

The Stone Age

- Prehistoric period is that period of our ancient past for which we do not have written records. Therefore our knowledge of the cultures, which developed in this period, is based only on the materials found in the archaeological excavations.
- The earliest man living during this period made tools and implements of stone found in his surroundings. These tools helped him to hunt and gather food in order to satisfy his hunger. Since the earliest tools used by humans were made of stones, this phase of human development is known as the Stone Age.
- On the basis of the different type of tools and techniques the stages of human development in prehistoric period are described as the Palaeolithic or Old Stone Age, the Mesolithic or Middle Stone Age, and the Neolithic or New Stone Age.
- ***It is interesting to know that the first human being ever to have lived in a complete environment dates back to about 5000,000 years. He is known as the 'Peking Man'.***

The Old Stone Age (Paleolithic)

- The term Palaeolithic is derived from the Greek word 'palaeo', which means old and 'lithic' meaning stone. Therefore, the term Palaeolithic age refers to the old stone age.
- The archaeologists have dated this culture to the Pleistocene period about two million years ago.
- The Pleistocene period is the geological period of the age when the earth's surface was covered with ice, and weather was so cold that human or plant life could not survive. But in the tropical region, where ice melted, the earliest species of men could exist.
- The people lived near the hillocks and used only stone tools for hunting and their protection. However, the choice of raw material used for tool-making varied from region to region and depended upon its availability.
- The material used was quartzite available in hilly areas of different regions, basalt found in Maharashtra region and limestone in Karnataka region. On the basis of the nature of progress made in tool types and techniques the Palaeolithic cultures have been divided into three phases. These are – (i) Lower or Early Palaeolithic, (ii) Middle Palaeolithic, (iii) Upper or Late Palaeolithic.
- These phases covered a long period ranging broadly from 5,00,000 to 10,000 B.C.

Tools of the Palaeolithic Period

- The main tools of lower Palaeolithic phase were handaxes, cleavers and choppers.
- These are called chopping tools. These were rough and heavy and were made by chipping the sides of the

stones. Gradually, sharper and less heavy tools came to be made.

- The flake tools or chipped pieces were the chief tools during the middle Palaeolithic period.
- The tools of the upper Palaeolithic period primarily consisted of burins and scrapers.
- In handaxes, the butt end is broader and the working edge is narrow. These were used for cutting the trees or digging the roots.
- The cleavers had a bifaced edge. These were meant for splitting objects like the trunks of trees.
- The choppers were the massive core tools with a unifacial working edge, and were used for chopping purposes.
- The burins were like flakes or blades. These were used for engraving on soft stones, bones or rocks. The scrapers were also made of flakes. These tools served the purpose of obtaining barks of trees and skins of animals.

Palaeolithic Sites

- In the north, Kashmir Valley and the Sohan Valley in Rawalpindi (now in Pakistan) have yielded Palaeolithic tools.
- In Rajasthan, Palaeolithic tools were found at the sites along the river Luni.
- In Western India, the Palaeolithic tools were also discovered from the sites of the rivers Sabarmati, Mahi and their tributaries in Gujarat.
- In Maharashtra, the most important sites are Nevasa on a tributary of Godavari and Patne in the Tapti river system.
- In Madhya Pradesh, the rock shelters at Bhimbetka (near Bhopal) and Adamgarh in the district Hoshangabad have yielded tools from the Palaeolithic to the Mesolithic period.
- In Uttar Pradesh, the Belan Valley (the region broadly from Allahabad to Varanasi) is the most prominent site. It shows human occupation of the area continuously from the Palaeolithic period.
- Assam and neighbouring areas including Meghalaya (Garo Hills) have yielded prehistoric artifacts.
- In Tamil Nadu, an important site is Attirampakkam in Chingleput region.
- The subsistence of the Palaeolithic cultures was based mainly on hunting animals and gathering fruits and roots. In other words, the people were primarily hunters and gatherers with no settled habitation.

Middle Stone Age/ MESOLITHIC CULTURES

- In Greek 'meso' means the middle and 'lithic' means stone. Hence, the Mesolithic stage of prehistory is also

known as the Middle Stone Age.

- It was the transitional phase between the Palaeolithic and the Neolithic Ages.
- On the basis of archaeological discoveries, the beginning of the Mesolithic Age in Indian subcontinent is dated to around 10,000 BC.
- Though man was still in hunting-gathering stage, he now started fishing and some domestication of animals. The main tools they used are called the microliths or small stone tools.
- The Rock paintings found at Bhimbetka (near Bhopal) belonging to the period indicate the artistic taste of the people.

Tools of the Mesolithic Period

- The microliths used were largely made out of chipped or flaked pieces. Some of these tools have geometric forms such as triangles, lunates and trapezes.
- These tools could be tied or fixed in other objects to form an arrow or a spear.

Mesolithic Sites

- The Mesolithic cultures covered almost the entire India from north to south and east to west. Important sites of this culture are Langhnaj (District Mehsana) in Gujarat; Bhimbetka (near Bhopal) in Madhya Pradesh; Chopani Mando (near Allahabad in Belan Valley) in Uttar Pradesh; Birbhanpur (District Burdwan) in West Bengal; Sanganakallu (District Bellary) in Karnataka; and Tuticorin in southern Tamil Nadu.

New Stone Age /NEOLITHIC CULTURES

- The term Neolithic is derived from Greek 'neo' which means new, and 'lithic' meaning stone. Thus, the term 'neolithic Age' refers to the 'New Stone Age' of human culture.
- It is dated back to around 8000 BC. The term 'Neolithic' was coined by John Lubbock.
- The chief characteristic of this age was the new type of ground and polished stone tools.
- This period also marked the beginning of cultivation of plants and the domestication of animals. It led to the beginning of settled life and the growth of village settlements. The Neolithic culture had following characteristics:
 - a. Beginning of agricultural activities
 - b. Domestication of animals
 - c. Grinding and polishing of stone tools having sharper edges
 - d. Use of pottery

Neolithic Tools

- The Neolithic tools consist of the ground tools having smooth surfaces, and well rounded and symmetrical shapes.
- The grinding made the tools sharper, polished and

more effective than those in the earlier period.

- The tools of the Neolithic period included different types of axes called 'celt'.
- Sites of this period have also yielded various types of bone objects such as needles, scrapers, borers, arrowheads, pendants, bangles and earrings.

Neolithic Sites

- The Neolithic sites were spread over almost all the regions of Indian subcontinent.
- In the northwestern region Mehrgarh is a classic site in the Kachi plains of Baluchistan. The excavations at Mehrgarh have revealed the evidence of houses built by Neolithic people. These were built of sun-dried bricks. These houses were divided into small rooms.
- The evidence of cultivation of crops like wheat, barley and cotton were discovered from here.
- The important sites in Kashmir Valley include Burzahom and Gufkral. The dwelling pits, either circular or rectangular, at these sites form an important feature of Neolithic culture.
- The Belan Valley along the edge of Vindhyan plateau near Allahabad in Uttar Pradesh also has many Neolithic sites such as Koldihwa and Mahagara.
- In Bihar and mid-Gangetic Valley region Chirand is the most popular Neolithic site. Several Neolithic sites are present covering the hills of Assam, Meghalaya and Nagaland. The tools like Neolithic celts, small ground axes alongwith the remains of pottery have been found from this area.
- In South India the Neolithic settlements were discovered along the rivers Bhima, Krishna, Tungabhadra and Kaveri. Some important sites are Sanganakallu, Brahmagiri, Maski, Piklihal, Hallur in Karnataka; Utnur, Nagarjunakonda, Budihal in Andhra Pradesh; and Paiyampalli in Tamil Nadu. These sites have yielded dwelling pits alongwith the evidence of cultivation of cereals and domestication of animals. Millet (Ragi) was one of the earliest crops cultivated by the villagers of South India.

Facts ON Neolithic Age

- The most important Neolithic settlement in the Indian subcontinent lies in Mehrgarh.
- An important site in Kashmir is Burzahom, which means the place of birth and is situated 16 km north-west of Srinagar.
- The Neolithic people lived there on a lake-side in pits and probably had a hunting and fishing economy.
- The people of Gufkral (literally the cave of the potter) a Neolithic site south-west of Srinagar, practiced both agriculture and domestication of animals.
- Considerable bone implements have been discovered from Chirand, which is west of Patna on the northern side of the Ganga. Made of antlers (horns of deer), these implements have been found in a late Neolithic

set-up. Bones recovered from Chirand cannot be dated earlier than 1600 B.C. and they possibly belong to a chalcolithic phase.

- The people of Burzahom used pottery. The Burzahom domestic dogs were buried with their masters in their graves.
- Pit dwelling and the placing of domestic dogs in the graves of the masters do not seem to be the practice with neolithic people in any other part of India.
- Neolithic sites in Allahabad district particularly Koldihwa are noted for the cultivation of rice in the

sixth millennium B.C.

- Some of the important Neolithic sites or those with Neolithic layers that have been excavated in south include Maski, Brahmagiri, Hallur, Kodekal, Sanganakallu, T. Narsipur and Takkalakota in Karnataka Paiyampalli and Piklihal in Tamil Nadu.
- Pottery first appeared in this phase. Hand-made pottery is found in the early stage. Later the Neolithic people used footwheels to turn up pots. Their pottery included black-burnished ware, grey ware and mat-impressed ware.



CHAPTER 2

Proto History (The Harappan Civilization) Indus Valley Civilization

- People in the prehistoric times used tools and weapons made of stone. Later man started using metals. Copper was the first metal to be used by man for making tools. Gradually several cultures developed in Indian subcontinent which were based on the use of stone and copper tools. They also used bronze, a mixture of copper and tin, for this purpose. This phase in history is known as the Chalcolithic (*chalco*-Copper; *lithic*-Stone) period. The brightest chapter in the Chalcolithic period in India is the Harappan civilization which is also referred to as the Indus Valley civilization.
- Harappan civilization was discovered in 1920–22 when two of its most important sites were excavated. These were Harappa on the banks of the river Ravi and Mohenjodaro on the banks of the Indus.
- The first was excavated by D. R. Sahani and the second by R.D. Bannerji. On the basis of the archaeological findings the Harappan civilization has been dated between 2600 B.C–1900 BC and is one of the oldest civilizations of the world.
- It is also sometimes referred to as the 'Indus Valley civilization' because in the beginning majority of its settlements discovered were in and around the plains of the river Indus and its tributaries.
- It is the first urban culture of India and is contemporaneous with other ancient civilizations of the world such as those of Mesopotamia and Egypt. Our knowledge of the life and culture of the Harappan people is based only on the archaeological excavations as the script of that period has not been deciphered so far.

Important Sites and Other Details

CITY	REGION	RIVER	Archaeologist/ EXCAVATED BY
Harappa	Punjab	Ravi(Left bank)	Daya Ram Sahni (1921)
Mohanjodaro	Sindh	Indus(Right bank)	R. D. Banerjee (1922)
Amri	Sindh	Indus	M. G. Majumdar(1929)
Chanhudaro	Sindh	Indus	M. G. Majumdar(1931)
Lothal	Gujarat	Bhogava	S.R. Rao(1957)
Banawali	Harayana	-	R. S. Bist(1973)
Surkotada	Gujarat	-	Jagat Pati Joshi(1964)
Dholavira	Gujarat	-	Dr. J. P. Joshi and R. S. Bist
Sutkagendor	Makran Coast	(Baluchistan)	Aurel Stein(1927)

Kot Diji	Sindh	Indus(Left bank)	Ghurey(1935)
Ropar			Y. D. Sharma(1953)
Rangpur	Gujarat	Bhadar	M. S. Vats(1931)

Origin:

- The Harappan civilization did not appear all of a sudden. It developed gradually from earlier Neolithic village cultures. It is believed that the better technology to exploit the fertile plains of river Indus might have resulted in increased agricultural production.
- Scholars have concluded that advanced civilization like Indus Valley was the net result of long drawn historical events. It evolved from farming communities and pastoral settlement of North-West India that preceded the Harappan civilization and it is termed as pre-Harappan culture. It can be said with certainty that Indus valley civilization did not develop abruptly and that the civilization was indigenous. It was outcome of long period of cultural evolution. Its origin can be traced to 6th Millennium B.C. and it emerged out of pastoral and farming communities.
- Careful analysis of the available materials and new excavation reports have convinced archaeologists that the Harappan culture developed over a long period of time in and around the Indus valley region itself.

Sources of Harappan civilization:

Excavations of important sites like Harappa and Mohenjodaro and the report on such excavation act as main source of our knowledge about Harappan civilization. Scholars draw conclusions on the basis of the study of the seals, figurines and other materials remains probably used by Harappan people.

The dietary habits and practices of Harappan have been reconstructed on the basis of large volume of information that has emerged after study of charred grains and seeds excavated from different Harappan sites. Similarly much about the society, economy and religion of Harappan people is known on the basis of study of seals, terracotta, utilitarian and luxurious items used, burial practice and mention of Meluha; Sindon etc. in different literary sources.

Phases of Harappan civilization:

Harappan civilization is in fact divided into three phases:

1. Early Harappan phase (3500 BC–2600 BC) – it was marked by some town-planning in the form of mud structures, elementary trade, arts and crafts, etc.,
2. Mature Harappan phase (2600 BC–1900 BC) – it was the period in which we notice well developed towns with burnt brick structures, inland and foreign trade,

crafts of various types, etc., and

3. Late Harappan phase (1900 BC–1400 BC) – it was the phase of decline during which many cities were abandoned and the trade disappeared leading to the gradual decay of the significant urban traits.

The Harappan civilization generally referred to precisely mean Mature Harappan Culture . It is associated with emergence of large cities, use of uniform types of bricks, weights, seals, beads and pottery, planned township and long distance trade. The earlier phase of Harappan civilization precedes Mature phase and is called Early Harappan Period. It is generally associated with smaller settlements with characteristics of village. Use of copper and wheel was known and emergence of uniformities in pottery tradition, making of defensive walls and granary has been witnessed. Late Harappan period (1900 BCE onwards) shows signs of abandonment of many Harappan sites, decline in uniformity involved in town planning, craft, pottery tradition etc.

Geographical extent of the Harappan civilization:

- The archaeological excavations reveal that this culture was spread over a vast area which included not only the present day states of India such as Rajasthan, Punjab, Haryana, Gujarat, Maharashtra, Western Uttar Pradesh but also Pakistan and some parts of Afghanistan. Some important sites of this civilization are:
 - ✓ Manda in Jammu and Kashmir;
 - ✓ Shortughai in Afghanistan;
 - ✓ Harappa in Western Punjab (Pakistan);
 - ✓ Mohenjodaro and Chanhudaro in Sind;
 - ✓ Kalibangan in Rajasthan;
 - ✓ Lothal and Dholavira in Gujarat;
 - ✓ Banawali and Rakhigarhi in Haryana;
 - ✓ Daimabad in Maharashtra while Sutkagendor on the Makran Coast (near Pakistan-Iran border) is the western most site of the Harappan civilization and Alamgirpur in western Uttar Pradesh marks its eastern most limit.

The location of settlements suggests that the Har pa, Kalibangan (on river Ghaggar- Hakra generally associated with the lost river Sarawati), Mohenjodaro axis was the heartland of this civilization and most of the settlements are located in this region.

Areawise Distribution of Settlements

Sind	Mohenjodaro, Amri, Kot Diji, Tarkai Quila, Sukkur, Allahdino, Chanhudaro, Rohri, Ali Murad, Jhukar.
Baluchistan	Mehargarh, Damb Sadaat, Killi Ghul Mohmmad, Rana Gundai, Nal, Kulli, Levan, Dabarkot, Balakot.
Afghanistan	Mundigak, Shortugai

West Punjab	Harappa, Ganeriwala
Gujarat	Dholvira, Lothal, Surkotada, Bhagatrav, Rangpur, Rojadi, Desalpur
Rajasthan	Kalibangan, Siswal, Bara, Bhagwanpura, Hulas
Uttar Pradesh	Alamgirpur, Hulas, Mandi
Punjab	Ropar, Sarai Khola, Kotla Nihang Khan

Subsistence:

It is now generally believed that emergence of Harappan cities was preceded by a long period of evolution of Agricultural communities.

Radiocarbon dates indicate that people of Mehargarh were growing wheat and barley and tendering sheep's and goats in 5th millennium B.C. There were many similarities in the material, culture, beads, seals, potteries, copper objects etc. among the diverse agricultural communities living in Indus region in the early Indus period.

A process of evolution was evident in the agricultural settlements and basic crafts and the distinct Indus style itself were probably carried over from earlier regional traditions.

The most essential basis for urbanization is availability of surplus food. Harappan urbanization was no exception to this. It was based on surplus agricultural production.

Harappan subsistence system was based on its exploitation of wide range of crops, domesticated animals and wild animals provided the animal products for consumption. The dietary habits and practices have been reconstructed on the basis of large volume of information that has emerged after study of charred grains and seeds, excavated from different Harappan sites. Barley, wheat, lentils, peas, mustard, sesames, millets etc. were grown in different areas keeping in view the climate of the regions.

Finds of rice are relatively rare. At Lothal and Rangpur rice husk was found embedded in clay pottery. Animal bones at Harappan include that of domestic animals like cattle, sheep, buffalo and pig and wild species like boar, deer and gharial was also found.

Agricultural Technologies:

It is difficult to reconstruct the precise agricultural practices and the technologies used by Harappan people. However, with the help of excavated material remains like seals, terracotta, models, and other artifacts and their linking with other facts, archaeologists extrapolate about the agriculture practices and techniques employed by people during Harappan period.

After correlating furrowed field of Kalibangan, representation of bulls on seals and their terracotta

sculptures, terracotta models of plough (found at Cholistan, Banawali), it is concluded that Harappan used some sort of wooden plough .At Kalibangan fields had two sets of furrow at right angle to each other. The pattern of crossed furrow widely spaces in on direction and closely spaced in another is still followed in the areas. It suggests that two different crops were grown together. Tools of harvest have not been identified with great certainty.

The geographical location of Harappan sites warrants artificial irrigation. Traces of canals found at Shortughai (Afghanistan) availability of large number of wells and discovery of water reservoir at Dholavira suggest that arrangements for irrigation might have existed.

Important characteristic features of Harappan civilization

Facts on Town Planning

Features of Town Planning

- A great uniformity in town planning, the fundamental lay-out of prominent urban settlements exhibits apparent similarities.
- Based on '**Grid Pattern**': streets and lanes cutting across one another at right angles dividing the city into a number of rectangular blocks. Main streets ran from north to south and were as wide as 30 feet.
- Entire city complex was bifurcated into two distinct parts: the '**CITADEL**' a fortified area which housed important civic and religious public buildings including granaries and residences of the ruling class and the '**LOWER TOWN**', somewhat bigger in area and invariably located east to the former, meant for commoners.
- Evidence of fortification of the lower towns as well from a few urban centres like Surkotada and Kalibangan and evidence of division of the city into three parts instead of two from Dholavira.
- Use of standardized burnt bricks on massive scale in almost all types of constructions (an extraordinary feature of the contemporary civilizations), circular stones were used at Dholavira.
- Elaborate and planned underground drainage system. Houses were connected to the main drain equipped with manholes. Mostly made up of bricks with mud mortar. Use of gypsum and lime to make it watertight.
- Bricks culverts meant for carrying rain and storm water have also been found.
- Bricks were made in ratio of 1 : 2 : 4.

Features of Houses

- Houses were plain and did not exhibit any refinement and beauty. So far as the decorative value of the houses was concerned, they lacked it. In general they gave plain and undecorative look.
- An average house comprised a courtyard and four to six rooms, a bedrooms, a kitchen, and a well presence of

staircase gives indication of the second storey.

- Houses had side-entrances and windows were conspicuously absent. Except Lothal, where entrance were on main road and windows were found.
- Houses varied from a single-roomed tenements to houses with a number of rooms and having even a second storey.
- Floors were generally of beaten earth coated with cowdung.
- Fire-places were common in rooms. Walls were thick and square holes in them suggest of use of wooden beams. Every house was separated by another by a narrow space of 'no-man's land'.
- Staircases were usually wooden but some made up of burnt bricks have been found too. Roofs were flat.
- Doors were set in wooden frames.
- Kitchen was small in size. .

Apart from Town planning other important characteristics of Harappan civilization includes exclusive style of Arts and Crafts

Findings from Harappan sites shows/uniformity in objects like seals, beads, toys, potteries, terracotta, masks, idols and figures.

Some of these objects and their significance are given below:

Seals

Seals are most distinctive artifact of IVC. They were generally made of steatite (soft stone) and had signs, symbols and animal motifs on it.

They were used as a means of authentication and had commercial content. Seals were the greatest of artistic creation of Harappan people. They are considered as the outstanding contribution of the Indus civilization to ancient craftsmanship. They were generally square and rectangular in shape and made of steatite. They display variety of signs and symbols. This ranges from geometric patterns, replica of flora and fauna, human, semi-human forms, composite animals etc. Most frequently depicted animal on Harappan seal is Unicorn and most famous Harappan seal is 'Pashupati seal' discovered from Mohenjodara. It depicts a horned deity sitting in a yogic posture surrounded by an elephant, a tiger, a rhinoceros, a buffalo and two antelopes. John Marshall identified it as Proto-siva.

Beads and its making:

Abundant number and variety of beads have been excavated from different Harappan sites. Beads of gold, silver, copper, faience, steatite, shell, semi-precious stones like carnelian, jasper are known. However, beads made of steatite are numerous. Steatite being soft and easier to work was moulded and even micro beads were made from it.

Beads were generally manufactured from locally available raw materials. Therefore, we find abundance of shell objects excavated from coastal sites like Nageshwar, Balakot and Lothal etc.

Techniques used for bead making involved polishing, drilling, cutting, etching etc. raw material were chipped into rough shapes and then finally flaked into the final form/shape.

The material to be used for making beads was cut in different shapes and size with the help of specific stone tools. The shapes were numerous like disc shaped, spherical, cylindrical, barrel shaped, segmented. Grinding polishing and drilling was involved in the manufacture of beads.

Specialized drills have been found at Chanhudaro, Lothal and Dholavira

Etching on the surface of beads shows the technical expertise of craftsmen and it reflects their knowledge of fine art.

Moulded beads and micro beads of steatite shows the extraordinary level of knowledge possessed by Indus Valley people as far as bead making is concerned.

The centre of production is identified on the basis of availability of waste material that results in the process of manufacture of finished product. The traces of large waste pieces used for making smaller object suggest that apart from specialized centers, craft production was also undertaken in larger cities and big cities such as Mohenjodaro and Harappa.

Pottery

- Mainly two types: Plain pottery and Red and Black Pottery with decoration, the majority being the former.
- Widespread use of potter's wheel made up of wood, use of firing technique, use of kiln.
- Variety of Pleasing Design – Horizontal strips, Chess-Board Pattern, Intersecting Circles (Pattern exclusively found), Leaves & Petals, Natural Motif – Birds, Fish, Animals, Plants, Human Figure – Rare (**A Man & A Child** found from Harappa), Triangles.
- Pottery had plain bases. Few ring bases have been found.
- Mainly famous colour of pot was pink. General design was on the red base horizontally black line on pots.

Indus Script :

It is certain from the discovery of Harappans artifacts like seals that Harappan had knowledge of writing. However, Harappan script is still a mystery because it is yet to be deciphered. Thus, we do not know what language the

Harappans spoke and wrote. The inscriptions discovered so far are short. There is a consensus among scholars that Harappans used ideograms (pictography), since too many signs (around 375-400) used by them is known. It was written from right to left. The decipherment of Indus script will probably reveal much more about the civilization and add to our knowledge

Trade

- Trading network, both internal (within the country) and external (foreign), was a significant feature of the urban economy of the Harappans. As the urban population had to depend on the surrounding countryside for the supply of food and many other necessary products, there emerged a village-town (rural-urban) interrelationship.
- Urban craftsmen needed markets to sell their goods in other areas. It led to the contact between the towns. The traders also established contacts with foreign lands particularly Mesopotamia where these goods were in demand. It is important to note that various kinds of metals and precious stones were needed by craftsmen to make goods, but as these were not available locally they had to be brought from outside.
- The presence of such raw material found at sites away from the place of its origin naturally indicates it must have reached there through an exchange activity. Thus Rajasthan region is rich in copper deposits and the Harappans acquired copper mainly from the Khetri mines located here.
- Kolar gold fields of Karnataka and the river-beds of the Himalayan rivers might have supplied the gold. The source of silver may have been Jwar mines of Rajasthan. It is believed that it must have also come from Mesopotamia in exchange for the Harappan goods.
- Among the precious stones used for making beads, the source of lapis-lazuli was located in Badakshan mines in northeast Afghanistan. Turquoise and Jade might have been brought from Central Asia. Western India supplied agate, chalcedony and carnelian.
- The seashells must have come from Gujarat and neighbouring coastal areas. Timber of good quality and other forest products were perhaps obtained from the northern regions such as Jammu.
- The Harappans were engaged in external trade with Mesopotamia. It was largely through Oman and Bahrain in the Persian Gulf. It is confirmed by the presence of Harappan artefacts such as beads, seals, dice etc. in these regions. Though the artefacts from those regions are rarely found at the Harappan sites, a seal of West Asian or Persian origin has been discovered at Lothal which confirms this contact.
- Mesopotamian cities like Susa, Ur, etc. have yielded about two dozen of Harappan seals. Besides seals, other artefacts of Harappan origin which have been discovered include potteries, etched carnelian beads

and dices with Harappan features.

- The inscriptional evidence from Mesopotamia also provides us with valuable information on Harappan contact with Mesopotamia. These inscriptions refer to trade with Dilmun, Magan and Meluhha. Scholars have identified Meluhha with Harappan region, Magan with the Makran coast, and Dilmun with Bahrain. They indicate that Mesopotamia imported copper, carnelian, ivory, shell, lapis-lazuli, pearls and ebony from Meluhha.
- The export from Mesopotamia to Harappans included items such as garments, wool, perfumes, leather products and silver. Except silver all these products are perishable. This may be one important reason why we do not find the remains of these goods at Harappan sites.

Religious Beliefs And Practices

- Our knowledge on the religious beliefs and practices of the Harappans is largely based on the Harappan seals and terracotta figurines available to us.
- The Harappan religion is normally termed as animism i.e., worship of trees, stones etc.
- A large number of terracotta figurines discovered at the Harappan sites have been associated with the worship of mother goddess. Many of these represent females adorned with a wide girdle, loin cloth and necklaces. They wear a fan-shaped head dress.
- In some cases the female is shown with an infant while there is one that shows a plant growing out of the uterus of a woman. The latter type probably symbolizes the goddess of earth.
- There are many scholars who refer to the worshipping of *linga* (phallus) and *yoni* (female sex organ) by the Harappans but some are doubtful about it. Harappans' belief in a male deity is evident by the seal depicting a deity with a buffalo horned head-dress, sitting in a *yogic* posture and surrounded by animals.
- Many scholars identify him with god Pashupati (Lord of beasts) or 'Proto-Shiva' though some dispute it.
- In another instance, a deity is shown with horns and flowing hair standing nude between the branches of a *Pipal* tree and a worshipper is kneeling in front. It may represent tree worship. Animal worship also appears to be popular among the Harappans.
- The evidence of fire worship has also been found at some sites such as Kalibangan and Lothal. At Kalibangan, a series of raised brick platforms with pits containing ash and animal bones have been discovered. These are identified by many scholars as fire altars. This also shows that the Harappans living in different areas followed different religious practices as there is no evidence of fire-pits at Harappa or Mohanjodaro. The burial practices and the rituals related with them have been a very important aspect of religion in any culture. However, in this context Harappan sites have not

yielded any monument such as the Pyramids of Egypt or the Royal cemetery at Ur in Mesopotamia. Dead bodies were generally rested in north-south direction with their head

Burials practices

The Harappan disposed their dead usually by burial in pit graves. General practice was body lying on its back and head to the north. A number of ornaments and other items like clay pots, which originally might have contained food and drink, are also found in the burial pits. There are instances of graves being lined with bricks. All these indicate the stratification in Harappan society.

Decline of Harappan Civilisation

There are several theories propounded by different scholars regarding decline of Harappan civilization in general and about Harappan cities in particular. Some of the popular theories are given below:

(i) Aryan theory-

Scholars like Wheeler suggested that invasion of Aryans destroyed the Harappan civilization. Indra who has been described as Purandhara is considered as destroyer of the forts, women and children and it helps in the propagation of the theory that massacre of Harappans was result of Aryans invasion.

However, scholars like Kane points out that few scattered dead bodies cannot prove a massacre. George Dales suggest that there is no proof of Aryan invasion.

(ii) Rock Faulting

According to George Dales rock faulting could have raised natural dams and this in turn would have encroached towns. The sites in Gujarat, Punjab and Sindh show signs of inundation.

(iii) Trade

According to Shirin Ratnagar decline in external trade with western region was the reason for the collapse of civilization. The Indus people depended much on trade with Mesopotamia and other west Asian settlements. Trade was important component of Harappan economy. Therefore its decline led to decline and disintegration of the civilization.

(iv) Mismanagement

According to Walter Fairervis there was disequilibrium between urban demand and carrying capacity of land. Reduction in surplus forced Harappans to move away. Cattle remains depicted on figures and seals shows fodder needs of Mohenjodaro was not fulfilled.

Rise of population of both human and beast created seasonal stress and led to abandonment of region. Fire

bricks required lot of fuel and rise in fuel demand led to deforestation. Problems further worsened due to overgrazing by animals.

This affected the ecology and had an adverse effect on land. The precarious economic and ecological situation led to downfall of Harappan civilization in general and big cities in particular since the administrators of Harappan cities could not handle this problem of resource crunch.

Poshell says that Indus civilization did not end with the abandonment of cities. There was post Harappan culture in Gujarat, Punjab and Sindh. It did not happen instantly. Ceramics show change in culture but not an abrupt end.

Harappan civilization was so widespread that no monolithic explanation as given above seems applicable to all the settlements. It would be more realistic to say that many factors combined together were involved in decline and disintegration of Harappan civilization.

Chalcolithic Communities Of Non-Harappan India

The important non-Harappan chalcolithic cultures lay mainly in western India and Deccan. These include Banas culture (2600BC–1900 BC) in south-east Rajasthan, with Ahar near Udaipur and Gilund as its key-sites; Kayatha culture (2100BC–2000 BC) with Kayatha in Chambal as its chief site in Madhya Pradesh; Malwa Culture (1700BC–1400BC) with Navdatoli in Western Madhya Pradesh as an important site, and Jorwe culture (1400BC–700BC) with Inamgaon and Chandoli near Pune in Maharashtra as its chief centres. The evidence of the chalcolithic cultures also comes from eastern Uttar Pradesh, Bihar and Bengal. (Map 3.2) It may be noted that the non-Harappan Chalcolithic cultures though flourished in different regions they were marked by basic uniformity in various aspects such as their mud structures, farming and hunting activities, use of wheel made pottery etc. The pottery of these chalcolithic cultures included ochre coloured pottery (OCP), black-and-red ware (BRW) and has been found in the shape of various kinds of bowls, basins, spouted jars with concave necks, dishes on stand, etc.

Tools:

The chalcolithic cultures are characterised by the use of tools made of copper as well as stone. They used chalcedony, chert etc. for making stone tools. The major tools used were long parallel-sided blades, pen knives, lunates, triangles, and trapezes. Some of the blade tools were used in agriculture. Main copper objects used include flat axes, arrowheads, spearheads, chisels, fishhooks, swords, blades, bangles, rings and beads. Beads made of carnelian, jasper, chalcedony, agate, shell, etc. frequently occur in excavations. In this context, the findings from Daimabad hoard are noteworthy. The discovery includes bronze rhinoceros, elephant, two-wheeled charriot with

a rider and a buffalo. These are massive and weigh over sixty kilograms. From Kayatha (Chambal valley) also copper objects with sharp cutting edges have been recovered. These reflect the skills of the craftsmen of the period.

Subsistence Economy:

The people of these settlements subsisted on agriculture and cattle rearing. However, they also practised hunting and fishing. The main crops of the period include, rice, barley, lentils, wheat, jawar, coarse gram, pea, green gram, etc. It is to be noted that the major parts of this culture flourished in the zone of black soil, useful mainly for growing cotton. Skeletal remains from the sites suggest the presence of domesticated and wild animals in these cultures. The important domesticated animals were cattle, sheep, goat, dog, pig, horse, etc. The wild animals included black buck, antelope, nilgai, barasinga, sambar, cheetah, wild buffalo and one-horn rhino. The bones of fish, water fowl, turtle and rodents were also discovered.

Houses and Habitations:

The Chalcolithic cultures were characterised by rural settlements. The people lived in rectangular and circular houses with mud walls and thatched roofs. Most of the houses were single roomed but some had two or three rooms. The floors were made of burnt clay or clay mixed with river gravels. More than 200 sites of Jorwe culture (Maharashtra) have been found. The settlements at Inamgaon (Jorwe culture) suggests that some kind of planning was adopted in laying of the settlement.

Key words

Animism

Worshipping of plants, stones and natural phenomena with belief that these too have life and thus have spiritual importance.

Beads

A small piece of stone pierced in the middle for stringing.

BRW

black-and-red ware, a kind of pottery found at the Chalcolithic sites.

Carbon Dating (C-14)

It is also called C-14 dating. It is a method of measuring dead and decay matters

Chronology

Method of computing time.

Citadel	Citadel was the higher portion of the Harappan towns and was located on the western side.	Pastoral Nomadic	A social organization associated with sheep, goats, and cattle herders who move from one place to another in search of pastures.
Epigraphy	The study or science of epigraphs or inscriptions, especially of ancient inscriptions.	Paleography	The study of old writings used in inscriptions and other old records is called paleography; study of development of scripts is called paleography.
Excavation	The art of digging an ancient site.		
Fertility cult	The system of worship in which the reproductive aspects of nature of mankind is emphasized. The worship is expected to ensure the production of abundant crop or children	Pictography	scripts which uses pictures of different symbol
		Script	System or style of writing ; the letters or characters used in writing by hand
Fire Altars	Brick lined pits found in Kalibangan. They contain ash and animal bones. In many societies fire was worshipped.	Seal	A piece of soft stone (steatite) or some other material on which some designs, signs, symbols, motifs etc. is carved. It is used as a means of authentication.
Granary	The storehouse for grains		
Ideograms	characters or a symbol conveying ideas.	Sealing	The object carrying the stamp of the seal.
Lapislazuli	a bright blue rock from which lazurite used in jewellery is obtained. During the Harappan period this was found in Afghanistan region.	Silt	Material deposit from a flowing river to bank.
		Tectonic uplift	Relating to process of elevation which elevates large area of earth's surface
Mesopotamia	the land between two rivers Euphrates and Tigris in Iraq.	Terracotta	A composition of clay and sand used for making statue. It is baked in fire and is brownish red in colour.
Mound	Is an elevated portion of land covering remains of old habitations.	Unicorn	A mythical creature resembling a horse, with a single horn in the center of its forehead: often symbolic of chastity or purity
Numismatics	The study of coins is called Numismatics. It enables us to reconstruct the history of ruling dynasties of a particular period.		
OCP	Ochre coloured pottery.		

Points to remember

Seals

- Made of steatite (Soft stone), Sometimes of Copper, Shell, Agate, Ivory, Faience, Terracotta.
- Size – ½ inch to 2½ inch.
- Displays symbols – Circles, Crosses, Dots, Swastiks, Leaves of the Pipal tree.
- Most frequently depicted animal – Unicorn.
- Other animals : Elephant, Tiger, Rhino, Antelope, Crocodile.
- No bird were depicted on Harappan seal.
- **Pashupati Seal** has been found from Mohanjodaro.
- **'Persian Gulf Seals'** have been discovered from Lothal.

Technical Achievements

- Lost-Wax technique, used for making bronze images.
- Kiln Bricks – Evidence of Kiln has been found at Rakhigarhi
- Water Harvesting System—Dholavira
- For small measurement binary system and for big measurement decimal system were used in Harrappa.

Findings and Evidences

Harappa	Cemeteries 'H' & 'R 37'; Single – roomed barracks; Bronze models of 'ikkas' and 'bullock-carts'; Granaries; Granary outside citadel; Working platform
Mohanjodaro	Fragment of Woven cloth; Temple – like structure; Human skeletons huddled together indicating violent death/ massacre; Pasupati seal; Seal depicting Mother Goddess with a plant growing from her womb; Devastation by flood; Collegiate building; Assembly Hall ; Granaries;. Steatite figure of a bearded man; Bronze dancing girl (11.5 cm); Cylindrical seals of Gilgamesh Mesopotamian type, three in number; Terracotta figurine of a horse; Amulets and Talisman
Kalibangan	Furrow mark; Cities where lower towns were fortified; Cities having both proto – Harappan and mature Harappan evidences and Harappan Cultural Phases; Camel bones
Lothal	Dockyard; Evidence of Rice; Evidence of Coffin Burial; Fire altars; Terracotta Models of ships/boats; Houses having front entrances; Bronze rod/stick with measure marks; Painting on a jar resembling the story of the cunning fox of panchtantra; Harappan game similar to chess ; Devastation by flood ; Bead-making factory; Persian Gulf seals; Impressions of cloth on sealing; Evidence of joint burial
Surkotada	Cities where lower towns were fortified

Chanhudaro	City without a citadel; Small pot (Probably an ink-pot); Bronze models of 'ikkas' and 'bullock-carts'; Devastation by flood; Bead-making factory
Dholvira	City divided into three parts; City having a middle town apart from the citadel and the lower town; Signboard/Signage
Banwali	Cities having both proto – Harappan and mature Harappan evidences and Harappan Cultural Phases; Fire altars
Rangpur	Evidence of Rice; Absence of mother goddess figurines
Surkotada	Remains of Bones of Horse; Evidence of pot-burial
Rakhigarhi	Fire altars; Furnace
Daimabad	Copper rhinoceros; Copper chariot; Copper Elephant; Stone cut water reservoir
Alamgirpur	Absence of seals

Religion

Predominance of Mother Goddess, denotes people's faith in fertility cult; Male deity – Pasupati Shiva; Animal worship – Unicorn bull and humped bull; Tree worship – Pipal; Fertility Cult – Phallus worship; Nature worship; Amulets and Talisman (Mohanjodaro); Sacred bath – Water Cosmology

Burials

Bodies were extended in north-South direction; Cemeteries of Harappa, Mohanjodaro, Lothal, Kalibangan, Rakhigarhi and Ropar located around the outskirts; Three forms of burials – complete burial, Fractional burial and post-cremation burial; General practice was body lying on its back and head to the north; Coffin burial from Harappa; Pot burial from Surkotada (Sacrophagus tradition); Double burial from Lothal; Pit burial from Kalibangan; Cemetery –R-37 (Harappa); Cemetery – (Post Harappan)

Crops

Wheat & Barley; Peas, Rai, Linseed, Mustard, Cotton, Dates; No evidence of sugarcane; Rice was produced in jarat region (Rice husk has been found from Lothal & Rangpur).

Animals & Birds

Elephants, Cats, Dogs, Camels, Asses, Buffalo, Dear, Rhino, Goat, Unicorn, Pigs, Tortoise, Fowls, Ox, Fish, Stag, Antelope, Partridge.

Metals

Copper, Silver, Gold, Jade, Lapis Lazulli, Lead. Tin, Ingot (Lead+Silver), Electrum (Silver & Gold)

Rarities

Rice, Horse, Round Cylindrical seals, Plough, Whetstones.

Absence

Iron, Temple, Fork, Hair dyes, Round columns, Silk fabrics, Swords, Shields, Metallic Money, Water closets Brick-Lamps, Footwear's, Linen, Wool, Golden finger rings, Indigenous, Gradual decline.

Item of Imports

Gold, Silver, Copper, Tin, Lapis Lazuli, Amethyst, Agate, Jade, Shells.

Items of Exports

- Agricultural products Wheat, Barley, Peas, Oil Seeds
- Finished Products Cotton goods, Pottery, Beads, Shells, Terrocotta Products, Ivory Products.
- The four Harappan sites in descending order (the first being the largest) are:
 - ✓ Mohenjodaro in Sind (Pak)
 - ✓ Ganeriwala in Bahwalpur (Pak)
 - ✓ Harappa in West Punjab (Pak)
 - ✓ Dholvira in Gujarat (India).
- The Harappan settlement having potential to become largest settlement in India is Rakhigarhi in Haryana.
- Crossed furrows, widely spaced in one direction and closely spaced in other, gram or seasmum sown at the former and mustard at the later have been found at Kalibangan
- The 'great bath' of Mohenjodaro measures 12 x 7 x 3 metres.
- Harappan wheels were solid without spokes.
- Harappan Weight & Measures systems were as follows:
 - ✓ Of lower denomination – followed Binary system – 1, 2, 4, 8, 64 ... 160
 - ✓ Of higher denomination – followed Decimal system – 16, 320, 640, 1600, 3200
- The largest number of settlements are in Ghaggar – Hakar valleys.
- Principal Harappan Crops and the areas of their distribution are as follows:
 - ✓ Barley – Rajasthan
 - ✓ Wheat & Barley – Sind & Punjab
 - ✓ Rice & Millet – Gujarat

The Vedic Age

Geographical Areas Known to the Aryans

Rig Vedic Period

- Earlier settlement 'Brahmavarta' the region between the Satluj and Yamuna, corresponds to Punjab and its adjoining areas.
- The core region was 'Sapta-Sindhava', the land of the Indus and its principal Western tributaries Gomati (Gomal), Krumu (Korram), Kubha (Kabul) and Suvastu (Svat) and eastern tributaries the five rivers of Punjab besides the valleys of Saraswati and Drishadvati corresponding to Eastern Afghanistan and West & East Punjab.
- No Knowledge of sea.
- Knowledge of the Himalayas. (**Himvant**)
- Ninth Mandal describes about **Mujavant**

Later Vedic Period

- Satpatha Brahmn describes the story of Videh Madhav who reached to the bank of Sadanira (Gandak).
- Expansion to parts of eastern Rajasthan, eastern UP and Bihar
- Knowledge of Gangetic Valleys
- Knowledge of some more rivers like Narmada, Ganga, Gandak, Chamba.
- Mention of Seas.
- Mention of the Vindhayas.

Vedic Literature

The Vedas

- Veda means "to know".
- Called "apaurusheya" meaning not created by human beings that means divine.
- Known as "Shruti" meaning to hear. These have been passed on from one generation to another through verbal transmission.
- They are four in number, (Rig, Sam, Yajur and Aharva)
- They are collection of hymns, prayers, charms and sacrificial formulae.

Rig Veda

1. Oldest of all the Vedas; Contains 1017 Suktas; Contains 11 Balakhilya, that makes the total no. of Suktas 1028; Contains 10 'Mandals'
2. The oldest Mandalas are II, III, IV, V, VI and VII known as family books on account of their composition being ascribed to various families of sages.
3. The mandalas II to VII are ascribed to Gritsamada, Viswamitra, Vamadeva, Arti, Bhardwaja and Vasistha.
4. The latest mandalas are I, VIII, IX and X.
5. The IX mandala is completely devoted to the vedic God soma.
6. Brahmanas of Rigveda

- ✓ Aiterya Brahmana
- ✓ Sankhayana Brahmana
- Upanishads of Rigveda
 - ✓ Aitareya Upanishads
 - ✓ Kaushitaaki Upanishad

Priest related to Rigveda – Hotri

Upveda of Rigveda is – Ayurveda.

Sam Veda

1. Collections of hymns taken from the Rig Veda and set to tunes for the purpose of singing; Only 75 hymns are original; Known as the 'Book of chants';
2. Hymns are meant for singing at Soma sacrifices
3. Sung by a particular type of priests known as Udgatari.
4. Consists of 1810 (1549, omitting the repetitions)
5. Brahmanas
 - ✓ Jaiminiya Brahmana
6. Upanishads
 - ✓ Chanddogya Upanishad describes about Lord Krishana
 - ✓ Kena upanishad/Talavakara Upanishad.
- Upveda of Samveda is Gandharveda.

Yajur Veda

1. Collection of rituals for performing different sacrifices; Recited by the priests known as Adhvaru; Consists of 40 chapters; The only veda party in prose.
2. Divided into two parts Krishna/Black Yajurveda (commentary in prose) and Sukla/White Yajurved (sacrificial formulae and rituals)
3. Brahmanas of Yajurveda
 - a. Tattiriya Brahmana – Related with Krishna Yajurveda.
 - b. Satapatha Brahmana – Related with Sukla Yajurveda; The lengthiest of all the Brahmanas; The most important of all the Brahmanas.
4. Upanishads of Yajurveda
 - ✓ Tattiriya Upnishad
 - ✓ Brihadaranyaka Upanishad is the largest one
 - ✓ Kathad Upanishad- describes story of Nachiketa.
 - ✓ Isa Upanishads
 - ✓ Svetasvatara Upanishad
 - ✓ Upveda of Yajurveda – Dhanurveda.
 - ✓ Related priest – Adhwariyu.

The Atharva Veda

1. Collection of charms, magic and spells; Preserves many popular cults and superstitions, contains non-Aryan elements (folk elements)

2. Contains 711/731/760 hymns.
3. Contains 20 Kandas or books; The Knadas 18, 19 and 20 are later additions.
4. The hymns are meant for warding off evils & demons, winning over friends and gain material success.
5. No Brahmanan belongs to Atharvaveda.
6. Upanishads of Atharvaveda
 - ✓ Mundaka Upanishad-mentions 'Stya Mev Jayate'
 - ✓ Prasana Upanishad
 - ✓ Mandukya Upanishad
 - ✓ Upveda of Atharvaveda – Shilpveda.

The Brahmanas

1. Elaborate prose texts.
2. Contain explanation of the hymns, prayers, charms and sacrificial formulae.
3. A kind of theology and philosophy of the Brahmanas (the priestly class).
4. Satapath Brahman is the most famous Brahman. It describes the story of vidēh madhau and agricultural rituals.

The Aranyaka

1. Literal meaning is forest; Known as forest books; Deal with mysticism, moral values and philosophical doctrines.
2. Meant for the ascetics and hermits living in the forests.
3. Give emphasis on meditation.
4. Opposed to sacrifices, formulae and rituals.
5. The most famous Aranyaka is vrihadaranyaka.

The Upanishads

1. Literal meaning to sit near the feet of the teacher means to learn.
2. Deal with philosophy, metaphysics
3. Known as "vedānta" meaning the end of the vedas" for they denote the last phase of the vedic period and reveal the ultimate aim of the vedas.
4. They are 108 in number.
5. Upanishads mainly describe about the Atma and Parmatma and about Salvation.
6. The earliest upanishads are "Brihadaranyaka" and "Chanddogya" written in prose.
7. The later upanishads like "Katha" and "Svetasvatara" are written in verse form.
8. The pivot of their philosophy is realization of "Brahman", as the ultimate reality of the universe and the recognition that the individual soul is identical with that and attainment of salvation in this recognition.
9. Advocates salvation through knowledge (Jānan Marga) / realisation rather than works or faith.

Vedic Polity

The cities of the Harappan Culture had declined by 1900-1800 B.C.E. Around 1500 B.C.E. this period, the speakers of Indo-Aryan language, Sanskrit, entered the north-west

India from the Indo-Iranian region. Initially they would have come in small numbers through the passes in the northwestern mountains. Their initial settlements were in the valleys of the north-west and the plains of the Punjab. Later, they moved into Indo-Gangetic plains. As they were mainly a nomadic people, they were mainly in search of pastures.

The period between 1500 B.C.E and 600 B.C.E is divided into the Early Vedic Period or Rig Vedic Period (1500 B.C.E -1000 B.C.E) and the Later Vedic Period (1000 B.C.E -600 B.C.E).

Original Home of the Aryans

- The original home of the Aryans is a debatable question and there are several views. Different scholars have identified different regions as the original home of the Aryans. They include the Arctic region, Germany, Central Asia and southern Russia. Bala Gangadhar Tilak argued that the Aryans came from the Arctic region on astronomical calculations. However, the theory of Central Asia/Southern Russia appears to be more probable and widely accepted by historians. From there, the Aryans moved to different parts of Asia and Europe. They entered India in about 1500 B.C.E and came to be known as Indo-Aryans. They spoke the Indo-Aryan language, Sanskrit.

Original home of the Aryans: Viewpoints

a.	Sapta Sindhu Region	- A.C.Das
b.	Sapta Sindhu Region	- Sampurnanand
c.	Central Asia	- Max Mullar
d.	Arctic Region	- B.G.Tilak

THE EARLY VEDIC POLITY

- The basic unit of political organization was kula or family. Several families joined together on the basis of their kinship to form a village or grama. The leader of grama was known as gramani. A group of villages constituted a larger unit called vis. It was headed by vishayapati. The highest political unit was called jana or tribe. There were several tribal kingdoms during the Rig Vedic period such as Bharatas, Matsyas, Yadus and Purus.
- The chief social unit of the Aryans was known as jana. The chief of this unit was the political leader called rajan. The main function of the chief was to protect the jana and cattle from the enemies. He was helped in his task by the tribal assemblies called sabha, samiti, vidatha, gana and parishad.
- Out of these sabha and samiti were the most important assemblies. The former seems to have been a council

of elders and the latter, a general assembly of the entire people.

- All aspects of life were discussed in these assemblies. These may include wars, distribution of the spoils of wars, judicial and religious activities etc. Thus these assemblies in a way limited the powers of the chiefs.
- The post of the chief was not hereditary. The tribe generally elected him. Though the succession in one family was known but that was not based on the rule of primogeniture (i.e., the eldest son acquiring the position).
- The *purohita* assisted and advised the chief on various matters. Other than the *purohita*, there were a limited number of other officials who assisted the chief in the day-to-day tribal affairs.
- *Senani*, *kulapa*, *gramani*, etc. are some of the functionaries which find mention in the *Rigveda*.
- The *sena* or army was not a permanent fighting group and consisted of able bodied tribesmen who were mobilized at the time of the wars.
- *Takshan*, the carpenter and *rathakara*, the chariot maker were responsible for making chariots.
- There is no official mentioned as a collector of taxes. The people offered to the chief what is called *bali*. It was just a voluntary contribution made by the ordinary tribesmen on special occasions. All this shows that the early Vedic polity was an uncomplicated system based on the support and active participation of all the tribesmen. This situation, however, changed during the later Vedic phase.

POLITY IN LATER VEDIC PHASE

- The Aryans further moved towards east in the Later Vedic Period. The *Satapatha Brahmana* refers to the expansion of Aryans to the eastern Gangetic plains. Several tribal groups and kingdoms are mentioned in the later Vedic literature. One important development during this period is the growth of large kingdoms.
- Many *jana* or tribes were amalgamated to form *janapadas* or *rashtras* in the later Vedic period. Hence the royal power had increased along with the increase in the size of kingdom.
- The changes in the material and social life during the later Vedic period led to changes in the political sphere as well.
- The nature of chiefship changed in this period. The territorial idea gained ground. The people started to lose their control over the chief and the popular assemblies gradually disappeared.
- The chiefship had become hereditary.
- The idea of the divine nature of kingship gets a mention in the literature of this period. The *brahmanas* helped the chiefs in this process.
- The king performed various rituals and sacrifices to strengthen his position. They include *Rajasuya* (consecration ceremony), *Asvamedha* (horse sacrifice)

and *Vajpeya* (chariot race). The kings also assumed titles like *Rajavisvajanan*, *Ahilabhuvanapathi*, (lord of all earth), *Ekrat* and *Samrat* (sole ruler).

- In the later Vedic period, a large number of new officials were involved in the administration in addition to the existing *purohita*, *senani* and *gramani*. They include the treasury officer, tax collector and royal messenger. At the lower levels, the administration was carried on by the village assemblies.
- The importance of the *Samiti* and the *Sabha* had diminished during the later Vedic period.
- As the chiefs became more powerful, the authority of the popular assemblies started waning. The officers were appointed to help the chief in administration and they acquired the functions of the popular assemblies as main advisors.
- A rudimentary army too emerged as an important element of the political structure during this period. All these lived on the taxes called *bali*, the *shulka*, and the *bhaga* offered by the people.
- The chiefs of this period belonged to the *kshatriya* varna and they in league with the *brahmanas* tried to establish complete control over the people in the name of *dharma*.
- However, all these elements do not show that a *janapada* or territorial state with all its attributes such as a standing army and bureaucracy had emerged in the later Vedic period but the process has started and soon after the vedic period in the sixth century BCE. we notice the rise of sixteen *mahajanpadas* in the northern India.
- *Kuru* and *Panchala* kingdoms flourished in the beginning. *Parikshat* and *Janamejaya* were the famous rulers of *Kuru* kingdom. *Pravahana Jaivali* was a popular king of the *Panchalas*. He was a patron of learning.
- After the fall of *Kurus* and *Panchalas*, other kingdoms like *Kosala*, *Kasi* and *Videha* came into prominence.
- *Janaka* was the king of *Videha* with its capital at *Mithila*. His court was adorned by scholar *Yajnavalkya*.
- *Magadha*, *Anga* and *Vanga* seem to be the easternmost kingdoms.

Name of Political Functionaries

Purohita	Priest
Akshavapa	Companion of the king of dicing
Bhagadugha	Collector of Taxes
Govikarta	King's companion in chase
Kshattria	Chamberlain
Mahisi	Chief queen
Palagal	Friend and entertainer of the king
Parityaktri	The discarded Queen
Purpatis	Commanders of mud forts

Rathakara	Chariot maker
Ratnins	General term for higher functionaries, viz., purohita, senani, gramini
Sangrihitri	Treasurer
Senani	Commander – in – Chief
Suta	Charioteer
Takshan	Carpenter
Vivata	The dearest Queen
Vrajpati	Head of the pasture lands

- Gosthi – meeting
- Gotra- Cow pen
- Gvayuti – measurement of distance
- Pani – people having cattle wealth (traders)
- Sala – House
- Sardha – Tribal militia
- Vrata - Tribal militia

Rig Vedic and Later Vedic Religion

Rig Vedic Period

The early Vedic religion was naturalistic. The absence of temples and idols during Vedic period is could easily be understood under this perspective. The failure of the Aryans to understand and explain the various natural phenomena made them personify the natural forces as god.

The characteristic feature of this Rigvedic religion is that the deity supposed to preside over a particular aspect of nature was regarded at the time of its invocation as the greatest and highest.

Henotheism or Kathenostbeism was the core of the Vedic religion. Henotheism or Kathenotheism, literally means belief in single gods, each in turn standing out as the highest. It pertains to a belief in one god, supreme or specially venerated as the god of one's household, tribe and the like, but not the only god—a stage between polytheism and monotheism.

Important Divinities

In this period the gods are usually stated to be thirty three in number, divided into three groups, corresponding to the three divisions of the universe, namely terrestrial (*prithvisthana*), atmospheric or intermediate (*antarikshasthana or madhyamasihana*) and celestial (*dyusthana*).

Prithvi, Agni, Soma, Brihaspati and the rivers belong to the first order. Indra, Rudra, Vayu, Vata, Parajanya and Matarisvan belong to the second order and Dyaus, Mitra, Surya, Savitri, Pushan, Vishnu, the Adityas, Usha's and the Asvins to the third order. This division is overlapping and not clear-cut as Agni and Prithvi are assigned to all the three spheres; Ushas to the terrestrial as well as the aerial spheres; and Varuna, Yama and Savitri to the aerial as well as the celestial ones.

Indra or Purandhara was the most important god of the Rig Vedic period (250 Rig Vedic hymns are devoted to him). He plays the role of the warlord and is also considered to be the rain god. He is a warrior and king, through whose exploits the world has been ordered and who continues to be invoked to battle all those forces, both human and supernatural, that prevent Aryan prosperity.

Various types of Royal Ceremonies

Abhisheka	Be sprinkling ceremony
Aindra Mahabhishekha	A sacrifice meant for providing the king superiority and supermacy over all kings and making him 'Ekarat', the sole ruler. Aswamedha is associated with it.
Aswamedha	Literal meaning 'horse sacrifice'. It was meant for extending the domain of the king and providing him a status of 'Chakravartin' and bringing about fertility and prosperity of his kingdom. A special feature of his ceremony is sacrifice of the horse. It lasted for a year.
Punar- Abhisheka	A ceremony of renewed consecration which made the king eligible for all kinds of royal dignity
Purushmedha	Extreme and dreadful form of sacrifice in which a man was allowed to enjoy himself for a during year which all his wishes and were fulfilled and at the end of the year he was sacrificed.
Rajasuya	Royal consecration (accession to throne)
Vajapeya	Literal meaning drink of strength. A kind of rejuvenation ceremony. It strengthened the status of the king among his subjects. Chariot race (17 chariots) was an important feature of it.

Tribes Mentioned in the Rig Veda

Bhartas, Tritsu, Purus, Matsayas, Krivis, Turvasas, Yadus, Druhyus, Anus, Srinjayas, Pakthas, sivas, Bhalanases, Alinas, Visanins, Aja (NA), Sigrus (NA), Yakusus (NA), Sinyus (NA), Pisacas (NA), Kikatas (NA)

Vedic Period (Important Terms)

- Duhitri – daughter
- Gana - Tribal militia
- Gavisti – war
- Godhara – guest
- Godhuli – evening
- Gomat – a wealthy person

Agni was the second most important god (200 Rig Vedic hymns are devoted to him). He is the fire god and is considered to be the intermediary between the gods and the people. He is the priest of the gods and the god of the priests. In the *Rig Veda* he is second only to Indra in prominence. He has three forms: terrestrial as fire, atmospheric as lightning, and celestial as the sun. Thus, his function as the sacrificial fire of the priests serves as a kind of liaison between man and the gods carrying to the gods the oblations that the Brahman priests pour into the fire.

Varuna personified water and was supposed to uphold the *Rta* or natural order. As the administrator of the cosmic law (*Rta*), he regulates all activities in this world. He is, therefore, rightly called the world sovereign. This upholder of cosmic order is also regarded as the lord of human morality.

Soma was the god of plants. An intoxicating drink was named after him. On the basis of the number of hymns addressed to him, Soma is the third most important deity in the *Rig Veda*, after Indra and Agni. The *soma* sacrifice is the main feature of the ritual of the *Rig Veda*, and this is reflected by the fact that all but 6 of the 120 hymns to Soma have been collected in one book (*mandala IX*) whereas the hymns to the other gods are scattered throughout the other nine books of the *Rig Veda*.

No one knows what the *soma* plant was. Whatever the *soma* plant was, it produced an intoxicating drink that was, however, distinguished from *sura*, wine. The most important application of its intoxicating power in the *Rig Veda* is to fortify Indra, the pre-eminent *soma-drinker*, for his battles against Vritra and other demons.

During Later Vedic Period new gods like Prajapati (the creator), Vishnu (the preserver and protector of the people) and Rudra (god of animals) emerged and their importance grew at the cost of Indra and Agni (Rig Vedic gods). Special deities emerged for some of the social classes, for example Pushan (protector of cattle) for the Shudras.

There was a clear-cut male domination even in the divine pantheon during both the periods.

Mode of Worship

The Rig Vedic period was marked by recitation of prayers and offering of sacrifices both at the individual and collective levels. The offerings (such as grain, vegetables, flesh, ghee, and so on) were not accompanied by any ritual or sacrificial formulae.

In the later Vedic period there was a change in the mode of worship. The importance of prayers declined and that of sacrifices increased. Sacrifices involved the killing of

animals on a large scale and were accompanied by formulae meant to be pronounced carefully by the sacrificer.

In both periods people worshiped gods for material benefits and not for spiritual upliftment.

Sacrifices were elaborately developed and systematised, and for this, a regular science of sacrifice evolved in later Vedic period. The sacrificial ritual was gathering around it a mass of elaborate detail with the result that it came to be looked upon as a sort of machine in which every part must tally with the other for its successful operation. The slightest discrepancy in the performance of even a minute detail was believed to render the sacrifice devoid of its efficiency.

Priesthood became a profession and hereditary one. The *yajamana* (sacrificer) had practically nothing to do but to give liberal fees to these priests.

A formidable array of priests, divided into four groups headed by four chief priests, was required for the correct performance of the extremely complicated and elaborate ritual. The chief priests were *hotri* (the invoker), *udgatri* (the chanter), *adhvaryu* (the performer) and *brahmin* (the supervisor).

There was a lot of emphasis on rituals and sacrifices.

Vedic Deities

Aditi	Mother of gods. Adityas were her sons. The number of Adityas is 12 as Varuna, Mitra, Aryaman, Indra, Savitri, Pushan etc. They represented eternal forces. A mysterious and tenuous figure.
Agni	Fire-god (Sun of Earth and Heaven (Dyaus)) Symbolised the 'vital spark' Mediator between god and the humans Helped Indra in the destruction of the Purs Helped in clearing the jungles and known as Pathikrit God of the priests who deal with him at the fire sacrifices. Also the god of the home, for he dwells in the domestic hearth. Wife of Angi is Swaha. 200 hymns are devoted.
Apasara	Celestial Dancers.
Aranyani	Nature goddess of little importance Forest goddess

Asvins	Husband of Surya Twin sons of Vivasvat. Known as the physician of the gods and were capable Nasatayas of bestowing youth on man. Gods of morning. Precede Ushas each morning in their golden car, drawn by horses or birds.
Brahma	Lord of creation
Brihaspati	God of prayer
Dyaus	Father god Personified heaven Parent of other divinities
Indra	War-God and Weather-God Associated with storm and thunder His wife is Indrani His white elephant is Airavata, in Puranic literature. Also known as Purandra or breaker of forts. Two hundred and fifty hymns are devoted to him Responsible for causing rainfall.
Maruts	Spirit of storm and thunder. Helped Indra against the demon Vritra. Sons of Rudra.
Mitra	God with some solar characteristic God of views and compacts
Prajapati	The creator god. The lord of beings. occupied the supreme position in later vedic age.
Prithvi	Personification of the Earth Symbolised as cow. Usas were daughter and Agni, Indira, Dura and Saviter were Sons.
Ratri	(Spirit of night)
Ribhus	Aerial dwarfs.
Rudra	The howler, amoral, an archer – god. Depicted as a rowdy man of wild temper an object of fear and horror. Robber god and lord of thieves. Guardian of healing herbs.
Sarswati	River
Savitri	Personified the sun in its morning and evening aspects. Known as the generator or the stimulator. Commanded Night.
Soma	God of plants Patron deity of Brahmins Entire ninth mandala of the Rigveda is addressed to him.
Sraddha	Faith
Surya	Chief sun god regarded as Divine Vivifier. Moves according to fix laws. Son of Dyaus. (v) Gives permanance and stability to Earth and nourishes the moon. In due course of time he absorbed Savitri and Vivasvat.

Tavistri	God of magic powers. Sons of Dyaus. Source of the strength of gods. helped Indra. Made Indra's Vajra. Maker of chariots, weapons etc.
Usas	The goddess of dawn. Daughter of Dyaus. Linked to a bride or to wife whose beauties seem greater every morning. Brings wealth and like to all. Her chariot is drawn by 7 cows.
Varuna	God of cosmic order and the universal monarch the personified water Ethically the highest Pure and Holy
Vayu	Wind – God
Vidyadhar	Celestial musicians
Vishnu	Minor deities in vedic items God having solar characteristic. The preserver and protector of the people
Vivasvat	Worshipped as rising sun. (ii) married the daughter of Tvashtri, Saranyu. Supposed to be the father of two pairs of twins, the Asvins and Yama & Yami.
Yama	God of the dead Guardian of the "World of Fathers".

Six Vedangas

The Vedangas were considered important for understanding Vedas but they are not included in vedic literature.	
A. Siksha	Phonetics/Pronunciation, Yaska wrote Siksha Sastra.
B. Chhandas	Metre (Pingal wrote Chhanda Sastra)
C. Vyakarana	Grammar, Panini wrote Astadhyayi
D. Nirukta	Etymology (Explanation of words)
E. Jyotisha	Astronomy, No text is available on vedanga Jyotisa.
F. Kalpa	Sacrificial rituals
	Dharm Sutra, Sraut Sutra, Grihya Sutra, (Sutra depicts about geometry)

The first two were required for reading the vedas, the third and fourth for understanding the vedas and the fifth and the sixth for the implementation of the sacrifice.

Four Upavedas

a. Dhanurveda	Archery/Warfare
b. Gandharvaveda	Music

c. Shilpaveda	Sculpture/Architecture
d. Ayurveda	Medicine/Life

Vedas – Ritual Priests

1. Rig veda – Hota
2. Samveda – udgata
3. Yjurveda – Adhavaryn
4. Atharva Veda – Brahma

Aryan Priests

1. Hotri -Invoker, priest well-versed in the Rigveda.
2. Udgatri -Chanter, priest well-versed in the Samveda.
3. Adhavaryu -Performer of Yajna, priest well-versed in Yajurveda.
4. Brahma -Atharva Veda.
5. Ritvik -Supervised the whole sacrifice.

Twelve Ratnins

12 political functionaries who formed a king of king's council in the Later Vedic Period. Some of them were recruited from the non-Aryans also. Out of a twelve ratnins, three happened to be women. The following is the list of ratnin:

Purohita, Rajnya, Mahisi, Parityaktiri, Senani, Suta, Gramini, Kshta, Samgrahitr, Bhagadugha, Aksavapa, Govikarta.

EARLY VEDIC ECONOMY

- The Rig Vedic Aryans were pastoral people and their main occupation was cattle rearing. Their wealth was estimated in terms of their cattle.
- They reared cattle, sheep, goats, and horses for purposes of milk, meat and hides. Scholars arrive at this conclusion after analyzing the literary evidence in the *Rigveda*.
- A large number of words are derived from the word *go* meaning cow.
- A wealthy person was known as *gomat* and the daughter called *duhitri* which means one who milks the cow.
- The word *gaveshana* literally means search for cows, but it also means battle since many battles were fought over cattle.
- The cows were thought of as providers of everything.
- Prayers are offered for increase in the number of cattle. All the above and many more references show that cattle breeding was the most important economic activity of the Rigvedic Aryans.
- The evidence for agriculture in comparison with pastoral activities in the early portions is meager and mostly late insertions. A few references show that they had knowledge of agriculture and practiced it to supplement their food requirements. They produced *yava* (modern *jau* or barley), which was rather a generic word for cereals. Apart from cattle-rearing and small-scale cultivation, people were engaged in many other

economic activities.

- Hunting, carpentry, tanning, weaving, chariot-making, metal smeltry etc. were some such activities. The products of these activities were exchanged through barter. However, cows were the most favoured medium of exchange.
- Carpentry was an important profession and the availability of wood from the forests cleared made the profession profitable. Carpenters produced chariots and ploughs.
- Goldsmiths were active in making ornaments.
- The potters made various kinds of vessels for domestic use.
- In the later times, gold coins called *nishka* were used as media of exchange in large transactions.
- The priests received cows, horses and gold ornaments as fees for performing sacrifices.

THE LATER VEDIC PHASE

- During later Vedic phase, agriculture became the mainstay of the Vedic people. Many rituals were introduced to initiate the process of agriculture. It also speaks of ploughing with yokes of six and eight oxen.
- The buffalo had been domesticated for the agricultural purposes. This animal was extremely useful in ploughing the swampy land. The god Indra acquires a new epithet 'Lord of the Plough' in this period.
- The number and varieties of plant food increased. Apart from barley, people now cultivated wheat, rice, pulses, lentils, millet, sugarcane etc. The items of *dana* and *dakshina* included cooked rice. Thus with the beginning of food production agricultural produce began to be offered in the rituals. *Tila*, from which the first widely used vegetable food-oil was derived increasingly, came to be used in rituals.
- The main factor in the expansion of the Aryan culture during the later Vedic period was the beginning of the use of iron around 800 BCE. The Rigvedic people knew of a metal called *ayas* which was either copper or bronze. In the later Vedic literature *ayas* was qualified with *shyama* or *krishna* meaning black to denote iron.
- Archaeology has shown that iron began to be used around 800 BCE which is also the period of later Vedic literature.
- The northern and eastern parts of India to which the Aryans later migrated receive more rainfall than the north-western part of India. As a result this region is covered with thick rain forests which could not be cleared by copper or stone tools used by Rigvedic people. The use of iron tools now helped people clear the dense rain forests particularly the huge stumps left after burning, in a more effective manner. Large tracts of forestland could be converted into cultivable pieces in relatively lesser time.
- The iron plough could turn the soil from deeper portions making it more fertile. This process seems to

have begun during the later part of the Rigvedic period but the effect of iron tools and implements become evident only towards the end of the Later Vedic period.

- There has been a continuous increase in the population during the later Vedic period due to the expansion of the economy based on agriculture.
- The increasing number and size of Painted Grey Ware (PGW) settlements in the *doab* area shows this.
- With the passage of time the Vedic people also acquired better knowledge of seasons, manuring and irrigation.
- All these developments resulted in the substantial enlargement of certain settlements such as Hastinapur and Kaushambi towards the end of the Later Vedic period. These settlements slowly began to acquire characteristics of towns. Such rudimentary towns inhabited mainly by the chiefs, princes, priests and artisans were supported by the peasants who could spare for them some part of their produce voluntarily or involuntarily.
- Metal work, leather work, carpentry and pottery made great progress.
- In addition to internal trade, foreign trade was known. The Later Vedic people were familiar with the sea and they traded with countries like Babylon.
- A class of hereditary merchants (*vaniya*) came into existence. Vaisyas also carried on trade and commerce. They organized themselves into guilds known as *ganas*.
- Besides *nishka* of the Rig Vedic period, gold and silver coins like *satamana* and *krishnala* were used as media of exchange.

Early Vedic Society

The Early Vedic Society was a tribal society, in which social relations based on kinship ties were predominant. The society was not divided according to caste lines and everyone including the rajas (kings), were parts of the clan networks. The tribe was referred to as the *jana*. The chief of the tribe was the *raja* or the *gopati*. He was the leader in battle and the protector of the tribe. His office was not based on heredity, but he was selected from amongst the clansmen. Many clans (*vis*) formed a tribe. The clans settled in villages or *grama*. The basic social unit was the *Kula*, or the family, and the *Kulapa* i.e. 'one who protects the family' denoted the eldest male member or the head of the family.

Society was patriarchal.

The birth of a son was the common desire of the people. The importance given to the male members is reflected in the hymns, where the desire for a son is a constant prayer.

Even though society was patriarchal, women had also important position in it. They were educated and they had access to the assemblies. There are also instances of women who composed hymns. They had a right to choose their partners, and could marry late. However women 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 presence of different groups in the same area might have contributed to the emergence of the *Varna* system.

Various occupational groups such as those of weavers, smiths, carpenters, leather workers, chariot makers, priests etc. are also mentioned. The chariot makers occupied a special social status. The society was economically stratified, and we do find references to rich people possessing chariots, cattle, etc. and making generous gifts of them.

Later Vedic Society

The status of the *vis* declined and the period witnessed ascendancy of the *Kshatriyas* and the *Brahmanas*. Society was thus composed of unequal groups.

This hymn describes the origin of the four *varnas*, i.e. *Brahmana*, *Kshatriya*, *Vaisya* and the *Sudra*, from the body of the universal creator, *Prajapati*. The 'Hymn of the Priemeval Man' comes from the later portion of the *Rigveda*. Thus hymn for the first time describes the origin of the four *varnas* and described them as limbs of the society. However, these limbs did not have equal status. The Brahman was compared to the head whereas the *shudra* was compared to the feet.

In social life *Brahmans* were considered the highest *Varna* because society could communicate with gods with the help of Brahmans only. The *Sudras* on the other hand performed menial tasks and included slaves captured in wars.

Concept of Varna: The system of *varna* had the following features:

(i) Status by birth

A hierarchical ordering of the *varnas*, rules of endogamy and ritual purity were all decided on the basis of birth.

The division of social groups was based on occupation alone, and society was still flexible, where one's occupation did not depend on birth.

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 formation of a composite society. 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.

(ii) Gotra:

The institution of gotra (literally meaning-cow pen) appeared during this period. As against tribal endogamy (marriage within tribe) 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*.

(iii) Family:

The patriarchal family was well established and the *grihapati* acquired a special status. Since householding 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.

Despite the presence of some Women philosophers and the references to a few queens participating in the coronation rituals, women were considered subordinate to men, and were not involved in any major decision making.

(iv) Three stages of life:

Three *ashramas*, i.e. stages of life were prescribed and these stages were represented by the *brahmachari* (studentship), *grihastha* (householder), *vanaprasth* (partial retirement from householding life by living in the forest). It seems that the fourth i.e. the *sanyasa* (or complete retirement from ".active participation in the world) stage of life was not known till the time that the Upanishads were written.

References & Evidences

Mention of the word 'Sudra'	Rig Veda(10 th Mandala)
'Gayatri Mantra'	Rig Veda(3 rd Mandala)
Mention of the word 'Gotra'	Atharva Veda
Origin of kingship	Aitareya Brahma
'Soma', the intoxicating drink and the god who lends his name to the drink	Rig Veda (9 th Mandala)
Four-fold division of society	Rig Veda (10 th Mandala) Purusa Shukta Hymn
. First three 'ashramas' (Brahmacharin, Grihastha, Vanaprastha)	Chandogya Upanishad
Four ashrams (Brahmacharin, Grihastha, Vanaprastha, Samyasin)	Jabla Upanishad
Doctrine of 'Trimurti'	Maitrayani Upanishad
Origin of the Universe	Rig Veda (10 th Mandala)
Mention of the 'Great Flood'	Satpatha Brahma
Samsara (Transmigration of soul)	Brahadarankya Upanishad

Kshatriyas Precedence over Brahamanas	Aitreyya Brahma
Division of India into five parts	Aitreyya Brahma
Sabha & Samiti as the twin daughters of Prajapati	Atharva Veda
Battle of ten kings between Sudas and Bhed for the water of Parushni	Rig Veda (VII Mandala)
Mention of the eastern and western seas	Satpatha Brahma
Surdas as the servant of another to be expelled at will and to be slain at will	Atreyya Brahma
Ganga	Rig Veda (X, Mandala)
Satya Meva Jayate	Mundaka Upanishad

Words in Rigveda

- | | | | |
|-------------|-----------|-----------------|--------------|
| a. Ganga | - 1 times | (l) Agriculture | - 25 |
| b. Vaisya | - 1 | (m) Agni (five) | - 200 |
| c. Sudra | - 1 | (n) Cow | - 176 times. |
| d. Himalaya | - 1 | (o) Vish | - 170 times. |
| e. People | - 1 | (p) Varun | - 175 |
| f. Yamuna | - 3 | (q) Indra | - 250 |
| g. Khatriya | - 9 | (r) Jana | - 275 |
| h. Sabha | - 8 | (s) Mother | - 234 |
| i. Samiti | - 9 | (t) Father | - 335 |
| j. Nation | -10 | (u) Ohm | - 10,000 |
| k. Brahmin | - 14 | | |