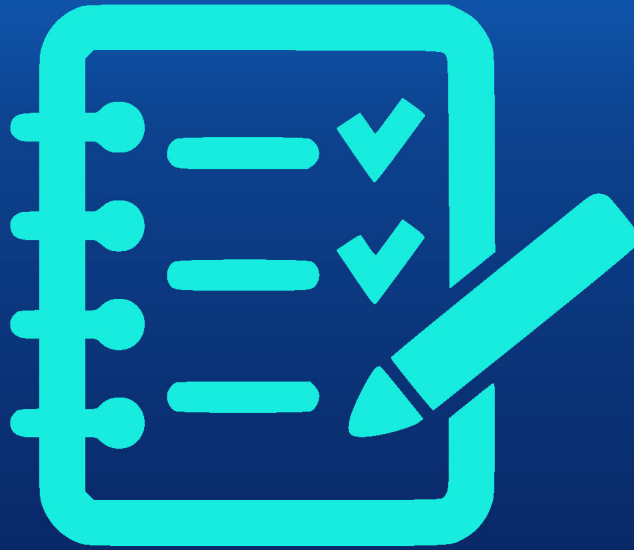




9th Std Social Science
Notes
TnpSC Syllabus Portion



www.winmeen.com

9th Social Science Lesson 1 Notes in English

1. Evolution of Humans and Society - Prehistoric Period

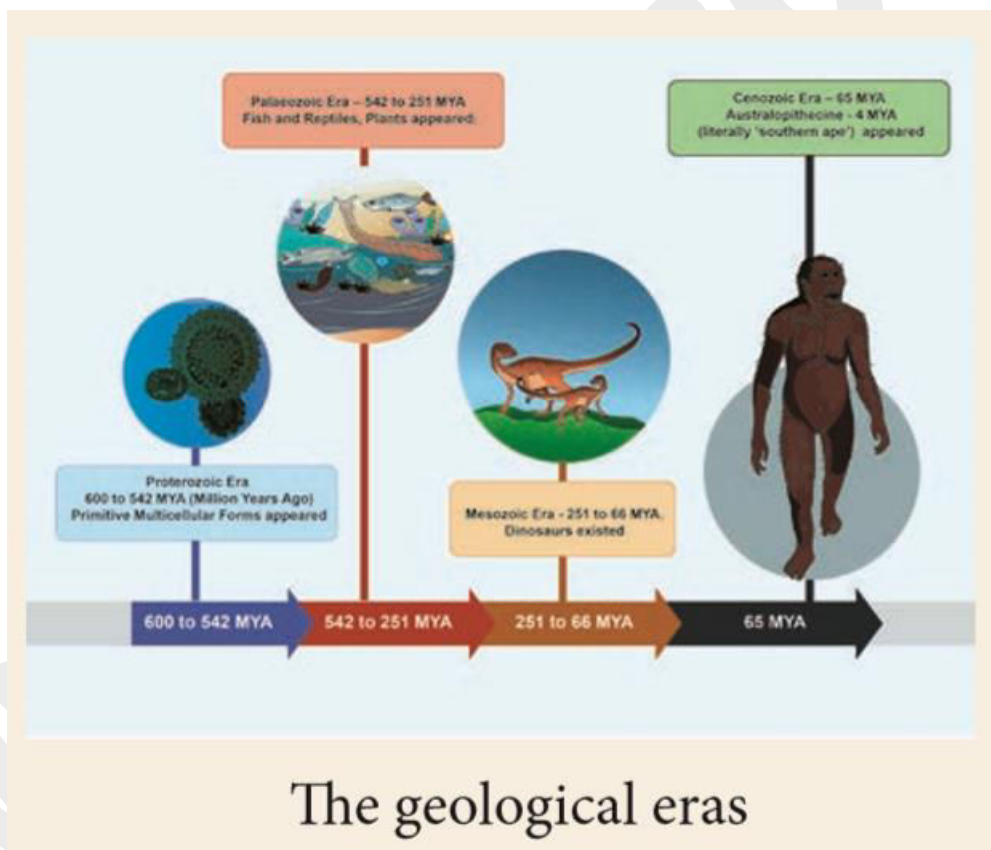
Introduction

- We live in the age of **Information Technology**. The mobile phones have literally put the world on our finger tips.
- The allen compassing knowledge that we possess now, which has helped in the development of powerful technology, did not emerge all of a sudden.
- The foundation for our modern life was facilitated by the development of the process of cognition among the human ancestors in the prehistoric age.
- Prehistoric people were the pioneers of creative knowledge.
- From the artefacts and the languages they developed, we are able to understand how intelligent they were.
- **Artefact** is an object or tool made or modified by humans. **Cognition** refers to the act of mind in which knowledge and understanding are acquired through thoughts, experiences and senses.
- Cognition is related to development of human thought.

Origin of the Earth and the Geological Ages

- The history of humans is closely related to the history of the earth. The earth contains geological, archaeological and biological records of historical times in its upper layers.
- They are important for reconstructing the history of the earth and various living organisms.
- The fossil bones of the human ancestors are embedded in the earth's layers.
- **Palaeoanthropologists and archaeologists** excavate the soil and rock layers on the earth and extract evidence about human ancestors.
- These layers and the fossils are scientifically dated to study the various stages in human evolution and prehistory.
- Through the gathered evidence, they attempt to understand the evolution of human history and developments in a chronological order.
- Archaeology is the study of human past through the analysis and interpretation of material remains.
- **Palaeoanthropology is the study of the human ancestors** and their evolution by the study of the fossil remains.
- The earth was formed approximately **4.54 billion years ago**. Gradually, conditions emerged for the growth of organisms.
- Then plants and animals came into being, and thereby foundation was laid for the evolution of humans.

- The long span of time in earth's history is divided into eras, periods and epochs by the geologists
- The earliest trace of life in the form of microorganisms emerged **3.5 billion** years ago.
- The primitive multi-cellular form of life first appeared in the Proterozoic era, about **600 to 542 million years ago**.
- In the Palaeozoic era (542 to 251 million years ago), fish and reptiles along with various plants appeared.
- Dinosaurs existed in the Mesozoic Era (**251 to 66 million years ago**). Australopithecines (literally 'southern ape') appeared in the Cenozoic era, which commenced about 66 million years ago.
- **Australopithecines** were the apes from which modern humans evolved. Now they are extinct, but they are considered to be the close relatives of humans.



Human Enquiries into the Past and Origin of the World

The Age of Speculation

- Humans are the only species on earth concerned with understanding as well as explaining the world and the universe.

- In the course of evolution, humans became conscious and knowledgeable. They turned curious and began to think and ask questions about nature, organisms and the world around them.
- At first, they considered **nature as God**. They worshipped sun, moon and various natural forces about which they developed their own understanding, some of which is not scientific.
- The lack of scientific knowledge on the creation of the world is reflected in the ancient writings and religious literature.

BCE – Before Common Era CE - Common Era

Scientific Foundations of Geology, Biology and Archaeology

- The beginning of history writing can be traced to the ancient Greeks. **Herodotus (484–425 BCE)** is considered the **Father of History**, because the history he wrote was humanistic and rationalistic.
- In the Middle Ages, people were preoccupied with religion; but the real scientific enquiries became stronger only around the 15th and 16th centuries CE, with the Renaissance movement in Europe playing an influential role in rational thinking. Scientific enquiry was undertaken and scientific foundations for geology, biology, anthropology and archaeology were laid.
- Numerous ideas were articulated by various learned men in these fields during this period.
- Through their enquiry and observation, scholars believed that the evidence for the origin of the earth and the organisms lay in the upper layers of the earth.
- The rise of scientific enquiry into the origin of humans was possible because of
 1. the interest in collection of archaeological remains and the opening of museums after the Renaissance Movement;
 2. the development of ideas of stratigraphy and geology;
 3. Darwin's theory of biological evolution;
 4. the discovery of human and animal fossils, stone tools, and artefacts of early civilizations; and
 5. the ability to decipher early scripts.

Stratigraphy

The study of origin, nature and relationships of rock and soil layers that were formed due to natural and cultural activities.

Oldest Museum

- The museum of **EnnigaldiNanna** in Mesopotamia was established in 530 BCE. The princess Ennigaldi was the daughter of the **neo-Babylonian king Nabonidus**.
- The Capitoline Museum in Italy is perhaps the oldest surviving museum (1471 CE) at present.

- Ashmolean Museum at Oxford University is the oldest university museum in the world. It was established in 1677 CE.
- Herbert Spencer's (1820–1903 CE) and Charles Darwin's (1809–1882 CE) theory on biological evolution, concepts of natural selection and survival of the fittest contributed to the scientific understanding of human origins.
- Charles Darwin published the books **On the Origin of Species in 1859** and **The Descent of Man in 1871**.

Natural selection

- The processes by which organisms that are better adapted to their environment would survive and produce more offspring.
- Survival of the fittest means **"survival of the form that will leave the most copies of itself in successive generations."**

Fossil

- Prehistoric animal or plant that turns into stone over a period of time (millions of years) because of chemical and physical processes.
- Animal bones are preserved due to mineralization. Palaeontology is the study of fossils.
- The idea of the Three Age System proposed by **C.J. Thomsen** became the basis for understanding early human history.
- He classified the artefacts in the Danish National Museum, Copenhagen, into Stone Age, Bronze Age and Iron Age.

Stone Age – the period when stone was mainly used for making implements.

Bronze Age – the period when bronze metallurgy (extraction of metal from ores) developed.

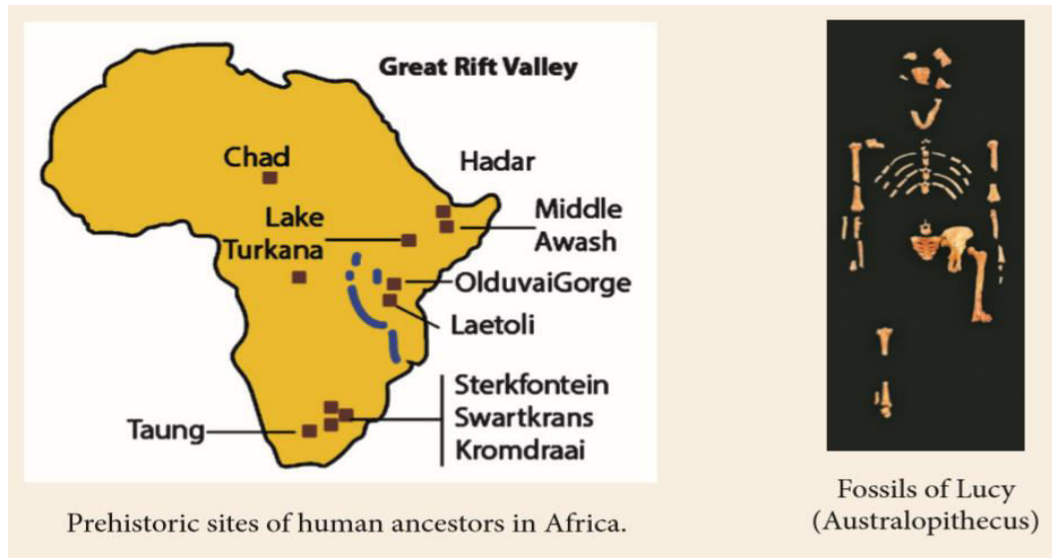
Iron Age – the period when iron was smelted to produce implements.

- Since the 19th century, scholars have used advanced scientific techniques and undertook systematic studies to contribute to the current state of knowledge on prehistory, human origins and the early civilisations.
- Now the theory of human evolution is widely accepted.

Prehistory: From Australopithecus through Homo erectus to Homo sapiens

- The introduction of writing system is a hallmark of the human civilisation.
- The period before the introduction of writing is called prehistory.
- Prehistoric societies are treated as pre-literate. But pre-literate should not be taken to mean primitive.
- The prehistoric people developed language, made **beautiful paintings and artefacts, and they were highly skilful**.

Human Evolution and Migration



- The chimpanzee, gorillas and orangutans, along with humans, are collectively called the Great Apes.
- Among them, the chimpanzee is genetically the closest to humans. The ancestors to humans were called Hominins, and their origins have been traced to Africa.
- They evolved from those origins and then began to move to other parts of the world in due course of time.
- The Hominins emerged around **7 to 5 million years ago**. Skeletons of Australopithecus, one of the early species of this tribe, have been found in Africa.
- The Great Rift Valley in Africa has many sites that have evidence for the prehistoric period.
- The Great Rift Valley is a valley like formation that runs for about **6,400 km** from the northern part of Syria to Central Mozambique in East Africa.
- This geographical feature is visible even from the space, and many prehistoric sites are found in eastern Africa.
- Human ancestors are divided into various species according to their physical features. Hominid refers to all the species of the modern and extinct great apes, which also includes humans.
- **Hominins (a zoological tribe)** refers to the close relatives of human ancestors and their sister species including **Homo sapiens (the modern humans)** and the extinct members of **Homo neanderthalensis, Homo erectus, Homo habilis and various species of Australopithecines**.
- Humans are the only living species of this 'tribe'. They stand erect, walk with two legs and have large brains.
- They can use tools and a few of them can communicate. It excludes the gorillas.
- **Homo habilis (handy human)** was the earliest known human ancestors to make tools in Africa about 2.6 million years ago.

- Around 2 million years ago, the species of Homo erectus/ergaster emerged. This species made hand axes between 2 and 1 million years ago.
- They began to spread into various parts of Asia and Africa in time. Anatomically, modern humans, called **Homo sapiens (wise man)**, first appeared around **3,00,000** years ago in Africa.
- It is believed that these modern humans eventually migrated and dispersed into various parts of the world from around **60,000** years ago.

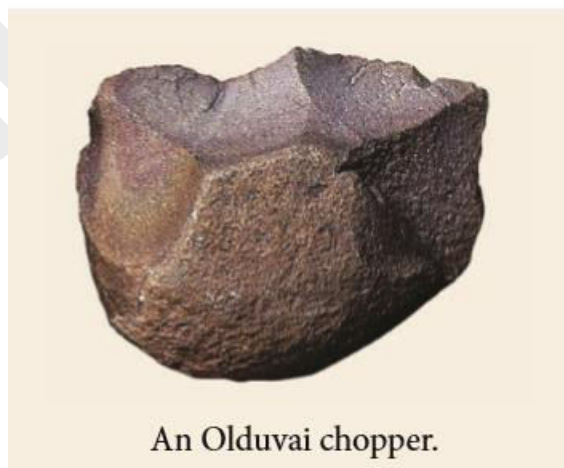
Prehistoric Cultures

While the fossil bones are classified as various species such as Homo habilis, Homo erectus and Neanderthalensis, based on the lithic tools, cultures are assigned names such as Earliest Lithic Assemblages, Oldowan Technology, Lower, Middle and Upper Palaeolithic and Mesolithic cultures.

Earliest Lithic Assemblages of Human Ancestors



Stone tools from Kenya about 2.3 million year old.



An Olduvai chopper.

- The earliest tools made by human ancestors are found in Lomekwi in Kenya. They are dated to 3.3 million years.
- Oldowan tools occur in the **Olduvai Gorge in Africa**. They are 2 to 2.6 million years old.

- The human ancestors (Australopithecines) used hammer stones and produced sharp-edged flakes. The tools were used for cutting, slicing and processing food.

Lower Palaeolithic Culture



Hand axe - London Museum.

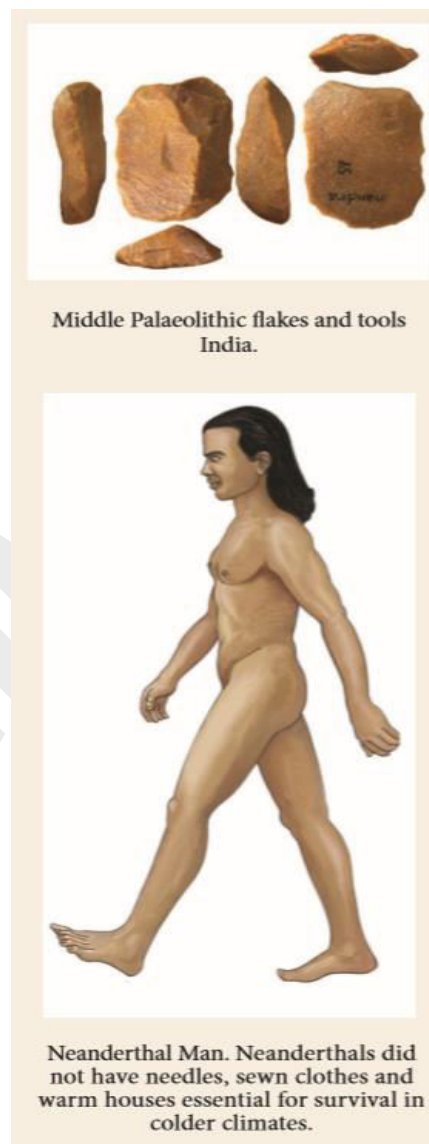


Flint biface from Saint-Acheul, France.

- The Lower Palaeolithic Culture is marked by the human ancestors belonging to the species *Homo habilis* and *Homo erectus*.
- The human ancestors flaked large stone blocks and designed various tools including hand axes.
- These tools, which are found in Africa, Asia, and Europe, are dated the earliest to about **1.8 million years ago**.
- They made various tools such as hand axes and cleavers to meet their subsistence needs. These tools are also known as **bifaces**.
- These tools have physical symmetry and convey the humans' cognitive (perception) skills. This culture is called the Lower Palaeolithic Culture.
- The hand axe tools are also known as Acheulian. This tool-making tradition continued till 250,000 years to 60,000 years ago in India.
- **Acheulian** – They were first hand axes recognized at a place called St. Acheul in France. Hence they are called Acheulian tools.
- **Bifaces are tools that have flaking on both sides (bi = two, face = side).**
- Subsistence necessities of prehistoric humans were mainly food and water. The human ancestors perhaps did not possess complex language skills we have now.
- They might have voiced a few sounds or words and possibly used sign language. They were intelligent enough to select stones as raw material and used the hammer stones to carefully flake the rocks and design tools for their needs.
- They hunted animals, fed on the meat of the animals killed by predators and gathered plant foods such as roots, nuts and fruits.

- In India, the Acheulian tools have been found near Chennai and many other sites such as Isampur in Karnataka and Bhimbetka in Madhya Pradesh.
- Raw material is the naturally available stone block or pebbles selected by humans for making tools.
- Since these stones produced flakes with sharp edges, they were selected for making stone tools.
- Core is the main block of stone from which small chips are flaked by using a hammer stone. Flake is a small chip removed from a large stone block called the core.

Middle Palaeolithic Culture



- After about **398000 years BCE**, further changes took place in the lithic technology in Africa.
- The Homo erectus species existed during this period. Anatomically modern humans are said to have emerged around 3 lakh years ago.

Lithic Technology:

- **'Lith'** means stone. The methods and techniques involved in the production of stone tools are called lithic technology.
- The hand axes turned out to be much attractive in design and many smaller tools were also produced.
- The core was prepared and then tools were made. Points and scrapers were used. Short blades were also produced.
- The lithic tool-making tradition of the Levalloisian belonged to this period. The tools made during this time are found in Europe and Central and western Asia.
- Levalloisian tools are the implements made after preparing the core. It was named after the town of **Levallois in France**.
- The Middle Palaeolithic Culture appeared between **3,85,000 and 1,98,000** years BCE ago in Europe and parts of western and South Asia.
- The tools that were made during this period were in use till about 28,000 BCE.
- The people of this period were called Neanderthals. They buried the dead people systematically.
- Perhaps they were the first human ancestors to mourn death properly and bury the dead.

Upper Palaeolithic Culture

- The cultural phase that succeeded the Middle Palaeolithic is called the Upper Palaeolithic phase.
- This period was marked by innovation in tool technology. Long blades and burins were produced during this time.
- People used different varieties of silica-rich raw materials in this phase. Numerous paintings and art objects were made. The diversity of artefacts suggests the improvement in cognitive skills and the development of languages.
- Microliths appeared in this phase. Burin is a stone-made chisel with a sharp cutting edge.
- The modern humans, who first appeared as a result of human evolution in the sub-Saharan Africa **300,000 years ago**, began to move to various parts of Asia around 60,000 years ago.
- They probably replaced the earlier populations. In Europe, humans known as Cro-Magnons lived in this period.
- **Horns and ivory** were used for making tools and art works. **Bone needles, fishhooks, harpoons and spears** were also employed creatively.
- The humans of this time wore clothes and cooked food. The dead were placed in the burials with folded hands placed over their chest. Pendants and richly carved tools were also seen in use.
- Evidences from **paintings, clay model sculptures and carvings** are available. Images on stone and bone called **Venus Statues** were produced in Europe and in some parts of Asia.

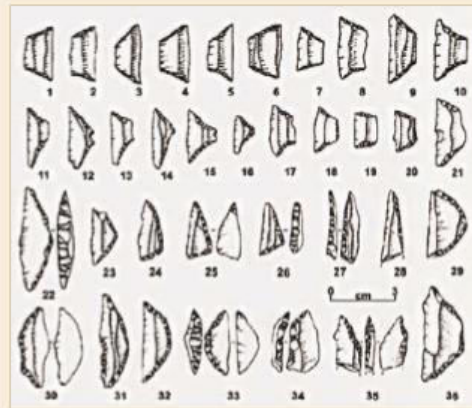
- The Upper Palaeolithic Culture appeared about 60,000 years ago. It continued till about the beginning of the Holocene about 12,000 years ago, when the Ice Age ended.
- Some of the rock paintings of India are also dated to this period.

Ice Age

The period before **8,000 BCE** when many parts of the world remained covered by ice sheets and snow.

Mesolithic Culture

- Mesolithic period is known as the Middle Stone Age, as it is placed between the Palaeolithic and Neolithic periods.
- People mainly used microlithic (small stone) tools during this period. These people were hunter-gatherers.
- With the global warming occurring after the Ice Age, they became highly mobile and occupied various ecozones.
- People of Mesolithic period widely employed microlithic technology. They made tiny artefacts that were less than **5 cm in size**.
- They produced points, scrapers and arrowheads. They also used geometric tools such as lunates, triangles and trapezes. These tools were hafted onto wooden or bone handles and used. Microliths are stone artefacts of small size.
- The dating of the Mesolithic Culture varies across different parts of the world. It was pre-agricultural in certain areas.
- In northwest Europe, the people of this culture appeared between **8,000 and 3,000** years ago.
- In India, Mesolithic Culture emerged around 10,000 BCE and in Tamil Nadu it continued up to 1000 BCE, till the beginning of the Iron Age.
- Some of the rock paintings of India date to the Mesolithic Period.



Microlithic tools



Rock paintings from Bhimbetka

Neolithic Culture and the Beginning of Agriculture

- The period called Neolithic marks the beginning of agriculture and animal domestication. It is an important phase in history.
- Early evidence of the Neolithic period is found in the **fertile crescent region of Egypt and Mesopotamia, the Indus region, the Gangetic valley and in China.**
- By about **10,000 BCE to 5000 BCE**, agriculture had come to be practised in these regions. Fertile Crescent Region refers to the area covering Egypt, Israel-Palestine, and Iraq, which is in the shape of crescent moon.
- Neolithic Age is called the 'new age', because of the new grinding and polishing techniques used for the tools.
- The Neolithic people also used the flaked stone tools. Until the Mesolithic period, people mainly hunted and gathered food for their subsistence.
- By hunting and gathering people obtained very limited food as a result of which only a small number of people could exist in a particular region.
- The introduction of domestication of animals and cultivating plants at home led to production and supply of large quantities of grains and animal food.

- The fertile soil deposited by the river on its banks helped the growth of agriculture. People preferred to live on river banks as it was better for adaptation.
- As a result of domestication and cultivating plants, there was an excess food production.
- The surplus food production was a main factor for the development of early civilisations. Permanent residences were built and large villages emerged as a result.
- Hence, the development of this period is called Neolithic Revolution.

Domestication of Animals and Plants:

- A Milestone in Human History Rice was probably cultivated in **India and China** around 7000 BCE or even earlier. Wheat and barley were cultivated at Mehrgarh in northwestern part of the Indian subcontinent (Pakistan) before **6000 BCE**.
- Animal domestication developed as part of symbiotic life. Dogs may have been domesticated first. Friendly animals were gradually domesticated.
- **Sheep and goat** were domesticated around 10,000 BCE in Southwest Asia.
- Oxen were used in Sumerian civilisation for tilling the land. **Mehrgarh in Pakistan** has evidence of sheep, goat and cattle domestication in the Neolithic period

Prehistoric Tamilagam

Timeline: The Course of Cultures in Ancient Tamilagam		
Culture	Time Period	Cultural Traits
Palaeolithic Period	Circa. 20,00,000 years to circa. 8,000 BCE	Hand axes, cleavers Hunting and gathering
Mesolithic Period	Circa. 8,000 years to circa. 1,300 BCE	Microlithic tools No knowledge of metal Hunting of animals and birds Gathering of plant food
Neolithic Period	Circa. 2,000 BCE to 1,000 BCE	Polished Stone Axes Microliths Domestication of animals Cultivation of crops Multiplicity of groups Co-existence of hunter-gatherers and pastoral groups
Iron Age	Circa. 1,300 BCE to 500 BCE	Megalithic burial custom Co-existence of hunter-gatherers and pastoral groups Development of chiefdom Knowledge of iron, black and red ware, black ware ceramics Craft specialisation, specialised groups: potters, blacksmiths
Early Historic and Sangam Age	300 BCE to 300 CE	Cultural traits of Iron age Monarchies of Chera, Chola and Pandya Development of hero worship Poetic traditions and literature Trade and exchange by sea

Background to Prehistory

Lower Palaeolithic Culture in Tamil Nadu

- One of the oldest Stone Age tools in the world made by human ancestors, called **hominins**, had been produced in Tamil Nadu.
- These stone tools are found near the Chennai region at several sites, especially at Athirampakkam.
- The archaeological excavations at this site and cosmic-ray exposure dating of the artefacts suggest that people lived here about **1.5 to 2 million** years ago.
- The **Kosasthalaiyar river** is one of the major cradles of human ancestors in the world.
- The people who lived here belonged to the species of *Homo erectus*. Archaeological excavation refers to digging undertaken to recover archaeological evidence such as **stone tools, pottery, animal bones and pollens**, in order to understand the past lifestyle of humans.

- **Cosmic-ray exposure dating** – A method in which exposure to cosmogenic rays is done for dating the samples.
- In 1863, **Sir Robert Bruce Foote**, a geologist from England, first discovered Palaeolithic tools at Pallavaram near Chennai.
- They are the earliest finds of such tools in India. Hence, the hand axe assemblages were considered the **Madras Stone Tool Industry**.
- The tools that he discovered are now housed in the Chennai Museum. The Palaeolithic people hunted wild animals and gathered the naturally available fruits, roots, nuts and leaves.
- They did not have knowledge of iron and pottery making, which developed much later in history.
- Hand axes and cleavers are the important tool types of the Lower Palaeolithic period. These tools fitted with a wooden and bone handle were used for cutting, piercing and digging.
- The people of this time also used hammer stones and spheroids. The quartzite pebbles and cobbles were chosen as raw materials.
- The tools are found in the soil deposits and also in the exposed river side. They occur at **Pallavaram, Gudiyam cave, Athirampakkam, Vadamadurai, Erumaivettipalayam and Parikulam**.

Lemuria and the Tamils

- Some researchers relate the origin of the Tamils to the submerged continent of Lemuria. This theory of Lemuria continent was proposed in the 19th century.
- In the wake of advancements in plate tectonics theory, differing views are put forth by scholars.
- The available literary references point to the submergence of areas around Kanyakumari.
- Some parts of Sri Lanka and Tamil Nadu were connected by land about **5000 years BCE**.
- It is possible that some land might have submerged near Kanyakumari and around the coast of India, because of the rising sea levels.
- Underwater surveys are necessary in this area. Archaeological research reveals that at least a section of people may have been living continuously in South India, including Tamil Nadu, from the Mesolithic and Neolithic times.
- The Lower Palaeolithic tools are also found in the **North Arcot and Dharmapuri districts**. The people belonging to this period used basalt rocks for manufacturing artefacts.
- However, the southern part of Tamil Nadu and Sri Lanka do not have evidence of Lower Palaeolithic Culture.

Basalt rocks are igneous rocks:

- Igneous rocks are those formed from the molten lava from the earth.
- The Lower Palaeolithic Culture is datable to about **2 - 1.5 million years** at **Athirampakkam**.

- This cultural phase continued in other parts of India up to 300,000 years ago.

Middle Palaeolithic Culture in Tamil Nadu

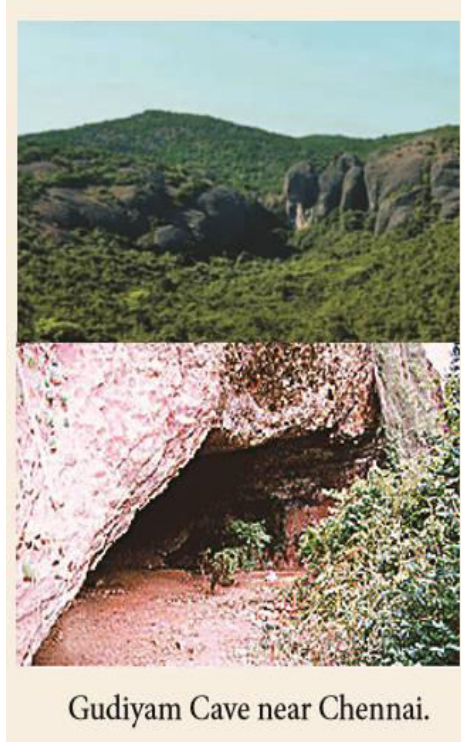


Sir Robert Bruce Foote discovered the first Palaeolithic tools in India at Pallavaram.



Tools discovered by Robert Bruce Foote

- In the course of time, the Middle Palaeolithic Culture emerged during 3,85,000 - 1,72,000 years ago.
- The tool types of this period underwent a change and smaller artefacts were used.
- Cores, flakes, scrapers, knives, borers, Levalloisian flakes, hand axes and cleavers are the artefact types of this period.
- Compared to the previous phase, these tool types became smaller in size.
- Evidence for the Middle Palaeolithic Culture can be observed in some parts of Tamil Nadu. In the southern part of Tamil Nadu, at **T. Pudupatti and Sivarakkottai**, artefacts of the Middle Palaeolithic tools have been collected.
- Also near **Thanjavur and Ariyalur**, similar artefacts have been found.



Gudiya Cave near Chennai.

Mesolithic Culture in Tamil Nadu



Microlithic flakes from
Tamil Nadu.

- In many parts of the world, and in some parts of India, the Upper Palaeolithic Culture succeeded the Middle Palaeolithic Culture.
- There is no evidence for the Upper Palaeolithic Culture in Tamil Nadu. But the people who used **microliths** or **small-stone artefacts** lived in many parts of Tamil Nadu.
- Since this cultural period occurs between Palaeolithic and Neolithic Culture, it is known as Mesolithic Culture or Middle Stone Age.

- Evidence for the existence of Mesolithic hunter-gatherers is found at **Chennai, North Arcot, Dharmapuri, Salem, Coimbatore, Ariyalur, Tiruchirappalli, Pudukkottai, Madurai, Sivagangai, Tirunelveli and Kanyakumari**.
- The teri sites near Thoothukudi have evidence of microlithic artefacts. These sites have red sand dunes called teris.
- Mesolithic people might have engaged in fishing activities. The microlithic artefacts of southern Tamil Nadu are also found in the coastal regions of Sri Lanka.
- Geologists argue that the Tamil Nadu region and Sri Lanka remained connected before 5000 BCE when the sea level was low.
- The people of this period used small artefacts made of **chert and quartz**. The tool types are scrapers, lunates and triangles.
- These people hunted wild animals and gathered fruits, nuts and roots for their subsistence. Scrapers are tools used for scraping the surfaces.
- Scrapers are similar to the tools used in the kitchen for removing skin of vegetables. Triangles are tools in the shape of triangles.
- Lunates are tools in the shape of a crescent.

Neolithic Culture in Tamil Nadu

- The culture that domesticated animals and cultivated crops is called Neolithic. It is known as the New Stone Age. The Neolithic people used polished stone axes called **celts**.
- Cattle rearing was their main occupation. They lived in small villages with houses made of thatched roof and walls plastered with clay.
- Evidence of Neolithic village is found at **Payyampalli in Vellore district** and a few sites in the Dharmapuri region.
- Payyampalli is a village in Vellore district of Tamil Nadu. The earliest evidence for the domestication of animals and cultivation of plants is found at this site, which was excavated by the Archaeological Survey of India.
- Evidence for pottery making and cultivation of horse gram and green gram has been found in this village.
- These Neolithic sites were part of the Southern Neolithic Culture of India. They are mainly concentrated in the **Andhra Pradesh and Karnataka** regions.
- The Neolithic people used stone axes fitted on a wooden handle.
- These polished stone axes are worshipped in many village temples of Tamil Nadu even today used in the kitchen for removing skin of vegetables.
- Triangles are tools in the shape of triangles. Lunates are tools in the shape of a crescent.

Neolithic Culture in Tamil Nadu

- The culture that domesticated animals and cultivated crops is called Neolithic. It is known as the New Stone Age.

- The Neolithic people used polished stone axes called celts.
- Cattle rearing was their main occupation. They lived in small villages with houses made of thatched roof and walls plastered with clay.
- Evidence of Neolithic village is found at **Payyampalli in Vellore** district and a few sites in the Dharmapuri region.
- Payyampalli is a village in Vellore district of Tamil Nadu. The earliest evidence for the domestication of animals and cultivation of plants is found at this site, which was excavated by the Archaeological Survey of India.
- Evidence for pottery making and cultivation of horse gram and green gram has been found in this village. These Neolithic sites were part of the **Southern Neolithic Culture of India**.
- They are mainly concentrated in the **Andhra Pradesh and Karnataka regions**. The Neolithic people used stone axes fitted on a wooden handle.
- These polished stone axes are worshipped in many village temples of Tamil Nadu even today.

Iron Age / Megalithic period

- The cultural period that succeeded the Neolithic is called the Iron Age. As the name suggests, people used iron technology. It preceded the Sangam Age.
- The Iron Age was a formative period and the foundation for the Sangam Age was laid in this time.
- During the Iron Age, many parts of Tamil Nadu were occupied by people. An exchange relationship developed among the people.
- The people of this age had knowledge of **metallurgy and pottery making**. They used **iron and bronze objects and gold ornaments**.
- They used shell ornaments and **beads made of carnelian and quartz**.
- The evidence for Iron Age is found at many sites including **Adhichanallur in Tirunelveli district, Sanur near Madhuranthakam and Sithannavasal near Pudukkottai**.
- Megalithic burial sites are found in the whole of Tamil Nadu.

Megalithic Burial Types



A Menhir



An urn covered with lids in Adhichanallur.



A stone circle with Menhir and the capstone.



Sarcophagus



Dolmen



Cist, Kodumanal.



Kodakkal, Kerala.



Toppikkal, Kerala.



Paththikal, Kerala.

- The Iron Age is also known as megalithic, since people created burials with large stones for the dead people.
- Within these burials, the skeletons or a few bones of the dead persons were placed along with grave goods including **iron objects, carnelian beads and bronze objects**.
- Some of the burials do not have human bones and they have only the grave goods. They may be called memorial burials.
- Grave goods are the objects placed in the burials along with the physical remains (bones) of the dead. People may have believed that these would be useful in the after-life.

- Egyptian pyramids also have similar artefacts. Similar burials were also built in the early historic period or the Sangam Age.
- The Sangam literature mentions the various burial practices of the people. The megalithic burials are classified as dolmens, cists, menhirs, rock-cut caves, urn burials and sarcophagus.
- The burial types of **Kodakkal (umbrella stone), Toppikkal (hatstone) and Paththikal (hoodstone)** are found in Kerala.
- Dolmens, table-like stone structures, were erected as funerary monuments. Cists are stone enclosures buried under the earth.
- They were created by placing four stone slabs on the sides, one on top of each other. The cists and dolmens have openings called portholes. Urns are pottery jars and were used for burying the dead.
- Sarcophagi are **burial receptacles made of terracotta**. They sometimes had multiple legs.
- Menhirs are pillar-like stones erected as part of the burials or memorials. Portholes are holes found in the cists and dolmens on one side.
- They may have acted as the entrance to the burials. There is a view that they were meant for the movement of the soul or spirit.
- There could be several factors influencing the megalithic burial types. For example, **social status or the importance of the individuals buried or simply the choice of the relatives of the dead could have been the reasons**.
- Raw material availability is another reason. In the deltaic areas where stones are not available, people used the simple urns made by potters using clay.
- The menhirs may have been erected for the heroes in the Iron Age. The tradition of hero stones might have begun in the Iron Age or even before.

Agriculture and Pastoralism

- The people in the Iron Age practiced agriculture, domesticated cattle and sheep, and some of the groups were still hunting and gathering.
- Millets and rice were cultivated. Irrigation management developed in this period, since many of the megalithic sites are found nearby rivers and tanks.
- In the deltaic regions, irrigation as a technology had developed. Evidence of rice is seen in the megalithic sites like **Adhichanallur in Thoothukudi district and Porunthal near Palani**.

Iron Age Society and Polity

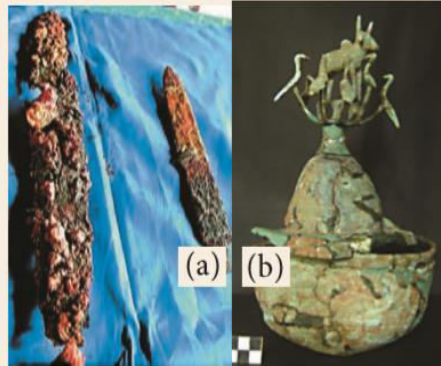
- The Iron Age society had farming communities, pastoralists and huntergatherers.
- **Craft specialists, potters and blacksmiths** were the professionals during this period. The society had several groups of peoples (tribes).
- The size of the burials and the variations found in the burial goods suggests the existence of numerous social groups and their diverse practices.

- Some of them seem to have had organised chiefdoms. Cattle lifting leading to wars and encroachment and expansion of territories had also started taking place in this period.
- Chiefdoms were stratified societies in which chiefs were selected based on kinship relations.
- The Ashokan inscriptions datable to third century BCE refers to the **Cheras, Cholas, Pandyas and Satyaputras outside his empire in Tamilagam.**
- If the Cheras, Cholas, Pandyas and Satyaputras had been powerful political powers in the Mauryan period, they must have commenced their political rule in the Iron Age.

Pottery



Black and red ware in Adhichanallur.



(a) Iron sword and dagger in Adhichanallur.

(b) Bronze vessel from a Burial at Auroville, Puducherry

- Pottery is an important evidence found in the archaeological sites.
- The Iron Age and Sangam age people used the **black and red colours** to make black ware and red ware pottery.
- Potteries were used for cooking, storage and dining purposes. The black and red ware pottery has a black inside and a red outside, with lustrous surfaces.

Iron Technology and Metal Tools

- The megalithic burials have abundant iron objects placed in the burials as grave goods.
- Weapons such as **swords and daggers, axes, chisels, lamps and tripod stands** are also found.
- Some of these objects were hafted to wooden or bone or horn handles and used.
- The iron tools were used for agriculture, hunting, gathering and in battles.
- Bronze bowls, vessels with stylish finials decorated with **animals and birds, bronze mirrors and bells have also been found.**

More to Know:

1. Prehistoric period does not have evidence of writing.
2. Neolithic people perhaps devised the first pottery. They made pottery, using a slow wheel called turn-table or made pottery out of hand. Before firing, the pottery was polished with pebbles. This process is known as **burnishing**.
3. **Athirampakkam and Gudiyam** Cave yielded both Early and Middle Palaeolithic artefacts.
4. **Wheat, barley and peas** were domesticated around 10,000 years ago. Fruit and nut trees were domesticated around 4,000 BCE. They comprised olives, figs, dates, pomegranates and grapes.
5. The chimpanzee and the pygmy chimpanzee (**also known as bonobo**) are our closest living relatives.
6. The DNA of a chimpanzee is **98%** identical to that of a human being.

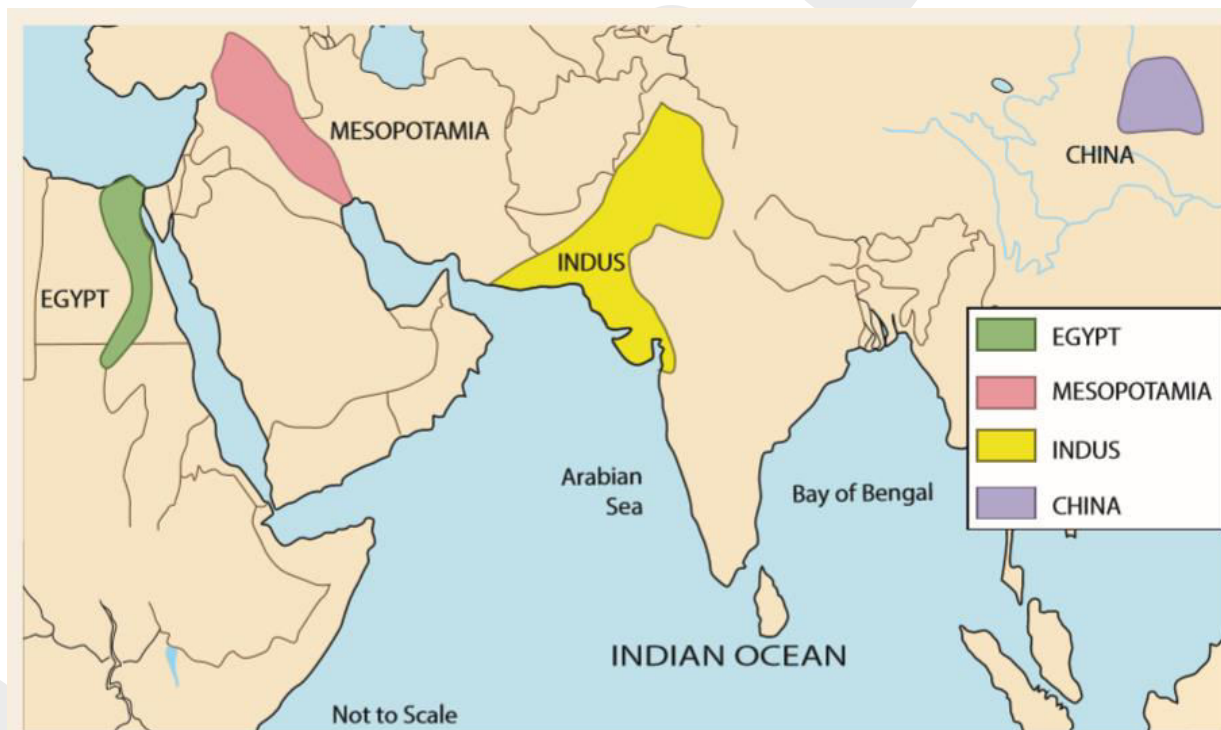
9th Social Science Lesson 2 Notes in English

2. Ancient Civilisations – Indus Civilisation

Introduction

- Societies that adopted complex ways of life were more organised than the early hunter-gatherer and Neolithic farming societies.
- Urban societies had social stratification and well-planned cities. They practised crafts, engaged in trade and exchange, adopted science and technology and formed political organisation (**early form of state**).
- Hence the term '**civilisation**' is used to distinguish them from the early forms of societies.
- However, they should not be considered superior to other forms of societies, since each culture or civilisation had its own unique features.

Early Societies and Early State Formation



Early world civilisations

- Societies before the modern times are classified as bands, tribes, chiefdoms and proto-state by scholars.
- Early societies were organised as bands during the Pre-Mesolithic Age. Bands were small groups of people who were **nomadic**, making their living on hunting and gathering.

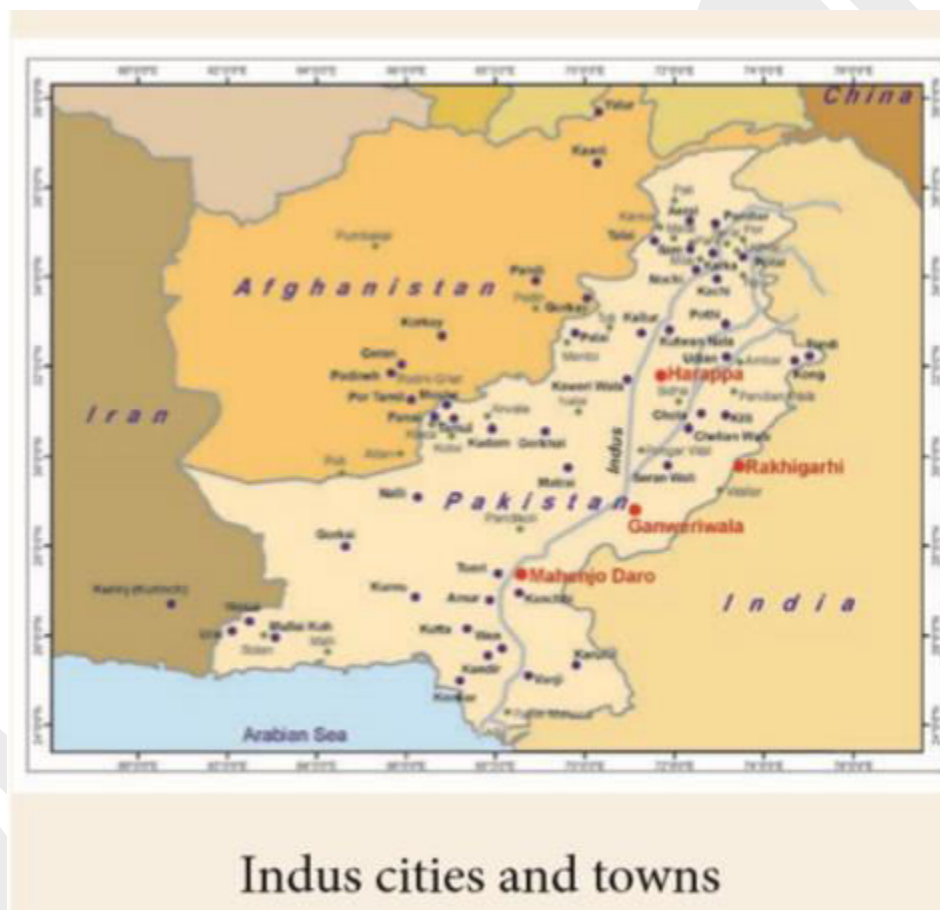
- As the Neolithic way of life came into practice, large groups of people were concentrated in the villages.
- They were organised as tribal communities with a sedentary or semi sedentary lifestyle. The tribal organisations that developed in the Mesolithic times were mostly egalitarian in nature.
- The chiefdoms are political formations larger than the tribal-level formations. People under chiefdoms lived over a larger area than the areas covered by tribes.
- Social distinction existed among these groups in terms of wealth and authority. The cultural developments after the **Neolithic period** in certain regions that had a flowing river and rich and fertile alluvial soil gave rise to civilisations.
- In the post Neolithic period, that is, in the **Bronze Age societies**, early form of state (proto-state) originated in the areas where agricultural surplus and population density was more.
- These early states had a political system that controlled many smaller regions, chiefs and cities through conquests.
- The kings and royals occupied the higher position in the social hierarchy. Palatial buildings were built for their dwelling.
- **Priests, king's officials and traders** formed the middle strata. Craft persons and peasants formed the lower sections in this hierarchical social system.
- Taxes were collected from the peasants and artisans. Language was refined, literary texts were composed and script developed.
- **Sciences, including mathematics and astronomy**, emerged from research. The process of urbanisation began.

Early Civilisations

- Civilisation is seen as an advanced, organised way of life. It instilled a way of life that could be considered as an adaptation to particular environmental and cultural contexts.
- When it became necessary for large numbers of people to live in close proximity, they brought in planning, organisation and specialisation.
- Settlements were planned and laid out, a polity emerged, society became organised and food production and craft production were regulated.
- As civilisations began to take shape, huge buildings were built, the **art of writing** developed and **science and technology** contributed to the betterment of society.
- The surplus food production by the farmers in the fertile regions supported the livelihood of a large number of people.
- The people who did not cultivate crops engaged in artisanal activities such as making of **bronze tools, ornaments and pottery**.
- **Priests, scribes, nobles, rulers, administrators and craft persons** became part of this civilisation.

- The **Egyptian, Mesopotamian, the Chinese and the Indus** were the important early civilisations.
- While these civilisations flourished in certain regions, people in other parts of the world lived as huntergatherers and pastoralists.
- The hunter gatherers and pastoralists maintained their relationships with these civilisations through interactions.
- Their history is also equally important.
- During the time of these civilisations, South India witnessed the emergence of Neolithic agro-pastoral communities and Microlith form of life by hunter-gatherers.

Indus Civilisation



- The Indus civilisation, known also as the Harappan civilisation, covers an area of over 1.5 million square kilometres in India and Pakistan.
- **Sutkagen-dor in the west on the Pakistan–Iran border; Shortugai (Afghanistan) in the north; Alamgirpur (Uttar Pradesh in India). in the east; and Daimabad (Maharashtra in India). in the south** are the boundaries with in which the Harappan culture has been found.
- Its main concentration is in the regions of Gujarat, Pakistan, Rajasthan and Haryana.

Planned Towns

- Harappa (Punjab, Pakistan), MohenjoDaro (Sindh, Pakistan), Dholavira (Gujarat, India), Kalibangan (Rajasthan, India), Lothal (Gujarat, India), Banawali (Rajasthan, India), Rakhigarhi (Haryana, India) and Surkotada (Gujarat, India) are the major cities of the Indus civilisation.
- Fortification, well-planned streets and lanes and drainages can be observed in the Harappan towns.
- The Harappans used baked and unbaked bricks and stones for construction. A civic authority perhaps controlled the planning of the towns.
- A few of the houses had more than one floor. The tank called the **Great Bath** at Mohenjo-Daro is an important structure, well paved with several adjacent rooms.
- Some unearthed structures have been identified as the granary. We do not know about the nature of the state or political organisation of the Harappans.
- But they must have had a political organisation at the level of an early form of state. A male image from MohenjoDaro has been identified as '**priest king**', but we do not know about the accuracy of this interpretation.
- The structure identified as granary should be considered as archaeologists' interpretation.



The Great Bath

The priest king
from Mohenjo-Daro

Harappan painted pottery.



The Dancing Girl from Mohenjo-Daro

Rohri chert blades from Harappan site of
Shikarpur, Gujarat

Agriculture and Animal Domestication

- The Harappans practiced agriculture. They cultivated wheat, barley and various types of millets. They adopted a double cropping system.
- Pastoralism was also known to them. They reared **cattle, sheep and goats**.
- They had knowledge of various animals including elephants but did not use horses.

- The **Harappan cattle are called Zebu**, and it is a large breed, often represented in their seals.

Pottery

- The Harappans used painted pottery. Their potteries have a deep red slip and black paintings.
- The pottery has shapes like **dish-on-stands, storage jars, perforated jars, goblets, S-shaped jars, plates, dishes, bowls and pots**.
- The painted motifs, generally noticed on the pottery, depict pipal tree leaves, fish-scale designs, intersecting circles, zigzag lines, horizontal bands, and geometrical motifs, and floral and faunal patterns.

Metal, Tools and Weapons

- The Harappans used chert blades, copper objects and bone and ivory tools. They **did not** possess knowledge about **iron**.
- The tools and equipments such as points, chisels, needles, fishhooks, razors, weighing pans, mirror and antimony rods were made of bronze.
- The chisels made out of **Rohri chert** were used by the Harappans. Their weapons included arrows, spears, a chisel-bladed tool and axe.
- The bronze image of **dancing girl from Mohenjo-Daro** is suggestive of the use of lost-wax process.
- Rohri chert refers to the chert raw material collected from Rohri in Pakistan. It was used by the Harappans for making blades.
- The Harappans used **both stone and bronze tools**.

Textiles and Ornaments



Indus ornaments.

- The Harappans used metal and stone adornments. They had knowledge of cotton and silk textiles.
- They made **carnelian, copper and gold ornaments**. Faience, stoneware and shell bangles were also used.
- Some of them had etched designs, and the Harappans exported them to the Mesopotamia.

Trade and Exchange

- The Harappans had close trade links with the Mesopotamians.
- Harappan seals have been found in **the West Asian sites, Oman, Bahrain, Iraq and Iran**.
- The cuneiform inscriptions mention the trade contacts between Mesopotamia and the Harappans.
- The mention of '**Meluhha**' in the cuneiform inscriptions is considered to refer to the Indus region.

Weights and Measures



- The Harappans developed a system of proper weights and measures. Since they engaged in commercial transactions, they needed standard measures.
- The cubical chert weights are found at the Harappan sites. The copper plates for weighing balances have also been found.
- The weights point to their knowledge of the binary system. The ratio of weighing is doubled as 1:2:4:8:16:32.

Seals, Sealings and Scripts

- The seals from various media such as steatite, copper, terracotta and ivory are found in the Harappan sites.
- They were probably used in the trade activities. The Harappan script is not yet deciphered.
- About **5,000** texts have been documented from the Harappan sites.
- Some scholars are of the view that the script is in Dravidian language.

Arts and Amusement

- The terracotta figurines, paintings on the pottery and the bronze images from the Harappan sites suggest the artistic skills of the Harappans.
- 'Priest king' made of steatite and dancing girl made of bronze (**both from Mohenjo-Daro**) as well as stone sculptures from Harappa, Mohenjo-Daro and Dholavira are the important objects of art.
- **Toy carts, rattles, wheels, tops, marbles and hop scotches** made in terracotta suggest the amusement of the Harappan people.

Religion

- The Indus people had a close relationship with nature. They worshipped pipal trees. Some of the terracotta figures resemble the mother goddess.
- Fire altars have been identified at **Kalibangan**. The Indus people buried the dead.
- Burials were done elaborately and evidence for cremation has also been found.

Original Inhabitants and their Culture

- The authors of the Harappan civilisation are not known, since the script has not been deciphered.
- One school of thought argues that they spoke the Dravidian language.
- The archaeological evidence shows movement of the Harappans to the east and south after the decline of the Indus civilisation.
- It is probable that some of the Harappan people moved into different parts of India. Only the decipherment of the script can give a definite answer.
- Indus civilisation had more than one group of people. Several groups including farmers, pastoralists and hunter-gatherers lived in the Indus region.
- The Indus region had villages and large towns. The population was mixed.
- The period of the civilisation has been divided into **Early Harappan, starting around 3300 BCE and continuing to 2600 BCE and mature Harappan, are the last phase civilisation from 2600 to 1900 BCE. The later Harappan existed upto 1700 BCE.**

Decline of Indus Culture

- The Indus civilisation and its urban features started declining from about **1900 BCE**.

- Changes in climate, decline of the trade with Mesopotamia and drying up or flooding of the river Indus, foreign invasion were some of the reasons attributed to the collapse of this civilisation and for the migration of people in the southern and eastern directions.
- It did not completely disappear. It continued as rural culture.

Indus Civilisation and Tamil Civilisation

- The similarity of the graffiti found on the megalithic burial pots of South India with the Indus script and the identical place names of Tamil Nadu and Indus region of Pakistan are presented as arguments to establish the relationship between the Indus civilisation and Tamil culture.
- Researchers like **Father Henry Heras, Asko Parpola and Iravatham Mahadevan** find similarity between the Indus script and the Dravidian/ Tamil language. Archaeological evidence points out that several groups of people have been living in Tamil Nadu and South India continuously from the Mesolithic period.
- A few groups from the Indus region might have migrated into southern India. Some of the ideas and technologies of the Indus civilisations had reached South India in the Iron Age.
- The carnelian beads, shell bangles and bronze mirrors found in **the Megalithic/Early Historic sites of Tamil Nadu** were first introduced by the people of the Indus civilisation.
- More research is needed to arrive at any definite conclusion in this matter.
- The towns of ancient Tamilagam such as **Arikkamedu, Uraiyur and Keezhadi** that flourished are part of the second urbanisation of India and these towns are much different from the Indus cities.
- These towns emerged approximately 1,200 years after the decline of the Indus civilisation.

More to Know:

1. The Indus Valley civilisation is also known as the Harappan civilisation, since Harappa was the first site to be discovered. This civilisation is known as **Harappan civilisation** rather than Indus Valley civilisation, since it extended beyond the Indus river valley.

2. The Terracotta Army



Terracotta Warriors, China

- The Terracotta Army refers to the large collection of terracotta warrior images found in China. They depict the armies of the **king Qin Shi Huang**, the first emperor of China.
- They were buried with the king in 210–209 BCE. They are found at the northern foot of the Lishan Mountain, thirty five kilometres northeast of Xi'an, Shaanxi Province, as part of the mausoleum of the king.

3. The Great Wall of China

- The Great Wall of China, one of the wonders of the world, was a massive effort undertaken for the protection of China from the Mongols.
- In 220 BCE, under Qin Shi Huang, earlier fortifications were connected by walls as a form of defence against invasions.
- It was built from third century BCE until 17th century CE. It ran for over **20,000 kilometres** covering the hills and plains, from the border of Korea in the east to the Ordos Desert in the west.

4. **Ziggurats** were pyramid-shaped monuments found in ancient Mesopotamia (modern Iraq). One of the most famous Ziggurats of the time is the one in the city of Ur.

5. **Assyrian Empire** was the first military power in history. They emerged militarily powerful because they were the earliest to use iron technology effectively.

6. The **Epic of Gilgamesh** is perhaps the oldest written epic on earth. It was originally written on twelve clay tablets in cuneiform in ancient Sumaria.

7. The **city of Akkad** later became the city of Babylon, a commercial and cultural centre of West Asia.

8. The word 'paper' comes from 'Papyrus'. The Egyptians wrote on the leaves of a plant called papyrus, a kind of reed, which grew on the banks of Nile.

9th Social Science Lesson 3 Notes in English

3. Early Tamil Society and Culture

Introduction

- Tamil civilization, as we have seen, begins atleast **three centuries before the Common Era (CE)**.
- As seafaring people, Tamil traders and sailors established commercial and cultural links across the seas and merchants from foreign territories also visited the Tamil region.
- The resulting **cultural and mercantile activities and internal developments** led to urbanization in this region. Towns and ports emerged. Coins and currency came into circulation. Written documents were produced.
- The Tamil Brahmi script was adopted to write the Tamil language. Classical Tamil poems were composed.
- In the unit one, we studied the cultural developments in the Tamil region from the prehistoric period to the beginning of the Iron Age.
- In this lesson, we will learn about the development of Tamil culture in the **Early Historic Period also known as the Sangam Age**.

Sources for the study of early Tamil society

The sources for reconstructing the history of the ancient Tamils are:

1. Classical Tamil literature
2. Epigraphy (inscriptions)
3. Archaeological excavations and material culture
4. Non-Tamil and Foreign Literature

The Classical Sangam Tamil Literature

The Classical Sangam corpus (collection) consists of the **Tholkappiyam, the Pathinen Melkanakku (18 Major works) and the Pathinen Kilkanakku (18 minor works) and the five epics.**

Tholkappiyam

- Tholkappiyam, attributed to **Tholkappiyar**, is the earliest written work on Tamil grammar.
- Apart from elaborating the rules of grammar, the third section of Tholkappiyam also describes poetic conventions that provide information on Tamil social life.
- The texts of **Pathinen Melkanakku include Pathupaattu (ten long songs) and Ettuthogai (the eight anthologies).**
- These texts are the oldest among the classical Tamil texts. The texts of **Pathinen Kilkanakku belong to a later date.**

The Ettuthogai or the eight anthologies are

1. Natrinai
2. Kurunthogai
3. Paripaadal
4. Pathittrupathu
5. Aingurunuru
6. Kalithogai
7. Akanaanuru
8. Puranaanuru

Pathupattu collection includes ten long songs

1. Thirumurugatrupadai
2. Porunaratrupadai
3. Perumpanatrupadai
4. Sirupanatrupadai
5. Mullaipaattu
6. Nedunalvaadai
7. Maduraikanchi
8. Kurinjipaattu
9. Pattinappaalai
10. Malaipadukadam

Pathinen Kilkanakku (18 minor works)

- The Pathinen Kilkanakku comprises **eighteen texts** elaborating on ethics and morals.
- The pre-eminent work among these is the **Thirukkural composed by Thiruvalluvar**.
- In **1330 couplets** **Thirukkural** considers questions of morality, statecraft and love.

The Five Epics

The epics or Kappiyams are long narrative poem of very high quality. They are,

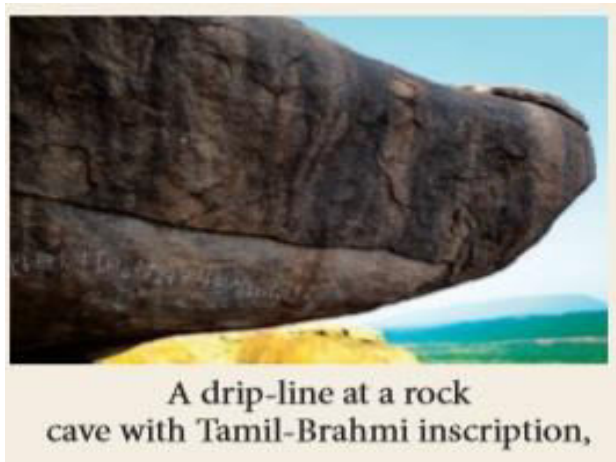
1. Silappathikaaram
2. Manimekalai
3. Seevaka Chinthamani
4. Valaiyapathi
5. Kundalakesi

Epigraphy

- Epigraphy is the **study of inscriptions**. Inscriptions are documents scripted on stone, copper plates, and other media such as coins, rings, etc.

- The development of script marks the beginning of the historical period.
- The period before the use of written script is called prehistoric period. Tamil-Brahmi was the first script used for writing in Tamil Nadu.
- Inscriptions in Tamil-Brahmi are found in caves and rock shelters, and on pottery and other objects (coins, rings and seals).

Tamil-Brahmi inscriptions



- Tamil-Brahmi inscriptions have been found in more than **30 sites** in Tamil Nadu mostly on cave surfaces and rock shelters.
- These caves were the abodes of monks, mostly Jaina monks. The natural caves were converted into residence by cutting a dripline to keep rain water away from the cave.
- Inscriptions often occur below such **driplines**. The sites have smooth stone beds carved on rock surface for monks who led a simple life and lived in these shelters.
- Merchants and kings converted these natural formations as habitation for monks, who had renounced worldly life.
- **Mangulam, Muttupatti, Pugalur, Arachalur and Kongarpuliyankulam and Jambai** are some of the major sites of such caves with Tamil-Brahmi inscriptions.
- Around Madurai many such caves with Tamil-Brahmi inscriptions can still be seen. Many of them are located along ancient trade routes.
- **Acts of destruction of heritage property or property belonging to others are called vandalism.**

Hero Stones



The Tamil-Brahmi inscription
at Arachalur



Estampage copy of the
above inscription

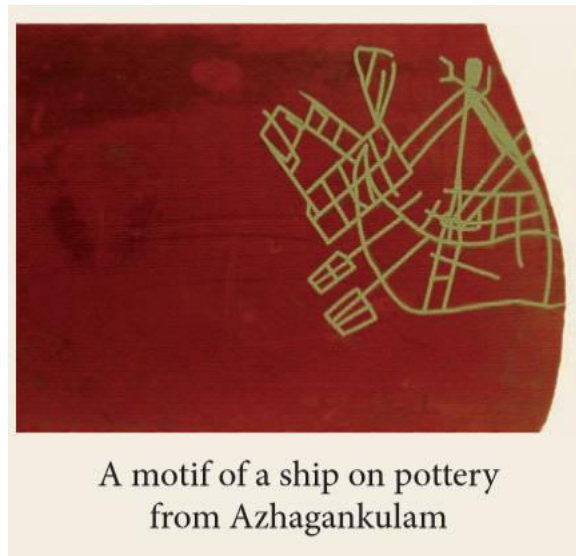


A rock bed at K. Puliankulam

- Hero stones are memorials erected for those who lost their lives in the battles and in cattle raids.
- As cattle were considered an important source of wealth, raiding cattle owned by adjoining tribes and clans was common practice in a pastoral society.
- During the Sangam Age, the **Mullai landscape** followed the pastoral way of life. Tribal chieftains plundered the cattle wealth of enemies whose warriors fought to protect their cattle.
- Many warriors died in such battles and were remembered as martyrs. **Memorial stones were erected in their honour.**
- Sangam literature vividly portrays these battles and clashes, and describes such hero stones as objects of worship.

- Tholkappiyam describes the procedures for erecting hero stones. Hero stones of the Sangam Age with Tamil-Brahmi inscriptions can be found at **Pulimankombai and Thathapatti in Theni district and Porpanaikottai in Pudukkottai district**.
- Those of the Sangam Age discovered till now do not have images or sculptures. Hero stones of the post-Sangam Age and the Pallava period occur in large numbers in pastoral regions especially around the Chengam region near Thiruvannamalai district.
- These hero stones have inscriptions and the images of warriors and names of heroes.

Inscriptions



- Pottery vessels from the Early Historic Period have names of people engraved on them in Tamil-Brahmi script.
- Potsherds have been discovered in **Arikkamedu, Azhagankulam, Kodumanal, Keezhadi**, and many other sites in Tamil Nadu.
- Pottery inscribed with names in Tamil-Brahmi script have also been found in **Berenike and Quseir al Qadhim in Egypt and in Khor Rori in Oman** indicating that early Tamils had trade contacts with West Asia and along the Red Sea coast.
- People etched their names on pottery to indicate ownership. Many of the names are in Tamil while some are in Prakrit.

Prakrit

Prakrit was the language used by the common people in the Northern part of India during the Mauryan period.

Archaeology and Material Culture

- Archaeology is the study of the past by interpretation of the material cultural remains. Such remains are unearthed by the systematic excavation of old inhabitation sites called archaeological sites.
- Archaeological sites have mounds which are an accumulation of soil, pottery, building and organic remains and objects.
- In many parts of Tamil Nadu they are called **Nattam, Kottai and Medu**. Such sites provide evidence of how people lived in the past.

Archaeological Sites

- Archaeological excavation refers to systematically digging a site to recover material evidence for exploring and interpreting societies of the past.
- Archaeological excavations at the early historic sites are the source of evidence of the activities of the Sangam Age people.
- Excavations at **Arikkamedu, Azhagankulam, Uraiyyur, Kanchipuram, Kaveripoompattinam, Korkai, Vasavasamudram, Keezhadi, Kodumanal in Tamil Nadu, and Pattanam in Kerala** provide the evidence we have of this period.
- Arikkamedu, near Puducherry, is a Sangam Age port, excavated by the Archaeological Survey of India (ASI).
- British archaeologist, **Robert Eric Mortimer Wheeler**, French Archaeologist, **J.M. Casal**, and Indian archaeologists, **A. Ghosh and Krishna Deva**, excavated this site.
- They found evidence of a planned town, warehouse, streets, tanks and ring wells. The Archaeological Survey of India (ASI) is a Central government agency that manages archaeological sites and monuments in India.
- The Government of Tamil Nadu has its own department for archaeology called the Tamil Nadu State Department of Archaeology.
- **The Indian Treasure Trove Act (1878), the Antiquities and Art Treasures Act (1972), the Ancient Monuments and Archaeological Sites and Remains Act (1958)** are legislation related to the preservation of archaeological remains in India.

Material Culture

- Archaeologists have found evidence of brick structures and industrial activities, as well as artefacts such as **beads, bangles, cameos, intaglios, and other materials** in these sites.
- Tamil Brahmi inscriptions on pottery and coins have also been unearthed. Evidences of the various arts, crafts and industries together help us reconstruct the way of life of the people of those times.
- From this we learn and understand how they might have lived.
- **Cameo** – an ornament made in precious stone where images are carved on the surface.
- **Intaglio** – an ornament in which images are carved as recess, below the surface.

Coins



- Coins as a medium of exchange were introduced for the first time in the Sangam Age.
- The coins of the Cheras, the Cholas and the Pandyas, punch-marked coins, and Roman coins form another important source of evidence from the Sangam Age.
- Punch-marked coins have been found at Kodumanal and Bodinayakkanur. Roman coins are concentrated in the Coimbatore region, and are found at **Azhagankulam, Karur, and Madurai**.
- They were used as bullion for their metal value and as ornaments. Bullion means precious metal available in the form of ingots.
- Punch-marked coins are the earliest coins used in India. They are mostly made of silver and have numerous symbols punched on them. Hence, they are known as punch-marked coins.

Non-Tamil Sources (Foreign Accounts)

- Non-Tamil literary sources also offer information on early Tamil society.
- The presence of the non-Tamil sources reveals the extensive contacts and interactions of the early Tamil society with the outside world.

Arthasastra

- Arthasastra, the classic work on economy and statecraft authored by **Chanakya during the Mauryan period, refers to Pandya kavataka**.
- It may mean the pearl and shells from the Pandyan country.

Mahavamsa

- Mahavamsa, the Sri Lankan Buddhist chronicle, composed in the **Pali language**, mentions **merchants and horse traders** from Tamil Nadu and South India.
- Chronicle is a narrative text presenting the important historical events in chronological order.

Periplus of Erythrean Sea

- Periplus of Erythrean Sea is an ancient **Greek text** whose author is not known. The term Periplus means navigational guide used by sailors.
- Erythrean Sea refers to the **waters around the Red Sea**. It makes references to the Sangam Age ports of **Muciri, Thondi, Korkai and Kumari**, as well as the Cheras and the Pandyas.

Pliny's Natural History

- Pliny the Elder, was a Roman who wrote **Natural History**. Written in **Latin**, it is a text on the natural wealth of the Roman Empire.
- Pliny speaks about the pepper trade with India and he states that it took **40 days** to reach India, from Oealis near North East Africa, if the south west monsoon wind was favourable.
- He also mentions that the Pandyas of Madurai controlled the port of Bacare on the Kerala coast. The current name of Bacare is not known.
- Pliny laments the loss of Roman wealth due to Rome's pepper trade with India – an indication of the huge volume and value of the pepper that was traded.

Ptolemy's Geography

- Ptolemy's Geography is a **gazetteer and atlas of Roman times** providing geographical details of the Roman Empire in the second century CE.
- **Kaveripoompattinam (Khabaris Emporium), Korkai (Kolkoi), Kanniyakumari (Komaria), and Muciri (Muziris)** are some of the places mentioned in his Geography.

Peutingerian table



Map of Peutingerian table,

Peutingerian table is an illustrated **map of the Roman roads**. It shows the areas of ancient Tamilagam and the **port of Muziris**.

Note: Taprobane refers to Sri Lanka as Island. Muziris refers to the port of Muchiri.

Vienna Papyrus

- Vienna papyrus, a Greek document datable to the second century CE, mentions **Muciri's** trade of olden days.
- It is in the **Papyrus Museum attached to the Austrian National Library, Vienna (Austria)**.
- It contains a written agreement between traders and mentions **the name of a ship, Hermapollon**, and lists articles of export such as pepper and ivory that were shipped from India to the Roman Empire.
- Papyrus, a paper produced out of the papyrus plant used extensively for writing purposes in ancient Egypt.

The Sangam Age

- The Sangam Age or the Early Historic period is an important phase in the history of South India.
- This period is marked out from prehistory, because of the availability of textual sources, namely Sangam literature and Tamil-Brahmi inscriptions.
- Sangam text is a vast corpus of literature that serves as an important source for the study of the people and society of the relevant period.

Chronology

- There is considerable debate among scholars about the age and chronology of Sangam society. The Sangam texts are generally dated to between **third century BCE and the third century CE**.

- The references in Greco-Roman texts, TamilBrahmi inscriptions and the references to **the Cheras, Cholas and the Pandyas in the Ashokan inscription** corroborate this date.
- It is generally agreed that the Sangam poems were composed in the early part of the historical period, but were compiled into anthologies in the later period.
- Ashokan Brahmi - the script used in Ashokan edicts or inscriptions.

The Thinaï

- The concept of Thinaï is presented in the **Tamil Grammar work of Tholkappiyam** and this concept is essential to understand the classical Tamil poems.
- Thinaï is a poetic theme, which means a class or category and refers to a habitat or eco-zone with specific physiographical characteristics.
- Sangam poems are set in these specific eco-zones and reveal that human life has deep relationships with nature.
- The themes of the poems are broadly defined as **akam (interior) and puram (exterior)**.
- Akathinaï refers to various situations of love and family life, while Purathinaï is concerned with all others aspects of life and deals particularly with war and heroism.
- **Ainthinaï**: The Five Thinaïs or landscapes. Tamilagam was divided into five landscapes. Each region had distinct characteristics – **a presiding deity, occupation, people and cultural life according to its specific environmental conditions**.
- This classification has been interpreted by scholars to reflect real life situations in these landscapes.

The five landscapes are Kurunji, Mullai, Marutham, Neythal and Paalai.

- Kurunji refers to the hilly and mountainous region.
- Mullai is forested and pastoral region.
- Marutham is the fertile riverine valley.
- Neythal is coastal region.
- Paalai is sandy desert region.

Sangam Age Polity: Political Powers of Tamilagam

- The Sangam Age has its roots in the Iron Age. In the Iron Age people were organised into chiefdoms.
- From such communities of Iron Age emerged the Vendhars of the early historic period and the Velirs of the Sangam Age were chieftains.
- The **Mauryan emperor, Asoka, conquered Kalinga (Odisha) and parts of Andhra and Karnataka regions**.
- **Ashokan inscriptions found in present day Odisha, Karnataka, Telangana and Andhra Pradesh are not seen in Tamil Nadu and Kerala**.
- Therefore, we may conclude that the Tamil rulers were independent of Mauryan authority.

The Muvendhar



A Chera coin with bow and arrow, and an elephant goad on the obverse and elephant on the reverse



Chola Coins with a tiger on the obverse, elephant and the sacred symbols on the reverse



Sangam Age Pandya coin with fish symbol

- Among the political powers of the **Sangam Age**, the **Cheras**, the **Cholas** and the **Pandyas** occupied pre-eminent positions.
- They were known as Muvendhar (the three kings). The muvendhar controlled the major towns and ports of the Sangam period.

The Cheras

- The Cheras, referred to as Keralaputras in the Ashokan inscriptions, controlled the region of present-day Kerala and also the western parts of Tamil Nadu.
- **Vanci** was the capital of the Cheras while **Muciri and Thondi were their port towns**. Vanci is identified with Karur in Tamil Nadu while some others identify it with Thiruvanchaikalam in Kerala.
- **Pathiruppathu speaks about the Chera kings** and their territory. The Cheras wore garlands made from the flowers of the palm tree.
- The inscriptions of Pugalur near Karur mention the Chera kings of three generations. Coins of Chera kings have been found in Karur.
- The **Silappathikaram speaks about Cheran Senguttuvan**, who built a temple for **Kannagi**, the protagonist of the epic.
- The bow and arrow was the symbol of the Cheras. Legend has it that **Ilango** who composed the Silappathikaram, was the **brother of Cheran Senguttuvan**.

The Cholas

- The Cholas ruled over the Kaveri delta and northern parts of Tamil Nadu. Their capital was Uraiyur and their port town was **Kaveripoompattinam or Pumpuhar**, where the river Kaveri drains into the Bay of Bengal.
- **Pattinappaalai is a long poem about Kaveripoompattinam composed by the poet Kadiyalur Uruthirankannanar**. Silappathikaram describes the trading activities at Kaveripoompattinam.
- **Karikalan** is notable among the Chola kings and is credited with bringing forestlands under the plough and developing irrigation facilities by effectively utilising the water from the river Kaveri.
- The foundation for the extensive harnessing of water for irrigation purposes, which reached its zenith in later Chola times (**10th to 13th centuries**) was laid in his time.
- Karikalan fought battles with the Pandyas, Cheras and other chieftains.
- The Chola emblem was the tiger and they issued square copper coins with images of a **tiger on the obverse, elephant and the sacred symbols on the reverse**.

The Pandyas

- The Pandyas who ruled the southern part of Tamil Nadu are referred to in the Ashokan inscriptions.
- **Madurai was the Pandya's capital**. Tamil literary tradition credits Pandyan rulers with patronizing Tamil Sangams (academies) and supporting the compilations of poems.
- The Mangulam Tamil-Brahmi inscription mentions the king **Nedunchezhiyan**.
- **Nediyon, Mudathirumaran, Palayagasalai Mudukudumipperuvazhuti** were some of the important rulers of the dynasty. The **Pandyan symbol was the fish**.

Velirs / Chieftains

- Apart from the Vendhars, there were Velirs and numerous chieftains who occupied territories on the margins of the **muvendhar**.
- The velirs were the seven chiefs **Pari, Kari, Ori, Nalli, Pegan, Ai and Athiyaman**. Sangam poems write extensively about the generosity of these velirs.
- These chiefs had intimate relations with the poets of their time and were known for their large-heartedness.
- These chieftains had alliance with one or other of the **muvendhar** and helped them in their battles against the other Vendhars.

Society in Sangam Age

- Many of the communities of the Iron Age society were organised as tribes, and some of them were Chiefdoms.
- The Sangam Age society was a society in transition from a tribal community ruled by a chief to a larger kingdom ruled by a king.

Composition of the Society

- Social stratification had begun to take root in Tamil society by the Sangam times.
- There were several clan-based communities including groups such as **Panar, Paratavar, Eyinar, Uzhavar, Kanavar, Vettuvavar and Maravar**. The Vendhars, chiefs, and their associates formed the higher social groups.
- There were priests who were known as Antanars. There were artisan groups **specialising in pottery and blacksmithy**. The caste system we find in northern India did not take root in Tamil country as social groups were divided into five situational types (tamil) and related occupational patterns.
- Even though Sangam society was characterized by limited consumption of commodities, the kings, chiefs and merchants led a prosperous life. People at the margins lived in poverty.
- **Panars** depended on their patrons for their livelihood. The development of agriculture and pastoral ways of life might have harmed the eco-system and the naturally available forest and wild animals.
- It is possible that some of the hunter-gatherers might have been pushed to the forest areas and a few might have taken up the occupation of manual labourers.
- The development of agriculture in the wet-land region depended on the use of certain groups of people as labourers.

Women

- Women are frequently referred to in Tamil texts as mothers, heroines, and foster-mothers. Women from **Panar families, dancers, poets, and royal women** were all portrayed in Sangam literature.

- There are references to women from all five eco-zones. For example, **Vennikkuyathiyar** is identified as a poetess from the village of Venni.
- There are references to women protecting **Thinai fields from birds** and **Umanar** women selling salt showing that women were involved in primary production.
- Instances where women preferred to die along with their husbands also occur in the literature of the times.

Economy



Paddy grains collected from Porunthal excavations



Different types of pottery from Porunthal excavations.



Russet coated painted pottery with wavy line decoration

- The economy was mixed as elaborated in the Thinai concept.
- People practiced **agriculture, pastoralism, trade and money exchange, hunting-gathering, and fishing** depending upon the eco-zones in which they lived.

Primary Production

- Agriculture was one of the main sources of subsistence. Crops like **paddy, sugarcane, millets** were cultivated. Both wet and dry land farming were practiced.
- In the riverine and tank-irrigated areas, paddy was cultivated.
- Millets were cultivated in dry lands. Varieties of rice such as **sennel (red rice), vennel (white rice), and aivananel (a type of rice)** are mentioned in the literature.
- Rice grains were found in burial urns at excavations in Adichanallur and Porunthal.
- People in the forest adopted punam or shifting cultivation.
- Pastoralism – nomadic people earning livelihood by rearing cattle, sheep, and goat.

Industries and Crafts of the Sangam Age

- Craft production and craft specialization were important aspects of urbanization. In the Sangam Age there were professional groups that produced various commodities.
- The system of production of commodities is called industry.

Pottery

- Pottery was practised in many settlements. People used pottery produced by **Kalamceyko (potters)** in their daily activities and so they were made in large numbers.
- **Black ware, russet-coated painted ware, black and red ware** potteries were the different types of pottery used.

Iron Smelting Industry

- Iron manufacturing was an important artisanal activity.
- Iron smelting was undertaken in traditional furnaces and such furnaces, with terracotta pipes and raw ore have been found in many archaeological sites.
- For instance evidence of iron smelting has been found in **Kodumanal and Guttur**.
- Sangam literature speaks of blacksmiths, and their tools and activities. Iron implements were required for agriculture and warfare (swords, daggers, and spears).

Stone Ornaments



A terracotta seal with rice husk impression, Keezhadi



Carnelian Beads of Sangam Age



Carnelian beads with etched designs of Sangam Age



Gold ornament axe



Gold pendant, Porunthal



A map of major Sangam Age sites



Gold ornaments, Pattanam

- Sangam Age people adorned themselves with a variety of ornaments.
- While the poor wore ornaments made of **clay, terracotta, iron, and leaves and flowers**, the rich wore jewellery made of **precious stones, copper, and gold**.
- **Quartz, amethyst (sevvantikkal) and carnelian (semmanikkal)** were some of the semi-precious stones used for making ornaments.
- Diamond drills were used to pierce holes in the hard stones and etched carnelian beads have been found in the megalithic monuments.

Gold jewellery

- Gold ornaments were well known in this period. **Gold coins from Roman** was used to make jewellery.
- Evidence of gold smelting has been found at Pattanam in Kerala.

- Gold ornaments have been unearthed at the megalithic sites of **Suttukeni, Adichanallur and Kodumanal**, and towns of **Arikkamedu, Keezhadi and Pattanam** in Kerala.

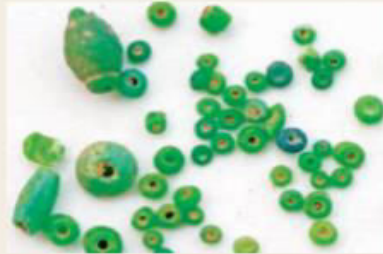
Glass Beads



A bronze tiger with carnelian stones, Kodumanal



A bronze vessel from a megalithic burial Auroville, Puducherry



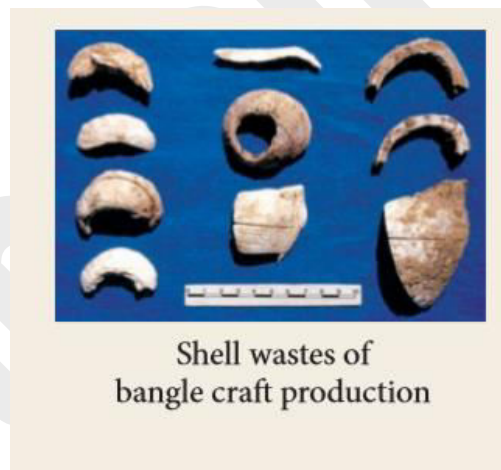
Glass beads from Porunthal excavations

- The presence of glass beads at the sites reveals that people of the Sangam Age knew how to make glass beads.
- Glass material (silica) was melted in a furnace and drawn into long tubes which were then cut into small beads. Glass beads came in various shapes and colour.
- **Arikkamedu and Kudikkadu, near Cuddalore** show evidence of glass beads industry. It is possible that people who could not afford precious stones used glass beads instead.

Pearl Fishery and Shell Bangle



- The Pamban coast is famous for pearl fishery. A pearl has been discovered in recently excavated **Keezhadi site**.
- Shell bangles were very common in the Sangam Age. The Parathavars collected conch shells from the Pamban Island, which were cut and crafted into bangles by artisans.
- Whole shells as well as fragments of bangles have been found at many sites. Sangam literature describes women wearing shell bangles.



Textiles

- Textile production was another important occupation. Evidence of spindle whorls and pieces of cloth have been found at Kodumanal.
- Literature too refers to clothes called **kalingam** and other fine varieties of textiles.
- Periplus also mentions the fine variety of textiles produced in the Tamil region. Spindle whorls were used for making thread from cotton.

Exchange, Trade, Merchants, and Trade Routes

- We saw the primary production of grains, cattle wealth, and various commodities. These goods were not produced by everybody and were not produced in all settlements. Resources and commodities were not available in all regions.
- For example, the hill region did not have fish or salt and the coastal regions could not produce paddy.
- Therefore trade and exchange was important for people to have access to different commodities.
- **Specialised groups called vanikars (traders)** travelled in groups trading goods and commodities between regions.

Traders

Akanaanuru poem 149 describes the trading at the port of Muciri as follows:

“the well crafted ships of the Yavana came with gold returned with pepper at the wealthy port of Muciri”



The trade route from Tamilagam to Rome.

- The terms **vanikan** and **nigama (guild)** appear in Tamil-Brahmi inscriptions.
- There were different types of merchants: **gold merchants, cloth merchants, and salt merchants.**
- Salt merchants were called **Umanars** and they travelled in bullock carts along with their family.

Means of Transport

- Bullock carts and animals were used to transport goods by land. Trade routes linked the various towns of Tamilagam.
- Various types of water crafts and sea-going vessels such as **Kalam, Pahri, Odam, Toni, Teppam, and Navai** are also mentioned in Tamil literature.

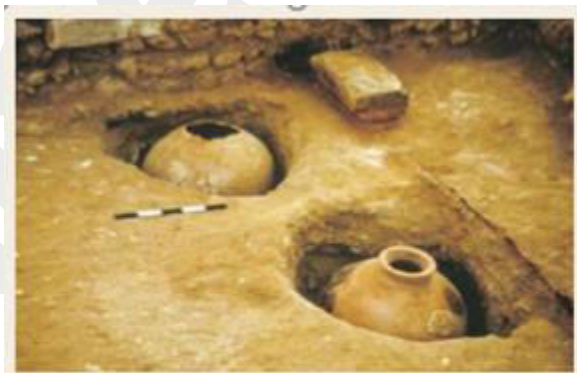
Barter and Coins

- Barter was the primary mode of exchange. For instance, rice was exchanged for fish. Salt was precious and a handful of it would fetch an equal amount of rice.
- The extensive availability of coin hoards of the **Sangam Age of the Cheras, Cholas, Pandyas, and Malayaman** indicates that they were used widely.

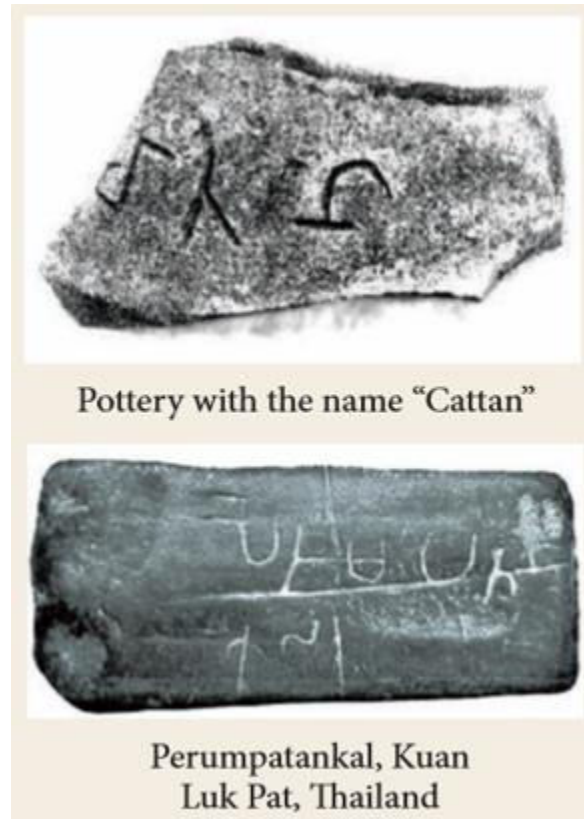
Tamilagam and Overseas Interactions

- Tamil country had connections with countries overseas both in the east and west.
- Roman ships used monsoon winds to cross the **Western Sea or the Arabian Sea to connect Tamilagam with the Western world.**
- Spices including pepper, ivory, and precious stones were exported. Metal including gold, silver and copper and precious stones were imported.
- Yavanar referred to the **Westerners**, including the Greeks, Romans and West Asian people. Yavana derives from the **Greek region of Ionia.**

Tamil Nadu to Red Sea Coast



Ceramic Jars from Tamilagam with preserved pepper, Berenike, Egypt



- An Indian jar with **7.5 kg of pepper, teak wood, a potsherd** with Tamil-Brahmi inscription and Indian pottery have been discovered at **Berenike**, a port on the Red Sea coast of Egypt.
- At Quseir al Qadhim, another port located north of Berenike on the Red Sea Coast, three Tamil-Brahmi inscriptions, **Panaiori, Kanan, and Cattan**, have been found on pottery discovered here.
- A stone with the name "**Perumpatankal**" has been found at KhuanLuk Pat, Thailand.
- Southeast Asia was known as **Suvarna Bhumi** in Tamil literature. This stone was used by a person called Perumpattan, probably a goldsmith. It was a touchstone used to test the purity of gold.

Emergence of towns and ports

- The Sangam Age saw the first urbanization in Tamilagam.
- Cities developed and they had **brick buildings, roof tiles, ring wells and planned towns, streets, and store houses**.
- The towns worked as ports and artisanal centres. Arikamedu, Kaveripoompattinam, Azhagankulam and Korkai on the east coast and Pattanam in Kerala were port centres.
- Kanchipuram, Uraiyur, Karur, Madurai and Kodumanal were inland trade centres.
- Many goods and commodities were produced in these centres and were exported to various regions.
- Though few in number, large towns appeared in the Sangam Age.

- Small villages however were found in many areas. **Bronze vessels, beads, shell bangles, glass beads, pottery with names of people written in TamilBrahmi script** were found at these sites.

Faith and Belief System

- Like the diverse nature of the society and economy, the belief system of the Sangam Age was also diverse.
- It consisted of animism, ancestor worship, hero worship and worship of several deities.
- Tholkappiyam lists the presiding deities of **Kurunji, Mullai, Marutham, Neythal and Paalai landscapes, as Murugan, Thirumal, Indiran, Varunan and Kotravai**, respectively.
- However, people also worshipped natural forces and dead heroes, and ancestors. The force of anangu is mentioned in the literature which indicates the prevalence of animistic beliefs.
- Jainism was present as evidenced by the caves with Tamil-Brahmi inscriptions. **Performance of Yagna** is also evidenced.
- Buddhism was also present in certain centres. Different groups practiced various forms of worship

Culture of Arts

- Various art forms too existed in the Sangam Age. Performances of ritual dances called Veriyatal are referred to in the literature.
- Composition of poems, playing of music instruments and dances** were also known. The literature mentions the fine variety of cuisine of the Sangam Age.
- People took care of their appearance and evidence of antimony rods (kohl sticks) made of copper has been found in archaeological sites.
- They were used by women for decorating their eyebrows.

Tamil-Brahmi Script																									
used in the Sangam Age for writing the Tamil Language																									
	அ	ஆ	இ	ஈ	உ	ஊ	எ	ஏ	ஐ	ஒ	ஔ			அ	ஆ	இ	ஈ	உ	ஊ	எ	ஏ	ஐ	ஒ	ஔ	ஃ
	𑌀	𑌁	𑌂	𑌃	𑌄	𑌅	𑌆	𑌇	𑌈	𑌉	𑌊			𑌀	𑌁	𑌂	𑌃	𑌄	𑌅	𑌆	𑌇	𑌈	𑌉	𑌊	𑌋
க	𑌔	𑌕	𑌖	𑌗	𑌘	𑌙	𑌚	𑌛	𑌜	𑌝	𑌞			ம	𑌟	𑌠	𑌡	𑌢	𑌣	𑌤	𑌥	𑌦	𑌧	𑌨	𑌩
ங	𑌪	𑌫	𑌬	𑌭	𑌮	𑌯	𑌰	𑌱	𑌲	𑌳	𑌴			ய	𑌵	𑌶	𑌷	𑌸	𑌹	𑌺	𑌻	𑌼	𑌽	𑌾	𑌿
ச	𑌀	𑌁	𑌂	𑌃	𑌄	𑌅	𑌆	𑌇	𑌈	𑌉	𑌊			ர	𑌫	𑌬	𑌭	𑌮	𑌯	𑌰	𑌱	𑌲	𑌳	𑌴	𑌵
ஞ	𑌔	𑌕	𑌖	𑌗	𑌘	𑌙	𑌚	𑌛	𑌜	𑌝	𑌞			ல	𑌟	𑌠	𑌡	𑌢	𑌣	𑌤	𑌥	𑌦	𑌧	𑌨	𑌩
ட	𑌪	𑌫	𑌬	𑌭	𑌮	𑌯	𑌰	𑌱	𑌲	𑌳	𑌴			வ	𑌵	𑌶	𑌷	𑌸	𑌹	𑌺	𑌻	𑌼	𑌽	𑌾	𑌿
ண	𑌔	𑌕	𑌖	𑌗	𑌘	𑌙	𑌚	𑌛	𑌜	𑌝	𑌞			ழ	𑌟	𑌠	𑌡	𑌢	𑌣	𑌤	𑌥	𑌦	𑌧	𑌨	𑌩
த	𑌔	𑌕	𑌖	𑌗	𑌘	𑌙	𑌚	𑌛	𑌜	𑌝	𑌞			ள	𑌟	𑌠	𑌡	𑌢	𑌣	𑌤	𑌥	𑌦	𑌧	𑌨	𑌩
ந	𑌔	𑌕	𑌖	𑌗	𑌘	𑌙	𑌚	𑌛	𑌜	𑌝	𑌞			ற	𑌟	𑌠	𑌡	𑌢	𑌣	𑌤	𑌥	𑌦	𑌧	𑌨	𑌩
ப	𑌔	𑌕	𑌖	𑌗	𑌘	𑌙	𑌚	𑌛	𑌜	𑌝	𑌞			ஊ	𑌟	𑌠	𑌡	𑌢	𑌣	𑌤	𑌥	𑌦	𑌧	𑌨	𑌩

More to Know:**1. Keezhadi near Madurai, Tamil Nadu**

Brick Structures at Keezhadi

- Keezhadi is located near **Silaimaan east of Madurai, on the highway to Rameswaram.**
- In a large coconut garden, called Pallichandai Tidal, the Archaeological Survey of India excavated an ancient town dating to the Sangam Age.
- Archaeological excavations have produced evidence for brick buildings, drainage, Tamil-Brahmi inscription on **pottery, beads of glass, carnelian and quartz, pearl, iron objects, games pieces, and antimony rods.**
- Further excavation may shed light on the nature of the craft production and the cultural activities undertaken at this settlement.

2. Kodumanal, Tamil Nadu

Excavated
Megalithic Burial
at Kodumanal



Iron objects (horse
equipment) from
Kodumanal

- Kodumanal is located near **Erode** in Tamil Nadu and is identified with the Kodumanam of Pathitrapattu.
- Evidence of **iron, stone bead and shell work**, as well as megalithic burials have been discovered at this site.

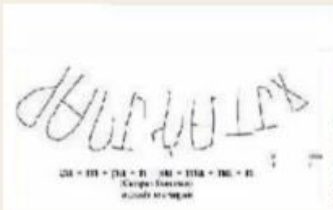
- More than 300 pottery inscriptions in Tamil-Brahmi have also been found.



Shell bangle fragments and a conch, Kodumanal



Carnelian beads, Kodumanal



Jar with writing in Brahmi



Human skeleton from Kodumanal

3. Pattanam, Kerala



Pottery sherds from West Asia



Canoe excavated at Pattanam

- Pattanam is located near **North Paravur in Vadakkekara village of Ernakulam** district of Kerala.
- It was an ancient port town that had overseas connections with the western and eastern worlds.

4. What is an urban centre?

A planned town with brick architecture and a proper layout. Urban centres have a larger population involved in non-agrarian, commercial and political occupations. Various industrial activities are seen in these towns.

5. Pulimankombai Hero stone



Hero stone-Pulimankombai

- Pulimankomba is a village in the Vaigai river valley in **Theni district**.
- In **2006**, rare hero stone inscriptions in Tamil Brahmi script were discovered in this village. One of the inscriptions from Pulimankombai reads **"Kudalur Akol pedu tiyan antavan kal"** It means **"The stone of Tiyan Antavan who was killed in a cattle raid at the village of Kudalur"**.

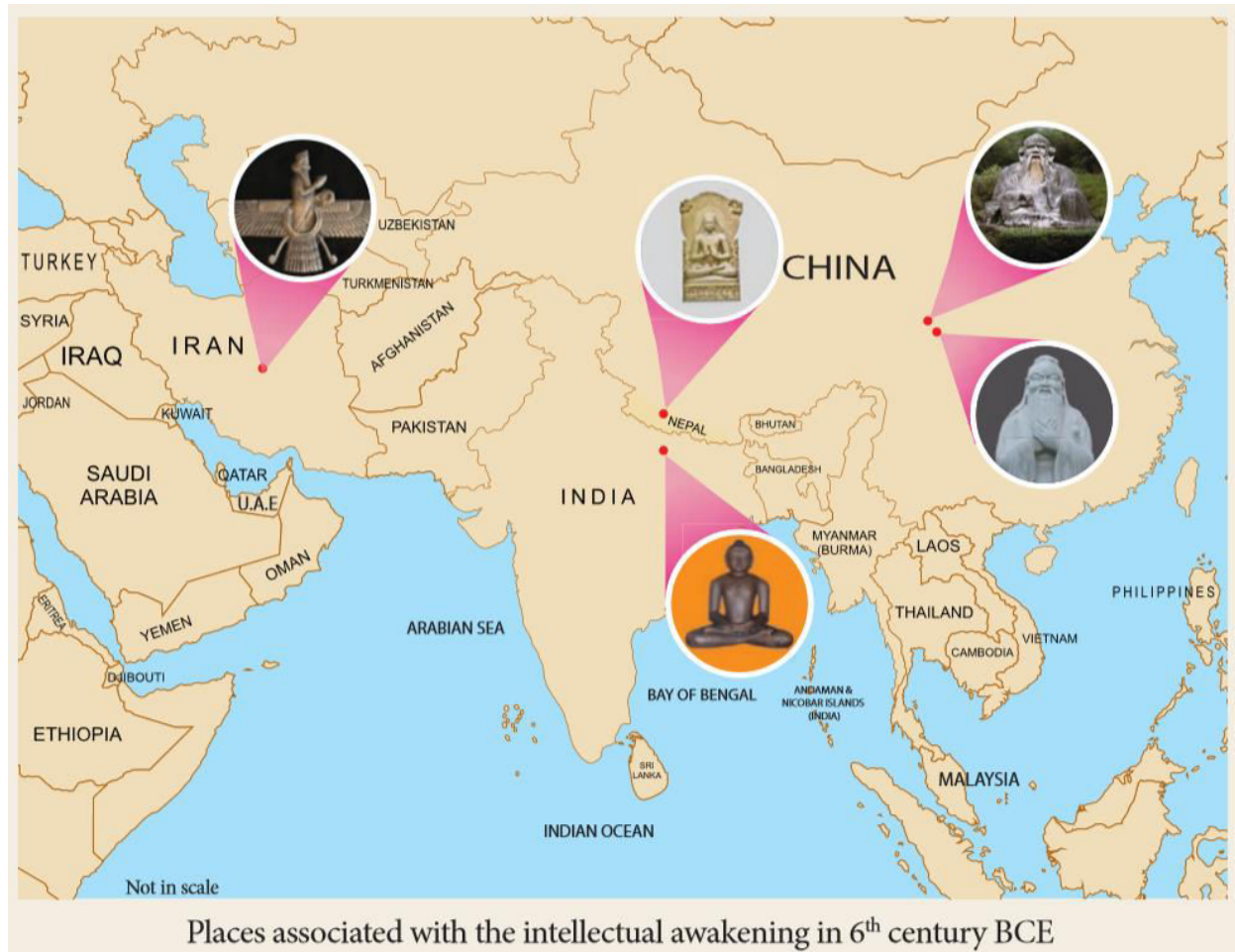
9th Social Science Lesson 4 Notes in English

4. Intellectual Awakening and Socio-Political Changes

Introduction

- The discovery of iron marked the beginning of the second phase in the history of civilisations.
- The invention of smelting of iron transformed both production and warfare. Before **iron, copper and its alloy, bronze, which were expensive**, were employed in production.
- The copper or bronze edges became blunt quickly and so implements, whether weapons or ploughs, made of bronze could not be used effectively.
- Iron ore, in contrast, was available in abundance compared to copper or bronze. The effect of iron axe on agriculture was immense.
- The iron axe enabled cultivators to clear the jungles and the iron plough was used to break the hardest soil.
- The Assyrian Empire, which made use of iron technology, was ascendant by the beginning of the seventh century BCE.
- Small kingdoms or city states emerged in **China, Asia Minor (modern Turkey), Greece, Italy, Palestine, Lebanon and North Africa**.
- A new civilisation began to develop in northern India, with the revival of trade and urbanization during the sixth century BCE.
- In this period of major political and social changes in north India, Buddha and Mahavira were born.
- In the century following their death, **Buddhism and Jainism took root as major religions in India**.
- This meant that new religious orders were coming up with many followers, propagating new beliefs and philosophies.
- Similarly **Zoroastrianism in Persia and Confucianism and Taoism in China** became popular during this period.

Religion in the Sixth Century BCE



- The new civilisations that emerged in the **new Iron Age** had certain common features.
- They were characterised by the **proliferation of new crafts, growth of long-distance trade, building of cities and towns, rise of universalistic religions and evolution of a code of conduct.**
- Sixth century BCE was, therefore, a period of exceptional development in all spheres of life such as **material, cultural and intellectual.**
- About this time, we find that a number of prominent men, great thinkers and founders of new religions lived, making it a period of great historical importance.
- Philosophical and religious thinkers such as **Confucius in China, Zoroaster in Iran and Mahavira and Buddha in India** gained popularity in sixth century BCE.

Confucianism and Taoism

- In the sixth century BCE, two great thinkers were born in **China: Confucius and Lao-Tse.**
- They laid down the systems of morals and social behaviour for individuals and communities.

- But after their death, temples were built in their memory and the philosophy they taught was developed into a religion. Known as **Confucianism** and **Taoism** respectively, their books were held in great reverence in China.
- Confucianism exerted a big influence on not only the political class of China but also on the common people.

Confucius (551–478 BCE)

- Confucius was born in the Shantung province of China in 551 BCE.
- He studied **history, poetry, philosophy and music**. He is the author of five important works:

(1) The Book of Records, which is chiefly ethical, providing guidelines for the regulation of human society

(2) The Book of Odes, illustrating the sound principles of morality in songs

(3) The Book of Changes dealing with metaphysics

(4) The Spring and Autumn Annals, a code of political morality

(5) The Book of History narrating the events and legends of the early religions of China.

Five Cardinal Principles of Confucius' Ethics

1. Humaneness

2. Righteousness

3. Propriety

4. Wisdom

5. Trustworthiness

- Confucius said that wisdom grows from the family, and that the foundation of society is the disciplined individual in an orderly family.
- The superior man, according to him, is not merely intelligent or scholarly, but his character should be exemplary.
- The superior man of Confucius possesses three virtues: intelligence, courage and goodwill.
- Though Confucius insisted on children obeying parents and wife her husband, he also clearly proposed that **"when the command is wrong a son should resist his father and a minister should resist the prince."**
- When asked about government, he said that there are three requisites for it: **"That there should be sufficiency of food, sufficiency of military equipment and confidence of the people in their ruler."**

- The philosophy of Confucius gave the Chinese people an awareness about their political rights.
- It also clearly listed the government's duty towards the people. Confucius felt that the government should work with an ideal.
- In matters of national life, Confucius felt that the people in the nation are the actual and proper source of political sovereignty.
- He advised that the ruler must appoint persons of character in the government to govern the people impartially.
- Confucianism is often characterised as a system of social and ethical philosophy rather than as a religion.
- The correct way of writing Confucius, according to the new Pinyin system of transliteration, is **Kong Fu-Tse**.
- The European scholars who visited China found it difficult to pronounce the name and so they turned it into **Latin** and called him **Confucius**.
- **[Linguists developed a system called Pinyin, meaning spelled sounds, for pronouncing and spelling Chinese names and words in languages written in the Latin alphabet.**

Taoism

- Lao-Tse, the greatest of the preConfucian philosophers, was **53 years older than Confucius**. **Lao-Tse was born in 604 BCE**.
- Disgusted with the intrigues of politicians and the prevailing corruption of his time, he left China to live in a peaceful abode.
- Lao-Tse wrote a book in two parts, running into 5,000 words. He then disappeared from the place and no one knew where he died.
- His book Tao Teh Ching is a guide to the conduct of life.

Teachings of Lao-Tse (Taoism)

- The cause of human unhappiness in the world is human selfishness. Selfishness creates unlimited human desires, which can never be satisfied. In nature, all the things act in a natural way.
- The law of human conduct must correspond with nature. Humans live a life under the regulation of someone.
- This is because they have acquired knowledge and have not remained innocent. On the basis of their acquired knowledge, they have built up an **urban civilisation and have made themselves unhappy**.

Zoroastrianism

- Zoroastrianism is one of the oldest of the revealed world religions. It remained as the state religion of **three great Iranian empires**, which flourished from the **6th century BCE and dominated much of the Near and Middle East**.
- Zoroaster of Persia is the founder of Zoroastrianism. Zoroaster was pained to find his people worshipping primitive deities.
- He revolted against it and proclaimed to the world that there is one god, **Ahura Mazda (the Lord of Light)**.
- The holy book of Zoroastrians is **Zend Avesta**. It is a collection of sacred literature of different **epochs, containing religious hymns, invocations, prayers, confessions, laws, myths and sacred reminiscences**.
- The doctrines and rituals of the Zoroastrians have much similarity to those of the Vedas. The language of Avesta bears similarity to that of the Indo-Aryan.
- Linguists have established a close relationship between Indo-Aryan and the languages of West Asia, in particular Iran.
- The old Iranian language dates back to the second millennium BCE.
- Later, it incorporated languages of Dravidians and those of aboriginals of the Indian sub-continent.
- According to the historian Romila Thapar, the old Iranian and IndoAryan speakers originally belonged to a single group and later split up because of dissensions.

Teachings

- Zoroaster taught that the great object of religion, state or society is the cultivation of morality.
- The highest religious conception is purity of thought, word and deed. He asserted that Ahura Mazda has seven qualities:
 - (1) light
 - (2) good mind
 - (3) right
 - (4) dominion
 - (5) piety
 - (6) well-being
 - (7) immortality.
- Ahura Mazda is omniscient (**knows everything**), omnipotent (**all powerful**) and omnipresent (**is everywhere**).

- In Zoroastrianism, sacrifice and image worship were discarded. Fire was worshipped as a symbol of the deity and considered the highest form of worship.
- Charity was made an essential part of religion, and service to the poor was particularly emphasised.
- Human virtues did not mean only prayer, meditation, sacrifices and rituals. It meant much more, such as fighting evil, making efforts for good and assisting the activity of Ahura Mazda.
- This religion ceased to exist in its place of origin, as in the wake of Muslim conquest of Persia (Iran), many of the Zoroastrian families fled to different countries, including India between the eighth century and tenth century CE.
- With their dwindling numbers and in the face of coercive measures adopted by the Arabs to push through their new faith, as well as the incidents of destruction of fire temples and killing of priests, Zoroastrianism went into a decline.
- The Parsis, who came to India from Persia first as merchants and later in the wake of persecution, brought Zoroastrianism with them and they have been practicing it ever since.

Impact of Iron Technology in India

- In the Gangetic valley, people learnt to produce crops more than that was required for subsistence.
- So, another section of people took up some professional crafts as their livelihood. Like the farmers, these craftsmen also had to rely on a group of people who collected raw materials and distributed the craft products.
- Early urbanisation happened in two ways. One was as a result of some villages specialising in **black smithy, pottery, carpentry, cloth weaving and the like**.
- The other was on account of the congregation of specialised craftsmen in villages close to where the raw materials were available and where markets were present.
- Such a concentration enabled villages to evolve into towns and exchange centres. **Vaisali, Shravasti, Rajagriha, Kausambi and Kashi were some significant commercial centres of the Gangetic plain.**

Religion: Post-Rig Vedic

- Three more Vedas – **Yajur, Sama and Atharva – were composed after the Rig Veda.**
- Manuals of rituals called Brahmanas, specifying rhyming words to be sung, and two commentaries on certain Rig Vedic hymns called Aranyakas, containing knowledge to be learnt secretly in the forest, and the Upanishads, were compiled in the **upper Gangetic plain during 1000–600 BCE.**

Post-Vedic

- During the post-Vedic period, the Rig Vedic gods such as **Varuna, Indra, Agni, Surya and Usha** lost their importance.
- New gods like **Siva, Vishnu and Brahma** appeared on the religious firmament. Aryans developed the ideas of tapas (virtuous living) and brahmacharya (celibacy).
- Rites and rituals insisted on by Brahman priests overshadowed the true spirit of the religion.
- The sacrificial cult, supported by the wealthy and the elite, urbanized in accordance with the formulae prescribed in Brahmanas, were opposed by Buddha and Mahavira, who revolted against the existing practices and proposed their ethical teachings.

Jainism and Buddhism

- In the Gangetic plain, iron plough agriculture required the use of bullocks. But the indiscriminate killing of cattle for Vedic rituals and sacrifices caused resentment.
- The founders of Jainism and Buddhism did not prescribe killing as a religious rite. They secured their livelihood mostly by alms.
- Celibacy and abstinence from holding property made the new teachers much more acceptable than the Brahman priests.
- The people's resentment about the expensive and elaborate Vedic rituals, animal sacrifice and the desire for wealth eventually took them towards Jainism and Buddhism.
- Mahavira and Buddha lived a life of purity and exemplified simplicity and self-denial. They lived in the times of **Bimbisara and Ajatashatru, the famous kings of Magadha**.
- The commercial development of the northern cities like **Kaushambi, Kushinagara, Benaras, Vaishali and Rajgir** added importance to the Vaishyas who turned to Buddhism and Jainism in their eagerness to improve their social status.

Jainism Mahavira: Birth and Life

- **Vardhamana Mahavira was born in 599 BCE at Kundagrama near Vaishali.** His mother was Trishala, a Lichchavi princess.
- He spent his early life as a prince and was married to a princess named **Yashoda**. The couple had a daughter. At the **age of thirty**, he left his home and became an ascetic.
- For over twelve years, Mahavira wandered from place to place, subjecting himself to severe penance and self-mortification.
- In the **thirteenth year of his asceticism**, he acquired the highest knowledge and came to be known as **Jaina (the conqueror) and Mahavira (great hero)**.
- Jains believe that Mahavira came in a long line of Tirthankaras and he was the **twenty fourth and the last of them**.
- **Rishabha was the first Tirthankara and Parshvanath the penultimate or the twenty third.**
- Mahavira travelled extensively as a preacher in the kingdoms of Magadha, Videha and Anga.
- Magadha rulers **Bimbisara and Ajatashatru were influenced by his teachings**

- Thousands of people became his followers. After **30 years of preaching**, Mahavira died at **Pawapuri in 527 BCE at the age of seventy two.**

Teachings of Mahavira

The three principles of Jainism, also known as Tri-ratnas, are the following:

1. Right faith: Belief in the teachings and wisdom of Mahavira.
2. Right knowledge: Acceptance of the theory that there is no God and that the world existed without a creator.
3. Right action: It refers to the Mahavira's observance of the five great vows: **(a) ahimsa, (b) honesty, (c) kindness, (d) truthfulness and (e) not coveting or desiring things belonging to others.**

Spread of Jainism

- In order to spread his new faith, Mahavira founded monasteries and engaged munis (Jaina monks) who led a very austere life.
- In North India, this new faith was 8rbanizati by rulers such as **Dhana Nanda, Chadragupta Maurya and Kharavela.**
- There was a notable following for Jainism in Karnataka and western India during the 4th century BCE.
- Jainism encouraged the public spirit among all who embraced it. Varna system practiced by Brahmans was challenged.
- People were spared from the costly and elaborate rituals and sacrifices.
- Mahavira believed that all objects, both animate and inanimate, have souls and various degrees of consciousness. **They possess life and feel pain when they are injured.**

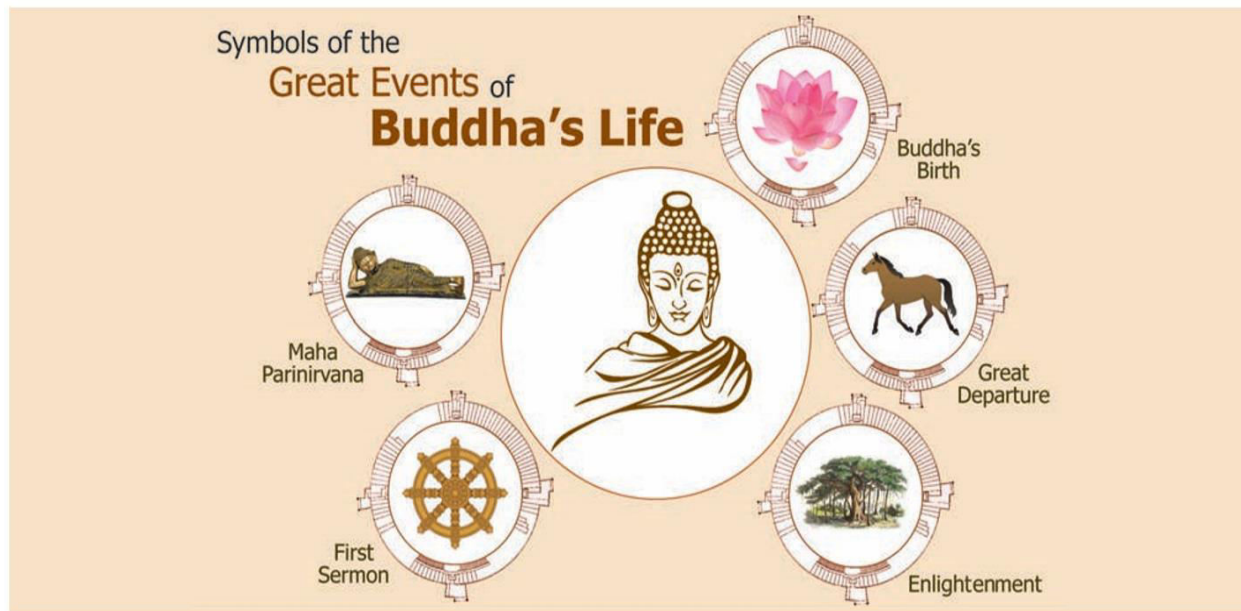
Split in Jainism

In course of time, Jainism split into two branches, namely the **Digambaras (sky-clad)** and the **Svetambaras (white clad)**. The Digambaras were the orthodox followers of Mahavira. The Digambaras rejected clothes altogether. Svetambaras wore a white dress from head to toe.

Decline of Jainism

The **lack of royal patronage, its severity, factionalism and spread of Buddhism** led to the decline of Jainism in India.

Buddhism



Gautama Buddha: Birth and Life

- Gautama Buddha was the **son of Suddhodana, the chief of a Kshatriya clan of the Sakyas of Kapilavastu in present-day Nepal.**
- His given name was **Siddhartha**. As he belonged to the Sakya clan, he was also known as '**Sakya Muni**'.
- He was born in **567 BCE in Lumbini Garden, near Kapilavastu**. His mother, **Mayadevi (Mahamaya)**, died after a few days of his birth and he was brought up by his stepmother.
- In order to divert his attention towards worldly affairs, his father got him married at the age of sixteen to a princess called Yashodhara.
- He led a happy married life for some time and had a **son by name Rahula**.
- One evening, while Siddhartha was passing through the city, he came across an old man who had been abandoned by his relatives, a sick man crying with pain and a dead body surrounded by weeping relatives.
- Siddhartha was deeply moved by these sights. He also saw an ascetic who had renounced the world and found no sign of sorrows.
- These '**Four Great Sights**' prompted him to renounce the world and search for the cause of suffering. In **537 BCE**, he left his palace and went into the forest in search of truth.
- In the course of his wanderings, he sat under a peepal tree for several days until he attained enlightenment.
- The place where he attained enlightenment, the **Mahabodhi temple**, still exists in **Bodh Gaya (Bihar)**.
- After his enlightenment, Buddha decided to impart his knowledge to the people. He went to Varanasi and gave his first sermon at **Saranath**. He preached in the kingdoms of Magadha and Kosala.

- A large number of people became his followers including his own family. After **forty five years of preaching**, he breathed his last in **487 BCE at Kushinagar (near Gorakhpur in Uttar Pradesh) at the age of eighty.**

Teachings of Buddhism

(i) Four Great Truths:

- (1) There is suffering and sorrow in this world.
- (2) The cause of human suffering is desire and craving.
- (3) This pain or sorrow can be removed by suppressing desire and craving.
- (4) This is to be achieved by leading a disciplined life or by following what Buddha called the 'Noble Eight-fold Path'.

(ii) Attainment of Nirvana:

According to Buddha, a person should aim at attainment of nirvana or the highest bliss, and it could be achieved by any person by leading a virtuous life and by following the Noble Eight-fold Path.

(iii) The Noble Eight-fold Path:

Buddha preached a new path to attain the purest state of mind:

- (1) right views,
- (2) right aspirations,
- (3) right speech,
- (4) right action,
- (5) right livelihood,
- (6) right effort,
- (7) right mindfulness and
- (8) right contemplations or meditation.

Buddha preached that he who practices the eight-fold path can attain the highest and purest state of mind.

(iv) Middle Path and Salvation:

Buddha advised his followers neither to indulge in material pleasures and luxuries nor to practice austere penances. He said that by following the '**Middle Path**', people could attain moksha or salvation, that is freedom from the cycle of birth, death and rebirth.

(v) Ahimsa or Non-violence was another fundamental belief of Buddha.

He condemned **bloody sacrifices in the yajnas**. According to him, love for all living beings was an essential disposition for a good practitioner of Buddhism.

(vi) Emphasis on Morality:

Buddha advised his followers to do good deeds and lead a moral and disciplined life. He appealed to them to refrain from lying, from killing living beings, from taking intoxicants, from **stealing and from leading a sensual life**.

Spread of Buddhism

- Buddha, in order to carry his message to different parts of India, established the Buddhist **sangha or the Holy Order of Monks**.
- The **bikshus (monks) and the bikshunis (nuns)** were enlisted for spreading the faith and they were required to lead a life of purity and poverty.
- Buddhism spread to **Central Asia, Sri Lanka, Tibet, Asia, as well as the eastern countries of China, Mongolia, Korea, Japan and Vietnam**.

The Split in Buddhism

- During the reign of Kanishka, the Buddhist monk Nagarjuna initiated reforms in the way Buddhism was being followed.
- As a result, Buddhism was split into two as Hinayana and Mahayana.

(i) The **Hinayana (Lesser Vehicle)** was the original creed preached by Buddha. The followers of this form regarded Buddha as their guru and did not worship him as God. They denied idol worship and continued with the **people's language, Pali**.

(ii) In **Mahayana (Greater Vehicle)**, Buddha was worshipped as **God and Bodhisattva** as his previous avatar. The followers made images and statues of Buddha and Bodhisattva and offered prayers, and recited hymns (mantras) in their praise. Later, they wrote their religious books in Sanskrit. This form of Buddhism was **urbanized by Kanishka**.

Decline of Buddhism

Buddhism declined in India due to the following reasons:

1. Buddhism was popular in the beginning because it was preached in people's **language (Pali)**. The later texts were written in Sanskrit, which was difficult for the common people to understand.

2. The split in Buddhism into **Hinayana and Mahayana** was another vital reason. Image worship in Mahayana made no difference between Hinduism and Buddhism.
3. Buddhism lost its royal patronage during the reign of Guptas.
4. Further, the invasions of **Huns and Turks** almost wiped out Buddhism.

Other Heterodox Sect

Ajivika

- The period that produced Buddhism and Jainism also witnessed the birth of a sect known as Ajivika.
- Its founder was **Gosala (Maskariputra Gosala)**, a friend of Mahavira. For some time, they were together.
- Later, Gosala moved away and founded the Ajivika sect. As an atheistic sect, Ajivikas rejected the karma theory, which postulated that the condition of men is determined by their past actions.
- Gosala argued that acts of charity and piety can, in no way, influence this finality. Ajivikas had a small presence in southern India.
- Under the Cholas, a special tax was levied on them. Three Tamil texts, **the Manimekalai of Buddhists, the Nilakesi of Jains and the Sivajnanasiddhiyar of Saivites**, contain the outlines of Ajivika doctrine.

Political Organisation:

- Pre-Mauryan The spread of Aryans in the east led to the establishment of new settlements in the Gangetic region.
- One important result of introduction of iron tools was the easy removal of dense forest cover from the banks of the Ganges.
- Sedentary agriculture had resulted in a permanent settlement of a clan in a particular area, thereby giving it a geographical identity. Retaining their acquired land required **political urbanization**.
- The emergence of **gana-sangha, chiefdom**, has to be seen in this context. The clusters where particular clansmen were dominant came to be known as janapadas.

Gana-sanghas

- There were two distinct forms of government at the time of Mahavira and Buddha: monarchical kingdom and clan oligarchies or Gana-sanghas.
- The Gana sanghas provided a polity alternative to the kingdoms. Vedic rituals and the rules of varna were not followed.

- The Ganasanghas consisted of either a single clan, such as the **Shakyas, Koliyas and Mallas**, or a **confederacy of clans**, such as the **Vrijjis and the Vrishnis** (a confederacy located at **Vaisali**).
- The Gana-sanghas had only two strata: the **Kshatriya rajakula**, ruling families, and the **dasa-karmakara, the slaves and labourers**. The dasakarmakaras had no representation in the Assembly.
- The presence of various other popular religious cults in Gana-sanghas is in contrast to the socio-cultural system prevailing in kingdoms.
- In Gana-sanghas, the head of the clan presided over the Assembly, comprising the heads of families.
- The clan's head was not chosen following heredity. This Assembly discussed the matters relating to the affairs of the Gana-sanghas and if a unanimous decision was not possible, it was put to vote.
- There were advisers to the head of the clan. In later days, elaborate judicial procedures also evolved.
- The income of the Gana-sanghas was drawn from **agriculture and cattle rearing**, which was confined only to the Punjab and the doab, and to some extent from trade.
- For the chieftains of the north-west, the income primarily came from trade. Land was owned in common by the clan.
- They were cultivated by dasa-karmakara. There was only domestic slavery. The use of slaves in production was absent.

Rise of Kingdoms

- The 6th century BCE witnessed the establishment of kingdoms, oligarchies and chiefdoms as well as the emergence of towns.
- From the largest of the chiefdoms emerged kingdoms.
- Many tribes of Rig Vedic period such as **Bharatas, Pasus, Tritsus and Turvasas** passed into oblivion and new tribes such as the **Kurus and Panchalas** rose into prominence. **Sixteen mahajanapadas are** listed in the Buddhist texts.
- Linguistic and cultural commonality prevailed in the janapadas, whereas in the mahajanapadas, different social and cultural groups lived.
- With the emergence of kingdoms, the struggle for supremacy among different states occurred frequently.
- Sacrifices such as **Rajasuya and Asvamedha** were performed to signify the imperial sway of monarchs over their rivals.
- The **Rig Vedic title of 'Rajan'** was replaced by impressive titles such as **Samrat, Ektrat, Virat or Bhoja**.

Growth of Royal Power

- The king enjoyed absolute power. The sabha of the Rig Vedic period ceased to exist. The king sought the aid and support of the **samiti** on matters like war, peace and fiscal policies.
- However, in spite of the existence of the assemblies, the power of the king kept increasing.
- The **Satapatha Brahmana** describes the king as infallible and immune from all punishments.
- The growth of royal power was reflected in the enlarged administrative structure. The king was now assisted by a group of officers such as **Bhugadugha** (collector of taxes), **Suta** (charioteer), the **Aksharapa** (superintendent of gambling), **Kshattri** (chamberlin), **Gorikartana** (king's companion in the chase), **Palogola** (courtier), **Takshan** (carpenter) and **Rathakara** (chariotmaker).
- In addition, there were the ecclesiastical and military officials like the **Purohita** (chaplain), the **Senani** (army general) and the **Gramani** (leader of the village).
- In the later Vedic period, Gramani, who acted both a civil and military officer, was the link through which the royal authority was enforced in the village.
- The king administered justice and occasionally delegated his judicial power to **Adhyakshas** (royal officials).
- In the villages, **Gramyavadin** (village judge) and **Sabha** (court) decided the cases. Punishments for crimes were severe.

The Rise of Magadha Kingdom

- The polity followed in kingdoms was different from that of **gana-sanghas**. Kingdoms operated with a **14rbanizatio** government.
- Political power was concentrated in the ruling family, which had become a dynasty, with succession becoming hereditary. There were advisory bodies such as **parishad** (ministers) and **sabha** (advisory council).
- The sabha collected the revenue and remitted it to the treasury in the capital of the kingdom, from where it was redistributed for the public expenses, such as maintenance of army and salaries to state officials.
- Of the kingdoms mentioned in the literature of the period, **Kashi, Kosala and Magadha** are considered to be powerful. The only republic that **14rbaniz these kingdoms was the Vrijjis, whose capital was Vaisali.**
- In the struggle for control for the Gangetic Plain, which had strategic and economic advantages, the Magadha kingdom emerged victorious. **Bimbisara** was the first important king of Magadha.
- Through matrimonial alliances with the high-status **Lichchavi clan of Vaishali** and the ruling family in **Kosala, Bimbisara** went on to conquer Anga (in West Bengal now), thereby gaining access to the Ganges delta.
- **Bimbisara** succeeded in establishing a comprehensive structure of administration. Village was the basic unit of his administrative system.

- Apart from villages (gramas), there were fields and pastures as well as wasteland and the forests (aranya, khetra and vana).
- Each village was brought under a **gramani (headman)**, who was responsible for collecting taxes and remitting them to the state treasury.
- Officers appointed to measure the land under cultivation and assess the value of crop were to assist the gramani in his task.
- Land tax (bali) was the main source of revenue to the kingdom and the share of the produce (bhaga) was determined proportionate to the extent of land cultivated.
- The term **shadbhagin – one who is entitled to a share of one-sixth –referred to the king**. Thus, a peasant economy came into being at Magadha. Ajatashatru, the son of Bimbisara, is said to have murdered his father and ascended the throne in **493 BCE**.
- He continued his father's policy of expansion through military conquests. The capital city of Magadha was Rajagriha, which was surrounded by five hills, providing protection to the kingdom from external threats.
- Ajatashatru strengthened the Rajagriha fort and also built another fort at Pataligrama on the Ganges.
- It served as the exchange centre for the local produce and later became the Mauryan capital of Pataliputra.
- **Ajastashatru died in 461 BCE** and he was succeeded by five kings. All of them followed the example of Ajatashatru by ascending the throne by killing their parent.
- Fed up with such recurring instances, people of Magadha appointed the last ruler's viceroy Shishunaga as the king.
- After ruling nearly for half a century, the Shishunaga dynasty lost the kingdom to **Mahapadma Nanda** who founded the Nanda dynasty.
- The Nandas were the first of non-kshatriya dynasties to rule in northern India. Nandas extended the Magadhan Empire still further.
- Nandas gave importance to irrigation, with the canals they built touching even the **Kalinga (Odisha)** kingdom.
- During their period, officials were regularly appointed to collect the taxes which became a part of the administrative system.
- Nandas' attempt to build an imperial structure was cut short by Chandragupta Maurya who founded the Mauryan kingdom in **321 BCE**.

North-West India and Alexander

- Historically, the north-west part of India remained a region under varying suzerainties such as **north India, Afghanistan and Persia (Iran)**. During **6th century BCE**, it was part of the Achaemenid empire founded by **Cyrus II of Persia**.

- The Indian region had since been providing mercenaries for the Persian armies in their fight against the Greeks. **Takshashila or Taxila**, as the Greeks called it, was a prominent city in the northwest.
- It turned out to be a centre for intermixing of Iranian and Indian culture and learning. The ascendancy of Achaemenid empire **in north-west ended with the conquest of that empire by Alexander of Macedonia**.
- While marching on the territories of the Achaemenid Emperor Darius III. Alexander, the Greek Emperor entered the Indian provinces in **326 BCE**.
- His campaign in northern India lasted for two years. The king of Jhelum region, Porus, fought him heroically in the battle of the Hydaspes (Jhelum).
- Though Porus lost the battle, he was restored to the throne only to be killed by one of Alexander's generals after Alexander's death. Alexander had left his governors in India. But his sudden death at the age of thirty three prompted his governors to leave north-west India to seek their fortune in West Asia.
- Alexander was a great general and a world conqueror. After his death, his great empire fell to pieces.
- Ptolemy took Egypt with its capital Alexandria, while Seleucus had **Persia and Mesopotamia and part of Asia Minor** as his share.
- Alexander's death, however, cleared the way for the founding of a great empire, the Mauryan empire in India.

Mauryan Empire: State and Society

- Mauryan Kings Vishnugupta, who was later known as **Chanakya or Kautilya**, fell out with the Nanda king and vowed to dethrone him.
- Chandragupta perhaps inspired by Alexander of Macedonia, was raising an army and looking for opportunities to establish a kingdom of his own.
- On hearing the news of Alexander's death, Chandragupta stirred up the people and with their help drove away the Greek garrison that Alexander had left at **Taxila**.
- Then he and his allies marched to Pataliputra and defeated the **Nanda king in 321 BCE**. Thus began the reign of the Mauryan dynasty.
- During Chandragupta's reign, Seleucus, the general of Alexander, who had control over countries from Asia Minor to India, crossed the Indus only to be defeated by Chandragupta.
- **Seleucus's envoy, Megasthenes**, is said to have remained in India and his account titled Indica is a useful record about Mauryan polity and society.
- After gaining control over the Gangetic plain, Chandragupta turned his attention to north-west to take advantage of the void created by Alexander's demise.
- These areas comprising the present-day **Afghanistan, Baluchistan and Makran** surrendered without any resistance. There upon Chandragupta moved to Central India. According to

Jaina tradition, towards the **end of his life, Chandragupta**, who had by now become an ardent follower of Jainism, abdicated his throne in favour of his son Bindusara.

- Bindusara, during his rule, succeeded in extending the Mauryan empire upto Karnataka. At the time of his death, a large part of the subcontinent had come under Mauryan suzerainty.
- **Ashoka succeeded Bindusara in 268 BCE.** Desirous of bringing the remaining parts of South India into his empire, Ashoka waged a war against Kalinga in the eighth year of his reign.
- The people of Kalinga fought bravely, but they were defeated after a large-scale slaughter. This war and slaughter affected Ashoka so much that he decided to give up war.
- Ashoka became an ardent Buddhist after meeting the **Buddhist monk Upagupta and propounded his Dharma.**
- The only true conquest, he proclaimed, is the conquest of self and the conquest of men's hearts by the **dhamma (Pali) or dharma (Sanskrit)**. He issued edicts, which were carved out in the rock.
- In one of his Kalinga edicts, he tells us his horror and sorrow over the deaths which the war and conquest caused.
- In yet another edict, he makes it known that Ashoka would not tolerate any longer the death or captivity of **even hundredth or thousandth** part of the number killed and made captive in Kalinga.
- Ashoka's passion for protecting life extended to animals as well. **Hospitals were constructed for them and animal sacrifice was forbidden.**
- Ashoka sent his son Mahendra and his daughter Sanghamitra to Ceylon to spread his message of Dharma there. Ashoka died after ruling for **38 years**.

Mauryan Administration

- The Mauryan state in its early years undertook some measures that were positive for the development of society.
- The state raised taxes to finance a huge standing army and a vast bureaucracy. The Mauryans had evolved a very efficient system of governance.
- The king, as the head of the administration, was assisted by a council of ministers. There were **mahamatriyas, who functioned as secretaries to the ministers. The person in charge of revenue and expenditure was samaharta.**
- The empire was divided into four provinces and these provinces were administered by governors, who were usually princes or from the royal family.
- The district was under a **sthanika**, while gopas were in charge of five to ten villages. The urban administration was under a **nagaraka**.
- Six committees with five members each carried on their duties under him. They were to take care of the foreigners, to register the birth and death of the citizens, to look after trade and commerce, to supervise different manufactures and to collect excise duties and custom duties respectively.

- Like the city or town administration, the military department was also managed by a board of **30 members, split into six committees, with five members in each of them.**
- At the village level, there was gramani, whose responsibility was maintaining the boundaries, keeping the records of land and a census of population and livestock. In order to keep a vigil over the entire administration, including the conduct of officers, a well-knit spy system was evolved and put in place.
- Justice was administered through well-established courts in all major towns and cities. Punishment for crimes was severe.
- The state used the surplus appropriated for the development of the rural economy by founding new settlements, granting land and encouraging the people to settle as farmers.
- It also ¹⁸urbanized irrigation projects and controlled the distribution of water. There was state control of **agriculture, mining, industry and trade.**
- The state discouraged the emergence of private property in land and banned its sale. The Mauryan state gave further boost to urban development.
- It secured land trade routes to Iran and Mesopotamia, as well as to the kingdoms of northern China. **Arthashastra refers to Kasi (Benares), Vanga (Bengal), Kamarupa (Assam) and Madurai as textile centres.**
- The distribution of black polished ware of northern India as far as South India is indicative of the extent of trade during the Mauryan rule.
- Trade contributed to ¹⁸urbanization in a big way. New cities such as **Kaushambi, Bhita, Vaishali and Rajagriha had sprung up in the doab region.**

Educational Centres

Monasteries and temples served the purpose of imparting education. Nalanda was a great monastery built by the Magadha Empire. Educational centres offered Buddhist and Vedic literature, logic, grammar, medicine, philosophy and astronomy. Even the science of war was taught. Nalanda became the most renowned seat of learning in course of time. It was supported by the revenues of 100 villages. No fees were charged to the students and they were provided free board and lodging.

More to Know:

1. Chandragupta's minister **Chanakya** is credited with a book titled Arthashastra, which gives a detailed account of the Mauryan administration.
2. Our national emblem with four lions is a replica of the **Ashoka Pillar of Saranath.**
3. There are **33 edicts, including 14 major rock edicts, 7 pillar edicts and 2 Kalinga edicts**, apart from Minor Rock edicts and Minor Pillar inscriptions. They form the reliable sources to know about the Mauryan Empire, in particular the dharmic rule of Ashoka.
4. Iron plough agriculture led to the rise of empires Assyrian in **Iran and Magadha in India.**

5. Northern India extended from the Kabul Valley in the north to the Godavari in the South. It witnessed the rise of sixteen states known as Mahajanapadas or sixteen great states: **Kasi, Kosla, Anga, Magadha, Vajji, Malla, Chedi, Vatsa, Kuru, Panchala, Matsya, Surasena, Assaka, Avanti, Gandhara and Kamboja.**

6. Jaina Kanchi :

Jainism was one of the major faiths in the Tamil region during the 7th century CE. The Pallava king, Mahendravarman was a Jain. Under the influence of Appar he got converted to Saivism. Close to the present town of Kanchi there is a place called Jaina Kanchi where you find many Jain temples. One of the important temples is the Thiruparuthikundram temple, where the ceiling is painted with the life story of Mahavira.

7. The statue of **Bahubali (known as Gomateswara, 57 feet) at Shravanabelgola** in Karnataka is the tallest Jaina statue ever carved out in India.

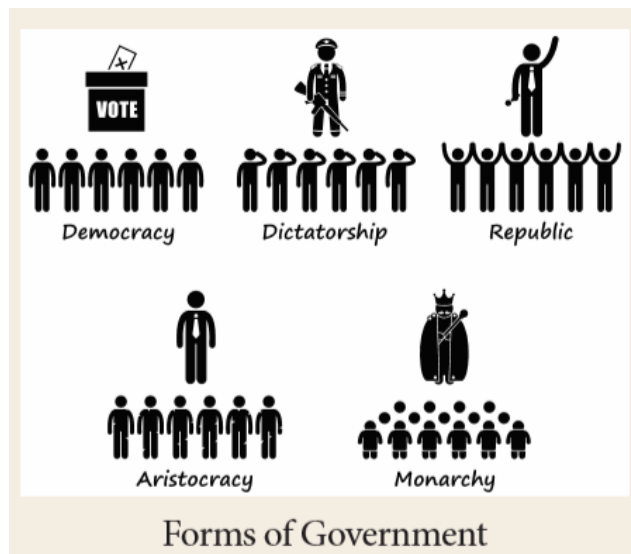
8. Manichaeism, resembling Iranian and Indian religions, was founded in Persia by Mani in the 3rd century CE but could not survive in the face of persecution of the Church on grounds of heresy.

9th Social Science Lesson 5 Notes in English

5. Forms of Government and Democracy

Forms of Government

- The governance of nations differs significantly based on who has power.
- There are different forms of government: **aristocracy, monarchy, autocracy, oligarchy, theocracy, democracy and republic.**



Aristocracy

A form of government in which power is held by the nobility. Example: **United Kingdom, Spain.**

Monarchy

A system of government in which one person reigns supreme, usually a king or queen (constitutional monarchy). Example: **Bhutan, Oman, Qatar.**

Autocracy

A system of government by one person with absolute power. Example: **North Korea, Saudi Arabia.**

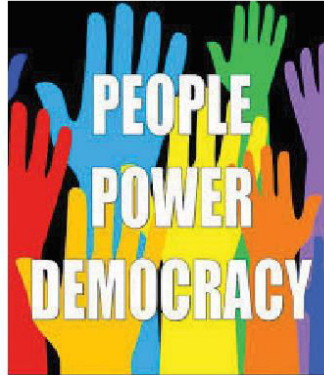
Oligarchy

A small group of people having control of a country or organisation. Example: **Former Soviet Union, China, Venezuela.**

Theocracy

A system of government in which religious doctrines form the basis of government headed by a priest who rules in the name of God or proclaims himself as a God. Example: **Vatican**.

Democracy



A system of government in which eligible members in the population **vote to elect their elected representatives**, and the party or individual who obtains the majority votes forms the government. Example: **India, USA, France**.

Republic

A state in which **supreme power is held by the people** and their elected representatives and which has an elected or nominated President rather than a monarch. Example: India, Australia.

What Is Democracy?

- Democracy is a form of government that allows people to choose their rulers.
- Only leaders elected by people should rule the country.
- People have the freedom to express views, freedom to organise and freedom to protest.

Meaning of Democracy

Democracy is a system of government in which the **supreme power is vested in the people of a country and people elect their representatives either directly or indirectly** through fair and free elections, which are usually held periodically.

Definition

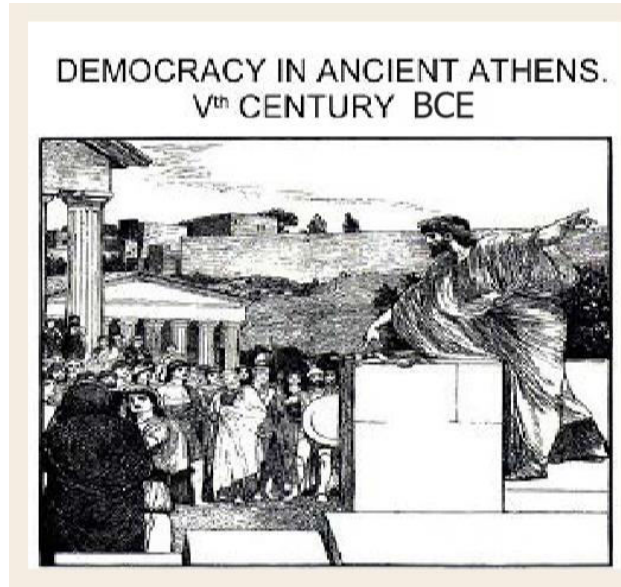
According to Mahatma Gandhi, **"True democracy cannot be worked by twenty men sitting at the centre. It has to be worked from below by the people of every village."**

Salient Features of Democracy

- Elected representatives of people and final decision-making power to the representatives.
- Free and fair elections

- Universal adult franchise with each vote having equal value.
- Fundamental rights and protection of individual freedom.

Evolution of Democracy



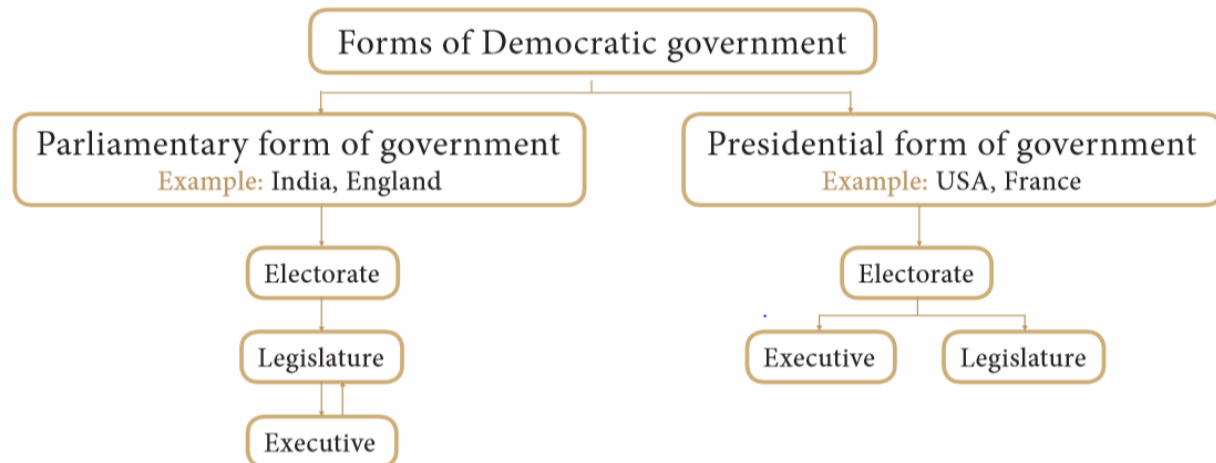
- Democracy began **2,500 years ago** in some of the city-states of ancient Greece. It is important to know that democratic institutions existed in India as early as the Vedic period.
- **Chanakya's Arthashastra** tells us that in ancient India, an autonomous village community was the basic unit of the local government.
- In ancient Tamil Nadu, **Kudavolai system** was a very notable and unique feature of the village administration of the **Cholas**.
- The evolution towards a democracy is represented by the following values: **freedom, equality, liberty, accountability, transparency and trust**.

Types of Democracy

There are two types of democracies:

1. Direct democracy
2. Indirect (representative) democracy

The types of democracy refers to the kind of government or social structures which allow people to participate equally.

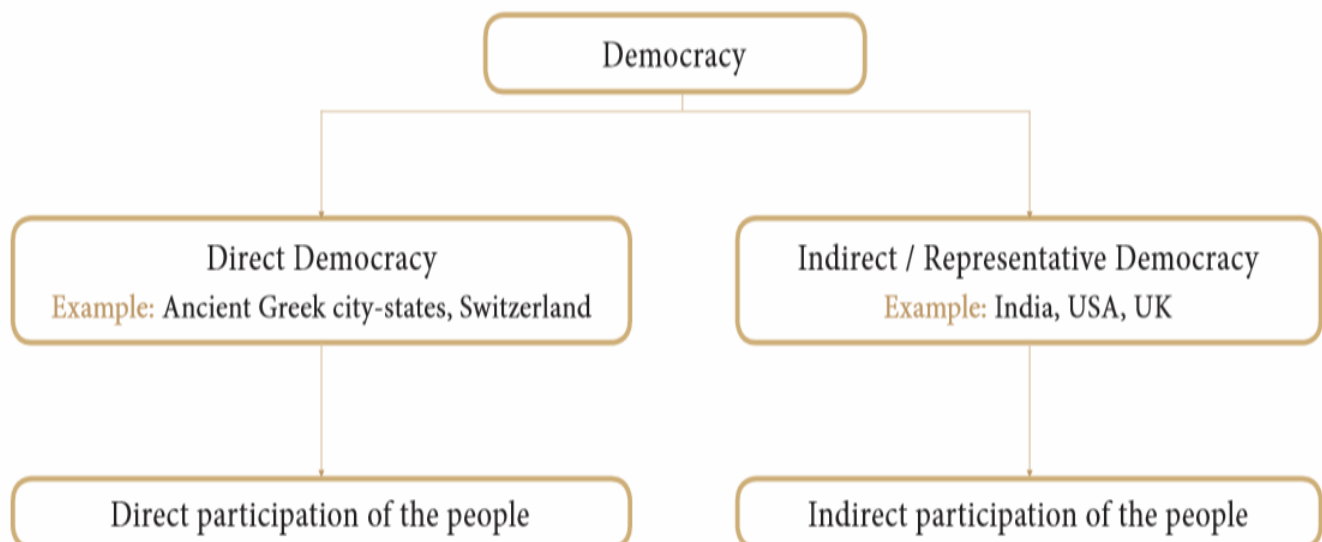


Direct Democracy

When the people themselves directly express their will on public affairs, the type of government is called pure or direct democracy. Example: **Ancient Greek city-states, Switzerland**

Indirect Democracy / Representative Democracy

When the people express their will on public affairs, through their elected representatives, the type of government is called indirect or representative democracy. Example: **The prevailing system of democracy in India, USA and UK**



Democracy in India

- India has a parliamentary form of democracy. The Indian Parliament comprises the elected representatives of people and makes the laws for the country.

- The participation of people in the decision making and the consent of citizens are the two important elements of the parliamentary form of government in India. India is the largest democratic country in the world.
- Democracy in India works on five basic principles. These are sovereign, socialist, secular, democratic, republic.
- **Every person who is a citizen of India and who is not less than 18 years of age can exercise their right to vote in India, based on universal adult suffrage.**
- There is no discrimination based on a person's caste, creed, religion, region, gender and education when it comes to providing the right to vote.

Merits and Demerits of Democracy

Merits

- Responsible and accountable government
- Equality and fraternity
- Sense of responsibility among common people
- Local self-government
- Development and prosperity for all
- Popular sovereignty
- Sense of cooperation and fraternal feeling

Demerits

- Indirect or representative nature of democracy
- Lack of interest in democratic process and hence lower turnout in elections
- Instability in governance due to fractured mandate
- Delay in decision-making process.

Elections in India



1952 – India's First General Elections

- India has a **quasi-federal** government, with elected representatives at the federal, state and local levels.
- The general elections are conducted by the Election Commission of India. At the national level, **the President of India, appoints the Prime Minister**, who enjoys majority in the Lok Sabha, the lower house of the Parliament of India.

Two Houses of Parliament	
Lok Sabha / Lower House / House of People	Rajya Sabha / Upper House / Council of States

- All members of the Lok Sabha are directly elected through general elections, which take place once in every **five years**, in normal circumstances.
- **Two Anglo Indian** members can be nominated by the President of India to the Lok Sabha.
- Members of the Rajya Sabha, the Upper House of the Indian Parliament, are elected by an electoral college consisting of elected members of the legislative assemblies of the states and the Union Territories of India.
- The President of India nominates **12 members for their contributions to art, literature, science and social services**.

The First Elections in Democratic India

- General elections to the first Lok Sabha since independence were held in India between **25 October 1951 and 21 February 1952**.
- The Indian National Congress emerged victorious by winning **364 of the 489 seats**.
- Jawaharlal Nehru became the first democratically elected Prime Minister of the country.

Major challenges to Indian Democracy

- Democracy is the dominant form of government in the contemporary world. It has not faced a serious challenge or a rival so far.
- In the last hundred years, there has been an expansion of democracy all over the world.
- The various aspects of democracy and its challenges are:

1. Illiteracy

2. Poverty

3. Gender discrimination

4. Regionalism

5. Casteism, communalism and religious fundamentalism
6. Corruption
7. Criminalisation of politics
8. Political violence

Conditions for the Success of Democracy in India

- Empowerment of the poor and illiterates to enjoy the goodness of democracy.
- Willingness among the elected people not to misuse their powerful position and public wealth.
- Eradication of social evils and dangers from which democracy suffers.
- An impartial and efficient press to form public opinion.
- Presence of strong public opinion.
- Feeling of tolerance and communal harmony among the people.
- Awareness among the people of the fundamental rights that they are entitled to enjoy.
- Conscious check and vigilance on the working of the elected representatives. Powerful and responsible opposition.
- Though democracy in India has been appreciated worldwide for its working, there is still a lot of scope for improvement.
- The above-mentioned steps must be taken to ensure smooth functioning of democracy in the country. Indian democracy can be successful and vibrant only when its citizens imbibe and reflect in their behavior the basic democratic values like **equality, freedom, social justice, accountability** and respect for all.
- Their mindset, thinking and behavior are expected to be in tune with the essential conditions of democracy.
- They have to appreciate the opportunities for their desired roles like participation, making the system **accountable, fulfilling obligations, and playing proactive roles to actualize the goals of democracy.**

More to Know:

1. British India –General elections, 1920

General elections were held in British India in 1920 to elect members to the Imperial Legislative Council and the Provincial Councils. They were the first elections in the country's history.

2. The Parliament House in India was designed by the British architects **Edwin Lutyens and Herbert Baker in 1912-13** and construction began in 1921 and ended in 1927

3. Abraham Lincoln, one of the Presidents of USA, defines democracy as a government of the people, by the people and for the people.

4. The term 'republic' was first coined in **500 BCE in Rome**. It is derived from republica, a Latin word meaning public matter.
5. India became a Republic on 26 January 1950. It is governed in accordance with the Constitution adopted on 26 November 1949, which came into force on 26 January 1950.
6. The term 'democracy' is derived from two Greek words: demos meaning people and cratia meaning power. Thus, literally democracy means "the power of the people".

9th Social Science Lesson 6 Notes in English

6. Election, Political Parties and Pressure Groups

Introduction

An election is a formal decision-making process by which a people chooses an individual to hold public office by voting.

Electoral System in India

- The electoral system in India has been adapted from the system followed in the United Kingdom.
- India is a **socialist, secular, democratic republic** and the largest democracy in the world. The modern Indian nation state came into existence on **15 August 1947**.
- **Articles 324 to 329 in part XV** of the Constitution make the following provisions with regard to the electoral system in our country.
- Article 324 of the Indian Constitution provides for an independent Election Commission in order to ensure free and fair elections in the country.
- At present, the commission consists of a **Chief Election Commissioner and two Election Commissioners**.
- The Parliament may make provision with respect to all matters relating to elections to the Parliament including the preparation of electoral rolls, the delimitation of constituencies and all other matters necessary for securing their due constitution.
- The state legislatures can also make provisions with respect to all matters relating to elections to the state legislatures including the preparation of electoral rolls and all other matters necessary for securing their due constitution.

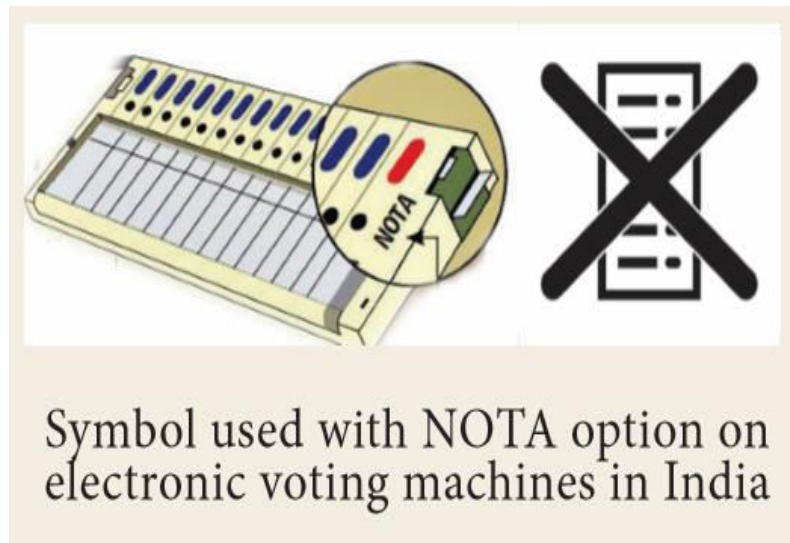
Election Process



Voters Verified Paper Audit Trail
(VVPAT)

- At the national level, the head of government, the Prime Minister, is elected by members of the Lok Sabha, the lower house of the Parliament in India.
- In representative democracy like ours, elections are extremely important. Voting in elections are the best way to make your 'voice' heard.

Introduction of the NOTA Option



- If the people in a democratic country are not willing to elect any candidate, they can vote for the option called NOTA (None Of The Above).
- **Rule 49-O in the Conduct of Elections Rules, 1961**, of India describes this procedure.

Types of Elections in India

Elections are classified into two types: direct and indirect elections.

Direct Elections

- People directly vote for the candidates in the fray and elect their representatives.
- The following are examples of direct elections in which people over the age of **18 years** participate in the electoral process by casting their votes.
 1. Lok Sabha elections, in which the **Members of Parliament are elected**.
 2. Elections to the state Legislative Assemblies, in which the **Members of Legislative Assemblies are elected**.
 3. Elections to the local governing bodies, in which members of **the local governing bodies like the municipal corporation or the panchayat are elected**.

Merits

1. As the voters elect their representatives directly, direct elections are considered to be a more democratic method of election.

2. It educates people regarding the government activities and helps in choosing the appropriate candidates. Also, it encourages people to play an active role in politics.
3. It empowers people and makes the rulers accountable for their actions.

Demerits

- Direct elections are very expensive.
- Illiterate voters sometimes get misguided by false propaganda and sometimes campaigning based on caste, religious and various other sectarian consideration pose serious challenges.
- Since conducting direct elections is a massive exercise, ensuring free and fair elections at every polling station is a major challenge to the Election Commission.
- There are instances of some political candidates influencing the voters through payments in the form of cash, goods or services.
- Election campaigns sometimes results in violence, tension, law and order problems and affects the day to-day life of people.

Indirect Elections

Voters elect their representatives, who, in turn, elect their representatives to formal offices like the President's office.

Merits

- Indirect elections are less expensive.
- It is more suited to elections in large countries.

Demerits

- If the number of voters is very small, there exists the **possibility of corruption, bribery, horse trading and other unfair activities.**
- It is less democratic because people do not have a direct opportunity to elect, but they instead do it through their representatives. So, this may not reflect the true will of the people.

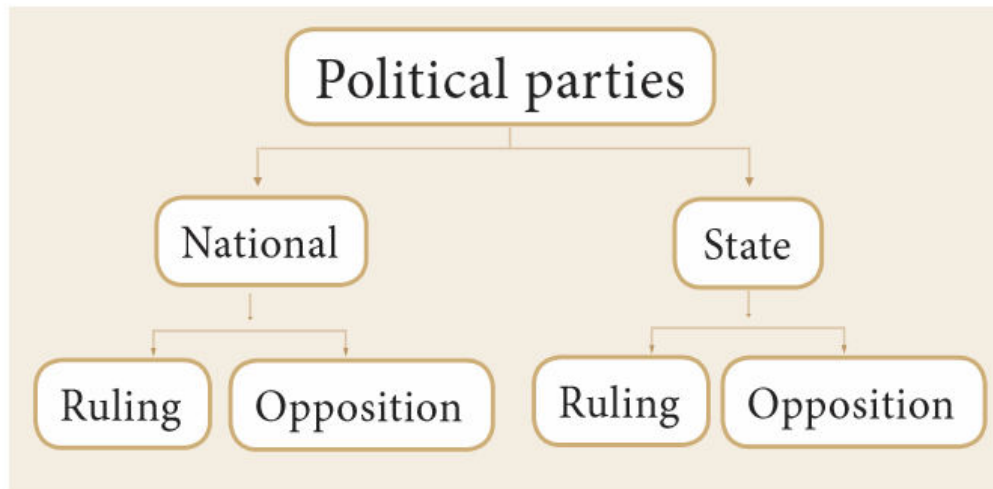
How is the President of India elected?

The President of India is elected by the members of an electoral college consisting of

- The elected members of both Houses of Parliament
- The elected members of the Legislative Assemblies of all the states and Union territories in India

NOTE: The members nominated to either House of Parliament or the Legislative Assemblies of states are not eligible to be included in the electoral college.

Political Parties



Political parties are an essential part of democracy. Parties are the **link between government and the people**.

Meaning of Political Party

- A political party is an organisation formed by a group of people with a certain ideology and agenda to contest elections and hold power in the government.
- A political party has three components: **a leader, active members and the followers**.

Types of a Party System

There are three types of party system in the world namely.

- Single-party system in which one ruling party exists and no opposition is permitted. **China, Cuba, the former USSR (Union of Soviet Socialist Republics)** are the examples for the single-party system.
- Two-party system in which only two major parties exist, for example, **USA, UK**.
- Multi-party system in which there are more than two political parties, for example, **India, Sri Lanka, France and Italy**.

Types of Political Parties

Political parties in India are classified according to their area of influence into two main types: **(1) national and (2) state parties**.

National Parties

- A party which is recognised as a state party in at least four states is recognised as a national party.

- Every party in the country has to register with the Election Commission while the Commission treats all the parties equally.
- It offers some special facilities to state and national parties. These parties are given a unique symbol.
- Only the official candidate of the party can use that election symbol. In **2017**, there were seven recognised national parties.

State Parties

- Other than the seven national parties, most of the major parties of the country are classified by the Election Commission as 'state parties'.
- These are commonly referred to as regional parties.
- A party is recognised as a state party by the Election Commission of India based on certain percentage of votes secured or a certain number of seats won in the Assembly or Lok Sabha elections.

Recognition to the Parties

For getting recognition as 'national party', a party has to fulfill any one of the following criteria:

- At least **6% votes** in at least four states and members to the Lok Sabha
- In the election of Lok Sabha, at least **2% members from at least three states** are elected to Lok Sabha.
- Recognition as a state party at **least four states**.

Functions of Political Parties

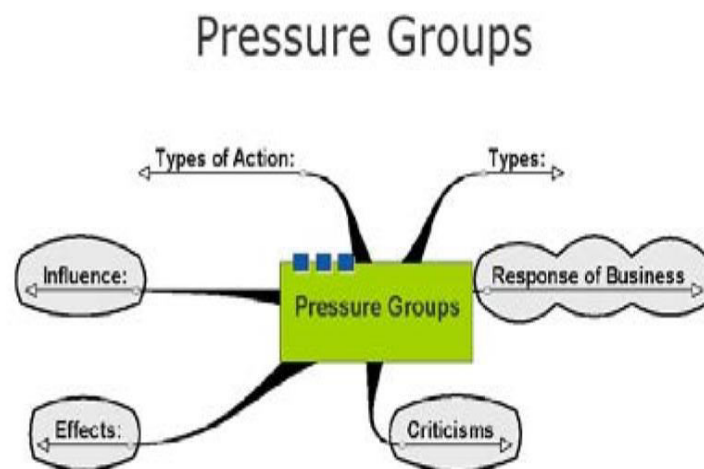
Parties contest elections. In most democracies, elections are fought mainly among the candidates put up by political parties.

- Parties put forward their policies and programmes before the electorate to consider and choose.
- Parties play a decisive role in making laws for a country. Formally, laws are debated and passed in the legislature.
- Parties form and run the governments.
- Those parties that lose in the elections play the role of the **Opposition to the party or a group of coalition parties in power, by voicing different views and criticising the government for its failures or wrong policies**.
- Parties shape public opinion. They raise and highlight issues of importance.
- Parties function as the useful link between people and the government machinery.

Role of Opposition Parties in a Democracy

- In a democracy, there may be a **two-party system like in the USA** or a **multi-party system like in India and France**.
- The ruling party may have received the mandate of the majority people and the Opposition party represented the remaining people.
- The Leader of the **Opposition party** occupied a prominent place in all democratic forms of the government.
- He enjoys the rank of a Cabinet Minister. He opposes the wrong policies of the **ruling party, which affects the general public**.
- As the Chairman of the Public Accounts Committee questions the functioning of the government departments and examines the public money used for the well-being of the people.
- Similarly, he plays an important role to select the **Chairman and members of the Central Vigilance Commission, Chairperson and members of the Information Commission**.
- The Opposition Parties reflect genuine demands and concern of the people to play a constructive role in a democracy.

Pressure Groups



- The term 'pressure group' originated in the **USA**. A pressure group is a group of people who are organised actively for promoting and defending their common interest.
- It is so called as it attempts to bring a change in the public policy by exerting pressure on the government.
- The pressure groups are also called '**interest groups**' or **vested groups**.
- They are different from the political parties in that they neither contest elections nor try to capture political power.

Pressure Groups in India

- A large number of pressure groups exist in India. But, they are not developed to the same extent as in the USA or the Western countries like **Britain, France, Germany** and so on.

The pressure groups in India can be broadly classified into the following categories:

- Business groups
- Trade unions
- Agrarian groups
- Professional associations
- Student organisations
- Religious organisations
- Tribal organisations
- Linguistic groups
- Ideology-based groups
- Environmental protection groups

Functions of Pressure Groups in India

- Pressure groups are the interest groups that work to secure certain interest by influencing the public policy.
- They are non-aligned with any political party and work as an indirect yet powerful group to influence the policy decisions.
- Pressure groups carry out a range of functions including **representation, political participation, education, policy formulation and policy implementation.**

Political Participation

- Pressure groups can be called the informal face of politics.
- They exert influence precisely by mobilising popular support through activities such as **petitions, marches, demonstrations and other forms of political protest.**
- Such forms of political participation have been particularly attractive to young people.

Education

Many pressure groups devote significant resources by carrying out research, maintaining websites, commenting on government policy and using high-profile academics, scientists and even celebrities to get their views across, with an emphasis to cultivate expert authority.

Policy Formulation

- Though the pressure groups themselves are not policy-makers, yet it does not prevent many of them from participating in the policy-making process.
- Many pressure groups are vital sources of information and render advice to the government and therefore they are regularly consulted in the process of policy formulation

Mobilisation and People's Participation

Mobilisation

- Mobilising people towards socially productive activities that lead to the overall betterment of people's lives is essential.
- Sometimes **earthquakes, tsunamis, floods and other such natural disasters** on a massive scale occur and people's immediate mobilisation for evacuation and emergency relief becomes most essential.

Democratic Participation

- Democracy can succeed only when smaller local groups and, in fact, every citizen can take action that **supports the tax and revenue collection systems, observance of national norms in environmental protection, cleanliness, health and hygiene, sanitary drives and immunisation programmes** like pulse polio.
- However, we must keep on mind that there is no better form of government than Democratic government.
- To create a better society and nation, the people of India along with the union and state governments should come together to fight against the miseries of human life.

More to Know:

1. Examples for Pressure Groups

1. Federation of Indian Chamber of Commerce and Industry (FICCI)
2. All India Trade Union Congress (AITUC)
3. All India Kisan Sabha
4. Indian Medical Association (IMA)
5. All India Students Federation (AISF)
6. All India Sikh Students Federation
7. Young Badaga Association
8. Tamil Sangam
9. Tamil Nadu Vivasayigal Sangam
10. Narmada Bachao Andolan

2. **Voters Verified Paper Audit Trail (VVPAT)** is the way forward to enhance credibility and transparency of the election process. This system was first introduced in the **2014 General Election**.
3. NOTA was first introduced in the General Elections held in 2014. **India is the 14th country in the world to introduce NOTA.**
4. We celebrate **National Voters Day on 25th January** in India.
5. Kudavolai was the system of voting followed during the **Chola period** in Tamil Nadu.

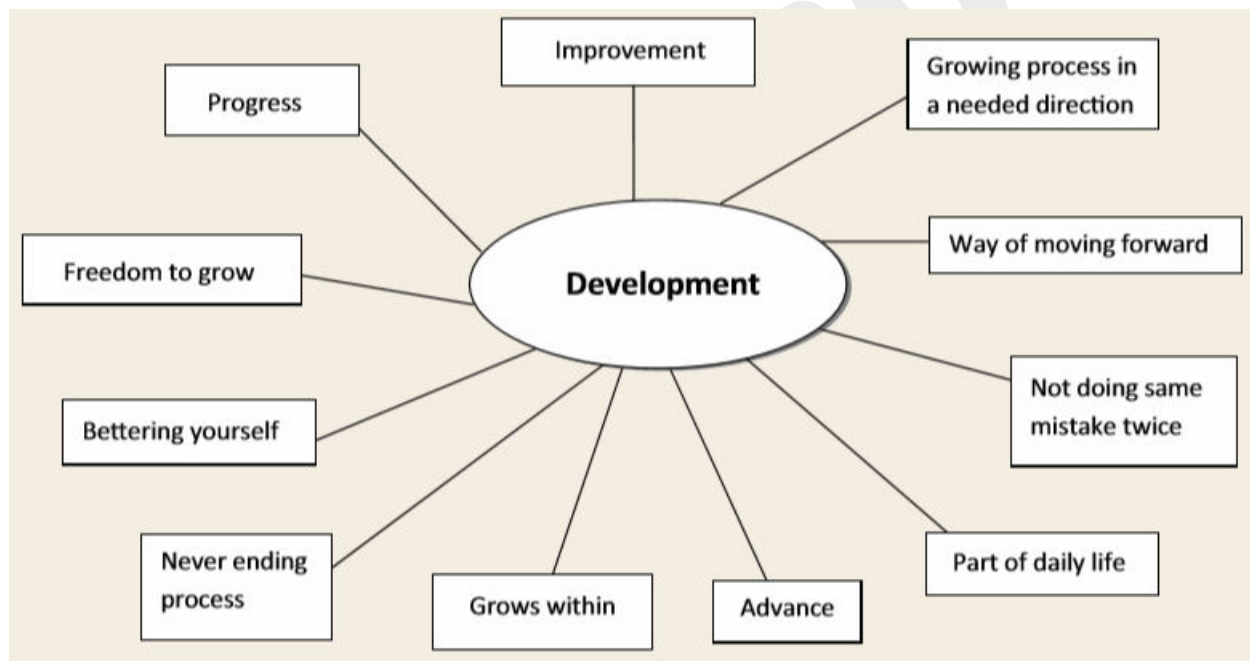
9th Social Science Lesson 7 Notes in English

7. Understanding Development: Perspectives, Measurement and Sustainability

Introduction

- The word '**development**' is used widely. It refers to the progress of a particular field or a particular person. Similarly, the economic progress of a country is known as '**economic development**'.
- However, the interpretation of the concept development keeps on changing from time to time, from person to person and its meaning gets extended further.

Different Perspectives About Development



- Every human being has an **ambition or desire of his or her own to achieve progress in life**.
- Similarly, we have ideas about how a country should progress. If our thinking turns towards progress and about the ways to achieve the many goals for progress, it leads to development.
- From the above diagram, you will notice that other than income, people seek freedom to grow on their own.
- Thus, development refers to the improvement in quality of life such as **higher income, better education, better health and nutrition, less poverty and more equal opportunity**.
- The term 'economic development' refers to the overall growth of all sectors of the economy by adoption of new technologies.
- Economic development improves the living standards of the people as well as the status of the country.

			
G8 Countries	GDP per capita (Value in US dollars)	SAARC Countries	GDP per capita (Value in US dollars)
UK	40,03,000	Afghanistan	610.24
Russia	10,63,000	Bangladesh	1,66,000
Canada	47,66,000	Bhutan	3,22,000
France	42,42,000	India	1,99,000
USA	61,69,000	Maldives	132,000
Italy	33,73,000	Nepal	882.93
Japan	40,06,000	Pakistan	NA
Germany	47,54,000	Sri Lanka	4,05,000

Indicators of Economic Development

The major indicators to measure the level of economic development are **Net National Product (NNP)**, **Per Capita Income (PCI)**, **Purchasing Power Parity (PPP)** and **Human Development Index (HDI)**.



BRICS Countries	GDP per capita (Value in US dollars)
Brazil	10,51,000
Russia	10,63,000
India	1,99,000
China	9,38,000
South Africa	6,29,000
Source: www.imf.org	

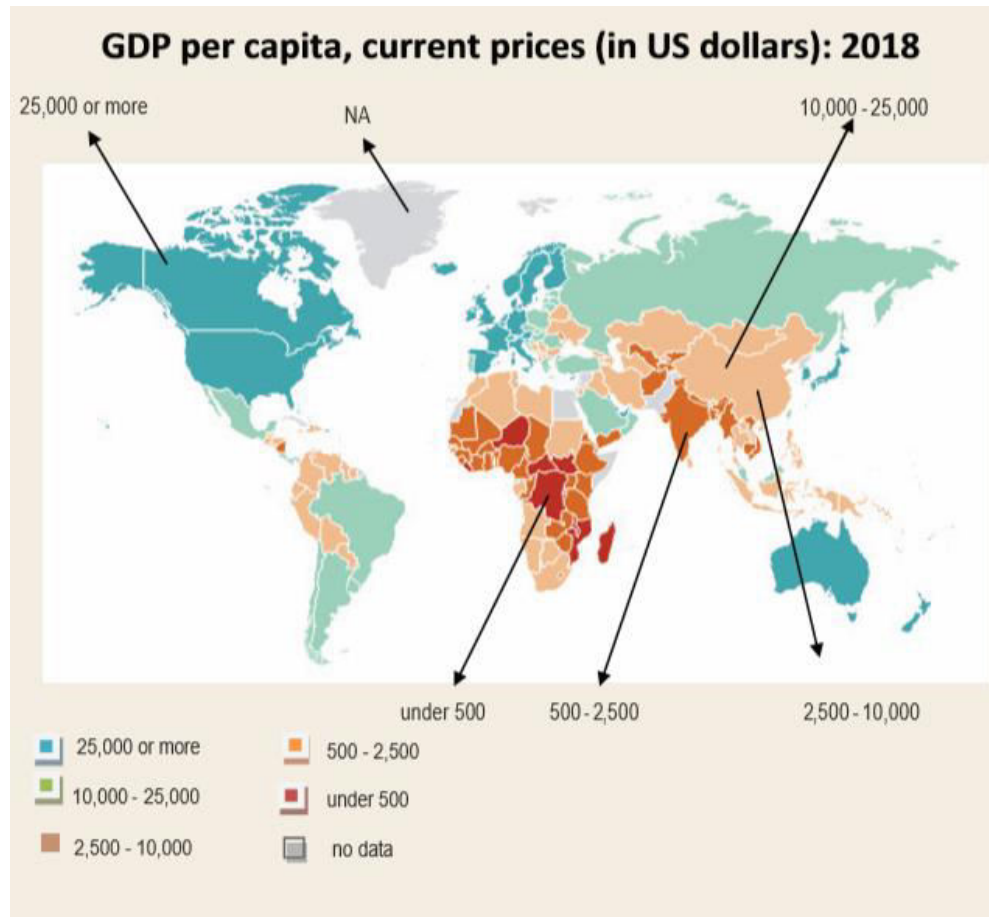
Net National Product

- The Net National Product (NNP) is considered as a **true measure of national output**. It is also known as national income.
- A rise in per capita income means an increase in aggregate real output. Hence, this is a better indicator than national income for measuring development.
- For measuring a country's development, its income is considered to be one of the most important factors.
- **Countries with higher income are considered to be more developed than those with lesser income.**
- So, income itself is considered to be one of the indicators of economic development.

Per Capita Income

Per Capita Income		
According to the World Bank report, new income measurements of countries are classified as below (2017–18)		
S. No.	Types of Countries	Per Capita Income (US Dollar)
1	Low Income	< 1005
2	Lower Middle Income	1006–3955
3	Upper Middle Income	3956–12,235
4	High Income	> 12,235
Source: www.worldbank.org		

- However, for comparing the development of various countries, total income is not an useful measure.
- Since countries have different populations, comparing total income will not be suggestive of what an average person is likely to earn.
- Are people in one country better off than others in a different country? The average income is calculated by dividing the country's total income by its total population. The average income is also called per capita income.

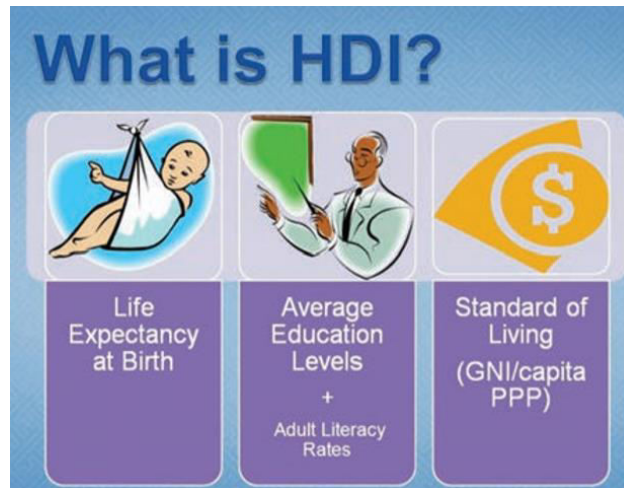


- Calculations on the per capita income of all countries are calculated **only in the US dollar in order to compare International level.**

Purchasing Power Parity

- Purchasing power parity is defined as the number of units of a country's currency required to buy the same amount of goods and services in the domestic market as one dollar would buy in the US.
- The technique of purchasing power parity allows us to **estimate what exchange between two currencies** is needed to express the accurate purchasing power of the two currencies in the respective countries.
- Recently, **India became the third largest economy in terms of PPP. China became the largest defeating the US to the second position.**

Human Development



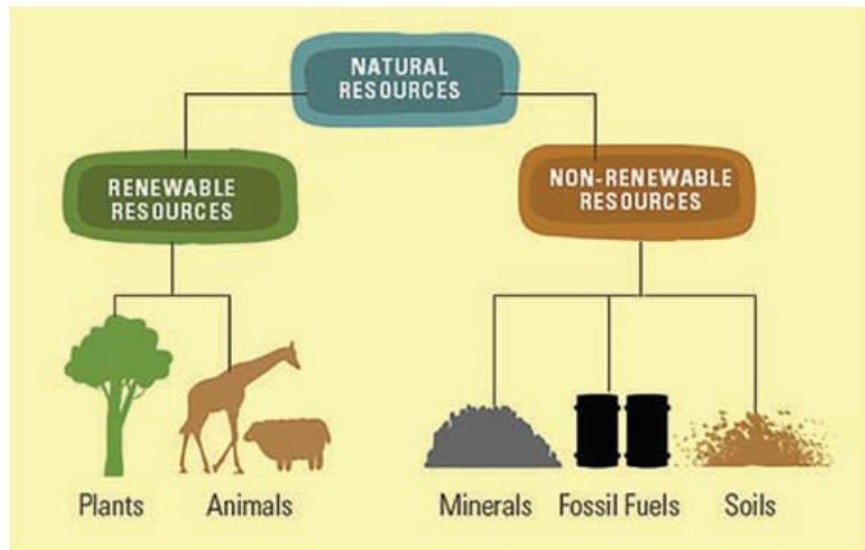
- Human resource is necessary for the progress of any country. The term '**human resources**' refers to the collective abilities of people, which can be utilised in the production sector.
- Human resource development means the **development of a person's physical and mental abilities through education, health care and training**.
- Therefore, investment in education and health of people can result in a high rate of returns in the future for a country.
- For example, if a child is invested with **good education and health**, he or she may turn to be very productive in future in the form of higher earnings and greater contribution to the society.
- Human Development Index (HDI) Which indicates all round development of the people in the society.
- In the past, economists believed that the rate of economic growth of nations could be increased only by increasing investment in physical capital.
- But they have realised over time that investment in human capital is as important as investment in physical capital.

Human Development Index			
S.No.	Country	HDI in 2010	HDI in 2015
1	India	0.580	0.624
2	Russia	0.785	0.804
3	China	0.700	0.738
4	Pakistan	0.525	0.550
5	Nepal	0.529	0.558
6	Bangladesh	0.545	0.579
7	South Africa	0.638	0.666
8	Sri Lanka	0.746	0.766

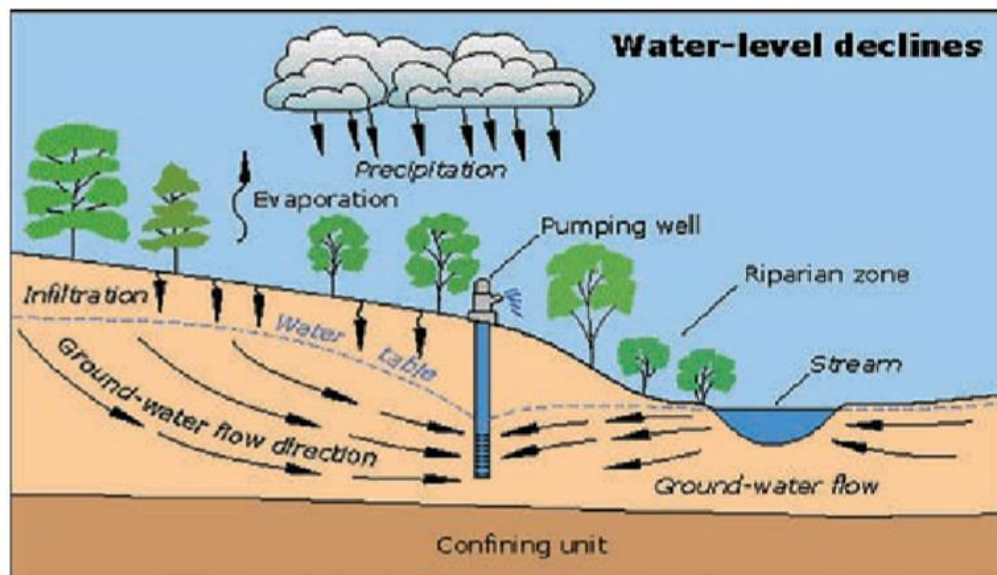
Source: hdr.undp.org/en/composite/trends

Sustainability of Development





- Sustainable economic development is taken to **mean development without damaging the environment and not compromising** with the needs of the future generation.
- The consequences of environmental degradation do not respect national or state boundaries.
- Sustainability of development is comparatively a new area of knowledge in which **scientists, economists, philosophers and other social scientists** are working together.
- Natural resources can be divided into renewable resources and non-renewable resources.



- Groundwater is an example of a renewable resource. The question arises as to how sustainable development is possible if the resources are over-used rather than getting replenished.

- Non-renewable resources get exhausted after certain number of years of extracting and using them and they cannot be replenished.
- To achieve real sustainability, **we need to balance economic, social and environmental sustainability in equal harmony.**
- In general, the question of development or progress is continuous.
- At all times, as a member of society and as individuals, we need to ask where we want to go, what we wish to become and what our goals are.

S. No	Parameter	States						Tamil Nadu	India
		Andhra Pradesh	Karnataka	Kerala	Gujarat	Uttar Pradesh			
1	Literacy Rate % (2011)	67.02	75.36	94	78.03	69.72		80.09	74.04
2	Sex Ratio (Females per 1000 Males) (2011)	993	973	1084	919	912		996	943
3	Enrolment in Higher Education% (2015–16)	30.8	26.1	30.8	20.7	24.5		44.3	24.5

Policies for Sustainable Development

Renewable resources	Non-renewable resources
Renewable resources are pollution free and environment friendly. These resources take a short time for renewal. Example: Solar energy, wind energy, water, wood, paper.	Non-renewable resources pollute and damage the environment. Million of years are needed for the formation of these resources. Example: Metals, glass, fossil fuels (coal, petroleum, natural gas, diesel)

Use of Non-conventional Sources of Energy

- India depends on thermal and hydro power plants to meet its power needs. Both these sources have an adverse environmental impact.
- **Thermal power plants emit large quantities of carbon dioxide**, which pollute the environment.

Solar Power in India

- Solar power is the conversion of energy from sunlight into electricity either directly using photovoltaic cells or indirectly using concentrated solar power.
- Solar panels absorb the sunlight as a source of energy to generate electricity. A solar electric system can reliably produce electricity for our home and offices.
- These distributed solar systems are often installed by home and business owners to reduce their electricity costs.
- Solar power in India is a fast-developing industry. **Tamil Nadu is the state with highest installed solar capacity in India.**
- Tamil Nadu is one of the leading solar power producing states in India. As on **31 July 2017, the total installed capacity in Tamil Nadu is 1,697 MW.**

Environmental Policies in India

- Environmental policies in India have been evolved considerably over the past three decades.
- These policies have covered a wide range of issues such as **air, water pollution, waste management and biodiversity conservation.**
- India faces challenges in economic development, which has to be achieved with limited resources, minimum externalities and in the presence of an uncertain climate.
- One of the approaches to overcome this challenge is through the path of sustainable development.
- The Supreme Court of India has interpreted and introduced new changes in environmental protection through a series of directions and judgements.
- **Article 51A(g)** of the Constitution states that **"it shall be the duty of every citizen of India to protect and improve the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures."**
- Development increases the quality of life. This means that people will **have higher incomes, better education, better health and nutrition, less poverty and more equality of opportunity.**

List of Environmental Acts in India		
S. No	Act	Action
1	National Green Tribunal Act, 2010	Environmental protection and conservation of forests and other natural resources
2	Biological Diversity Act, 2002	To provide for conservation of biological diversity
3	The Environment (Protection) Act, 1986	Providing for the protection and improvement of the environment.
4	Forest (Conservation) Act, 1980	Check deforestation and encourage afforestation of non-forest areas.
5	Water (Prevention and control of pollution) Act, 1974	Provides maintenance and restoration and quality of all types of surface and groundwater.
6	Wildlife Protection Act, 1972	Providing protection to wild animals and birds.

The Growth Story of Tamil Nadu

- Tamil Nadu is one of the states that achieving rapid progress over a relatively short period, though it started from appalling levels of **poverty, deprivation and inequality**.
- It is during that period, Tamil Nadu is much to the consternation of many economists, initiated bold social programmes such as universal midday meals in primary schools and started putting in place an extensive social infrastructure – **schools, health centres, roads, public transport, water supply, electricity connections, and much more**.
- Today, Tamil Nadu has some of the best public services among all Indian states, and many of them are accessible to all on a non-discriminatory basis. First, active social policies constitute an important aspect of this shared experience.
- This is particularly striking in the vigour of public education, but it also extends to other domains, such as health care, social security and public amenities.
- Second, these states have typically followed universalistic principles in the provision of essential public services. This is especially noticeable in the case of Tamil Nadu. Third, these efforts have been greatly facilitated by a functioning and comparatively efficient administration.
- The governments involved have delivered their services in traditional lines and these 'old fashioned' public institutions-functioning **schools, health centres, government offices, Gram Panchayat and co-operatives** have left much room for private initiatives at a later stage of development.

- Fourth, dealing with social inequality has also been an important part of these shared experiences. In each case, the historical burden of social inequality has been significantly reduced in one way or another.
- In Kerala, Tamil Nadu and Himachal Pradesh, principles of equal citizenship and universal entitlements were forged through sustained social reform movements as well as fierce struggles for equality on the part of under-privileged groups-especially Dalits,.
- Fifth, these experiences of rapid social progress are not just a reflection of constructive state policies but also of people's active involvement in democratic politics.
- The social movements that fought traditional inequalities are part of this larger pattern. Last but not least, there is no evidence that the cultivation of human capability has been at the cost of conventional economic success, such as fast economic growth.
- **Tamil Nadu have some of the highest per capita incomes and lowest poverty rates among all Indian states.**
- Economic growth, in turn, has enabled these states to sustain and consolidate active social policies. This is an important example of the complementarity between economic growth and public support.

Source: An Uncertain Glory by Nobel laureate Prof. Amartya Sen.



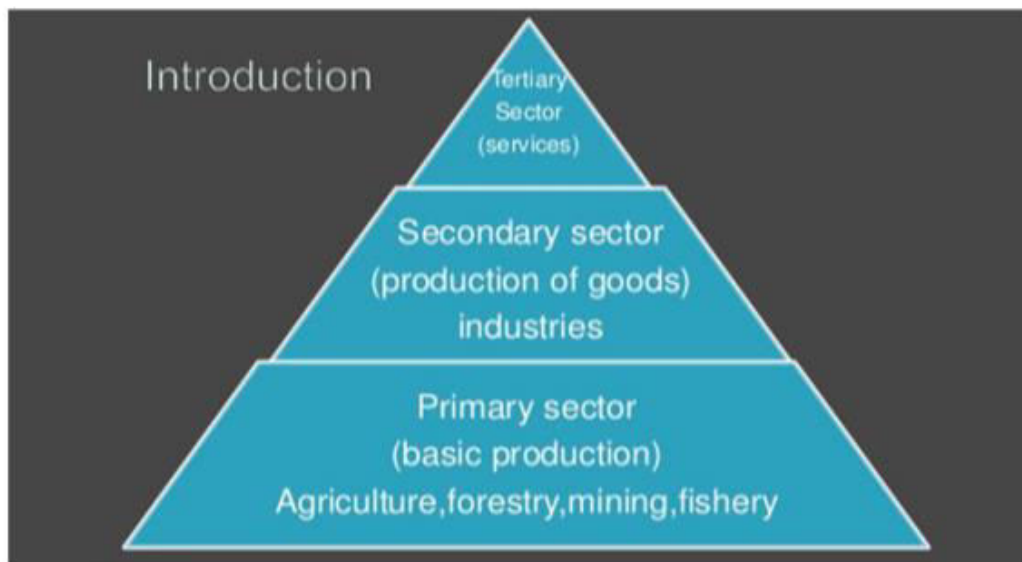
More to Know:

1. Literacy rate of Tamil Nadu is the second highest among the southern states. Tamil Nadu's literacy rate is higher than the national average. The enrolment for higher education in Tamil Nadu is the highest in India.
2. Human Development Report of the world prepared and released by UNDP
3. The Ministry of Human Resource Development is responsible for the development of human resources in India. Its headquarters is situated at Shastri Bhavan in New Delhi.
4. Final value of total goods and services produced within the geographic boundaries of a country during a specified period of time, normally a year is known as Gross Domestic Product (GDP).

9th Social Science Lesson 8 Notes in English

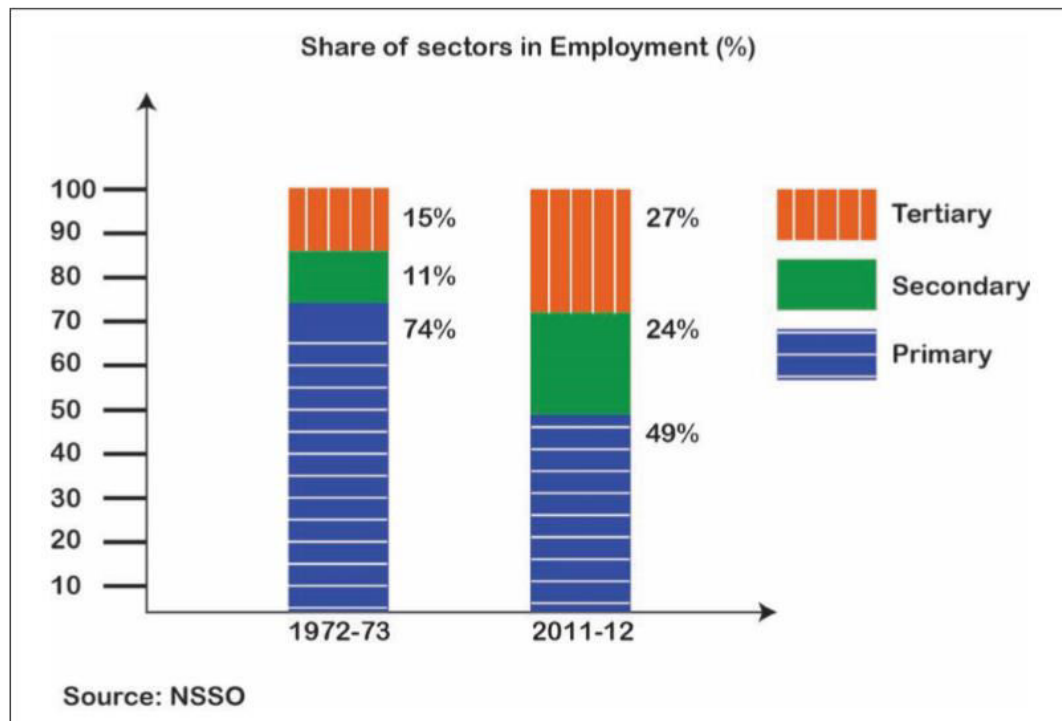
8. Employment in India and Tamil Nadu

- In the present world, one more essential need has to be added in this list. That is employment. To survive in the world, we all need employment to earn money.
- Those who are engaged in economic activities, in whatever **capacity**– **high or low** – are called employees. People who employ these workers and pay rewards for their work are called the employers.



Employment Structure

- Labour force of the economy is the number of people in the country who work and also capable of working. We take the age group of **15–60 years** for the computation of workforce.
- Persons who are less than 15 years are considered as children, and person who have crossed 60 years of age are excluded as they are not physically fit to undertake productive occupation.
- If larger percentage of population is accounted by children and oldage persons, then the progress of the country would be very slow as the working force is very small.
- Besides, the small working force will have to maintain larger non-working force for feeding out of the small national product.



Employment Structure in India

- The nature of employment in India is multi-dimensional. Some get employment throughout the year; some others get employed for only a few months in a year.
- The economy is classified into three sectors: **primary or agriculture sector, secondary or industrial sector and tertiary or service sector**. The structure of employment denotes the number of workers engaged in different sectors of the economy.
- Though the occupational pattern varies from one country to another, one can find in developing countries like India that a large work force will be engaged in primary sector, while a small proportion in secondary and tertiary sectors.
- Whereas, in well-developed countries, the proportion of workforce engaged in agriculture will be very small and a majority of labour force will be in the industrial and tertiary sectors.
- Employment has always featured as an important element of development policy in India. Employment growth has increased at an **average rate of 2% during the past four decades since 1972-73**.

Primary sector : Agriculture, forestry animal husbandry, poultry, dairy farming, fishing etc.

Secondary sector : Manufacturing, small and largescale industries and constructional activities.

Tertiary sector : Transport, insurance, banking, trade, communication, real estate, government and non-government services

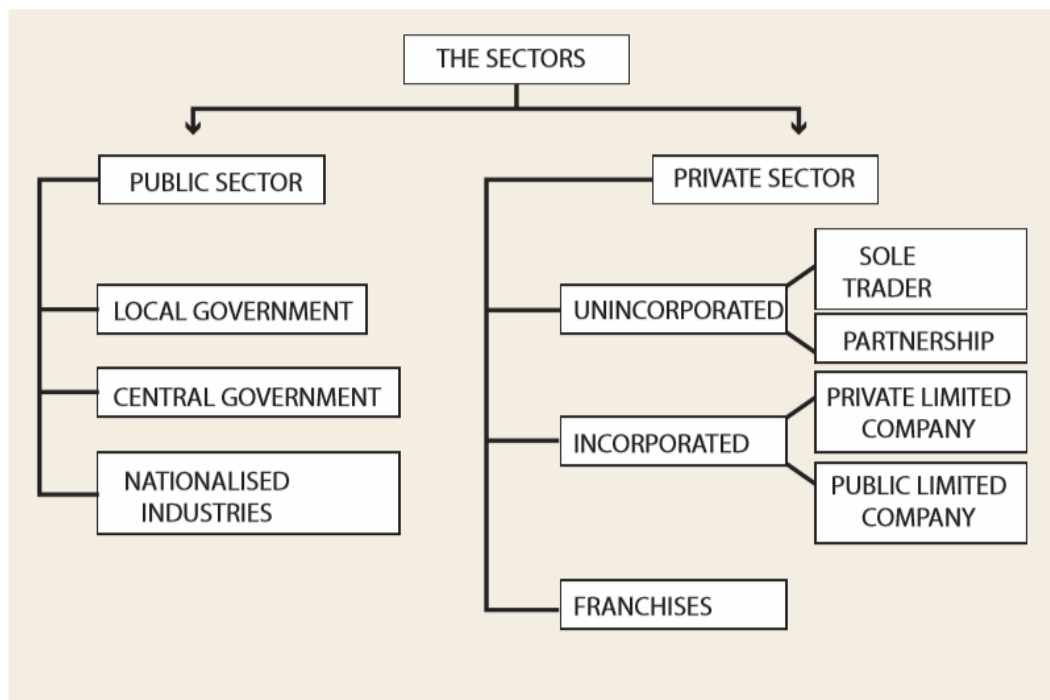
Types of Employment: Organised and Unorganised Sectors

Organised Sector

- The organised sector is one that **is incorporated with the appropriate authority or government and follows its rules and regulations.**
- In India employees of central and state governments, banks, railways, insurance, industry and so on can be called as organised sector.
- This sector works according to certain rules and regulations given in the law. Organised sector has some formal processes and procedures.
- The employees in this sector are provided with job security and receive higher wages than those of the unorganised sectors.
- Organised sector gives good salary, fixed working hours, paid holidays and provides medical allowance and insurance also.

Unorganised Sector

- **The unorganised sector of the economy characterised by the household manufacturing activity and small-scale industry.**
- Jobs here are low paid and often not regular, Mostly, they do not have paid leave, holiday, leave due to sickness and so on.
- Employment is not secure. When there is no work, people are asked to leave the job. This sector includes a large number of people who are employed on their own doing small jobs such as selling on the street, doing repair work and so on.
- In the unorganised sector, the employment terms are not fixed and regular. They do not enjoy any special benefits or job security. These enterprises are not registered with the government.



Public Sector vs Private Sector

S. No.	Public Sector	Private Sector
1	Service motive	Profit motive
2	Government owns the assets	Private individuals own the assets
3	Wages are paid by the government	Wages are paid by the owner of private enterprises.

Economic activities are classified into public and private sector based on who owns assets and is responsible for the delivery of services.

Employment Pattern

In recent years, there has been a change in the employment pattern and this has helped the employers to **develop more flexible working patterns among their employees**. The trends are

- (a) increasing self-employment
- (b) firms using fewer full-time employees and tending to offer more short-term contracts
- (c) there has been a growth in part-time employment. This may be due to lifestyle of the people.

Employment Trends in Tamil Nadu

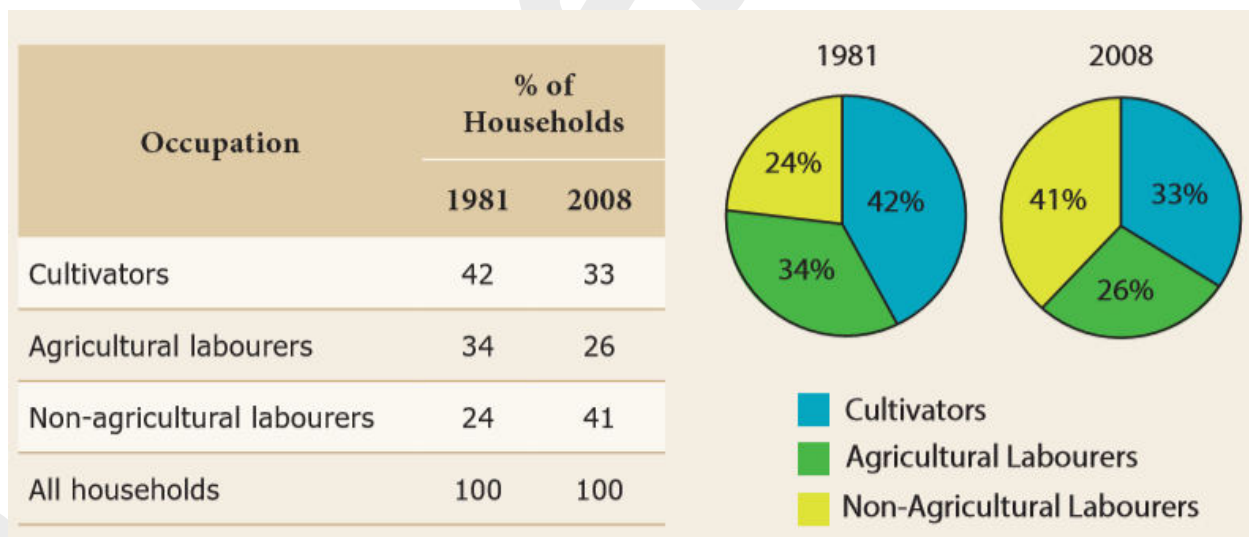
- Agriculture, despite a sharp decline in gross domestic product, continues to be the largest employer in Tamil Nadu.
- This is because the non-agriculture sectors are yet to generate enough employment to affect a shift of labour force.
- Most of the employment growth in Tamil Nadu has been contributed by the unorganised and informal sectors.

More to know:

1. In the medieval period, **Feroz Shah Th uqlaq, the Sultan of Delhi**, had set up an 'Employment Bureau' to solve the unemployment problem.
2. Public Sector NLC SAIL BSNL
3. Private Sector TVS Motors Ashok Leyland TATA Steel

4. Employment in Iruvelpattu: A case study

- What is happening in the employment scenario can be understood not only from national or state level, but also from the study of the village economy. **Iruvelpattu is one such village in Villupuram district in Tamil Nadu.**
- This village has been studied for more than 100 years by many scholars. This village is also called Slater village as **Gilbert Slater was the first scholar working in the University of Madras** to go with his students to study this village in **1916**.
- Over the years, many scholars surveyed the occupation of villagers and collected many more details of each person in the village.
- It was clearly observed that the government brought social security awareness among the people of the village through primary health care, provision of schools and maintenance of public distribution system.
- Though this village underwent many changes, it is still dependent on agriculture as the main occupation. Look at the following table or chart. You will notice that during **1981, out of 100 families, 24 were engaged in nonagriculture employment.**
- In 2008, the member of families engaged in such employment increased to 41.
- During 1981–2008, the proportion of families engaged in agriculture has declined – both as agriculture labourers and as cultivators.



9th Social Science Lesson 9 Notes in English

9. State and Society in Medieval India

(From the Cholas to the Mughals)

Introduction

- The periodization of history into 'ancient/classical', medieval' and 'modern' is conventionally used with reference to European history.
- In the context of Indian history, the use of these terms is more problematic. Therefore, historians have debated their relevance in defining different periods of Indian history.
- For instance, the historian **Burton Stein**, uses the term 'classical' to describe the period up to the Gupta empire, and dates the 'medieval' period from the 7th century A.D.(CE) till the beginning of Mughal rule in the 16th century.
- The Mughal era, from the **16th to 18th century** is referred to as the early modern period.
- The political scenario in all parts of India underwent momentous, definitive changes which transformed the social and economic fabric and development of the country. Historians have now moved away from thinking of history as a linear narrative of kings and dynasties, and the events – mainly wars and military campaigns – which happened during their rule.
- History is now thought of inter-disciplinary terms to comprise social and economic change.
- Nevertheless, such change does not happen autonomously without any reference to changes in the political structure.
- This is especially true for the period covered in this chapter.

Major Political Changes

- The expansion of the Chola empire from the time of Rajaraja which eclipsed the Pandyan and Pallava kingdoms, extending north till Orissa.
- From the twelfth century, the beginning of several centuries of **Muslim rule in Delhi**, extending throughout north India and the spread of Islam to different parts of the country.
- By the end of the 13th century the eclipse of the great empire of the Cholas and the consequent rise of many Religious kingdoms in south India.
- This ultimately culminated in the rise of the **Vijayanagar empire** which exercised authority over all of south India and came to be considered the bastion of Religious rule in the south.
- The consolidation of Muslim rule under the Mughals in the north, beginning in 1526 A.D. (C.E.) with the defeat of the **Ibrahim Lodi by Babur**.
- At its height, the Mughal empire stretched from Kabul to Gujarat to Bengal, from Kashmir to south India.
- The coming of the Europeans, beginning with the Portuguese who arrived on the west coast of India in **1498**.



North India: The Advent of Islam

- Muslim rule was established in Delhi at the end of the **12th century by Muhammad Ghori**, but did not expand much beyond this core region for another hundred years. Muslim merchants and rulers were known in India for several centuries even prior to this.
- Arab Muslim merchants had been trading in the ports of the west coast, especially Kerala, as early as the 9th century.
- Similarly, **Muslim invaders from west Asia had set up Sultanates in Gujarat and Sind since the 8th century.**
- However, these contacts did not lead to any widespread exposure to Islam or Muslim rule in the rest of the country.
- The impact of Muslim rule was felt during the reign of **Alauddin Khalji (1296-1316 A.D. (C.E.))** who sent military campaigns to the south. The primary objective was to plunder the wealth, rather than to expand his territory. **Devagiri (near Aurangabad) was captured by Alauddin Khalji.**
- Renamed Daulatabad, it was the second stronghold of his growing kingdom. Alauddin Khalji's slave and commander, Malik Kafur, was sent on military expeditions further south in the first decade of the 1300s A.D. (C.E.).
- The Tughlaq kings who came after Alauddin also sent their armies to the south. As a result, the generally more isolated southern part of the country came into the orbit of the rulers of the north.
- Governors were appointed in various provinces in the Deccan region, and a Sultanate was even established in Madurai.
- During the reign of Muhammad bin Tughlaq, there was a revolt in **Daulatabad. Alauddin Bahman Shah set up the Bahmani sultanate in 1347 A.D. (C.E.), with his capital in Bidar.**
- The Bahmani kingdom survived for nearly a century and a half, mainly due to the able administration of **Mahmud Gawan**, a great statesman and loyal minister.
- After his death, many viceroys declared their independence, and by the end of the fifteenth century, five sultanates came up in the Deccan: **Bijapur, Golkonda, Ahmednagar, Berar, and Bidar.**
- Bijapur and Golkonda were the largest of these sultanates and the region entered a phase of considerable economic growth and expansion of trade.
- The Deccan sultanates were conquered by Aurangzeb in the 1660s A.D. (C.E.), and the entire region, as far south as Madras (Chennai) became a part of the Mughal empire.

The Chola Empire in the South

- The territorial expansion of the Chola empire began under Rajaraja I. The Pallava kingdom had already been assimilated into the Chola kingdom.

- The Pandya kingdom remained independent, but was subservient to the Cholas. The empire expanded further under Rajendra I who had successfully taken his armies as far to the northeast as the river Ganges.
- He had also sent naval expeditions against the Sailendra Kingdom of **Sri Vijaya (in Indonesia), Kadaram (Kedah) and Ceylon.**
- This earned him the title **"the Chola who had conquered the Ganga and Kadaram" (gangaiyum kadaramum konda cholan).**
- Ceylon remained a province of the Chola empire for a few decades. The empire was further consolidated through marriage with the eastern Chalukyas under Rajendra's grandson Kulottunga I, and extended up to the **border of Orissa.**
- Maritime trade with south-east Asia and China expanded greatly during the Chola period.
- The continued interaction with Tamil merchants resulted in the spread of the influence of Indic culture and art into south-east Asia, as seen in the magnificent temples of Angkor Wat in Cambodia.

Vijayanagar and South India after the Cholas

- The Chola Empire began to decline after the middle of the 13th century. The last known Chola emperor was Rajendra III.
- The empire died out in **1279 A.D. (C.E.).** Several power centres came up after this in the region. Further to the south, the Pandya kings again sought to regain the glory they had lost under the Cholas.
- Many brilliant Pandya kings like **Jatavarman Sundara Pandyan** ruled at the end of the 13th century. Further to the north was the Hoysala kingdom, with its capital at **Belur and later Halebidu.**
- This kingdom extended through much of the present day state of Karnataka. The **Kakatiyas ruled from Warangal (Telangana) while the Yadavas ruled in Devagiri** until Devagiri fell to Alauddin Khalji's forces at the end of the 13th century.
- These states did not exist in peaceful cooperation, and the region was beset by many internal wars and conflicts.
- The establishment of the kingdom (subsequently empire) of Vijayanagar was the most momentous development in the history of south India in the medieval period. The kingdom was established by **Harihara and Bukka**, two brothers. They were the first rulers of the Sangama dynasty.
- They founded a new capital city on the southern banks of Tungabhadra which they named **Vijayanagara (city of victory).**
- Harihara was crowned in **1336 A.D. (C.E.).** The Sangama dynasty ruled Vijayanagar for nearly one and a half centuries. This was followed by the Saluva dynasty which was in power only for a brief period.

- The Tuluva dynasty then succeeded as rulers. Krishnadeva Raya, the greatest ruler of Vijayanagar, belonged to this family. As the empire expanded, kingdoms to the south, such as the Hoysalas and the Tamil region, were also assimilated into Vijayanagar.
- The rulers of Vijayanagar were almost continuously at war with the Bahmani sultanate as well as with the Religious based kingdoms of Kondavidu and Orissa.
- Finally, the combined forces of the five Deccani Sultanates defeated Vijayanagar in **1565 A.D. (C.E.) at the Battle of Talikota.**
- The Vijayanagar emperors then shifted their capital further south to Penugonda, and eventually to **Chandragiri near Tirupati.**
- The empire (or what remained of it) finally withered away in the middle of the seventeenth century.

The Mughals (1526–1707 A.D. (C.E.))

- The Mughal empire was founded by Babur in **1526 A.D. (C.E.)** after he defeated Ibrahim Lodi at Panipat.
- The first six Mughal emperors are referred to as the 'Great Mughals'. Aurangzeb was the last of the great Mughals.
- Akbar consolidated the Mughal empire through conquests and through a policy of conciliation with the Religious based kingdoms of Rajasthan.
- The Mughal empire though began to disintegrate after Aurangzeb, continued to exist nominally till **1857 A.D. (C.E.)** when the British finally ended the virtually nonexistent empire.
- A new power centre rose in Maharashtra in the seventeenth century, and the Marathas under the leadership of Shivaji seriously undermined the authority of the Mughals in western India.
- At its height, the empire stretched over most of the Indian sub-continent. Only the south-western region of Kerala and southern Tamilnadu were not directly under Mughal rule.

The Arrival of the Europeans

- During the fifteenth century the Europeans were pre-occupied with trying to find a direct sea route to India, bypassing the overland route through west Asia and the Mediterranean.
- The spice trade from India was controlled by Muslims up to Alexandria. By gaining direct access to India the Europeans could exercise more direct control over the spice trade and obtain the spices at more favourable prices. In **1498 A.D. (C.E.)**, Vasco da Gama landed on the Kerala coast having sailed around the Cape of Good Hope in South Africa.
- Barely five years later, the Portuguese built their first **fort at Cochin in 1503 A.D. (C.E.)**. **Goa was captured in 1510 A.D. (C.E.)** and became the centre of the Portuguese state in India. Because of their naval superiority, the Portuguese were able to conquer many ports from

east Africa up to Malacca, and could effectively control the maritime trade over the entire region.

- Other European nations soon followed the Portuguese, most notably the Dutch, English and French.
- The activities of the latter were carried on through the respective East India Companies. While these were all private trading enterprises, they all had a strong political agenda.
- During the seventeenth century, when Mughal authority was still powerful, the European companies were able to trade in the Mughal empire, but could not have their own territorial base within the boundaries of the empire.
- In South India, however, political authority was fragmented and much less cohesive, and they had their own enclaves over which they exercised complete authority.
- The Dutch were in **Pulicat (and later Nagapatnam)**, the **English in Madras**, the **French in Pondicherry** and the **Danes in Tarangampadi (Tranquebar)**.

Impact on Polity

- The above stated political developments in Indian history had far-reaching consequences on administrative institutions, society and the economy across the subcontinent.
- The CHOLA PERIOD was an enterprising period when trade and the economy expanded, accompanied by urbanization. The administrative machinery was reorganised during Chola rule.
- The basic unit of local administration was the **village (ur)**, followed by the **sub-region (nadu) and district (kottam)**.
- Tax-free villages granted to Brahmins were known as brahmadeya. Marketing centres and towns were known as nagaram.
- The **ur, nadu, brahmadeya and nagaram** each had its own assembly. They were responsible for the maintenance and management of the water resources and land; the local temples; resolving local issues and disputes; and for collecting the taxes due to the government.
- While the Chola state did not intervene in this fundamental system of local administration, they introduced innovations in revenue administration by creating new revenue divisions (mandalam and valanadu).
- Several new taxes on agriculture and commerce were also introduced. The second notable feature was the great increase in the construction of temples.
- This had two dimensions: new temples were constructed, and existing temples became multi-functional social and economic institutions.
- The construction of great temples also was a reflection of the growing prosperity in the kingdom, since the activity involved great expenditure.
- The temple was no longer a mere place of worship, but became an important economic entity as an employer, consumer and land-owner.

- The establishment of Islamic Rule in Delhi made a big impact on Indian society. Initially, Islam did not cause any social tension.
- Arab merchants, for instance, when they came and **settled on Kerala coast, married local women and led a peaceful life.**
- The situation changed when Islam became a state power. For a medieval ruler one way of asserting imperial authority was to demolish the place of worship of the enemies.
- Otherwise Islam as a monotheistic religion had its positive impact in Indian society. It played a decisive role in the evolution of a composite culture.
- **Muslim kingdoms in Delhi, as well in the Deccan,** also attracted migrants from Persia and Arabia who moved to India and took up service in these states and many became important and well known statesmen.
- This also opened up Indian society to steady interaction with west Asia resulting in the transfer of cultural and technical influences.
- Muslim merchants and craftsmen also migrated from the north of India to the south in the wake of the military expeditions.
- Society became more heterogeneous and hybrid in character. A new composite culture evolved.
- This could be seen most vividly in the Deccan sultanates of Bijapur and Golkonda whose rulers were extremely broad-minded and secular in outlook.
- A notable development was the profusion of contemporary historical accounts of the Muslim Sultanates by Arab and Persian historians. **Al beruni, Ibn Batuta, and Ferishta** are among the best known of the Muslim historians.
- These historians provide valuable information about the rulers and events of the medieval period. They also provide an alternate historical point of view of Islamic rule in India as seen through the eyes of Muslim writers.
- The establishment of the **VIJAYANAGAR EMPIRE** changed the administrative and social institutional structure of south India, especially in the Tamil country.
- Perhaps because the new kingdom was threatened from the beginning by the hostility of the **Bahmani sultanate in the north, Vijayanagar evolved as a militaristic state.** This empire needed two kinds of resources to feed its military establishment – revenue and men.
- This was achieved through re-organizing the administration of the conquered territories, especially in the Tamil region. **Military officers, known as 'nayakas',** were appointed as chiefs of various localities in Tamilnadu and received land grants from the emperor.
- There were also lesser military leaders known as palayakkarar who essentially supplied the manpower for the army. Many forts were also built which were under Brahman commanders.
- Three major nayaka kingdoms, owing allegiance to the Vijayanagar emperor, came up between **1500 A.D.(C.E.) and 1550 A.D. (C.E.) in Madurai, Tanjavur and Gingee (Senji).** These nayakas had formal roles in court ceremonials at Vijayanagar.

- This became the new political order in Tamilnadu during the sixteenth century. The nayaka chieftains as well as the three nayaka kings were all strong supporters of Hindu temples. The three capitals became great cultural **centres under the patronage of the nayaka rulers who promoted literature and the performing arts.**
- Resources realized from the land were transferred to the empire by the nayakas not as tax revenue, but as tribute. Thus, the resources of the core regions, especially in the Tamil region, were utilized for military purposes.
- This administrative set-up effectively **destroyed the decentralized, local institutions which managed local resources, temples and affairs** which had come up during Chola rule.
- The appointment of Telugu nayakas also resulted in the migration of Telugu-speaking people from the north.
- These included **soldiers, agriculturists, craftsmen and Brahmins.** The MUGHAL EMPIRE transformed the economy and society of north India.
- The empire was consolidated under Akbar through his policy of co-opting the Hindu Rajput rulers under the umbrella of Mughal rule.
- He also reversed the policy of discriminatory measures against the Hindus. He employed Hindu administrators like **Todar Mal in key positions** of authority.
- These initiatives earned the emperor the loyalty and trust of the majority community. As the empire stretched across north India, the entire region was brought under a uniform administrative structure.
- The political stability of the large empire led to impressive growth of the economy and trade. At the height of its power the Mughal empire was one of the largest, richest and most powerful empires in the entire world.
- In part due to Aurangzeb's reversal to orthodox Islamic principles of governance which alienated the Rajput rulers and the Hindu subjects, the over-extended empire began to collapse under its own weight by the beginning of the eighteenth century. T
- he viceroys of many Mughal provinces – **Bengal, Awadh (Oudh), Hyderabad, Arcot** – became independent rulers of the successor states after the death of Aurangzeb.
- These states became centres of distinctive local cultures, including styles of cooking like **Luckhnavi and Hyderabadi** cuisines.
- The **ARRIVAL OF THE EUROPEANS** in India ultimately culminated in the establishment of colonial rule in India under the British, and this is what is considered foremost when discussing the impact of the European presence.
- But the coming of the Europeans was important for many other reasons. The growing presence of the European trading companies also witnessed an influx of European travellers into India.
- They left exhaustive accounts of their travels in India, commenting on virtually all aspects of life in India.
- These accounts are important contemporary sources of information on the **economy, society, political developments and institutions in India.**

- The Europeans came to India primarily in search of spices. But soon there was an explosion in the demand for Indian textiles in the European markets, often referred to as the '**Indian craze**'.
- This led to a significant expansion of textile production in India, which was accompanied by an expansion of the production of commercial crops like **cotton and indigo and other dyes**.

Society

Caste

- Caste is the most distinctive (**and most discussed**) aspect of Indian society. We first need to understand two dimensions of the term '**caste**'.
- First, the four-fold division of society as specified in the **religious texts, referred to as varna**.
- There was a considerable proportion of the population which was outside the varna system. The number of such people increased significantly by the medieval period.
- This was partly because more and more pastoral and forest land was being reclaimed for cultivation, and the people who lived in these lands were evicted.
- They had to work as landless labourers for their living, and were often tied to the land like serfs.
- In reality, caste was a complex phenomenon. It combined economic and social dimensions and has to be understood under the more common term of **jati**.
- The different jatis were not necessarily at different levels of ranking in a vertical hierarchy, but each still retained a separate identity.
- The persons who worked in any specific occupation or profession considered themselves as part of a distinct caste.
- These occupations could be service related or artisanal crafts **like weaving, metal work, woodwork etc**.
- In most cities persons working in the same occupation often lived in their own segregated quarters. In general, occupations were hereditary.
- Technology and knowledge about production processes were transferred orally from generation to generation.
- We have extensive information about occupational castes for south India, especially Tamilnadu.
- The occupational caste groups are sometimes referred to as guilds. They functioned under a leader or small group of leaders who were the deciding authority on all matters pertaining to the caste.
- Theoretically, any person who worked in a particular occupation could become a member of the group (**as was the case in guilds in Europe**).
- In practice, however, there are virtually no instances of outsiders becoming a member of an occupational caste.

- Muslim craftsmen or weavers could thus not become members of a Hindu group. Improving the status of their **jati** was a major pre-occupation for all caste groups.
- This is particularly evident after the fourteenth century when the traditional local assemblies which controlled the resources and social interactions began to weaken.
- In traditional society many castes were denied various social rights and privileges.
- Therefore, caste groups often petitioned the local ruler for permission to use various symbols of higher status, like the **right to wear footwear, the right to carry umbrellas, the right to use certain decorations at funerals and so on.**
- Each caste also created a mythical genealogy to establish its origins; this was used to justify the claim for the right to a higher status in the hierarchy.
- These genealogies are found in many of the manuscripts collected by **Colin Mackenzie**. A singular and unusual feature of the caste system existed in most of south India: groups of castes were vertically divided into **right (valankai) and left hand (idankai) castes.**
- Each group included castes at different levels in the caste hierarchy, like merchants, land-owning castes and professional castes down to agricultural labourers.
- This division was found throughout south India, but we have more comprehensive information on the right and left hand castes in the Tamil region because their conflicts are extensively documented in the English records.
- Primarily, the conflicts between the two groups were extremely violent.
- Generally, these conflicts arose from the claims by each group to indicators of superior ceremonial status, which was another manifestation of the constant striving for improving social status in the caste hierarchy.

Religion

- Diverse institutions with different ideologies came up within the bhakti movement during the medieval period.
- Mathas or mutts were established under different gurus or religious leaders like **Vidyardanya**; **Saivite** movements came up like the Tamil **Saivasiddhanta, and the Virasaivas in Karnataka; in Maharashtra the Varkarisampradaya (tradition)** of the devotees of Vithoba arose in the 14th century.
- Buddhism had faded out in India. Jainism also lost ground in most parts of India due to emergence of bhakti movement under **Sankara and Ramanuja**.
- However, it continued to thrive in parts of **Gujarat and Marwar**, especially among the trading communities.
- Islam spread throughout the country as Islamic sultanates were set up eventually entering south India.
- With regard to Christianity, there were a small number of Christian groups in Kerala claiming their origins to the **time of St Thomas, the disciple of Jesus.**

- But Christianity took roots when the Portuguese arrived in Kerala and set themselves up in Goa.
- In Goa itself the local population was under great pressure to convert to Christianity, especially under the oppressive conditions of the Inquisition.
- But Jesuit missionaries were also active in other areas, especially among the fishing communities on the Pandyan coast.
- The best known among the Jesuit missionaries was **St Francis Xavier** who was instrumental in making the fishing community to take to Christianity in the **Tuticorin region**.
- Another notable **Jesuit was Roberto de Nobili, a scholar, who was based in Madurai**. In the north a new religion, Sikhism, was founded by Guru Nanak, who lived during 15th and 16th century.
- Sikhism grew in strength in spite of severe repression by Aurangzeb. Thus, by the beginning of the eighteenth century, many religions co-existed across India. Foreign religions also came to India when **Jews and Zoroastrians (Parsis)** migrated to India.
- The Parsis, who fled Persia to escape persecution, settled in Gujarat, while the Jews lived in Kerala.
- Parsi merchants were among the richest and most prominent in the **port of Surat, and subsequently, in Bombay under the British**.

Culture

Literature, Art and Architecture

- The Chola period was an era of remarkable cultural activity. These were the centuries when major literary works were written. The best known classical poet, **Kamban, wrote Ramayana in Tamil which was formally presented (Arangetram) in the temple at Srirangam**.
- **Sekkilar's Periyapuramam**, similarly was presented at the temple in **Chidambaram**. Among the other great works of the period is **Kalingattup-parani and Muvarula**.
- It was also a period when great religio-philosophical treatises like the Sankara-bhasyam and Sribhashyam were produced. The monumental architecture of the Cholas is visible in the great temple of **Tanjavur, Gangai-konda-cholapuram and Darasuram**, to name only a few. Stone images were sculpted on the temple walls and pillars.
- Bronze images of great beauty and artistry were made by the 'lost wax' process. The best known of them is the iconic representation of **Siva as Nataraja**, performing the cosmic dance.
- A distinct Islamic cultural tradition developed in India with the establishment of Muslim rule. The sultans built forts, tombs, mosques and other monuments in Delhi as well as in south India which came under their rule.
- The Mughal period particularly was a brilliant epoch in the cultural history of India. The Mughals were well-known for their aesthetic values, and were great patrons of the arts.

- They left behind numerous monuments, in addition to constructing entire cities like **Shahjahanabad (Delhi) and Fatehpur Sikri, gardens, mosques and forts.**
- Decorative arts – especially jewellery set with precious and semi-precious gems for items of personal use – flourished under the patronage of the royal household and urban elites. The art of painting also flourished in the Mughal period.
- Primarily known as Mughal miniatures, they were generally intended as book illustrations or were single works to be kept in albums.
- A large volume of literature was produced, especially in **Persian, and also in Urdu, Hindi and other regional languages.** In the performing arts, **like Hindustani the name of Tansen** is well-known indicating the patronage extended to classical music under Akbar.
- In south India, the Vijayanagar rulers and their military chiefs actively supported temple construction. Many new temples were built by them.
- Besides this, new structures like pavilions and halls with many pillars were added extensively to existing temples, with elaborately carved pillars.
- Art historians point to the distinctive style of the temple sculptures of the Vijayanagar period.
- The intricately **carved lofty towers or gopurams** at the entrance to temples were all added during the Vijayanagar period. The walls of the temples were embellished with paintings. A large volume of religious literature, especially in Sanskrit, was produced under the patronage of the **nayakas and the Vijayanagar rulers.**
- Telugu literature flourished under royal support. A new style of Tamil literature called Prabandham emerged during this period.
- The great commentaries of the epic **Silappadikaram and Tirukkural** were also written during this period.
- **Venkatamakhi, son of Govindha Dikshidar** who codifying the ragas of Carnatic music had lived in this period.

Economy

Agriculture

- India was predominantly an agricultural country, and a very large proportion of the population lived in rural areas and depended on agriculture for their livelihood. Both in the north and the south, agriculture depended heavily on irrigation.
- Canals and wells added to the water sources in addition to rainfall and rivers. The state was actively involved in the construction of canals for increasing the availability of water.
- The biggest network of canals known in India until the nineteenth century was created in the fourteenth century by **Firuzshah Tughluq in the Delhi area.**
- Construction of lakes, tanks and reservoirs with sluices to let out the water as well as the use of check dams all increased the availability of water for irrigation.

- Cultivators were also encouraged to dig wells. Lift irrigation was used to draw the water. In the north, the Persian wheel was used for lifting water from wells. In the Tamil region, the Cholas had created a network of canals for irrigation connecting the tributaries of **Kaveri**.
- Lakes and tanks also added to the water sources. An important feature of Indian agriculture was the large number of crops that were cultivated.
- The peasant in India was more knowledgeable about many crops as compared to peasants in most of the world at the time.
- A variety of food grains like **wheat, rice, and millets** were grown apart from **lentils and oilseeds**.
- Many other commercial crops were also grown such as **sugarcane, cotton and indigo**. Other than the general food crops, south India had a regional specialization in **pepper, cinnamon, spices and coconut**.
- In general, two different crops were grown in the different seasons, which protected the productivity of the soil.
- Maize and tobacco were two new crops which were introduced after the arrival of the Europeans.
- Many new varieties of fruit or horticultural crops like **papaya, pineapple, guava and cashew nut** were also introduced which came from the west, especially America.
- **Potatoes, chillies and tomatoes** also became an integral part of Indian food. Sericulture (silk production by breeding the mulberry silkworm) was introduced in the fourteenth and fifteenth centuries.
- By the seventeenth century, Bengal had become one of the largest silk-producing regions in the world.
- In addition, other varieties of silk (like tassar) were also produced. There is more data for north India especially with respect to crop yields.
- The data for the thirteenth to fourteenth centuries, as well as the sixteenth century indicate that the productivity per unit of land was as high then as it was at the end of the nineteenth century.
- There was less population pressure on land in the earlier centuries, so it can be argued that even productivity per capita was higher than it was in more recent times.
- By and large, the evidence indicates that land was still plentifully available in north and south India.
- Rural population were known to abandon a settlement and move to a new location in protest against excessive demands by the rulers.
- People moved to the more arid, **black soil regions of western and southern Tamilnadu in the context of decline of Vijayanagar empire** and began to cultivate these lands.
- The economic condition of the bulk of the peasantry, however, was poor. They generally lived only at a very basic level of subsistence.
- There are many instances in south India in the seventeenth century when poor peasants sold themselves and their families into slavery.

- The shipping lists of the Dutch East India Company regularly mention men and women slaves who were transported to the spice producing islands of Indonesia to work on the plantations.

Non Agricultural Production

- Up to the end of the seventeenth century, India was one of the largest manufacturing countries in the world though the economy was primarily agricultural.
- Nonagricultural production refers to both processed agricultural products and craft production.
- Primarily the products can be grouped under: processed agricultural products like sugar, oil, textiles; **metal work; precious gems and jewellery; ship building; ornamental wood and leather work; and many other minor products.**
- The organization of production basically depended on the nature of the market for which it was produced.
- A large part of the production was intended for local use in the village, or at most a rural region.
- These goods were basic utilitarian **goods like pots and pans, implements like ploughs, basic woodwork and coarse textiles.**
- Generally the producer marketed the product himself, and exchange was probably conducted on barter.
- In economic terms, what was important was specialized production by skilled craftsmen for an external market, especially in demand among the high income rural and urban upper classes.
- Such craft production was generally located in cities, or in rural settlements close to the cities.
- Craftsmen generally worked on an individual or family basis from their homes or workshops though larger manufacturing units (**karkhanas**) employing many craftsmen were set up under the Mughal state.

Textiles

- Nearly all the cloth that was produced was of **cotton, though silk weaving had developed in Bengal where silk was produced, and in Gujarat.**
- Each region of India produced a range of highly specialized local varieties of cotton cloth ranging from the coarse to the superfine, but all were intended for an external market. Dyed and printed/patterned cloth involved the use of vegetable dyes.
- India had two natural advantages in cotton weaving. The first was that cotton grew in almost all parts of India, so that the basic raw material was easily available. Second, the technology of producing a permanent colour on cotton using vegetable dyes was known from very early times in India.

- Cotton does not absorb dyes without a preparatory process using mordants, which was not known in the rest of the world.
- Indigo was the most important dye crop that was grown in India, but other dye crops (**like the chay root for red colour**) were also grown in India. Dye woods and resins like lac were imported.
- In addition, a range of colours were produced by using **flowers and fruits, and products like turmeric in various combinations**.
- Textile production involved several stages and craftsmen in the spinning of yarn, weaving and dyeing and printing.
- Each was a specialized occupation. Yarn was traditionally spun by women and was a home-based occupation.
- Indian textiles were in great demand in the Asian markets, and were the chief export from India.
- During the seventeenth century, the Dutch and the English realized that they could procure spices from the **spice islands of Indonesia most profitably in exchange for cloth from India**.
- There was also a growing demand for many varieties of Indian cloth like **muslin, chintz** and so on for personal wear and furnishings in the European market.
- This resulted in a sudden expansion of demand for Indian cloth, thereby impacting on agricultural sector also.

Commerce

- The large manufacturing sector essentially produced goods for exchange, and not for self-use.
- Therefore, India had an extensive network of trade for marketing these goods. The village was the basic geographical unit of production, and was essentially a subsistence economy and barter was the medium of exchange.
- At the next level, the producer (**agricultural or non-agricultural**) produced a surplus which he marketed himself, usually in regional weekly markets.
- At the most advanced level, the producer was de-linked from marketing, which was undertaken by merchant intermediaries.
- All three kinds of markets co-existed in India, in an **“ascending scale in the overlapping circuits of exchange”**.
- Big cities were usually major commercial centres, with bazaars and shops. They were also intermediate points in interregional trade since they were connected by a network of roads to other centres in other parts of the country.
- In addition to such overland trade, smaller ships and boats were used in coastal trade along both the western and eastern coasts of the country. Itinerant merchants, usually nomadic banjaras, carried supplies for the large armies which were on the move. Finally, the major

ports (**Surat, Masulipatnam, Calicut etc.**) were the nodal points in international, maritime trade.

- Maritime trade across the Indian Ocean, extending from China in the east to Africa in the west, had flourished for many centuries. India was an integral part of this maritime.
- This was partly due to its geographical location in the middle of the Indian Ocean. Till the seventeenth century, ships from China rarely ventured further west beyond the ports of the Kerala coast, while ships from the west did not sail beyond **Malacca (in Malaysia) to the east.**
- Thus ports like **Malacca, Calicut etc. were 'entrepots'** or intermediate points in this regionally segmented trade. In the seventeenth century, **Surat in Gujarat, Masulipatnam in the Golkonda kingdom, Chittagong in Bengal, Pulicat (Pazhaverkadu) and Nagapatnam on the Coromandel Coast, and Calicut in Kerala** were all major ports in Asiatic trade.
- India was also a major exporter of textiles, pepper, precious and semiprecious gems – especially diamonds which were then found only in India – and **iron and steel** which were greatly in demand in the entire Asian region.
- Textiles accounted for nearly 90 per cent of the total exports from India.
- The major imports from **China and the east were silk, Chinese ceramics, gold, spices, aromatic woods and camphor.**
- **Silk, drugs, dye woods and sugar were the main imports from Persia, while gold, ivory and slaves** were brought in from east Africa. Until the fourteenth century, in south India, international trade was carried on by merchants who belonged to the corporate group of a guild.
- Two such guilds are **wellknown: Ainnurruvar (the Five Hundred) who had their headquarters in Aihole, and the Manigramam.**
- These guilds were heterogeneous agglomerations of many merchant groups and corporate assemblies like nagarams.
- After the thirteenth century when the local assemblies of villages and towns which had hitherto managed the temples had begun to weaken, the merchant guilds took it on themselves to raise taxes from their members and make joint donations to temples.
- There are no references to the merchant guilds after the fifteenth century and individual rich merchants took over maritime trade.
- A large network of merchants was needed to manage and channel trade across India. Merchants operated at different levels.
- The petty traders and shopkeepers, single commodity merchants and brokers on the one hand and the richest and most powerful merchants who were involved in exports and imports at the apex of the pyramid on the other had to source the goods for their trade, especially textiles, from a very large hinterland.
- In order to meet this need they employed local merchants and brokers to procure the textiles and other products which they exported. Trade on such a large scale could function only with the availability of financial and banking services. Bankers and money changers

operated in all the big cities, and bills of exchange or hundis (similar to cheques or bank drafts) were used to transfer money from one city to another.

- **Gujarati merchants were found in all the ports of the Persian Gulf and Red Sea, while the Coromandel merchants operated from Malacca and other ports in Siam and Burma.**
- The European trading companies realized that they could not function in India without the services of these rich and influential merchants.
- They entered into contracts with them to supply the goods that they wanted and also to lift the imports which they brought in from Europe.
- The Indian merchants benefited from the business opportunities offered by the European companies. But this scenario began to change from the beginning of the eighteenth century.
- The Indian merchants were under contract to the Europeans to supply textiles and other goods. But by then the local resources were not enough to produce the quantities required and political disturbances also disrupted all economic activity.
- This resulted in most merchants being bankrupted diminishing the economic vitality of the merchant community.

Urbanization

- Travellers coming to India in the medieval period noted that there were a number of urban centres of various sizes, from cities to small market towns throughout India, though the country was primarily rural.
- The urban population was probably quite small as a proportion of the total, but it had an economic and cultural significance which was much greater than its actual size.
- What were the factors which facilitated urbanization? It has been observed that cities and towns fulfilled diverse and overlapping roles in the economy.
- The large cities were centres of manufacturing and marketing, banking and financial services. They were usually located at the intersection of an extensive network of roads which connected them to other parts of the country.
- **Smaller towns were marketing centres** in local trade connecting the immediate rural hinterland. Cities also served as political and administrative centres, both in the capital region (for instance, **Agra and Delhi**) and in the provinces (**Patna, Ahmedabad, Lucknow**).
- Major pilgrimage centres like Varanasi also grew into cities, because the regular inflow of pilgrims provided a market that attracted manufacturing and trade. In South India, especially the **Tamil region, urbanization went hand in hand with temples.**
- Temples were large economic enterprises requiring a variety of goods and services to function.
- They needed and employed a large number of people to man the religious services, the kitchens and for other work.
- Devotees coming to worship at the temple needed many services and goods, so that temple towns also became marketing centres.

- The pace of **urbanization increased during the Vijayanagar period** when there was a great increase in the construction of temples across Tamilnadu.
- It must be remembered that the distinction between rural and urban was not as marked as it is in the present day.
- Most urban centres also displayed rural characteristics. For instance, it was not uncommon to find fields with crops within a city.
- But it is interesting to note that most of the large cities and market centres which existed in the medieval period are still to be found in north and south India, even though their relative importance might have changed over the centuries.

Conclusion

The medieval period covering more than seven hundred years of Indian history was a time when momentous changes took place in the political landscape which also transformed the social and economic fabric of the country.

More to Know:

Kingdom: a country ruled by a king or queen. **Empire:** a group of countries controlled by one ruler.

9th Social Science Lesson 10 Notes in English

10. Human Rights

What are Human Rights?

The U.N.O defines Human rights as **"The right inherent to all human beings, regardless of race, gender, nationality, ethnicity, language, religion or any other status. Every one is entitled to these rights without discrimination."**

Universal Declaration of Human Rights (UDHR)

- The Universal Declaration of Human Rights is a milestone document in the history of human rights.
- It was drafted by the representatives with different legal and cultural back grounds from all regions of the world.
- The Declaration was proclaimed by the United Nations General Assembly in Paris on **10th December 1948 (General Assembly resolution 217A)** as a common standard of achievement of all people and all nations.
- The first time it sets out the fundamental human rights to be universally protected and the UDHR has been translated into many languages.
- There are **30 articles** in the Universal Declaration of Human Rights and it guarantees freedom of expression as well as **civil, political, social, economic and cultural rights**.
- These rights apply to all people, **irrespective of their race, gender and nationality, as all people are born free and equal**.
- This general explanation of Human Rights by UDHR is not a legally binding document; however it has a political and moral importance and many of its guarantees have become standard norms today.

Social, Economic and Cultural Rights:

- Social ,economic and cultural rights are integral part of the human rights law that developed due to the aftermath of World War II.
- Social rights are necessary for full participation in the society. Economic rights guarantee every person to have conditions under which they are able to meet their needs.
- They are a part of a range of legal principles through which economic equality and freedom are preserved in a State.
- **Cultural rights** are human rights that aim at assuring the enjoyment of culture and its components in conditions of equality, human dignity and non-discrimination.

Civil and Political Rights:

- Civil and political rights protect an individual's freedom from infringement by the **government, social organizations and private individuals**.
- These rights ensure one's ability to participate in the civil and political life of the society and state.
- The term '**Civil rights**' refers to the basic rights afforded by laws of the government, to every person regardless of race, nationality, colour, gender, age, religion etc.,
- **Political rights** exercised in the formation and administration of a government. They are given to the citizens by law.
- These rights give power to the citizens to participate either directly or indirectly in the administration.

Differences Between Human Rights and Fundamental Rights	
Human Rights	Fundamental Rights
• The rights that a human being deserves to survive with respect and freedoms.	• The elemental rights of the citizens of a country, which are listed in the constitution and enforceable under the law is known as fundamental rights.
• Human rights include those rights which are basic to a real life and are absolute, i.e. it cannot be taken away.	• Fundamental rights includes only those rights which are basic to a normal life.
• Human rights are recognised at international level.	• Fundamental rights are guaranteed under the constitution of the country.

Fundamental Rights in India

Fundamental rights are required for the all round development of a human being. They make the life of people meaningful by giving them rights like speech and to live in an area of their choice.

The fundamental rights are:

- Right to Equality
- Right to Freedom
- Right against Exploitation
- Right to Freedom of Conscience and Religion
- Cultural and Educational Rights for minorities
- Right to Constitutional Remedies

Right to Equality

- It refers to equality before law and equal protection of law.
- Prohibition or discrimination on the **grounds of religion, caste, races, gender or place of birth is offensive** and one can seek justice from court.

Right to Freedom

Six different types of freedom are mentioned in the Constitution.

They are:

- a. Freedom of speech and expression.
- b. Freedom to assemble peacefully without arms.
- c. Freedom to form associations and unions.
- d. Freedom to reside and settle in any part of India.
- e. Freedom to move freely throughout the territory of India.
- f. Freedom to practice any profession and carry on any occupation, trade or business.

Right against Exploitation

- It is against the law to employ children **below 14 years of age in mines, factories or other occupations.**
- Neither contractor nor an employer can force a worker to do a job against their will.

Right to Freedom of Conscience and Religion

- This right gives the citizens freedom to follow and practice a religion of their choice. All citizens have the freedom of conscience or ideas.
- The citizens also have the freedom to follow their own ways for practicing any religion.

Cultural and Educational Rights

- The Constitution gives us the right to preserve, protect and promote culture. We have the right to open schools, associations and societies to preserve and promote our tradition and culture.
- Similarly a group of people may open a school for imparting religious education to children.
- The government also promotes such activities by giving grants. However, such institutions cannot deny admission to anyone based on their **caste, colour, creed or even religion.**

Right to Constitutional Remedies

- Fundamental Rights are guaranteed by the Constitution.
- By this right, a person can adopt Constitutional means and approach a court if he is denied the Fundamental Rights.
- The court then issues orders which are called '**Writs**' to the government to restore the rights to the citizen.

- The Constitutional Remedies put to right anything which may be wrong in terms of the Constitution.
- This right therefore protects and safeguards all other rights.

Fundamental Duties

- These are in the form of duties and responsibilities of citizens. **The original Constitution which came into force with effect from 26th January, 1950 did not contain Fundamental Duties.**
- These were incorporated in the Constitution by the **42nd Amendment Act in 1976.**
- The Constitution states eleven Fundamental Duties as given below:

1. Respect for the Constitution and its ideals and institutions, the National Flag and the National Anthem.
2. To follow and cherish the noble ideals which inspired our National Struggle for freedom.
3. To uphold and protect the sovereignty, unity and integrity of India.
4. To defend the country and render national service when called upon to do so.
5. To promote harmony and spirit of common brotherhood amongst all the people of India, transcending religious, linguistic, regional or sectional diversities, to renounce practices derogatory to the dignity of women.
6. To value and preserve the rich heritage of our composite culture.
7. To protect and improve the natural environment including forests, lakes, rivers and wildlife and have compassion on living creatures.
8. To develop the scientific temper, humanism and the spirit of inquiry and reform.
9. To safeguard public property and to abjure from violence.
10. To strive towards excellence in all spheres of individual and collective activity, so that the nation constantly rises to higher levels of endeavour and achievements.
11. To provide opportunities for education by the parent and guardian to their child or ward upto the age of 14 years.

National Human Rights Commission



- The National Human Rights Commission is an autonomous body constituted on **12th October 1993** under the protection of **Human rights Act, 1993**. It consists of a chairman and few other members.
- NHRC is responsible for the protection and promotion of human rights in India defined by the Act as rights relating to **life, liberty, equality and dignity** of the individual guaranteed by the Constitution or embodied in the international covenants.

Functions of NHRC

- To inquire into the violation of human rights or negligence in the prevention of such violation by a public servant
- To intervene in court proceedings relating to human rights
- To undertake and promote research in the field of human rights
- To engage in human rights education among various sections of society
- To encourage the effects of NGOs and institutions working in the field of human rights.

State Human Rights Commission (SHRC)

- Every state in India has a State Human Rights Commission established in accordance with the power conferred on the state under **section 21 of the Protection of Human Rights Act, 1993**.
- The protection and promotion of human rights constitute the principal concern of the Commission.
- Moreover, the procedures adopted by the Commission to conduct its proceedings, the suo motu actions taken on complaints regardless of the sources received and the transparency of the proceedings of the SHRC add strength to its functioning in a state.

Functions of SHRC

- The SHRC shall enquire into violation of human rights in respect of matters specified in the state and concurrent lists.
- Its objectives and duties are the same as NHRC, but confined only to the state. It has a chairman and two members.
- It has the power of a civil court and can take cognizance of cases if received or in suo motu.

- It can also recommend compensation to victims.

Child Rights

Apart from the fundamental rights described by the Constitution, we have to ensure certain other rights. A child is a person who has not completed the age of **18 years** i.e. a minor as per UNO. This principle is exhibited in **Articles 25 of the Universal Declaration of Human Rights**. Based on these principles, the declaration of the Rights of the child was accepted and adopted in the UN General Assembly on **20th November, 1989**.

- Right to life
- Right to family environment
- Right to Education
- Right to benefit from Social security
- Right against sexual exploitation
- Right against sale or trafficking
- Right against other forms of exploitation like Child labour.

Right to life

A child has the right to survive even before its birth. The right to survival also includes the **right to be born, the right to basic needs of food, shelter and clothing and a dignified living**.

Right to Family Environment

A child has the right to live a normal childhood in a family environment. Children who have been left destitute, abandoned or orphaned also have the right to live. These children can be given for adoption to caring families.

Right to benefit from Social security

Children should get financial support from the country when their parents or guardians are unable to provide them with a good standard of living by themselves, due to any illness, disability or old age.

Right to Education

Right to Education Act is an Act of the Parliament of India enacted in **2009** for free and compulsory education for children **from 6 to 14 years of age as under Article 21A of the Constitution**.

Right against sale or trafficking Children should be treated as individuals with fundamental human rights. Children are vulnerable. There are root causes such as poverty, gender discrimination, broken families etc., behind the sale or trafficking of Children are subjected to sale or trafficking

for various reasons – **economic exploitation, sexual exploitation, sexual abuse, drug trafficking and child labour.**

Right against sexual exploitation

The state should protect children from sexual exploitation and abuse, when they are forced or persuaded to take part in sexual activities physically or mentally.

Right against other forms of exploitation like Child labour Children are often employed in several industries. These children are deprived of their childhood, health and education.

- This will lead to a life of poverty and want. These children are made to **work in glass, match-box, lock-making factories, rag-picking, carpet – making industry, beedi - rolling, mining, stone quarrying, brick kilns and tea gardens etc.**
- Work is mostly gender – **specific, with girls performing more home – based work, while boys are employed as waged labour.**
- Since these children work in agricultural fields, restaurants, motor repair workshops and home – **based industries, elimination of child labour remains a challenge.**
- The findings of an international survey reveals that children with disabilities are **3.4% more sexually abused than normal children.**

Women Rights

- The National Commission for Women (NCW) is constituted in India to review the Constitutional and legal safeguards for women, recommends remedial measures and advises the government on all matters of policy affecting the welfare and development of women in the country.
- In modern India, women have held high offices including that of the President, Prime Minister, Speaker of the **Lok Sabha, Leader of the Opposition, Union Ministers, Chief Ministers and Governors.**
- Women's rights under the Constitution of India mainly include **equality, dignity, and freedom from discrimination; additionally, India has various statutes governing the rights of women.**

Reservations

- The state of Tamil Nadu provides **69% of reservation to the Scheduled Classes, Scheduled Tribes, Backward Classes, Most Backward Classes, Most Backward Classes, Denotified communities and Minorities in employment and educational institutions.**
- Government of Tamil Nadu provides inner reservations for Muslims in BC and for Arunthathiyar in SC category.
- Under each reserved category and in General category **33% is reserved for women and 4% is reserved for differently abled persons.**

- Special reservation offered to Arunthathiyars with in the seats reserved for Scheduled castes. For persons studied in **Tamil medium 20% seats are offered under each category on priority basis.**

Right to Information Act (RTI)

- The Right to Information Act is a revolutionary act that aims to promote transparency in the government institutions in India.
- This act was enacted in **October 2005**. A common man can demand any government organization to provide information.
- The information must be provided within thirty days. If not, a fee will be collected as penalty from the concerned official.
- It is one of the most powerful laws of the country. This act is people friendly; even an illiterate person can ask any Public Information Officer to write it down for him.
- All government agencies like **Municipal Corporations, Government departments, Government Schools, Road Authorities, etc.,** come under this Act.
- Through RTI one can get even copies of government documents such as records, reports, papers, etc., Personal information of individuals and organisations related to the country's defence and intelligence, such as **BSF, CRPF, Intelligence Bureau** are exempted from the RTI.
- Sign the Application form with your full name and address along with the date and send it through a registered post to the office of the concerned authority.
- If a reply is not received within **30 days**, an appeal can be filed with the Appellate Authority.

Labour Rights

The Constitution ensures right to equality, equality of opportunity in public employment, right to form **associations and unions, right to livelihood, prohibits trafficking, forced labour and child labour**. **Article 39(d)** ensures equal wages to male and female workers for equal work.

"The rights of every man are diminished when the rights of one man are threatened" said John F. Kennedy. Civilized nations of the world insist on equality. Nations pay more attention on human rights to ensure equality. This helps in maintaining peace, harmony and development of the country.

More to Know:

1. Contribution of Dr.B.R. Ambedkar

Dr.B.R. Ambedkar's contribution to labourers.

- Reduction in Factory Working Hours (8 hours a day)
- Compulsory Recognition of Trade Unions
- Employment Exchange in India

- Employees State Insurance (ESI)
- Minimum Wages
- Coal and Mica Mines Provident Fund

2. It is a great victory for female workers who stand all the time **more or less 12-14 hours** per day while they are working in shops and commercial malls in Kerala for decades as **Government of Kerala** amended the shops and commercial establishment **Act in July 2018**. Female workers who are working in shops and commercial malls are not allowed to sit or even lean on the wall. They were allowed only **5 minutes** of break two times a day to take rest. There was a strong voice against this inhuman practice among women workers for a long time. Considering this, the Government of Kerala has decided to redress by amending the Shops and **Commercial Establishment Act in July 2018**.

3. SC and ST Rights In order to ensure the dignity and security of **Adi Dravidars (mostly referred as Scheduled Castes in other States)** and remove all forms of exclusion, marginalization, untouchability and discrimination the Government formulate policies, plans, budgets, schemes and programmes for ensuring the right to social equity, access to entitlements and right to dignity. These rights facilitate the betterment of their socio-economic conditions as well as conferring democratic and political rights. Furthermore, the Scheduled Tribes constitute a total of **8.6 percent of India's population**. They continue to practice their native norms and customs and on most occasions remain inaccessible to the rest of the world. This has become an important ground for the preservation of their rights.

4. Women Labourers' Welfare and Ambedkar

Dr B.R. Ambedkar framed many laws for women workers in India such as the '**Mines Maternity Benefit Act**', '**Women Labour Welfare Fund**', '**Women and Child Labour Protection Act**', '**Maternity Benefit for Women Labour**', and '**Restoration of Ban on Employment of Women on Underground Work in Coal Mines**'.

5. In Tamil Nadu, ancestral property rights were given to women through Hindu Succession (**Tamil Nadu Amendment**) **Act 1989**. The Central Government amended the **Hindu Succession Act in 2005**. By this amendment, women are now given equal shares in inheritance of the undivided property.

6. Rosa Parks- a Symbol of Dignity

By refusing to give up her seat to a white man on a **Montgomery, Alabama, city bus in 1955**, one Rosa Parks (**1913–2005**) helped to initiate the civil rights movement in the United States. The leaders of the local Afro -American community organized a bus boycott that began the day (**same Monday, every week**) Parks was convicted of violating the segregation laws. Led by a young Rev. **Dr. Martin Luther King Jr.**, the boycott lasted more than a year—during which Parks not coincidentally lost her job—and ended only when the U.S. Supreme Court ruled that bus segregation

was unconstitutional. Over the next half-century, Parks became a nationally recognized symbol of dignity and strength in the struggle to end entrenched racial segregation.

Children are the foundation of any nation. When girls get married early, they lose many privileges like childhood happiness, availing education and a healthy life. The society in turn gets affected by child marriage. Thus child marriage should be avoided at any cost.

7. **Kailash Satyarthi** is a Nobel Peace Prize recipient and the founder of **Bachpan Bachao Andolan**, and many other child rights organisations. More than **86,000** children in India have been liberated by him and his team members from child labour, slavery and trafficking. An **80,000 km** long Global March against Child Labour was led by **Kailash in 1998** which turned the world's attention towards the issue of Child labour.

8. Child Rights in the Indian Constitution

- Article 24 – No child below the age of 14 must be employed in hazardous employment.
- Article 45 – Free and compulsory education for all children until they attain the age of 14 years.

9. 1098

Childline is India's first 24 hours free emergency phone service for children in need of assistance. Special care is given for vulnerable children like those affected by child labour, child marriage and children affected by any abuse.

10. POCSO Act - Protection of Children from Sexual Offences Act

The Protection of Children from Sexual Offences Act, 2012 regards the best interest of the child as being of paramount importance at every stage. Salient features of POCSO Act

- The Act defines a child as any person below eighteen years of age, to ensure the healthy, physical, emotional, intellectual and social development of the child.
- When the abuse is committed by a person in a position of trust or authority vis-à-vis the child, like a family member, neighbours or any other acquaintances.
- The statement of the child is to be recorded exactly as the child narrates.
- A child not to be called repeatedly to testify. An ordinance providing the death penalty for rapists of girls below **12 years of age and other stringent penal provisions for rape has been promulgated in April 2018. The Criminal Law Amendment Ordinance, 2018**, amended the Indian Penal Code .
- Another salient feature of this amendment is that the fine imposed shall be just and reasonable to meet the medical expenses and rehabilitation of the victim.

11. The **Kavalan SOS App** is launched by the Government of Tamil Nadu for public use during emergencies. Anyone in a critical situation, not only women, can easily and directly access the State Police Control Room using this App.

12. **Malala - Nobel Peace prize laureate says** "I loved school. But everything changed when the fundamentalist took control of our town in Swat Valley. They said girls could no longer go to school. I spoke out publicly on behalf of girls and our right to learn. And this made me a target. In October 2012, on my way home from school, a masked gunman boarded my school bus and asked, **"Who is Malala?"** He shot me on the left side of my head. I woke up 10 days later in a hospital in Birmingham, England. After months of surgeries and rehabilitation, I joined my family in our new home in the U.K. I determined to continue my fight until every girl could go to school. Every day I fight to ensure all girls **receive 12 years of free, safe, quality education. With more than 130 million girls out of school today**, there is more work to be done. I hope you will join my fight for education and equality. Together, we can create a world where all girls can learn and lead. If you were Malala, what would you have done? Is Malala's fight necessary? Are girl children treated and given education equally?

13. **The Right of children To free and compulsory Education (RTE) Act, 2009**, means that every child has a right to formal Elementary Education. This right of children provides free and compulsory education till the completion of elementary education in a neighbourhood school. The child need not pay any kind of fee for completing elementary education.

14. **Maintenance and welfare of parents and Senior Citizens Act, 2007** is a legislation passed in 2007 by the Government of India. This Act is a legal obligation for children and heirs to provide maintenance to senior citizens and parents.

15. **WRIT** is a written order from the court or other legal authority ordering to do an act or not to do it.

16. End of Apartheid

Apartheid was the highest form of discrimination that existed in **South Africa**. Places of residence were determined by racial classification. It was the governing policy in the country by the minority whites over the majority non-whites. The people of South Africa protested against racial discrimination. Nelson Mandela raised his voice against apartheid. When he organised defiant campaigns against the government, he was imprisoned. Amid growing domestic and international pressure and with the fear of a racial civil war, **President F. W. de Klerk released him in 1990**. The efforts taken by Mandela and de Klerk put an end to apartheid. In **1994**, a multiracial general election was held, in which Mandela led the African National Congress to victory and became President.

9th Social Science Lesson 11 Notes in English

11. Money and Credit

'பொருளல்லவரைப் பொருளாகச் செய்யும்
பொருளல்லது இல்லை பொருள்'
(Money adds value to people)

- Almost all things used by man have a monetary value. In addition to that, the pay given for labour, wages and services are all fixed on the basis of money.
- The taxes and duties are also paid in the form of money. We would have seen our parents planning the expenses at our home every month.
- The **monthly income, pending expenditure, savings, payment of interest etc.**, are all measured in terms of money. Not only at homes, but also the budgets of a country or states are also framed on the basis of money.
- The Government, as well as, private institutions and industries calculate their financial status through money. Thus, money plays a predominant and inseparable role in all our lives.

'ஆகாறு அளவிட்டி தாயினும் கேடில்லை
போகாறு அகலாக் கடை'
(Expenditure should not exceed income says Thiruvalluvar)

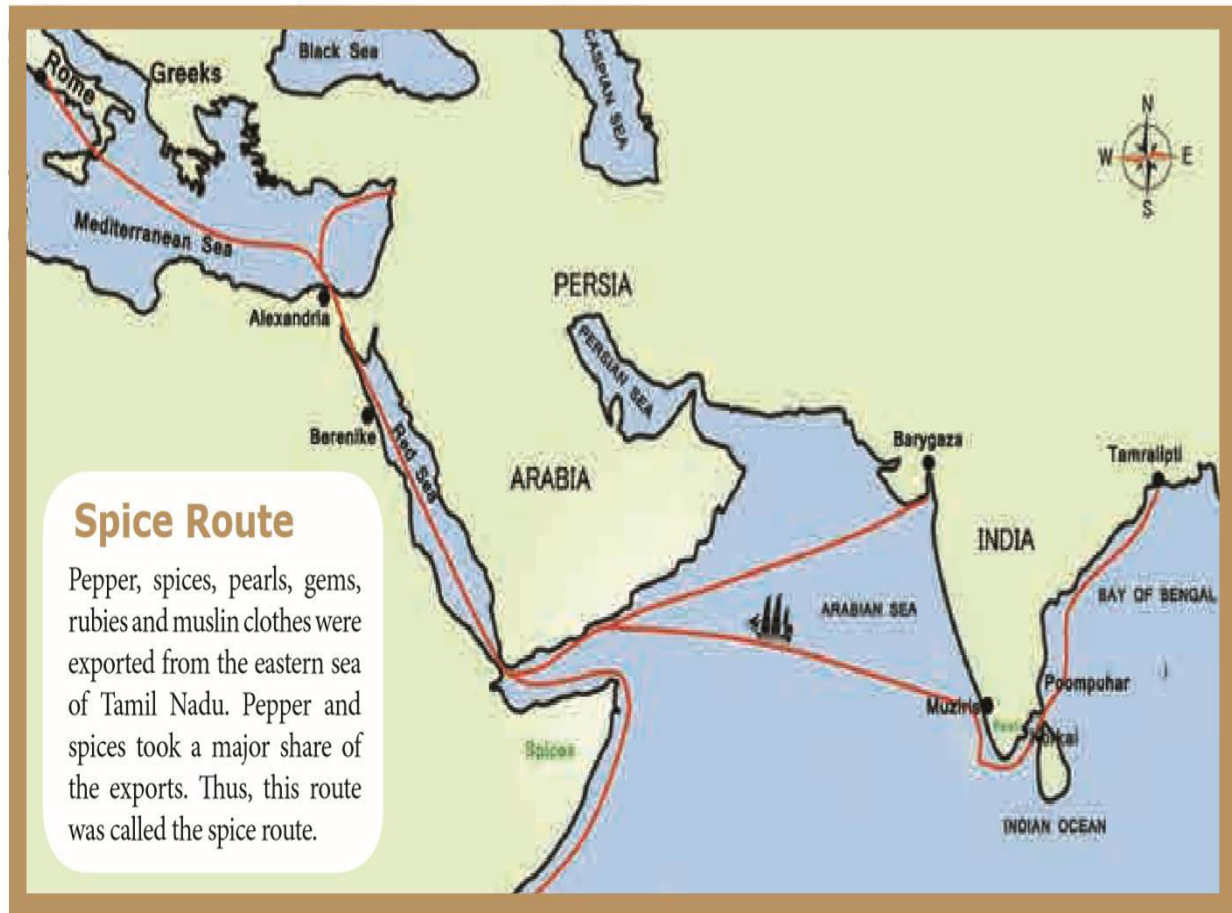
Barter System

- Ancient man hunted and gathered food. He lived in caves and forests. In later stages, he **invented weapons for hunting and gathering food**.
- Later, he invented fire and learnt to practise agriculture. He used mud to build houses and settle down in a place and also to make earthenware.
- When the agricultural yield was high, they made handicrafts. When there was surplus in agricultural produce and other articles like **earthenware, they exchanged it with people who needed them**.
- For example, **if a community had excess food stuff, they would exchange that with those who had excess pots**.
- Likewise, when a particular grain grew in abundance in a region, it was exchanged for a different crop in another region.
- These articles which were exchanged through barter system can be termed as the first form of trade.

Coins



- The barter system flourished wherever civilizations thrived. This system was active not only within a civilization, but also among civilizations.
- This was the initial form of international trade. During archaeological excavations in **Egypt and Iraq (Mesopotamia)**, articles used during the Indus valley civilization were excavated.
- As years went by, there were issues found in barter system. For example there were problems in the exchanging needed goods.
- A person who had paddy was in need of earthenware for instance. But, the person who had pots and other utensils was not in need of paddy.
- Thus, the needs of many people were not fulfilled. Measuring the quantity and value of the goods exchanged were found very difficult.
- To solve these issues, they fixed a common item with a **standard value, for the effective exchange of goods**.
- It was usually in the form of some metal. Metals were rare to find and could be maintained for a long time and never lost their value.
- Hence, the metals can be termed as the first form of money. These may be the reasons why metals were chosen.
- **Gold, silver and copper** were the metals used first. They were called ancient currency. Leather, beads, shells, tobacco, salt, corn and even slaves were exchanged as barter, says economists.
- The later Cholas allowed the traders to have their own army.
- Historical evidences state that during this period, small traders and producers gave credit to the Tamil traders to support their export needs.



Natural Money

- The metals such as silver and gold gained importance gradually all over the world.
- So, these metals were used as standard value in the exchange of goods. This was called as natural money.

Paper Money

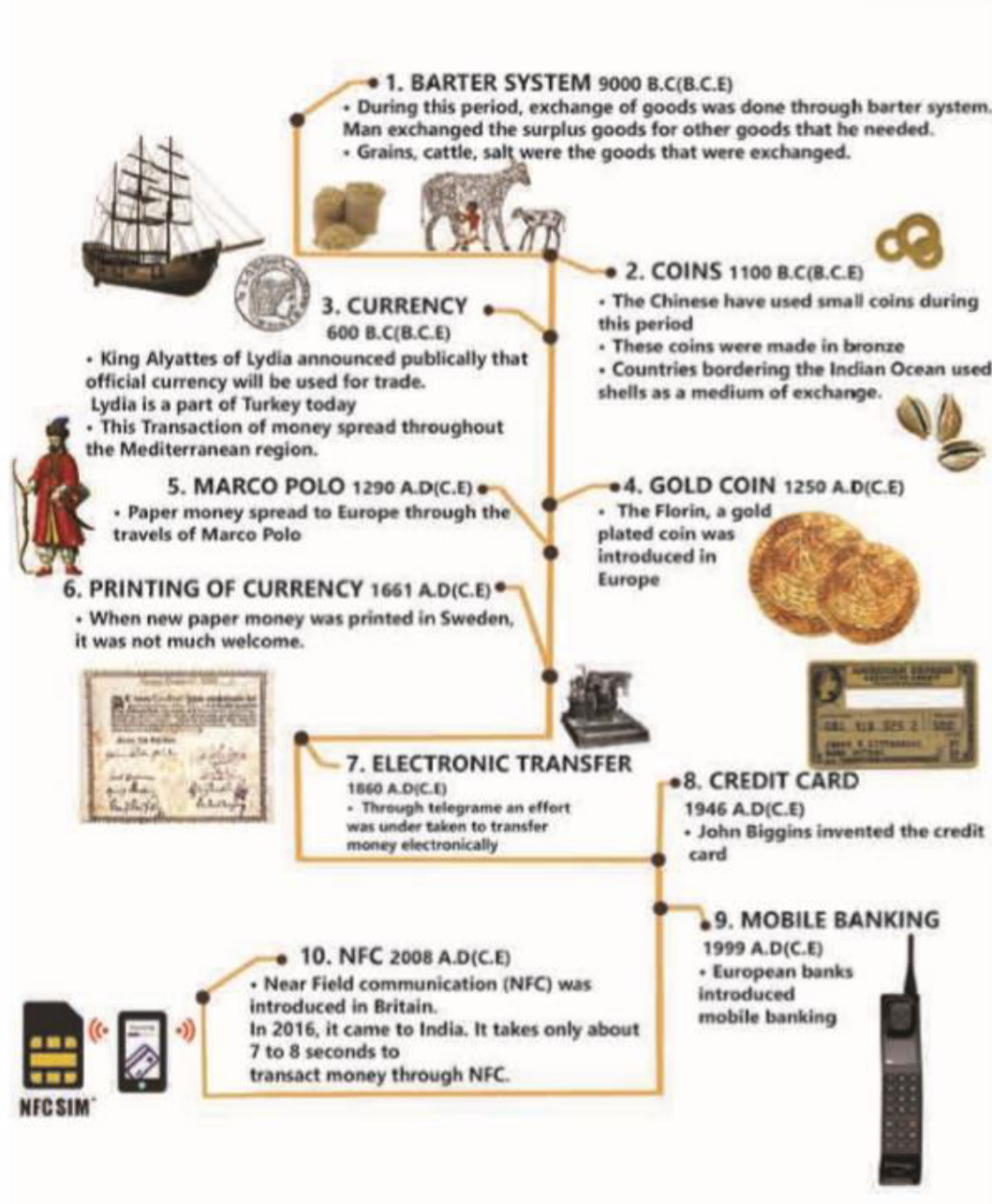
சலத்தால் பொருள்செய்தே மார்த்தல் பசுமட்க
லத்துள்நீர் பெய்திரீஇ யற்று

‘The wealth stored through immoral ways will
disappear as water kept in an unburnt pot’

- As days went by, issues arose because while trade prospered, there were insufficient reserves of gold and silver.
- Mines also had a limited reserve of these metals. An alternative was found and coins were made using metals with lesser value.
- These were used to buy and sell goods of lesser value. It was used as the money of the poor people. Hence these coins were printed in large numbers.

- Paper money came into being as the next stage. This money was without form and people started saving in banks.
- The **Great Economic Depression** was also prompted the saving habit of the people.
- Money has become an inseparable part of everyone's life today. It has changed its form in the economic front. Money transactions are done through many ways in the electronic world

HISTORY OF MONEY



Electronic Transactions

- One has to visit the bank and fill in a challan or produce a cheque to withdraw money from his account. Now this practice is gradually vanishing.

- Instead, one can easily withdraw the necessary amount from an **Automated Teller Machine (ATM)**, with the help of an ATM debit card. One can easily withdraw the money needed at any time at ATMs located everywhere.
- A person can deposit money in their account without visiting the branch.
- Similarly, credit cards are also available, through which things are bought on credit and the amount can be paid later.
- Nowadays, instead of **using cheques or Demand Drafts (DDs)**, **online transactions through net banking are carried out.**
- Through this, money is transacted to anyone who lives anywhere across the globe.
- Technology has advanced so much that even mobile banking is widely used nowadays.

Role of the Reserve: Bank of India

- A government has the responsibility to regulate money supply and oversee the monetary policy.
- Hoarding of money must be avoided at all costs in a country's economy. Only then money can be saved in banks.
- A major portion of the savings in banks are used for the development of industries, economic growth and various development schemes for the welfare of the poor.
- All the major and **important banks were nationalised (1969)** in India.
- The Reserve Bank of India (RBI) regulates the circulation of currency in India. The Reserve Bank of India started its operations on **1st April 1935**.
- It was permanently moved to Mumbai from the year **1937**. RBI was **nationalized in 1949**.
- **85%** of the printed currency is let for circulation. According to the statistics available as on August 2018, currency worth of **19 lakh crore** are in circulation.

Relationship between Money and Prices

- There is a close relationship between volume of circulation money and the price of things.
- 90% of the products are manufactured with the main aim of sales or meant for services. Growing crops and production are done on a commercial basis, rather than on a subsistence level.
- This phenomenon also increased the importance of the market and money. The relationship between money and price is connected with the Monetary policy.
- There is a close relationship between the growth of money supply and inflation. Price controls play a very important role in a country's economic stability.
- This role is played by the Central Bank of our country, RBI in India. Currency is the medium of exchange in a country.
- The Indian currency is called the **Indian Rupee (INR)**. In a country the foreign currency is called foreign exchange.
- Purchasing capacity of all currencies in the world are compared using the US dollar as the standard currency.

- This value differs from country to country. **Most of the international trade transactions are carried out in US dollar.**

Functions of Money

When money replaced the barter system, a lot of practical issues were solved. **Money acts a medium of exchange**, a unit of measurement, a store of value and a standard of deferred payments. It plays an important role in transactions.

Foreign exchange rate equivalent to US Dollars		
Country	Currency	Equivalent Value for 1 US Dollar (July 2018)
India	Rupee	68.72 rupees
England	Pound	0.76 pound
European Union	Euro	1.14 euro
Canada	Dollar	1.31 dollar
Japan	Yen	111.15 yen
China	Yuan	6.76 yuan
Saudi Arabia	Riyal	3.75 riyal
Australia	Dollar	1.35 dollar
Malaysia	Ringgit	4.05 ringgit
Pakistan	Rupee	124.2 rupees
SriLanka	Rupee	159.8 rupees



Medium of Exchange

Money should be accepted liberally in exchange of goods and services in a country.

Unit of Account

Money should be the common, standard unit of calculating a country's total consumer goods, products, services etc. For example, if a book costs ` 50, it means that the price of the book is equal to 50 units of money. **Money is used to measure and record financial transactions in a country.**

A Store of Value

Money is used as a store of purchasing power. It can be used to finance future payments.

Credit

Farmers avail credit during monsoons for **buying seeds, agricultural input and other expenses. Traders and small entrepreneurs need credit for their needs.** Even large industries receive credit to take up their new projects.

Credit is available from:

- Formal financial institutions like nationalised and private banks and cooperative banks
- Informal financial institutions
- Micro credit is received through Self Help Groups (SHG) As far as nationalised banks and cooperative banks are concerned the interest to credit is comparatively lesser and there is guarantee for the pledged, goods.

Informal Financial Institutions

Tamil Nadu - Banking Statistics

Banking Activities (April 2017- March 2018)	Rupees (approximately)
Deposits Received	7.17 lakh crore
Loans sanctioned	7.84 lakh crore
Loans to Micro & Small enterprises	1.40 lakh crore
Priority Sector Loans including Agriculture	3.56 lakh crore
Loans to weaker section	1.04 lakh crore
Education Loan	1.67 lakh crore
Credit Deposit Ratio	109.34%

Source - Report of 154th state level Bankers Committee Meeting - 2018

- Informal financial institutions are easily approachable to the customers with flexible procedures.
- But there are issues like the safety of items pledged high rates of interest and modes of recovery.
- People who live in a particular place or those who are involved in a certain work join together as a group and start saving. These are called as Self Help Groups.
- The nationalised banks provide help to these groups through micro-credit.
- Credit given through Self Help Groups for **street vendors, fishermen, especially women and the poor really make a difference in their life.**
- In Tamil Nadu, all the banks have **10,612 branches, across the state** They carry on a total transaction of around **15 lakh crore rupees during the financial year (2017-2018).**

More to Know:**1. Money supply is divided into four:**

- M1 = Currency held with the public + cash Reserves in commercial and Cooperative banks + cash reserves in the RBI.
- M2 = M1 + Money saved in Post office and bank savings Accounts
- M3 = M1 + Time Deposits in Commercial and co-operative banks
- M4 = M3 + Post office savings Money

2. How is currency printed in India?

- One rupee and two rupee notes were first printed in India in the year **1917**. The Reserve Bank of India is empowered to issue the **Government of India notes since 1935**.
- 500 rupee note currency was introduced later. In **1940, one Rupee notes were issued again**.
- Till 1947, the currency notes with the image of **King George VI** were in circulation. After Independence, the Government of India issued currency notes.
- In **1925**, the British government established a government press at Nasik in Maharashtra.
- Currencies were printed three years later. In 1974, a press was started in **Dewas, Madhya Pradesh**. (Security Printing and Minting Corporation of India Ltd.)
- In the 1990s two more presses were started in **Mysuru, Karnataka** and **Salboni in West Bengal to print bank notes**.
- The Reserve Bank of India has the authority to decide the value of currency to be printed and how the amount should reach its destination safely. Around ten thousand workers are employed here.
- Countries like **Sri Lanka, Bhutan, Iraq and Africa** have drawn contracts for printing their currencies and sent to the respective countries.
- Though the RBI has the power to print up to ten thousand rupee notes, at present a maximum of upto rupees two thousand is printed.

3. Educational Loans

- Educational loan attempts to meet the educational aspirations of the society.
- A student is the main borrower.
- A parent, spouse or sibling can be the co-applicant.
- It is offered to students who want to pursue higher education in India or overseas.
- It can be taken for a full time, part – time or vocational course and Graduation or Post Graduation.
- There is no security required for the loan amount up to **4 lakhs**
- The loan is repaid by the student generally after the employment.
- Students can apply through **"Vidya Lakshmi Portal Education Loan Scheme"**. (<https://www.vidyalakshmi.co.in/>)

4. Dr. B.R. Ambedkar's Ph.D.thesis on **'The Problem of the Rupee - Its origin and solution'** was the reference tool and provided guidelines for the Reserve Bank of India Act of 1934.
5. Money, i.e. paper currency is a value. Money is recognized as a standard record for the payment of a thing or service. Using this currency, people can purchase things, pay taxes and repay debts. In the currency of India, I promise to pay the bearer the sum of rupees is printed as the assurance given by the governor of the Reserve Bank of India, with his signature. Similarly, the signature and the promise given by the highest official are found in currencies of all countries.
6. During his **rule (1540-1546) Sher Shah Suri** set up a new civic and military administration and issued a coin of silver weighing **178 grams**, which was termed the Rupiya. The silver coin remained in use during the Mughal period, the Maratha era and in British India as well.

9th Social Science Lesson 12 Notes in English

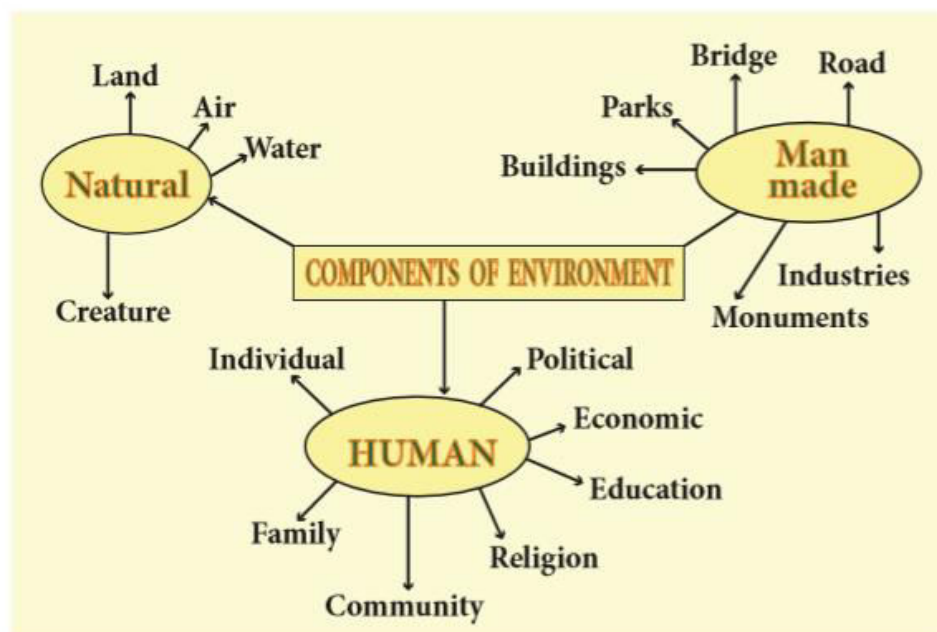
12. Man and Environment

- Environment is a set of relationships between man and nature.
- Man has survived through the **ages, dwelling within his surrounding** called the environment.
- The word '**environment**' is derived from **the French word 'environ' meaning encircled or surrounded**.
- Environment includes both living (biotic) and non living (abiotic) components.

Man and Environment:

- Early man depended entirely on nature for food, clothing and shelter. Man has enjoyed a dominant position over the other living organisms around him because of his **erect posture, hands and intelligence**.
- From the **paleolithic period to the neolithic period**, man has invented and developed the wheel, fire, tools and patterns of agriculture and housing to his comfort, which led him to improve the standard of living making himself technologically advanced.
- Thus, modern man modified the environment where he multiplied in numbers to increase population and has always).
- Economic Factors Educational institutions, employment opportunities, manufacturing industries, luxurious amenities, trade and commerce and other facilities encourage dense population in an areas extended his territories, leading to the exploitation of natural resources.

Classification of Environment:



Environment is generally classified as

- (a) Natural environment
- (b) Human environment and
- (c) Manmade environment

Natural environment

Earlier, we have learnt about the natural components of environment such as lithosphere, atmosphere, hydrosphere and biosphere.

Human Environment

Human environment is defined as the interaction between man as an individual, with his family, occupation and society. It is also related to various cultural aspects such as education, religion, economics and politics.

Man-made environment

- Man-made environment has been created by man himself for the purpose of fulfilling his needs and to make his life more convenient and easy.
- For example, **building, transport, park, industrie, monument, etc.**
- To bring an equilibrium between man and the environment, man has to study the distribution of population, availability of resources, development in technology, alternate means of fulfilling the increasing demand created by the growing population and other man-made features.

Population

- Human beings are important to develop the economy and society. The Latin word '**populus**' means '**people**'.
- Population is the total number of people living together in a particular place at the given point of time.
- Population Growth '**It is easy to add but difficult to maintain**' Population is a dynamic phenomenon where the number, distribution and composition are constantly changing.
- Human population increases as babies are born and decreases as people die.
- For most of human history, births have only slightly exceeded deaths every year. As a result, human population grows slowly.
- About the time of Industrial Revolution, it began to increase rapidly. Natural increase of population is the difference between the birth rate and death rate.
- In fact population is always increasing but only in very rare cases it may decrease through natural or man-made disasters such as **famine, landslides, earthquakes, tsunami, epidemics, extreme weather conditions and war.**

- Population change refers to an increase or decrease in the population of an area influenced by the number of births, deaths and migration.
- The population of the world doubled from **500 million in 1650 to 1000 million in 1850**.
- The projected population for **2025 and 2050 is about 8 billion and 9 billion** respectively. Population growth refers to an increase in the number of people who reside in a particular area during a particular period.
- Population increases when there are more births and immigration. It decreases when there are more deaths and emigration. Population growth, can be calculated as

Population growth = (Birth rate + Immigration) - (Death rate + Emigration).

The important features associated with the population studies in Tamil Nadu are as follows:

S. No	Term	Definition	Data for Tamil Nadu
1	Birth Rate	Indicates the number of live births per 1000 people in a year	15.4% (2014)
2	Population Growth	The average annual growth of population	15.6% (2011)
3	Population Density	The average number of people per square kilometre	555/ Km ² (2011)
4	Total Fertility Rate	The average number of children born per woman during her child bearing years (usually ages 15 to 44)	1.6 Birth Per Woman (2016)
5	Infant Mortality	The number of deaths under one year of age for every 1000 live births in a year	17 per 1000 live births (2016)
6	Life Expectancy at Birth	The average number of years an individual is expected to live	70.6 years (2010-14)
7	Literacy Rate	The percentage of people in a given population who can read and write a language	80.09% (2011)
8	Sex Ratio	The number of females for 1000 males in a given population	996:1000 (2011)

Distribution of Population

Population distribution refers to the way in which people are spread out across the earth's surface. The world population is not uniformly distributed, owing to the following factors.

Physical Factors

Physical factors include temperature, rainfall, soil, relief, water, natural vegetation, distribution of minerals and availability of energy resources.

Historical Factors

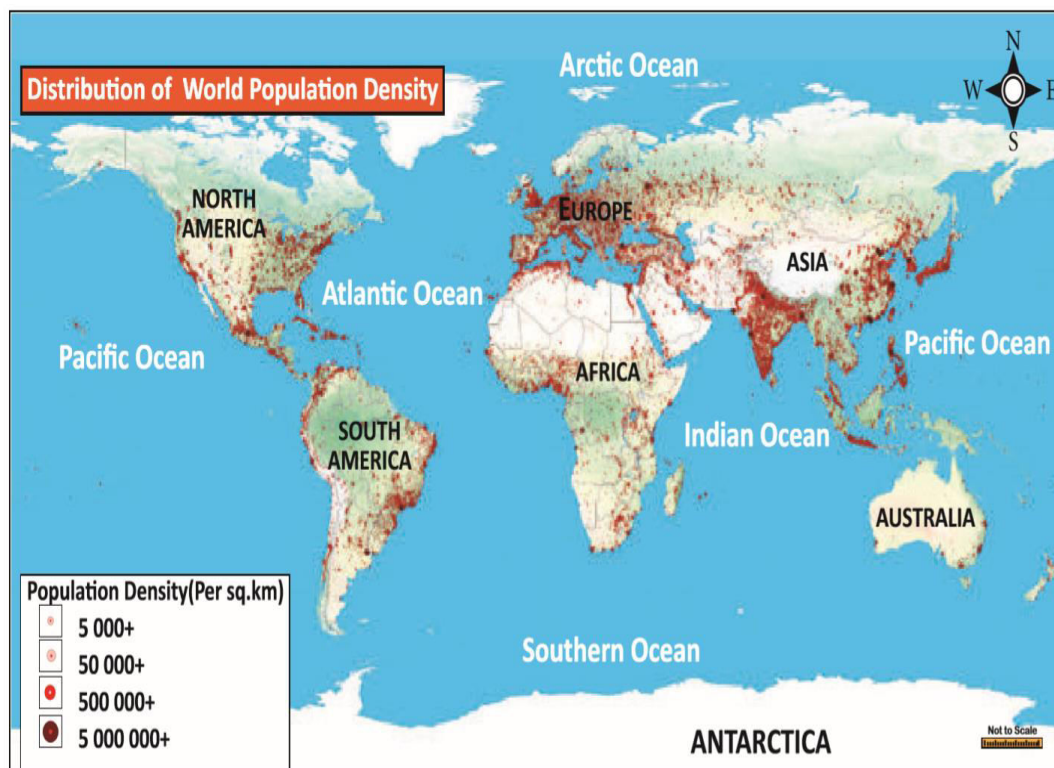
Regions with historical importance (river valley civilizations), war and constant invasions fall under historical factors responsible for population distribution.

Economic Factors

Educational institutions, employment opportunities, manufacturing industries, luxurious amenities, trade and commerce and other facilities encourage dense population in an area.

Density of population

- Density of population refers to the number of people living per square kilometre.
- An area is said to be sparsely populated when it has a large area with less number of people.
- Similarly, smaller the area with a large number of people, it is said to be densely populated.
- $\text{Population Density} = \frac{\text{Total Population}}{\text{Total land area}}$



The world's population density is divided into three main groups.

- Areas of high density (**above 50 people per sq.km**) - East Asia, South Asia, North West Europe & Eastern North America
- Areas of moderate density (**10 to 50 people per sq.km**) - The sub tropical regions like Angola, Congo, Nigeria and Zambia in Africa
- Areas of low density (**less than 10 people per sq.km**) - Central Africa, Western Australia, Northern Russia, Canada, etc...

Migration

- Migration is defined as the **permanent or semi-permanent** change of home of an individual or a group of people over a significant distance from their place of origin.
- The causes of migration may be physical (**climate, drought, flood, earthquake, volcanic eruption, epidemics etc.**), social inequalities, economic opportunities, technology, education, cultural clashes, war or political issues. There are two types of migration:

Internal Migration

The movement of people within a country i.e. **between states, districts, villages, etc** is called as Internal migration.

International Migration

The movement of people from one country to another, across international borders is called as International migration.

Push and pull factors of migration

Push factors are those factors which force people to move to new areas to live, while pull factors are those factors that attract migrants to a new location. Given below are some of the push and pull factors of migration.

Push Factors of migration	Pull factors of migration
• Insufficient jobs and few opportunities	• Better job opportunities
• Primitive conditions	• Better living conditions
• Desertification	• Fertile land
• Slavery or forced labour	• Socio economic independence
• Poor medical care	• Better health care
• Death threats	• Security
• Pollution	• Clean environment
• Poor infrastructural facilities	• Better infrastructural facilities
• Bullying	• Education
• Natural Disasters	• Living Stability
• War	• Industry
• Lack of political or religious freedom	• Political and religious freedom

Human settlements

- A settlement can be described as any temporary or permanent unit area where people live, work and lead an organized life. It may be a **city, town, village or other agglomeration** of buildings.
- During the early days, man preferred tree branches, caves, pits or even rock cuts as his shelter.
- As days passed by, man slowly learnt the art of domesticating animals and cultivating food crops.
- The evolution of farming took place along four major river basins i.e. **the Nile, Indus, Hwang Ho, Euphrates - Tigris**.
- Man built huts and mud houses. Slowly settlements came into existence. A settlement generally consisted of a cluster of houses, places of worship and a place of burial. Later, small settlements developed into villages.
- Several villages together formed a town. Bigger towns developed into cities. Settlements were formed in different shapes, sizes and locations.

Classification of settlements

On the basis of occupation, settlements may be classified as rural and urban settlements.

Rural Settlements

- Any settlement where most of the people are engaged in primary activities like agriculture, forestry, mining and fishery is known as a rural settlement.
- Most of the world's settlements are rural, that are mostly stable and permanent.

- The most important and unique feature of rural settlements is the vast, open spaces with green, pollution-free environment.

Patterns of rural settlements:

Rectangular pattern:

Rectangular pattern of settlements are found in plain areas or valleys. The roads are rectangular and cut each other at right angles.

Linear pattern:

In a linear pattern, the houses are located along a **road, railway line and along the edge of the river valley or along a levee.**

Circular or semicircular pattern:

The pattern of settlement that is found around the **lakes, ponds and sea coasts** are called circular or semi circular pattern.

Star like pattern:

Where several **metalled or unmetalled** roads converge, star shaped settlements develop. In the star shaped settlements, houses are spread out along the sides of roads in all directions.

Triangular pattern:

Triangular patterns of rural settlement generally develop at the confluence of rivers.

T-Shaped, Y-Shaped, Cross-Shaped or Cruciform settlements:

T-shaped settlements develop at tri junctions of the roads (T), while Y-shaped settlements emerge as the places where **two roads converge with the third one.** Cruciform settlements develop on the cross-roads which extend in all four directions.

Nebular pattern:

The arrangement of roads is almost circular which ends at the central location or nucleus of the settlement around the house of the **main landlord of the village or around a mosque, temple or church.**

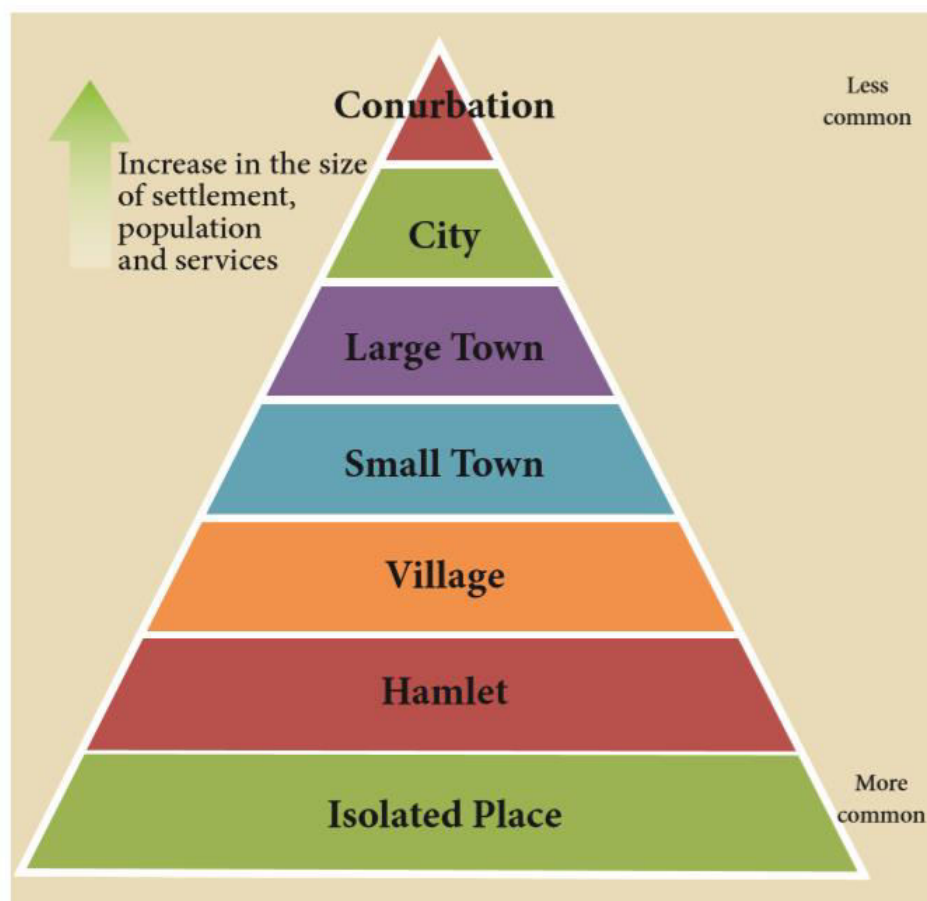
Urban Settlements

- Urban is the term related to cities and towns where people are primarily engaged in non-agricultural activities, such as secondary, tertiary and quaternary activities.

- The common characteristic feature of an urban unit is that they are **compact, congested and liable to a large number of population**.
- They comprise of mostly man-made structures that fulfill the requirements of a **society's administrative, cultural, residential and religious functions**.
- The factors responsible for urbanization are **better employment opportunities, suitable conditions for business, education, transport, etc.**

Classification of Urban Settlements

Urban centres are classified as towns, cites, metropolitan cities, mega cities, conurbation, etc., depending on the size and services available and functions rendered to it.



Town:

A town is generally larger than a village, but smaller than a city. It has a population of less than 1 lakh. E.g.: Arakkonam near Chennai

City:

Cities are much larger than towns and have a greater number of economic functions. The population in cities is estimated to be more than 1 lakh. E.g.: Coimbatore

Metropolitan cities:

Cities accommodating population between 10 lakhs and 50 lakhs are metropolitan cities. E.g.: Madurai

Megacities:

Cities with more than 50 lakh population are called Megacities. E.g.: Greater Chennai

Conurbation:

A conurbation is a region comprising of a number of cities, large towns and other urban areas. E.g.: Delhi conurbation

Economic Activities

Economic activities are those efforts or actions that involve production, distribution and consumption of commodities and services at all levels within a region.

Types of Economic Activities**Primary Activities:**

Primary Activities pertain to the extraction of raw materials from the earth's surface. For example: **food gathering, hunting, lumbering, fishing, cattle rearing, mining and agriculture.**

Secondary Activities:

Secondary Activities transform raw materials into finished goods. For example: **Iron and Steel industries, automobile manufacturing etc.**

Tertiary Activities:

Activities which by themselves do not produce goods, but support the process of production are called tertiary activities. For example: **Transport, communication, banking, storage and trade.**

Quaternary Activities:

The activities related to Research and Development, as well as knowledge are called Quaternary activities. For e.g. **Services like consultation, education and banking**

Quinary Activities:

The activities that focus on the creation, rearrangement and interpretation of new and existing ideas are called quinary activities. It includes the highest levels of decision making in a society or economy. E.g.: **Senior business executives, scientists and policy makers in the Government.**

Environmental Issues

- Environment is the basic life support system that provides **air, water, food and land to all living organisms.**
- But human beings degrade the environment through rapid industrialization. Human life will be at risk if they don't live in harmony with the environment.
- Environmental problems are not limited to the local, regional and national level, but there are several global issues.
- Scientific and technological revolutions have given a lot of facilities to mankind, but at the same time it is responsible for the depletion of resources.
- Thus, several environmental problems have emerged. Some of the environmental issues that we are going to learn are:
 1. Deforestation
 2. Pollution such as air, water ,noise, etc
 3. Urbanisation
 4. Fracking
 5. Waste disposal

Deforestation

Deforestation is the cutting down of trees permanently by the people to clear forests in order to make the land available for other uses.

Effects of Deforestation:

- Deforestation results in many effects like **floods and droughts, loss of soil fertility, air pollution, extinction of species, global warming, spread of deserts, depletion of water resource, melting of ice caps and glaciers, rise in sea level and depletion of ozone layer.**
- The United Nations Conference on Environment and Development (UNCED) by name Earth Summit Conference held at **Rio de Janeiro, Brazil, on June 1992** concluded that all member countries should reduce their emission of carbon dioxide, methane and other green house gases thought to be responsible for global warming.

Conservation of forests

Conservation of forests can be done through the regulation of cutting of trees.

Control over forest fire: Through regular monitoring and controlling the movement of the people forest fire can be prevented.

Reforestation and afforestation: Reforestation involves the replanting or regeneration of areas of forest which have previously been damaged or destroyed. Sometimes forests are able to regenerate naturally. Afforestation is the process of planting trees or sowing seeds on barren land devoid of any trees to create a forest. The term afforestation should not be confused with reforestation, which is the process of specifically planting native trees into a forest that has decreasing number of trees. **While reforestation is increasing the number of trees of an existing forest, afforestation is the creation of a new forest.**

Proper use of forest products: We depend on forests for our survival from the air we breathe, to the wood we use. Besides providing habitats for animals and livelihoods for humans, forest products are one of the most essential things in our day to day life. Therefore we must use forest products properly.

Sustainable forest management: The use of forest and forest lands in a way and at a rate, that **maintains their biodiversity, productivity, regeneration capacity, vitality** and their potential to fulfill the global levels should not cause damage to other eco systems. Forest Management seeks to achieve a balance between the society's increasing demands for forest products, its benefits and the preservation of forest health and diversity too. This balance is critical to the survival of forests and to the prosperity of forest dependent communities.

Pollution

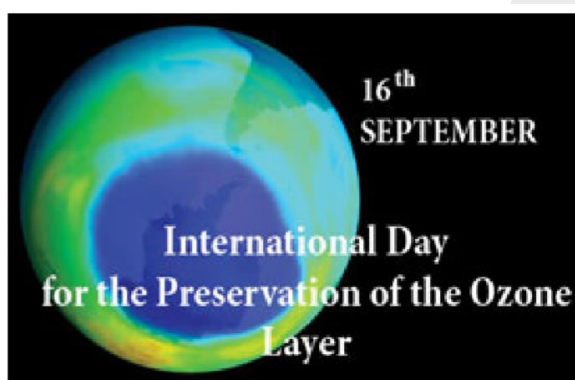
- Environmental pollution occurs when pollutants contaminate the natural surroundings.
- Pollution disturbs the balance of our eco system affecting our normal life styles and gives rise to human illnesses and global warming. The word '**pollute**' means to degrade or to make dirty.
- Pollution is thus, an unfavourable modification of the natural world, caused entirely or partly due to direct or indirect actions of human beings.
- There are many types of pollution degrading the environment. They are
 1. Air pollution
 2. Water pollution
 3. Land pollution
 4. Noise pollution
 5. Light pollution

Air pollution

- Due to some human activities or natural processes, the amount of solid wastes or concentration of gases, other than oxygen increases in air. Air thus becomes polluted and this process is called air pollution.

- The pollutants are generally grouped as natural and manmade. The natural pollutants are **volcanic eruptions, wind erosion, pollen disposal, evaporation of organic compounds and radioactive elements etc.**,
- Natural air pollution does not occur in abundance and also creates a little impact on the environment. But, manmade pollutants like **vehicular emission, industrial wastes, smoke** from thermal power plants and refineries badly affect the environment.
- The main pathological effects caused by **air pollutants, particularly oxides of sulphur, nitrogen and carbon-dioxide, include respiratory disorders, jaundice, irritation of eyes and throat, headache, cancer and even death.**

Ozone Depletion



- Ozone layer is depleted by the pollutants like CFCs, HFCs, methyle bromite, etc.
- to the depletion of ozone layer, UV rays fall on the earth's surface, warming the earth surface and leads to impervious diseases like **skin cancer, blindness, loss of plankton etc.**,

Water Pollution

- Water pollution is any chemical, physical or biological change in the quality of water that has a harmful effect on any living thing that drinks or uses or lives in it.
- The water bodies including ponds, lakes, rivers, ground water and oceans are contaminated by the chemical wastes from industries, domestic wastes and sewage etc.

Major water pollutants

The disease – Causing agents bacteria, viruses, protozoa and parasitic worms that enter sewage – systems and untreated waste.

Oxygen demanding bacteria: Wastes that can be decomposed by oxygen requiring bacteria

Water soluble inorganic pollutants: Acids, Salt and toxic metals.

Organic compounds: Oil, plastics and pesticides in the water.

Causes of Water Pollution

Main pathological problems caused due to water pollution include diarrhoea, liver cirrhosis, lung cancer, kidney diseases, paralysis, chronic pain, bone deformities, cancer and even death and so on.

Land Pollution

- Land pollution is contaminating the land surface of the earth through dumping of urban waste matter.
- It arises from the breakage of underground storage tanks, application of pesticides and percolation of contaminated surface water, oil and fuel dumping, leaching of wastes from landfills or direct discharge of industrial wastes to the soil.

Preventive Measures

- Things used for domestic purposes can be reused and recycled.
- Organic waste matter should be disposed off far away from the settlements.
- Inorganic wastes can be separated, reclaimed and recycled.

Noise Pollution

LOUDSPEAKER PROHIBITION:

The major cause of noise pollution in public areas are loudspeakers. For the welfare of the people it should be banned at any cost. Those who violate and play loudspeakers in crowded areas and public places strict laws should be imposed against them.



- Noise pollution is basically a problem of urban areas, industrial areas, transport areas due to bombardment, traffic etc.
- It has an impact on the habitat of animals migration and health of inhabitants.
- E.g. Chandipur Missile Launching Centre has created migration of sea birds.
- **Hearing loss, hypertension, stress and mental illness** are the major health hazards that human beings face.

The control measures of noise pollution

- Development of green belt vegetation
- Installation of decibel meters along highways and in places of public gatherings
- Planting trees along the compound wall to protect houses.

Light pollution

- Light pollution is an unwanted consequence of outdoor lighting and includes such effects as sky glow, light trespass and glare.
- It is caused by **streetlights, parking lot lights, floodlights, signs, sports field lighting decorative and landscape lights.**
- It affects the environment, energy resources, wildlife, humans and astronomy research.

Urbanisation

Urbanisation refers to the process of increase in urban population and urban areas in a country.

Problems of urbanisation

- As the town expands, it mounts more pressure on transport system, water supplies, sewage and refuse disposal.
- The overall development creates problems like air pollution, water pollution, traffic congestion and noise pollution etc.,
- This disturbed environment affects the human beings as mental illness, heart troubles, breathing problems etc.

Fracking

- The modern technology applied to extract oil and gas while fracturing the rocks artificially with the use of pressurized liquid is called fracking.
- Fracking fluid is a mixture of water, sand and thickening agents. The first successful implementation of the process was done in **1950**.
- Methane is one of the most important chemicals used in fracking process. It is estimated that four percent of methane escapes into the atmosphere during extraction.
- Methane is **25 times stronger** than carbon dioxide in terms of trapping heat.
- The spills of this gas is detrimental to the air quality of the surrounding fracking sites.
- Pollutants decrease the availability of clean air for workers and local residents.

Other Environmental Concerns

- Fracking not only pollutes water and air but also pollutes the soil. The oil spills during fracking can harm the soil and the surrounding vegetation.
- The use of high pressure at the time of oil extraction and the storage of waste water on site may cause earthquakes.

Waste disposal

Things become waste when their purpose of consumption is over. Wastes can be classified into five types, which are commonly found around the house. These include **liquid waste, solid rubbish, organic waste, recyclable rubbish and hazardous waste like e-waste.**

How to dispose of waste:

- Do not litter your surroundings. Use a proper waste bin to store your wastes.
- People should practise to segregate degradable and non-degradable wastes and should dispose them in proper coloured bins.
- Wastage is generally classified into three types. They are

Wet Waste: which comes from the kitchen/ cooking/food, etc.

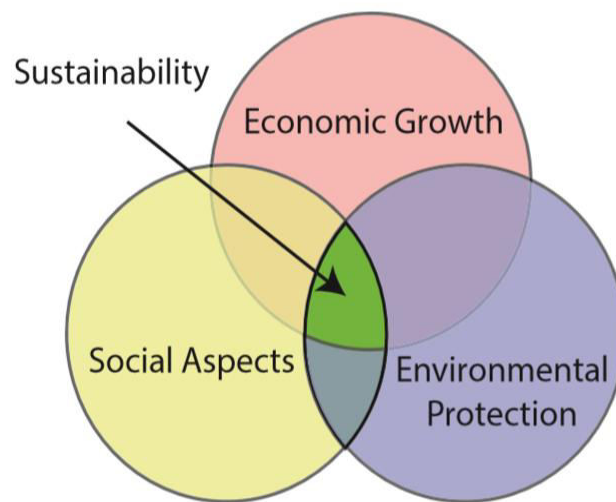
Dry Recyclable Waste: such as newspapers, cardboard, packing plastics, bottles, cans, etc., should go to a different bin.

Rejected Waste: which does not belong to the above two categories, including bio waste like diapers and bandages, etc..

Sewage sludge is produced by waste water treatment processes. Due to rapid urbanization, there has been an increase in municipal waste water. Common disposal practices of sewage should be send to sewage treatment plant through proper drainage pipes.

Electronic Waste (e-waste): It can be defined as any electrical goods, devices or components that you no longer want or have already thrown away. For example, computers, televisions, mobiles and fax machines. This waste can take many years to break down, if at all and can contain toxic chemicals such as mercury, lead and lithium that leach into the ground and cause illness. Even short term exposure to high levels of lead can result in vomiting and diarrhea. Instead of sending e-waste to the dump, components from electronics can be reused to make new products.

Sustainable Development



- Humans on earth are facing many problems, such as pollution, climatic changes, poverty, war and uneven distribution of resources.
- These problems directly affect the survival of mankind. Therefore to sustain mankind, we have to educate people on what sustainable development is.
- In 1987, the **Brundtland Commission** cited the definition of sustainability.
- **"Sustainable development is development that meets the needs of the present without compromising the ability of future generation to meet their own needs".**
- For sustainable development to be achieved, it is crucial to harmonize three core elements: economic growth, social aspects and environmental protection.
- These elements are interconnected and are crucial for the wellbeing of individuals and societies. To achieve true sustainability, we need to balance the economic, social and environmental factors of sustainability in equal harmony.

Social Sustainability

- The ability of a social system such as a country, family or organization to function at a defined level of social well being and harmony is called social sustainability.
- Problems like **war, endemic poverty, widespread injustice and low education rates** are symptoms of a system in socially unsustainable.
- The balancing capacity of a government in maintaining peaceful existence towards other countries and at the same time providing the requirements of its citizens without affecting the environment creates social sustainability.

Economic Sustainability

- The people on earth consume far more than what is their fair share.

- The economic sustainability is successfully implemented through strong **Public Distribution System**.
- Economic sustainability ensures that our economic growth maintains a healthy balance with our ecosystem.

Environmental Sustainability



- Environmental sustainability is the ability of the environment to support a defined level of environmental quality and natural resource extraction rates forever to mankind.
- Unnecessary disturbances to the environment should be avoided whenever possible.

Why is sustainability important?

- The excessive usage of natural and manmade resources deplete its availability for the future generation.
- We need to look after our planet, our resources and our people to ensure that we can hand over our planet to our children to live in true sustainability.
- Hence conservation and awareness are the two important terms that can bring sustainability to our living.
- When we use the word sustainability to **mean maintain, it means to maintain it forever**
- This is because our actions have a lasting effect on the environment and we should protect it for our future generations.

More to Know:

1. Rural India has hardly any arrangement to dispose off liquid waste. Only **56.4%** of the urban wards have a sewer network. According to estimates, about **80%** of the sewage in India flows into rivers, lakes and ponds. This sewage is untreated and pollutes water bodies.

2. Our role in conserving water:

- Do not dump in or around rivers. Clean up rivers that have a lot of trash in and around them.
- Never dispose of cooking fats and oils by pouring them down the sink.
- In the bathroom, take short showers and draw less water for baths. When you buy a new toilet, purchase a low flow model (**1.6 gallons or less per flush**). Check your toilet for "silent" leaks by placing a little food coloring in the tank and see if it leaks into the bowl.
- Turn off water while brushing teeth, washing, gardening and shaving.
- Keep a gallon of drinking water in the refrigerator, rather than running the tap for cold water. Run your washing machine with a full load of clothes. Wash with warm water instead of hot water, rinse with cold water instead of warm water.

3. Ozone layer

- Ozone is a poisonous gas made up of molecules consisting of three **oxygen atoms (O₃)**.
- This gas is extremely rare in the atmosphere, representing just three out of every 10 million molecules.
- The ozone layer is not really a layer at all, but has become known as such because most ozone particles are scattered between **19 and 30 kilometre** up in the earth's atmosphere, in a region called the stratosphere.
- Ozone layer in the atmosphere absorbs most of the harmful ultraviolet radiation from the sun.

- It also screens out the deadly UV-C radiation the ozone shield is this essential to protect life.

4. Acid Rain

- When pollutants combine with water vapour in the presence of sunlight and oxygen, they form **dilute sulphuric and nitric acids** in the atmosphere.
- When this mixture precipitates from the atmosphere, it is called acid rain. The gases that cause acid rain are **sulphur-di-oxide, nitrogen oxides, carbondi-oxide and other minute bio-products**, caused by the burning of fossil fuels

5. Green house effect

- Global warming is caused by the increase of green house gases such as **carbondioxide, methane, water vapour and Chloro Fluoro Carbons(CFC), carbon monoxide, photo chemical oxidants and hydrocarbons**, which are responsible for the heat retention ability of the atmosphere.
- Global warming causes climatic change, ozone layer depletion, rise in sea level and drowning of coastal inhabited land, melting of ice, etc.,
- They are posing an even greater threat to human existence and so, man must start thinking of protecting the environment from pollution.

6. **Damascus** is widely believed to be the oldest, continuously inhabited city in the world, dating back to at least **11, 000 years**.

- Tokyo is the world's largest city with the greater Tokyo area, housing about 38 million inhabitants.
- According to the Quality of Living Rankings by Consultancy Mercer, in **2016, the city offering the best quality of life was Vienna, with Zurich falling second**. (Sources: United Nations, UNESCO, Mercer).

7. **Emigration** means moving out or to leave a place.

8. **Immigration** means to enter or come into a new country for the purpose of settling there.

9. 'India has an official population policy implemented in **1952**. India was the first country to announce such a policy. The main objective of this policy was to slow down the rate of population growth, through promotion of various birth control measures.

10. Census

- Census is an official enumeration of population carried out periodically. It records information about the characteristics of population such as **age, sex, literacy and occupation**.
- Different countries of the world conduct census every **5 to 10 years** as recommended by the United Nations.

- The first known census was undertaken nearly six thousand years ago by the **Babylonians in 3800 BC (BCE)**. Denmark was the first country in the modern world to conduct a census.
- In India, the first census was carried out in the year **1872**.
- Censuses have been conducted regularly every tenth year since **1881**.
- The Indian Census is the most comprehensive source of demographic, social and economic data.

11. The World Population Day is observed on **11th July every year**. It seeks to raise awareness of global population issues. The United Nations Development Programme started celebrating this event from the year **1989**.

12. The black death is estimated to have killed **30 - 60 percent of Europe's total population during the 14th century**. The dominant explanation for black death is attributed to the outbreak of plague.

13. What is Demography?

In ancient **Greek**, '**demos**' means **people** and '**graphis**' means **study of measurement**. So, 'Demography' is the statistical study of human population.

14. The **Stockholm Conference, 1972**, declared man as both a creator and moulder of his environment. 'The Earth Summit', formally known as the United Nations Conference on Environment and Development (UNCED) was held in **Rio de Janeiro in 1992**.

15. Over population and Under Population

Over population is a condition when a country has more people than its resources to sustain. Under Population is a condition where there are too few people to develop the economic potential of a nation fully.

16. The Mangroves of Palk Bay towards Sustainable Development

- The connection between environment protection and restoration and sustainable development has also been presented.
- As an example, the case of the **Mangroves of Palk Bay will help demonstrate these concepts in more practical terms**.
- Palk Bay is the area located roughly between **Kodiakkarai or Point Calimere and Rameshwaram Island** in Tamil Nadu on the southeastern coast of India.
- Palk Bay is home to mangrove ecosystems or tidal swamps.
- Characterised by plants and trees that can withstand high salinity, these swamps are rich in biodiversity.
- The Mangrove trees themselves, offer coastal protection by checking erosion. Erosion affects not just the coastline, but also coral reefs.

- The tangled roots of mangrove trees help **retain and trap loose soil and thereby protect coral reefs and seaweed meadows from siltation.**
- Coral reefs are important ecosystems in maintaining healthy fish population.
- Mangrove forests also help fish population by providing space which act as **nurseries for juvenile fish.**
- In the recent decades, the mangroves of Palk Bay have been heavily degraded due to the **Tsunami of 2004, land encroachment**, rapid urbanisation, cattle grazing and agriculture.
- The degradation of mangroves resulted in the reduction of nursery space for juvenile fish, impacting fish populations in the region and as a result, the livelihood of the fishing communities of the region.
- Given the scale of the problem, solutions needed to be multipronged and involve multiple stakeholders. Local communities, government and civic organisations all came together not just to conserve the remaining mangroves, but also to restore it.
- Saplings of native species of plants and trees are being grown, planted and cared for.
- Live colonies of coral from the **Gulf of Mannar Biosphere Reserve are being transplanted to Palk Bay.** The existing mangroves and the region are being mapped and the way land is used around the mangrove is being studied.
- The local communities are actively involved in the conservation and restoration of the mangroves. **Education and awareness programmes about mangrove ecosystem** are being undertaken.
- Along with awareness programmes, the communities are also being provided with livelihood training, so they can earn an income in more ways than just fishing. All of these efforts are on-going.
- The health of the mangroves are improving and as it does, the **fish population will improve in quality and quantity, improving the lives of the communities.**
- As one can see, sustainable solutions take the needs of the people into consideration and the environment because both are interconnected.

9th Social Science Lesson 13 Notes in English

13. Disaster Management: Responding to Disasters

A disaster is “a catastrophe that causes great damage or loss of life and property”.

Disaster Response

- Disaster response entails restoring **physical facilities, rehabilitation of affected population, restoration of lost livelihoods and reconstruction** efforts to restore the infrastructure lost or damaged.
- The Response Phase focuses primarily on emergency relief: saving lives, providing first aid, restoring damaged systems (**communications and transportation**), meeting the basic life requirements of those impacted by disaster (**food, water and shelter**) and providing mental health and spiritual support and care.

Who are the first responders?

- No matter how large or small, local communities are expected to provide immediate disaster response.
- On a daily basis, **police officers, firefighters, and emergency medical technicians are a community's first responders**, whether during fire, flood or acts of terrorism.
- Mental health professionals and the community's hospitals may also be activated in those early minutes and hours after disaster.
- Disaster management includes **Prevention, Mitigation, Preparedness, Response and Recovery**.
- Disaster management involves all levels of government. Nongovernmental and community based organizations play a vital role in the process. Modern disaster management goes beyond post-disaster assistance.
- It now includes pre disaster planning and preparedness activities, organizational planning, training, information management, public relations and many other fields. Crisis management is important, but is only a part of the responsibility of a disaster manager.
- The traditional approach to disaster management has a number of phased sequences of action or a continuum.
- These can be represented as a disaster management cycle. We mainly focus on the way how the community should respond to disasters.

Earthquake

- An earthquake is a sudden vibration of the part of the earth caused by plate movements.
- It occurs along the plate boundaries. The place inside the earth **where an earthquake originates is focus**.
- The point on the **earth's surface above the called a focus is called an epicentre**.

- The damage caused by the earthquake is the highest near the epicentre. The **earthquake is measured by an instrument called a Seismograph.**
- It is recorded in Richter scale. Let us now see how the communities can better respond to earthquakes.

What to do during an earthquake?



- Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur later.
- Minimize your movements to a few steps that reach a safe place nearby and stay indoors until the shaking has stopped and you are sure exiting is safe.

If indoors

- **DROP** to the ground; take **COVER** by getting under a sturdy table or other piece of furniture and **HOLD ON** until the shaking stops. If there is no table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
- Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed
- Stay away from glass windows, outside doors and walls and anything that could fall (**such as lighting fixtures or furniture**)
- Stay inside until the shaking stops and go outside.

If outdoors

- Move away from buildings, trees, streetlights and utility wires.

- If you are in **open space, stay there until the shaking stops**. The greatest danger exists directly outside buildings at exits and alongside exterior walls. Most earthquake related casualties result due to collapsing walls, flying glass and falling objects.

If in a moving vehicle

- Stop as quickly as safety permits. Avoid stopping near or under buildings, trees, overpasses and utility wires.
- Proceed cautiously once the earthquake has stopped. Avoid roads, bridges or ramps that might have been damaged by the earthquake

Tsunami

- A tsunami can kill or injure people and damage or destroy buildings and infrastructure as waves come forth and recede.
- A tsunami is a series of enormous ocean waves caused by earthquakes, underwater landslides, volcanic eruptions or asteroids.
- Tsunamis can travel **700-800 km per hour**, with waves **1030 meter high**.
- It causes flooding and disrupts transportation, power, communications, and water supply.

How to respond to Tsunami?

- You should find out if your home, school, workplace or other frequently visited locations are in tsunami hazard areas along the sea-shore
- Plan evacuation routes from your home, school, workplace, or any other place you could be, where tsunamis poses a risk.
- Use a weather radio or stay tuned to a local radio or television station to keep informed of local watches and warnings.
- Discuss tsunamis with your family. Everyone should be aware of what to do when tsunami strikes. Discussing tsunamis ahead of time will help reduce fear and save precious time in an emergency. **Review flood safety and precautionary measures with your family.**

What to do after a Tsunami?

- You should continue using a weather radio or staying tuned to a Coast Guard emergency frequency station or a local radio or television station for updated emergency information.
- Check yourself for injuries and get first aid if necessary, before helping injured or trapped persons.
- If someone needs to be rescued, call professionals with the right equipment to help
- Help people who require special assistance, like Infants, **elderly people, those without transportation, large families who may need additional help in an emergency situation, people with disabilities, and the people who care for them.**

- Stay out of a building if water remains around it. Tsunami water, like floodwater, can undermine foundations, causing buildings to sink, floors to crack, or walls to collapse
- Check for gas leaks. If you smell gas or hear a blowing or hissing noise, open a window and get everyone outside quickly.

Riot

- Though riot may seem dramatic, an angry mob can be just as dangerous and unpredictable as just about any natural disaster.
- Thousands of people are killed in riots all over the world each year, and these riots erupt from a number of racial, religious, economic, political, or social causes that cannot be predetermined.
- As per Pew Research Center analysis of **198 countries on April 11, 2015**.
- **Syria tops in riot in the world followed by Nigeria, Iraq and India.**
- If you've found yourself in the middle of a riot, you may not be able to run away immediately, but you can take some measures to protect yourself from harm. If you want to know how to survive a riot, just follow these steps.

Surviving a Riot

At Travel Destination: What to Do

- Keep abreast of the current news if you are in a volatile area
- If you come across a demonstration, don't become inquisitive, just leave the area and find another route to your intended destination
- Void any place where police or security forces action is in progress.

If caught in a riot:

- If you find yourself caught up in a demonstration, keep to the edge of the crowd where it is safer. At the first opportunity, break away and seek refuge in a nearby building or find a suitable doorway or alley and stay there until the crowd passes
- When leaving the fringe of the demonstration, **just walk away – don't run** as this will draw attention to you
- In the event that you are arrested by the **police/military, do not resist**. Go along peacefully and contact your law advisor to help you resolve your predicament
- If you are caught up in the crowd, stay clear of glass shop fronts, moreover, move with the flow
- If shooting breaks out, drop to the ground and cover your head and neck, and lie as flat as you can.

Fire

- Wildfires occur when vegetated areas are set alight and are particularly common during hot and dry periods.

- They can occur in forests, grasslands, bush and deserts, and with blowing wind, can spread rapidly.
- Fires can lead to the destruction of buildings, wooden bridges and poles, power, transmission and telecommunication lines, warehouses containing oil products and other fuel.
- It causes injury to people and animals. The most common causes of fires are lightning strikes, sparks during arid conditions, eruption of volcanoes and man-made fires arising from deliberate arson or accidents.
- A side-effect of wildfires which also threatens inhabited areas is smoke. Fires create large quantities of smoke, which can be spread far by wind and poses a respiratory hazard.
- On an average, in India, every year, about **25,000 persons** die due to fires and related causes. Female accounts for about **66%** of those killed in fire accidents. It is estimated that **about 42 females and 21 males** die every day in India due to fire.

Fire Safety Do's and Don'ts

- Know your building's evacuation plan
- Evacuate calmly and quickly, whenever a fire alarm or **carbon monoxide alarm sounds**.
- Before opening a door, feel it with the back of your hand. If the door is hot, do not open it
- If you encounter smoke during your evacuation, stay low to the floor
- Know the outside rally point for your building
- Know the locations of fire extinguishers, fire alarm pull stations and exits.

What you should do during a fire:

- Stay calm
- Pull the nearest fire alarm or **call 112**
- Give your name and location of the fire. Do not hang up until the police dispatcher tells you to do so
- Leave the building immediately
- Inform others as you pass them to leave the building immediately
- **Walk—don't run**—to the nearest exit
- Never use elevators—an elevator may become a trap.

More to Know:

1. Japan is in a very active seismic area and it has the densest seismic network in the world.

2. Which country actually has the most number of earthquakes?

Indonesia is in a very active seismic zone also, but because it is larger than Japan, it has more earthquakes.

3. Which country has the most earthquakes per unit area?

This would probably be **Tonga, Fiji or Indonesia**, since they are all in extremely active seismic areas along subduction zones.

4. Tsunami-case study

- Shortly before **8 am on 26 December 2004**, the cicadas fell silent and the ground shook in dismay.
- The Moken, an isolated tribe on the Andaman Islands in the Indian Ocean, knew that the Laboon, the **'wave that eats people'**, had stirred from his ocean lair.
- The Moken also knew what was next: a towering wall of water washing over their island, cleansing it of all that was evil and impure.
- To heed the Laboon's warning signs, elders told their children, run to high ground. **'If the water recedes after an earthquake, run immediately to high ground'** The tiny Andaman and Nicobar Islands were directly in the path of the tsunami generated by the magnitude **9.1** of earthquake off the coast of Sumatra.
- Final total put the islands' death toll at **1,879 alone with another 5,600 people missing**.
- The islanders who had heard the stories about the Laboon or similar mythological figures survived the tsunami essentially unscathed.
- Most of the casualties that occurred in the southern Nicobar Islands were outsiders, leaving them with no indigenous tsunami warning system to guide them to higher ground.

9th Social Science Lesson 14 Notes in English

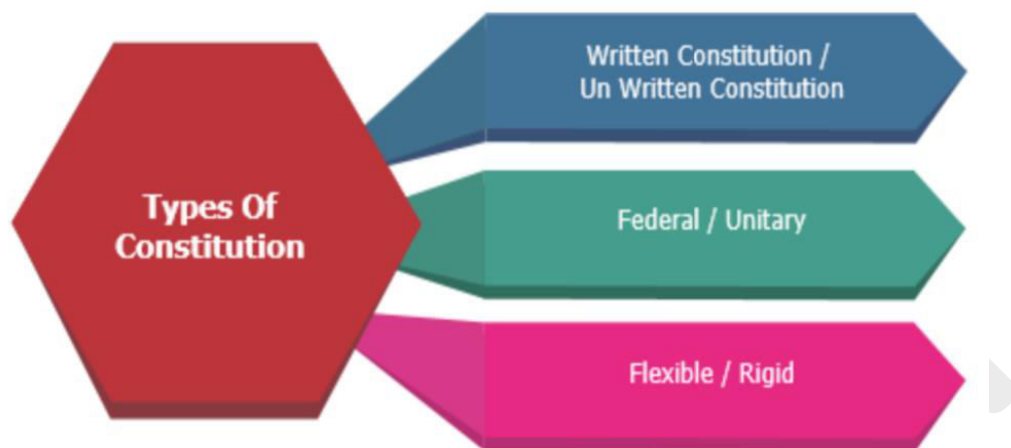
14. Forms of Government

- Government is the main agency of the state. It comprises of several members belonging to **political and administrative wings**.
- It serves as the instrument for delegation and execution of the state policies for the welfare of the people. It formulates, expresses and realises the will of the state. It exercises certain **legislative, executive and judicial powers** based on the constitution and the laws.
- There are three organs in government, namely – **Legislature, Executive and Judiciary**.
- These organs carry out the activities of the state. Governments are classified into **unitary, federal, parliamentary and presidential forms**.



Meaning

- 'Government' refers to the **executive functions of the state**. It denotes a body having authority to make and enforce laws applicable to **the civil, corporate, religious, academic or other groups**.
- The term Government is derived from Old French 'governer', derived from Latin 'gubernare' to **direct, rule, guide, govern**".



Unitary Form of Government

- A unitary system of government or unitary state, is a sovereign state governed as a single entity.
- The central government is supreme and the administrative divisions exercise only powers that the central government has delegated to them.
- **England, France, Japan and Sri Lanka** are examples of Unitary Form of governments.
- In a Unitary form of government, all the authority and power is vested in a single centre, whereas in a federal form of government authority and power is distributed between centre and the constituent units.
- Even in a Unitary form of Government, there might be a lot of decentralisation of authority, but we cannot claim it as a federal system.

Merits of unitary form of government

- Suitable for small countries.
- There is no conflict of authority and responsibility
- A unitary government will make prompt decisions and take speedy action
- A unitary government is less expensive
- Amendments to the constitution are easy
- There is unity, uniformity of law, policy and administration.

De-merits of unitary form of government

- It is not suitable for big countries
- The central government will have to tackle so many complex problems that lead to administrative delay
- The central government will not concentrate on local problems, local interest and initiative
- The concentration of powers may pave way for the despotism of the central government.

Unitary features of the indian constitution

- Strong Centre
- Central Government's control over state territory
- Single Constitution
- Flexibility of the Constitution
- Unequal representation of states
- Emergency Provisions
- Single Citizenship
- Single Integrated Judiciary
- All India Services
- Appointment of Governor by the central government

Federal form of government

- The classification of governments into unitary and federal is based on the nature of relations between the national and the regional governments.
- A federal government is one in which powers are divided between the national government and the regional governments by the Constitution itself and both operate in their respective jurisdictions independently.
- **U.S.A, Switzerland, Australia, Canada, Russia, Brazil, Argentina have federal form of governments.**
- In a federal model, the national government is known as the Federal government or the Central government or the Union government and the regional government is known as the state government or the provincial government.

Merits of federal form of government

- Reconciliation of local autonomy with national unity
- Division of power between centre and states leads to administrative efficiency
- It gives rise to big states
- Distribution of powers check the despotism of central government
- More suitable for bigger countries
- It is good for economic and cultural progress

De-merits of federal form of government

- Federal government is weaker when compared to the unitary government
- Federal government is more expensive
- Provincial tendencies are very common
- Lack of uniformity in Administration
- Threat to national unity
- Distribution of powers between centre and states lead to conflicts
- Double Citizenship

- Rigid constitution cannot be mended easily for changing needs
- The state governments sometimes place hindrances in the foreign policy

Country	Name of Parliament
Israel	Knesset
Germany	Bundestag
Denmark	Folketing
Norway	Storting
U.S.A	Congress

Federal features of the Indian constitution

- Dual Government
- Written Constitution
- Division of Powers
- Supremacy of the Constitution

The Constitution is the supreme law of the land. The laws enacted by the Centre and the states must conform to its provisions

- Rigid Constitution
- Independent Judiciary
- Bicameralism

Difference between Unitary form and Federal form of Government

Unitary Form of Government	Federal Form of Government
Only one Level of Government or Sub units	Two Levels of Government
Mostly Single Citizenship	Dual Citizenship
Sub Units cannot operate independently	Federal Units are answerable to Central Government
No Division of Power	Division of Power
Centralisation of Power	Decentralisation of Power

Parliamentary form of government

- Modern democratic governments are classified into **parliamentary and presidential** on the basis of the nature of relations between the executive and the legislative organs of the government.

- The parliamentary system of government is the one in which the executive is responsible to the legislature for its policies and acts.
- The parliamentary government is also known as cabinet government or responsible government or Westminster model of government and is prevalent in **Britain, Japan, Canada and India among others.**

Features of parliamentary form of government

- Nominal and Real Executives
- Majority Party Rule
- Collective Responsibility
- Dual Membership
- Leadership of the Prime Minister

Merits of the parliamentary form of government

- Harmony between Legislature and Executive
- Responsible Government
- Prevents Dictatorship
- Wide Representation

Demerits of the parliamentary form of government

- Unstable Government
- No Continuity of Policies
- Dictatorship of the Cabinet
- Against Separation of Powers

The presidential form of government

The Presidential Form of Government is also known as non-responsible or non-parliamentary or fixed executive system of government, basically built on the principle of separation of power and is prevalent in the **USA, Brazil, Russia and Sri Lanka among others.**

Features of presidential form of government

- The American President is both the head of the State and the head of government. As the head of State, he occupies a ceremonial position.
- As the head of government, he leads the executive organ of the government. The President is elected by an electoral college for a fixed tenure of four years.
- He cannot be removed by the Congress, except by impeachment for a grave unconstitutional act.
- The President governs with the help of a cabinet or a smaller body called '**Kitchen Cabinet**'. It is only an advisory body and consists of non-elected departmental secretaries.

- They are selected and appointed by him, are responsible only to him and can be removed by him any time. The President and his secretaries are not responsible to the Congress for their acts.
- They neither possess membership in the Congress, nor attend its sessions.
- The President cannot dissolve the House of Representatives—**the lower house of the Congress**.
- The doctrine of separation of powers is the basis of the American presidential system.
- The **legislative, executive and judicial** powers of the government are separated and vested in three independent organs of the government.

Merits of the presidential system of government

- Democratic
- Effective Control by the President
- Facilitate decision-making
- State government

Demerits of the presidential system of government

- Can degenerate into Dictatorship
- Strain relationship between executive and legislature
- Lack of Harmony between the Legislature and Executive

Difference between the Parliamentary Form of Government and Presidential Form of Government

Presidential Form of Government	Parliamentary Form of Government
President is directly elected by the People	Prime Minister is from the majority party
President is Supreme	Central Legislature is supreme
Separation of Powers	Absence of Separation Powers Centralisation
Independent branches	Independent branches with Overlapping functions
President - Head of the State	President - Head of the State
President - Head of the Government	Prime Minister - Head of the Government
Individual Leadership	Collective leadership
President is not accountable to Congress	Collective and Individual Responsibility

The relationship between the Centre and the State in India

- India is a union of States where the power is shared between **the centre and the states**, as per the procedures mentioned in the Constitution of India.
- Though the powers are shared between the Central and State Governments, the final decision is by the Central government in all matters.
- The relationship between the centre and the states are
 1. Legislative relations (Articles 245-255)
 2. Administrative relations (Articles 256-263)
 3. Financial relations (Articles 268-293)
- Both the Central and State governments have the power to make laws, but the matters differ.
- The centre can make laws applicable to the whole nation on certain matters called as the **union list**.
- The States have the powers to make laws in some matters only, applicable to their own state, called as the **State list**. The **concurrent list** includes the subjects on which both Central and State government have the power to make laws.
- **Union List**: Union list has **100 subjects**. These include Foreign affairs, Defence, Armed forces, Posts and Telegraphs, inter-state trade and commerce and so on.
- **State List**: The state list consists of **61 subjects**, which include Public order in the state, police, prisons, Local Governments, agriculture and so on.
- **Concurrent List**: The Concurrent list has **52 subjects** which include Criminal and Civil procedures, marriage and divorce, economic and special planning, newspapers, books and printing presses, population control and so on.

THE CONCEPT OF GOVERNANCE

From Government to Governance

- Good governance is an indeterminate term used in the international development literature to describe how public institutions conduct public affairs and manage public resources. Governance is '**the process of decision-making and the process by which decisions are implemented**'. 'Government' and 'governance' are synonyms, both denoting the exercise of authority in an organization, institution or state.

Characteristics of good governance

- Participation
- Rule Of Law
- Transparency
- Responsiveness
- Consensus Orientation

- Equity
- Effectiveness And Efficiency
- Accountability

More to Know:

1. Gross National Happiness (GNH):

- Gross National Happiness is a developing philosophy as well as an '**index**' which is used to measure the collective happiness in any specific nation.
- The concept was first mentioned in the constitution of **Bhutan, which was enacted on 18 July 2008**.
- The term 'Gross National Happiness' was coined by **the fourth king of Bhutan, Jigme Singye Wangchuck, in the 1970s**.
- The GNH's central tenets are: **"Sustainable and equitable socio-economic development; environmental conservation; preservation and promotion of culture; and good governance"**.
- GNH is distinguishable by valuing collective happiness as the goal of governance and by emphasising harmony with nature and traditional values.

2. April Revolution and democracy in Nepal

- On **April, 2006** the leaders of Nepal vibrant pro-democracy civil society movement **"Seven Party Alliance" (SPA)** called for a million strong demonstration to be staged at 7 different points along the Ring road encircling the capital Kathmandu.
- The millions of citizens who made up the people's movement demanded an end to autocratic rule of monarchy and Restoration of total democracy in the Himalayan kingdom.
- An unprecedented development forced **King Gyanendra** to step down and paved the way for democracy.

3. Historic Transition in Bhutan

Third King - Abolishment of slavery

Fourth King - Abdication of regal title

Fifth King - Democratic elections and establishment of local self-government Transition from the hereditary monarchy to the Parliamentary Democracy.

- In **2006**, the king abdicated the throne **34 years** after ascending it.
- His son Crown Prince **Jigme Khesar Namgyel Wangchuck** became the fifth monarch and head of the state of the Himalayan kingdom.
- Now Bhutan is a Parliamentary Democracy and King Jigme a constitutional monarch.

4. Which is the oldest form of government?

- Monarchy is the oldest form of government in the United Kingdom. In a monarchy, a king or queen is Head of State.
- The British monarchy is known as a constitutional monarchy.
- This means, while The Sovereign is **Head of State**, the ability to make and pass legislation resides with an elected Parliament.

9th Social Science Lesson 15 Notes in English

15. Local Self Government

Meaning of Local Self Government

- Local Self-Governments are institutions that **look after the administration of an area or a small community** such as a **village, a town or a city**.
- Local Self Government operates at the lowest level of society. It works at the grass root level, close to the people, touching their everyday life.
- Local Self-Government is the management of local affairs by such local bodies which have been elected by the local people.
- These local bodies provide services to the local community as well as act as an instrument of democratic self-government.

Historical Background

- The idea of local self government is a very old concept in India. **It was at its peak under the later Cholas or the Imperial Cholas of Tanjore.**
- There are historical records of references to local self government under Mauryan administration.
- Local self government existed throughout the country with its own diverse characteristics of ancient India.
- During the medieval period, local self governments had somewhat declined due to the onslaught of feudalism.
- It was revived during the British period in the last quarter of the 19th century, with Western orientation of training in democracy with **Lord Ripon's Resolution in 1882.**
- Lord Ripon was known as the 'Father of Local Government for laying the foundations of local self governments in modern times.
- Under the **Government of India Act, 1935** provincial autonomy was introduced. This Act came into force in 1937.
- In the provinces where the Congress formed its Government, rural development received special attention.
- It was an essential part of Gandhi's programme that Panchayat Raj institutions would be built from villages to the highest level.
- After Independence, the Gandhian ideal of Grama Swaraj (Village Republic) greatly influenced the constitution makers.
- India being the land of villages, the creation of village panchayats became a social movement.
- Restoration of panchayats has become an article of faith during our freedom struggle. Hence with the dawn of independence and framing of the constitution of India, **Article 40** was

incorporated in the constitution which reads as: “the State should take steps to organise village panchayats and endow them with such powers and authority as may be necessary to enable them to function as the units of self Governments.”

Local Self Governments since Independence

- The conceptualisation of the system of local self-government in India took place through the formation and effort of four important committees from the year 1957 to 1986.
- The Community Development Programme (1952) and National Extension Service (1953) became a basis for 'The Great Charter on Panchayat Raj' in 1957.

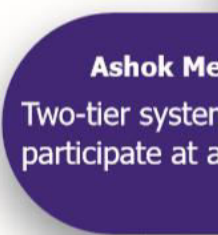
Salient Features of the 73rd and 74th Constitution Amendment Acts (1992)

Panchayats and Municipalities will be 'institutions of self-government'.



Balwant Rai Mehta Committee (1957)

Three-tier Panchayati Raj system – gram panchayat at village level (direct election), panchayat Samiti at the block level and Zila Parishad at the district level (indirect election).



Ashok Mehta Committee (1977-1978)

Two-tier system and political parties should participate at all levels in the elections.



G V K Rao Committee (1985)

Appointed by the Planning Commission, the committee concluded that the developmental procedures were gradually being taken away from the local self-government institutions, resulting in a system comparable to 'grass without roots'.



L M Singhvi Committee (1986)

73rd and 74th Constitutional Amendment Acts, 1992.

Committees and Recommendations

Committees and Recommendations

- Basic Units of Democratic System – Grama Sabhas (Villages) and Ward Committees (Municipalities) comprising all the adult members registered as voters
- Three-tier system of panchayats at village, intermediate **block/taluk/mandal and district levels**. Two-tier for smaller states with population **below 2 million**.
- Seats at all levels filled by direct elections.
- Seats reserved for Scheduled Castes (SCs) and chairpersons of the Panchayats at all levels also shall be reserved for SCs and STs in proportion to their population
- One-third of the total number of seats reserved for women. One-third of the seats reserved for SCs and STs also reserved for women. One-third offices of chairpersons at all levels reserved for women.
- Uniform five year term and elections to constitute new bodies to be completed before the expiry of the term. In the event of dissolution, elections must be held compulsorily within six months.

Salient Features of the Tamil Nadu Panchayati Raj Act, 1994

The New Panchayati Raj System came into being in Tamil Nadu after the enactment of a new law for local body institutions in the year 1994. The salient features of the new Act are as follows:

- (a) A three-tier system
- (b) Gram Sabha
- (c) Establishment of Election Commission
- (d) Constitution of Finance Commission
- (e) Reservation of seats for SC/ST's proportionate to their population One third reservation of seats for women and
- (g) Constitution of District Planning Committees.

Village Panchayat

- Local governments which are function in villages are called Village Panchayats.
- The President and ward members are directly elected by the people. **(Those who have attained the age above 18)** and their term of office is five years.
- District Collector act as the Inspector of Village Panchayat.
- Village Panchayats are constituted in each and every village wherever the population is above 500.

Functions of the Village Panchayat

- Supply of drinking water
- Maintenance of street lights
- Maintenance of roads
- Maintenance of village libraries
- Maintenance of small bridges
- Granting permission to the housing plots
- Maintenance of drainage
- Construction of group houses
- Cleaning of streets
- Maintenance of burial grounds
- Maintenance of common lavatory facilities

Voluntary Functions.

According to the Tamil Nadu Local Government Act passed in 1994, the following functions to be performed as voluntary functions by the local governments

- Maintenance of street lights in the villages
- Maintenance of markets and fairs
- Implantation of trees
- Maintenance of play grounds
- Maintenance of parking vehicles, slaughter houses and cattle sheds
- Control over places of exhibition

Revenue

Village Panchayat was the only **local government** which was empowered to levy taxes in the **three-tier system of Village Panchayat**.

Taxes

- Property Tax
- Professional Tax
- House Tax
- Taxes for connection of drinking water
- Land Tax
- Taxes levied on shops

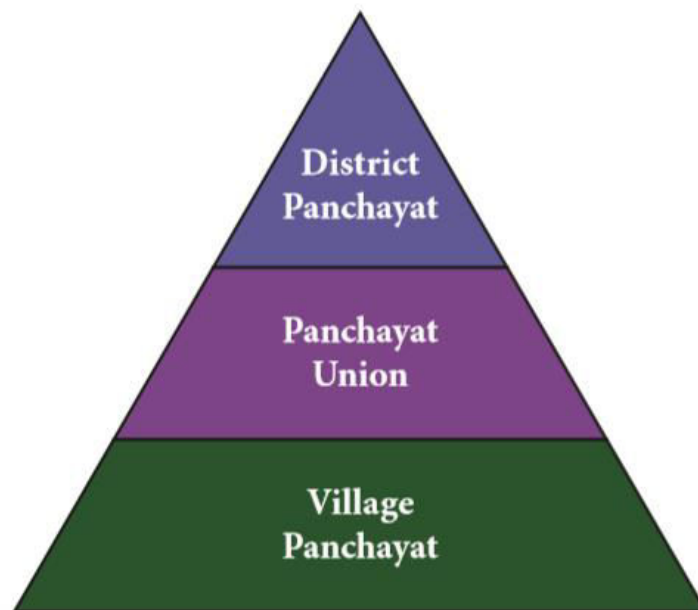
Meeting of Gram Sabha

- In each and every village, the people living within its jurisdiction will be the members of Panchayat.
- The **President of the Panchayat** will preside over its meetings.

- In the meeting of the Grama Sabha, the income and expenditure and the beneficiary of the schemes in the village are discussed.

Meetings of the Grama Sabha are conducted four times a year

1. January 26 - Republic Day
2. May 1 - Labourer Day
3. August 15 - Independent Day
4. October 2 - Gandhi Jayanthi



Panchayat Union

- Panchayat Union is formed by grouping of villages.
- Members of the Panchayat Union are directly elected by the people.
- The Chairman of the Panchayat Union is chosen from among the members.

Functions of the Panchayat Union

- Supply of drinking water
- Maintenance of Village Health Centres
- Maintenance of roads
- Establishment of Maternity Homes
- Establishment of Public fairs
- Maintenance of Social forests
- Repairing of Primary School buildings

The district collector, Planning officer, concerned **Block Development Officer** are empowered to supervise the developmental functions of the Panchayat Union.

District Panchayat

- A District Panchayat is constituted in each district.
- One district Panchayat is constituted for every **50,000 people** and the ward members are directly elected by the people.
- The Chairman is elected from one among its members and their **term is 5 years**.

Functions of District Panchayat

- Advising the government about the developmental schemes of the Village Panchayat and Panchayat Union
- Supervising the functions of District Planning Commission.

Town Panchayat

- The area where more than **10,000** people live is called a Town Panchayat.
- Members and President of the town Panchayat are directly elected by the people.
- There is an Executive Officer to look after the administration of the Town Panchayat and their term of office is **5 years**.

Municipality

- The area where more than **1,00,000** people live is called a Municipality.
- The Members and the Chairman of the Municipalities are directly elected by the people and their term of office is **five years**.
- A Municipal Commissioner is appointed by the government to administer the Municipality.

Corporation

- Municipal corporations are established in big cities where the city has many lakhs of population.
- The Municipal Commissioner is the Administrative Officer. The Mayor is the Chairman of the corporation.
- The term of office of the Mayor and other members is five years. The Municipal Commissioner will be a person from the Indian Administrative Service (IAS). All the decisions of the Corporation Council will be implemented by him.
- He will be assisted by the office of the corporation.

Important functions of the Mayor

- He acts as a bridge between the members of the corporation and the government

- He presides over the meetings of the Corporation Council
- He receives the dignitaries from foreign countries

Types of other Urban Panchayats

- Notified Area Committee
- Town Area Committee
- Cantonment Board
- Township
- Port Trust
- Special Purpose Agency

Elections to the local government in Tamil Nadu

- The State Election Commission conducts the elections to the local government like general elections.
- The electoral roll is prepared ward wise. Seats are reserved for the SC & ST and also for the women in proportion to the population by rotation basis.

Problems and Challenges facing the Local Self Governments

Local self governments are the crucial basis for our democracy. The Constitutional status of local self governments adds more significance to their functioning. There are, however, a few critical concerns in the working of local self governments in India. Major problems and challenges may be mentioned as below:

- Lack of clear demarcation of powers and functions of local bodies
- Allocation of funds and needs assessment are not matched
- Role of caste, class and religion in decision making at the local self governments
- Poor accountability of elected members and officials at the grass root levels of democracy.

More to know:

1. Odanthurai Panchayat

- With permanent concrete houses built over a period, the village now has been declared as hut less village which provides continuous water supply, quality road networks to the residents.
- The most notable among Odanthurai's Self-help ventures is its experiments with renewable energy sources.
- By availing loan from the banks and subsidy by The Government, the village panchayat had installed a small wind turbine at the **cost of Rs.2.3 Cr which generates around 7.5 lakh** units of electricity in a year.

- While the Panchayat's need is only **2.5 lakh units**, the remaining power is sold to TANGEDCO, fetching an annual income of around R.s **20 lakh**.
- Moreover the panchayat had installed a **9kw biomass gasifier** Power generation system to substitute the grid electricity for pumping drinking water.
- Solar based streetlight and biogas system connected to houses for cooking purpose are some of the highlights of the self-reliant in energy aspect by this model village panchayat, Odanthurai.

2. Piped water supply scheme in Erode Municipality:

- Periyar E.V.Ramasamy became the Chairman of **Erode Municipality in 1917**.
- During his tenure in Erode Municipality, Periyar worked effectively for Providing piped drinking water supply and health facilities to the people.
- Piped water supply scheme was implemented in **1919** by Periyar.
- This scheme was said to be first of kind in the history of Indian Municipal administration.

3. In Tamil Nadu, there are **15 Corporations**. They are in Chennai, Kovai, Madurai, Trichy, Tirunelveli, Salem, Erode, Vellore, Tuticorin, Tirupur, Tanjore, Dindigul, Nagercoil, Hosur, Aavadi.

4. Gandhi's Concept of Gram Swaraj

- Gandhi really wanted 'Swaraj', the self rule by the people of India who represent the rural mass. He observed 'India's soul lives in the village'.
- He dreamt of village republics in terms of Panchayat in free India. Mahatma Gandhi advocated Panchayat Raj, a decentralized form of government, where each village is responsible for its own affairs, as the foundation of India's political system.
- In simpler words, Gandhi's ideal village should be basically self-reliant, making provision for all necessities of life-food clothing, clean water, sanitation, housing, education, and other requirements, including government and self-defense.

5. Urban Local Government

- Town Panchayat
- Municipality
- Corporation

6. Historical Origin and Development of Local Self Government in Tamil Nadu

- Tamil Nadu has a long history of local self-governance as is evident from the Uthiramerur stone inscriptions in **Kanchipuram District**.
- Tamil Nadu, in those days was a land of village republics, with community groups undertaking many activities for their area development.

- This tradition reached its peak during the **10th and 11th centuries** under the reign of Cholas when Village Councils used to levy taxes, improve community life and administer justice in their limited area.
- These Village Councils had effective links with the Chola rulers.
- **"Kuda Olai Murai"** was the name of the secret ballot method exercised to elect members to the Village Councils.
- With the downfall of Cholas, the state experienced a decline of the village autonomy and rise of the centralized feudal administrative system.
- This continued till British rules introduced local self-governance primarily as an administrative convenience for the colonial British Government.
- In the post independence era, the first enactment in democratic decentralization in the state was the **Madras Village Panchayats Act, 1950**.
- Pursuant to the White Paper on the '**Reform of Local Administration**' in 1957, the **Madras Panchayats Act, 1958** and Madras District Development Council Act were enacted with the following salient features.

7. Lord Ripon

- Lord Ripon was the one who gave Indians the first taste of freedom by introducing the **Local Self Government in 1882**.
- Ripon took some steps towards liberalizing the administration in India. He formulated the local self government and made it clear that he was advocating for the decentralization of administration.
- He tried to remove obstacles in the sphere of Local Self government by his resolution of 1882.
- He led a series of enactments in which larger powers of the local self-government were given to the rural and urban bodies and the elected people received wider rights.

9th Social Science Lesson 16 Notes in English

16. Road Safety

- Road accident refers to any accident involving at least a vehicle, occurring on a road open to public transport, and in which at least one person is injured or killed.
- Intentional acts (murder, suicide) and natural disasters are excluded from road accidents.
- Road accidents are the leading cause of death by injury and the tenth-leading cause of all deaths globally.
- An estimated **1.2 million people** are killed in road crashes each year, and as many as **50 million people** are injured.

How different factors contribute to road accidents:



Drivers:

Over-speeding, rash driving, violation of rules, failure to understand signs, fatigue, alcohol

Pedestrians:

Carelessness, illiteracy, crossing at wrong places, jaywalkers

Passengers:

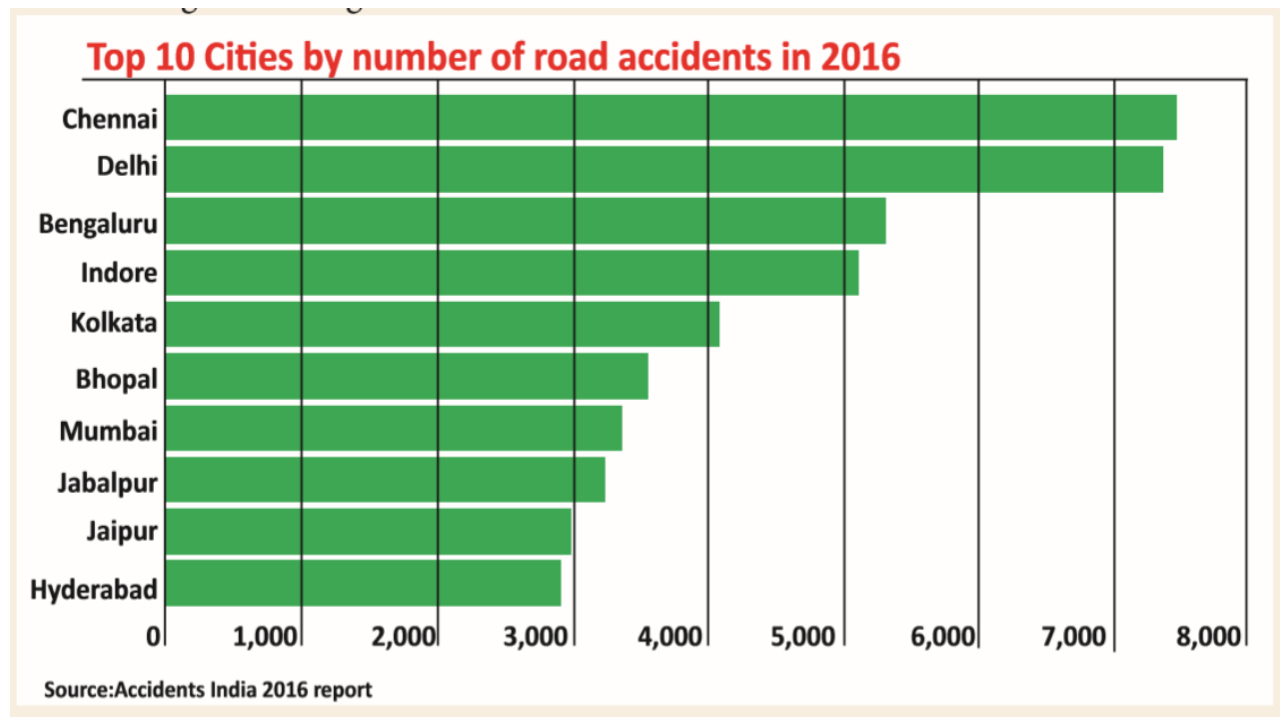
Projecting their body parts outside vehicles, talking to drivers, alighting and boarding vehicles from the wrong side, travelling on footboards, catching a running bus etc.

Vehicles:

Failure of brakes or steering, tyre burst, insufficient headlights, overloading Road Conditions: Potholes, damaged roads, eroded roads merging of rural roads with highways and illegal speed breakers

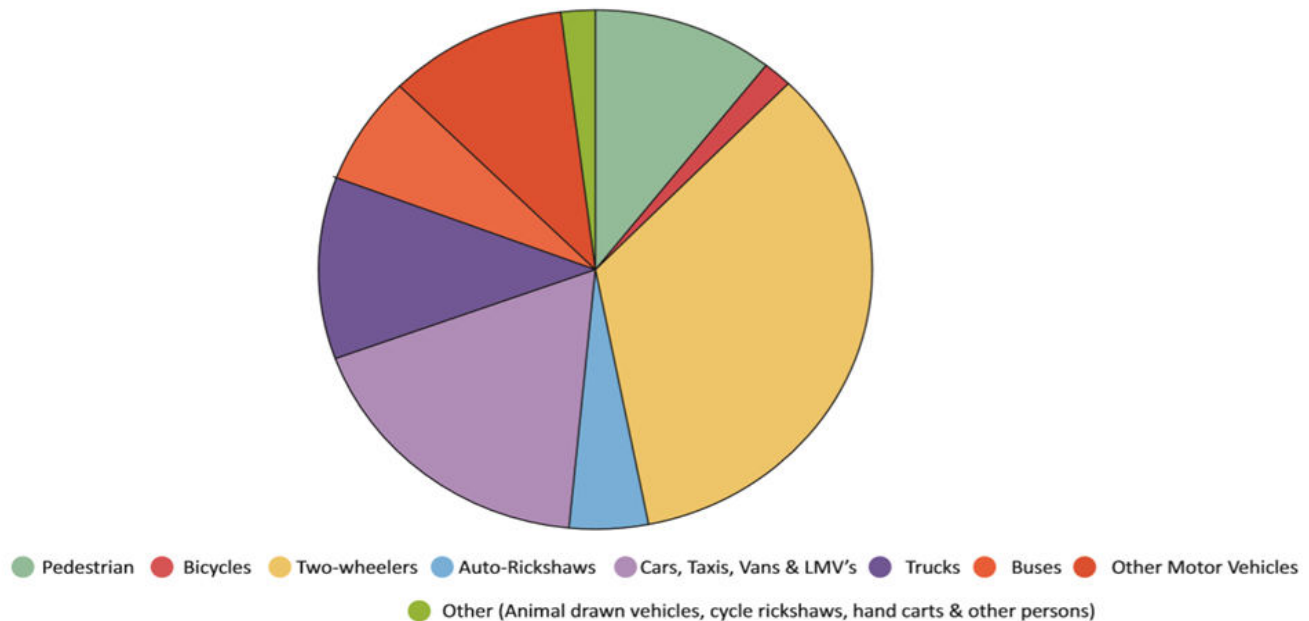
Weather conditions:

Fog, snow, heavy rainfall, wind storms, hail storms.

**Direct Consequences of Accidents:**

1. Fatality (Death)
2. Injury
3. Damage to Property

Break-up of persons killed by road use category in 2016



Source: Accidents India 2016 report

Preventive measures for accidents:

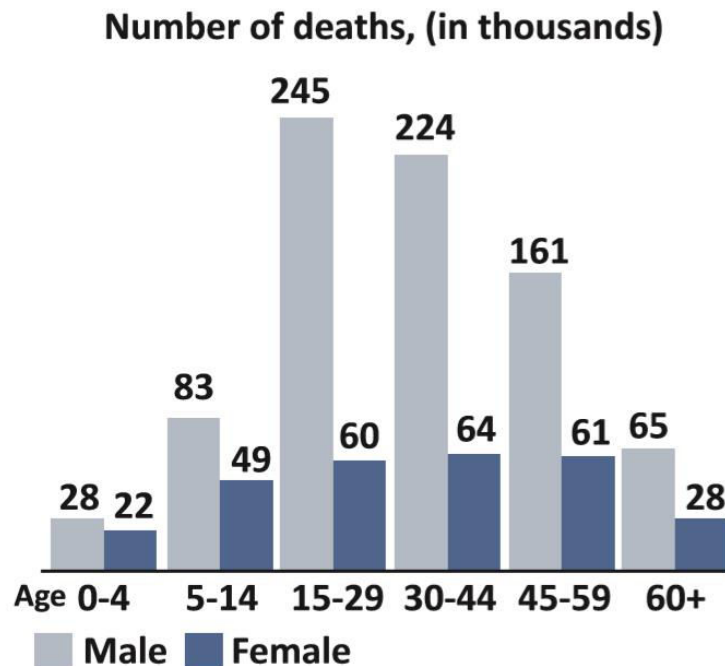
1. Education and awareness about road safety
2. Strict enforcement of law
3. Engineering: (a) Vehicle design (b) Road infrastructure

Rules to Ensure Road Safety for children

It is important for children to know about road safety rules and regulations. Here are a few basic road safety rules for children:

1. Know Your Signals
2. Stop, Look and Cross
3. Pay Attention – Listen
4. Don't Run On Roads
5. Always Use Sidewalks
6. Never Stick Hands outside the Vehicle
7. Never Cross Road at Bends
8. Don't Rush.

Road Traffic Deaths Worldwide by Sex and Age Group, 2002



More to Know:

1. With over **1,30,000 deaths** annually India has the worst road accident rate worldwide.
2. The chances of death by accident can be decreased by **51% with the proper use of seat belt**.
3. Every three minutes a child is killed in an accident in the world. The main causes of death by road accidents include
 1. Drunk and drive (40%), speeding (24%), car boom in India (16%), inefficient law enforcement (15%) and less use of helmets and seat belts (5%)
 2. Distractions to Driver
 3. Red Light Jumping
 4. Overtaking in a wrong manner

9th Social Science Lesson 17 Notes in English

17. Tamil Nadu Agriculture

- Most of the people of Tamil Nadu depended on agriculture at the time of independence and even after **40 years of independence**.
- That situation is being changed in the recent years. It has been noticed that the number of farmers in Tamilnadu has got reduced during the last 10 years according to the 2011 census data.
- Similarly the number of agricultural workers also reduced during the same period.
- According to the 2001 census, **49.3%** out of the total population of workers were involved in agriculture.
- The percentage has reduced to **42.1 in the next 10 years**. In 2011 there were **three crore 29 lakh workers in Tamilnadu of which 96 lakh** were agricultural workers.
- In 2011, nearly 55% of the women were involved in agriculture whereas nearly **one third (35.3%)** of the male population was involved in agriculture during the same year.

Sectors of people involved in agricultural activities

- A major portion of the workers involved in agricultural activities are landless labourers. All the land holders do not have the same amount of land.
- Many have very little land and very few people hold large areas of land. During **2015-16, there were 79,38,000 cultivators** in Tamil Nadu.
- But five years earlier there were 81,18,000 cultivators. There was a reduction of 1,80,000 cultivators in these five years.
- Similarly, the area under cultivation also reduced from **64.88 lakh hectares to 59.71 lakh hectares** during the same period.
- That is, the state of Tamil Nadu had lost nearly **1,03,400 hectares** on an average during these five years.
- Most of the cultivators in Tamilnadu are micro farmers who cultivate in an area less than 1 hectare.
- Micro farmers account to around 78% of the total cultivators, while the area cultivated by these micro farmers is just **36%**.
- Small farmers cultivating 1-2 hectares of land cover 14%, while the land cultivated by them is 26%.
- Cultivators of schedule caste farmers are only one percent in Tamilnadu. 96% of this one percent are small, micro farmers.
- The total land area under agriculture is shrinking fast not only in Tamilnadu, but also throughout India. The number of marginal farmers has increased in India.
- In contrast, the number of marginal farmers is decreasing in Tamil Nadu. This shows that the farmers are doing other occupations.

Types of land usage

- The total geographical area of Tamil Nadu is **one crore 30 lakhs and 33 thousand hectares**. Out of this only one third of land is used for agriculture (**45,44,000 hectare**).
- 17% of the land is used for non agricultural use. Nearly the same size (**2125 thousand hectares**) of land are forests.
- About 4% of the total land is unusable. One tenth of the land is barren. Other fallow lands are 13 percent.
- So nearly one-fourth of the land is barren and we have to be concerned of the increasing size of the barren land.
- Grazing land and cash crops occupy slightly more than 5% of the total land area. The size of the total cropping land in Tamil Nadu is **4,544 thousand hectare** and this keeps on changing every year.
- Sufficient rains at the proper period will increase this extent of land. Failure or shortage in rainfall leads to the reduction of land usage for cultivation.
- A small part of this area gives a chance to crop more than once in a year. The extent of this area also changes every year.
- This land extent was **9 lakh hectare** in next year but was reduced to 6 lakh hectare, due to lack of rainfall.
- This area will be more or less stable only when there is a stable and reliable water source.
- If there is good water for a land, more than one crop can be cultivated in a year. In some land, two or even three crops can be cultivated.
- If one hectare land is cultivated once in a year, then the net land and the cultivated land is also one hectare only. If the land is cultivated twice, then the net land area is only one hectare, but the cultivated land area accounts to two hectare.
- If calculated in the same way for Tamil Nadu for the year **2012 -13**, it is **45 lakh 44 thousand hectare** net land area whereas the cultivated land comes to around **51 lakh 40 thousand hectare**.
- So, it is clear that **5,96,000 hectares** is cultivated more than once. While reliable water supply increases, the possibility of cultivating the land more than once increases.
- Thus when the total area of cultivable land area increases, it results in the increase of agricultural production.
- In 2012-13, out of the total cultivated land, nearly 72 percent is used for food crops and the remaining for non-food crops.

Water resources for agriculture

- There are no perennial rivers in Tamil Nadu. Tamil Nadu receives the required water from the Northeast and Southwest monsoons.
- When the South West monsoon rains are high in the catchment areas of the **Cauvery River in Karnataka dams get filled and in turn the Cauvery river in Tamil Nadu gets water**.

- Northeast monsoon (Oct-Dec) is a major source of water for Tamil Nadu. The Northeast monsoon rains are stored in reservoirs, lakes, pond and wells for cultivation.
- Conventional water bodies like lakes, ponds and canals provide water for agriculture in Tamil Nadu. 2,239 canals run through Tamil Nadu covering a **length of 9,750 km**.
- There are **7,985 small lakes, 33,142 large lakes, 15 lakh open wells and there are 3,54,000 borewells** in the state where agriculture is carried out with the help of these water resources.
- The area of land that is irrigated using water from lakes is very low. Nearly 3.68 lakh hectares of land obtain water from lakes. The canals provide water to 6.68 lakh hectares.
- **Borewells irrigate 4.93 lakh** hectares and open wells provide water to 11.91 lakh hectares of land.
- Agriculture in Tamil Nadu is dependent mostly on groundwater. Use of ground water for agriculture creates many hardships too.
- There would be no sufferings if the amount of water taken from the underground and the amount of water that goes into the underground during the rainy season are equal.
- On the contrary, as the amount of water taken increases, the ground water goes down resulting in complete dryness or change into unusable water.
- The Union Ground Water Board is constantly monitoring the level and nature of ground water. This continuous monitoring has categorized the Panchayat Union (blocks) in terms of the amount of groundwater used. **139 blocks in Tamilnadu are identified as excessive users of groundwater and 100 blocks as nearing the stage of excessive usage of groundwater. 11 blocks have been identified with reduced water quality.**
- Only 136 blocks have enough quantity and quality water for usage. From this, we come to know that:

1. Tamil Nadu agriculture is dependent on groundwater.
2. It is very urgent and necessary to regulate the usage of underground water.
3. This is very important for sustainable farming.

Irrigation and crop types

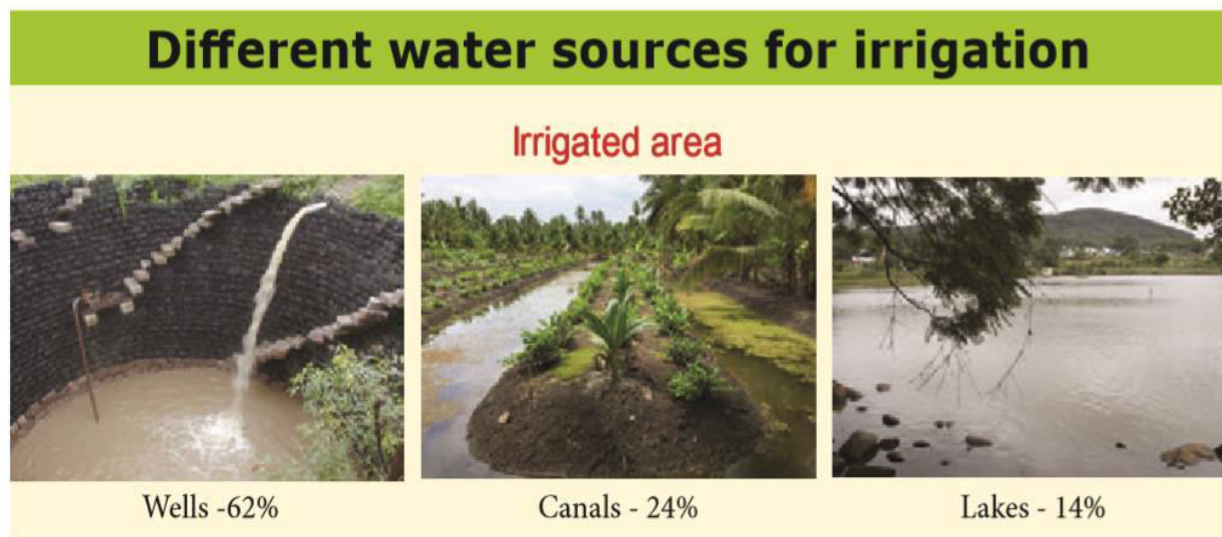
Crops in Tamilnadu

- All cultivated crops can be classified as food crops and non-food crops. 57 percentage of the total land under food grain cultivation is irrigated.
- In **2014-15, 59 percentage** of food crops and 50 percentage of non food crops were irrigated in Tamilnadu.
- The total area of land cultivated in Tamil Nadu was **59 lakh and 94 thousand hectares in 2014-2015. Out of this non-food crops were 76%.**
- Paddy cultivation is carried out at a large scale of 30 percent cultivated land area and other food crops in 12 percent area. Millets are cultivated in a very low percentage of area.

- **Sorghum (Cholam)** cultivation in 7 per cent land area, **cumbu** in one percent and **ragi** in 1.7 per cent.
- Other **millets** occupy 6 per cent in the year 2014 - 2015. The area cultivatable land changes every year as a result of many factors such as rainfall, availability of water, weather and market prices

Virtual water

- The term '**virtual water**' was introduced by **Tony Allen** in 1990. The water consumed in the production process of an agricultural or industrial product is called 'virtual water'.
- It is the hidden flow of water when food or other commodities are traded from one place to another.
- For instance, it takes **1340 cubic metres** of water (based on the world average) to produce one metric ton of wheat.
- That is, if one metric ton of wheat is exported to another country, it means that **1340 cubic metres** of water used to cultivate this amount of wheat is also being exported.
- India is the largest global freshwater user. India has been the fifth largest exporter of virtual water in the world



Decadal growth in agricultural production

- The total quantity of foodgrains produced in Tamil Nadu in the year 2014 - 2015 was **one crore 27 lakh 35 thousand tonnes**.
- Paddy alone accounted to **80 lakhs tonnes**.
- The **contribution of paddy** to the **total amount of food production** is 62%.
- **Maize production** was 20%, **corn** 7%, **ragi** 3% and **another 3%** occupied by **black gram**, while other food crops contributed a very meager amount to the total food production in Tamil Nadu.
- The amount of production varies depending on the amount of land being cultivated.

Micro irrigation

- Micro irrigation technology is a very good remedial measure to tackle shortage in irrigational water.
- This irrigation technology helps to have a higher yield when compared to the traditional irrigation methods.
- As only required amount of water is supplied at regular intervals, it increases the ability of water usage and productivity of the crop resulting in reduction of labour expenses and weed growth in the field.
- As the fertilizer is distributed through water, it increases the usage of fertilizer and the yield.
- As Tamil Nadu gets insufficient rainfall, the government has taken many measures to implement micro irrigation for proper distribution of water to crops that require more water.

The yield of productive crops

- The amount of production depends not only on the area but also on the productivity of crops.
- Production capacity of paddy in Tamil Nadu was **4,429 kg per hectare in 2014-2015**.
- This capacity was **3,039 kilograms in 2010-2011** revealing the increase in productivity.
- Next to paddy, maize stands second in the production (**8,824 kg/hectare**).
- **2,093 kg/hectare corn, 3,077 kgs of rye (cumbu) and 3348 kgs of ragi** were produced during the same period.
- Black gram, one of the largest cultivated pulses, produced 645 kg per hectare.
- Production of sugarcane and ground nut (Manila) were **107 tons and 2,753 kg per hectare** respectively.
- The productivity of crops continues to increase. For example the productivity of paddy in 1965 - 66 was 1,409 kg.
- It increased to **2,029 kg in 1975-76 and 2,372 kg in 1985-86**. It increased to 2,712 kg after a decade.
- The production was 4,429 kg in the year 2014-15. In the past fifty years, the productivity of paddy has increased more than three times.
- The food grain production capacity, has increased about 3.5 times **between 1965-66 and 2014-15**.
- Similarly, the total food grain production has risen by 2.5 times during this period.
- In 1965-66, the total food grain production was slightly more than 50 lakh tonnes and in 2014-15, the production increased and was slightly below one crore 28 lakh tonnes.
- We find that both the productivity and food production in Tamil Nadu continue to increase.
- However, the area under food grain cultivation has reduced in the same period. Though there was a reduction in the area of production, the total amount of production has been maintained and there is an increase of productivity.

More to know:

1. River Cauvery is the **3rd largest river** in South India. Its length is 765 km. The dams constructed across Cauvery in Tamil Nadu are **Mettur Dam, Kallanai**.
2. The area under irrigation is about **57 percent** of the total area under cultivation.

9th Social Science Lesson 18 Notes in English

18. Migration

Concept of Migration:

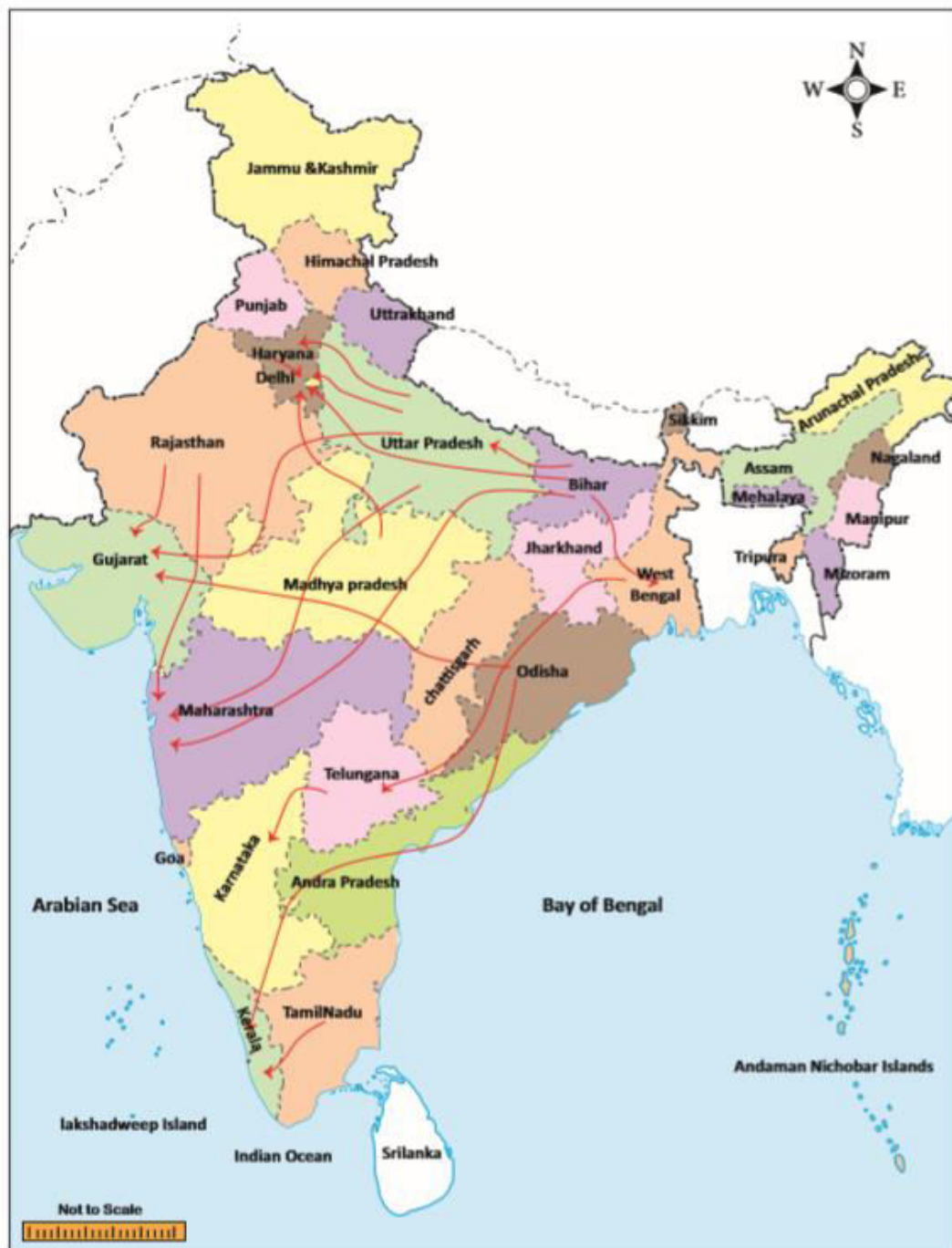
- In any settlement-village or town- change in population occurs due to **birth, death and migration**.
- Of these three components of population change, birth and death is clearly identifiable events while migration poses the maximum amount of problem with regards to its definition and measurement.
- As almost everyone keeps moving most of the time, it is not easy to define which of these moves have to be classified as migratory moves.

In the Census of India, migration is enumerated on two bases

(i) Place of birth: If the place of birth is different from the place of enumeration (**known as life-time migrant**).

(ii) Place of residence: If the place of last residence is different from the place of enumeration (**known as migrant, by place of last residence**).

Extent of Migration in India in Tamil Nadu



India - Extent of migration

- In India, the Census of 2011 enumerated a total population of **121 crores**, of which **45 crore** people were reported as migrants, according to the definition of the place of last residence.
- Similarly, in Tamil Nadu out of **7.2 crore people**, **3.13 crore** people were counted as migrants, in 2011.

- That is, the percentage of migrants was **37 percent** in the country, while it was at a much higher rate in Tamil Nadu at 43 percent.
- Generally, one tends to associate migration with urban areas. However, we find that in India as well as Tamil Nadu, the extent of migration is much higher in rural areas compared to urban areas.
- In 2011, 37 percent of the population are counted as migrants in rural areas while the corresponding percentage in urban India is 27 percent.
- In Tamil Nadu, migrants account for **41 percent in rural areas and 35 percent in urban areas, in 2011**. That is, the mobility of population in rural areas is greater than that in urban areas.
- Further, one usually associates mobility with males rather than females. However, an examination of data clearly indicates that a larger proportion of females are reported to be migrants compared to males.
- In the country as a whole, **53 percent are female migrants while 23 percent are male migrants, in 2011**.
- In Tamil Nadu, the picture is very similar, with more than half the **females (52%)** reporting their status as migrants, by place of last residence, and 35 percent are male migrants.
- Now, why is there such a large percentage of migration among women? **70 percent in India and 51 percent in Tamil Nadu** report marriage as the reason for migration of females in 2011.
- That is, marriage and the movement associated with marriage appear to be a major factor responsible for women's mobility in India and Tamil Nadu.
- Movement related to work and employment appears to be the driving force for migration, among men.
- Of all the male migrants in India, **28 percent report 'work'** as the major reason for their migration, in 2011. The corresponding percentage in Tamil Nadu is 26 percent.
- To sum up, in Tamil Nadu, two out of every five persons is reported to be a migrant in the year 2011.
- Incidence of migrants is higher in rural areas and larger among women. Tamil Nadu has a history of migration and people have moved for various reasons such as **trade, business, employment etc**, to various countries.
- During the colonial period, labourers had moved to other colonies seeking work and wages.
- In the more recent period workers from Tamil Nadu have been moving to countries in **the Gulf, United States of America and Australia**.
- In 2015, an independent research study was conducted to understand the level, nature and pattern of migration in Tamil Nadu . This study has made some interesting findings, as discussed below:

Of the total migrants in Tamil Nadu, 65 percent have migrated or moved abroad while 35 percent have moved within the country

Chennai district has recorded the maximum number of emigrants followed by Coimbatore, Ramanathapuram and Tiruchirapalli districts

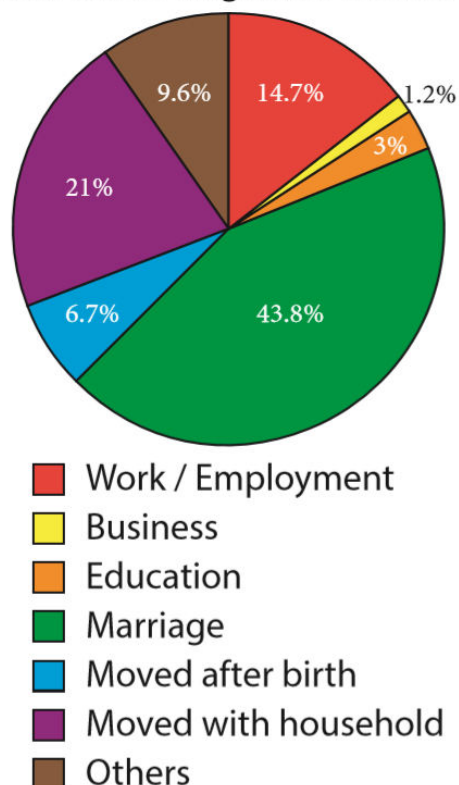
Cuddalore, Karur, Thiruvannamalai, Vellore, Namakkal, Salem, Dindigul, Krishnagiri, Nilgiris and Dharmapuri districts record low number of emigrants. This study also provides information about the sex and destination of migrants Tamil Nadu

Of the total migrants who go to foreign countries, nearly 20% have chosen to go to Singapore, while 18% to the United Arab Emirates, 16% to Saudi Arabia, 13 % to the United States of America; and Malaysia, Kuwait, Oman, Qatar, Australia and England are also referred as important destinations for migrants from Tamil Nadu in the year 2015

Of the international migrants, 15 percent are women, while 85 percent are men. On the question of educational qualifications of migrants from Tamil Nadu, the study reveals that in 2015 about 7 % were illiterates; 30 % have completed Class X; 10 % have completed Class XII; 15 % had undergone vocational training; 11 % were graduates; 12% were professionally qualified and 11 % had Post Graduate degrees.

The study clearly reveals various occupations undertaken by the migrants: highly skilled professions on one hand and low skilled occupations on the other, along with a large number of semi-skilled occupations.

Reasons for Migration in India



Factors Underlying Migration

- The extent and nature of migration in any society is basically determined by the nature of the development process experienced by that society.
- That is, the type and scale of development achieved by the agricultural and industrial sectors in an economy would determine the migratory patterns.
- In India and Tamil Nadu, though the agricultural and industrial sectors have grown over the years, inequalities still exist in asset and income distribution.
- Endemic poverty continues to be a major problem. The growth processes have also created spatial inequalities, by leading to enclaves of growth.
- The migration patterns observed in a developing society such as ours correspond to these inequalities (**economic, social, spatial etc**) created by the development processes. Therefore, any migrant stream would consist of heterogeneous sub-streams.
- For example, if we consider the rural-urban migrant stream, it would comprise **of rural rich and the rural poor, each with its own reasons and motivation for migration, the mode of migration, the outcome or consequence of migration etc.**
- Poorer sections of the population migrate as a survival strategy, in response to distressing conditions in rural areas.
- Migrants from better-off sections migrate to improve their living standards.
- Further, spatially, there would be a tendency for migrants to converge on enclaves of growth - either in urban areas or in rural areas. The pattern of migration is very complex, comprising of a number of streams:
 1. rural to rural; rural to urban; urban to rural; urban to urban
 2. short, medium and long distance migration streams
 3. long-term stable migration and short-term circulatory type of movements Each of these streams would consist of different types of migrants, (from different social classes) each with its own reason for migration. The extent and nature of these migrant streams would essentially depend on
 4. pressures and aspirations experienced by people at the origin of migration
 5. constraints imposed on mobility at the origin of migration
 6. opportunities at the destination and availability of information regarding these opportunities and
 7. the cost of migration

Migration Policies

Policies to address the problem of migration in developing countries like India essentially aim at the following:

- To reduce the volume of migration: As a large part of migration is a reflection of poverty and insecurity faced by large sections of the rural people, the focus of intervention has to be in rural

areas. Rural development policies to reduce poverty and insecurity would be essential to reduce the rate of migration

- To redirect the migrant streams: Redirection of migrant streams, away from big metropolitan cities is a desirable policy option. This policy can help in reducing spatial inequalities by suitable strategies, such as **developing a more dispersed pattern of Orbanization**.

More to Know:

1. The largest migration corridor in the world in **2010 was Mexico – U.S.A.**
2. The **Arctic tern** has the longest migration distance of any bird in the world.