ashoka
 - 13.7.1 The Kalinga War
 - 13.7.2 Magadha at Ashoka's Death
- 13.8 Summary
- 13.9 Key Words
- 13.10 Answers to Check Your Progress Exercises
- 13.11 Suggested Readings

13.0 OBJECTIVES

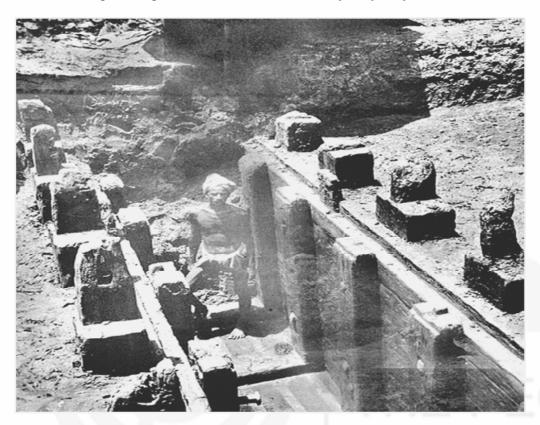
In this Unit we will outline territorial expansion of the kingdom of Magadha. This will provide an understanding of how and why it was possible for Magadha to become an 'empire'. After reading this Unit, you should be able to:

- identify the location of Magadha and its environs and note its strategic importance;
- learn about some of the sources that historians use for writing on this period;
- have a brief idea of the political history of Magadha during the two centuries preceding Mauryan rule;
- understand the notion of 'empire' in the context of early periods of Indian history;
- trace chief events leading to the establishment of the Mauryan rule;
- learn about early Mauryan kings Chandragupta and Bindusara and their expansionist activities;
- explain the context of accession and coronation of Ashoka and importance of the Kalinga war; and
- finally, identify boundaries of the Magadhan 'empire' at the time of the death of Ashoka.

^{*} This Unit has been adopted from EHI-02, Block 5.

13.1 INTRODUCTION

In Unit 10 you were introduced to various *Janapadas* and *Mahajanapadas* that are known to us from primarily the early Buddhist and Jaina texts. The rise of these *Janapadas* and *Mahajanapadas*, which were situated mostly to the north of the Vindhyas, is dated around the 2nd half of 1st millennium BCE. In this Unit we will discuss in detail the growth of one of these *Mahajanapadas*, namely Magadha. Magadha has drawn the attention of historians for the last 200 years. This is so because it had become the nucleus of political power of the well known Mauryan dynasty.



Mauryan Remains of Wooden Palisade at Bulandibagh Site of Pataliputra. Credit: ASIEC, 1912-13. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mauryan_remains_of_wooden_palisade_at_Bulandi_Bagh_site_of_Pataliputra_ASIEC_1912-13.jpg).

However, in this Unit we do not intend to highlight only the achievements of Mauryan kings in expanding the territorial frontiers of Magadha. We will also discuss the notion of an 'empire' in the pre-modern context at two levels:

- i) Various meanings of the term 'empire' which does not simply mean a territorially vast kingdom, and
- ii) early Indian notions of state and empire.

By discussing these various definitions it would be possible to understand various views of scholars on the characterization of Magadhan empire, particularly under the Mauryas.

In this Unit we will also take into account the political events throughout the period from c. 5^{th} to 3^{rd} century BCE. The Magadhan kingdom began to grow during c. 6^{th} century BCE itself. However, this process accelerated considerably under the Nandas and the Mauryas. The location of Ashokan inscriptions indicates that a major part of Indian subcontinent, excluding the eastern and southern extremities, had come under Magadhan

suzerainty. However, after discussing the details of how this expansion took place we will introduce you to the view that the composition and texture of the Magadhan empire, in its various parts, was so diverse that to be able to hold it together a direct political control was probably very difficult. This may, perhaps, explain why Ashoka endeavoured to resolve inherent social tensions in the empire through the introduction of his policy of *Dhamma*.

13.2 LOCATION OF MAGADHA

You have been generally introduced to the kingdom of Magadha as one of 16 *Mahajanapadas* in Unit 10. The *Mahajanapadas* were located over a major part of Ganga valley, with a few to the north-west and south-west of it. However, of the four most powerful kingdoms three – Kosala, the Vajji confederacy and Magadha – lay in middle Ganga valley and the fourth – Avanti – was in western Malwa. The kingdoms that surrounded Magadha were:

- Anga in the east,
- Vajji confederacy to the north,
- to its immediate west the kingdom of Kashi, and
- further west, the kingdom of Kosala.

Magadha can be identified with modern districts of Patna, Gaya, Nalanda and parts of Shahabad in the present-day state of Bihar. Geographically, Magadha's location is such that it has in its vicinity large tracts of alluvial soil. Interestingly, the earliest capital of Magadha – Rajgriha – was situated to the south of the river Ganga and not near it. This is most plausibly explained from the point of view of its strategic location, and secondly, due to the fact that it lay in the vicinity of iron-encrusted outcrops. It has also been suggested that its accessibility to copper as well as the forests of the present-day southern Bihar region can effectively explain why early Magadhan kings did not choose to have their capital in the most fertile plains of the Ganges valley but in a comparatively isolated region. The capital of Magadha did, however, shift to Pataliputra (originally Pataligrama), situated on the confluence of several rivers like Ganga, Gondak, Son and Pun Pun. Pataliputra became the capital of Magadha under the Mauryas. This enabled Magadha to effectively command the *uttarapatha* (northern route) which lay to the north of Ganga along the foothills of Himalayas. The river also came to be used as one of the main arteries connecting Magadha with different regions and making heavy transport along the river possible. Thus, Magadha had certain natural advantages over other contemporaneous kingdoms, though some of which like Avanti to its south-west, Kosala to its north-west and the Vajji confederacy to its north were equally powerful at the turn of 6th century BCE.

Recent researches have suggested that accessibility to iron mining areas, in particular, enabled the kingdoms like Magadha and Avanti to not only produce good weapons of warfare but also in other ways. It facilitated the expansion of agrarian economy and thereby, the generation of substantial surplus extracted by the state in the form of taxes. This, in turn, enabled them to expand and develop their territorial base. Avanti, it must be noted, became a serious competitor of Magadha for quite some time and was also located not far from the iron mines in eastern Madhya Pradesh.

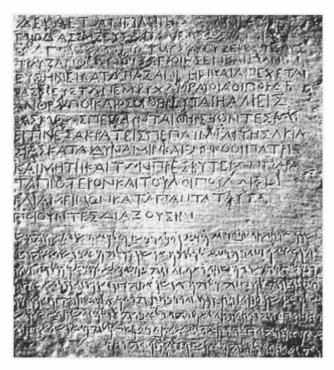
13.3 NOTE ON SOURCES

Events and traditions of the middle Ganga plains, where Magadha was prominently located, are well preserved in early Buddhist and Jaina literature. Some of the texts of the Buddhist tradition are compiled as the *Tripitikas* and the *Jatakas*. Those pertaining to early Jaina tradition are the *Acharanga Sutra* and the *Sutrakritanga* which are considered earlier than the others. All these were, however, written or compiled well after *c*. 6th century BCE at different times. For particularly the early events of a political nature the Buddhist and Jain traditions represent them more authentically and directly than do the later Brahmanical accounts of various *Puranas* which attempt to provide histories of royal dynasties to the period of the Guptas. Later Buddhist chronicles like the *Mahavamsa* and *Dipavamsa* compiled in Sri Lanka are significant sources for events related particularly to Ashoka's reign. These, along with the *Divyavadana* (which is preserved outside India in the Tibetan and Chinese Buddhist sources), not being contemporary to the period under discussion, have to be used cautiously as they developed in the context of Buddhism's spread outside India.

The foreign sources of information, which are considerably more relevant and are near-contemporary, are accounts gathered from classical writings in Greek and Latin. These are the impressions of travellers who visited India around that time and the name of Megasthenes, who visited the court of Chandragupta Maurya, is famous in this respect. Megasthenes is, however, known to us only through quotations in later Greek writings of Strabo and Diodorus of *c*. 1st century BCE and Arrian of *c*. 2nd century CE. Since the north-west India from about 6th century BCE till about 4th century BCE was under the sphere of foreign rule some of the information on the phase of Achaemenian (Persian) rule and later, on the invasion of Alexander, comes to us from Persian inscriptions and Greek sources like Herodotus' account.

Ever since its discovery in 1905 the *Arthashastra* of Kautilya has been considered an important source of information for the Mauryan period. Today, several new views on the date of *Arthashastra* have emerged, some of which suggest that it should not be considered in totality a text written in the Mauryan period. Thus, it is suggested on the basis of a statistical method that some of the chapters of *Arthashastra* should be dated to first two centuries of the Common era. However, many other scholars would like to use a major portion of this text for the Mauryan period. They suggest that the text was originally written by Kautilya, the minister of Chandragupta, and commented upon and edited by other writers during a subsequent period.

Both inscriptions and coins as important sources of information for understanding the early history of India become significant during the Mauryan period. The coins of this period, however, do not bear names of kings, and they are called punch-marked coins because different symbols are punched on them separately. Though this type of coinage is known from roughly about 5th century BCE the Mauryan punch-marked series are significant in that they were probably issued by a central authority as is indicated by the uniformity of the symbols used. In contrast to the coins the inscriptional material for particularly Ashoka's rule is extremely significant and unique in content. There are 14 major edicts, seven minor rock edicts, seven pillar edicts and other inscriptions of Ashoka located at prominent places near towns and trade routes in various parts of Indian subcontinent. They markedly stand out as a physical testimony to the length and breadth of the Magadhan empire at the close of Ashoka's reign.



Bilingual (Greek and Aramaic) Inscription of Ashoka at Kandahar (Shar-i-Kuna). Preserved in Kabul Museum, Afghanistan. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:AsokaKandahar.jpg).

Archaeology as a source of information has, in recent years, yielded considerable data on the material cultures of Ganga valley. The nature of this archaeological material has already been discussed in Unit 10. We know that the archaeological phase associated with Northern Black Polished Ware was the period when cities and towns emerged and during the Mauryan period, as archaeology suggests, there were further changes in material life of the people. From archaeology we also know that many elements of material culture started spreading to areas outside Ganga valley and that they came to be associated with the Mauryan rule.

Check Your Progress Exercise 1

- Tick the right answer (✓).
 Magadha was surrounded by the following three kingdoms:
 - a) Avanti, Kosala, Anga
 - b) Anga, Kosala, Vajji confederacy
 - c) Anga, Vajji confederacy, Kashi
 - d) Avanti, Kashi, Kosala

2)	Describe the important sources for reconstructing the history of Magadha in about five lines.
3)	List three important factors which were advantageous for the growth of Magadhan kingdom.

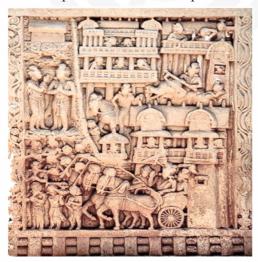
Establishment of
Mauryan Rule and
Magadhan Territorial
Expansion

Ma	rk which of the following statements is right (\checkmark) or wrong (\times).		
a)	Inscriptions are the most important source of information for pre- period.	-Maury (yan)
b)	Mauryan punch-marked coins have uniform symbols.	()
c)	Uttarapatha was a route which followed the course of the river G	Ganges	S.
		()
d)	Patalinutra was situated south of the river Ganges	()

Megasthenes' account of India is known to us through later writers.

13.4 POLITICAL HISTORY OF PRE-MAURYAN MAGADHA

Under Bimbisara who was a contemporary of the Buddha and who, like the Buddha, lived in 6th-5th century BCE Magadha, emerged as a controller of middle Ganga plains. Bimbisara is considered to be the first important ruler of Magadha. With political foresight he realized the importance of establishing dynastic relations through marriage with the royal house of Kosala. Through this alliance he acquired a part of the district of Kashi as dowry. He had cordial relations with the king of Gandhara. These diplomatic relations can be considered as a sign of the strength of Magadha. To the east of Magadha lay the kingdom of Anga whose capital Champa was an important commercial centre as a river-port. Bimbisara is reported to have ruled over 80,000 villages. Tradition tells us that he was imprisoned by his son Ajatshatru who is said to have starved him to death. This is reported to have taken place around 492 BCE.



4)



LEFT: King Bimbisara with his Royal Cortege Issuing from the City of Rajagriha to Visit the Buddha, Artwork from Sanchi, Madhya Pradesh. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki File:Bimbisara_with_his_royal_cortege_issuing_from_the_city_of_Rajagriha_to_visit_the_Buddha.jpg).

RIGHT: Bimbisara visits the Bamboo Garden (*Venuvana*) in Rajagriha, Sanchi. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Bamboo_garden_(Venuvana)_at_Rajagriha,_the_visit_of_Bimbisara.jpg).

Internal troubles and succession of Ajatshatru to the throne of Magadha did not change its fortune. In terms of expansionist policies the new Magadhan king followed a decisively more aggressive policy. He gained complete control over Kashi and broke earlier amicable relations by attacking his maternal uncle Prasenajit, the king of Kosala. The Vajji confederation of people whose *mahajanapada* lay to the north of the Ganga was Ajatshatru's next target of attack. This war was a lengthy one and tradition tells us that after a long period of 16 years he was able to defeat the Vajjis only through deceit by sowing the seeds of dissension amongst them. His invasion of the kingdom of Avanti, the strongest rival of Magadha at that time, did not materialize though preparations are said to have been made for it. However, during his reign Kashi and Vaisali, the capital of Vajji *mahajanapada*, had been added to Magadha, making it the most powerful territorial power in Ganga valley.

Ajatshatru is said to have ruled from 492 to 460 BCE. He was succeeded by Udayin (460-444 BCE). During Udayin's reign Magadhan kingdom extended in north to the Himalayan ranges and in south to the Chota Nagpur hills. He is said to have built a fort on the confluence of Ganga and Son. Despite the vastness of Magadha's territories Udayin and the four kings who succeeded him were unable to effectively rule and the last of these is said to have been overthrown by people of Magadha. Shisunaga, a viceroy at Banaras, was placed on the throne in 413 BCE. The rule of Shisunaga dynasty, too, was of short duration and gave way to the rule of the Nanda dynasty headed by the usurper Mahapadma Nanda.

It was during the rule of the Nandas in Magadha and the Ganga plains as a whole that the invasion of Alexander took place in north-west India in 326 BCE which is often considered the beginning of historic period in India. The Nandas are, therefore, often described as first empire-builders of India. It must, however, be underlined that they did inherit a large kingdom of Magadha which they then extended to more distant frontiers.

In later *Purana* writings Mahapadma Nanda is described as the exterminator of all *kshatriyas*. It is further suggested that he overthrew all contemporary ruling houses. Greek classical writings describe the might of the Nanda empire when they tell us about their vast army which is said to have consisted of 20,000 cavalry, 200,000 infantry, 2000 chariots and 3000 elephants. We also have some indications that the Nandas had contact with Deccan and south India. Their control of some parts of Kalinga (modern Odisha) is indicated in the Hathigumpha inscription of king Kharavela who ruled in Odisha from the middle of 1st century BCE. Some very late inscriptions from the south Karnataka region also suggest that parts of Deccan may have been included in Magadhan empire under the Nandas. Most historians suggest that by the end of the reign of Mahapadma Nanda the first phase of expansion and consolidation of the kingdom of Magadha had taken place. That the north-west was still under various small chiefdoms is attested by Greek writings describing Alexander's invasion of Punjab around this time. It is clear, however, that there was no encounter between the kingdom of Magadha and the Greek conqueror.

The Nanda rule came to an end by 321 BCE. Nine Nanda kings are said to have ruled and by the end of their rule they are said to have become very unpopular. Chandragupta Maurya took advantage of this situation to ascend the throne of Magadha. Despite all these dynastic changes Magadha continued to remain the foremost kingdom in Ganga valley. Deeper reasons for the success of Magadha lay in its advantageous geographical location, its access to iron mines and the control it had come to exercise over important land and river trade routes. In next part of this Unit we turn to take a look at Magadha as an 'empire' and the Mauryan control of it.

13.5 NOTION OF 'EMPIRE'

Before we talk of the Mauryan empire let us try to understand what an 'empire' means. This is necessary because we often indiscriminately use the term 'empire' in relation to all types of kingdoms or states. Further, we somehow seem to think that ancient, medieval and modem empires were all identical in nature. Obviously, the nature of the British empire of modern times or even the central Asian Mongol empire of medieval times could not have been identical with the nature of the Mauryan empire. There were important differences between empires in different periods of history and when we study the history of an ancient empire it is important that we understand what essential elements constituted an empire.

13.5.1 Modern Views on Definition of 'Empire'

Most often, 'empire' is understood to designate a political system which has under a central control a vast expanse of territories not all of which are necessarily culturally homogeneous. The centre in this definition is embodied either in the person of the king/emperor or in the political institution which is organized to hold together the territories under one control. The term 'imperial' comes from the Latin word **imperium**. This indicates relative concentration of authority at the centre. The centre controls territorially contiguous units which ultimately attain some symbols of common political identity. Generally, Roman empire in the ancient world is taken as the classical example to which all others, including the Mauryan, are then compared.

This definition, however, should not be understood as connoting sovereign nation states some of which built vast empires in modern times. The nature of central authority in early empires was either dependent on charismatic personality of the rulers and leaders and their exploits and, most importantly, their upholding of a certain order of things which are sanctioned by tradition.

Common view about the Magadhan empire of the Mauryas is that it could best be understood as a centralized bureaucratic empire. This kind of 'empire' was prevalent in other parts of the world as well.

Centralized bureaucratic empires were usually established through military and other exploits of individuals, generally in periods of turmoil, strife and unrest of various kinds, and thus, the establishment of their rule is considered to have brought about peace and order. At the same time it would be natural for such empires to have enemies, because in their rise to power they must have either usurped or challenged various interest groups. In new territories their policy of aggrandisement must have nurtured animosity. The rulers have, therefore, to make allies, passive or active, to implement their aims through either matrimonial or diplomatic alliances. In terms of political goals such empires visualize a unified centralized polity in which decision making is monopolized. This means that they replace earlier traditional or local tribal authorities. In the rise and success of such empires geo-political factors are usually said to shape their activities. It was absolutely essential for such empires to be able to mobilize various resources, those of economic raw materials and man power in particular. For active political support these empires were usually dependent on urban economic, cultural and professional groups and, in a passive sense, from the wider social strata of peasants and urban lower classes. Recruitment from upper class groups ensured proper functioning of administrative bodies. In the ultimate analysis, the administration, thus, evolved was expected to work for exploitative purposes. In other words, in the early empires there was a high degree of inequality in society, permitting the privileged groups and regions to exploit the resources produced by others.

13.5.2 Indian Notion of Chakravari-Kshetra

In understanding the Mauryan phase of Magadhan empire or, indeed, any other empire of ancient India it may be useful to know how an ideal emperor was viewed in ancient literature. The idea of an emperor is expressed through the Sanskrit term *Chakravarti* and the sphere of his 'imperial rule' by the term *Chakravarti-kshetra*. Though in early Brahmanic texts the kings performing sacrifices like *Ashvamedha* and *Rajasuya* are mentioned it is only in the *Arthashastra* that a clear idea is given of what a *chakravarti-kshetra* was. It is said to be the land which extended north to south from Himalayas to the seas (of Indian Ocean) and measured a thousand *yojanas*. There is no doubt that the *Chakravarti* ideal reflected the conventional ideas about an Indian ruler's sphere of influence and, in fact, it was an ideal never achieved except, perhaps, by Ashoka. On the other hand, this aspiration of universal conquest is constantly emphasized in exaggerated terms in both literary and epigraphical sources. Historians have often taken these reflections to indicate the actual achievement of large territorial conquests by kings and, thus, misreading the ideal for actual achievements.

The Arthashastra and several other texts also list different limbs (angas) which together made a rashtra (state). Of the seven limbs of the state mentioned in the Arthashastra the king is made out to be the most powerful. The seven elements (saptanga) of the state, in general texts on ancient Indian polity, are stated to be the ministers (mantri), ally (mitra), taxes (kara), army (sena), fort (durga), land or territory (desh) and to these the Arthashastra significantly adds an eighth element: the enemy (shatru). In defining the king as the most powerful being in the state, Kautilya, the author of Arthashastra, also expects him to have exceptional qualities. You will read more about how the king organized the state and administered his empire in Unit 14. Some of these ideas about state and empire, as defined above, have led historians for some time to consider Magadha under the Mauryas to have become a despotic state, with the king controlling all regions of the empire through a centralized administration. This has now been questioned, and we will review some of these views below. One can, however, clearly say that the success of Magadha marked the triumph of a monarchical form of political organization over others such as ganga-samgha forms of political organization.

Check Your Progress Exercise 2

Use the space given below for your answers:

1) Tick the right answers using the code given below:

The early kings of Magadha entrenched its stability by achieving the following:

- i) shifting the capital to Pataliputra,
- ii) conquering the Anga capital of Champa,
- iii) expanding the frontier up to Gandhara,
- iv) incorporating the neighbouring kingdoms through war and alliance,
- v) capturing the iron mines of Avanti.

code

- a) i, ii, iii
- b) i, iv, v
- c) ii, iv
- d) iii, v

2)	To what extent do you think that the Nanda rule in Magadha was significant?
3)	On the basis of the definitions given above about what constitutes an empire how would you describe the Mauryan empire? Answer in about five lines. Also, discuss it with the Counsellor at the Study Centre.

- 4) Mention which of the following statements are correct (\checkmark) or wrong (\times).
 - a) The Magadhan empire can be described as a conquest empire.
 - b) The Magadhan empire can be described as a centralized bureaucratic empire.
 - c) The most important element of state in early texts was the army.
 - d) The ideal of a *Chakravarti* was achieved by most ancient Indian kings.
 - e) The king in the *Arthasastra* was expected to have exceptional qualities.

13.6 ORIGIN OF THE MAURYAN RULE

It has been suggested by D. D. Kosambi that the most immediate and unexpected by-product of Alexander's invasion of the north-west was that "it hastened the Mauryan conquest of the whole country." He has argued that because the tribes of Punjab had already been weakened it was not difficult for the Magadhan army under Chandragupta to conquer the whole of Punjab. Most of the Gangetic valley was already under the control of Magadha. According to the foreign classical sources Chandragupta is supposed to have even met Alexander and advised him to attack Magadha which was under the unpopular rule of the Nandas. Though this is difficult to verify, both Indian and foreign classical sources suggest that Alexander's retreat resulted in the creation of a vacuum, and, therefore, it was not difficult for Chandragupta to subdue the Greek garrisons left there. However, what is not clear is whether he did this after his accession to the throne of Magadha or before it. Some scholars date his accession to 324 BCE while now it is generally accepted as 321 BCE.



Mauryan Ringstone with Standing Goddess found at North-west Pakistan, c. 3rd Century BCE. Preserved in British Museum. Credit: World Imaging assumed (based on copyright claims). Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mauryan Ringstone.JPG).

According to Indian tradition Chandragupta was assisted by the Brahmin Kautilya, also known as Chanakya or Vishnugupta, to rise to power. It is further suggested on the basis of a play of 6th century CE, which in its description of the overthrow of the Nandas by Chandragupta, hints that at his accession to the throne at 25 years of age he was, in fact, a weak ruler and the real ruler of the empire was Chanakya. The *Arthashastra* is attributed to Kautilya who is said to have been well-versed in not only the political principles of warfare and aggrandisement but was also deeply knowledgeable about organization of the state and society to ensure that the empire did not collapse.

Though the early years of Chandragupta's reign are little known, most historians agree to assign either a 'low caste' or a tribal origin to the Mauryan family. According to some accounts Chandragupta was son of the last Nanda king by a "low born" woman called Mura; from her came the family name Maurya. Buddhist tradition tells us that he was a member of the Moriya clan of Pipphalivana and, thus, suggests that this dynasty was, in some way, linked to the tribe of the Shakyas to which the Buddha belonged. In this explanation the family name Maurya is said to have been derived from name of the tribe. This also indirectly implies that as an old family of chiefs they were in some sense Kshatriyas. The Puranas do not link the Nanda and Maurya dynasties, though they too describe the latter to be *Shudras*. The Brahmanical perception about them is, however, based on its earlier idea of the Magadhan society generally being unrighteous and of mixed caste origin. The classical sources which know of the last Nanda king also do not link these two dynasties, though Chandragupta, known to them as **Sandrakottus**, is described to be of low origin. It is also suggested that the name ending 'Gupta' in Chandragupta's name and the later episode of Ashoka's marriage to the daughter of a merchant of Vidisa lend credence to the view that the Mauryas could have been of Vaishya origin.

Though the caste affiliation of the Mauryas remains obscure it is significant that most important rulers of this dynasty turned to heterodox sects later in their lives. On the other hand, several sources that point to the role of the Brahmin Kautilya as advisor and the motivating force behind Chandragupta cannot be ignored. The *Puranas* even suggest that Chanakya had appointed Chandragupta as king of the realm. One can, perhaps, suggest that the Mauryas rose to power in a society which was never very orthodox. In the north-west there had been considerable contact with the foreigners and Magadha itself was looked down upon in the orthodox Brahmanical tradition. Besides, it was considerably exposed to the ideas of the Buddha and Mahavira. It was, thus, amidst considerable turmoil—social and political—that Chandragupta was successful in ascending the throne of Magadha.

Many historians who understand the Mauryan state as an empire primarily in terms of its territorial extent attribute great importance to the role Chandragupta Maurya played in ruthlessly stemming the tide of foreign interference in the north-west and suppressing indigenous rulers in west and south India. Source material on the exact nature of these military exploits is wanting and, therefore, one has to construct these details on the basis of the accounts which are available for his successors who inherited this empire.

Both Indian and foreign classical sources agree that Chandragupta overthrew the last of the Nanda kings and occupied his capital Pataliputra and this success is linked with his accession to the throne around 321 BCE. As mentioned earlier, the political rise of Chandragupta was also linked with the invasion of Alexander in north-west. The years 325-323 BCE were crucial in the sense that many of the governors who were stationed in the north-west after Alexander's invasion were assassinated or had to retreat and this enabled Chandragupta to gain control of this region rather quickly. Here, it needs to be stated that there is an uncertainty about whether Chandragupta routed the foreigners

first or defeated the Nandas. In any case, both these tasks were complete by 321 BCE and the state was set for further consolidation.

One of the first major achievements of Chandragupta Maurya on the military front was his contact with Seleucus Nikator who ruled over the area west of the Indus around 305 BCE. In the war that ensued, Chandragupta is said to have turned out victorious and eventually, peace was established with this Greek viceroy around 303 BCE. In return for 500 elephants Seleucus gave him eastern Afghanistan, Baluchistan and area west of the Indus. The *Satrapies*, thus, called were Arachosia, Paropanisadae, Aria and Gedrosia. A marriage alliance was also concluded. Further, Seleucus sent an ambassador called Megasthenes who lived in the court of Chandragupta for many years. This achievement meant that the territorial foundation of the Mauryan empire had been firmly laid, with the Indus and Gangetic plains well under Chandragupta's control.

It is suggested by a majority of scholars that Chandragupta ultimately established his control not only in the north-west and the Ganges plains, but also in western India and Deccan. The only parts left out of his empire were, thus, present-day Kerala, Tamil Nadu and parts of north-eastern India. Details of his conquests in different parts of India are lacking. Greek writers simply mention that he overran whole country with an army of 600,000. Conquest and subjugation of Saurashtra or Kathiawar in extreme west is attested in the Junagadh Rock Inscription of Rudradaman of the middle of 2nd century CE. This record refers to Chandragupta's viceroy or governor, Pushyagupta by name, who is said to have constructed the famous Sudarshana lake. This further implies that Chandragupta had under his control the Malwa region as well. With regard to his control over the Deccan, too, we have late sources. These are some medieval epigraphs informing us that he had protected parts of Karnataka.

Tamil writers of the *Sangam* texts of the early centuries CE make allusion to "Moriyar" which is said to refer to the Mauryas and their contact with the south, but this probably refers to the reign of Chandragupta's successors. Finally, the Jaina tradition informs us that Chandragupta, having become a Jaina, abdicated the throne and went to south with Bhadrabahu, the Jaina saint. At Shravana Belgola, the Jaina religious centre in south Karnataka, he spent the rest of his life and died in the orthodox Jaina way by slow starvation.

Bindusara, the son of Chandragupta, is said to have ascended the throne in 297 BCE. There is comparatively little known about him from either Indian or foreign classical sources. To the latter he is known as Amitrochates. They also inform us that he had contacts with the Seleucid king of Syria – Antiochus I – whom he requested to send him sweet wine, dried figs and a sophist.

In a very late source of the 16th century, in the work of the Buddhist monk Taranath of Tibet we are told of Bindusara's warlike activities. He is said to have destroyed kings and nobles of about 16 cities and reduced to submission all the territory between eastern and western seas. Descriptions of early Tamil poets of the Mauryan chariots thundering across the land probably refer to his reign. Many scholars believe that since Ashoka is credited to have conquered only Kalinga the extension of Mauryan empire beyond the Tungabhadra must have been the work of his predecessors. It can, therefore, be suggested that it was probably in Bindusara's reign that the Mauryan control of Deccan, and Mysore plateau in particular, was firmly entrenched.

Though Bindusara is called the "slayer of foes" his reign is not very well documented, and, therefore, the extent of his conquests can only be arrived at by looking at a map of the empire of Ashoka who conquered only Kalinga (Odisha). His religious leanings are said to have been towards the *Ajivikas*. Buddhist sources suggest the death of Bindusara

Establishment of Mauryan Rule and Magadhan Territorial Expansion



around 273-272 BCE. After his death there was a struggle for succession among his sons for about four years. Ultimately, around 269-268 BCE Ashoka was crowned Bindusara's successor

13.7 ASHOKA

Till about 1837 CE Ashoka was not a very well known king. In that year James Prinsep deciphered a Brahmi inscription referring to a king called **Devanampiya Piyadassi** (Beloved of the Gods). This was compared with what was known from the Sri Lankan chronicle *Mahavamsha* and then it could be established that the king of the inscription was indeed Ashoka. The fame of Ashoka is due to the fact that he turned away from war and tried to establish a system of rule based on the principle of *Dhamma*. Below we discuss some relevant details of his early life, Kalinga war and the extent of Mauryan empire during his reign.

13.7.1 The Kalinga War

During his father's reign Ashoka served as a viceroy at Ujjain and also at Taxila. It is suggested that he was sent to Taxila for a special purpose: to quell a revolt. After being successful at Taxila, the Buddhist sources tell us, he was sent to Ujjain as viceroy. The events in his personal life here, like his marriage to a Vidisha merchant's daughter and birth of their two children **Mahinda** and **Sanghamita** are said to have had a great influence in turning Ashoka towards Buddhism. Many of the details about his early life come from the Buddhist chronicles, and, therefore, certain ambiguities in them cannot be denied.

About his accession, too, there are several versions, but there is some general agreement that he was, in fact, not the crown prince (*Yuvaraja*). Therefore, he was involved in a struggle against other princes before he ascended the throne. His portrayal as an extremely wicked king before his conversion to Buddhism is, undoubtedly, exaggerated in Buddhist accounts so as to enhance his piety as a Buddhist. It is necessary to point out that though Buddhism played a significant role in his later life one has to discount those versions that depict him as a fanatic or bigot. An idea of the king's personality and beliefs comes through more clearly from his many inscriptions in which his public and political role are both described. They also suggest his conversion to Buddhism to have taken place after the Kalinga war.



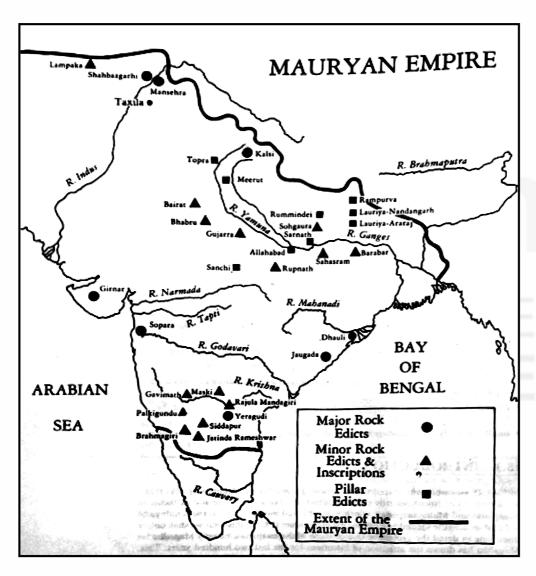


LEFT: "Ashoka with his Queens" at 1st-3rd Century CE Sannati-Kanaganahalli *Stupa*, Gulbarga District, Karnataka, with an Inscription mentioning him. Credit: Top – Wikimapia; Bottom – Upinder Singh, *A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century*, New Delhi: Pearson, 2013, p. 333. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Kanaganahalli_Asoka_with_inscription.jpg).

RIGHT: Ashoka's Visit to Ramagrama Stupa, Depicted on Sanchi Stupa 1. Credit: Photo Dharma. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ashoka%27s_visit_to_the_Ramagrama_stupa_Sanchi_Stupa_1_Southern_gateway.jpg).

Though his predecessors had intruded into Deccan and south and, perhaps, conquered parts of it, Kalinga, i.e., the present-day state of Odisha, still had to be brought under Mauryan control. It was of strategic importance as it controlled routes to south India both by land and sea. Ashoka himself in Rock Edict XIII describes his conquest of Kalinga which is said to have taken place eight years after his consecration, around 260 BCE. In this war the Kalingans were completely routed and "one hundred thousand were slain and many times that number died". Though on the battlefield he was victorious the inscription goes on to describe his remorse which then ultimately turned him towards *Dhamma*. A policy of conquest through war was given up and replaced by a policy of conquest through *Dhammavijaya*. This was meant to work both at the state and personal levels and totally transformed attitude of the king and his officials towards their subjects.

13.7.2 Magadha at Ashoka's Death



Source: EHI-02, Block-5, Unit-18.

The location of various Rock Edicts and Pillar Edicts through which Ashoka preached his policy of *Dhamma* gives us a fair idea of the extent of Magadhan empire during his reign. There are 14 Major Rock Edicts, seven Pillar Edicts and some Minor Rock Inscriptions which give us this information. The Major Rock Edicts are located at:

- Shahbazgarhi and Maneshra near Peshawar,
- Khalsi near Dehradun,

- Sopara in Thane district,
- Girnar near Junagarh in Kathiawar,
- Dhauli near Bhuvaneshwar and Jaugada in Gangam district of Odisha.





LEFT: Khalsi Rock-Edict of Ashoka with Names of Greek Kings. Credit: Alexander Cunningham, *Archaeological Survey Of India*, Vol. 1, p. 247. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Khalsi_rock_edict_of_Ashoka_with_names_of_the_Greek_kings.jpg).

RIGHT: Stone-Elephant Carved From Rock at the Site of an Ashokan Inscription at Dhauli. ASI Monument No. N-OR-59. Credit: Kumar shakti. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Elephant-sculpture-dhauli.JPG).

In Karnataka the Minor Rock Edicts appear, among other places, at:

- Siddapura,
- Jatinga-Rarneshwara, and
- Brahmagiri.

Other Minor Rock Edicts are found at:

- Rupnath near Jabalpur in Madhya Pradesh,
- Sahasram in Bihar,
- Bairat near Jaipur in Rajasthan, and
- Maski in Karnataka.

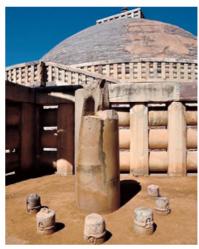


Full Title 'Devanampiyasa Piyadasino Asokaraja' in the Gujjara (Datia District, Madhya Pradesh) Minor Rock-Edict I. Credit: Ashok.tapase. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Gujarra_Devanampiyasa_Piyadasino_Asokaraja.jpg).

The Pillars bearing Asoka's inscriptions are found at:

Delhi (originally located at Topara near Ambala and Meerut);

- Kaushambi in Uttar Pradesh;
- Lauriya Araraj, Lauriya Nandangarh and Rampurva in Bihar,
- Sanchi near Bhopal;
- Sarnath near Benaras; and
- Rummindei in Nepal.





LEFT: Ashokan Pillar, *Stupa* 1, Sanchi Hill. ASI Monument No. N-MP-220. Author: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ashokan_Pillar_-_Stupa_1_-_Sanchi_Hill_2013-02-21_4361.JPG).

RIGHT: Credit: Eugen Hultzsch. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Sarnath_pillar_inscription.jpg).

Exact location of these sites is indicated in the map given above and gives a clear idea of large territorial spread of the empire under Ashoka. Placement of the edicts also highlights the care with which they were located on important trade-routes linking river and road traffic. Therefore, as suggested by recent writings on the subject, access to raw materials appears to have been the main motivation particularly in controlling the peninsula.

The Edicts also describe people on borders of the empire and this confirms the delineation of the empire noted above. In the south are mentioned the Cholas, Pandyas, Sataputras and Keralaputras as people living outside Mauryan empire. Inside the empire, too, there were people of diverse origins and cultures. For example, in the north-west are mentioned the Kambojas and Yavanas. They are mentioned along with other peoples like Bhojas, Pitinikas, Andhras and Pulindas who can be located in parts of western India and Deccan.

Apart from studying the locations of Ashoka's edicts on a map the exact extent of his empire can be ascertained, to some extent, by distinguishing 'conquest territories' (*Vijita*) and 'royal territories' (*Rajavishaya*) from the bordering territories (*Pratyanta*). Just as the territory of the Seleucid king Antiochus-II lay outside his empire in the northwest, so were the territories of Cholas, Pandyas, Keralaputras and Satyaputras, as also the island of Sri Lanka, outside his empire in the south. In east the empire of the Mauryas seems to have included north and south Bengal.

Magadhan empire, thus, reached its greatest territorial expansion under Ashoka. However, simultaneously, there was also a conscious attempt to end all wars in his empire. Extension of the principle of non-violence to state policy was a unique experiment that was never repeated in the annals of the political history of India. Often in the

writings of different historians Ashoka has been idealized as a benevolent despot. This tends to overlook the more enabled Ashoka to ideologically control a vast empire which, otherwise, would, perhaps, have been difficult to rule. Finally, though the findspots of Mauryan inscriptions are on well-known trade routes, some of them bordering peripheral zones of the empire, it still remains to be conclusively decided whether the regions, where no evidence of inscriptions is found, were controlled in the same way as those where they were found.





LEFT: Ashokan Capital Column (Sarnath). Source: EHI-02, Block-5, Unit-18.

RIGHT: Ashokan Pillar at Vaishali, Bihar; c. 3rd Century BCE. Credit: Bpilgrim. Source: WikimediaCommons (https://commons.wikimedia.org/wiki/File:Ashoka_pillar_at_ Vaishali, Bihar, India.jpg).

Cno	eck 1	our Progress Exercise 3		
1)	Me	ntion which of the statements are correct (\checkmark) or wrong (X) .		
	a)	On the advice of Chandragupta, Alexander invaded Magadha.	()
	b)	Nanda and Mauryan families were related by blood.	()
	c)	Chandragupta was able to defeat Seleucus Nikator.	()
	d)	Chandragupta and Bindusara conquered India up to Kanyakumari.	()
	e)	Bindusara had contacts with the Seleucid king Antiochus-I.	()
2)		at are the various ways in which the caste/origin of the Mauryan family lained? Give some of the views in about five lines.	can	be
3)	Wri	te a note on why there was a change in the policy of conquest under As	shok	a?

- 4) Use the code given below to identify which of the following statements about Ashoka are correct:
 - i) He was the crown prince and the successor to Bindusara.
 - ii) During the latter half of his life he turned towards Buddhism.
 - iii) His inscriptions were inscribed when conquest of a region had been made.
 - iv) He replaced the policy of conquest of war by conquest of dhamma.
 - v) In his inscriptions he is usually known as **Davanampiya Piyadassi**.

Code:

- a) ii, iv, v
- b) i, iii, iv
- c) ii, iii, iv
- d) i, iv, v

13.8 SUMMARY

In this Unit we have attempted to introduce to you the way in which the first historical empire can be studied and also the details on the rise and territorial expansion of Magadha. It is hoped that after going through this Unit you have been able to learn:

- i) importance of the strategic location of Magadha and the factors responsible for its rise.
- ii) sources that can be used for writing about the political history of Magadha, in particular with the Mauryan rule,
- iii) chief events in the early history of Magadha before the rise of Mauryan rule,
- iv) explanation about the notion of 'empire' in the context of the early period of Indian history,
- v) details pertaining to the origin of Mauryan family and their early history,
- vi) expansionist policies of Chandragupta Maurya and Bindusara,
- vii) issues surrounding the accession of Ashoka and his activities up to the Kalinga war, and
- viii) the extent of Magadhan empire at the time of the death of Ashoka.

13.9 KEY WORDS

Aggrandizement

: Aggression.

Autocratic

: An absolute ruler whose authority is unchallenged.

History of India
from the Earliest
Times Upto <i>C</i> . 300 C.E.

Benevolent Despotism

: Good or benign ruler but who exerts absolute

control.

Chakravarti-Kshetra

: Sphere of influence of a *chakravarti* (universal

emperor).

Confederacy

: League or alliance of states.

Contiguous

: Adjacent or adjoining each other.

Dhamma/Dharma

: Literally "universal order" but in its use in the Ashokan inscriptions it is translated to mean

"piety".

Satrapy/Satraoues

: A term originally derived from an old Iranian institution, it referred to the provinces into which an empire was divided and which were placed under the charge of the shatraps.

Saptanga

: Seven limbs or parts.

Sophist

: A philosopher, literally the "one meant to

deceive".

Surplus

: Amount left over when all consumption requirements have been met. In an economic sense, the difference between the value of goods

produced and wages paid.

Uttarapatha

: Northern route usually referring to the land route

running along the foothills of Himalayas.

Yojanas

: A unit of measurement in ancient India.

ANSWERS TO CHECK YOUR PROGRESS 13.10 **EXERCISES**

Check Your Progress Exercise 1

- 1) c
- 2) See Sec. 13.3
- Consult Sec. 13.2
- a) \times , b) \checkmark , c) \times , d) \times , e) \checkmark

Check Your Progress Exercise 2

- 1)
- 2) See last part of Sec. 13.4
- See Sec. 13.5 and 13.6
- $(a) \times (b) \checkmark (c) \times (d) \times (e) \checkmark$

Check Your Progress Exercise 3

1) a) 5, b)
$$\times$$
, c) \checkmark , d) \times , e) \checkmark

- 2) Consult Sub-sec. 13.7.1
- 3) See Sub-sec. 13.7.2 and Map
- 4) Consult Sub-sec. 13.7.1
- 5) a

13.11 SUGGESTED READINGS

Bongard-Levin, G. (1985). Mauryan India. Delhi.

Nilakanta Sastri, K. A. (ed.) (1952). The Age of the Nandas and Mauryas. Varanasi.

Raychaudhuri, H. C. (1965). *Political History of Ancient India*. Calcutta, with an update by B. N. Mukherjee. Calcutta.

Shrimali, K. M. (1985). History of Pancala to c. AD 500. Vols. I and II, Delhi.

Smith, V. (1957). *Early History of India from 600 BC to the Muhammadan Conquest*. 4th edn., Oxford.

Thapar, Romila (1988). *The Mauryas Revisited*. Calcutta.

Thapar, Romila (1997). Asoka and the Decline of the Mauryas. 2nd edn, Delhi.

Trautmann, T. R. (1971). Kautilya and the Arthasastra. Leiden.



UNIT 14 ADMINISTRATIVE ORGANIZATION, ECONOMY AND SOCIETY*

Structure

- 14.0 Objectives
- 14.1 Introduction
- 14.2 Basis and Beginning of the Mauryan Empire
- 14.3 Administrative Apparatus
 - 14.3.1 Sources
 - 14.3.2 Kingship
 - 14.3.3 The Amatyas
 - 14.3.4 Army Administration
 - 14.3.5 Espionage Department
 - 14.3.6 Revenue Administration
 - 14.3.7 Judicial System
 - 14.3.8 City Administration
 - 14.3.9 Provincial Administration
 - 14.3.10 Local Administration
- 14.4 Perceptions of the Mauryan State
- 14.5 Economy and Society: The Mauryas
- 14.6 Post-Mauryan Polities
 - 14.6.1 The Shungas and Kharavela
 - 14.6.2 The Indo-Greeks
 - 14.6.3 The Shakas and the Pahlavas
 - 14.6.4 The Kushanas
 - 14.6.5 Non-monarchies/Ganasanghas/Clan-Based Polities
 - 14.6.6 The Shaka-Kshatrapas of Western India
 - 14.6.7 The Satavahanas
- 14.7 Economy and Society: Post-Mauryas
- 14.8 Summary
- 14.9 Key Words
- 14.10 Answers to Check Your Progress Exercises
- 14.11 Suggested Readings

14.0 OBJECTIVES

After reading this Unit, you will:

- know the sources for the reconstruction of the Mauryan administrative system;
- know about the vast administrative apparatus of the Mauryan state;
- know about the different tiers of administration;

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- understand different perceptions of the Mauryan state;
- know about the economy and society of the Mauryan period;
- understand the emergence of different types of principalities such as the Indo-Greeks and the Kushanas in the north-west;
- understand the process of state formation in Odisha and the Deccan i.e. during the Satavahanas; and
- know about the economy and society of the post-Mauryan period.

14.1 INTRODUCTION

The Mauryan period witnessed the formation of the first empire in the Indian subcontinent. The term 'empire' means the vast territory in which the command of the Mauryan emperor was established. It included diverse regions with varied ethnic groups, different socio-economic conditions and multiple cultural patterns, and people of different religious and linguistic backgrounds were brought together under one purview (Chakravarti 2013: 131). The definition of empire indicates heavy responsibility upon the Mauryan rulers to administer the huge territory of their times. One notices the availability of a diverse range of primary sources – literary and archaeological – for reconstructing the history of the Mauryan period. Before delving into the administrative arrangements we must have a look at the foundation and the duration of this empire.

14.2 BASIS AND BEGINNING OF THE MAURYAN EMPIRE

The founder of this dynasty was Chandragupta Maurya who overthrew the last Nanda king – Dhanananda – in *c.* 321 BCE.

It is believed that he was supported by the influential *brahmana* – Kautilya – in defeating the Nandas and taking the throne of Pataliputra. He followed the policy of capturing territories (the Indus, the Gangetic plains and the far north-west) and laid the territorial foundation of the Mauryan empire. Bindusara succeeded Chandragupta Maurya and reigned from 301 to 273 BCE. He made new conquests in the Deccan.

Ashoka, the son of Bindusara, came to the throne around 273 BCE. He is the renowned king of the Mauryan empire for many reasons. At the time of the death of Bindusara his empire included practically the whole of the Indian subcontinent except Kalinga. Chandragupta Maurya added territories and expanded the physical boundaries of the Mauryan realm. But, Ashoka is credited with uniting the diverse territories through the policy of *Dhamma*. According to the *Puranas* the Mauryan rule lasted for 137 years. The Mauryan age in Indian history lasted from the late 4th century BCE to the 1st quarter of the 2nd century BCE (Chakravarti 2013: 131). This period has left an indelible imprint on Indian history.

Different scholars debate on the origin and caste status of the Mauryas on the basis of different sources. For instance, the Brahmanical sources imply that they were *sudras* and heretics, presumably because each king was patron to a heterodox sect (Thapar 2002: 176). Another source – the *Mudrarakshasa* – highlights that the mother of Chandragupta was a slave woman and her name was Mura (Chakravarti 2013: 121). The Sri Lankan Buddhist text – *Mahavamsha* – mentions that Chandragupta was born in Khattiya (*kshatriya*) Moriya family. And, a 12th century Jain text – the *Parishishtaparvam* – states Chandragupta as the grandson of peacock-tamers

(*mayura-poshakas*). The aforesaid is suggestive of the fact that the Mauryan rulers did not belong to the royal *kshatriya* status. However, the Buddhist source the *Mahavamsha* highlights the royal background of the Mauryan rulers. Probably, the association of Asoka with Buddhism may have been the reason of such portrayal.

14.3 ADMINISTRATIVE APPARATUS

It is beyond doubt that Asoka managed to solidify the huge empire whose foundation was laid down by Chandragupta Maurya. The working of the vast empire was possible due to efficient administrative arrangements undertaken in this period.

14.3.1 Sources

The chief sources which throw light upon the nature of the Mauryan administration are:

- i) The Arthashastra by Kautilya,
- ii) Fragments of Megasthenes' *Indica*,
- iii) Ashokan inscriptions.

Arthashastra is the first Indian prescriptive text to define a state¹ and its functions. It is ascribed to Kautilya or Chanakya who is considered as the chief minister of Chandragupta Maurya. There is a debate whether this text on polity describes the functioning of the state of the Mauryan period or an ideal state. The study by Trautmann proves that the earliest portion of the text pertaining to the heads of administrative departments belongs to c. 3rd century BCE i.e. the Mauryan period, and it is not the work of a singular author (Chakravarti 2013: 118). It consists of 15 sections. This work was discovered by R. Shamasastry in 1905. It mentions the duties of a king, his council of ministers and the state officials. The text also throws light upon civil and criminal law and foreign diplomacy. The problem with this source is that it is a theoretical text and a portion of this text was composed in the Mauryan period. Therefore, it is argued by many that it does not reflect the conditions prevailing in the Mauryan period.

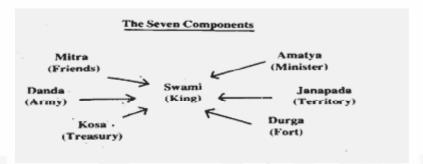
Another source is *Indica* based on the travels and experiences of Megasthenes. He was the representative of Seleucus Nikator of Arachosia and came as a Greek ambassador in the court of Chandragupta Maurya (Singh 2009: 324). This Greek source is available to us in fragments preserved by later writers such as Diodorus, Strabo and Arrian. It gives details on city administration and social segments on an organized basis. Romila Thapar points out that Megasthenes envisioned India on the basis of his understanding of the Seleucid realm of West Asia (Chakravarti 2013: 117). Upinder Singh highlights that different versions of the fragments of the lost text are known to us through the works of Diodorus, Strabo and Arrian (Singh 2009: 340).

The most significant archaeological source which throws light on the Mauryan administration are the Ashokan inscriptions. They are broadly divided into two major categories – 14 major Rock Edicts and six Pillar Edicts. These Rock and Pillar Edicts are sets of inscriptions that occur with minor changes at different places. There are several minor Rock Edicts, minor Pillar Edicts and Cave Inscriptions of Ashoka (Singh 2009: 328). It is interesting to note that these inscriptions provide an insight into Ashoka's idea as a king and are a contemporaneous account of the Mauryan period. However, they provide incidental references related to the Mauryan administration.

¹ The term 'state' implies the existence of a resource-base capable of generating surplus, and the existence of a structure of relationships of domination and subordination.

Let us now have a look at the functions of the Mauryan administration through the window of these sources. The *Arthashastra* outlines seven essential constituents of the state (*saptanga rajya*) which are as follows:

- i) Svami (the king),
- ii) Amatyas (ministers),
- iii) Janapada (the territory and the people),
- iv) Durga (the fortified capital),
- v) Kosha (the treasury),
- vi) Danda (justice), and
- vii) *Mitra* (the ally) (Singh 2009: 341).



Source: EHI-02, Block-5, Unit-20.

14.3.2 Kingship

The king is a crucial figure in Mauryan statecraft. He is regarded as the upholder of *varnashrama dharma* (*Arthashastra* 2.1.26). The paternal attitude of the king towards his subjects is also noticed in the *Arthashastra*. The text states that the happiness of the king rested on the happiness of his subjects and the benefits of the king lies in providing benefits to his subjects (*Arthashastra* 1.19.34). The daily (day and night) duties of a king are diligently laid down in this prescriptive treatise (*Arthashastra* 1.9.16). The Megasthenes' account also describes the hectic daily schedule of the ruler and informs that Chandragupta carried out official affairs even during relaxation time (Chakravarti 2013: 133). The importance of state affairs is also stressed in Ashokan inscriptions when one of them states that all important official matters should be communicated to the ruler even when the latter is in his inner chamber (Rock Edict VI).

The *Arthashastra* gives final authority to the king in all aspects of administration such as the appointment and removal of ministers, protection of the treasury, activities for the welfare of the people and provisions of punishment to the evil. He is given primacy in determining these affairs. Though the Ashokan inscriptions (Rock Edicts I and II) reflect the paternal attitude of the ruler towards his subjects, there is a certain authoritative element visible towards people living in the border areas (Singh 2009: 343).² The Rock Edict VIII suggests that the title of *devanampiya* (Beloved of the Gods) was not limited to Ashoka; instead, it is seen as the traditional dynastic epithet of the Mauryan rulers (Chakravarti 2013: 126).

14.3.3 The Amatyas

The Arthashastra states that the work of the state cannot be handled without assistance;

The king cautions that not all kind of offences will be forgiven for the people of border areas (Singh 2009: 343).

therefore, *amatyas* need to be recruited. They are referred to as the wheel of the chariot of the king. The *amatya* is a broader term which includes high ranking officials, counsellors and the executive heads of departments. And these high ranking officials were supposed to be chosen on clearing peculiar test of deception, which shows the precarious posts held by them. On the other hand, mantri seems to be a specific term used to refer to the king's advisors and councillors (Singh 2009: 343). The text also mentions mantri parishad as the larger body of the heads of various departments. The term parishad in the Ashokan Rock Edict III appears as directing the officer known as yukta to carry out certain duties. Further, the Rock Edict VI reveals that the king should be informed immediately in case of disputes amongst the members of the parishad (Singh 2009: 343). This is indicative of the fact that the final power vested with the king and the primary role of the *mantri parishad* was advisory in nature. Interestingly, Megasthenes, in his classification of the society into seven classes, refers to the counsellors and assessors who were smaller in number and held highest position in administration (Chakravarti 2013: 134). Overall, it can be suggested that the burden of administration at the apex level was handled by high ranking functionaries (amatyas) than ministers.

If one looks at the Ashokan edicts it is noticed that the *mahamatras* are designated as the highest officers. There are specific types of *mahamatras* mentioned in the Ashokan inscriptions such as:

- anta-mahamatras as in-charge of frontier areas,
- *itijhaka-mahamatras* as in-charge of women in general,
- nagalaviyohalaka-mahamatras as in-charge of city administration, and
- *dhamma-mahamatras* as the special officers appointed for the propagation of the *dhamma* policy of Ashoka.

14.3.4 Army Administration

The army was another essential component of the state. A powerful armed force was required for maintaining frontier areas of the Mauryan empire. The fortified capital (*durga*) was possible only with the availability of a military setup. Let us have a look at the details of the military administration in this period. The Greek accounts suggest that Sandrocottas (Chandragupta) had a vast territory under his rule which was made possible due to his vast army comprising 600,000 soldiers. Though the numerical strength of the army may have been an exaggerated figure, yet it indicates that the Mauryan state had huge manpower resources. The victory over Kalinga by Ashoka also speaks of the magnificent army of the Mauryas.

On the basis of Greek texts, the administration of the army was carried out by the following six boards, each consisting of five members:

- the first board was concerned with naval affairs,
- second looked after the supply of provisions for the army with the help of bullockcarts,
- the third board was in-charge of infantry,
- fourth took headship of cavalry,
- fifth was regarded as the in-charge of chariots, and
- sixth was in-charge of the elephant corps.

Hence, the Greek sources throw light on the administration of the army through committee setup. The *Arthashastra* places different units of the armed forces under different heads of department (*adhyaksha*). For instance:

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- *navadhyaksha* as the supervisor of naval activities,
- goadyaksha for bullock-cart management,
- patyadhyaksha as in-charge of infantry,
- rathadhyaksha as in-charge of chariots, and
- *hastyadyaksha* as in-charge of elephant corps.

Thus, we have seen that both Greek sources and *Arthashastra* talk about the composition of the army into different units.

The text also mentions *senapati* as the commander of the army whose annual salary was 48,000 *panas*. There is a historical reference to *senapati* of the Mauryan army – Pushyamitra Sunga, the commander-in-chief of the last known Mauryan ruler Brihadratha (Chakravarti 2013: 136). Besides, there is also a mention of a separate department to look after the production and maintenance of a variety of armaments whose chief was known as *Ayudhagaradhyaksha*. A doubt has been raised over this issue whether the Mauryan army maintained regular navy or not. This is due to the fact that in the *navadhyaksha* section of the text the subject of discussion was only riverine vessels, not sea-going crafts. Kautilya also recognises that the fighting forces were recruited from forest dwellers (*aranya vaasin*/*van vaasin*) (Chakravarti 2013: 136).

14.3.5 Espionage Department

Another important department which was closely linked with the armed forces was espionage department. The well established system of espionage network is elaborated in the *Arthashastra*. It provides detailed account of secret agents. Broadly, they are divided into two types:

- stationary secret agents (samstha), and
- roving secret agents (*sanchara*).

The head of secret service was known as *samahartta* whose task was the collection of revenue. In order to verify the information collected by these spies Kautilya states that the information gathered by roving spies should be routed through stationary spies to the head of secret service (Chakravarti 2013: 137). The main tasks of the spies are stated as:

- i) keeping an eye over the ministers,
- ii) reporting on government officials,
- iii) collecting impressions regarding the feelings of citizens, and
- iv) to know the secrets of foreign rulers.

These spies were supposed to adopt various guises like ascetics, students, householders etc.

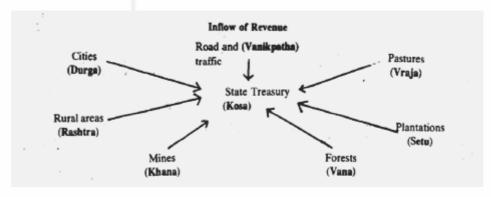
The Ashokan inscriptions also mention the terms-pativedakas and pulisani who were supposed to report public views to the king. The term pativedakas appears to have been used for spies and pulisani for high ranking officials (Singh 2009: 345). The classical texts also mention the term episcopoi as the most reliable people in the Mauryan administration. This term may have been used for spies of the Mauryan realm (Chakravarti 2013: 137).

14.3.6 Revenue Administration

The maintenance of the administrative officials of different grades suggests the requirement and organization of the resources of the state. Therefore, revenue administration (*kosha*) is the essential component of the *saptaanga rajya* in *Arthashastra*. The text mentions *Samahartri* as the chief collector of revenue and seen as an in-charge of maintaining accounts, and *samnidhartri* is regarded as the treasurer of the royal stores (Singh 2009: 344). The chief collector was supposed to look after the collection of revenue from these seven heads:

- i) the fortified urban area (durga),
- ii) the countryside (rashtra),
- iii) mines (khani),
- iv) irrigation projects (setu),
- v) forest (vana),
- vi) pasture grounds (*vraja*), and
- vii) trade routes (vanika path).

All these resources had their own sources of collection in their areas. For example, the cities collected revenues in the form of fines, sales tax (*sulka*), excise on sale of liquor, a kind of income-tax imposed on the rich, etc. The text enlists approximately 22 taxes which were supposed to be collected from the urban area (*durga*). The revenues from the rural areas were appropriated by the state in the form of income from crown lands (*sita*), land revenue (*bhaga*) from cultivators, taxes on orchards, ferry charges, etc. As all the mines were under the control of the state the mineral wealth was a regular source of income for the state. Taxes were levied on merchants travelling by road or waterways. Taxes were also levied on exports and imports. Land tax constituted an important source of revenue. The rate of *bhaga* during Mauryan times is likely to be at least 1/6th of the produce. It is only the *Arthashastra* which states that the irrigation cess (*udakabhaga*) levied on cultivators ranged from 1/5th to 1/3rd. However, according to some scholars it is unlikely that the Mauryas levied this tax on the farmers (Chakravarti 2013: 138).



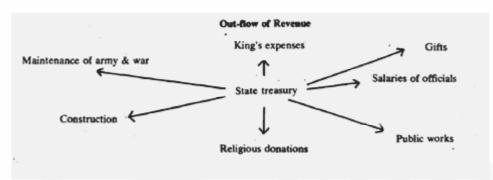
Source: EHI-02, Block-5, Unit-20.

There were certain collections made directly by the state from concerned people. For example, the gamblers were supposed to part with 5% of their winnings to the state and the merchants had to pay when their weights were tested and certified by the state officials. The state control over armament industry and salt trade increased its revenues. The state was also empowered to impose taxes in case of emergency from:

- peasants,
- merchants,
- artisans, and
- even courtesans.

There were various departments to collect, regulate and manage state revenues. The details of the *Arthashastra* clearly indicate the fact that an active role was played by state over the economy of the times. It is interesting to note that for the purpose of the collection of revenue the text recognises the importance of even non-agrarian pursuits as well as the profession of prostitution.

Most of the revenue collections which went to the state treasury had their outflow in the form of expenditure. This can be described with the help of this flow-chart:



Source: EHI-02, Block-5, Unit-20.

This figure shows that the revenue of state was expected to be utilized for different purposes. The major part of revenue appears to be used in the maintenance of armed forces, payment of salaries to the state officials and king's expenses. The state must have also spent a substantial portion for the promotion of religious activities and gifting. As discussed above, the special class of dhamma mahamatras was created for the propagation of Ashoka's dhamma. The text Divyavdana recounts the fact that Ashoka sent his son Mahinda and daughter Sanghamitra on a mission to disseminate Buddhism into Sri Lanka. Further, in the inscriptions it is noticed that he reduced the taxes of agricultural produce of the villages of Lumbini to 1/8th. It was due to the fact that Lumbini was the birthplace of the Buddha (Chakravarti 2013: 138). The keen interest towards public welfare activities is noticed in Ashokan inscriptions as well as in the Arthashastra. Like, in the inscription of Rudradaman (dated in the middle of 2nd century CE) there is mention of the construction of a water reservoir (tadaga) called Sudarshana during Chandragupta's time. This was, obviously, built to facilitate the supply of water. There are many references to medicine men of various kinds during this period, like ordinary physicians (chikitsaka), midwives (garbhavyadhi) etc. From Ashokan inscriptions we know that medical treatment and medicines were available to both men and animals. The Arthashastra mentions that the king should look after orphans, old unattended women etc. We are not certain to what extent these were actually carried out at the time of the Mauryan rule. Another important aspect of public works – construction and repair of roads and opening inns – is also the subject matter of the text.

14.3.7 Judicial System

In order to maintain social order, smooth functioning of the administrative system and flow of revenues to the state, an orderly legal system is the prerequisite. *Danda* is the

sixth element of administration and understood as force or justice in the *Arthashastra*. This text elaborately discusses the administration of justice. Judges are called *dharmastha* and *pradeshtri* are referred to as the officers responsible for the suppression of the criminals (Singh 2009: 347). The king was the upholder of *dharma* and held supreme judicial power. The *Arthashastra* is full of codes listing punishments for various offences. These included a vast range from violation of marriage laws, divorce, murder, adulteration, wrong weights etc. There were different courts to try the offenders of law or settle disputes at various levels.

Two kinds of courts are mentioned in the *Arthashastra*:

- Dharmasthiya were the courts which decided personal disputes, and
- *kantakshodhana* as the courts which decided upon matters related to individuals and the state

For example, the first kind of courts would settle issues related to disputes over *stridhana* (wife's wealth) or marriages etc.; and the second category of courts dealt with wages to workers, conduct of workers, murder, etc. The punishment ranged from fines to mutilation of limbs to death. According to Megasthenes the incidence of crime committed in Mauryan India was not very high. But, the range of punishments mentioned in the *Arthashastra* indicates that the breakage of laws and crime were not uncommon in the Mauryan social fabric. This may have led to the mention of detailed severe penal code in the text. The penalties in the *Arthashastra* are based on *Varna* hierarchies, meaning that for the same kind of offence a *brahmana* was punished much less severely than a *sudra*.

14.3.8 City Administration

Let us have a look at the administration of the urban town. Megasthenes has given a vivid description of city administration of Pataliputra, probably the apex centre of the Mauryas. The officer-in-charge of city administration was known as *astynomoi*. In this account, the city council is divided into the following six committees, each committee consisting of five members:

- 1) The first committee looked after industry and crafts. Its functions included inspection of such centres, fixing the wages, etc.
- 2) The second committee looked after the foreigners. Its functions included arranging for their food, stay and comfort, security, etc.
- 3) The third committee's work was registration of births and deaths.
- 4) The fourth committee was supposed to look after trade and commerce, and its functions included inspection of weights and measures, controlling the market, etc.
- 5) The fifth committee inspected the manufactured goods, made provisions for their sale and a strict watch was kept to distinguish between new and second-hand.
- 6) The sixth committee was supposed to collect taxes on the goods sold.

These committees defined the nature of the activities of city administration. The plan of administration of the city and bureaucratic head is also noticed in the *Arthashastra*. Like, it mentions that the head of city administration was called *nagarika*. *Sthanika* and *gopa* were subordinate officers under him. Interestingly, according to the treatise the functions of the fourth committee were performed by *Panyadhyaksha*, the collection

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of taxes (sixth committee) was the responsibility of *Sulkadhyaksha* and the registration of births and deaths was the work of *Gopa*. Besides these, there were a host of officials whose functions have been elaborately defined. For example:

- the Bandhanagaradhyaksha looked after the jail,
- Rakshi, i.e. the police, was to look after the security of the people,
- the centres where goods were manufactured was looked after by a host of superintendents like the *Lohadhyaksha*, *Sauvarnika*, etc.

The *Arthashastra* also refers to a variety of activities related to city administration. The *nagalviyohalak mahamatras* of Ashokan inscriptions certainly appear as being associated with city administration (Singh 2009: 345). Thus, we can say that city administration, as reflected in these sources, was elaborate and well planned.

14.3.9 Provincial Administration

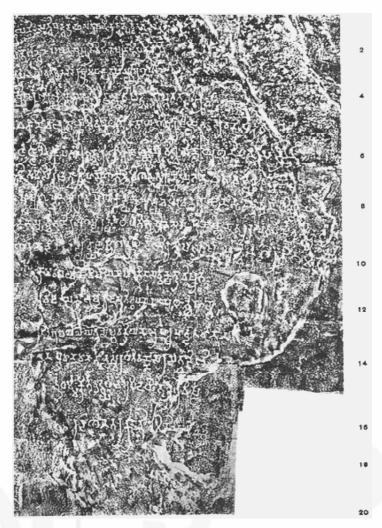
The vast Mauryan empire could not function only from Pataliputra, the administrative capital or apex centre of the Mauryas. It required centres of control at the provincial and local level for administering the vast territory. The heads of provincial centres were governors appointed by the ruler. The governor was, in turn, assisted by *Mahamatyas* (*Mahamatras* during Ashoka's period) and a council of ministers. It is believed that the council of ministers at provincial level not only acted as a check on the governor, but, at times, had direct relations with the king. In Ashokan edicts (*Dhauli* and *Jaugada*) there is a reference that three provincial capitals – Tosali (in the east), Ujjain (in the west), and Taxila (in the north) – were governed under the charge of *Kumara* (a prince of royal blood). In the Major Rock Edict I Ashoka directly instructs local officers to issue orders for tour of inspection, whereas the *kumara* was not informed. This suggests that all *kumaras* did not have equal power in governing their provincial centres.

Another provincial capital – Suvarnagiri (in the south) – was under the charge of *Aryaputra*. The term *aryaputra* probably refers to the eldest son of the family (according to Panini's *Ashtadhyayi*). Hence, it suggests the exalted status of *aryaputra* in comparison to *kumara*. Possibly, the provincial centre of south (Suvarnagiri) given to the eldest son indicates the rich resource region being delegated to the one who was eldest and most responsible. (Chakravarti 2013: 139).

Certain areas within the province were administered by governors who may have been minor rulers of their areas. We can say this because the Junagadh inscription of Rudradaman mentions Tushaspa – a *yavana* – as the governor of Junagadh area during the time of Ashoka. The same inscription, however, says that during Chandragupta Maurya's time his representative in that area was a *vaisya* Pushyagupta.

It is interesting to note that these governors did not carry the designation of royal prince. Further, it needs to be pointed out that the term *yavana* stands for people of West Asia and Tushaspa is an Iranian name. They both appear to be situated outside the royal blood lineage (Chakravarti 2013: 140). Hence, it could be suggested here that in the Mauryan empire there was an existence of diverse administrative units entrusted to provincial authorities of different types.





Junagadh Inscription of Rudradaman. Source: *Epigraphia Indica* Vol. VIII published in 1905. Author: J. F. Fleet. Web Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Junagadh_inscription_of_Rudradaman_(portion).jpg).

14.3.10 Local Administration

The Ashokan edicts mention that provincial administration was further subdivided into district level and the terms *janapada* and *ahara* are used for it. The important officers at district level were:

- pradeshika,
- rajuka, and
- yukta.

These officers were supposed to go on tours every five years in order to instruct people in *dhamma* and for other purposes (Singh 2009: 344). The *pradeshika* was regarded as the overall in-charge of the district. His other functions included:

- survey and assessment of the land,
- collection of revenue, and
- maintenance of law and order.

The term *rajju* means rope; this reference may be related to the measurement of land using a rope. Bongard Levin suggests that the *rajukas* of the aforementioned inscription can be seen as similar to *agronomoi* of Megasthenes' account. In the classical source

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he is referred to as being engaged with the measurement of land for the purpose of revenue assessment (Singh 2009:344). Similar meaning of *rajuka* is noticed in the Pali texts wherein the term *rajjuggahakamachcha* is used to denote the officer holding the rope. His role as a settlement-officer holding a rope to measure the field suggests a similar role discussed above (Chakravarti 2013: 141). *Yukta* was the junior officer who provided secretarial assistance to the other two officers.

At the local level Kautilya recommends that the king should establish a headquarter known as *sthaniya* which consisted of 800 villages, a *dronamukha* of 400 villages, a *karvatika* of 200 villages and a *samgrahana* of 10 villages. The village was the lowest unit of administration. *Sthanika* was the officer-in-charge of the district. Under him were the *gopas*, the people in-charge of units ranging from 5 to 10 villages. *Gramika* was the headman of the village (Singh 2009: 344). However, it is not possible to ascertain whether local level of administration as mentioned in the theoretical text was also practised in Mauryan period.

The sources for reconstructing Mauryan administration have advantages as well as limitations. However, an attempt to draw comparison amongst these sources has been helpful to reconstruct the administrative apparatus of the Mauryan empire. Though one has to be cautioned that the *Arthashastra* is a prescriptive text and discusses the ideal plan of the administrative setup (not the actual Mauryan administration) the fact cannot be denied that a text like this, with such detailed accounts, would not have been written without any historical background. And, the comparison of references from the Ashokan edicts and Megasthenes' account has helped in envisioning the nature of Mauryan state. Ashokan edicts also throw light over administrative officials and directives given to them from time to time. And Megasthenes' account conveys the urban administrative setup from a specific angle. The correlation of evidences helps in sketching the elements which constituted the Mauryan system.

14.4 PERCEPTIONS OF THE MAURYAN STATE

There are different perceptions of the Mauryan state known to us. The popular view is that the Mauryas established a uniform and highly centralized state system (Chakravarti 2013: 133). It means that the royal control over people, produce and resources was homogeneously applied in all regions of the empire. However, an opposite stand is visible in the writing of I. W. Mebbet (1972) who questioned the idea of centralized control in his book titled "Truth, Myth and Politics in Ancient India." Further, Gerard Fussman stated, "given the extent of the empire and the communication networks of the time the Mauryan empire could not possibly have been centralized" (Singh 2009: 340).

The centralized control presumes vast empire being maintained in a unified manner and the directives of control being applied uniformly in all parts of the empire. However, different political institutions such as monarchy and republican states are noticed in *Arthashastra*. It is quite plausible that the degree of centralized administrative control varied from place to place as well as from officials to officials. Some regions may have been economically fertile; highest ranks of officials were placed there to extract maximum revenue from those regions. For instance, different provincial centres were allocated to different officials of the Mauryan state. On the other hand, an attempt to homogenize the diverse cultures is noticed in the *dhamma* policy of Ashoka. It was used as a political and administrative tool to accommodate diverse cultural practices within a common code of conduct. An attempt to regulate diverse economies through the provisions mentioned in the *Arthashastra* is also visible. The taxation mechanism suggests the collection of resources from diverse economic activities.

Romila Thapar in her earlier work "Ashoka and the Decline of the Mauryas (1961)" viewed Mauryan empire being governed under a centralized mechanism. However, later, she revised her arguments in another work, "The Mauryas Revisited (1987)" and suggested that the empire entailed diverse regions with different economies, polities and cultural milieu. Therefore, she pointed out that a three tier administrative structure—metropolitan, core and peripheral—must have been prevalent in the Mauryan period. Magadha was a metropolitan state where direct royal orders of the Mauryan ruler were imposed. The core areas included *Koshala, Vatsa, Avanti* and *Gandhara* that were either centres of trade or areas where the state system has just begun. And, the areas which were situated at a long distance from Pataliputra were the peripheral areas like the north-western borderlands and peninsular regions. These areas can be seen as the ones where the state system had not started.

Hence, one can notice that instead of defining the nature of the Mauryan administration as either "centralized" or "decentralized" it can be defined as having some elements of centralized control at the apex level and significant amount of transfer of authority at the provincial, district and village levels. The relationship between the metropolitan state, core and peripheral areas varied and it was based on the extraction of resources from core and distant areas. However, an attempt was made to give the political system a degree of uniformity through the *dhamma* policy which was an administrative tool of Ashoka (Singh 2009: 341). It suggests that the concept of state is not only related with polity or administrative control; the economical and societal considerations were also reorganizing the structure of the Mauryan state.

14.5 ECONOMY AND SOCIETY: THE MAURYAS

The discussion on revenue administration in the above section also throws light upon crucial matters related to the economy of the Mauryan period. The *Arthashastra* informs that the revenue was collected through taxes levied on urban and rural areas, irrigation projects, mines and forested areas, and trade routes. Thus, a tightened control over the economy by state is visible in this theoretical text. However, how far it was applicable in the real scenario is uncertain. The economy of northern India was primarily agricultural. An attempt to expand the areas of cultivation through agricultural policies of the state (*janapadanivesha*) is noticed in *Arthashastra* (Chakravarti 2013: 151). The manual also mentions the presence of private ownership of land apart from the state owned land (*sita*). The private landowners paid a part as tax to the state.

The provision of irrigation facilities is intimately linked with agricultural production. In this period the state and individual initiative in providing irrigation facilities to the people can be seen. For instance, Megasthenes' account informs us that there was a specific officer-in-charge (*agronomoi*) in the countryside whose duty was to provide irrigation facilities to cultivators. The *Arthashastra* also talks about two types of irrigation projects being undertaken by the state. One hydraulic project was the provision of water through natural sources while the other functioned through artificial means. Interestingly, the text mentions the irrigation tax (*udaka bhaaga*) for availing irrigation services (Chakravarti 2013: 152). The Junagarh inscription of Rudradaman I, the post-Mauryan ruler, mentions that one of the governors during the reign of Chadragupta Maurya constructed a dam across a river near Girnar in western India. That dam is known as Sudarshana lake and was built to supply water for the region (Thapar 2002: 187).

Kautilya's account states that textile manufacturing was another state controlled enterprise. And the details of employees, the amount of production and salary are clearly laid out in the text. It is interesting to note that women workers were also employed

Administrative Organization, Economy and Society

in textile manufacturing unit (Chakravarti 2013: 154). However, it is unlikely that all textile production took place under the supervision of state. As textile manufacturing has been seen as an economic activity since earlier times it could be stated that an attempt to organize the work force for the production of textiles is noticed in the *Arthashastra*.

Similarly, supervision over trade and commerce is noticed in the sources of Mauryan period. The Greek accounts mention that the city officers were supposed to look after urban affairs which included:

- inspection of manufactured goods,
- the quantity and quality of goods, and
- tax on sold goods.

The *Arthashastra* also mentions that *panyadhyaksha*, i.e. the superintendent of trade kept an eye over merchants. This head was supposed to be aware of:

- the goods brought in the market,
- ways in which the goods were brought,
- amount of profit, and
- the change in demand and prices of various commodities.

Urban taxes such as duties on imported and exported goods are also mentioned in the text. Archaeological excavations indicate that this period witnessed agrarian and urban expansion in continuation of the earlier period. Urban growth also brought about an expansion of crafts, trade and guild organization. The remains of wooden Mauryan palace and pillared hall have been found from the metropolitan area Pataliputra. The discovery of a large number of seals suggest Bhita site in the upper Ganga valley as an important trade centre of the Mauryan period. Evidence of specialized crafts activities such as terracotta craft, copper and iron working, and bead-making have been noticed in Mathura region. Similarly, the findings of mud brick walls, ring wells and a circular barn suggests Atranjikhera as an urban centre (Singh 2009: 336). It could be suggested here that in order to extract maximum revenue from diverse economic activities the *Arthashastra* laid emphasis upon the state control over economy.

These sources also talk about the social conditions in the Mauryan period. According to Megasthenes Indian society was divided into seven groups:

- philosophers,
- farmers,
- soldiers,
- herdsmen,
- artisans,
- magistrates, and
- councillors.

These were understood as castes and it was stated that no one was allowed to change profession and marry outside their groups (Thapar 2002: 190). Megasthenes appears to define social groups in terms of their occupations instead of social status. And, the

Arthashastra upholds the Brahmanical ideal of social order and emphasizes upon the maintenance of varna and asrama systems. An interesting picture of an unequal society emerges from Ashokan inscriptions wherein the brahmanas and nobles are regarded as arya, slaves and servants as dasabhataka, wealthy persons as mahat and low persons as khudaka (Chakravarti 2013: 150).

The *Arthashastra* mentions that the ideal form of marriage is within the *varna* but outside the *gotra*, i.e the practice of endogamy is highlighted here. If we look at the Allahabad-Kosam Queen's edict Karuvaki is mentioned as the second queen of Ashoka. It highlights the practice of polygamy in society. Karuvaki is represented as queen and mother of the prince. It suggests that the identity of queen is highlighted in relation to male members of the family, which is a prominent feature of the patriarchal society.

Women are represented in the *Arthashastra* as undertaking diverse range of economic activities. They appear to be employed as royal bodyguards and state spies. Poor women, widows and prostitutes are also viewed as being employed for spinning and weaving activities inside and outside their households. Kautilya also seems to recognize the profession of prostitutes and outlines the appointment of *Ganikadhyaksha* for the regulation of their profession. Hence, this prescriptive text appears to bring all sorts of women under the ambit of the generation of revenues for the state. The economic concerns of the state influenced the reorganization of social groups and society at large.

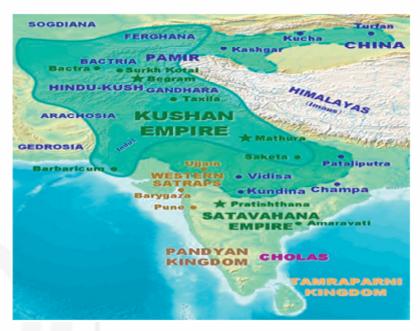
Check Your Progress Exercise 1

1)	What are the sources for the study of Mauryan administration?
2)	Was the Arthashastra written down in the Mauryan period? Discuss.
3)	Are Ashokan inscriptions more reliable source for the Mauryan history than the <i>Arthashastra</i> ?

Wr 	ite few lines on the city admi	Administrative Organization, Economy and Society		
	as the Mauryan state a ce ministrative tool of the state?	ntraliz	ed state? Elucidate. Was <i>Dhamma</i> an	
1)	Match the following:	,		
1)	Navadhyaksha	a)	Head of elephant corps	
2)	Rathadhyaksha	b)	Head of Infantry	
3)	Hastyadhyaksha	c)	Head of naval affairs Head of Charieta	
4)	Patyadhyaksha Matah tha fallowing	d)	Head of Chariots	
ii)	Match the following:	۵)	Tax from cultivators	
1)	Kosha	a)	Secret agents	
2)	Bhaaga Ayudhagaradhyaksha	b)	Incharge of city administration	
		c)	Revenue administration	
4)	Astynomoi Samstha	d)		
5) Mo		e) oinst th	Head of Armament production unit	
1)	 Mark right (✓) or wrong (×) against the following statements: 1) In the <i>Arthashastra</i> the <i>dharmasthiyas</i> are mentioned as courts dealing with matters related to personal disputes whereas <i>kantakshodhana</i> dealt with matters where the state and individuals were concerned. () 			
2)	The <i>Sthanika</i> and <i>Gopa</i> are referred to as subordinate officers in rural administration.			
3)	The City Council, according to Megasthenes, was divided into six committees and each committee consisted of five members.			
4)	All provincial capitals wer blood.	e gove	rned through <i>Kumara</i> , the prince of royal ()	
5)	The term <i>astynomoi</i> is use accounts.	d for th	ne officers of rural administration in Greek	

14.6 POST-MAURYAN POLITIES

The period between c. 200 BCE to 300 CE is perceived as the period of crisis in the early works of historians due to the presence of foreign rulers and absence of a large territorial structure in the Indian subcontinent. Recent studies highlight that it is one of the dynamic periods in terms of extensive economic engagements and cultural developments. Different types of polities were witnessed at this time. Foreign tribes of central and West Asia established their political rule in the north-west region. The emergence of monarchical polity was noticed in the Deccan and Odisha region. Simultaneously, the rise of non-monarchical groups was seen in the northern and central India.



Credit: PHG Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:SatavahanaMap.jpg).

14.6.1 The Shungas and Kharavela

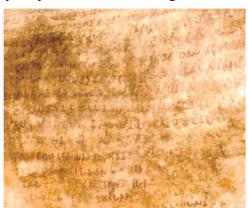
The breakup of the Mauryan empire was followed by the rise of a number of monarchies in different parts of the Indian subcontinent. Pushyamitra, the *senapati* of the Mauryan army, is believed to have killed the last Mauryan king Brihadratha and established the Shunga dynasty. It is widely accepted amongst historians that the emergence of Shunga empire could be seen as an attempt at Brahmanical revival after widespread patronage to Buddhism in the Mauryan rule. The *Divyavdana* gives stories of Pushyamitra's cruelty and his hatred towards Buddhism (Singh 2009: 372).

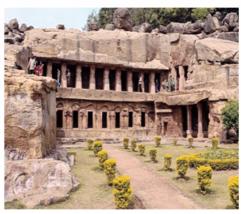
Shungas' realm extended to only a part of the Mauryan empire. It included Pataliputra, Ayodhya and Vidisha. In some places viceroys were placed to look after the governance. The Shungas are believed to belong to the *brahmana bhardvaja gotra*. They tried to revive Vedic practices and sacrifices. The Ayodhya stone inscription of king Dhana refers to Pushyamitra as the performer of two *ashvamedha* sacrifices (Singh 2009: 372). The last Shunga king, Devabhuti, became a victim of conspiracy devised by his *brahmana* minister Vasudeva who founded the Kanva dynasty. It was a short-lived rule. In Magadha the Kanvas made way for the Mitra dynasty in 30 BCE. The Mitras were eventually displaced by the Shakas.



Shunga and its Contemporary Empires (c. 185-75 BCE). Credit: Windy City Dude. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Sunga_map.jpg).

Kharavela emerged as an important ruler in the coastal and eastern part of Odisha around mid 1st century BCE. He belonged to the Meghvahana lineage associated with the Chedis (Thapar 2002: 211). Kalinga was an independent kingdom under his rule. He is said to have raided a major part of the country including Magadha and the Satavahana and Pandya countries. He was an ardent follower of Jainism. The Hathigumpha inscription records the conquest, patronage and welfare of subjects of this ruler. Kalinga was associated as one of the centres of Mauryan administration. The process of state formation in this area was seen as the result of interaction with the Mauryan empire. Some features of the Mauryan empire, like respect for different religious practices and welfare issue of the subjects, were given consideration by Kharavela in this region. The Hathigumpha inscription records the patronage given to Jain monks and the fact that *brahmanas* were also exempted from taxes; respect towards every sect; and construction of canals and tanks for the purpose of irrigation (Thapar 2002: 212-213). He continued the use of punch-marked coins. However, the dynasty did not last for a long time and disappeared after the death of Kharavela.

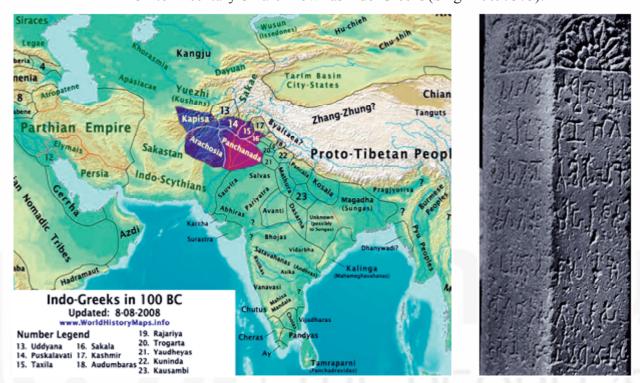




LEFT: Hathigumpha Rock Inscription of King Kharavela of Kalinga. Attribution: Windrider 24584 Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Hatigumfa.jpg). RIGHT: Udayagiri Caves Complex, Home to the Hathigumpha Inscription, near Bhubaneswar, Odisha. ASI Monument No. N-OR-62. Credit: Bernard Gagnon. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Udayagiri_Caves_-_Rani_Gumpha_01.jpg).

14.6.2 The Indo-Greeks

The Greeks of Bactria were originally *kshatraps* (subordinate rulers) of Seleucid empire of West Asia. Bactria is the ancient name of modern northern Afghanistan. In mid 3rd century BCE there was a revolt against Seleucid empire and independent Bactria was carved out. These Bactrians extended their kingdom and reached to the south of the Hindukush mountains. Around 145 BCE they lost their control over Bactria and established control in north-western part of the Indian subcontinent (Singh 2009: 373). The Bactrian Greeks who ruled in the north-west part of India between *c*. 2nd century BCE to 1st century CE are known as Indo-Greeks (Singh 2009: 373).



LEFT: Indo-Greek Kingdoms in c. 100 BC. Credit: Thomas Lessman. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Indo-Greeks_100bc.jpg).

RIGHT: The Heliodorus Pillar, Erected Around 113 BCE, Commissioned by the Indo-Greek Ambassador Heliodorus who was one of the Earliest Recorded Indo-Greek Converts to Hinduism, Vidisha, Madhya Pradesh. It is the 1st known inscription related to Vaishnavism in India. Credit: Public.Resource.Org. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Heliodorus_pillar_inscription.jpg).

14.6.3 The Shakas and the Pahlavas

The Shakas belonged to the Scythian ethnic stock living in Jaxartes (central Asia). Around 2nd century BCE, due to a series of tribal movements in central Asia, the Shakas were displaced and they entered north-western part of the Indian subcontinent. Parthia is a place in Iran and people of this area are known as Parthians. The term 'Shaka-Pahlava' is used for various groups of invaders who came from Parthia to north-west India in the 1st century BCE (Singh 2009: 375). The history of the Shakas-Pahlavas is known through inscriptions and coins. An inscription from Taxila mentions a Shaka king Moga and his *kshatrapa* (governor) Patika. Some coins suggest the practice of conjoint rule. For instance, Spalirises and Azes I seem to have been co-rulers at a time. Another important ruler was Gondophernes. In his coins the position of governor and military governor is mentioned. Regarding the nature of polity it is understood that the Shakas' kingdom was divided into provinces. Each province was under a military governor known as *mahakshtrapa*. And, further subdivision of provinces was under a lesser

governor known as *kshatrapa*. They were also known as subordinate rulers. These *kshatrapas* are seen as issuing inscriptions and minting coins in their own right. Hence, it appears that these governors enjoyed independent status rather than being state officials working under the direction of their rulers. The Shakas carried out their administration on the basis of Achaemenid and Seleucid systems in Iran (Thapar 2002: 220). The role of *kshatrapas* and *mahashtrapas* in the expansion of their empire has been duly recognised in history.



Indo-Scythian Kingdom at its Greatest Extent (c. 150 BCE-400 CE). Credit: DLommes. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:IndoScythianKingdom.svg).

14.6.4 The Kushanas

Another central Asian force which entered into the Indian subcontinent was the Kushanas. They were a branch of the Yueh-chi tribe. The Yueh-chi tribe earlier belonged to central Asia and was later displaced by Wu-sun and moved westwards. At this point there was a split in the tribe into two parts — Great Yueh-chi and Little Yueh-chi. The former moved to the Tibet region and the latter moved further west and finally settled down in Afghanistan. The great Yueh-chi was divided into five principalities in the valley of Oxus. One of the principalities was the Kushanas. Around the beginning of the 1st century CE Kujula Kadphises amalgamated the five principalities and laid the foundation of an unified Kushana empire. Coins of Kujula Kadphises have been found in the south of the Hindukush region. His successor, Vima Kadphises, earlier acted as a co-ruler along with his father and later ruled independently. He conquered Kandahar region from the Parthians and established his control over the Indus valley and Mathura region (Singh 2009: 376).

The Kushana empire reached its height under the ruler Kanishka. Most scholars accept that his reign began in 78 CE and that his successors dated their inscriptions in an era beginning from this year (Singh 2009: 376). During Kanishka's reign the empire extended in east till the Ganga valley and southwards in the Malwa region. Kushanas' influence was noticed in western and central India as well where the Shaka-*Kshatrapas* recognised the overlordship of Kushana rulers. Kanishka's rule in Pataliputra and Champa in Bihar is attested in the Rabatak inscription (Chakravarti 2013: 178). The Chinese source Hou-Han-shu indicates that the Kushanas became powerful and wealthy due to their conquest over the lower Indus region.

B. N. Mukherjee opined that the mining areas of Malwa region and the trade potential in lower Indus region led to the expansion of Kushanas in these areas. Further, it was argued that the decline in trading relations with the Makran coast led to the decline of the Kushanas (Singh 2009: 377). This argument is suggestive of the fact that economic

factor played an important role in the expansion of the Kushana rulers. Kanishka's empire probably included most of Afghanistan, easternmost part of China and extended up to the north of Oxus valley in central Asia. The inclusion of vast regions proved to be a major stimulus to trade (Singh 2009: 377). In other words, the vast empire played a key role in facilitating trade from China to West Asia through India. The great Silk Route passed through the northern portion of the Kushana empire.



Extent of Ancient Silk Route. Credit: Whole_world_-_land_and_oceans_12000.jpg: NASA/Goddard Space Flight Center. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Silk_route.jpg).

Formerly, the Kushana empire was a central Asian kingdom. Later, it expanded to Afghanistan and north-western India. The centre of this vast empire was Bactria. In India, Purushapura (Peshawar) and Mathura were two important capitals of the Kushana power. The immediate successors of Kanishka were Vasishka, Huvishka, Kanishka I and Vasudeva I. The Kushana power declined by mid 2nd century CE (Singh 2009: 377). The Kushana rulers took grand titles like:

- devaputra (son of heaven),
- *maharajadhiraja* (king of kings),
- *soter* (saviour), and
- kaisara (Caesar).

Thapar has suggested that these titles were borrowed from Persians, Chinese and Romans; and the practice of depicting a halo on the portraits of Kushana rulers has been followed after the Mediterranean customs (Thapar 2002: 223). These titles suggest that in order to establish their authority over lesser kings and chiefs of those times Kushana kings adopted them. On the one hand, they were making an attempt to legitimize their position in their empire; on the other hand, the impact of central Asian traditions is also visible in the wake of taking these titles. The administrative system of Kushanas does not appear to be a centralized one. Different regions of the vast empire seem to have had different degrees of control. Some regions were under the direct rule of the king while other regions were under the control of lesser governors – the *ksatrapas*. There were other regions which accepted the overlordship of Kushana rulers and governed their territories in their own manner. Hence, a three-tier system of control is known in Kanishka's time:

- direct control,
- control through the local kshatrapas, and
- that through the subordinate rulers.

Kanishka is regarded as a great patron of Buddhism. He is credited for the establishment of a *stupa* at Purushapura and sending missions to propagate Buddhism to Kashgar,

Yunan and China. A Buddhist council was held in his reign. Surprisingly, in his coins different religious deities – Indian, Greek and West Asian – are represented. This suggests that an attempt was made by him to acknowledge religious diversity in the composition of his empire. This may have been part of the royal policy to connect the rulers with different religious tendencies that existed in their vast empire. The state tried to sustain and perpetuate itself by accommodating the essentials of divergent communities.





LEFT: Headless Statue of Kanishka, Mathura Musuem. Credit: Biswarup Ganguly. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Kanishka_enhanced.jpg). RIGHT: Kanishka Inaugurates Mahayana Buddhism: Illustration from an Oil Painting on Canvas, 1910. Credit: Ambrose Dudley. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Kanishka-Inaugurates-Mahyana-Buddhism,jpg).





LEFT: Coin of Kanishka with Greek Lettering "BO $\Delta\Delta$ O" (i.e. Buddha). Credit: Classical Numismatic Group, Inc. (http://www.cngcoins.com). Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Coin_of_Kanishka_I.jpg).

RIGHT: Qila Mubarak fort at Bathinda, Punjab built by Kanishka. Credit: en:User:Guneeta. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Qila_Mubarak_in_Bathinda.jpg).

The Kushana power began to decline due to the victory of Iranian Sassanids. Bactria, being the apex centre, went into the hands of Iran (Chakravarti 2013: 180). In the same period there was a resurgence of different types of principalities – local and sub-regional – in different parts of India.

14.6.5 Non-Monarchies/Ganasanghas/Clan-Based Polities

This period also witnessed the emergence of different tribal or clan-based polities in different parts of north India. The Arjunayanas appeared in south-east of Mathura (Alwar region in Rajasthan); the Malavas originated in Punjab and later migrated to

Rajasthan; the Yaudheyas lived in eastern Punjab and the areas of Uttar Pradesh and Rajasthan; Kunindas at the foot of Sivalik hills; Trigartas between the Ravi and Sutlej river basins. The Yaudheyas were famous even in the time of Panini as professional warriors and, during this period, are said to have been suppressed by Rudradaman, the Shaka king. Many of these tribes claimed *kshatriya* status through epic heroes and legends. And their coins were often issued in the name of *gana* or *janapada* like in the case of the Yaudheyas (Thapar 2002: 211). Other tribal republics, as they are popularly known, during this period are those of Sibis, Malavas, Trigartas and so on. These *janapadas* interspersed the region of northern and north-western India and, at the same time, independent principalities like Ayodhya, Kausambi, Mathura and Ahichhatra also re-asserted their power, having earlier succumbed to the Mauryas.

14.6.6 The Shaka-Kshatrapas of Western India

The Shaka-Kshatrapas came to power in western India. Earlier, they were feudatories of the Kushanas and owed allegiance to them. Gradually, they came to the forefront and declared their independence. In the early centuries of the Christian era the two lines of Kshatrapa rulers were the Kshaharatas and the Kardamakas. Bhumaka and Nahapana were important rulers of the Kshaharata dynasty and they were loyal to the Kushanas.

Chastana was the founder of Kardamaka dynasty. He was appointed as viceroy of the south-western province of the Kushanas (Singh 2009: 379). The Kardamakas followed the practice of senior and junior rulers with titles *kshatrapa* and *mahakshatrapa* respectively.

Rudradaman I was the famous ruler of the Kardamaka dynasty. He came to the throne in 150 CE and his conquests are inscribed in the Junagarh inscription. It mentions that Malwa, Saurashtra, Gujarat and northern Konkan were the conquered regions by this ruler. He defeated Satakarni ruler of Satavahana dynasty twice, probably Gautamiputra Satkarni (Singh 2009: 381).

14.6.7 The Satavahanas

In the post-Mauryan period many local rulers started ruling in regions like Vidarbha, eastern Deccan, Karnataka and western Maharashtra. The Satavahana empire is said to have been built through the consolidation of numerous local centres. The Satavahanas probably belonged to a clan or branch of the Andhra tribe whose power gradually rose in the Deccan and western India around 1st century BCE (Chakravarti 2013:181). They are believed to have begun their rule around 1st century BCE and the rule ended in early 3rd century CE. Simuka is known as the founder of this dynasty whose apex political centre was Pratishthan or Paithan.

The Prakrit Nasik inscription mentions the Satavahana ruler Gautamiputra Satkarni as *ekabrahmana* (Singh 2009: 383). That another ruler of this dynasty – Satkarni I – performed *ashvamedha* sacrifices is known through the Nanaghat inscription. These facts suggest that the local rulers played a significant role in the making of Satavahanas. They were the earliest indigenous tribes that were transformed into a monarchical polity. The rulers of this dynasty may have attempted to sanctify their position through the performance of Vedic sacrifices.





LEFT: This slab was first carved in about the 1st century BCE. When the Great *Stupa* at Amaravati was refurbished under the patronage of the Satavahana rulers the Buddha was carved standing in human form at the entrance of the Monument. British Museum, London. Credit: Gryffindor. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:British_Museum_Asia_14.jpg).

RIGHT: Current Statue of Gautamiputra Satakarni at Amravati, Maharashtra. Credit: Krishna Chaitanya Velaga. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Gautami_Putra_Satkarni_Statue_in_Amaravathi.jpg).

The Satavahana empire comprised of Andhra Pradesh, Maharashtra, north Karnataka, south Madhya Pradesh and Saurashtra. Kharavela of Chedi dynasty of Odisha is believed to have challenged the authority of the Satvahana ruler Satakarni I. Nevertheless, he appears to have had a vast area under his control. This could be gleaned from the title – the lord of *Dakshinapatha* – taken by him.

Gautamiputra Satakarni was the famous ruler of this dynasty and this empire reached its height under him. The Nasik cave inscription mentions him as "the destroyer of the Shakas, Pahlavas and Yavanas, the uprooter of Kshaharatas and the restorer of the glory of Satavahanas" (Singh 2009: 383). The extent of Satavahana empire at this time included Malwa and Saurashtra in the north to the Krishna delta in south, and from Berar in the east to the Konkan coast in the west. The inscription also describes that the Buddhist monks were donated a piece of land for dwelling purposes in his reign. This is the first time in history when land was granted with terms and conditions, i.e. the land will not be interfered by royal authority, will be free from state control and the landholder will enjoy certain privileges over it (Singh 2009: 384). Probably, Yajnasri Satakarni, also known as Gautamiputra Yajna Sri, was the last ruler of the Satavahana dynasty to control eastern and western Deccan. Numerous dynasties emerged after the gradual decline of the Satavahanas. Like the Vakatakas arose in Deccan region, the Kadambas in Mysore, the Abhiras in Maharashtra and the Ikshvakus in the Andhra region (Singh 2009: 383).









RIGHT: Coins of Gautamiputra Yajna Satakarni, c. 167-196 CE. Attribution: Classical Numismatic Group, Inc. (http://www.cngcoins.com). Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Gautamiputra_Yajna_Satakarni.jpg).

The Satavahana empire was divided into small provinces known as *aharas*. Each province was under civil and military officers. The following are the titles used for officials:

- Amatya,
- Mahabhoja,
- Mahasenapati, and
- Maharathi.

Amatya was the highest official. Village was the lowest administrative unit. The head of town administration was known as *nagarasabha* and that of village administration known as *gramasabha*. Both these officials carried out their functions independently. There is a mention of a special official – *Uparakshita* – being appointed by the ruler to look after the building activities of the caves for monks.

The above mentioned titles indicate that their administrative system was feudal in nature. The power was not confined to the ruler. Instead, it was distributed through the hierarchy of officials. The fiscal and administrative rights rested with feudal chiefs. Some were allowed to issue their coins and some entered into marital alliances with the royal family. Hence, it could be pointed out that the administration was carried out through local channels with either less or no interference from royal authorities in provinces and regions. However, a strong element of monarchy appears to exist in the apex centre of this dynasty.

In the extreme south the three important chiefdoms that continued to be prominent from the Mauryan period were:

- the Cheras who controlled the Malabar area,
- the Colas who held sway on the south-eastern coast and the Kaveri valley, and
- the Pandyas whose power centre lay around the tip of the peninsula.

The *Sangam* texts of this period give us a considerable amount of information on the society, ecology, polity and economy of the region where these three kingdoms ruled. For the extreme south we know that the chiefs of the three main chiefdoms (the Cherasthe Colas-the Pandyas) were constantly at war with minor chiefs of the less developed regions. The Velir chieftains, for instance, were famous as they controlled important outlets to Roman trade on the south-east coast.

Though attempts were made in the post-Mauryan period by various dynasties to build empires there were several instances of each of them contending the other. Further sub-regional powers could not totally be suppressed. Whereas, on the one hand the political decline of the Mauryas created a situation for many of these local powers to rise, on the other hand their economic expansion witnessed in the Mauryan period continued unabated. The crisis in the Magadhan empire under the Mauryas was, thus, one of organization and control of its resources and not a lack of them.

14.7 ECONOMY AND SOCIETY: POST-MAURYAS

This period witnessed dynamic changes in economic and social spheres. Agriculture remained a crucial source of revenue. The spread of sedentary agriculture was, for the first time, noticed in the Satavahana and Kalinga kingdoms. The inscription from Nasik also informs us about the coconut plantation in these regions (Chakravarti 2013: 194). The *Milindapanho* mentions eight different stages of agricultural activities – from

removing weeds to harvesting of crops. It also enumerates varieties of crops and different types of rice cultivated (royal and coarse) in this period. Archaeological evidences of agricultural implements such as iron ploughshare, axes, adzes, spades and sickle have been found from Taxila and Sanchi (Chakravarti 2013: 194). Another important fact is that *Gahapatis* (large landowners) and *Kutumbika* and *halika* (cultivators) appear as donors or patrons to the Buddhist *sangha*. This suggests an exalted status of the cultivators in economic terms.

The state and individual initiative to provide irrigation facilities continued in this period too. The embankment of Sudarshana lake was repaired during the reign of Rudradaman I, the Shaka ruler. Canals were built by the Nandas of Kalinga. The Nasik inscription records that in the reign of Nahapana tanks were built. Another inscription informs that a Greek named Theodorus donated an excavated tank near Taxila (Chakravarti 2013: 194).

Tremendous increase was noticed in trading activities within and between the sub-continents in this period. One of the important trade route i.e. *Uttarapatha* connected Taxila in the north-west with Tamralipti in the Ganga delta. Other major trade endpoints in northern India were:

- Pushkalavati in the north-west,
- Patala and Bhrigukachha in the west, and
- Muziris in the south.

The Kushanas and the Satavahanas used coins for small scale transactions. Coins of gold, silver and copper facilitated trading activities. The *Dharmashastras* lay provisions related to taxes, profits on indigenous goods and foreign goods. The *Jatakas* provide information on long-distance travels. It mentions people taking different travelling modes like bullock-carts, chariots and by foot. There were rest-houses for tired travellers to rest for some time (Singh 2009: 406).

Another landmark change noticed in this period was the prospering long-distance trade relations. There was a huge demand of Chinese silk in the Roman empire. The silk reached the latter through far flung overland route from east Asia. There were two ways of silk routes – northern and southern silk routes. Bactria falls on the southern silk route. The significant issue is that when the Kushanas rose to power and captured Bactria the Roman empire found an alternative way of trade through the Indian subcontinent. It provided immense avenues to the Kushana power and this empire flourished on the basis of silk route from India to the Roman empire. The discovery of south-west monsoon winds added to the possibilities of maritime trade in the Indian Ocean.

The Periplus and Ptolemy's Geography mention that Chinese silk entered north-western India through Bactria and Kabul, reached Mathura and from there to Ujjayini. From Ujjayini the merchants and merchandise reached the port city Barygaza. And the items were sailed from here to the ports of Red Sea and eastern Mediterranean region (Chakravarti 2013: 202). It also paved the way for trading relations between the Indian merchants and the Roman world. The exports from India included:

- precious gems like diamond, pearls,
- ivory products,
- finest textiles, and
- exotic spices.

Black pepper was in high demand in the Roman empire. The import items included:

- Chinese silk,
- distinct potteries like Arretine ware,
- imported amphorae, and
- the Mediterranean wines.

The trade contacts between India and east and south-east Asia also intensified in this period. The flourishing trade relations and continuous interaction of migrating groups in north-western India provided the backdrop for craft specialization in this period. The *Milindapanho* mentions 60 types of people specialized in crafts such as:

- potter,
- carpenter,
- metal smith,
- reed-maker,
- bamboo-maker,
- ivory-worker etc.

The organization of these craftsmen into guilds (*shrenis*) is also an important feature of the post-Mauryan period. *Shreni* was a group of professionals, merchants or artisans who decided their common interests and policies pertaining to their professions. The inscriptions of western Deccan mention guilds of:

- weavers,
- potters,
- flour makers,
- oil millers,
- bamboo workers, and
- merchants.

These guilds also seem to have had a close connection with royal officials (Singh 2009: 404).

The normative Brahmanical literature – *Manusmriti* and *Yajnavalkya Smriti* – upholds the fourfold *varna* system; it also accommodates numerous *jatis*. The offsprings born of union of two different *varnas* were assigned the status of *jati*, and the *jatis* were denoted by specific or hereditary occupations. The *Manusmriti* also refers to *vratya kshatriyas* as *kshatriyas* who were degraded due to the non-performance of rituals (Singh 2009: 418). The proliferation of *jatis* may have been due to the absorption of tribal groups into the Brahmanical structure resulting from the gradual spread of the state society. And the foreign tribes who came from central and West Asia appear to be assimilated as the *vratya kshatriyas*. Earlier, they were regarded as outsiders (*yavanas*), but gradually given space in the Brahmanical literature in the form of degenerated *kshatriyas* (Chakravarti 2013: 210).

Regarding the position of women *Manusmriti* lays emphasis upon guarding the wives and keeping them under the control of men. It states that women should be under the guard of father, then husband and then, the son. A subordinate position has been assigned to women in the domain of household. The preference for son over daughter and women being confined to the domestic sphere is emphasized in the text. The ideal form of marriages such as *brahma*, *daiva*, *arsa* and *prajapatya* are permitted for the upper *varnas* and for the lower *varnas*, *asura*, *gandharva*, *rakshasa* and *paishacha* were prescribed. If we look at the *Mahabharata* the marriage between Arjun and Subhadra was a *rakshasa* form of marriage. Surprisingly, the *Swayamvara* form of marriage is not mentioned in normative literature (Chakravarti 2013: 212). Another important aspect noticed in the *Smriti* literature of the 2nd century BCE is that the property of women (*stridhana*) was recognized and prescriptions were laid out in this regard.

The practice of using mother's *gotra* in their names has been noticed amongst the Satavahana rulers. This suggests that the mother may have been considered significant, as ancestry is traced through their names. Inscriptions indicate that the women of Satavahana dynasty made donations in their own rights. Other epigraphic sources suggest that a large number of women, who did not belong to the royal background, were also donors at the Buddhist sites. This indicates that these women may have had some degree of economic liberty.

Check Your Progress Exercise 2

1)	Who were the Indo-Greeks?
2)	Discuss the nature of polity of the Shaka dynasty.
<i>2)</i>	Discuss the nature of pointy of the shaka dynasty.
3)	Write a note on Kanishka.

History of India from the Earliest Times Upto C. 300 C.E.	4)5)		Highlight the significance of the Kushana rule. Throw light on the administrative system of the Satavahana dynasty.					
	6)	i)	Match the following:					
		1)	Kharavela	a)	Junagarh Inscription			
		2)	Rudradaman	b)	Hathigumpha Inscription			
		3)	Kanishka	c)	Nasik Cave Inscription			
		4)	Gautamiputra Satkarni	d)	Rabatak Inscription			
		ii)	Match the following:					
		1)	Yaudheyas	a)	Yueh-Chi Tribe			
		2)	Kushanas	b)	Professional Warriors			
		3)	Rudradaman	c)	Andhra Dynasty			
		4)	Satavahanas	d)	Kardamaka Dynasty			
	7)	Ma	rk right (\checkmark) or wrong (\times) ag	gainst the f	following statements:			
		1)	The last Mauryan king Br	ihadratha	was killed by Gautamiputra Satkarni.			
		2)	Pushyamitra Shunga emer part of Odisha.	rged as an i	important ruler in the coastal and eastern ()			
		3)	The term Yaudheyas-Kur from Parthia to north-wes		sed for the group of invaders who came ()			
		4)	The Kushana empire play West Asia through India.	ed a key ro	ele in facilitating silk trade from China to			
		5)	The Shakas probably hel	anged to t	he Andhra tribe whose nower arose in			

14.8 SUMMARY

the Deccan region.

In this Unit we discussed the establishment of the first empire in the Indian subcontinent – the Mauryan empire. The origin and dynastic history of the Mauryas was discussed.

The constituents of the state and its elaborate mechanism of administration have been highlighted. Different types of sources are correlated to understand the nature of Mauryan state. The *Arthashastra* highlights the essential matters pertaining to governance; the Ashokan inscriptions reveal the royal proclamations of Ashoka and the Megasthenes' account envisions the workings of the state and society in the court of Chandragupta Maurya. The social and economic processes of earlier period continued and expanded in this period. The royal policies that appeared to consolidate and weave the vast heterogeneous empire in one thread have been studied here.

The post-Mauryan period can be characterized as the period of diverse and dynamic polities. An attempt to reconstitute the Brahmanical society is visible in the rule of Shungas and Kanvas. The invasions of Shakas, Pahlavas and Kushanas added to social flux and also denote the intermixing of governance aspects, culture and religious practices. There were monarchies established by foreigners in the north-western portion of the Indian subcontinent. Tribal polities were witnessed in the Indo-Gangetic divide such as the Yaudheyas, Arjunayanas etc. The Satavahanas and Kalinga highlight the beginning of indigenous state societies in new areas. There was expansion of cities, specialized crafts and trade networks.

14.9 KEY WORDS

Saptanga Rajya

: The *Arthashastra* uses this term to define seven essential organs of a state system. It included *svami* (the king), *amatyas* (ministers), *janapada* (the territory and the people), *durga* (the fortified capital), *kosha* (the treasury), *danda* (justice) and *mitra* (relationships with neighbours).

Varna system

: It refers to the fourfold classification of society into *brahmanas*, *kshatriyas*, *vaishyas* and *sudras*. The status of these *varnas* is also considered in a sequential manner and the duties of these *varnas* appear to be fixed in the Brahmanical sources. Like, the *brahamanas* are supposed to perform rituals, the *kshatiryas* are supposed to protect the other *varnas*, the *vaishyas* are for trading activities, and the *sudras* are supposed to serve the upper three *varnas*.

Dhamma

: It is a Prakrit term equivalent of the Sanskrit word *dharma*. The term *dharma* means duty or righteousness. In the Buddhist principle it is used for the teachings of the Buddha. Ashoka gave it a broader meaning.

Stridhana

: The property received by a woman as a gift at the time of marriage by parents, relatives or friends.

Sita

: Land under the control of the king/the state.

Janapadanivesha

: This term is mentioned in the *Arthashastra*. It is used for the mechanism of agrarian expansion in the new areas. In order to maintain stable agrarian

resource-base this term is given emphasis in the text.

Ganasangha

: Refers to a system of governance where political power is exercised through a group of rulers. The concept of a single ruler is absent here. The political decisions are taken collectively by these rulers through their assembly.

14.10 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) See Sub-section 14.3.1
- 2) See Sub-section 14.3.1
- 3) See Sub-section 14.3.1
- 4) See Sub-section 14.3.8
- 5) See Section 14.4
- 6) i) 1-c, 2-d, 3-a, 4-b
 - ii) 1-d, 2-a, 3-e, 4-c,5-b
- 7) (i) \checkmark (ii) \times (iii) \checkmark (iv) \checkmark (v) \checkmark

Check Your Progress Exercise 2

- 1) See Sub-section 14.6.3
- 2) See Sub-section 14.6.4
- 3) See Sub-section 14.6.5
- 4) See Sub-section 14.6.5
- 5) See Sub-section 14.6.8
- 6) (i) 1-b, 2-a, 3-d, 4-c
 - (ii) 1-b, 2-a, 3-d, 4-c
- 7) $1) \times 2) \times 3) \times 4) \checkmark 5) \times$

14.11 SUGGESTED READINGS

Chakravarti, Ranabir (2013). *Exploring Early India Up to C. AD 1300*. New Delhi: MacMillan.

Fussman, G. (187-88). Central and Provincial Administration in Ancient India: The Problem of the Mauryan Empire. *Indian Historical Review*. Vol.14, Nos. 1-2, 43-72.

Jayaswal, K. P. (1955). *Hindu Polity*. Bangalore: Bangalore Printing and Publishing Co, [1918].

Jha, D.N. (2009). *Ancient India in Historical Outline*. New Delhi: Manohar Publishers, revised and enlarged edition.

Levin, Bongard G. (1985). Mauryan India. New Delhi: Abhinav.

Raychaudhuri, H. C. (1987). *Political History of Ancient India*. Delhi: Oxford University Press. (revised edition).

Sharma, R. S. (1991). *Aspects of Political Ideas and Institutions in Ancient India*. Delhi: Motilal Banarsidass Publishers Pvt. Ltd.

Sharma, R.S. (1983). *Perspectives in Social and Economic History of Early India*. New Delhi: Munshiram Manoharlal.

Sharma, R.S. (1983). *Material Culture and Social Formations in Ancient India*. Delhi: Macmillan Ltd.

Sharma, R.S. (2007). *India's Ancient Past*. New Delhi: Oxford University Press.

Shastri, A. M. (2002). *Early History of the Deccan: Problems and Perspectives*. Sandeep Prakashan.

Singh, Upinder (2013). A History of Ancient and Early Medieval India: From the Stone Age to the 12th Century. New Delhi: Pearson.

Thapar, R. (1983). *Ashoka and the Decline of the Mauryas*. Delhi: Oxford University Press.

Thapar, R. (1998). The Mauryas Revisited. Calcutta: K.P. Bagachi & Co.

Thapar, R. (2002). Early India from the Origins to AD 1300. New Delhi: Penguin.



UNIT 15 EARLY STATE FORMATION IN DECCAN AND TAMILAHAM

Structure

- 15.0 Objectives
- 15.1 Introduction
- 15.2 Sources
- 15.3 State Formation
- 15.4 Antecedents
- 15.5 Geographical Background
- 15.6 Outline History of Satavahana Dynasty
- 15.7 Settlement Pattern
 - 15.7.1 West Coast
 - 15.7.2 Inland Settlements
- 15.8 Administration
- 15.9 Society
- 15.10 South India (Tamilaham): The Region
- 15.11 The Five Eco-zones and Subsistence Patterns
- 15.12 Evolution of Political Society
 - 15.12.1 Different Kinds of Chiefdoms
 - 15.12.2 Plunder and Booty Redistribution
 - 15.12.3 Muvendar and Other Levels of Political Control
- 15.13 Summary
- 15.14 Key Words
- 15.15 Answers to Check Your Progress Exercises
- 15.16 Suggested Readings

15.0 OBJECTIVES

After reading this Unit, you will be able to learn about:

- Satavahana dynasty which founded the earliest state in Deccan;
- nature of administration under the Satavahanas; and
- changes in the society at this time.

You should be able to understand:

- what eco-zones constituted *Tamilaham* (south India) of the early period;
- how various forms of subsistence co-existed and interacted;
- how different kinds of chiefdoms functioned; and
- how they represented different levels of political control.

^{*} This Unit has been adopted from EHI-02, Block 7.

15.1 INTRODUCTION

In the previous Unit you learnt about the expansion of trade in north India in post-Mauryan period. This was associated with an increase in the number of cities and developments in art and architecture. In this Unit we will study changes in the Deccan. The major power that rose in the Deccan around 1st century BCE was the Satavahana dynasty. Here, we will concentrate on the political and social structure of Deccan under the Satavahanas.

After learning about early state formation in Deccan under the Satavahanas you will see that a similar situation is not seen in south India (*Tamilaham*) during this period. We do not see the existence of a state power in the region, but only chiefdoms. State presupposes the existence of a centralized political authority over a territory. Its authority would be based on the control of territorial resources. It would have a regular system of taxation and organized defence. For facilitating both taxation and defence, the state would have a bureaucracy or a team of officials of different ranks and functions. On the other hand, a chiefdom would have no such evolved features. A chiefdom would be a society of hereditary status, ruled by a chief. His authority would be the one based on the control of his people bound by the concerned tribal or clanish ties of kinship. The chief would be the embodiment of the kinship relations of his people. There would be no regular taxation or periodic exaction of any revenue from the people, but only occasional voluntary payments to the chief. In this Unit you will be made familiar with the variety of chiefly powers and their levels of political development in *Tamilaham*.

15.2 SOURCES

The names of Satavahana rulers, also known as the Andhras, occur in the lists of kings found in the *Puranas*. However, there are many difficulties in using these lists as sources of history without critically comparing them with other sources. For example, the names of kings and the duration of their rule vary in different *Puranas*. Moreover, information about kings is interwoven with myths and legends, and one has to carefully distinguish between facts and legendary stories. The *Puranas* are, nevertheless, useful when studied with other sources such as coins and inscriptions. The Satavahanas minted a large number of coins in:

- lead,
- silver, and
- an alloy of copper.



Satavahana 1st Century BCE Coin Inscribed in Brahmi Script. British Museum Collection, London. Credit: PHGCOM. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Satavahana1stCenturyBCECoinInscribedInBr hmi(Sataka)Nisa.jpg).

Their silver coins carry the portrait of king and his name. The inscriptions are found in Buddhist caves cut in the rock and record donations made by Satavahana kings and queens as well as by a large number of ordinary people. By comparing the information available in these different sources, scholars generally accept that the Satavahanas began their rule around 1st century BCE. Their earliest record is found engraved on rock in a cave near Nasik in the present state of Maharashtra.

15.3 STATE FORMATION

We should now pose the question: What is a state and how does the emergence of state bring about changes in society? There are many theories which seek to explain the reasons for the emergence of a state. Reasons for the emergence of a state vary from region to region. In certain cases the development of trade and growth of urban centres could lead to the rise of a state. Other theories suggest that population pressure or conquest could also result in a change in the political structure.

Scholars generally agree that a state is a more efficient method of controlling expanding populations. A state exercises control over a more or less well-defined territory and maintains an administrative machinery to collect taxes and revenue. It pays for a regular army that enforces law and order. But together with all this, the inequality and stratification in society also increases. There is a well-marked distinction between rulers and the ruled. The rulers control the resources of society for their own benefit and use. The ruled, on the other hand, provide revenue and money required to maintain the members of ruling family, the notables in the state, various categories of officials and army. Thus, the basic difference between a tribal society and a state society is in the nature of political control. In a state system, a specialized administrative machinery separates rulers from the ruled. In a tribal society, political power is generally exercised by a clan which has no authority to enforce its decisions. The position of the clan depends on loyalty of the members and most decisions are taken together.

15.4 ANTECEDENTS

In Unit 7 you learnt about the spread of Chalcolithic settlements in western Deccan in the 2nd millennium BCE. Eastern Deccan was occupied a little later in second half of the 1st millennium BCE by iron using communities. These were, by and large, village settlements – the abode of a large number of tribes. Early Sanskrit literature, particularly the epics and *Puranas*, mention several tribes such as Andhras, Sabaras, Pulindas, etc. who lived in the Deccan. Many of these are also mentioned by Ashoka in his inscriptions. But, most of these references are of a general nature and it is difficult to define the region where they lived in the Deccan.

The process of change, perhaps, started with Mauryan expansion in the Deccan. The Mauryas were primarily interested in exploiting mineral resources of the Deccan peninsula. Gold, diamonds and gems from the mines in Karnataka and Andhra were transported to Magadha in the north through a series of land and coastal routes. Market centres developed at important points along these routes such as Dharanikota on the banks of Krishna in the Guntur district of Andhra and Karad in Satara district of Maharashtra. Many chiefs known as *maharathis* became important in several scattered pockets. But, it was under the Satavahanas who were related by marriage to the *maharathis* that the first state emerged in the Deccan.

Early State Formation in Deccan and Tamilaham

15.5 GEOGRAPHICAL BACKGROUND

The Deccan peninsula is divided into plateau region and coastal plains by the hill ranges of Eastern and Western Ghats. Andhra coast is much wider than Konkan coast to the west. The general slope of the plateau is to the east and as a result, major rivers such as the Mahanadi, Godavari and Krishna flow eastwards into Bay of Bengal. Deltas and valleys of the rivers provide fertile areas for settlements. Perhaps, a significant aspect of the geography of Deccan is the fact that the hill ranges of the plateau can be crossed only along the passes.

15.6 OUTLINE HISTORY OF SATAVAHANA DYNASTY

According to the *Puranic* tradition it was Simuka Satavahana who established the Satavahana power. Kanha or Krishna, his brother, is perhaps known to us from an inscription at Nasik. Another record that lists several rulers of the dynasty is the Nanaghat inscription of Queen Nayanika, the widowed queen of Satakarni, who performed Vedic sacrifices. Nanaghat was a major pass connecting Junnar with the coast, and in a cave at the head of the pass portraits of Satavahana rulers were carved. Unfortunately, the sculptures are now completely destroyed and all that remains are labels over their heads giving their names.

We know very little about the rulers that followed Satakarni till we come to the reign of Gautamiputra Satakarni. An inscription of his mother engraved on the entrance to a cave at Nasik provides us details about the extent of his kingdom and events of his reign. One of his major achievements was defeat of the Kshatrapas of western Deccan and Gujarat. His mother's epigraph praises him as the restorer of Satavahana glory and further proof of this comes from numismatic evidence. After his victory, he counterstruck silver coins of the Kshatrapa Nahapana with his own legend and symbols. According to the **Periplus of the Erytheaen Sea**, as a result of the rivalry between Kshatrapas and Satavahanas, Greek ships entering Kalyan, a port near present Bombay, were sent under guard to the port of Bharuch. Perhaps, control of the lucrative foreign trade was one of the causes for the conflict. It would also seem that under Gautamiputra Satakarni, Satavahana rule extended over Andhra as well.

Gautamiputra was succeeded by his son Pulumavi and it was at this time that the Satavahanas consolidated their power in eastern Deccan. For the first time we find Satavahana inscriptions outside western Deccan at Amaravati. Yajnasri Satakarni was the last important Satavahana ruler and after him the kingdom was splintered and divided between his successors — one line of kings ruling in the Andhra region. It was also under the later Satavahanas that coins with bilingual legends were issued and in addition to the name of the king in Prakrit these carried a legend in a south Indian language — opinion being divided on its identification between Tamil and Telugu.

In addition to the Kshatrapas, an early Satavahana ruler had to contend with the power of Kharavela from Odisha (Kalinga). Kharavela rose to power in Kalinga in the middle of the 1st century BCE. He dispatched an army to the west without caring for Satakarni; this suggests that early Satavahana power suffered setbacks both at the hands of the Kshatrapas and of Kharavela. It was revived only through the exploits of Gautamiputra Satakarni.



Approximate Extent of the Satavahana Empire under Gautamiputra Satakarni. Source: *The History and Culture of the Indian People*, Vol. II. Credit: chetanv. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Satvahana.svg).

One of the problems of Satavahana history is that we know very little about different pockets of the Deccan. For example, the inscriptions refer to marriage relations of Satavahanas with Maharathis and Mahabhojas – in fact, in the Nanaghat inscriptions a Maharathi finds precedence over a *Kumara* (prince) and Queen Nayanika herself was the daughter of a Maharathi. Maharathis are also known to have made independent donations – most of their inscriptions having been found around Karle, while the records of Mahabhojas occur along the west coast.

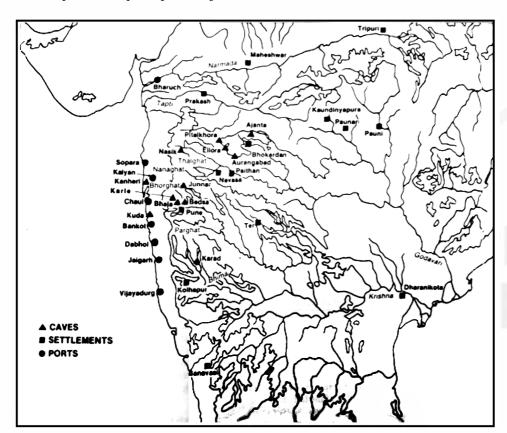


Nanaghat/Naneghat Cave Inscription of Queen Nayanika/Naganika in Sanskrit, c. 2nd Century BCE. Credit: Elroy Serrao. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Complete_view_of_Inscription_in_cave_at_Naneghat.jpg).

15.7 SETTLEMENT PATTERN

On the basis of the find-spots of their earliest inscriptions, it can be said that the Satavahanas began their rule in western Deccan. A 2nd century BCE inscription of Gautamiputra Satakarni's mother from Nasik provides information about the extent of the kingdom under the Satavahanas. The mention of both the Western and the Eastern Ghats as forming parts of Gautamiputra Satakarni's empire suggests that by this time Satavahana rule covered the entire Deccan and that it was divided into *aharas* (districts). We get the names of at least five *aharas* in the inscriptions:

- Govardhana-*ahara* with its centre around Nasik;
- Soparaka-*ahara* on the west coast;
- Mamala-*ahara* comprising the hilly portions of Pune and Satara districts;
- Satavahanihara covering the Bellery district of Karnataka; and
- Kapurachara perhaps in Gujarat.



Satavahana Settlements. Source: EHI-02, Block-7, Unit-27.

15.7.1 West Coast

On the west coast there were a series of ports at Bharuch, Kalyan, Sopara and Chaul and continuing further south all along the Konkan coast. To these ports commodities were brought from the inland centres through passes along the Western Ghats. An important source for understanding the nature of travel and trade is the 1st century CE text **Periplus of the Erytheaen Sea** written by an anonymous Greek sailor. It provides a graphic account of the dangerous passage through the narrow mouth of the Gulf of Cambay to Bharuch. As a result, incoming ships were piloted into the port by royal fishermen of the district. We have earlier referred to the conflict between Satavahanas

and the Kshatrapas over control of maritime trade and competition between the ports of Bharuch and Kalyan.

15.7.2 Inland Settlements

Across Western Ghats on the inland side, the major concentrations of settlements were around:

- Nasik,
- Junnar within a 30 km. radius of Karle, and
- further south in the upper Krishna basin around Kolhapur.

It should be emphasized that all these areas are agriculturally rich and fertile and provided a valuable resource base for the ports on the west coast. These ports handled much of the trade in 1st century CE between India and the Mediterranean region and were also linked by the overland trans-peninsular route across the Deccan to centres in Andhra and along the east coast. It went from Bharuch to Paithan and Ter and further east to centres in Andhra. The ancient site of Paithan spreads over 4 sq. km. along the Godavari and from time to time a rich yield of antiquities like coins, moulds, terracottas and pottery have been carried out in the area so far and hence, we know very little about structural remains of the Satavahana period.

Ter lies in the major cotton producing region of Deccan. Excavations at the site have yielded evidence of wooden fortifications and a number of vats, perhaps for dyeing cloth. It is also well known for the find of an ivory figurine very similar to the specimen found at Pompeii, but, perhaps, the most important ruin at the site is that of a brick *chaitya* subsequently converted into a Brahmanical temple.

Another route in the Deccan linked Ujjain to Maheshwar on the Narmada and past the caves at Ajanta and Pitalkhora to Bhokardan and Paithan. Bhokardan was a major bead-making centre and was also known for shell and ivory-working. Inhabitants of Bhokardan or Bhogavardhana are known to have made donations at the Buddhist caves of Bharhut and Sanchi in central India.

Further south in the upper Krishna valley, Karad is an early centre referred to in Buddhist inscriptions. Also located in the same region is Kolhapur. In western part of the town a rich hoard of bronze objects was found. Some of these like the statuette of Poseidon were, clearly, imports, while others like carts and bronze vessels were of local manufacture. An extensive site in the adjacent district of Belgaum is the site of Vadgaon Madhavpur, a suburb of Belgaum town where excavations have yielded large numbers of coins and other antiquities. Further south is the site of Banavasi known as the find-spot of one of the Satavahana inscriptions. It was, perhaps, a fortified settlement as there are indications of a fortification wall and a moat.

The trans-peninsula route across the Deccan linked these sites in western Deccan to centres like Amravati in lower Krishna valley and went past the Karimnagar region of Andhra. The Karimnagar region has an extensive distribution of early historical sites, an important centre being that of Kondapur about 70 km. north-west of Hyderabad. Excavations at the site have yielded a rich collection of coins and terracottas and several structures of brick of various sizes laid in mud mortar. Peddabankur is a small village now but was an important settlement during the Satavahana period extending over a 30 hectare area. About 10 km. from Peddabankur was the fortified site of Shulikatta. It was surrounded by a mud-rampart and excavations have unearthed a large brick structure at the site. Another major habitation site was at Kotalingala which was settled

Early State Formation in Deccan and Tamilaham

in the pre-Satavahana period as indicated by recent coin finds. The Satavahana settlement had a mud fortification and extensive brick structures. Large quantities of iron slag and ore were found at the site. Leading from the Karimnagar region, the route branched off into the lower Krishna valley which has a large concentration of early historical sites. Prominent among these are Amaravati and Dharanikota on both banks of the river Krishna, and Dharanikota was connected to the river through a navigation channel. Earliest structural activity at the site was marked by the construction of a wooden wharf which was later converted into a brick structure. But, with the gradual silting up of the navigation channel the site was abandoned in the 4th century CE. In addition to the trans-peninsular route, another alternative was to go to the region of Vidarbha into central India – the important settlements in Vidarbha being those of Panuar, Pauni, Mandhal, Bhatkuli and Adam.

One point that needs to be stressed here is that it is only during the Satavahana period that fortified settlements develop in Deccan, and excavations indicate a marked improvement in the quality of construction. Brick was increasingly used both for fortification as well as for other structures. The floors were well made by means of rammed clay and the roof supported by wooden posts and covered with tiles.

Railway lines at present follow the same routes that were used in the ancient period. The Bhorghat is still the only pass across the Western Ghats connecting Pune to Bombay past a series of early Buddhist caves such as:

- Shelarwadi,
- Bedsa,
- Bhaja,
- Karle,
- Ambivale, and
- Kondane.

15.8 ADMINISTRATION

Administration under the Satavahanas was much simpler that under the Mauryas. Inscriptions refer to ministers who were in charge of various functions. Among other things, they served as treasury officers and maintained land records. The exact number of ministers is not known. These ministers were appointed directly by the king and the post of a minister does not seem to have been hereditary, i.e. passed from father to son. They were, perhaps, paid in money from the revenue collected by the state. We do not have exact figures for the amount of revenue collected, but we do know that the state collected taxes both from agriculture and trade. One of the practices started by Satavahana rulers in 1st century BCE was that of donating revenue of a village to either a *Brahmana* or the Buddhist *sangha*. This practice became much more widespread under Gupta rulers.

The importance of land revenue for the king can be judged from the elaborate procedure that was used to record donations of land. These donations were first proclaimed in an assembly (*nigama-sabha*). It was then written down either on a copper-plate or cloth by an officer or minister. This record was then delivered to the donee to whom the grant had been made. There was a keeper of records who maintained a detailed account of these donations.

The rulers at this time were eager to bring more land under cultivation so that they could earn extra revenue. It seems that anyone who cleared the forest and tilled a plot could claim ownership of land. Revenue from trade was another major source of income. We will discuss the expansion of trade in the subsequent Unit. Here, we should point out that much of the trade was handled by guilds who also acted as bankers. The state took elaborate measures to encourage trade. Highways were made secure and rest-houses were constructed along them.

15.9 SOCIETY

The social structure of Deccan under the Satavahanas shows many features which are different from those prescribed in the Sanskrit texts such as the *Manusmriti*. For example, many inscriptions of the Satavahana rulers mention the names of their mothers rather than those of their fathers, such as Gautamiputra Satakarni (Satakarni, son of Gautami). This is not in keeping with the *Dharmashastras* which state that in the approved forms of marriage the bride acquires the *gotra* of her husband and loses that of the father.

Another interesting feature of the inscriptions is that the Satavahanas refer to themselves as unique *Brahmanas* who crushed the pride of *Kshatriyas*. According to the Brahmanical texts it was only the *Kshatriyas* who had the right to rule. The inscriptions are also useful as they record donations by a cross-section of the population and from this we can judge the prosperity of certain sections of society. Traders and merchants figure prominently as donors, but also important are blacksmiths, gardeners and fishermen. No doubt, these artisans and craftsmen benefitted from the increased long-distance trade. What is noteworthy is that they mention their occupations with names and not their castes. In an earlier Unit we had mentioned that Buddhist texts prescribe a somewhat different division of society as compared to the Brahmanical texts. Here, the distinction was based on work and craft and in most cases people were known by their occupations rather than their castes.

Another category of donors that is known at this time was that of *Yavanas* (foreigners). The term *yavana* originally denoted an Ionian Greek, but around the Common era it was used indiscriminately for any foreigner. Many of the *Yavanas* adopted Prakrit names and made donations to Buddhist monasteries. Women frequently made gifts either on their own or sometimes with their husbands or sons. One of the Satavahana queens named Nayanika also performed Vedic sacrifices and made large donations to *Brahmana* and Buddhist monks.

These examples indicate that society in the Deccan, as it is known from the records of this period, was not governed by rules laid down by the Brahmanical texts. Thus, any reconstruction of ancient social structure should carefully analyze textual references and establish their veracity by comparing these with other sources such as inscriptional or archaeological.

The role of Buddhist monasteries mentioned in the records of the period had also changed a great deal since the time of the Buddha. In the beginning Buddhist monks were allowed very few personal possessions. These were limited to few robes and a begging bowl. Gradually, the influence and membership of the Buddhist *sangha* increased. We have seen that Satavahana kings donated large sums of money and land to Buddhist monasteries. This added to the wealth of the *sangha*. It is also at this time that we get references to donations made by Buddhist monks and nuns themselves.

Check Your Progress Exercise 1

1)	Discuss some features of the society under Satavahanas.
2)	Write a short note on inland trade routes of the Satavahana period.
2)	Write a short note on inland trade routes of the Satavahana period.
2)	Write a short note on inland trade routes of the Satavahana period.
2)	Write a short note on inland trade routes of the Satavahana period.
2)	

15.10 SOUTH INDIA (TAMILAHAM): THE REGION

The land in between the hills of Venkatam and Kanyakumari is called *Tamilaham*. It includes the whole of modem Tamil Nadu and Kerala. With forested hills, undulated terrains, pastures, arid zones, wet-lands and long sea coast, the region represented a combination of diverse eco-zones. The three principal chiefdoms – Cheras, Cholas and Pandyas – had their strongholds both in the interior as well as on the sea coast. The Cheras had Karur in the interior and Muciris, the well known ancient port on the west coast. The Cholas had Uraijur in the interior and Puhar on the Coromandel coast as their strongholds. Similarly, the Pandyas had Madurai and Korkar as their interior headquarters and port respectively. These were the most important political centres of the period in the region.



Ancient *Tamilaham* Ports. Source: http://www2.demis.nl/mapserver/mapper.asp. Credit: Lotlil. Photo Courtesy: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ancient_tamilakam_ports.png).

15.11 THE FIVE ECO-ZONES AND SUBSISTENCE PATTERNS

Ecological differences of the region are reflected in ancient Tamil poetry. This is in the form of the concept of *aintinai* (five eco-zones). In ancient Tamil poetry *Tamilaham* is portrayed as a combination of five *tinais*, viz.:

- *kurinji* (hilly backwoods),
- palai (arid zone),
- *mullai* (pastoral tracts),
- *marutam* (wet-land), and
- *neytal* (sea coast).

There could be areas in which one *tinai* or the other dominated. But, generally most of the *tinais* were fragmented and mixed up all over the region. The mode of human adaptation varied from tinai to tinai depending on its ecological conditions. Social groups also varied. The people of kurinji took to hunting and gathering. Palai being dry land, the inhabitants over there could not produce anything. They took cattle lifting and plundering. The people of *mullai* practised animal husbandry and shifting cultivation. In marutam, the people could pursue plough agriculture and in the neytal, fishing and salt making. Thus, Tamilaham had different forms of subsistence as determined by ecological conditions of the five tinais. People from each tinai went out interacting with the peoples of other *tinais* and entered into barter of goods. For example, people from the hilly backwoods came down to other zones for exchanging their resources like honey, meat, fruits and other wild goods. The people of pastoral tracts exchanged their dairy products and the coasted people fish and salt. Agrarian zones attracted all of them. The small, self-sustaining *tinais* grew up into larger eco-zones through such interaction and interdependence. There were larger zones of productivity as well as non-productivity. The zones of better productivity had a relatively developed social division of labour. In the zones of lesser productivity the society was essentially simple and consisted of clans. By and large, the peoples of *Tamilaham* represented a complex society of unevenly developed components which shared a common culture. Political level of the society varied from simple chiefdom of clans to complex chiefdom of ruling houses. A full fledged state power was yet to take shape.

15.12 EVOLUTION OF POLITICAL SOCIETY

The earliest recognizable phase of the evolution of political society can be seen in the chiefdoms of clans. There were several chiefdoms of clans, some big and others very small. The chiefs of clan-chiefdoms were addressed to in the poems as the great son (*perumakan*) or chiefly, son (*ko-makan*) indicating the relation between chiefs and their clan members. What is really indicated is the basis of kinship. Some such chiefdoms must have grown beyond kinship through conquests and subjugation of other clans. The relatively larger chiefdoms of complex nature were born out of conquests and subjugation. Marriage alliances of chiefs also were responsible for the formation of larger chiefdoms, but the real basis of the enlargement of chiefdoms was their wealth. Chiefdoms with large agricultural areas constituted the most powerful ones. There were three such most powerful chiefdoms in contemporary *Tamilaham*, viz.; Cheras, Cholas and Pandyas which represented the phase of evolution of a political society anticipating the emergence of a real state.

15.12.1 Different kinds of Chiefdoms

There were three different kinds of chiefdoms in *Tamilaham*:

- *kizar* (little chiefs),
- velir (bigger chiefs), and
- *vedar* (biggest chiefs) categories of chiefs.

The *kizar* were headmen of small villages (*Ur*), generally bound by kinship. Many *kizars* are mentioned in the poems. They are referred to by being prefixed with the name of their respective villages. Arnkantur-*kizar* or Urntur-*kizar* may be cited as examples. Some of them were subjugated by bigger chiefs and had to serve them in their campaigns. The poems refer to *kizar* doing *vidutozil* (obligatory services) to bigger chiefs like Cheras, Cholas and Pandyas in their campaigns. The bigger chiefs, in their turn, rewarded the *kizars* through gifts which included grant of predatory control over the subjugated villages. Such *kizars*, sometimes, received control over certain other villages also as reward for serving bigger chiefs. The *velirs* were mostly hill chieftains, though there were *velirs* controlling low-lands too. The hill chiefs were:

- hunter chiefs,
- vetar-koman or
- kuravar-koman or
- nedu vettuvan.

Vetar, kuravar and vettuvar were major clansmen of the hills dominated by the velir. Venkatamalai (the hills of Venkatam), Nanjilmalai (the high ranges south of Travancore), Parampuralai (probably modem Parampikkulam reserve forest near Pollachchi), Potyilmalai (high ranges in the modem Madurai district) are some of the important centres of the hill chiefs of this period. The Cheras, Cholas and Pandyas were the three principal ruling houses of the biggest category of chiefs. They were known as Muvendar – the three *cendars*. These chiefly houses had control over peoples of larger areas. Cheras controlled the peoples of the *Kurinji* dominated areas of the Western Ghats towards sea. Cholas had control over the peoples in the Kaveri area and the Pandyas, in the south-central area toward seas. They had several lesser chiefs under their service and paying tributes (*tiarai*). There was no notion of a precisely demarcated territory. The political authority functioned through control over peoples rather than privileges over basic resources. For example, the control over the peoples like *kuravar* or *vetar* or vettuvar by their chiefs made them chiefs. The hills as well as plains were collectively owned by such peoples. The right of their chiefs emanated from their kinship with people. The resources were inherited not by individuals but by groups whose members were bound by ties of common ancestry. These were descent groups and they made voluntary payments to their chiefs. Regular and periodic payment of taxes was not in vogue. However, productivity of the chiefdom determined the strength of the chiefs. Compared to the chiefs of agricultural areas, the pastoral and hunter chiefs were less powerful. Powerful chiefs tried to subjugate lesser ones and extracted tributes from them. Plunder raid was the characteristic feature of contemporary political practice.

15.12.2 Plunder and Booty Redistribution

All chiefs, big and small, had to resort to plunder raids for satisfying the needs of their people. The chiefs redistributed the booty among their warriors, bards and mendicants besides their own kinsmen. The institution of gift-giving (*kodai*) was integral to the

practice of booty redistribution. Gift-giving was considered to be the most important responsibility of any chief. Most of the poems in *Puranaruru* (one of the anthologies under Ettuttokai) praise the generosity of the chieftains. Generosity and bravery are the two major virtues of chieftains according to such poems. The insufficiency of local resources made chiefly plunders an economic imperative. A poem in *Puranaruru*, praising a chief namely Urtur-kizar, shows how meagre his resources were. When a dependent approached him for gifts, he called his blacksmith to get him a new lance, so that he could go for a raid and acquire booty to give gifts. Plunder raids and booty redistribution, thus, became the characteristic feature of contemporary polity. Chiefs of all kinds indulged in plundering against one another. Lesser chiefs joined hands with big ones in plunder campaigns and obtained their shares of booty. Cattle and grain constituted the routine items of booty. Bards of the period sing about the gifts of:

- elephants,
- horses,
- golden lotuses,
- chariots,
- gems, and
- muslin.

Sometimes, the raids of bigger chiefs involved subjugation of villages beyond their control. In such cases the lesser chiefs assisting the bigger ones got the subjugated villages. It was not land of the village that was granted but control over the people there.

15.12.3 Muvendar and Other Levels of Political Control

The antiquity of *Muvendars* as principal ruling groups goes back to the Mauryan period. Ashokan edicts mention them. The bards praise the *Muvendars* as 'crowned kings' and mention that the whole of *Tamilakam* belonged to them. The title of crowned kings need not necessarily indicate the establishment of state power. A state presupposes the existence of:

- standing militia,
- regular taxation,
- bureaucracy, and
- local administrative bodies.

These had not evolved as yet. Nonetheless, the authority of the *Muvendar* was significantly different from that of the other categories of chiefs. Their subjugation of lesser chiefs was an ongoing process. The main concern of all the three ruling groups — Cheras, Cholas and Pandyas — was subordination of *velir* chiefs who were next in importance. The *velir* also had great antiquity. Along with Cheras, Cholas and Pandyas, Satyaputras or the Adigaiman chiefs are also mentioned in Ashokan edicts. Satyaputras were of the status of *velir* chiefs. They held sway over the communities in the high ranges of upper Kaveri area. The other prominent *velir* chiefdoms lay on the highlands and sea coast along the fringes of the areas of *Muvendar*. The modern districts of Dharmapuri, Nilgiris, Madurai North Arcot, Tiruchirapalli, Padukkottai are the chief places of the hills and plains occupied by *velir* chiefs. There were about 15 important *velir* chiefdoms in all as scattered in *Tamilaham*. Some of them had control over communities in strategic centres like:

- points of exchange,
- ports,
- junctions of highways, and
- hill stations.

Certain places and resources determined the nature of their power. With the coming of the period of Indo-Roman trade and control over strategic centres and trade goods added to the importance of the chiefs. Pari of Parambumalai (near Pollachchi), Ariyar of Podiyilmalai (Madurai), Andiran of Nanjilmalai (south of Travancore), Irunko-vel of Kodunbai (Pudukkottai) were some of the prominent *velir* chiefs mentioned in the poems. *Velir* chiefs controlling such strategic centres had to face severe challenges from superior chiefs like *Muvendar*; sometimes such competitions led to annihilation of the weak. Destruction of the domain of Pari, the *velir* chief of Parambunadu, by *Muvendar* is a well known example. Apart from direct combats, the bigger chiefs tried to gain access to the *velir* domains through marriage relations also. There were several instances of the Cheras, Cholas and Pandyas taking their brides from *velir* families. In the case of the village chiefs of strategic areas the bigger chiefs adopted the method of military control. They were subjugated and made subservient to bigger chiefs. *Muvendars* had several such subjugated chiefs as their subordinates serving them in plunder raids.

It is obvious that *Muvendar* was most powerful political authority in contemporary *Tamilakam*. Next to them was the political authority of *velir*. The village chiefs of Kizar constituted the primary level of political authority. Although this gives the impression of a political hierarchy, there was no determinate chain of political control uniting these three levels of political authority. Integration of lesser chiefs was in progress under the subjugative and marital policies of *Muvendar*. But, a unified political system was still in the making. The traditional authority over resident communities based on kinship remained fundamental to contemporary political control. Traditional assembly of elders transacted day-to-day affairs in every settlement. The assembly site was called *manram*, a raised seating around the foot of a tree. It was also called *podiyil*. The chief was assisted by a council of elders called *avai* (*sabha*), the structure, composition and functions of which are not known. Two other bodies often discussed as part of early Tamil polity are:

- aimperumkuzu (the five great groups) and
- *enperayam* (the eight great groups).

These were relatively later bodies which, probably, developed after 3rd century CE. The structure and functions of these bodies, also, are not known.

Check Your Progress Exercise 2

1) Read the following statements and mark right (\checkmark) or wrong	wrong (×	or	(\checkmark)	k right (marl	s and	statements	owing	foll	l the	Read	1)
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i)	The political authority of the period was based on the control of pe	ople	2
	rather than resources.	()

iii)	The Muvendars	were full-fledged state systems.	()
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History of India from the Earliest Fimes Upto <i>C</i> . 300 C.E.	2)	How did different categories of chiefdoms co-exist and interact?
	15	.13 SUMMARY
	Sat BC stat and resi	avahana period was important in the history of Deccan because it was in 1st century E that the earliest state came into being in peninsular India. Administration of the e was simpler than that of the Mauryas. A crucial factor was the expansion of overland maritime trade networks. This provided additional revenues to the rulers and also alted in the prosperity of a large number of towns and cities throughout Deccan in period.

In this Unit you have also learnt about various eco-zones, their subsistence pattern and various details of the chiefdom level political formation. You learnt how the system of plunder raids and booty redistribution functioned as crucial factor in the political practice of the time. Another important point you learnt is the basis of clan ties and kinship in the political authority. You could also learn about the gradual process of institution formation during the period after the 3rd century CE.

15.14 KEY WORDS

cl	small area with its own ecological naracteristics such as climate, soil conditions, rganizms etc.
	region with its special ecological factors, social roups and subsistence pattern.
	society of hereditary status controlled by a chief ho collected voluntary tributes from his people.
	he three principal ruling groups, namely the heras, Cholas and Pandyas.
Velirs : C	hiefly groups next to the principal ones.
	mallest category of chiefs who had, virtually, he control over their descent groups.
Manram or Podiyil : A	

15.15 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) See Section 15.9
- 2) See Section 15.7.2

Check Your Progress Exercise 2

- 1) $i) \times ii) \checkmark iii) \times iv) \checkmark$
- 2) See Sub-section 15.12.3

15.16 SUGGESTED READINGS

Champakalakshmi, R. (1996). *Trade, Ideology and Urbanization: South India* 300 *BC to AD* 300. Delhi.

Gurukkal, Rajan and Raghava Varier, M. R. (Eds.) (2000). *Cultural History of Kerala*. Vol. I Tiruvananthapuram.

Kailasapathy, K. (1972). Tamil Heroic Poetry. Oxford.

Mahalingam, T. V. (1970). *Report on the Excavations in the Lower Kaveri Valley*. Madras.

Subrahmanian, N. (1980). Sangam Polity: The Administration and Social Life of the Sangam Tamils. Repr., Bombay.



UNIT 16 AGRARIAN SETTELEMENTS, AGRARIAN SOCIETY, EXPANSION OF TRADE AND URBAN CENTRES -**PENINSULAR INDIA***

Structi	ure
16.0	Objectives
16.1	Introduction
16.2	Forms of Subsistence
16.3	Spread of Agrarian Settlements 16.3.1 <i>Tamilaham</i> 16.3.2 Deccan
16.4	Ownership Rights
16.5	Revenue and Surplus Extraction 16.5.1 Revenue from Agriculture 16.5.2 Modes of Acquiring and Distributing Resources in <i>Tamilaham</i> 16.5.3 Excesses in Extraction
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16.7	New Elements and Social Change
16.8	Types of Trade
	16.8.1 Local Trade16.8.2 Long-Distance Overland Trade16.8.3 Long-Distance Overseas Trade
16.9	Aspects of Commercial Organization
16.10	Exchange Facilities
16.11	Coins as a Medium of Exchange 16.11.1 Local Coins of Different Varieties 16.11.2 Roman Coins
16.12	Revenue from Trade
16.13	Weights and Measures
16.14	Urban Centres
16.15	The Impact of Trade and Urban Centres on Society
16.16	Summary
16.17	Key Words
16.18	Answers to Check Your Progress Exercises
16 10	Suggested Readings

^{*} This Unit has been adopted from EHI-02, Block 7.

16.0 OBJECTIVES

The aim of this Unit is to discuss the spread of agrarian settlements in the Deccan and south India from c. 200 BCE to 300 CE. We will also discuss briefly the different dimensions of the expansion of trade and urban centres in south India during the aforementioned period. This Unit will focus on the kingdom of Satavahanas and regions far south under the Cheras, Cholas and Pandyas as well as local chieftains who were less important. After reading this Unit, you will be able to know about:

- different forms of subsistence which were prevalent in different parts of south India;
- nature of the spread of agrarian settlements;
- nature of the ownership of land;
- revenue income from agriculture and redistribution of resources in agrarian settlements;
- organization of agrarian society;
- introduction of new elements and beginnings of change;
- nature of exchange which determined the character of trade at various levels in early peninsular India;
- transport and communication facilities;
- coins as medium of exchange in trade;
- interest of political authorities in trade;
- urban centres in south India; and
- impact of trade and urbanization on the society of early peninsular India.

16.1 INTRODUCTION

The earliest evidence of cultivation in peninsular India is traced back to the later phase of new stone-age which is dated in the first half of 2nd millennium BCE. The new Stone-Age people cultivated millets like *ragi* and *bajra* and also pulses like green gram and horse gram. Making terraces on the slopes of hills was an important feature of the settlement of new stone-age and cultivation was limited to the terrace fields. Rice was found in peninsular India roughly around the beginning of 1st millennium BCE which is the starting point of iron age in the south. Spread of rice cultivation took place in Deccan and south India during the iron age.

The earliest of the iron-age settlements are seen in upland areas. Introduction of iron did not bring any sudden change in the techniques of cultivation. Technological advancement came later with the introduction of iron-ploughshare. This coincided with a concentration of settlements in the river valleys. Harnessing of bullocks to the plough and extensive use of iron-ploughshare resulted in the expansion of area under cultivation and an unprecedented increase in agricultural production. There was a corresponding increase in population too. A remarkable change occurred later in the agrarian sector with the beginning of the practice of donating village land to religious beneficiaries such as Buddhist monasteries and the *Brahmanas*. They had better knowledge of seasons and the ability to predict weather. Grants of land to monks and *Brahmanas* resulted in

Agrarian Settlements, Agrarian Society, Expansion of Trade and Urban Centres – Peninsular India

coming in of non-cultivating groups in the agrarian sector. Thus, we identify three phases in the spread of agrarian settlements in early south India:

- 1) The first phase of primitive agriculture with a low-level technology in which cultivation was confined to hill slopes.
- 2) A second phase, characterized by plough agriculture with considerable advancement in technology and spread of cultivation to river valleys.
- 3) A third phase which witnessed introduction of non-cultivating groups into the agrarian sector that were endowed with better knowledge of seasons, managerial capacity and aids for method of cultivation.

16.2 FORMS OF SUBSISTENCE

The forms of subsistence were determined by several factors such as:

- geographical location,
- nature of terrain.
- material culture, and
- level of technology of the given region.

Primitive techniques lingered on for long in some pockets while some other areas advanced in material production and social development. Diverse forms of subsistence are more visible in the region of *Tamilaham*. You will read in the subsequent Unit that the early Tamil *Sangam* poems speak of five eco-zones in terms of *tinai* and the subsistence pattern of each eco-zone was quite distinct. There were:

- *Kurinji* the hills and forests,
- *Mullai* the pasture land with low hills and thin forests,
- *Marutam* the fertile agricultural plains
- Neytal the sea-coasts, and
- Palai the arid zone.

Mullai or *Kurinji* tracts could become an arid zone in scorching summer. *Kurinji* tracts had forest tribes who were variously known as *Kuravar*, *Vetar* etc. Their main occupations were hunting and collecting forest produce like bamboo, rice, honey and roots. They practiced "slash and burn" cultivation on hill slopes and produced millets and pulses. They used various tools such as:

- spades,
- sickles, and
- iron-tipped hoes.

Such hill tracts were places where pepper and other spices were grown in plenty. There are literary references to the cultivation of pepper and facilities for watering the gardens. Pastures of the *Mullai* were occupied by cowherds who were known as *Itaiyars/Idaiyars*. Their source of livelihood was cattle rearing. They exchanged dairy products. They, too, practised shifted cultivation and produced:

millets,

- pulses, and
- lentils.

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The *Marutam* or agrarian areas were mostly in fertile river-valleys which were suitable for wet land cultivation of paddy and sugarcane. People, who were called *Uzhavars*, meaning ploughmen, engaged themselves in plough agriculture and produced considerable surplus of paddy. People of other *tinais* depended on the *Marutam* tracts for rice, their staple food. The *Neytal* people, who were known as *Paratavas*, were engaged in fishing and salt producing. They exchanged fish and salt for earning their livelihood. The *Palai* zone was a seasonal phenomenon of summers during which cultivation was not possible due to scarcity of water. Therefore, there were some people in the region who took to wayside robbery and cattle lifting. Salt merchants and dealers in other articles often passed through *Palai* regions in caravans that were often plundered by people who belonged to the *Maravar* groups.

From the above discussion, following forms of livelihood can be listed:

- hunting and gathering forest produce,
- cattle rearing,
- plough agriculture,
- fishing and salt making,
- wayside robbery.

Chart I: Physiographic Divisions, Inhabitants and Occupations

Region	Geographical Feature	Inhabitants	Occupations
Kurinji	Hill and forests	Hunters and gatherers (Kuravar, Vetar)	Hunting, food gathering, slash and burn cultivation
Mullai	Pasture land with low hills and thin forests	Shepherds (Ayar and Itaiyar)	Cattle rearing, shifting cultivation
Marutam	River valleys and plains	Cultivators (<i>Uzhavar</i> and <i>Vellaler</i>)	Plough agriculture
Neytal	Sea-coasts	Fishermen (Paratavar)	Fishing, pearl diving, salt making
Palai	Arid zone (transformation of the hill tracts of pasture land in summers)	Robbers (Eyinar, Maravar)	Wayside robbery and hunting

16.3 SPREAD OF AGRARIAN SETTLEMENTS

An increase in population is a notable change from new stone-age to iron-age in the Deccan and south India. This increase is reflected in the number of the iron-age sites. As a result of this change there was a spread of settlements from upland areas to fertile river-valleys and a transformation from partly cattle rearing and partly shifting cultivation to settled agricultural economy. The main features of this way of life were:

- a concentration of settlements in the river valleys,
- a certain level of craft specialization,
- extensive use of iron tools and implements,
- new technology of the iron ploughshare,
- management of minor irrigational facilities, and
- a change from the dry land crops to a more surplus yielding wet land crop of paddy.

Archaeological sites which suggest these changes are scattered all over south India. They are generally known as Megalithic sites. You have already studied about the Megaliths in one of the previous Units. Before discussing agrarian settlements we would mention in brief about the Megaliths.

Megalith literally means big stone. The Megaliths are associated not with actual settlements of the people but with the burial sites in the form of stone circles around the graves. Some habitational sites such as Tirukkampuliyar, Alagarai etc. also have been brought to light but they are very rare. Beginnings of the Megaliths are traced to about 1000 BCE but in many cases they are dated in the 5th to the 1st century BCE. In some places they continued even later. The grave goods consisted of a variety of articles like:

- human bones.
- various types of pottery including the characteristic Black and Red ware,
- inscribed pot sherds,
- tools and weapons of iron,
- beads and ornaments,
- cult objects and several other things.

It is from these Megalithic remains that we know about the material culture of the agrarian settlements of iron-age in south India. Further, they corroborate some evidence supplied by the contemporary Tamil poems.

16.3.1 Tamilaham

Agriculture in *Tamilaham* was carried on with the help of iron-ploughshare. Spades, hoes and sickles also were used for different agricultural purposes. Blacksmiths knew the metallurgy of iron, and some sites have yielded furnaces used for iron smelting. Iron slags also have been obtained from such sites. Iron tipped plough is necessary for deep ploughing. For rice and sugarcane land needed deep ploughing. The use of ploughs is attested by literature and inscriptions. A dealer in ploughshare figures as a donor in a cave inscription in *Tamilaham*. Bullocks and buffaloes were harnessed to the plough, and the employment of draught animals combined with the use of the plough made agricultural operations efficient.

Irrigation facilities were organized at times by local cultivators and at times by kings and chieftains. River water was channelized to the fields. Remains of an ancient reservoir were discovered near Kaveripattinam in *Tamilaham*. Irrigation was important because rainfall was not sufficient in the region. Paddy and sugarcane were two important crops in the fertile *Marutam* fields. Pulses also were grown. It is known from literature of the

period that people had some knowledge of seasons which was necessary for successful cultivation.

Uzhavar and *Vellalar* were cultivators of land. *Uzhavar* literally means ploughman and *Vellalar* means master of soil. One of the sources of the labour for agriculture was the groups of ploughmen. *Atiyor* and *Vinaivalar* are also mentioned as working in the fields. *Atiyor* probably means slave and *Vinaivalar* means worker earning wages. Details about wage rates and other conditions of labour are not known. In several contexts the members of big families are found engaged in agricultural production. Production based on family labour alone did not yield large amount of surplus. However, in spite of this limitation the agrarian settlements could sustain different groups of functionaries like:

- blacksmiths,
- carpenters,
- bards,
- dancers,
- magicians,
- priests,
- monks etc.

16.3.2 Deccan

There was an overall increase in the number of settlements in Deccan in the river basins, on coasts and on the plateau during the Satavahana period (*c*. 1st century BCE to 3rd century CE). The Godavari valley had largest number of settlements. Material culture of the Satavahana settlements showed some improvements from that of the Megalithic settlements of Deccan. The tools and implements included:

- ploughshares,
- sickles,
- spades,
- axes, and
- arrow-heads.

Hoe continued in the developed phase but it was properly socketed. Iron ore was available in the areas of Karimnagar and Warangal. Iron working in these areas is indicated as early as the Megalithic period. Gold working also is attested to in Deccan in the Satavahana period. These developments show that metallurgy had progressed in these areas.

Irrigation facilities were known in the form of tanks and wells. Water wheel was used for lifting water. Digging tanks and wells was considered to be a meritorious act. Some rulers are praised in the inscriptions as the makers of tanks. Rich people also constructed tanks and wells.

The people of Deccan had knowledge of paddy transplantation. The river basins of Godavari and Krishna became extensive rice producing regions in first two centuries of the Common era. Cotton was grown in black soil areas and the cotton products of

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Andhra became famous even in foreign countries. Cultivation of coconut trees went a long way in the development of coastal areas. Plantations of mango tree and some other trees of timber are also heard of in different parts of the Deccan.

Source of labour in the Deccan included waged labourers and slaves. **The Periplus of the Erythrean Sea** states that slaves were brought from Arabia. This clearly shows that there was a sharp distinction and stratification in society. Distinction between 'high' and 'low' was prevalent in *Tamilaham*. The 'high' group consisted of rulers and chieftains and the *Vellalar* and *Velir* sections who were masters of the land. The 'low' section consisted of ordinary peasants, bards and dancers, workers etc. The distinction was more crystallized in the Deccan where a fusion of indigenous developments and the northern ideals and ideology took place at an earlier stage.

16.4 OWNERSHIP RIGHTS

Social distinction on the basis of wealth and property takes us to the problem of ownership rights. In the far south we have seen that there were some *Vellalar* groups who were masters of the soil. This seems to suggest possession of land rather than work on other's land for wages. Occasionally, the chieftains granted *Ur* settlements to their fighters and bards. In effect, the person who was given land received the right to collect income from *Ur* settlements which were granted to him. Generally, the field was owned collectively and the produce was also enjoyed collectively after paying dues to the chiefs. The nature of land rights is clearer in the Deccan. There were *Gahapati* householders who were both landowners and merchants. According to an inscription Ushavadatta, the son-in-law of Kshatrapa ruler Nahapana of western Deccan, purchased a plot of land from a Brahmin and donated it to a Buddhist *sangha*. This was possible because of the fact that land could be owned privately. From this deal the private owner received 40,000 *kahapana* coins. Satavahana kings donated plots of land and even villages to religious beneficiaries. Lay devotees followed this practice only later. From inscriptions of the period we know that private individuals owned plots of land.

Check Your Progress Exercise 1

1)

	Ma	rk the right (\checkmark) or wrong (\times) statements:		
	a)	Diverse forms of subsistence are more visible in the region of Tamila	han	ı.
			()
	b)	The five <i>Tinais</i> were the Deccan, Andhra, Karnataka, Tamil Nadu and K	Cera	la.
			()
	c)	The <i>Palai</i> zone is a seasonal phenomenon.	()
d) The third phase of agriculture in south India is characterized by the introd				on
		of non-cultivating groups into agrarian sector.	()
	e)	Megalithic monuments are the remains of new stone-age.	()
	f)	Millet crops could not be cultivated with hoes.	()
	g)	Irrigational facilities were not known in the river valleys of Tamilahan	n.()
	h)	The chieftains donated villages to the temples.	()
	i)	Private individuals in the Deccan were not entitled to own land.	()

2)	Write five lines about the eco-zones of ancient <i>Tamilaham</i> .	Agrarian Settlements, Agrarian Society, Expansion of Trade and Urban Centres – Peninsular India
3)	Write a note on the form of subsistence in the <i>Mullai</i> (pasture lands).	
4)	List six features of agrarian villages in ancient south India.	
5)	Write five lines about the tools and implements and irrigational facilities in agrarian settlements in the Deccan.	
6)	Write five lines about the ownership of land in the Deccan.	

through an organized mechanism. In this section we will discuss land revenue and its collection.

16.5.1 Revenue from Agriculture

Tamil literature mentions *Irai* and *Tirai* as the two types of contribution received by the chieftains. The *Irai* appears to have been a more regular contribution and the *Tirai*, tribute. Unfortunately, we do not have much information from contemporary records about the rate and mode of collection of revenue. The rulers are often advised to be gentle and moderate in the collection of revenue. This seems to suggest that coercion and excesses were practiced by the authorities in collecting shares from the cultivators.

The revenue system was, probably, more regular in Deccan under the Satavahanas but again, there also the details are not very clear. We hear about some names of taxes like:

- Kara,
- Deya,
- Meya, and
- Bhaaga.

The actual significance of these terms or the amount of revenue claimed by the state are not known. The donation of villages to Buddhist *sanghas* and *Brahmanas* included revenues from donated villages. In such cases some immunities are mentioned. These immunities were:

- i) against entry by king's soldiers for collecting any sort of fees;
- ii) against royal officers taking possession of articles from the village.

These would show that:

- ordinarily, villagers had to pay some contribution of money or articles to soldiers when they came to the village, or
- the soldiers were authorized to collect revenue.

It appears that in some Satavahana regions the rural areas were under the *Gaulmika* who was in-charge of a small military unit. When land was granted to Buddhist monasteries or the *Brahmanas* the state had to guarantee that their rights were not interfered with by the troops operating in rural areas.

16.5.2 Modes of Acquiring and Distributing Resources in *Tamilaham*

How did the resources reach the hands of those who required them? In the Deccan under a well-organized state system the modes of appropriation were regularised according to rule and custom. You have read in the previous Unit that a regular state system was yet to emerge in the far south; there was, therefore, no well-regulated system of distribution of resources.

Several modes of distribution of resources were prevalent in the agrarian settlements in *Tamilaham*. Here, we shall take up the important form of redistribution through gift. Gift was, perhaps, the most common mode of circulation of resources. Each producer gave a part of his product to others for services rendered. Gift of a rich meal or a piece of cloth was a simple form of redistribution. Fighting heroes were provided with feasts

both before and after plunder and raid. Poor singers and dancing women who sang and danced in praise of chieftains travelled from court to court, eager to get a full meal and something to put on. At times the gift objects included fine imported wine, silk clothes and even gold ornaments in addition to the feast. Brahmin priests and warrior-heroes often received villages and cattle in gifts by way of remuneration for their services. The gift of villages to the *Brahmanas* accounts for the *Brahman* settlements in ancient *Tamilaham*. Acts of redistribution through gift were made by three groups of persons with wealth and power, namely:

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- the crowned king (*Vendar*),
- the minor chieftain (Velir), and
- the well-to-do agricultural householders (*Vellalar*) of the agrarian settlements.

16.5.3 Excesses in Extraction

In order to make distribution of gifts possible it was necessary that resources were collected in a centre which was the residence of the chiefs. Distribution of gifts from a centre was an important feature of redistribution. Pooling of resources often led to plunder and pillage of agrarian tracts. Grains and cattle were looted. What they could not carry was destroyed. Setting fire to peasant settlements, devastation of the harvesting fields of enemies and conversion of rich gardens to waste land were some of the acts of the plunderers. The *Marava* fighters of hill tracts and pasture lands were used by the chiefs to plunder settlements. The booty of such plunders was redistributed among *Marava* fighters and Brahmin priests by way of presentation and remuneration for expiatory rituals. The defenseless plight of the peasants and the way they were terrorized and exploited are attested to by a number of songs of the *Sangam* anthologies.

In spite of all such excess committed against the poor peasants the war was celebrated as a noble heroic act. It was even institutionalised. The cult of war was propagated through the praise of the courage of warriors whose memorial stones were made cult objects or objects of worship. The *Pana* singers sang in praise of the warlike qualities of the chieftain and his fighters. Booty capture was necessary because of the scarcity of resources. At the same time, such activities of excesses resulted in the destruction of resources. This was a contradiction which was inherent in the mechanism of redistribution at the level of chieftains.

16.6 SOCIAL ORGANIZATION

In this section we will study different social groups and customs in *Tamilaham* and Deccan areas. Let us first discuss *Tamilaham*.

16.6.1 Society in Tamilaham

Society in ancient *Tamilaham* was, essentially, tribal in character with its kinship organizations, totem worship and tribal cults and practices.

In all the *tinais* (eco-zones) tribal customs prevailed, but a change was gradually happening in the predominantly agricultural region. In this region social organization was becoming complex. This was characterized by the gradual breaking up of old kinship ties and the introduction of the Brahmanical *varna* concept. Social stratification or inequality between different social groups appeared and there was broad distinction between different social groups appeared and there was broad distinction between 'high' and 'low'. The landed *vellalar* and *velala* peasants constituted basic producing groups in the agrarian settlements.



Approximated Two Millennium Old (Sangam Age) Paintings Found near Palani, Tamil Nadu. Credit: Gopikumar.ila. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Sangam_age_paintings,_Palani,_Tamil_Nadu_in_India_-_2.jpg).

Craft specialization was only rudimentary and subsidiary to agricultural production. We hear of blacksmiths (*Kollan*) and carpenters (*Techan*). Extended family was their unit of production. Weaving was another profession.

Religious worship and cult practices of the village folk followed old tribal rituals which necessitated the presence of ritual groups such as *Velan*, *Venttuvan* etc. They looked after the supernatural elements and their management. However, society was not 'priest-dominated'. There was considerable surplus which led to the prosperity of trading groups. They were known after the commodity in which they traded. Thus, we hear of:

- *Umanar* (salt merchant),
- Koola vaanigar (corn merchant/grain seller),
- Aruvai vaanigar (textile merchant),
- *Pon vaanigar* (gold merchant) etc.

Towards the end of our period these traders were accommodated within the *varna* order which had, by that time, taken roots in the far south. *Tolkappiyam*, the earliest available work on Tamil grammar, portrays Tamil society as consisting of four *varna* divisions. According to this text the traders belonged to the *vaishya* group. In deep south, especially in Madurai and Tirunelveli regions of the Pandya country, these traders are found associated with some heterodox religious groups. They figure in early inscriptions of this region as donors of cave dwellings to the ascetics of Jaina or Buddhist order. The presence of ascetics of heterodox sects suggests that they had some followers in the region.

It was quite natural that the chiefly groups established their centres in the agrarian tracts (*Marutam*) for the reason that surplus resources necessary for the sustenance of a non-producing group were available there only. The chieftains of *Marutam* agricultural tracts started claiming descent from *Suryavamsha* (Solar line) or *Chandravamsha* (Lunar line) as the *kshatriyas* of north India did.

Chieftains exploited the peasants in agrarian settlements and extracted surplus with the help of *Maravar* groups of the peripheral regions. They often plundered the villages. In the *Sangam* poems war and warlike qualities of the warrior heroes are glorified. The function of *Pana* singers and *Virali* dancers was to glorify the heroes and their heroism. Thus, we find that society in the agrarian *Marutam* region of ancient *Tamilaham* was an amalgamation of old tribal practices and of Brahmanical ideals and ideology.

16.6.2 Society in the Deccan

In Deccan all the three major religious systems i.e. Brahmanism, Buddhism and Jainism enjoyed large following. Satavahana rulers extended their patronage to Vedic ritualism. For example, Naganika, an early queen of the Satavahana family performed several Vedic rituals and made gifts mentioned in the Vedic texts. Jainism had some following in the region and some of the famous teachers of the *Digambara* sect flourished in this

period. Kondakundacharya, founder of the Mulasangha which became popular in south, lived in the region. Buddhism spread as a popular movement and that religion could enlist participation of a large number of followers, mostly traders and artisans. The Mahayana sect of Buddhism enjoyed good popularity. Ruling authorities, rich men and workers donated liberally to viharas and stupas. Acharya Nagajuna, the greatest exponent of Mahayana faith, flourished in the Deccan. Some foreign elements like Yavanas, Shakas and Pahlavas embraced either Brahmanical or Buddhist religion. Thus, the period under study witnessed the fusion of various cultural elements in society. The rulers of foreign descent used Prakrit and later on Sanskrit in their inscriptions and even adopted Indian personal and family names.

The idea of four-fold division of society was familiar in Deccan. The practice of calling people according to their profession was popular. Halaka (ploughman), Golika (shepherd), Vardhaki (carpenter), Kolika (weaver), Tilapisaka (oil presser) and Kamara (smith) were some such professional labels. Caste rules were much flexible and this might be due to mixing up with foreign elements. Joint family system was the normal feature of society. Male domination is clearly attested to in social life. Sometimes, some women are found accepting the titles of their husbands like *Bhojiki*, *Maharathini*, Mahasenapatini etc.

16.7 NEW ELEMENTS AND SOCIAL CHANGE

In the Deccan some new elements made their first appearance in the agrarian order during the first centuries CE. Satavahana and Kshatrapa rulers donated plots of land and even entire villages to religious beneficiaries such as Buddhist monks and *Brahmanas*. Along with land certain economic privileges in the form of the right to collect revenue from the village and to enjoy the right over mines were also transferred to the grantees. It appears that land grants included some fiscal and administrative rights over the peasants. The royal grants freed the village folk from obligatory payments to administrative functionaries and soldiers who visited the village. In the past many grants to individuals had been temporary. But now the trend was to make the grant perpetual.

The privileges and immunities sanctioned by the rulers and the grant of permanent right over land placed the religious beneficiaries in a highly powerful position. These new developments in the agrarian sector brought about serious and far-reaching changes in the land system and economy which can be summed up as follows:

- In the first place, the religious beneficiaries became powerful authorities of the i) villages received by them with the new economic and administrative privileges in addition to the spiritual control which they exercised.
- Secondly, land grants to monks and priests created a new class of non-cultivating land owners. Buddhist monks and Brahmin priests were not cultivators themselves. They had to employ others to work on their land. Actual tillers were, thus, separated from the land and its produce.
- Thirdly, this type of private ownership abolished earlier collective rights over forests, (iii pastures, fisheries and reservoirs.
- Fourthly, the beneficiaries enjoyed rights not only over land but also over peasants who worked on land. This led to an erosion of the rights of peasants who became servile.

These developments in the Deccan were to become prominent elsewhere in subsequent centuries. Finally, the practice of land grant contributed, with several other features, to the creation of a social order which is described by some scholars as "Indian feudalism".

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Check Your Progress Exercise 2

- Mark the right (\checkmark) and wrong (\times) from the following:
 - a) *Irai* and *Tirai* were the two items of revenue to be paid in cash.
 - b) Gualmikas were rural administrators of the Satavahanas.
 - c) The bards and dancers travelled from court to court to receive rich presentations of cattle and land.
 - d) Plunder war was institutionalized in ancient *Tamilaham*.
 - e) Social complexity started appearing in the pasture lands.

Write five lines on the plunder wars in ancient south India.

- f) According to *Tolkappiyam* the traders belonged to *kshatriya* groups.
- g) In Madurai and Tirunelveli regions the cave dwellings were donated to ascetics of heterodox sects like Jainism and Buddhism.
- h) Kondakundacharya was the founder of the *Mulasangha* of the *Digambara* sect.
- i) The idea of four-fold division of society war familiar in ancient Deccan.

3)	Write about the excesses in the appropriation of surplus in early <i>Tamilaham</i> .
4)	Di
4)	Discuss the craftsmen groups in <i>Tamilaham</i> .
5)	Write a note on the Satavahana land-grants to religious groups in the Deccan.

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	Write about the results of land grants to Buddhist monks and Brahmin priests.	5)

16.8 TYPES OF TRADE

You have read about agrarian settlements and agrarian society in ancient Deccan and far south. In this segment we will discuss other such aspects of economy as trade and urbanization which helped bringing about significant changes in the society of early peninsular India.

In peninsular India the growth of trade and emergence of urban centres were not isolated phenomena but were very much associated with other important changes taking place in the region which were generated by:

- i) changes within society in different parts of peninsular India caused by the growth of agriculture in major river valleys. To an extent this was connected with iron technology of peninsular Megalithic culture and with irrigation. In some parts agricultural surplus appears to have been available.
- ii) Mauryan expansion in peninsular India led to greater contact with the north and to movement of traders, merchants and others. This is suggested by the advantages of southern route (*dakshinapatha*) highlighted in the *Arthashastra*. There were further contacts along the coasts. The earlier system and network of exchange in peninsular India, thus, underwent major changes.
- iii) To this was added another factor. From the close of 1st century BCE demand for Indian goods brought merchants and ships from Roman world in the west in close contact with peninsular India. This provided a major impetus to the growth of trade and urban centres.
- iv) All these, again, are associated with the growth of crafts specialization or growth of skill in producing crafts items which were required for members of the society either in local exchange or for long-distance trade. For example, different types of pottery, bead-making, glass-making, weaving of cloth all required different skills.

It has, however, to be remembered that all corners of India were not uniformly affected by these changes. There were and there continued to be areas in which earlier forms of culture persisted. Secondly, between Deccan and the far south the changes were more prominent in different parts of Deccan. In the beginning changes were slower and limited territorially in far south.

Different aspects of the growth of trade and urban centres can be studied under following heads:

- a) Exchange mechanism in local transactions and long-distance trade,
- b) organizations of guilds,
- c) transportation, storage and shipping,
- d) means of exchange,
- e) revenue from trade,
- f) urban centres, and
- g) economic and social changes brought about by trade and urbanization.

You have learnt about the various geographical regions and their produces. Each region had something to exchange for items of other regions. At the same time each of these regions lacked some items which were essential for its own society. Agricultural tracts produced food-grains and sugarcane but it had to depend on coastal areas for salt and fish. Coastal areas produced considerable surplus in salt and fish but rice, the staple food, had to be brought from the areas of paddy cultivation. The hill ranges were rich in timber, spices etc. but they had to depend on agricultural tracts and coastal areas for food grains and salt. The result of this kind of interdependence was that exchange relationship had come to exist among various geographical regions.

Some of the articles available in south India were required by other parts of the subcontinent and even by other countries and civilizations. Contacts were established through land-routes or sea-routes by those distant countries and necessary articles were procured. Thus, we can identify three levels of trade:

- i) Local trade
- ii) Long-distance overland trade, and
- iii) Long-distance overseas trade.

16.8.1 Local Trade

Barter was the most common mode of transaction in the context of local exchange. Most of the items of barter were for immediate consumption. Salt, fish, paddy, dairy products, roots, venison, honey and toddy were regular items of barter in far south.

Salt was exchanged for paddy; paddy was exchanged for milk, curd and *ghee*; honey was given for taking fish oil and liquor; rice flakes and sugarcane were given for venison and toddy. Very rarely, luxury items like pearls and elephant tusks also appeared as items of barter. They were also bartered for articles of consumption such as rice, fish, toddy etc. Loan was not unknown in the barter system of Tamil south. A loan of a fixed quantity of an article could be taken to be repaid in the same kind and quantity at a later date. This was called *Kurietirppai*.

Exchange rates were not fixed. Petty bargaining was the only method of fixing the price of articles. Paddy and salt were the only two items for which a set exchange rate was known in the barter system of far south. Salt was bartered for an equal measure of paddy.

In Deccan under the Satavahana rule the use of coins was quite common. Even so the continuation of barter need not be ruled out. Craft produces like pots, pans, toys and trinkets were bartered in rural areas

In the barter system of the far south the following features can be noted:

- 1) Most of the items of exchange were of consumption articles.
- 2) Exchange was not profit-oriented.
- 3) As in the case of production, distribution also was subsistence-oriented.

16.8.2 Long-Distance Overland Trade

Contacts in various spheres between the northern and southern parts of India can be traced back at least to c. 4^{th} century BCE if not earlier. Resources of the regions which lay to south of the Vindhyan ranges were known to the north. Early Buddhist literature seems to refer to a route which ran from the Ganga valley to the Godavari valley. This was known as the *Dakshinapath*. Kautilya, the author of *Arthashastra*, has written about the advantage of this southern route. According to him the southern territories abounded in:

- conch-shells,
- diamonds,
- pearls,
- precious stones, and
- gold.

Moreover, this route passed through territories that were rich in mines and valuable merchandise. He says that this route was frequented by many during those days. The route touched many southern centres including the city of Pratishthana which was to become the capital of the Satavahanas at a later date. Most of the items of this north-south trade were luxury articles such as pearls, precious stones and gold. Good varieties of textiles moved between north and south also. Perhaps, a fine variety of silk came from Kalinga. The name of this thin silk was *Kalinga*, evidently named after the place of its origin. This was an important item favoured by the Tamil chieftains. The bards who sang in praise of chieftains received this silk cloth as a valuable present. The fine type of pottery called Northern Black Polished Ware (NBPW) also found its way to the extreme south. Archaeologists have unearthed some NBP sherds in territory of the early Pandyas.

Besides the above items some herbs and spices also were brought to the south. These included spikenard and malabathrum (a herb for preparing ointment) which were shipped to the west.

The northern traders also brought a large quantity of silver punch-marked coins. Punch-marked coins in large hoards have been unearthed from different parts of south India. They bear testimony to brisk commercial contacts between north and the south. As the long-distance trade with northern Indian was mostly in luxury items the benefit of this trade was enjoyed by a small section consisting of ruling elites and their men.

16.8.3 Long-Distance Overseas Trade

Indian items such as spices, precious and semi-precious stones, timber, ivory and many other articles were in great demand in western countries. The main source of these articles was south India. These articles were shipped to the west from very early times. Considering the bulk of transactions and the resultant profit, direct trade with the Roman world, of which we have evidence from the close of the 1st century BCE proved to very significant for the economy and society of peninsular India.

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We shall identify two stages in the commercial contact of Rome with peninsular India:

- 1) An early stage with the Arabs as middlemen.
- 2) A second stage in which a direct contact was established with the knowledge of monsoon winds.

For a long period navigation in the Arabian sea was coastal. It was tedious and expensive. The Arabs had established commercial connections with India, making the sea as a highway of trade before the beginning of the Common era. Geographical position of the Arabs was favourable to them in enjoying the monopoly in East-West trade. They had some knowledge of wind systems in the Arabian sea and they kept it as a trade secret. Thus, they played the role of middlemen and raised considerable profit out of the trade with peninsular India.



Indian Ship on the Lead Coin of Vasisthiputra Sri Pulamavi, Testimony to the Naval, Seafaring and Trading Capabilities of the Satavahanas during 1st-2nd Century CE. Location: British Museum, London. Credit: PHGCOM. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Indian_ship_on_lead_coin_of_Vashishtiputra_Shri_Pulumavi.jpg).

With the 'discovery' of monsoon winds which is attributed to a navigator named Hippalus, direct contact was established by the Romans with India. This marked the beginning of a period of increase in commerce between Rome and peninsular India.

Romans brought to the south Indian ports their articles which included both raw materials and finished products. The raw materials consisted of:

- copper,
- tin,
- lead,
- coral,
- topaz,
- flint.
- glass (as a few material for making beads).

The finished products were:

- best quality of wine,
- clothes of fine texture,
- fine ornaments,
- gold and silver coins, and
- different types of excellent pottery.

A large number of articles were shipped by the Romans from peninsular India to the west. We will identify the following categories among them:

- i) Spices and medicinal herbs like the pepper, spikenard, malabathrum, cinnabar;
- ii) precious and semi-precious stones such as beryl, agate, carnelian, jasper and onyx as well as shells, pearls and tusk;
- iii) timber items like ebony, teak, sandalwood, bamboo;
- iv) textile items of coloured cotton cloth and muslin as well as dyes like indigo and lac.

Among the above items of export beads and textile were the finished goods.

The Romans paid for Indian articles mainly in gold. A majority of the export items were locally available and the collection of merchandise in the Deccan and south India was done by Indian merchants themselves. Wagons and pack animals were for transporting them to the ports. The shipping of merchandise to the western lands was carried out mostly by foreign merchants though there were Indian maritime traders in Deccan and south India. South India had commercial connections with Sri Lanka and south-east Asia. Important articles of this trade were:

- some spices,
- camphor, and
- sandalwood.

Merchants of Tamil origin were, probably, responsible in taking the initiative in this trade. Sri Lankan merchants came to *Tamilaham* also. There are inscriptions written in Tamil Brahmi characters which refer to those who came from Elam(Sri Lanka). However, details of this trade are not known.

16.9 ASPECTS OF COMMERCIAL ORGANIZATION

In small-scale local transactions quite often the producers were the dealers too. Fishing and salt making were done exclusively by the community of the *Parathavas* mentioned in the *Sangam* literature as living in *Neytal* (coastal) region, and so, they had to devote their whole time for these activities. Therefore, a different method was followed in the distribution of fish and salt.

Fish was taken to neighbouring areas of the sea-coast by womenfolk of the fishermen's family. They appeared in the places of village fairs and other rural gatherings.

As an essential item salt was in demand everywhere. A separate group took to the distribution of salt. Salt merchants were known as *Umanaasa* in *Tamilaham*. In the coastal areas and neighbouring villages the *umanaasa* hawker girls carried salt in head loads and bartered it mainly with paddy. In the interior rural villages salt was taken by the *umanaasa*. Big bags of salt were transported in carts drawn by bullocks or asses. Salt merchants moved in large groups. These salt caravans were called *Umanchatu*. They bartered salt for local products. Thus, the *umanchatu* acted as the collectors of merchandise from different parts of the regions. The *umanaasa* moved in caravans with their family. No organization other than the family is known to have existed among the salt merchants.

Besides salt dealers, there were dealers in corn (*Koola vaanigar*), cloth (*Aruvai vaanigar*), gold (*Pon vaanigar*), sugar (*Panita vaanigar*) etc. They figure in some

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ancient cave inscriptions of *Tamilaham* as donors of dwelling places to some ascetics. This indicates that they were affluent. Details of their trade and organization are not known. There is a single epigraphic reference to a traders' organization of Tiruvellarai in the deep south, the members of the which are described as *nikamattor* meaning the members of the *nigama*, a guild.

In *Tamilaham* the organization of traders was, perhaps, a rare thing. But, in the Deccan merchants' guilds or associations were a regular phenomenon. Another route ran from the western hilly region to Kanchipuram which was a seat of a local chieftain and a famous city on the east coast.

Salt-caravans and other merchants were the travellers who traversed these routes. The caravans moved in large groups. Besides merchants, very often, wandering bards, dancers, messengers, mendicants etc. also moved from place to place along such routes. These groups chose to join the caravans because the journey was often hazardous. Most of the routes passed through dense forests and over hills where wild tribes lived. Wayside robbery was a perpetual threat to the merchants and the caravans employed guards of their own in absence of effective protection from the rulers.

In territories under the Satavahanas the picture was somewhat different. The main route to the Deccan from the north came from Ujjaini to the city of Pratishthana (Paithan), the capital of Satavahanas. From Pratishthana it passed across the Deccan plateau to lower Krishna valley and then went further south to reach the famous southern cities of Kanchi and Madurai. A network of roads developed early in the Common era from this old route linking the producing areas in the interior with inland markets and towns and the port towns on the western coast. The fertile river valleys of Godavari and Krishna also had such network of routes to connect the interior with the coastal towns.

It is interesting to note that some of the famous ancient Buddhist cave sites and religious centres in the Deccan were situated on such trade routes. These religious centres were helpful in many ways to the merchant-caravans. Besides providing food and shelter they even issued loans.

The rulers also showed interest in conditions of these routes. They donated liberally to Buddhist religious establishments which were located on the routes. They constructed rest houses at port towns and established watersheds on the routes. Officials also were appointed for their upkeep. Unfortunately, information is not available regarding the policing on such roads. Often the routes had to cross over rivers. Ferries were established at such points and a toll was also collected from merchants. Some of the ferries were toll-free.

Due to familiarity with a long coast-line and several river systems, navigation both on the sea as well as rivers was known to south Indians. Smaller boats were used for ferry-crossing and river navigation. Navigation on the sea was made possible by construction and use of bigger vessels.

Navigation in *Tamilaham* was mainly coastal. There were some trade connections with Sri Lanka. Sri Lankan (*Elam*) traders figure in some ancient inscriptions of south India. Similarly, Tamil traders appear as donors in some early inscriptions of Sri Lanka. These evidences show that traders from *Tamilaham* participated in maritime trade.

The Deccan, too, had merchants who were particularly engaged in sea-borne trade. Ships fitted out of Bharukachchha are known from literature of this period.

Merchants of peninsular India, particularly those of the Deccan, participated in foreign trade. The presence of some Indian traders in Egypt and Alexandria is attested by foreign writings of this period.

Royal authorities were aware of the importance of maritime trade. They provided facilities for the traders. Ships arriving at Bharukachchha were piloted by local boats and conducted to separate berths at the docks.

In far south the big chieftains of *Tamilaham* encouraged sea-trade in different ways. Lighthouses were erected on the shores; there were wharves where the Roman ships unloaded their merchandise to be stamped with the chieftains' emblem. Storage facilities were provided and protection of goods was also arranged at the warehouses. Seaborne trade in the far south as well as in the Deccan shows some features of what is described as "administered trade" by some modern scholars. The difference between the two regions is that the features are more prominent in Deccan whereas in *Tamilaham* they are at the rudimentary level.

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16.10 EXCHANGE FACILITIES

The question of facilities for transportation, storage and shipping is relevant particularly in the context of long-distance trade in which the movement of bulk items is a problem. In the far south pepper, paddy and salt were main items which required movement in bulk. In western Deccan timber also was a bulk item of demand from the West. Pack animals and carts were used for inland transport.

In *Tamilaham* there were several routes which connected interior tracts with the settlements in river valleys, port towns and seats of rulers. One such route went from western areas of the Kaveri valley to the Chola port town Kaveripumpattinam.

Each town seems to have had a guild (nigama). Each guild had an elderman (setthi) and its own office. The organization of traders acted as a bank. It received deposits and lent out money. Guilds of weavers, potters, oil pressers, bamboo workers, braziers etc. are known from the inscriptions of Deccan. The guild, as a working unit, was more efficient than the family unit. Besides the strength of unity guild was capable of providing all sorts of help to its members including financial assistance. Further, the individual member was relieved from the responsibility of finding out a customer. Thus, the territories under Satavahanas had a comparatively advanced system in the organization of trade.

16.11 COINS AS MEDIUM OF EXCHANGE

Though barter was the most common mode of transaction the use of coins as a means of exchange became current in the period that we are discussing. They can broadly be divided into two broad categories:

- i) Local coins of different varieties, and
- ii) Roman coins.

16.11.1 Local Coins of Different Varieties

Local coins of different varieties were prevalent in different regions in peninsular India. Ancient Tamil literature speaks about some of them such as:

- Kasu,
- Kanam,
- *Pon*, and
- Ven Pon.

But actual coins which may correspond to these names have not been discovered. In the Deccan inscriptions refer to the use of *Kahapanas* which were silver coins locally minted and *Suvarnas* which refer to gold coins either of the Romans or the Kushanas.

Actual coins of different varieties and minted in different metals like lead, potin (copper mixed with tin and other metals), copper and silver were in use. The earliest among them were punch-marked coins which, as you have learnt in a previous Unit, came to be minted in north-west and north India from c. 6^{th} - 5^{th} century BCE onward. In peninsular India too different varieties of punch-marked coins were minted in different regions. Other varieties of coins, manufactured by using other techniques like casting and die-striking, gradually came into use. From c. 2^{nd} century BCE kings of small localities of members of the important Maharathi and other families started minting coins in their own name. To these were added coins of the Satavahana rulers minted in different metals, possibly from c. 1^{st} century BCE onward. In northern Deccan, Gujarat, Malwa and adjacent regions silver coins of the Kshatrapas were in great demand. Thus, between c. 2^{nd} century BCE and the close of 2^{nd} century CE the largest varieties of local coins were minted and were in circulation in peninsular India.

16.11.2 Roman Coins

Ancient Tamil literature refers to *Yavana* (Roman) ships bringing large quantities of gold to *Tamilaham* to be exchanged for pepper. The Roman emperor Tiberius wrote to the Senate in 22 CE that the wealth of the empire was being drained off to foreign lands in exchange of petty things. In *c*. 1st century CE Pliny, author of **The Natural History**, complained that every year a huge amount of Roman wealth went out to India, China and Arabia for luxury articles. These statements are well supported by large number of Roman Coins found in hoards in various places of peninsular India like:

- Andhra.
- Karnataka,
- Tamil Nadu, and
- Kerala.

Most of the coins belong to a period between c. lst century BCE and 3^{rd} century CE. This suggests that Roman contact with peninsular India was brisk during this period.

Roman coins are mostly in gold and silver. Copper coins are extremely rare but not altogether unknown. Roman money was brought to purchase items which were dear to the Westerners. These items could not be procured by exchanging Roman things in bulk. Big transactions were done by means of gold coins. Silver coins were used for comparatively small purchases. Some scholars are of the view that Roman gold was accepted not as coin but as bullion. It is also held by certain scholars that Roman gold was used for ornaments by south Indians.



Roman Gold Coins Excavated in Pudukottai, Tamilnadu. British Museum Collection, London. Author: Uploadalt. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Roman_gold_coins_excavated_in_Pudukottai_India_one_coin_of_Caligula_31_41_and_two_coins_of_Nero_54_68.jpg).

Some numismatists have maintained that Roman coins and the punch-marked coins were current in the country side-by-side. Roman coins were of roughly the same weight as punch-marked coins. In some hoards they are found along with punch-marked coins. Both types are equally worn out and this suggests that they were current for a long time before they were placed in hoards. Imitations of Roman coins were also current in south India, especially on the Coromandal coast where there were some Roman trading stations. These imitated coins may have been manufactured to satisfy the needs of such 'colonies'.

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16.12 REVENUE FROM TRADE

Collection of revenue as a regular source of income to the treasury depends on several factors including efficiency of the government. Political developments in different regions in peninsular India in our period were not uniform in character. So, the revenue system also varied from region to region. Toll was collected for merchandise moving on pack animals and carts. This toll was known as *Ulku*, a derivative of the Sanskrit term *sulka* meaning toll. This seems to indicate that the idea of toll was borrowed from the north. However, all the crowned chieftains and lesser chieftains of the south are said to have been interested in trade, especially with the Yavanas, evidently with an eye on the income from commerce.

In the Chola port town of Kaveripumpattinam there were Chola ruler's agents to affix Chola emblem of the tiger on the merchandise. Toll was also levied on articles. Detailed information about this aspect is, sadly, not available. Further north, in the territory of the Satavahanas taxation seems to have been more regular and systematic. Toll was collected on each item of trade. Custom duties and various tolls were levied on merchants at each major town. The rates of such duties and tolls are not specified anywhere. Ferry duties were another source of income. Ushavadatta, the son-in-law and representative of the Kshatrapa ruler Nahapana of western India is said to have made arrangements for toll-free ferries on some rivers.

Revenue was received in kind or cash. Artisans had to pay tax on their products. This was known as Karukara (Karu = artisan and Kara = tax). From this fragmentary information one can only say that the ruling authorities derived considerable income from trade and commerce.

Check Your Progress Exercise 3

1)	Wr	ite about the features of the barter system in ancient south India.		
2)	Ma	rk which of the following statements are right (\checkmark) or wrong (\times).		
	a)	Most of the items of barter were for luxury.	()
	b)	Kurietirppai means barter in which a loan of a fixed quantity of an a	article	is
		taken to be repaid in the same kind and quantity at a later date.	()

History of India from the Earliest Times Upto C. 300 C.E.	est		Kautilya thought that the southern route was superior because it was dangerous than other routes.	ıs le (ss)
		d)	South India exported only raw material to the West and imported fir products from the West.	nishe (ed)
		e)	Trade guilds in the Deccan acted as a bank which received deposits an out money.	ıd le	nt)
		f)	In <i>Tamilaham</i> there were several routes which connected interior tract the settlements in river valleys, coastal towns and the seats of ruling chie		
		g)	Satavahana rulers established watersheds on trade routes and apporting officials for their upkeep.	ointe	ed)
		h)	Whether found in north or south the punch-marked coins carried a sta weight.	nda (rd)
		i)	In ancient south India the Roman gold coins were used exclusive ornaments.	ely :	as)
		j)	The tax paid by merchants was called <i>Karukara</i> .	()
	3)	Wri	te a note on salt-caravans in early <i>Tamilaham</i> .		
		•••••			
		•••••		- 5	
	4)				
	4)	WII	te a note about trade organizations in the Deccan.		
	5)		ng out the contrasting experience on the trade routes in ancient Deccarbin India in about 50 words.	ın aı	ıd

6)	Write on the local coins in early south India.	Agrarian Settlements, Agrarian Society, Expansion of Trade and Urban Centres – Peninsular India
7)	Write about five lines on the silver punch-marked coins.	
8)	Write a note on Roman coins and their use in early south India.	

16.13 WEIGHTS AND MEASURES

A developed system of exchange requires regular weights and measures. When it is possible to weigh, measure and count objects which one is buying or selling exchange becomes both easy and efficient. The buyer and the seller do not have to feel uncertain about the quantity or size of the object bought or sold.

In Deccan, where dealing with different kinds of items in the trading centres was a regular practice, the idea of exact measurements must have been prevalent. Coins were issued in different denominations and land was measured in terms of *nivartanas*.

Maa and *Veli* were measures of land in the far south. Here, grain was measured in *ambanam*, probably a large measure, in the context of paying tributes. Smaller measures such as *nali*, *ulakku* and *alakku* were also known.

Weight was known by means of balance. Balance was, perhaps, a rod with marks on it. Even minute weight could be balanced, for we are told about weighing gold on a balance. In day-to-day transactions the linear measurement was expressed in terms of length of gingilly grain (*el*), paddy grain (*nel*), finger and hand.

16.14 URBAN CENTRES

In the course of the above discussion we touched upon various aspects of commercial expansion of trade in early peninsular India. This early trade provided great impetus to

the rise and growth of a number of urban centres. We will begin with centres of the Deccan where the features of urban growth are clearly visible.

Western and eastern coasts had several port-towns. In the coastal Andhra region in the delta of the Godavari and Krishna there were some important centres. Ships sailed from there to the Malay peninsula and eastern archipelago. The western port towns of Bharukachchha (Broach), Sopara and Kalyan, however, appear to be older and more important in the early phase of Indo-Roman trade.

In the interior there were big and small urban centres:

- Pratishthana (Paithan),
- Tagara (Ter),
- Bhogavardhana (Bhokardan),
- Karahataka (Karad),
- Nasik,
- Vaijayanti,
- Dhanyakataka,
- Vijayapuri,
- Nagarjunakonda etc.

We may identify following factors which led to the rise of these centres which were distinct from ordinary rural settlements:

- 1) An agricultural hinterland capable of producing necessary surplus for the consumption of different social groups living in urban centres.
- 2) Emergence of such groups as those of traders, artisans and handicraftsmen who were not directly involved in food production.
- 3) Emergence of guilds which organized the activities of traders and craftsmen.
- 4) Facilities for collection of commodities required in local and foreign exchange and development of shipping.
- 5) A ruling class capable of channelizing surplus to the centres and also providing help and protection.
- 6) Emergence of a monetary system.
- 7) Spread of writing which is essential for accounting and registering.

Functionally, the urban centres belonged to different categories:

- Administrative centres,
- collection centres,
- cantonments,
- centres of foreign trade,
- markets, and
- manufacturing centres.

However, most of these functions could be carried out at a single urban centre.

Three distinct types of centres can be identified in *Tamilaham* mostly on the basis of references in the *Sangam* poems and other literary writings and to some extent, on the basis of archaeology:

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- rural exchange centres,
- inland market towns, and
- port towns.

In the process of exchanging articles for subsistence between different *tinais* (ecozones) there emerged several centres as points of contact. These contact points were often junctions on traditional routes. Some of these centres became more active because of regular exchange activities. It will not be appropriate to call them 'urban' in modern sense of the term. However, contemporary society viewed them as distinct from ordinary peasant settlements. Inland towns like Uraiyur (near modern Tiruchirapalli), Kanchi (Kanchipuram) and Madurai had markets. They, too, had not developed into full-fledged urban centres.

Pattinams (port-towns) were more active under the patronage of the rulers. There were several such centres:

- On east coast: Puhar or Kaveripumpattinam (of the Cholas), Arikamdu, Korhai (of the Pandyas);
- on west coast: Muziris and Tyndis (of the Cheras), Bakare and Neleynda.

They were the centres of maritime trade and some of them like Arikamedu had 'colonies' of the *Yavanas*. Muziris was a busy centre with a port crowded with ships of all kinds, with large warehouses and markets.

Since the emphasis of trade at the port-towns was on luxury items the *pattinams* were not closely linked with local exchange network. They remained as "pockets of foreign trade" with mainly the rulers and rich as clientele. The growth of these centres was, thus, a result of external trade. With the decline of external trade these centres, too, dwindled and disappeared slowly.

The nature of these urban centres was, thus, characterized by the absence of:

- a) Linkage with local exchange networks,
- b) craft specialization,
- c) support of such institutions as monastery and guild.

16.15 THE IMPACT OF TRADE AND URBAN CENTRES ON SOCIETY

Early trade and urban developments do not seem to have brought about very fundamental changes in the social life of *Tamilaham*. Local exchange was subsistence-oriented. This means that the items which changed hands through local exchange were used for regular consumption by different groups of people. Long-distance trade was mostly in luxury goods which did not circulate beyond kinship circles of the chieftains and their men. Individual merchants' wealth and prosperity, as seen in their gifts to monks, were not very impressive.



Craftsmen and traders were not organized in guilds. They functioned together as members of a family or as close relatives. They, thus, acted only according to the norms of the kinship-based relations of a tribal nature.

In Deccan the situation was different. Participation of local trading groups was necessary also for long-distance trade. So, the advantage of this trade filtered down to the other levels of society. The wealth and prosperity of the artisans, craftsmen and traders are reflected in their donations to Buddhist monasteries.

The guild organizations of artisans and traders were instrumental in breaking old kinship ties and introducing a new type of relations in production of handicrafts and in trading ventures.

The relationship between rulers, commercial groups and Buddhist monastic establishments was responsible in introducing important changes in society and economy of the Deccan.

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Check Your Progress Exercise 4

1)	Ma	rk right (\checkmark) or wrong (\times) statements given below:
	a)	Maa and Veli were linear measurements. (
	b)	Inland towns were more active than coastal towns in early south India.(
	c)	Guilds introduced some change in the production relations among the artisan and traders.
	d)	The circulation of luxury goods was among the members of the crowne monarchs and their families. (
	e)	Long-distance trade was not dependent on local exchange networks in the Deccan.
2)	Wri	te five lines on relations between the monasteries and the traders.
3)	Wri	te a note on the impact of trade and urbanizm on local traders and artisans.

16.16 SUMMARY

In this Unit we discussed several aspects of agrarian settlements and agrarian society in ancient peninsular India. You have learnt from this lesson about:

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- Economic activities of different sub-regions in *Tamilaham*.
- The spread of agrarian settlements.
- The problem of ownership of land.
- Collection and distribution of resources.
- Main features of the social organization in *Tamilaham* and Deccan.
- New elements which were introduced in the agrarian order in the early centuries of the Common era and the changes brought about by these elements.

Our attempt in this Unit was also to discuss with you certain important aspects of expansion of trade and urban centres in ancient peninsular India. You also have learnt from this Unit about:

- Different types of trade and ways in which exchange was carried on.
- Guilds of artisans and traders.
- Exchange facilities like transportation, storage and shipping.
- Different kinds of coins which were used as means of exchange.
- Revenue from trade.

Numismatics

Pana

- Distinctive features and functions of urban centres.
- Impact of trade and urbanizm in different regions of peninsular India.

16.17 KEY WORDS

Administered Trade	:	This refers to trade in which existed centres of
		trade offering facilities like those of anchorage
		and storage, civil and legal protection and
		agreement on the mode of payment.

Anthology : A collection of poems' lyrics.

Nigama : A guild of traders or artisans.

: A singer of ancient *Tamilaham* who sang in

praise of chieftains.

: The study of coins.

Potin : An alloy of copper and tin.

Punch-Marked Coins : In manufacturing these coins the metal was

beaten into flat sheets and then cut into strips. Blank sheets were cut into desired weights. The blank pieces were square or rectangular in the first instance. For getting actual weight the edges were clipped. So, most of these coins are

irregular in shape. Symbols were stamped on them with punches, each punch having one distinct symbol.

Slash and Burn Cultivation : A primitive type of agriculture. Trees and bushes

on hill-slopes are cut down and then burnt. Thus, the ground is prepared and then the seed is sown.

Shifting Cultivation : Mode of agriculture in which the plot of

cultivation is shifted periodically. This is to avoid exhaustion of land caused by continuous use of

the same plot.

Tinai : A generic term for a physiographic division of

land in early Tamilaham.

Totem Worship : Worship of the main symbol of a tribe.

16.18 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

1) a) \checkmark b) \times c) \checkmark d) \checkmark e) \times f) \times g) \times h) \times i) \times

2) In your answer you should write about *Kurinji*, *Mullai* etc. zones. See Section 16.2

3) You should write about pastures and cattle rearing. Also see Section 16.2

4) See Section 16.3

5) You should write about such tools as ploughshares, sickles, spades etc. and tank and well irrigation. See Sub-section 16.3.2

6) You should write about Vellalar, Gahapati etc. and their rights. See Section 16.4

Check Your Progress Exercise 2

1) a) \times b) \checkmark c) \times d) \checkmark e) \times f) \times g) \checkmark h) \checkmark i) \checkmark

2) You should write about the attacks in agrarian tracts. See Sub-section 16.5.3

3) You should write about the excesses committed against peasants. See Sub-section 16.5.3

4) See Section 16.6

5) You should write about land and village grants for religious and other purposes. See Section 16.7.

6) You should write about the changes brought about in the agrarian sector by the grants to religious beneficiaries. See Section 16.7.

Check Your Progress Exercise 3

1) See Sub-section 16.8.1

2) a) \times b) \checkmark c) \times d) \times e) \checkmark f) \checkmark g) \checkmark h) \checkmark i) \times j) \times

- 3) See Section 16.9
- 4) See Section 16.9
- 5) See Section 16.10
- 6) See Section 16.11
- 7) See Section 16.11
- 8) See Section 16.11

Check Your Progress Exercise 4

- 1) $a) \times b) \times c) \checkmark d) \times e) \times$
- 2) See Section 16.14
- 3) See Section 16.15

16.19 SUGGESTED READINGS

Ludden, D. (1985). Peasant History in South India. New Jersey.

Nilakanta Sastri, K. A. (1958). A History of South India: From Earliest Times to Vijayanagar. Madras.

Parashar-Sen, Aloka (ed.) (1993). Social and Economic History of the Early Deccan: Some Interpretations. New Delhi.

Ray, H. P. (1986). *Monastery and Guild, Commerce under the Satavahanas*. New Delhi.

Yazdani, G. (ed.) (1982). The Early History of the Deccan. Repr, Delhi.

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UNIT 17 GROWTH OF TAMIL LANGUAGE AND LITERATURE*

Structure

- 17.0 Objectives
- 17.1 Introduction
- 17.2 Early Evidences
- 17.3 Heroic Poems
 - 17.3.1 Classification
 - 17.3.2 Techniques of Composition
 - 17.3.3 Problems of Dating
 - 17.3.4 The Poetics
 - 17.3.5 Literary Development
- 17.4 Other Compositions
- 17.5 Summary
- 17.6 Key Words
- 17.7 Answers to Check Your Progress Exercises
- 17.8 Suggested Readings

17.0 OBJECTIVES

After reading this Unit you will be able to learn:

- how old is Tamil language and literature;
- what are the Tamil heroic poems;
- how were they composed and classified;
- what are their literary merits; and
- which are the other compositions of the period.

17.1 INTRODUCTION

In the previous Unit you learnt how settlements grew up, agriculture began to expand and trade flourished in *Tamilaham*. Trade brings in immigrants and opens up avenues of interaction between local people and outsiders within the region. Interaction of cultures helps the growth of language and literature in a region. In this Unit you will be made familiar with the growth of Tamil language and literature.

^{*} This Unit has been adopted from EHI-02, Block 7.

Growth of Tamil Language and Literature





LEFT: Ancient Tamil Script Found on the Walls of the Thanjavur Brihadeeshwarar Temple, Tamilnadu, Built by Raja Raja Chola I Between 1003 and 1010 CE. Credit: Symphoney Symphoney. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Ancient_Tamil_Script.jpg).

RIGHT: The Mangulam Brahmi Inscription Dated to *c*. 2nd Century BCE, Written in Old Tamil (*c*. 6th century BCE-6th century CE), Found at Dakshin Chithra, Chennai. It mentions the Pandyan king Nedunchezhiyan I and Jaina monks. Credit: Sodabottle. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Mangulam inscription.jpg).

17.2 EARLY EVIDENCES

Tamil had become a literary language, i.e. a full-blown language with its own system of writing, at least by c. $3^{\rm rd}$ century BCE if not earlier. Earliest evidence of the Tamil literary tradition, i.e. the tradition of writings in the language, comes from Tamil Brahmi inscriptions in Jaina and Buddhist caves from the Tamil Brahmi hills. These inscriptions are in the form of labels of persons or bodies who donated the caverns. The major centres of these label inscriptions are:

- Arittappatti (Mauylam, Madurai),
- Karungalakkuti (Melur, Madurai),
- Kongarpuliyamkulam (Madurai),
- Azakarmalai (Madurai).

Many Tamil words along with local adaptations of Sanskrit and Prakrit/Pali occur in these labels. *Nigamattor*, the member of a *nigaman*, and *Vanikan* (he who is engaged in *vanikam/vanigam* i.e.trade) may be cited as two examples of the Tamil adaptations of Sanskrit words. It has to be noted that the Tamil language used in these labels was different from the literary Tamil. The difference was due to Jaina and Buddhist immigrants from the north who were introducing a considerable number of Sanskrit and Prakrit/Pali terms. These terms were adapted to suit the linguistic structure of Tamil language. The combination of names of persons, professions and places that figure in inscriptions gives clues to the currency of Tamil as a literary language. The period of these label inscriptions is roughly between *c*. 200 BCE and 300 CE. Tamil heroic poems, popularly called the *Sangam* literature, constitute major evidence of the old Tamil literary tradition.

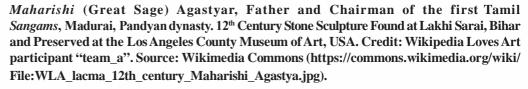
17.3 HEROIC POEMS

The Tamil heroic poems are called the *Sangam* literature since they were collected and classified by the *Sangam* which was an academy of scholars. The poems by themselves

were not the product of the Sangam. They were much earlier than the Sangam. History of the Sangam is clogged in legends. Tradition says that there were originally three sangams among which the works of the last one alone have survived. Previously, it was believed that the *Sangams* were academies of court poets. But, now it is a matter of consensus that they were constituted by the scholars in literature. The time lag between the *Sangam* and the heroic poems shows that the name *Sangam* literature is a misnomer. By and large, the Tamil heroic poems were products of the folk. They signify and highlight the tradition of bards who roamed about singing the praise of their patron chiefs. However, all the poetic compositions were not of the wandering bards. Some of them were composed by scholarly poets who followed the bardic tradition. Kapilar, Paranar, Avvayar and Gautamanar were some of the well known poets of the period. They were scholarly bards, namely the *Pulavar* as distinguished from the common bards, namely the Panar. It is, thus, not the literature of any particular social group but part of a common way of life. Spanned over a few centuries the poems reflect the gradual development of Tamil language and literature. They survive not in their original independent form but as classified anthologies or choice collections.







17.3.1 Classification

Now we see the poems in the form of classified collections of specific poetic themes and conventions. *Ettuttogai*: the eight collections of poems and *Pattupattu*: the ten idylls are the two categories of anthologies that comprise the heroic poems. *Narrinai*, *Kuruntokai*, *Ainkurunuru*, *Patirruppattu* etc. are the few examples of anthologies grouped under *Ettuttogai* and *Mullaippattu*, *Madurikkanj*, *Kurunjippattu* etc. are the example of anthologies under *Pattupattu*. The anthologies are divided into *akam* dealing with themes of subjective experience like love or affection, and *puram* – dealing with themes of objectification like raid or plunder. Both the above categories of

anthologies comprise collections of poems based on *akam* and *puram* themes. *Akananuru*, a collection of 400 poems based on *akam* themes and *Purananuru*, a similar collection based on *puram* themes are two examples of the *Ettuttogai* category. In the same manner, there are examples of both *akam* and *puram* anthologies in the *Pattupattu* category. Apart from the heroic anthologies the classified corpus of *Sangam* literature includes the *Tolkappiyam*, a treatise on Tamil grammar and *Patinenkizkanakku*, the 18 didactic texts also. The famous *Thirukkural* by Tiruvalluvar is one of the 18 didactic texts. Both *Tolkappiyam* and *Patinenkizkanakku* were composed after most of the *Ettuttogai* and *Pattupattu* poems had been composed. The diction and techniques of composition of the heroic anthologies keep them distinct from other texts that are later.



133 Feet (40.6 m.) Tall Stone Sculpture of the Tamil Poet and Philosopher Tiruvalluvar atop a Small Island near Kanyakumari, Tamilnadu. Credit: Shivamsp182. Source: Wikimedia Commons (https://commons.wikimedia.org/wiki/File:Thiruvalluvar_Statue_of_kanyakumari.jpg).

17.3.2 Techniques of Composition

The heroic poems were composed on the principles of oral bardic literature. The features of oral compositions are strikingly similar all over the world. Use of stock phrases and expressions is the most important feature of such compositions. Stock phrases or expressions are readymade expressions or phrases current among the people of those times. Poets knew the contexts of readymade expressions, where to use them and how in their poems. The poems are composed using set motifs or readymade expressions in a formula that is orally transmitted and commonly shared by the bards as well as the society. The set expressions required for poetizing the variety of contexts recur in the poems. For instance, if the context is to praise a chieftain the series of stock forms like "warrior of victorious lance", "possessor of lofty chariots", "chieftain of swift steeds", "hero of eyefilling garlands" and so on flow effortlessly whoever the poet is or the chieftain. These examples show that the bards just had to master such ready-made expressions and their contexts. This is not to minimize the individual poetic talents completely. But, by and large, the most important aspect was not the individual style or expressions of the poets. The technique of versification in oral poetry depended on the general or common styles and expressions. It is a technique of combining set phrases over which the poets as well as the society, by and large, had mastery. So, there are repeated lines and themes with marginal modifications in different poems by different poets. The hereditarily transmitted stock phrases leave the bulk of heroic poems full of old memory. This is one of the many hazards in dating the poems.

17.3.3 Problems of Dating

The corpus of *Sangam* literature cannot be precisely dated owing to a series of problems. In fact, several periods are represented in the poems of *Sangam* anthologies. One is the period of actual composition and oral transmission which was fairly long and spread over a few centuries from about 2nd century BCE to 3rd century CE. Next is the period of codification of the poems into anthologies which is between *c*. 6th and 9th centuries. Another period is that of the commentaries which are not earlier than *c*. 13th-14th centuries. *Tolkappiyam*, the traditional grammatical treatise in its present form, is not earlier than *c*. 3rd century CE, though basic parts of the text could be slightly earlier. All the *Kizkanakku* texts belong to a period later than *c*. 3rd century CE. The great difficulty in dating *Sangam* literature is that it is hard to clearly sort out the earlier from the later portions as they are all mixed up.

17.3.4 The Poetics

Based on the *Sangam* literature there developed a fairly evolved set of poetic conventions. Though the poetics as such is a little later the rules and conventions of the compositions were part of the old Tamil bardic tradition. The two fundamental aspects of traditional Tamil poetics are the divisions of the compositions into *akam* and *puram* genres. We have already noted what are *akam* and *puram* in a previous section. *Akam* is subdivided into five stages of love in relation to the five *tinais*. Each *tinai* is associated with a particular mood of love. For instance, *palai* is associated with the sentiment of separation of the lovers. The *puram* genre of poems has its own *tinais* (situations) and *turais* (contexts). There are as many as nine *tinais* and 63 *turais* which the poets could opt for the compositions. Both the *akam* and *puram* genres of poems followed the fixed conventions of each. Each *akam* poem had to follow the notion of *tinai* which had its own deity, biological organizms, subsistence pattern, musical instruments and songs. Similarly, each *puram* poem had to abide by the restrictions associated with the variety of *tinais* (situations of behaviour).

17.3.5 Literary Development

The Tamil literary tradition is independent of the classical Sanskritic literary tradition of India. It represents a parallel linguistic tradition in relation to Sanskrit. However, the development of Tamil language and literature was never a process in isolation. Even the earliest stratum of the Tamil literature contains influences of Sanskrit. The heroic poems and the other Sangam works contain traces of Aryan culture. By Aryan culture we mean Vedic ideas and institutions in this context. The tradition of Vedic rituals is well attested by the poems. Some of the bards like Gautamanar, Paranar and Kapilar were Brahmanas. Gautamanar is mentioned to have officiated many velvi (Yajna or Vedic sacrifice) for his patron Celkezu Kuttuvan, a Chera chief. The Epic and Puranic ideas are also seen in Tamil heroic poems. While praising the patron chiefs the poets refer to the former's participation in the Mahabharata battle. Many Puranic deities are equated to their Tamil counterparts. Mayon (the black god), well-known in the poems as the Tamil counterpart of Krishna, is one example. But, these influences never undermined what was typical of the Tamil literary tradition. This original aspect of Tamil language and literature does not owe to Sanskrit for its origin. But, its growth and development towards linguistic and literary perfection certainly owes to the influences of Aryan culture. The heroic poems and other works of the *Sangam* tradition testify widespread literary culture of early Tamilaham. They also indicate linguistic maturity achieved by the Tamils by c. 3^{rd} century.

17.4 OTHER COMPOSITIONS

The basic parts of *Tolkappiyam* and some of the *Kizkanakku* texts constitute the other compositions here. These are called the other compositions because they do not belong to the bardic tradition of heroic poems. But, they are not far removed from the literary background of the bardic tradition. The *Poruladikaram* part of *Tolkappiyam* that deals with the *akam* and *puram* conventions of old Tamil is close to the period of heroic poems. Similarly, the *tinai* texts and works like *Kalavazi* are relatively earlier. Though some scholars regard the twin epics, *Silappadikaram* and *Manimekhalai*, as contemporaneous to the heroic poems, they are identified as works of a much later period.



Statue of Ilango Adigal, the Author of *Silappadikaram*, at Marina Beach, Chennai. Credit: Rakesh.5suthar. Source: Wikipedia Commons (https://commons.wikimedia.org/wiki/File:Ilango_Adigal_statue_at_Marina_Beach_closeup.jpg).

Check Your Progress Exercise 1

1)	Rea	and the following statements and mark right (\checkmark) or wrong (\times):		
	i)	The Sangam literature belongs to a uniform period.	()
	ii)	The name <i>Sangam</i> literature is a misnomer.	()
	iii)	The heroic poems were composed using set phrases and expression	s.()
	iv)	The development of Tamil language and literature was a process in iso	latio	on.
2)	Wh	at do you know about literary conventions of the Tamil bardic tradition	ι?	
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17.5 SUMMARY

In this Unit you learnt about how old the Tamil literature is and what it is constituted by. You also learnt about the main features of heroic poems, their techniques of composition and the problems of dating. Another point you learnt was the level of literary and linguistic development of old Tamil. You could also understand how the works in old Tamil were classified and codified into anthologies during the *Sangam* period.

17.6 KEY WORDS

Akam	: A genre of poems dealing with subjective experiences like love.
Bard	: He who roams about composing and singing poems in praise of his patrons.
Didactic	: Poetry or text which intends to teach a moral lesson is called Didactic poetry or text.
Puram	: A genre of poems dealing with objectifiable experiences like raid or plunder.
Sangam	: An academy of scholars that collected and classified old Tamil works.
Turai	: A poetic convention indicating the thematic situation of <i>puram</i> poems.

17.7 ANSWERS TO SELF-CHECK EXERCISES

Check Your Progress Exercise 1

- 1. i) \times ii) \checkmark iii) \checkmark iv) \times
- 2. Sub-section 17.2.2, 17.3.5

17.8 SUGGESTED READINGS

Meenakshi, K. (2000). Literary Criticism in Tamil and Sanskrit. Chennai.

Peterson, I. V. (1991). Poems to Shiva: The Hymns of the Tamil Saints. Delhi.

Sivathamby, K. (1981). Drama in Ancient Tamil Society. Madras.

Zvelebil, K. V. (1973). The Smile of Murugan: On the Tamil Literature of South India. Leiden.