



10th Std Social Science
Notes
TnpSC Syllabus Portion



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10th Social Science Lesson 1 Notes in English

1. Social and Religious Reform Movements in the 19th Century

Introduction

- English education, introduced with the object of producing clerks, also produced a new English-educated middle class.
- This class came under the influence of western ideas and thoughts. Christianity also had its effect on the newly emerging middle class.
- Though small in number, the educated middle class began to take a lead in political as well as in reform movements. The Indian reformers were, however, quite hesitant to subject their old notions and habits to critical scrutiny. Instead they attempted to harmonize both Indian and Western cultures.
- Their ideas and their actions helped to mitigate social evils such as sati, female infanticide, and child marriage and various superstitious beliefs.
- The reform movements of nineteenth century in the realm of religion fall under **two broad categories: reformist movements like the Brahmo Samaj, the Prarthana Samaj and the Aligarh Movement; and the revivalist movements such as the Arya Samaj, the Ramakrishna Mission and the Deoband Movement.**
- There were also attempts to challenge the oppressive social structure by **Jyotiba Phule in Pune, Narayana Guru and Ayyankali in Kerala and Ramalinga Adigal, Vaikunda Swamikal and Iyothee Thassar of Tamil Nadu.**

Early Reform Movements in Bengal

Raja Rammohan Roy and Brahmo Samaj

- **Rammohan Roy (1772–1833)** was one of the earlier reformers influenced by the Western ideas to initiate reforms.
- He was a great scholar, well-versed in Sanskrit, Arabic, Persian, and English apart from his knowledge in his **mother tongue, Bengali.**
- Rammohan Roy was opposed to meaningless religious ceremonies and all forms of pernicious social customs.
- Yet he wanted to preserve continuity with the past. In his **religio–philosophical social outlook**, he was deeply influenced by monotheism and anti-idolatry.
- Based on his interpretation of the Upanishads, he argued that all the ancient texts of the Hindus preached monotheism or worship of one God.
- Deeply concerned with the prevailing customs of sati, child marriage, and polygamy he published tracts against them and petitioned the government to legislate against them. He advocated the rights of widows to remarry.

- **He wanted polygamy to end.** His opinions were resisted fiercely by orthodox Hindus. He appealed to reason and humanity and compassion of the people.
- He visited the crematorium of Calcutta to try and persuade the relatives of widows to give up their plan of self-immolation.
- His campaign played a key role in forcing the Governor-General **William Bentinck's legislation abolishing sati in 1829.**
- Rammohan Roy condemned the subjugation of women and opposed the prevailing ideas that women were inferior to men.
- He strongly advocated education for women. He gave his full support for the introduction of English language and western sciences in schools and colleges. Rammohan found in the Upanishads a new revelation of one infinite, divine Being, the eternal Brahman, while Hinduism as he saw in the daily life around him was a perversion of their teaching.
- **Rammohan Roy founded the Brahmo Samaj in 1828. On 20 August 1828 he opened a temple in Calcutta, where there was no image.**
- There he laid down that **'no religion should be reviled or slightly or contemptuously spoken off or alluded to.'**
- The Samaj forbade idol-worship and condemned meaningless religious rites and ceremonies. However, from the beginning, the appeal of the Brahmo Samaj remained limited to the intellectuals and enlightened Bengalis.
- Though the Samaj failed to attract the people from the lower sections of society, its impact on the culture of modern Bengal and its middle class was quite significant.

Maharishi Debendranath Tagore

After the death of Rammohan Roy (1833), **Maharishi Debendranath Tagore (1817–1905), the poet Rabindranath Tagore's father,** carried on the work. He laid down four articles of faith:

1. In the beginning there was nothing. The one Supreme Being alone existed who created the Universe.
2. He alone is the God of Truth, Infinite Wisdom, Goodness, and Power, eternal, omnipresent, the One without second.
3. Our salvation depends on belief in Him and in His worship in this world and the next.
4. Belief consists in loving Him and doing His will.

Keshab Chandra Sen & Brahmo Samaj of India

- Debendranath was a moderate reformer. But his younger colleagues in the Sabha were for rapid changes.
- The greatest of these, **Keshab Chandra Sen, (1838–84) joined the movement in 1857.**

- He was greatly influenced by Christianity, believing in its spirit but not in the person of its founder.
- But in 1866 a split occurred in the ranks of Brahmo Samaj. Keshab left the Samaj and founded a new organization.
- Debendranath's organization, thereafter, came to be known as **Adi Brahmo Samaj**.
- After Keshab had his fourteen-year-old daughter married to an Indian prince, in contravention of the Samaj's condemnation of child marriages, the opponents of child marriage left the Brahmo Samaj of India and started **the Sadharan Samaj**, which developed anti-Christian tendencies.

Ishwar Chandra Vidyasagar

- Another outstanding reformer in Bengal was **Ishwar Chandra Vidyasagar (1820–1891)**. While Ram Mohan Roy and others looked to western rationalist ideas to reform society, Vidyasagar argued that the Hindu scriptures were progressive.
- He provided evidence from scriptures that there was no sanction for burning of widows or for the prohibition on the remarriage of widows.
- He wrote a number of polemical tracts, and was the pioneer of modern Bengali prose. He played a leading role in promoting education of girls and helped them in setting up a number of schools.
- He dedicated his whole life for the betterment of the child widows of the Hindu society.
- The movement led by Vidyasagar, resulted in the **Widows' Remarriage Reform Act of 1856**.
- This Act was intended to improve the lot of child widows and save them from perpetual widowhood.

Prarthana Samaj

- The Maharashtra region was another region where reform activities gained steam. A movement similar to the Brahmo Samaj, but founded in **Bombay in 1867, was Prarthana Samaj**.
- Its founder was **Dr. Atma Ram Pandurang (1825–1898)**. The two distinguished members of this Samaj were **R.C. Bhandarkar and Justice Mahadev Govind Ranade**.
- They devoted themselves to activities such as intercaste dining, inter-caste marriage, widow remarriage and improvement of women and depressed classes.
- **Ranade (1842–1901)** was the founder of the **Widow Marriage Association (1861)**, the **Poona Sarvajanik Sabha (1870)** and the **Deccan Education Society (1884)**.
- While the above reformers worked among the upper castes, during the same time **Jyotiba Phule** worked for the uplift of depressed castes and the cause of women.
- His book **Gulamgiri ('Slavery')** is an important work that condemned the inequities of caste.

Hindu Revivalism

Swami Dayanand Saraswati and Arya Samaj, 1875

- In the Punjab, the reform movement was spearheaded by the Arya Samaj. It was founded (1875) by a wandering ascetic in the western Gangetic plain, **Swami Dayanand Saraswati (1824–83)**.
- Swami Dayanand later settled in the Punjab to preach his ideas. **His book, Satyarthaprakash**, enjoyed wide circulation.
- He declared the practices such as child marriage, the prohibition of widow remarriage, and the alleged polluting effects of foreign travel had no scriptural sanction.
- The positive principles enunciated by Dayanand were: strict monotheism, condemnation of idolatry, and rejection of Brahman domination of ritual and social practices.
- He also rejected superstitious beliefs in Hinduism, especially Puranic literature and his cry was **"go back to Vedas."**
- Arya Samaj attempted to check the incidence of religious conversion in British India.
- One of its main objectives was counter-conversion, prescribing a purificatory ceremony called suddhi, directed at Hindus who had converted to Islam and Christianity.
- The late nineteenth and early twentieth centuries were a period of great turmoil in undivided Punjab with intense debates between Hinduism, Islam and Christianity.
- The primary achievements of the Arya Samaj were in the field of social reform and spread of education.
- The Samaj started a number of **Dayananda Anglo–Vedic schools and colleges**.

Ramakrishna

- As we saw earlier, the Brahmo Samaj, as a response to Christian and rationalist criticism had criticised idolatry and other orthodox Hindu practices.
- The popularity that **Ramakrishna (1836–86)**, a **simple priest of Dakshineswar near Kolkata**, gained in the latter half of the nineteenth century was a response to this.
- He emphasised the spiritual union with god through ecstatic practices such as singing bhajans.
- An ardent worshipper of goddess Kali, the sacred mother, he declared that the manifestations of the divine mother were infinite.
- In his view, all religions contain the universal elements which, if practised, would lead to salvation. He said, **"Jiva is Siva" (all living beings are God)**.
- **Why then talk of showing mercy to them? Not mercy, but service, service for man, must be regarded as God.'**

Ramakrishna Mission

- Ramakrishna's primary achievement was his ability to attract educated youth who were dissatisfied with the rational orientation of religious reform organizations such as the Brahmo Samaj.
- After his death in **1886**, his disciples organised themselves as a religious community and undertook the task of making his life and teaching known in India and abroad.

- The chief spirit behind this task was Vivekananda. Following the **organizational structure of Christian missionaries, Vivekananda established the Ramakrishna Mission** which did not restrict itself to religious activities but was actively involved in social causes such as education, health care and relief in times of calamities.

Swami Vivekananda

- **Narendra Nath Datta (1863–1902)**, later known as Swami Vivekananda, was the prime follower of **Ramakrishna Paramahansa**.
- An educated youth, he was drawn to Ramakrishna's message. Dissatisfied with conventional philosophical positions and practices, he advocated the practical Vedanta of service to humanity and attacked the tendency to defend every institution simply because it was connected with religion.
- He emphasized a cultural nationalism and made a call to Indian youth to regenerate Hindu society.
- His ideas bred a sense of self confidence among Indians who felt inferior in relation to the materialist achievements of the West.
- He became famous for his addresses on Hinduism at the **1893 World Congress of Religions in Chicago**.
- Despite his fame, he was condemned by orthodox Hindus for suggesting that the lower castes should be allowed to engage in the Hindu rituals from which they were traditionally excluded.
- Vivekananda's activist ideology rekindled the desire for political change among many western-education young Bengalis.
- Many of the youths who were involved in the militant nationalist struggle during the Swadeshi movement following the Partition of Bengal were inspired by Vivekananda.

Theosophical Movement

- During the nineteenth century, Hindu religion and culture were being discredited in the West, especially due to missionary propaganda.
- However, some Western intellectuals looked to the East for spiritual salvation as a remedy to the materialistic orientation of the West.
- The Theosophical Society, founded by **Madame H.P. Blavatsky (1831–1891)** and **Colonel H.S. Olcott (1832– 1907)** played a key role in this. Founded in the **USA in 1875**, it later shifted to India at **Adyar, Chennai in 1886**.
- Theosophical Society stimulated a study of the Hindu classics, especially **the Upanishads and the Bhagavad Gita**.
- The Theosophical Society also played an important role in the revival of Buddhism in India.
- Western interest in Hindu scriptures gave educated Hindus great pride in their tradition and culture.

Contribution of Annie Besant

- In India the movement became further popular with the election of **Annie Besant (1847–1933)** as its president after the death of **Olcott**.
- She played a role in Indian nationalist politics, and formed the Home Rule League demanding home rule to India on the lines of Ireland.
- Annie Besant spread Theosophical ideas through her newspapers called New India and Commonweal.

Anti-Caste Movements

Jyotiba Phule

- Jyotiba Govindrao Phule was born in **1827 in Maharashtra**. Phule is chiefly known as the earliest leader of the non-Brahman movement.
- He opened the first school for “**untouchables**” in **1852 in Poona**.
- He launched the **Satyashodak Samaj (Truth-Seekers Society)** in **1870** to stir the non-Brahman masses to self-respect and ambition.
- Phule opposed child marriage and supported widow remarriage, which was prohibited particularly among high-caste Hindus.
- Jyotiba and his wife Savitribai Phule devoted their lives for the uplift of the depressed classes and women.
- Jotiba opened orphanages and homes for widows. Unlike many contemporary nationalists he welcomed British rule and missionary activities on the ground that British rule enabled lower castes to challenge the supremacy of Brahmins.
- His work, **Gulamgiri (Slavery)** is an important text that summarized many of his radical ideas.

Narayana Guru

- Born to poor parents in Kerala, **Narayana Guru (1854– 1928)** evolved into a poet and scholar in Malayalam, Tamil and Sanskrit.
- In his days the people of depressed classes had no access to temples, streets, public tanks and wells and educational institutions.
- Men and women belonging to lower castes were not allowed to wear the upper garments.
- Disturbed by the terrible caste tyranny, that the lower caste people suffered, he dedicated his whole life for the betterment of the oppressed.
- He set up the **Sri Narayana Dharma Paripalana Yogam**, an organization to work for the uplift of the “**depressed classes**”.
- He established a grand temple at Aruvipuram and dedicated it to all. His movement inspired a radical transformation of Kerala society, especially among the Ezhavas.
- Thinkers and writers such as **Kumaran Asan and Dr Palpu** were influenced by his ideas and carried forward the movement.

Ayyankali

- Nineteenth century Kerala region was plagued by caste discriminations of worst kind. Certain social groups were not only considered untouchable but also un-seeable.
- However, the strident campaigns by thinkers such as **Narayana Guru and Ayyankali (1863–1941)** in the context of larger political and economic changes ushered in tremendous social changes, especially in the caste structure.
- **Ayyankali was born in 1863 at Venganoor in Thiruvananthapuram** then in the princely state of Travancore.
- The discrimination he faced as a child turned him into a leader of an anti-caste movement and who later fought for basic rights including access to public spaces and entry to schools.
- Ayyankali challenged many caste conventions such as clothing style; he wore clothes associated with upper castes that were prohibited for lower castes.
- He rode on an ox-cart challenging the 'ban' on untouchables from accessing public roads used by caste Hindus.
- Inspired by Sree Narayana Guru, Ayyankali founded the **Sadhu Jana Paripalana Sangam (Association for the Protection of the Poor)** in 1907 which campaigned and raised funds to educate the lower caste Pulaya people.

Islamic Reforms

- After the suppression of great revolt of **1857** Indian Muslims looked to Western culture with suspicion.
- The community feared that Western education, Western culture and Western ideas would endanger their religion.
- Therefore only a small section of Muslims accepted the new avenues for modern education.
- Consequently, Indian Muslims as a community lagged behind in comparison to the Hindu elite of various parts of India.

Sir Sayyid Ahmed Khan

- As Indian Muslims steadily lost ground in education, in the public services and in general leadership in India, there was a realization that there was no alternative but to accept modern education if the community was to go on the path of progress.
- The man who gave life and soul to it was **Sir Sayyid Ahmed Khan (1817–1898)**. Born in Delhi into a noble Muslim family, Sayyid Ahmed Khan thought that lack of education, especially modern education, had harmed the Muslims greatly and kept them backward.
- He exhorted the Muslims to accept Western science and take up government services. He founded a scientific society and translated many English books, especially **science books into Urdu**.
- He believed that the interest of the Muslims would be best served if they bonded with the British Government rather than pitch in with the rising nationalist movement.
- So he advised the Muslims to take to English education and to concentrate on it.

Aligarh Movement

- Sayyid Ahmed Khan's movement, the "**Aligarh movement**," is so called because it was centred around the **Aligarh Mohammedan Anglo-Oriental college founded by him in 1875**, which is a landmark in the history of Indian Muslim education.
- The college was raised to the status of a university in **1920**. Aligarh produced a huge body of intelligentsia over successive generations who played a key role in public life.

Deoband Movement

- Deoband was a revivalist movement organized by the orthodox Muslim Ulema with the twin objectives of propagating the pure teachings of the Quran and the Hadith as well as encouraging the spirit of Jihad against the foreign and un-Islamic elements.
- The Ulema under the leadership of **Muhammad Qasim Watanotavi (1832-80)** and **Rashid Ahmad Gangotri (1828-1905)** founded the school at Deoband in the Saharanpur district of the U.P in 1866.
- The school curricula shut out English education and western culture. The instruction imparted was in original Islamic religion and the aim was moral and religious regeneration of the Muslim community.
- The Deoband School did not prepare its students for government jobs but for the preaching of Islamic faith. In politics, the Deoband School welcomed the formation of the **Indian National Congress in 1885**.
- In **1888** the **Deoband Ulema** issued a religious decree (fatwa) against Syed Ahmed Khan's Organisation called "**The United Patriotic Association**" and "**The Muhammeden Anglo – Oriental Association.**"
- It is said the Deoband Ulema were mainly influenced by their determination to oppose Sir Syed Ahmed's activities.
- **Maulana Mahmud-ul-Hassan became the new Deoband leader**. The **Jamait-Ul-Ulema (council of theologians)** led by him gave a concrete shape to Hassan's ideas of protection of the religious and political rights of the Muslims in the overall context of Indian unity.

Parsi Reform Movement

- In the middle of the nineteenth century the reform activities of the educated Parsis (the Zoroastrians who had fled from Iran in the tenth century in the face of religious persecution) began in Mumbai.
- **Furdunji Naoroji founded the Rahnumai Mazdayasnan Sabha (Parsis' Reform Society) in 1851**.
- **Rast Goftar (The Truth Teller)** was the main voice of the movement. The leaders of the Sabha criticized elaborate ceremonies at betrothals, marriages and funerals. They opposed both infant marriage and the use of astrology.
- **Behrramji Malabari** organized a campaign for legislation against the practice of child marriage.
- The community produced many leaders such as **Pherozeshah Mehta and Dinshaw Wacha** who played a big role in the early Congress.

Sikh Reform Movement (Nirankaris and Namdharis)

- The wave of reform movements did not leave any community untouched. Among the Sikhs of Punjab too there were attempts to reform. **Baba Dayal Das, founder of the Nirankari Movement**, stressed the worship of god as **Nirankar (formless)**.
- **Rejection** of idols, rejection of rituals associated with idolatry, reverence for the authority of Guru Nanak and of the Adi Granth formed the essence of his teachings.
- He reiterated the prohibition on meat-eating, and liquor consumption. The Namdhari Movement, founded by Baba Ram Singh, was another socio-religious movement among the Sikhs.
- The Namdharis insisted on wearing the symbols of Sikhism except the **kirpan (sword)**. Instead Baba Ram Singh wanted his followers to carry a lathi.
- It considered both men and women equal and accepted widow remarriage. It prohibited the dowry system and child marriage.
- In the wake of the gathering influence of Arya Samaj and the Christian missionaries, the Singh Sabha of Amritsar was established.
- Its main objective was to restore the purity of Sikhism. With the support of British, it established **Khalsa College for the Sikhs in Amritsar**.
- **Singh Sabha was a forerunner of Akali Movement.**

Social Reformers of Tamilnadu

Ramalinga Swamigal

- Popularly known as **Vallalar, Ramalinga Swamigal or Ramalinga Adigal (1823–1874)**, was born in **Marudhur**, a village near Chidambaram.
- After his father's death, his family moved to his brother's house at Chennai. Despite having no formal education he gained immense scholarship.
- Ramalinga emphasised the bonds of responsibility and compassion between living beings. He expressed the view that **'those who lack compassion for suffering beings are hardhearted, their wisdom clouded'**.
- He showed his compassion and mercy on all living beings including plants. This he called **jeevakarunya**.
- He established the **Samarasa Vedha Sanmarga Sangam in 1865** and it was renamed "**Samarasa Suddha Sanmarga Satya Sanga**" which means "**Society for Pure Truth in Universal self-hood**".
- Ramalinga also established a free feeding house for everyone irrespective of caste at Vadalur (1867), in the wake of a terrible famine in south India in 1866.
- His voluminous songs were compiled and published under the title **Thiruvartuppa (Songs of Grace)**.
- His radical views deeply disturbed Saiva orthodoxy, who condemned his writings as **Marutpa (songs of ignorance)**.

Vaikunda Swamikal

- **Vaikunda Swami (1809–1851)**, one of the earliest crusaders for social justice in south India was born at **Sasthan Koil Vilai**, the present Samithoppu, a village near Kanyakumari.
- His original name **Mudichudum Perumal was changed to Muthukutty** by his parents due to objection raised by the upper caste Hindus.
- Muthukutti had no opportunity to have any systematic school education but acquired knowledge of various religious texts.
- He preached the ideas of equality and advocated the rights of depressed class people in the face of stiff opposition from upper castes as well as the princely state of Travancore.
- He visited Tiruchendur temple and experienced a new vision. **Calling himself Vaikundar**, he requested the people to give up all the irrelevant rites and rituals in their worship. His preaching's against the prevailing religious order brought about a considerable change in the attitude of the lower caste people.
- In 1833, **Vaikundar commenced his meditation at Samithoppu for the abolition of caste differences** and social integration of the society. During this period, he led a life of a hermit.
- In south Travancore, there were many restrictions on lower caste people such as what they could wear and not wear.
- At a time when there was prohibition on certain sections on wearing headgear he advocated the wearing of a turban in protest.
- It gave a sense of honour to the oppressed people and offered a spirit of self-respect. A new confidence was installed in the minds of his followers.
- Like the other contemporary reform movements of India in the 19 th century, Vaikunda Swamigal condemned the worship of idols.
- The low caste people had no temples for their gods, they erected small pyramids of mud or bricks in their honor, plastered and white-washed. He considered this kind of worship as an uncivilized custom.
- The people sacrificed goats, cocks and hens. He condemned these religious customs and campaigned against animal sacrifice.
- **Vaikunda Swamigal founded Samathuva Samajam** to unite all the people of various castes. He organized inter-dining to accomplish it.
- Even though he was imprisoned by the Maharajah of Travancore, he never gave up his principles. His followers called him respectfully as **Ayya (father)**.
- His cult was also known as **Ayya Vazhi (The Path of Ayya)**. His message emancipated the people from the unjust social customs and superstitious beliefs.
- His ideas are collected into a text called **Akila Thirattu**.

Iyothee Thassar Pandithar

- **Iyothee Thassar (1845–1914)** was a radical Tamil scholar, writer, siddha medicine practitioner, journalist and sociopolitical activist.

- Born in Chennai, he was fluent in **Tamil, English, Sanskrit and Pali languages**.
- He initiated a new knowledge practice by using journalism as a tool to make inroads into the print public sphere, which, was hitherto an upper caste domain.
- He campaigned for social justice and worked for the emancipation of the “**untouchables**” from the caste clutches.
- He worked for the construction of a casteless identity and castigated caste hegemony and untouchability.
- He considered education as an important tool for empowerment and became the driving force behind the establishment of several schools for the “untouchables” in Tamil Nadu.
- **Pandithar Iyothee Thassar founded the Advaidananda Sabha to raise the voice for the temple entry of the “untouchables”.**
- In 1882, **John Rathinam and Iyothee Thassar** established a movement called, **Dravida Kazhagam** and launched a magazine called **Dravida Pandian in 1885**.
- He founded the **Dravida Mahajana Sabha in 1891** and organised the **First Conference of the association at Nilgiris**.
- He started a weekly journal, **Oru Paisa Tamilan, in 1907** and published it until his demise in 1914.
- Pandithar Iyothee Thassar was disappointed with the Hindu dharma, which served as the basis for propagating and validating caste in Hindu society.
- Influenced by the Theosophist organizer, **Colonel H.S. Olcott**, he went to **Sri Lanka in 1898** and converted to Buddhism.
- In the same year, he founded the **Sakya Buddhist Society at Madras** to construct the rational religious philosophy through Buddhist religion.
- He argued that the so-called untouchables were originally Buddhists who were stigmatized by Brahminism.
- He further constructed an alternative history through the interpretation of Tamil literature and folk traditions of Tamil from a Buddhist standpoint.
- In addition, he stated that the revival of Buddhism could liberate the people from the evil of caste that afflicted the Hindu society.
- He called the “**untouchables**” **Sathi Petham Atra Dravidar (Casteless Dravidians)** and urged them to register as casteless Dravidians in the Census.

More to Know:

1. Vaikunda Swamikal criticised the rule of the British and the rule of **Rajah of Travancore** as the rule of White devils and Black devils respectively.

2. **Ramalinga** bore witness to **hunger and poverty** in the country: “I saw poor people, emaciated with hunger and terribly weary, going to every house, yet their hunger was not removed, and my heart suffered intensely. Those who suffer with relentless disease, I saw them in front of me and my heart trembled. I saw those people, poor and of unmatched honor, their hearts weary, and I grew weak.”

3. In **1893 Arya Samaj** split over the question of doctrinal purity. **Swami Shraddhananda (1857–1926)**, a charismatic figure after Dayananda, accused the group running the DAV School of being too Westernized and thereby ignoring the founder's ideology. From 1900 onward, he established his own network of schools, the **Gurukulas, which were outwardly modelled after ancient Hindu seats of learning, emphasising the study of the Vedas.**

4. It was also to the credit of Vidyasagar that the **first age of consent Act was enacted in 1860**. The age for marriage was fixed as ten years. It was raised **to twelve and thirteen years in 1891 and 1925 respectively**. Sadly, as reported in the **Age of Consent Committee (1929)**, the law remained on paper and the knowledge of it was confined to judges, lawyers and a few educated men.

10th Social Science Lesson 2 Notes in English

2. India – Location, Relief and Drainage

Introduction

- India is the **seventh largest country in the world and second largest country in Asia**.
- It forms a part of south Asia and is separated by the Himalayas from the rest of the continent.
- India accounts for about **2.4 %** of the total area of the world with an area of **32,87,263 sq.km**. Many of the India states are larger than several countries of the world.

India's Land and Water Frontiers

- India shares its **15,200 km** long land frontier with **Pakistan in the west, Afghanistan in the north-west, China, Nepal and Bhutan in the north and Bangladesh and Myanmar in the east**.
- India's longest border is with Bangladesh (4156 km) while the shortest border is with Afghanistan (106 km).
- About **6,100 km long coastline of India** is washed on three sides of the country by the Indian Ocean and its two arms namely the Arabian sea in the west and the Bay of Bengal in the east.
- The total length of the coast line of India including the islands is **7,516.6 km**. India and Sri Lanka are separated by a narrow and shallow sea called Palk Strait.

India and the World

- The Indian land mass has a central location between, the East and the West Asia. India and the southward extension of the Asian continent.
- The transIndian ocean routes which connect the countries of Europe in the west and the countries of East Asia provide a strategic central location to India.
- Thus it helping India to establish close contact with **West Asia, Africa and Europe from the western coast and with South East, East Asia from the eastern coast**.

India: A Subcontinent

- India along with the countries of **Myanmar, Bangladesh, Pakistan, Nepal, Bhutan and Sri Lanka** is called a subcontinent.
- This region is separated from the rest of Asia by a chain of mountains in the northwest, north and northeast and by seas in the south.
- This region also possesses distinct continental characteristics in physiography, climate, natural vegetation, minerals, human resources etc. Hence India is known as 'subcontinent'.



Location and Extent

- India extends from **8°4' N to 37°6' N latitudes and 68°7' E to 97°25' E longitudes**. Hence India is located in the north Eastern hemisphere. The southernmost point of the country is **Pygmalion Point or Indira Point (6°45' N latitude)** located in the Andaman and Nicobar Islands.
- The southernmost point of main land of India is Cape Comorin (Kanyakumari).
- The north-south extent of India is **3,214 km** and it extends from Indira Col in Jammu and Kashmir in the north to Kanyakumari in the south.
- The east-west extension is **2933 km** and it stretches from Rann of Kutch (Gujarat) in the west to Arunachal Pradesh in the east.
- The Tropic of Cancer (**23°30' N**) passes through the middle of the country dividing it into two halves as northern temperate and southern tropical lands. India has been politically divided into **28 states and 8 union territories** for administrative convenience.

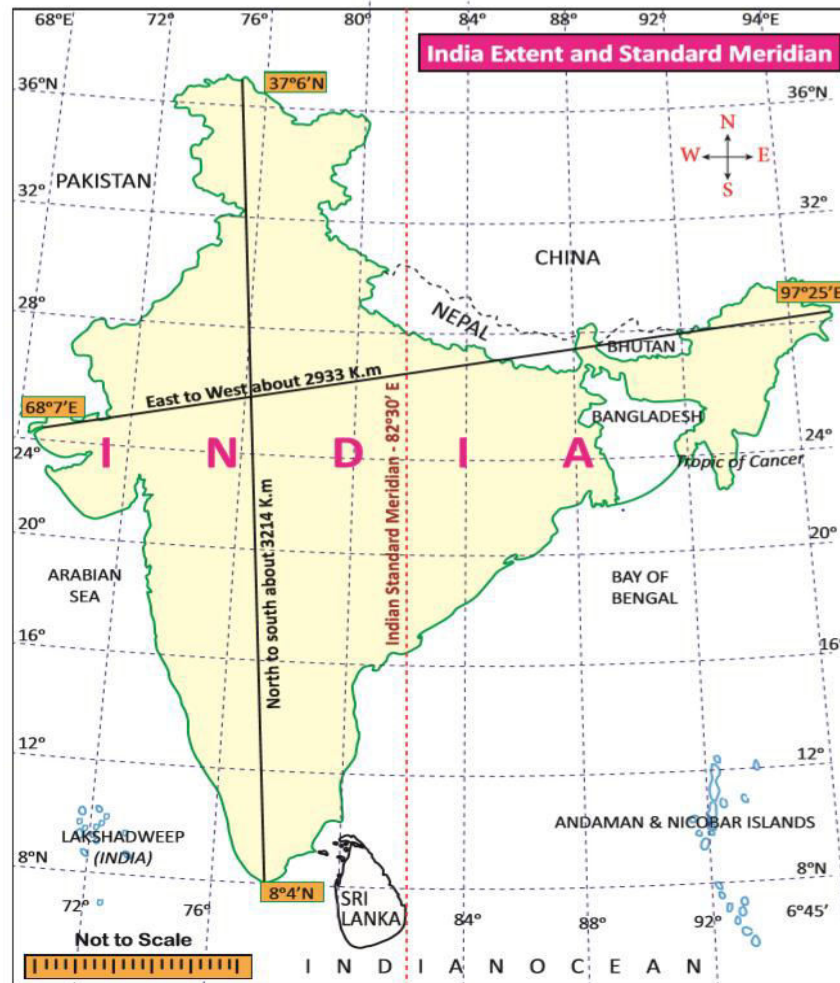
Indian Standard Time (IST)

- The longitudinal difference between Gujarat in the west and Arunachal Pradesh in the east is about 30°.

- The Earth rotates through its axis around **360° in 24 hours**. Thus, a difference of **1° longitude** will make a difference of **4 minutes** in time.
- The difference in longitude between **Gujarat (68°7 'E) and Arunachal Pradesh (97°25 ' E) is 29°18'.**
- Hence the difference in local time between these two places is **29°18' X 4' (minutes) = 1 hour 57 minutes 12 seconds (approximately 2 hours).**
- Since Arunachal Pradesh is towards east, it will have sunrise about two hours earlier than the sunrise at Gujarat which is in the west.
- In order to avoid these differences, Indian standard time is calculated.
- The local time of the central meridian of India is the standard time of India. India's central meridian is **82°30' E longitude.**
- It passes through **Mirzapur** and roughly bisects the country in terms of longitude. The **IST is 5.30 hrs ahead of Greenwich Mean Time (GMT).**

Major Physiographic Divisions of India

- The majestic Himalayan peaks in the north, the beautiful beaches in the south, the great Indian desert in the west and the breathtaking natural heritage in the east make India a geographically **vibrant, colourful and truly incredible country.**
- There is a varied nature of physiographic divisions in India. Though the country has many landforms based on the major differences, it is divided into the following five physiographic divisions:



1. The Himalayan Mountains
2. The Great Northern Plains
3. The Peninsular plateau
4. The Indian Desert
5. The Coastal Plains
6. The Islands

Himalayan Mountains

- The Himalayan Mountains (**Northern Mountains**) consist of the youngest and the loftiest mountain chains in the world because they have been formed only few millions years ago and also they were formed because of the folding of the earth crust due to tectonic activity.
- It stretches for a distance of **2,500 km** from the Indus gorge in the west to Brahmaputra gorge in the east.

- The width of the Northern Mountains varies from **500 km in Kashmir to 200 km in Arunachal Pradesh**.
- The **Pamir Knot**, popularly known as the **“Roof of the World”** is the connecting link between the Himalayas and the high ranges of Central Asia.
- From the Pamir, Himalayas extend eastward in the form of an arc shape. The term “Himalaya” is derived from Sanskrit. It means **“The Abode of Snow”**.
- The Northern Mountains that function as a great wall is grouped into three divisions. 1) The Trans-Himalayas, 2) Himalayas, 3) Eastern or Purvanchal hills.



1. The Trans-Himalayas

- It is also known as **western Himalaya's**. It lies to the north of the great Himalayan range. It lies in Jammu and Kashmir and Tibetan plateau.
- As its areal extent is more in Tibet, it is also known as Tibetan Himalayas.
- The **Trans-Himalayas are about 40 km** wide in its eastern and western extremities and about **225 km wide** in its central part.
- They contain the Tethys sediments. The rocks of this region contain fossils bearing marine sediments which are underlain by **'Tertiary granite'**.
- It has partly metamorphosed sediments and constitutes the core of the Himalayan axis. The prominent ranges of Trans Himalayas are **Zaskar, Ladakh, Kailash, and Karakoram**.

2. The Himalayas

- It constitutes the core part of northern mountains. It is an young fold mountain.
- It was formed by the movement of Angara land mass in the north and Gondwana land mass in the south.
- The Tethys sea found between these two land masses was uplifted by the compression and the resultant landform was the Himalayas.
- It consists of many ranges. The main divisions of the Himalayas are the (i) **Greater Himalayas**, (ii) **the Lesser Himalayas** and (iii) **the Siwaliks**

Peak	Country	Height in metres
Mt. Everest	Nepal	8848
Mt.K2 or Godwin Austen	India	8611
Kanchenjunga	India	8598
Makalu	Nepal	8481
Dhaulagiri	Nepal	8172
Nanga Parbat	India	8126
Annapurna	Nepal	8078
Nanda Devi	India	7817
Kamet	India	7756
Namcha Barwa	India	7756
Gurla Mandhata	Nepal	7728

(i) The Greater Himalayas or the Himadri

- The Greater Himalayas rise abruptly like a wall north of the Lesser Himalayas. **The Greater Himalayas are about 25 km wide. Its average height is about 6,000 m.**
- The Greater Himalayas receive lesser rainfall as compared to the Lesser Himalayas and the Siwaliks.
- Physical weathering is less effective over the Greater Himalayas as compared to the other ranges.
- Almost all the lofty peaks of Himalayas are located in this range. The notable ones are **Mt. Everest (8,848 m) and Kanchenjunga (8,586 m).**
- Mt. Everest is located in Nepal and Kanchenjunga is located between Nepal and Sikkim. This range is the most continuous of all ranges.
- It is region of permanent snow cover. So, it has many glaciers. **Gangothri, Yamunothri and Siachen are some of them.**

(ii) The Lesser Himalayas or The Himachal

- It is the middle range of Himalayas. Height of this range varies from **3, 700 to 4,500 m.** Its width varies upto 80 km.
- The major rocks of this range are slate, limestone and quartzite. This region is subjected to extensive erosion due to heavy rainfall, deforestation and urbanization.
- **Pir Panjal, Dhauladhar and Mahabharat** are the mountain ranges found in this part. Major hill stations of the Himalayas are located in this range.
- **Shimla, Mussourie, Nainital, Almora, Ranikhet and Darjeeling** are the familiar ones.

(iii) The Siwaliks or Outer Himalayas

- The Siwaliks extend from Jammu and Kashmir to Assam. It is partly made by the debris brought by the Himalayan rivers.
- The altitude varying between **900-1100 metres** elevation of this range is **1300 m.**
- The width of Siwaliks vary from **10 km in the east to 50 km in the west.**
- It is the most discontinuous range. The longitudinal valleys found between the Siwaliks and the Lesser Himalayas are called Duns in the west and Duars in the east.
- These are the ideal sites for the development of settlements in this region.

3. Purvanchal Hills

- These are the eastern off-shoot of Himalayas. It extended in the north-eastern states of India.
- Most of these hills are located along the border of India and Myanmar while others are inside India.

- **Dafla Hills, Abor Hills, Mishmi Hills, Patkai Bum Hills, Naga Hills, Manipur Hills, Mizo Hills, Tripura Hills, Mikir Hills, Garo Hills, Khasi Hills and Jaintia Hills** are the hills which are collectively known as purvanchal Hills.

The Great Northern Plains

- The fertile land extending across seven north Indian states forms the Great Northern Plains. This extensive plain lies to the south of the northern mountains.
- This plain is one of the most extensive stretches of the alluvium in the world and is deposited by the rivers **Indus, Ganga, Brahmaputra and their tributaries**.
- The length of the plain is about **2,400 km and the width varies from 240 to 320 km**. Its width increases from east to west. It covers an area of over **7 lakh sq.km**.
- The Great Plains of India is remarkably a homogeneous surface with an imperceptible slope. They are formed mostly by the depositional process of the Himalayan and Vindhyan rivers.
- These rivers deposit enormous quantity of sediments deposited along the foothills and flood plains.
- The important characteristics features of sediment deposition in the plains areas as follows.

The Bhabar Plain

- This plain is made up of gravels and unsorted sediments deposited by the Himalayan rivers. The porosity of this plain is so high that most of the small streams flow over this region disappear.
- It lies to the south of the Siwalik from west to east (**Jammu Division to Assam**). Its width varies from **8 to 15 km**. It is wider in the western plains (Jammu Division) than in the east (Assam).
- This plain is not suitable for cultivation, only big trees with large roots thrive in this region.

The Tarai Tract

- It is a zone of excessive dampness, thick forests and rich wild life. This tract lies to the south of Bhabar plains.
- The width of this belt is **15-30 km**. The Tarai is wider in the **eastern parts of the Great Plains, especially in Brahmaputra Valley due to heavy rainfall**. In many states, the Tarai forests have been cleared for cultivation.

The Bhangar Plains

- The Bhangar represent the upland alluvial tracts of the Great Plains of India, formed by the **older alluviums**.
- The Bhangar land lies above the flood limits of the rivers. This **soil is dark in colour, rich in humus content, well drained and useful for agriculture**.

The Khadar Plains

- The **new alluvium** tracts along the courses of the rivers are known as the '**Khadar**' or '**Bet**' lands.
- The Khadar tracts are enriched by fresh deposits of silt every year during rainy seasons. The Khadar land consists of sand, silt, clay and mud. It is highly fertile soil.

Delta Plains

- The deltaic plain is an extension of the **Khadar land**. It covers about **1.9 lakh sq.km** in the lower reaches of the Ganga River.
- It is an area of deposition as the river flows in this tract sluggishly. The deltaic plain consists mainly of old mud, new mud and marsh.
- In the delta region, the **uplands are called 'Chars'** while the **marshy areas are called 'Bils'**.

The Peninsular Plateaus

- The plateau region lies to the south of the Great Northern Plains. This is the largest physiographic division of our country.
- It covers an area of about **16 lakh sq.km (about half of the total area of the country)**. It is an old rocky plateau region.
- The topography consists of a series of plateaus and hill ranges interspersed with river valleys.
- Aravalli hills mark the north-western boundary of the plateau region. Its northern and north-eastern boundaries are marked by the **Bundelkhand upland, Kaimur and Rajmahal hills**.
- The Western Ghats and the Eastern Ghats mark the western and eastern boundaries respectively.
- The altitude of a large portion of the plateau is more than **600 m** from mean sea level. The peak of Anaimudi is the highest point in the plateau. Its height is **2,695 m** and is located in Anaimalai.
- The general slope of this plateau is towards east. The Great Plateau is a part of the Gondwana (very ancient one) land mass.
- Due to the old age, the rivers in this region attained their base level and developed broad and shallow valleys.
- The river Narmada divides the plateau region of India broadly into two parts.
- The region lying to the north of the Narmada is called the Central Highlands and the region lying to the south of Narmada is called the Deccan Plateau.
- All the major rivers (**Mahanadi, Godavari, Krishna, Kaveri etc.**) lying to the south of the Vindhyas flow eastwards and fall into the Bay of Bengal. Narmada and Tapi are the two rivers situated to the south of the Vindhyas flow westward.
- Their movement towards west is due to the presence of a rift valley in the region.

Central Highlands

- The Central Highlands extend between the river Narmada and the Northern Great Plains.
- The Aravallis form the west and northwestern edge of the Central Highlands. These hills extend from Gujarat, through Rajasthan to Delhi in the northwesterly direction for a distance of about **700 km**.
- The height of these hills is **about 1,500 m in southwest while near Delhi the height is hardly 400 m**.
- **Gurushikhar with 1,722 m is the highest peak of this range**. The Western part of the Central Highland is known as the Malwa Plateau.
- It lies to the southeast of Aravallis and to the north of Vindhya Range. The rivers Chambal, Betwa and Ken drain the Malwa Plateau before they join the river Yamuna.
- The part of the Central Highlands which extends to the east of Malwa Plateau is known as Bundelkhand and its further extension is known as Bagelkhand.
- The eastern part of the Central Highlands which lies in the north-eastern part of the Indian Plateau is known as Chhota-Nagpur Plateau.
- It covers much of **Jharkhand, adjacent parts of Odisha, West Bengal, Bihar and Chhattisgarh**. This region is very rich in mineral resources particularly iron ore and coal.

Deccan Plateau

- This physiographic division is the largest part of the plateau region of India. The shape of this plateau is roughly triangular.
- One of the sides of this triangle is marked by **the line joining Kanyakumari with Rajmahal Hills and this line passes through the Eastern Ghats**.
- The second arm is marked by the **Satpura Range, Mahadeo Hills, Maikal Range and the Rajmahal Hills**. The third arm is marked by the Western Ghats.
- The area of this Plateau is about **7 lakh square km and the height ranges from 500 to 1000 m above sea level**.
- The Western Ghats forms the western edge of the Peninsular Plateau. It runs parallel to the Arabian Sea coast.
- The northern part of this range is called as Sahyadris. The height of the Sahyadris increases from north to south.
- Anaimudi is a sort of tri-junction of the Anaimalai Range, the Cardamom Hills and the Palani Hills. Kodaikanal is a beautiful hill resort situated on the Palani Hills.
- Eastern Ghats run from southwest to northeast form the eastern edge of this Plateau. This range is also called as Poorvadri.
- The Eastern Ghats join the Western Ghats at the Nilgiri hills, bordering Karnataka and Tamil Nadu.
- The Eastern Ghats are not continuous like the Western Ghats. The rivers of Mahanadi, Godavari, Krishna, Pennar and Kaveri have dissected this range at many places.

The Indian Desert

- The Thar desert, also known as the Great Indian desert is a large arid region in the north western part of the Indian subcontinent that covers an area of **2,00,000 km²** and forms a natural boundary between India and Pakistan.
- It is the world 7th largest desert, and world 9th largest sub tropical desert located in Western part of the India.
- The desert lies in the western part of the aravalli range and covers **2/3 of Rajasthan state**. There are two major divisions in the Thar desert.
- They are known as the **Actual desert region (Marusthali)** and the **semi desert region (Bhangar)**. Many different types of **sand dunes and salt lakes (Dhands)** are seen here.

The Coastal Plains

- The Peninsula Plateau of India is flanked by narrow coastal plains of varied width from north to south, known as the Western Coastal Plains and the Eastern Coastal Plains.
- They were formed by the depositional action of the rivers and the erosional and depositional actions of the sea-waves.
- The Indian coastal plains are divided into the following two divisions: **1) The Western Coastal Plains and 2) The Eastern Coastal Plains.**

The Western Coastal Plain

- It lies between the Western Ghats and the Arabian Sea. It extends from Rann of kutch in the north to Kanyakumari in the south and its width varies from **10 to 80 km**.
- It is mainly characterised by sandy beaches, coastal sand dunes, mud flats, lagoons, estuary, laterite platforms and residual hills.
- The northern part of the West Coastal Plain is known as Konkan Plain. The middle part of this plain is known as Kanara.
- The southern part of the plain is known as Malabar coast which is about **550 km long and 20-100 km wide**. This part of the coast is characterized by sand dunes.
- Along the coast, there are numerous shallow lagoons and backwaters called Kayals and Teris. Vembanad is a famous back water lake found in this region.

The Eastern Coastal Plain

- It lies between the Eastern Ghats and the Bay of Bengal and, stretches along the states of West Bengal, Odisha, Andhra Pradesh and Tamil Nadu.
- These plains are formed by the alluvial fillings of the littoral zone by the east flowing rivers of India.
- The coastal plain consists mainly of the recent alluvial deposits. This coastal plain has a regular shoreline with well-defined beaches.

- The coastal plain between **Mahanadi and Krishna river is known as the Northern Circars and the southern part lies between Krishna and Kaveri rivers is called Coromandal coast.**
- The Marina beach on this coast in Chennai and it is the second longest beach in the world.
- Among the back water lakes of this coast, **lake Chilka (Odisha)** is the largest lake in India located to the southwest of the Mahanadi delta, the Kolleru Lake which lies between the deltas of Godavari and Krishna and the Pulicat Lake lies in the border of Andhra Pradesh and Tamil Nadu are the well known lakes in the east coastal plain.

The Islands

- India has two major island groups namely Andaman and Nicobar and Lakshadweep.
- **The former group consists of 572 islands** and are located in Bay of Bengal, and the later **one has 27 islands and are located in Arabian Sea.**
- The islands of Andaman and Nicobar are largely tectonic and volcanic origin.
- India's only active volcano is found on Barren Island in Andaman and Nicobar group of Islands, while the islands of the Arabian Sea are mainly coral origin.

Andaman and Nicobar Islands

- These islands are located in an elevated portion of the submarine mountains. Since these islands lie close to the equator, the climate remains hot and wet throughout the year and has dense forests.
- The area of the island group is about **8,249 sq.km.** The entire group of islands is divided into two.
- They are Andaman in the north and the Nicobar in the south. These island groups are of great strategic importance for the country.
- **Port Blair** is the administrative capital of the Andaman and Nicobar islands.
- **The Ten Degree Channel separates Andaman from Nicobar group. The southernmost tip, the Indira Point is a part of Nicobar Island.**

Lakshadweep Islands

- This is a small group of coral islands located off the west coast of India.
- It covers an area of **32 sq. km.** **Kavaratti** is its administrative capital. Lakshadweep islands are separated from the Maldiv Islands by the Eight Degree Channel.
- The uninhabited **"Pitt Island"** of this group has a bird sanctuary. Earlier, it had three divisions namely **Laccadive, Minicoy and Amindivi.** **It was named as Lakshadweep in 1973.**

Offshore Islands

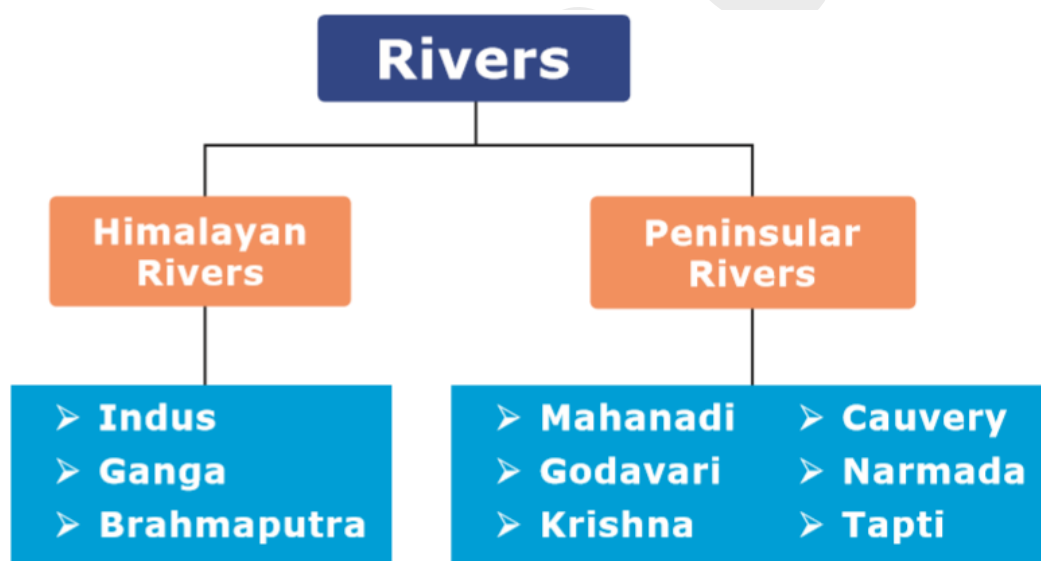
- Besides the two group of islands, India has a number of islands along the **Western Coast, Eastern Coast, in the delta region of Ganga and in the Gulf of Mannar.**
- Many of these islands are uninhabited and are administered by the adjacent states.

Drainage System of India

- A drainage system is an integrated system of tributaries and a trunk stream which collects and drains surface water into the sea, lake or some other body of water.
- The total area drained by a river and its tributaries is known as a drainage basin.
- The drainage pattern of an area is the result of the geological structure of the respective areas.
- The river system provides **irrigation, drinking water, navigation, power as well as grant livelihoods** for a large number of population.
- The drainage system of India is broadly divided into two major groups on the basis of their location. They are Himalayan rivers and the Peninsular rivers.

Himalayan Rivers

These rivers are found in north India and originate from Himalayas. So, they are also called as Himalayan rivers. These are perennial rivers



The Indus River System

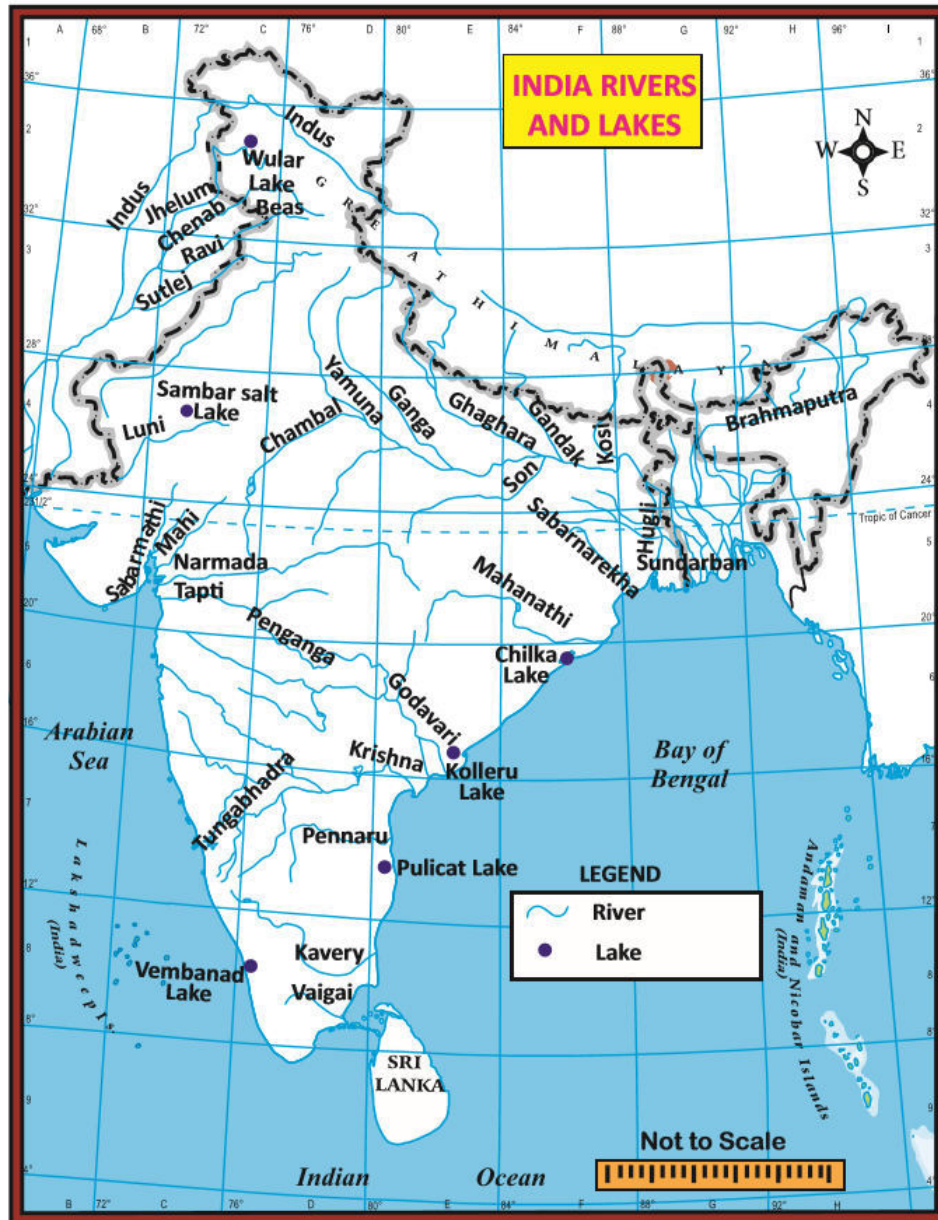
- The Indus River is one of the largest rivers of the world. It **originates from the northern slope of the Kailash range in Tibet near Manasarovar Lake** at an elevation of about **5,150 m**. Its length is about **2,880 km (Only 709 km is in India)**.
- The river has a total drainage area extending **11,65,500 sq km in which 321,289 sq km** areas are drained in India.
- The river flows through the Ladakh and Zaskar ranges and creates deep gorges.
- The river runs through Jammu and Kashmir, turns south near Chillar and enters Pakistan.
- Its major tributaries are Jhelum, Chenab (Largest tributary of Indus), Ravi, Beas and Sutlej. It enters into with the Arabian Sea.

The Ganga River System

- The Ganga River system is the largest drainage system of India it extend over and area of **8,61,404 sq km in India.**
- The Ganga plain is the most densely populated place in India and many towns are developed on the banks of this river.
- The **river Ganga originates as Bhagirathi from the Gangotri Glacier in Uttar Khasi District of Uttarkhand state**, at an elevation of **7,010 m.**
- The length of the river Ganga is about 2,525 km. Its major tributaries from the north are Gomti, Gandak, Kosi and Ghaghra and from south, Yamuna (largest tributary of Ganga), Son, Chambal etc.
- The river Ganga is known as the River Padma in Bangladesh. The combined river of Ganga and Brahmaputra creates the **World's largest delta known as Sundarbans in Bangladesh before joining the Bay of Bengal.**

The Brahmaputra River System

- The river Brahmaputra originates from the **Chemayungdung Glacier of the Kailash range to the east of Lake Manasarovar in Tibet** at an elevation of about 5,150 m.
- The total area is about **5,80,000 sq km but the drainage area lying in India is 1,94,413 sq km This river is known as Tsangpo (Purifier) in Tibet.**
- The length of this river is about 2,900 km (900 km in India). It enters into India through a gorge in Arunachal Pradesh namely Dihang.
- It has many tributaries. Tista, Manas, Barak, Subansiri are some of them. This river is called as Jamuna in Bangladesh.
- After it joins with the river Ganga in Bangladesh, the river is called as Meghna.



Characteristics of Himalayan Rivers

- Originate from Himalayas
- Long and wide
- Perennial in nature
- Unsuitable for hydro power generation
- Middle and lower courses are navigable

Peninsular Rivers

- The rivers in south India are called the Peninsular rivers.

- Most of these rivers originate from the Western Ghats. These are seasonal rivers (non-perennial).
- They have a large seasonal fluctuation in volume of water as they are solely fed by rain. These rivers flow in valleys with steep gradients.
- Based on the direction of flow, the peninsular rivers are divided into the West flowing and East flowing rivers.

East Flowing Rivers

Mahanadi

- The river Mahanadi originates **near Sihawa in Raipur district of Chattisgarh** and flows through Odisha. Its length is **851 km**.
- Seonath, Telen, Sandur and Ib are its major tributaries.
- The main stream of Mahanadi gets divided into several distributaries such as Paika, Birupa, Chitartala, Genguti and Nun.
- All these distributaries form the Delta of Mahanadi which is one of the largest deltas in India. The Mahanadi empties its water in Bay of Bengal.

Godavari

- Godavari is the **longest river (1,465 km)** with an area of **3.13 lakh km²** among the Peninsular rivers. It is also called **Vridha Ganga**.
- It originates in **Nasik district of Maharashtra, a portion of Western Ghats**. It flows through the states of Telangana and Andhra Pradesh before joining Bay of Bengal.
- Purna, Penganga, Pranitha, Indravati, Tal and Salami are its major tributaries. The river near Rajahmundry gets divided into two Channels called Vasistha and Gautami and forms one of the largest deltas in India.
- Kolleru, a fresh water lake is located in the deltaic region of the Godavari.

Krishna

- The river Krishna originates from a spring **at a place called Mahabaleshwar in the Western Ghats of Maharashtra**. Its length is **1,400 km** and an area of **2.58 lakh sq km**.
- It is the second longest Peninsular river Bhima, Peddavagu, Musi, Koyna and Thungabhadra are the major tributaries of this river.
- It also flows through Andhra Pradesh and joins in Bay of Bengal, at Hamasaladeevi.

Kaveri

- The river Kaveri originates at **Talakaveri, Kudagu hills of Karnataka**. Its length is **800 km**. The **river kaveri is called Dhakshin Ganga or Ganga of south** Harangi, Hemavati, Kabini, Bhavani, Arkavathy, Noyyal, Amaravathi etc are the main tributaries of the river Kaveri.

- In Karnataka the river bifurcates twice, forming the sacred islands of Srirangapatnam and Sivasamudram.
- While entering Tamil Nadu, the Kaveri continues through a series of twisted wild gorges until it reaches Hogenakkal Falls and flows through a straight, narrow gorge near Salem.
- The Kaveri breaks at Srirangam Island with two channels, river Coleroon and Kaveri. At last, it empties into the Bay of Bengal at Poompuhar.

West Flowing Rivers

Narmada

- This river rises in **Amarkantak Plateau in Madhya Pradesh** at an elevation of about **1057 m** and flows for a distance of about **1,312 km** it covers an area of **98,796 sq km** and forms **27 km long** estuary before outfalling into the Arabian Sea through the Gulf of Cambay.
- It is the largest among the west flowing rivers of Peninsular India. Its principal tributaries are Burhner, Halon, Heran, Banjar, Dudhi, Shakkar, Tawa, Barna and Kolar.

Tapti

- The Tapti is one of the major rivers of Peninsular India with the **length of about 724 km**. It covers an area of **65,145 sq km**.
- Tapti river rises **near Multai in the Betul district of Madhya Pradesh** at an elevation of about **752 m**.
- It is one of only the three rivers in Peninsular India that run from east to west - the others being the Narmada and the Mahi.
- The major tributaries are Vaki, Gomai, Arunavati, Aner, Nesu, Buray, Panjhra and Bori. It outfalls into the Arabian Sea through the Gulf of Cambay.

Characteristics of South Indian Rivers

- Originate from Western Ghats
- Short and narrow
- Non perennial in nature
- Suitable for hydro power generation
- Not useful for navigation

More to Know:

1. On the basis of deposition of sediments by various rivers and topographical characteristics, the Northern Plains of India is divided into the following four major regions:

Rajasthan Plains:

- It is located to the west of Aravalli range. It covers an area of about **1,75,000 sq.km**. Rajasthan plain is formed by the deposition of the river Luni and the long vanished river Saraswathi.
- There are several salt lakes in Rajasthan. The Sambhar salt lake (Pushkar Lake) near Jaipur is the prominent one.

Punjab - Haryana Plains:

- It lies to the north-east of the Great Indian Desert. This plain is found over an area of about **1.75 lakh sq.km**.
- The Punjab - Haryana plains are formed by the deposition of the rivers Sutlej, Beas and Ravi.
- This plain acts as water - divide (doab). The two major watershed it divides are Yamuna – Sutlej and Ganga – Yamuna.

Ganga Plains:

- It extends from the Yamuna River in the west to Bangladesh in the east. The total area covered by this plain is about **3.75 sq.km**.
- River Ganga and its tributaries such as Ghaghra, Gandak, Kosi, Yamuna, Chambal, Betwa etc. constitute this plain by their sediments and make a great plain in India.
- It is the largest plain of India. The general slope of the entire plain (upper, middle and lower Ganga plains) is towards east and south-east.

Brahmaputra Plains:

- It is located mainly in the state of Assam. It is a low - level plain located in the eastern part of the Great Plains of India and is formed by the deposits of river Brahmaputra.
- It covers an area of about **56,275 sq.km**. These plains create alluvial fans and marshy tracts.

2. Importance of Himalayas

- Himalayas blocks southwest monsoon winds and causes heavy rainfall to north India
- It forms a natural barrier to the subcontinent
- It is the source for many perennial rivers like Indus, Ganges, Brahmaputra etc.
- The Northern Mountains are described as the paradise of tourists due to its natural beauty
- Many hill stations and pilgrim centres like **Amarnath, Kedarnath, Badrinath and Vaishnavidevi** temples are situated here
- It provides raw material for many forest based industries
- It prevents the cold winds blowing from the central Asia and protects India from severe cold
- Himalayas are renowned for the rich biodiversity.

3. Longitudinal Divisions of Himalayas

1. The Kashmir Punjab Himachal Himalayas- Located between the rivers of Indus and Sutlej.

2. The Kumaun Himalayas- Located between the rivers of Sutlej and Kali.
3. The Central-Nepal Himalayas- Located between the rivers of Kali and Tista.
4. The Assam Eastern Himalayas- Located between rivers of Tista and Dihang.
4. The major passes in the Himalayan are **Karakoram pass (Jammu and Kashmir)**, **Zojila pass, Shipkila pass (Himachal Pradesh)**, **Bomdila pass (Arunachal Pradesh)**, **Nathala pass (Sikkim)** and **Jhelepla pass (Sikkim)**. The Khyber pass which connects Pakistan and Afghanistan, and Bolan pass in Pakistan are important passes of the Indian subcontinent
5. Himalaya is the home of several high peaks. However, it holds the record of having the maximum number of highest peaks among any mountain range in world. Out of **14 heights peaks in this world, Himalayas holds 9.**
6. Aravalli range is the oldest fold mountain range in India.
7. Amaravati is the new capital of Andhra Pradesh But according to **Andhra Pradesh Reorganization Act**, Hyderabad will be the capital for both the states of Andhra Pradesh and Telungana till **2024 (For 10 years from the act passed)**.

10th Social Science Lesson 3 Notes in English

3. Climate and Natural Vegetation of India

Introduction

- We drink more water during summer and do not drink the same amount of water during winter.
- This is because of the prevalence of **varying weather conditions between north and south India**.
- In this chapter, you will learn about the climate, rainfall distribution, natural vegetation and wildlife of our country.

The factors affecting the climate

Climate of India is affected by the factors of **latitude, distance from the seas, monsoon wind, relief features and jet stream**.

Latitude

- Latitudinally, India lies between **8°4'N and 37°6'N latitudes**. The Tropic of cancer divides the country into two equal halves.
- The area located to the south of Tropic of cancer experiences high temperature and no severe cold season throughout the year whereas, the areas to the north of this parallel enjoys **subtropical climate**.
- Here, summer temperature may rise above **40°C** and it is close to freezing point during winter.

Altitude

- When the altitude increases, the temperatures decreases. Temperature decreases at **the rate of 6.50C for every 1000 metres of ascent**. It is called normal lapse rate.
- Hence, places in the mountains are cooler than the places on the plains.
- That is why the places located at higher altitudes even in south India have cool climate.
- Ooty and several other hill stations of south India and of the Himalayan ranges like Mussourie, Shimla etc., are much cooler than the places located on the Great Plains.

Distance from the Sea

- Distance from the sea does not cause only temperature and pressure variations but also affects the amount of rainfall.
- A large area of India, especially the **peninsular region, is not very far from the sea and this entire area has a clear maritime influence on climate**.

- This part of the country does not have a very clearly marked winter and the temperature is equable almost throughout the year.
- Areas of central and north India experience much seasonal variation in temperature due to the absence of influence of seas.
- Here, summers are hot and winters are cold. The annual temperature at **Kochi does not exceed 30°C as its location is on the coast while it is as high as 40°C at Delhi**, since it is located in the interior part.
- Air near the coast has more moisture and greater potential to produce precipitation.
- Due to this fact, the amount of rainfall at Kolkata located near the coast is 119 cm and it decreases to just 24 cm at Bikaner which is located in the interior part.

Monsoon Wind

- The most dominant factor which affects the climate of India is the monsoon winds.
- These are seasonal reversal winds and India remains in the influence of these winds for a considerable part of a year.
- Though, the sun's rays are vertical over the central part of **India during the mid-June, the summer season ends in India by the end of May.**
- It is because the onset of southwest monsoon brings down the temperature of the entire India and causes moderate to heavy rainfall in many parts of the country.
- Similarly, the climate of southeast India is also influenced by northeast monsoon.

Relief

- Relief of India has a great bearing on major elements of climate such as **temperature, atmospheric pressure, direction of winds and the amount of rainfall.**
- The Himalayas acts as a barrier to the freezing cold wind blows from central Asia and keep the Indian subcontinent warm.
- As such the north India experiences tropical climate even during winter.
- During southwest monsoon, areas on the western slope of the Western Ghats receive heavy rainfall.
- On the contrary, vast areas of **Maharashtra, Karnataka, Telangana, Andhra Pradesh and Tamil nadu** lie in rain shadow or leeward side of the Western Ghats receive very little rainfall.
- During this season, Mangalore, located on the coast gets the rainfall of about 280 cm whereas the Bengaluru located on the leeward side receives only about 50 cm rainfall.

Jet Streams

- Jet streams are the **fast moving winds blowing in a narrow zone in the upper atmosphere.**
- According to the Jet stream theory, the onset of southwest monsoon is driven by the shift of the sub tropical westerly jet from the plains of India towards the Tibetan plateau.

- The easterly jet streams cause tropical depressions both during southwest monsoon and retreating monsoon.

Monsoon

- The word 'monsoon' has been derived from the **Arabic word 'Mausim' which means 'season'**.
- Originally, the word 'monsoon' was used by Arab navigators several centuries ago, to describe a system of seasonal reversal of winds along the shores of the Indian Ocean, especially over the Arabian Sea.
- It blows from the south-west to north-east during summer and from the north-east to south-west during winter.
- Monsoons are a complex meteorological phenomenon. Meteorologists have developed a number of concepts about the origin of monsoons.
- According to the Dynamic concept, Monsoon wind originates due to the seasonal migration of planetary winds and pressure belts following the position of the sun.
- During summer solstice, the sun's rays fall vertically over the Tropic of cancer. Therefore, all the pressure and wind belts of the globe shift northwards.
- At this time, **Inter -Tropical Convergence Zone (ITCZ)** also moves northward, and a major part of Indian landmass comes under the influence of southeast trade winds.
- While crossing equator this wind gets deflected and takes the direction of southwest and becomes southwest monsoon.
- During the winter season, the pressure and wind belts shift southward, thereby establishing the **north-east monsoon (trade winds)** over this region. Such systematic change in the direction of planetary winds is known as monsoon.

Seasons

The meteorologists recognize the four distinct seasons in India. They are;

1. Winter or cold weather season (January - February).
2. Pre Monsoon or summer or hot weather season (March - May).
3. Southwest monsoon or rainy season (June - September).
4. Northeast monsoon season (October - December).

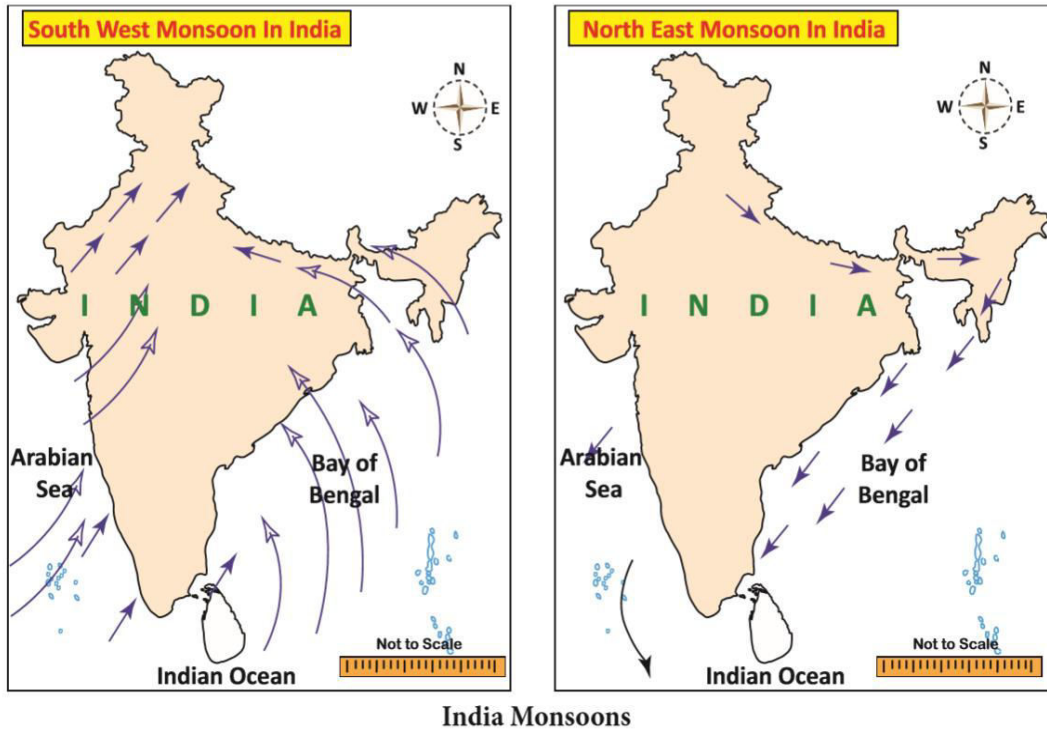
Winter or cold weather season

- During this period, **the vertical rays of the sun falls over tropic of capricorn** which is far away from India.
- Hence, India receives the **slanting sun's rays which results in low temperature**.
- The cold weather season is characterized by clear skies, fine weather, light northerly winds, low humidity and large day time variations of temperature.

- During this season a high pressure develops over north India and a north-westerly wind blows down the Indus and Ganges valleys.
- In south India, the general direction of wind is from east to west.
- The mean temperature increases from north to south, the decrease being sharp as one moves northwards in the north-western part of the country.
- The mean daily **minimum temperatures range from 22°C in the extreme south, to 10°C in the northern plains and 6°C in Punjab.**
- The rain during this season generally occurs over the Western Himalayas, Tamil nadu and Kerala.
- Western disturbances and associated trough in westerlies are main rain bearing system in northern part of the country.
- The jet stream plays a dominant role in bringing these disturbances to India.
- These disturbances cause rainfall in **Punjab, Haryana and Himachal Pradesh, and snowfall in the hills of Jammu and Kashmir.** This rainfall is very useful for the cultivation of winter wheat.

Pre Monsoon or summer or hot weather season

- During this season, the vertical rays of the sun falls over the peninsular India. Hence, there is a steady increase in temperature from south to north.
- It is practically hot and dry in the entire country in the initial part of this season.
- Weather over the land areas of the country is influenced by thunderstorms associated with rain and sometimes with hail mostly in the middle and later part.
- During this season, temperature starts increasing all over the country and by April, the interior parts of south India record mean daily temperatures of **30°C–35°C.**
- Central Indian land mass becomes hot with day-time maximum temperature reaching about **40°C** at many locations.
- Many stations in **Gujarat, North Maharashtra, Rajasthan and North Madhya Pradesh** exhibit high day-time and low night-time temperatures during this season.
- Because of the atmospheric pressure conditions, the winds blow from southwest to northeast direction in Arabian Sea and Bay of Bengal.
- They bring pre monsoon showers to the west coast during the month of May. There are few thunder showers called **"Mango Showers"** which helps in quick ripening of mangoes along the coast of Kerala and Karnataka.
- **"Norwesters" or "Kalbaisakhis"** are the local severe storms or violent thunderstorms associated with strong winds and rain lasting for short durations.
- It occurs over the eastern and north eastern parts over Bihar, West Bengal and Assam during April and May. They approach the stations from the northwesterly direction.



Southwest monsoon or Rainy Season

- The southwest monsoon is the most significant feature of the Indian climate.
- The onset of the southwest monsoon takes place normally over the southern tip of the country by the first week of June, advances along the **Konkan coast in early June and covers the whole country by 15th July**.
- The monsoon is influenced by global phenomenon like **ElNino**. Prior to the onset of the southwest monsoon, the temperature in north India reaches upto **46°C**.
- The sudden approach of monsoon wind over south India with lightning and thunder is termed as the '**break**' or '**burst of monsoon**'.
- It lowers the temperature of India to a large extent. The monsoon wind strikes against the southern tip of Indian land mass and gets divided into two branches.
- One branch starts from Arabian sea and the other from Bay of Bengal. The Arabian sea branch of southwest monsoon gives heavy rainfall to the west coast of India as it is located in the windward side of the Western Ghats.
- The other part which advances towards north is obstructed by Himalayan Mountains and results in heavy rainfall in north.
- As Aravalli Mountain is located parallel to the wind direction, Rajasthan and western part do not get much rainfall from this branch.
- The wind from Bay of Bengal branch moves towards northeast India and Myanmar. This wind is trapped by a chain of mountains namely Garo, Khasi and Jaintia are mainly responsible for the heaviest rainfall caused at Mawsynram located in Meghalaya.

- Later on, this wind travel towards west which results in decrease in rainfall from east to west.
- Over all about **75% of Indian rainfall** is received from this monsoon. Tamil nadu which is located in the leeward side receives only a meagre rainfall.

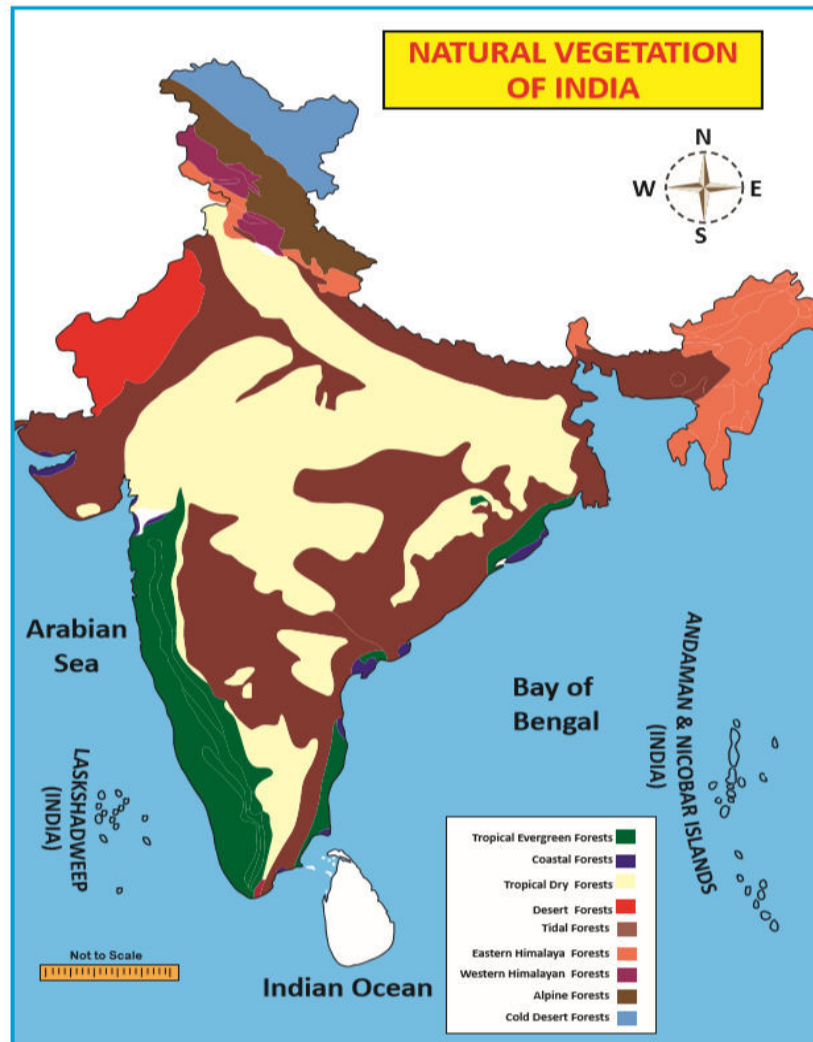
Post monsoon or Retreating or Northeast monsoon season

- The southwest monsoon begins to retreat from north India by the end of September due to the southward shifting pressure belts.
- The southwest monsoon wind returns from Indian landmass and blows towards Bay of Bengal.
- The **coriolis force** deflects this wind and makes it to blow from northeast. Hence, it is known as Northeast monsoon or Post-monsoon season.
- The season is associated with the establishment of the north-easterly wind system over the Indian subcontinent.
- **Andhra Pradesh, Tamil nadu, Kerala and south interior Karnataka** receive good amount of rainfall accounted for **35%** of their annual total.
- Many parts of Tamil nadu and some parts of Andhra Pradesh and Karnataka receive rainfall during this season due to the storms forming in the Bay of Bengal.
- Large scale losses to life and property occur due to heavy rainfall, strong winds and storm surge in the coastal regions.
- The day time temperatures start falling sharply all over the country. The mean temperature over northwestern parts of the country shows a decline from about **38°C in October to 28°C in November**.

Distribution of rainfall

- The average annual rainfall of India is **118 cm**. However, spatial distribution of rainfall in the country is highly uneven.
- About **11% area receives over 200 cm of annual rainfall**, **21% area receives 125 to 200 cm**, **37% area receives 75 to 125 cm**, **24% area gets 35 to 75 cm** and **7% area gets less than 35 cm**.
- The Western coast, Assam, South Meghalaya, Tripura, Nagaland and Arunachal Pradesh are the heavy rainfall areas which get more than **200 cm rainfall**.
- The whole of Rajasthan, Punjab, Haryana, Western and Southwestern parts of Uttar Pradesh, Western Madhya Pradesh, the entire Deccan Trap or Plateau region east of Western Ghats except for a narrow strip along Tamil nadu coast receive a **low rainfall of less than 100 cm**.
- The rest of the areas receive a rainfall ranging between **100 and 200 cm**.

Natural Vegetation



- Natural vegetation refers to a plant community unaffected by man either directly or indirectly. It has its existence in certain natural environment.
- Natural vegetation includes all plant life forms such as **trees, bushes, herbs and forbs etc**, that grow naturally in an area and have been left undisturbed by humans for a long time.
- Climate, soil and landform characteristics are the important environmental controls of natural vegetation.
- On the basis of the above factors the natural vegetation of India can be divided into the following types.

Tropical Evergreen Forest

- These forests are found in areas with 200 cm or more annual rainfall.
- The annual temperature is about **more than 22°C** and the average annual humidity exceeds **70 percent** in this region.
- Western Ghats in Maharashtra, Karnataka, Kerala, Andaman-Nicobar Islands, Assam, West Bengal, Nagaland, Tripura, Mizoram, Manipur and Meghalaya states have this type of forests.

- The most important trees are rubber, mahogany, ebony, rosewood, coconut, bamboo, cinchona, candel, palm, iron wood and cedar. These have not been fully exploited due to lack of transport facilities.

Tropical Deciduous Forest

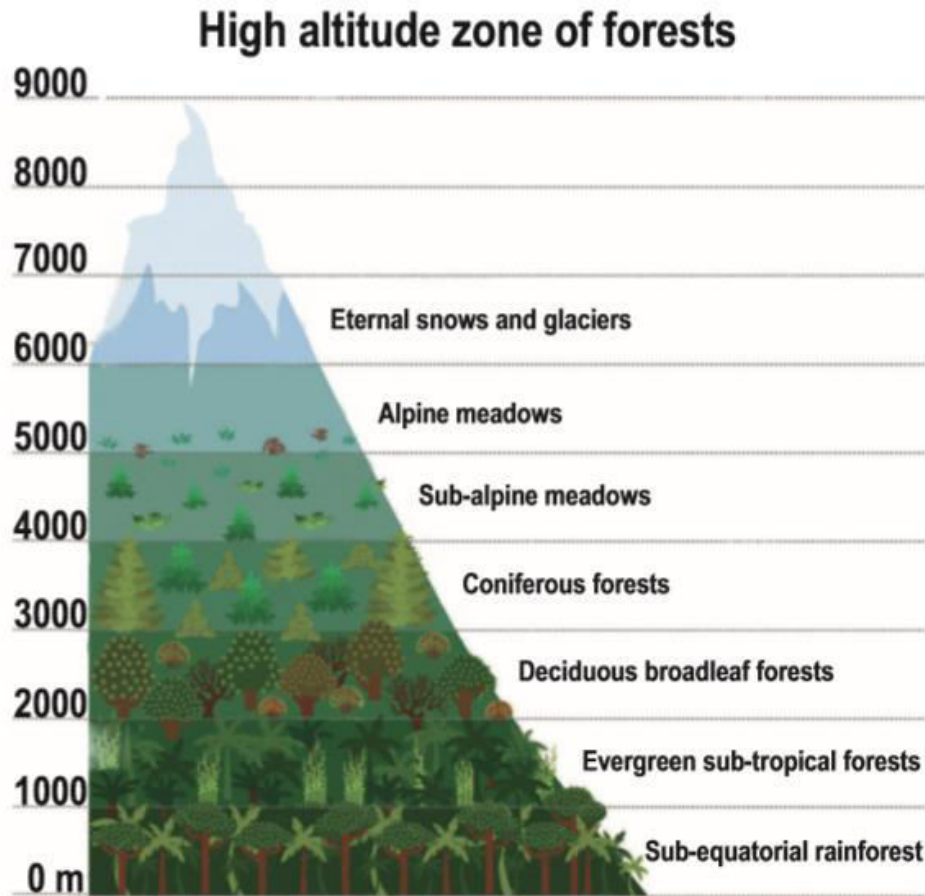
- These are found in the areas with **100 to 200cm.** annual rainfall. These are called 'Monsoon Forests'.
- The mean annual temperature of this region is about 27°C and the average annual relative humidity is **60 to 70 percent.**
- The trees of these forests drop their leaves during the spring and early summer. (**Sub Himalayan - Region from Punjab to Assam, Great Plains- Punjab, Haryana, Uttar Pradesh, Bihar, West Bengal, Central India - Jharkhand, Madhya Pradesh, Chattisgarh, South India - Maharashtra, Karnataka, Telangana, Andhra Pradesh, Tamilnadu and Kerala states are notable for this type of natural vegetation.**)
- Teak and sal are the most important trees. Sandalwood, rosewood, kusum, mahua, palas, haldu, amla, padauk, bamboo and tendu are the other trees of economic importance. These forests also provide fragrant oil, varnish, sandal oil and perfumes.

Tropical Dry Forest

- These are found in the areas with **50 to 100 cm.** annual rainfall.
- They represent a transitional type of forests. These are found in east Rajasthan, Haryana, Punjab, Western Uttar Pradesh, Madhya Pradesh, Eastern Maharashtra, Telangana, West Karnataka and East Tamilnadu.
- The important species are mahua, banyan, amaltas, palas, haldu, kikar, bamboo, babool, khair etc., Desert and Semi-desert Vegetation: These are also called as '**Tropical thorn forests**'.
- These are found in the areas having annual rainfall of less than 50 cm. They have low humidity and high temperature.
- These forests are found in north-west India which includes west Rajasthan, south-west Haryana, north Gujarat and south-west Punjab.
- They are also found in the very dry parts of the **Deccan plateau in Karnataka, Maharashtra and Andhra Pradesh.** Babul, kikar and wild palms are common trees found here.

Mountain or Montane Forest

- These forests are classified on the basis of altitude and amount of rainfall.
- Accordingly two different types of forests namely Eastern Himalayas Forests and Western Himalayas Forests.

**Eastern Himalayan Forest:**

- These are found on the slopes of the mountains in north-east states. These forests receive **rainfall of more than 200 cm**.
- The **vegetation is of evergreen** type.
- The Altitude between 1200-2400 m found in this type of forest sal, oak, laurel, amura, chestnut, cinnamon are the main trees from 1200 to 2400 m altitude oak, birch, silver, fir, pine, spruce and juniper are the major trees from 2400 to 3600 m height.

Western Himalayan Forest:

- The rainfall of this region is moderate. These forests are found in the states of **Jammu and Kashmir, Himachal Pradesh and Uttarakhand**.
- Upto **900 m** altitude semi desert vegetation is found and it is known for bushes and small trees.
- In altitude from **900 to 1800 m**, chir tree is the most common tree. The other important trees of this region are sal, semal, dhak, jamun and jujube. (height from 1800 to 3000 m is covered with semi temperate coniferous forests.)
- Chir, deodar, blue pine, poplar, birch and elder are the main trees of this region.

Alpine Forest

- It occurs all along the Himalayas with above **2400 m altitude**. These are purely having coniferous trees.
- Oak, silver fir, pine and juniper are the main trees of these forests. The eastern parts of Himalayas has large extent of these forests.

Tidal Forest

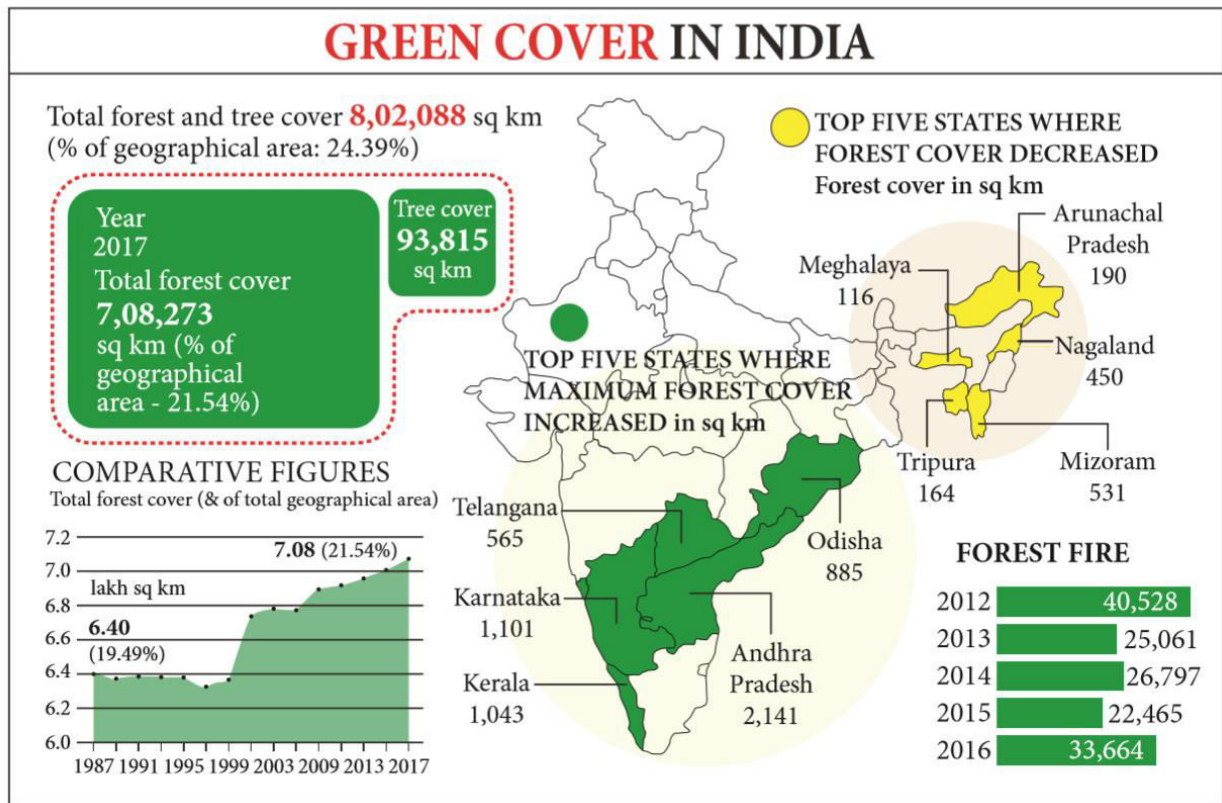
- These forests occur in and around the deltas, estuaries and creeks prone to tidal influences and as such are also known as delta or swamp forests. The delta of the **Ganga- Brahmaputra has the largest tidal forest**.
- The deltas of Mahanadi, Godavari and Krishna rivers are also known for tidal forests. These are also known as mangrove forest.

Coastal Forest

- These are littoral forests. Generally, coastal areas have these types of forests. Casurina, palm and coconut are the dominant trees.
- Both the eastern and western coasts have this type of forests. The coasts of Kerala and Goa are known for this type.

Riverine Forest

- These forests are found along the rivers on Khadar areas. These are known for tamarisk and tamarind trees.
- The rivers of Great Plains are more prominent for this type of natural vegetation.



Wildlife



- The term 'Wildlife' includes animals of any habitat in nature. Wild animals are non-domesticated animals and include both **vertebrates (fish, amphibians, reptiles, birds and mammals)** and **invertebrates (bees, butterflies, moths etc.)**.
- India has a rich and diversified wildlife. The Indian fauna consists of about **81,251 species of animals** out of the world's total of about 1.5 million species.
- The faunal diversity of the country consists of **about 6500 invertebrates, 5000 molluscs, 2546 fishes, 1228 birds, 458 mammals, 446 reptiles, 204 amphibians, 4 panthers** and about 60,000 species of insects.

- Our country is home to tigers, lions, leopards, snow leopards, pythons, wolves, foxes, bears, crocodiles, rhinoceroses, camels, wild dogs, monkeys, snakes, antelope species, deer species, varieties of bison and the mighty Asian elephant.
- Hunting, poaching, deforestation and other anthropogenic interferences in the natural habitats have caused extinction of some species and many are facing the danger of extinction.
- In view of this and the role of wild life in maintaining ecological balance, conservation and management of biodiversity of India is necessary at present situation.
- The **Indian Board for Wildlife (IBWL) was constituted in 1952** to suggest means of protection, conservation and management of wildlife to the government.
- The Government of India enacted **Wildlife (Protection) Act in 1972** with the objective of effectively protecting the wild life of the country and to control poaching, smuggling and illegal trade in wildlife and its diversities.
- United Nations Convention on **Biological Diversity (CBD) in 1992** recognizes the sovereign rights of states to use their own Biological Resources.
- To preserve the country's rich and diverse wildlife a network of **102 National Parks and about 515 Wildlife Sanctuaries** across the country have been created.

Biosphere Reserves



- Biosphere reserves are protected areas of land coastal environments wherein people are an integral component of the system.
- The Indian government has established **18 Biosphere Reserves** in India which protect larger areas of natural habitat and often include one or more National Parks preserves along with buffer zones that are open to some economic uses.
- **Eleven of the eighteen biosphere reserves** (Gulf of Mannar, Nandadevi, the Nilgiris, Nokrek, Pachmarhi, Simlipal, Sundarbans, Agasthiyamalai, Great Nicobar, Kanjanjunga and Amarkantak) of India fall under the list of Man and Biosphere programme of UNESCO.

S. No.	Biosphere Reserves	State
1	Achanakmar-Amarkantak	Madhya Pradesh, Chattisgarh
2	Agasthyamalai	Kerala
3	Dibru Saikhowa	Assam
4	Dihang Dibang	Arunachal Pradesh
5	Great Nicobar	Andaman and Nicobar Islands
6	Gulf of Mannar	Tamil nadu
7	Kachch	Gujarat
8	Kanchenjunga	Sikkim
9	Manas	Assam
10	Nanda Devi	Uttarakhand
11	The Nilgiris	Tamil nadu
12	Nokrek	Meghalaya
13	Pachmarhi	Madhya Pradesh
14	Simlipal	Odisha
15	Sundarbans	West Bengal
16	Cold desert	Himachal Pradesh
17	Sesahachalam hills	Andhra Pradesh
18	Panna	Madhya Pradesh

More to Know:

1. Project Tiger was launched in **April 1973** with the aim to conserve tiger population in specifically constituted "Tiger Reserves" in India. This project is benefited tremendously, with an increase of over 60% - the **1979 consensus put the population at 3,015** - while other equally disturbed species like the barasingha (swamp deer), rhino and elephants also fought back from the brink of oblivion.
2. The Nilgiri Tahr is facing a major threat in the Western Ghats. Continuous poaching activities and Eucalyptus cultivation hampering its habitat, the Nilgiri Tahr population is continuously decreasing.
3. The Black Buck is the state animal of Andhra Pradesh, Haryana and Punjab.

4. Mawsynram, the place which receives **highest rainfall (1141 cm)** in the world. It is located in Meghalaya.
5. Atacama desert is the driest place on the earth.
6. Weather refers to the state of atmosphere of a place at a given point of time.
7. Climate is the accumulation of daily and seasonal weather events of a given location over a period of 30-35 years.
8. Equable climate is also called as the **British climate**, which is neither too hot nor too cold.

10th Social Science Lesson 4 Notes in English

4. Components of Agriculture

Introduction

- Soil is one of the most important natural resources. India's varied natural environments resulted in a great variety of **soils compared to any other country** of similar size in the world.
- The rich, deep and fertile soils support high density of population through agricultural prosperity.

Soils

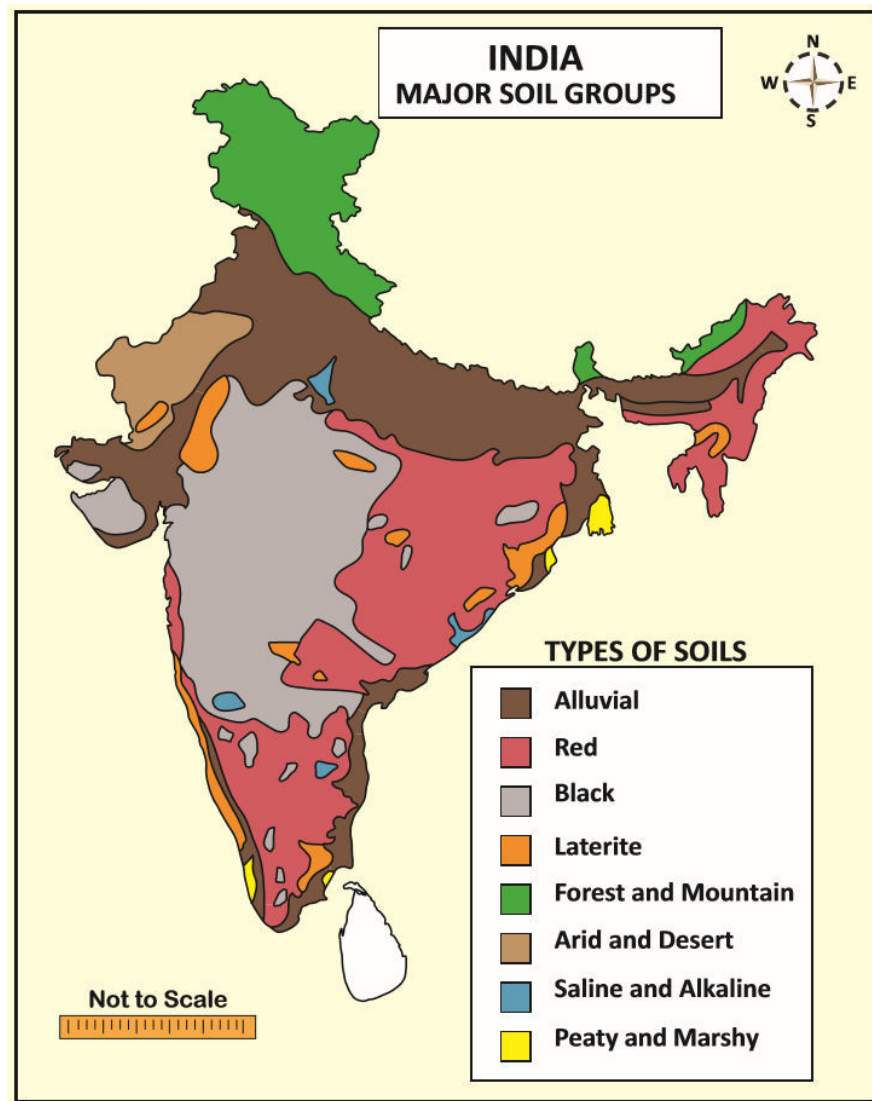
- Soil is the uppermost layer of the land surface, usually composed of **minerals, organic matter, living organisms, air and water**.
- Grains in the soil are of three categories namely, **clay, silt, and sand**. Soils are generally formed by the weathering of rocks under different conditions.
- Some soils are formed by the deposition of agents of denudation. Soils can vary greatly from one region to the other.

Types of Soils

The **Indian Council of Agriculture Research (ICAR)** set up in 1953 divides the soils of India into the following **eight major groups**.

Soil Type	Characteristics	Distribution	Crops growing
Alluvial soil	Khadar – light coloured, more siliceous. Bhangar – the older alluvium composed of lime nodules and has clayey composition. It is dark in colour. Formation - sediments deposited by streams and rivers when they slowly loose Chemical properties - rich in potash, phosphoric acid, lime and carbon compounds but poor in nitrogen Nature –Sandy-loam-silt-clay profile shows no marked differentiation	Ganga and Brahmaputra river valleys; Plains of Uttar Pradesh, Uttaranchal, Punjab, Haryana, West Bengal and Bihar	Rice, Wheat, Sugarcane and Oilseeds
Black soils	Formation - Derived from basalts of Deccan trap. Colour - black colour, due to presence of titanium, iron. Chemical properties - Consist of calcium and magnesium arbonates, high quantities of iron, aluminium, lime and magnesia. Rich in potash lime, Aluminium calcium and magnesium poor in Nitrogen Phosphoric acid and humus Nature - Sticky when wet High degree of moisture retentivity	Maharashtra and Malwa plateaus, Kathiawar peninsula, Telangana and Rayalaseema region of Andhra Pradesh and northern part of Karnataka	Cotton, Millets, Tobacco and Sugarcane
Red soils	Formation - decomposition of ancient crystalline rocks like granites and gneisses and from rock type Chemical properties - rich in minerals such as iron and magnesium. Deficient in nitrogen, humus, phosphoric acid and lime. Nature - Light texture, porous friable presence of limited soluble salts Clay fraction of the red soils generally consists of Kaolinitic minerals.	Eastern parts of Deccan plateau, southern states of Kerala, Tamil Nadu, Karnataka and Chota Nagpur plateau (Jharkhand)	Wheat, Rice, Cotton, Sugarcane and Pulses
Laterite soils	Formation - formed in the regions where alternate wet and hot dry conditions prevail. It is formed by the process of leaching Chemical properties - Composed mainly of hydrated oxides of iron and aluminium, Nature - More acidic on higher areas poor in high level, cannot retain moisture while plains they consist of heavy loam and clay and easily retain moisture	Assam hills, hill summits of Kerala and Karnataka and eastern Ghats and region of Odisha	Coffee, Rubber, Cashew nut and Tapioca

Soil Type	Characteristics	Distribution	Crops growing
Forest and mountain soils	Differ from region to region depending on climate. Formation - due to mechanical weathering caused by snow, rain, temperature variation Chemical properties - are deficient in potash, Phosphorus and lime. Nature - light, sandy, thin and found with the pieces of rock. Their character changes with the parent rocks. Very rich in humus. slow decomposition makes it acidic	Coniferous forest belts of Jammu and Kashmir, Himachal Pradesh, Uttarakhand and Sikkim. Eastern and Western Ghats	Coffee, tea, rice, maize, potato, barley, tropical fruits and various types of spices
Arid and desert soils	Formation - Due to prevalence of the dry climate, high temperature and accelerated evaporation, the soil is dry, it also lacks humus content due to the absence of vegetative cover Chemical properties - Contain high percentages of soluble salts, alkaline with varying degree of calcium carbonate and are poor in organic matter; rich enough in phosphate though poor in nitrogen Nature - light in colour, low humus, friable structure, low in moisture	Rajasthan, Northern Gujarat and southern Punjab	millets, barley, cotton, maize and pulses (with irrigation)
Saline and alkaline soils	Formation - formed due to ill drainage which causes water logging, injurious salts are transferred from subsurface to the top soil by the capillary action, it causes the salinisation of soils Chemical properties - liberate sodium, magnesium and calcium salts and sulphurous acid Nature - Consists of un decomposed rock and mineral fragments which on weathering	Andhra Pradesh and Karnataka. In the drier parts of Bihar, Uttar Pradesh, Haryana, Punjab, Rajasthan and Maharashtra	
Peaty and marshy soils	Formation - formed in humid regions from the organic matter. It is found in the areas of heavy rainfall and high humidity Peaty soils are black, heavy and highly acidic. Chemical properties - deficient in potash and phosphate. Contain considerable amount of soluble salts and 10-40 per cent of organic matter; and high proportion of vegetable matter. Nature - Contain considerable amount of Soluble salts and 10-40 per cent of organic matter; and high proportion of vegetable matter.	Kottayam and Alappuzha districts of Kerala; and coastal areas of Odisha and Tamil Nadu, Sundarbans of West Bengal, in Bihar and Almora district of Uttarakhand	Paddy, jute



Soil degradation

- Soil degradation is an acute problem in India. According to a 2015 report of the Indian institute of remote sensing (IIRS).
- The estimated the amount of soil .erosion that occurred in India was **147 million** hectares. The main problems of the Indian soils are

- Soil erosion (sheet erosion, Rill erosion, Gully erosion, Ravine and Badland)
- Degradation of Soil,
- Water-logging,
- Saline and Alkaline, and
- Salt Flats, types of soils are different erosion.

Methods of Conservation and Management of Soil

1. Afforestation
2. Constructing Dams and Barrages
3. Prevention of Overgrazing
4. Improved methods of Agricultural practices
 - Contour method
 - Rotation of crops
 - Contour bunding
 - Strip cropping
 - Planting of shelter beltsAdopting the techniques of sustainable agriculture are different conservation methods for better soil management.

Irrigation

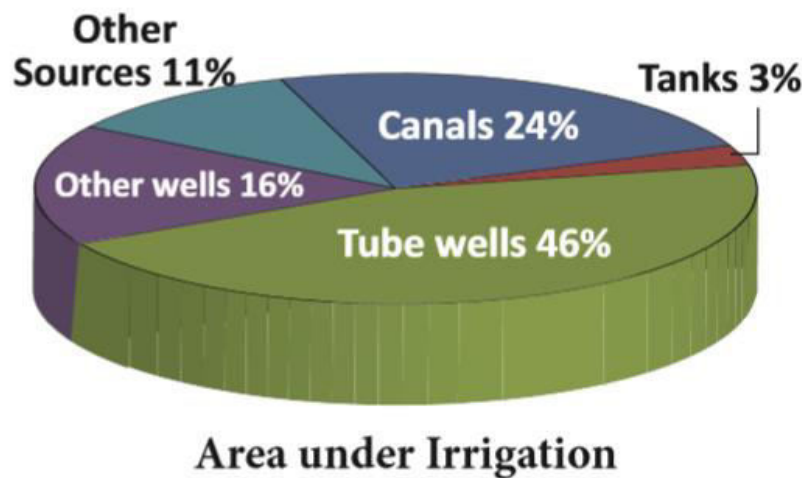
- Watering of agricultural plants through artificial means is called irrigation.
- Being a hot country with seasonal and irregular rainfall, it always needs irrigation to carry out agricultural activities during dry period.
- Beside erratic rainfall, prevalence of **high temperature, cultivation of annual crops and hydrophytes, commercial farming and porous soil** make irrigation an essential one for the agriculture of our country.

Sources of Irrigation

In India, different sources of irrigation are used depending upon the **topography, soils, rainfall, availability of surface or groundwater, nature of river (whether perennial or non-perennial), requirements of crops** etc. The main sources of irrigation used in different parts of the country are

1. Canal irrigation
2. Well irrigation and
3. Tank irrigation

Canal Irrigation



It is the second most important source of irrigation in our country. Percentage of area under canal irrigation in our country is **24%** (source: Statistical year book 2017 during 2013-2014). Canals are the effective source of irrigation in areas of low level relief, deep, fertile soils, perennial source of water and extensive command area. The canals are of two types:

1. Inundation Canals:

- In this, **water is taken out directly from the rivers without making any kind of barrage or dam.**
- Such canals are useful for the diversion of flood water from the rivers and remain operational during rainy season.

2. Perennial Canals:

- These are developed from perennial rivers by constructing barrage to regulate the flow of water.
- In our country, most of the canals fall under this category. These canals are useful for irrigation.
- In India the total area under canal irrigation is about **15.8 million hectares in 2014.**
- About 60 percent of the canal irrigated area falls in the northern plains of India, particularly in Uttar Pradesh, Punjab, Haryana, Rajasthan, and Bihar.
- In south and central India, Andhra Pradesh, Maharashtra, Karnataka, Madhya Pradesh, Chattisgarh, Odisha, and Tamil Nadu are the important states where canal irrigation is found.

Well Irrigation

Sl. No.	Name of the State	Area in %
1.	Uttar Pradesh	26.6
2.	Madhya Pradesh	14.6
3.	Rajasthan	13.1
4.	Gujarat	7.8
5.	Punjab	7.1

- A well is a hole or trough, usually vertical, excavated in the earth for bringing groundwater to the surface.
- Well irrigation is the most important source of irrigation as it contributes about **62 percent of net irrigated area in India**.
- It is a cheap, dependable, and popular source of irrigation in the country. Well irrigation is unavoidable in the region of low rainfall and becomes an essential one where the canals and tank irrigation are not available.
- Wells are of two types: i) **Open wells** and ii) **Tube wells**

1. Open Wells:

This type of irrigation is widely practiced in the areas where groundwater is sufficiently available. The areas are in Ganga Plains, the deltaic region of **Mahanadi, Godavari, Krishna, Cauvery and parts of Narmada and Tapti valleys**.

2. Tube Wells:

Tube wells are developed in the areas of low water table, sufficient power supply and soft subsurface geological units. Tube wells are predominant in the states of **Gujarat, Maharashtra, Punjab, Madhya Pradesh and Tamil Nadu**

Tank Irrigation

Sl. No.	Name of the State	Area in Lakh Hectares (2013-14)
1.	Tamil Nadu	3.78
2.	Andhra Pradesh	3.40
3.	Madhya Pradesh	2.64
4.	Telangana	2.30
5.	Karnataka	1.54
Source: Irrigation – Statistical Year Book India – 2017		

- A tank is a natural or man-made hollow on the surface developed by constructing a small bund around it across a stream.
- It is used to collect and store water for irrigation and other purposes. **Irrigation by tanks is a very old system in India.** It also includes irrigation from lakes and ponds.
- The tank irrigation is popular in the peninsular India due to the following reasons:
 1. The undulating relief and hard rocks make difficult to dig canals and wells.
 2. Natural depressions serve as reservoirs.
 3. Absence of perennial rivers.
 4. Impermeable rock structure which do not permit percolation.
 5. The scattered nature of population and agricultural fields

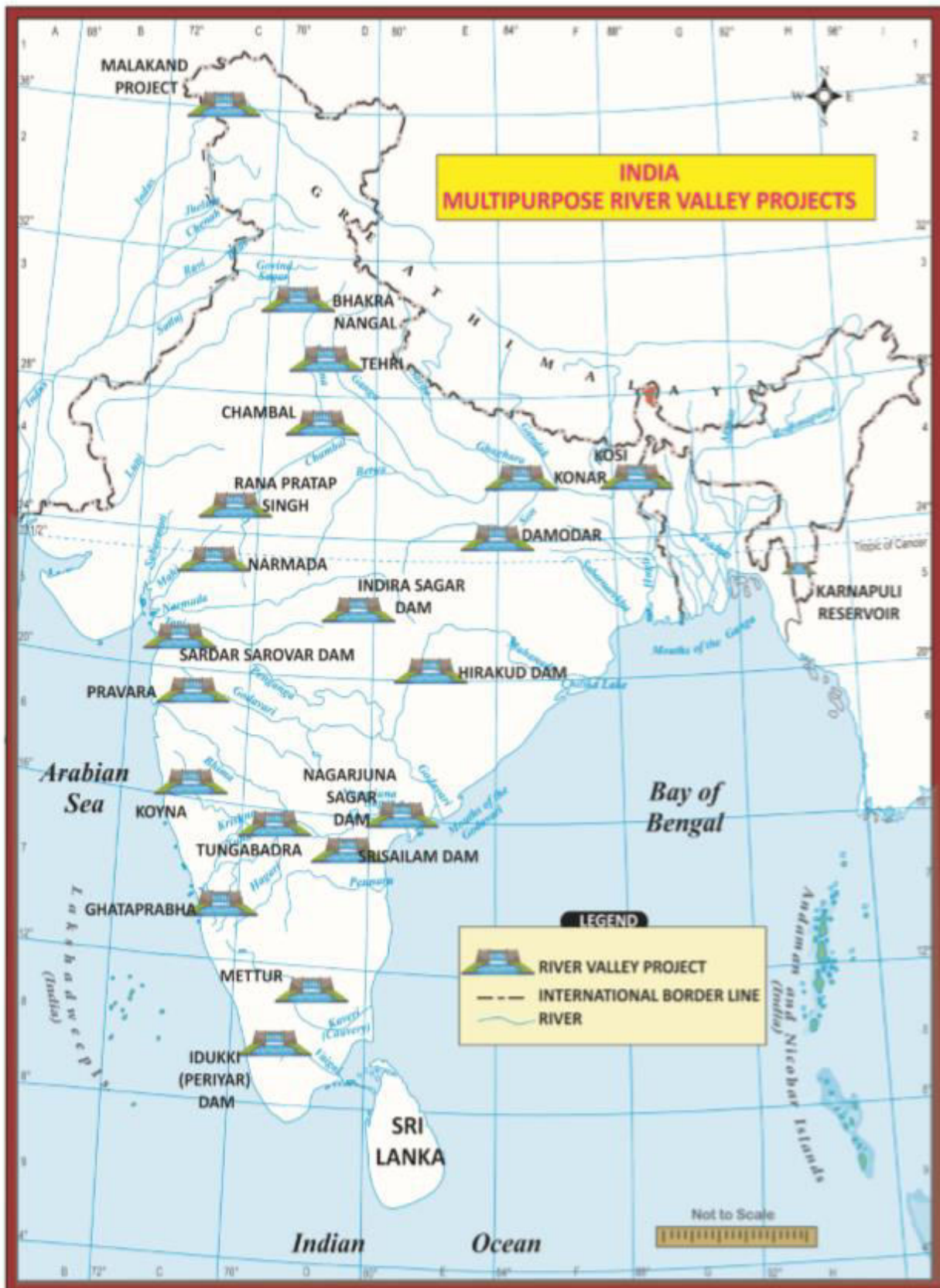
Modern irrigation methods

- There are many ways in Modern Irrigation among them mostly practiced and following in India are using **drips, sprinklers and poly houses central pivot irrigation Drip System** is used to watering like drops at near the roots of plant.
- It will cover a tiny area at plant, but suitable for big trees and horticulture plants too which used to grow bigger **Rain Gun**: Rain gun used to spread water like rain as in name and used to serve for crops which used to grow **upto 4 feet** or high also but we have to adjust sprinklers height as per crop size. typical usage of Rain guns are **in sugarcane, maize crops.**
- **Center-pivot irrigation** (sometimes called central pivot irrigation), also called waterwheel and circle irrigation, is a method of crop irrigation in which equipment rotates around a pivot and crops are watered with sprinklers

Multipurpose River Valley Projects

Name of projects	River	Benefit States	Irrigation (sq km)	Hydropower (Megawatts)
Damodar Valley project	Damodar	Jharkhand, West Bengal	5,150	.260
Bhakra-Nangal Project (highest gravity dam in the world)	Sutlej	Punjab, Haryana and Rajasthan	52,609	1,500
Hirakud Project (longest dam in the world)	Mahanadi	Orissa	1,41,600	347.5
Kosi Project	Kosi '(Sorrow of Bihar.)'	Bihar & Nepal	8,750	19.2
Tungabhadra Project	Tungabhadra	Andhra Pradesh and Karnataka	1,968	35.
Tehri Dam:	Bhagirathi	Uttarakhand	6000	1,000 MW
Chambal Valley Project	Chambal	Rajasthan and Madhya Pradesh	-	-
Nagarjuna Sagar Project	Krishna	Andhra Pradesh		
Sardar Sarover Project	Narmada	Madhya Pradesh, Maharashtra, Rajasthan	18,450	250
Indira Gandhi Canal Project	Satlaj	Rajasthan, Punjab and Haryana	-	-
Mettur Dam	Kaveri	Tamil Nadu	-	40

- It is a scientific management of water resources in our country. Construction of dam across rivers is aimed at many purposes.
- Hence, it is termed as multi-purpose river valley projects. The various purposes of a dam serves are irrigation, **hydro power generation, water supply for drinking and industrial purpose, controlling floods, development of fisheries, navigation** etc.
- Generally, majority of multipurpose projects are combination of irrigation and hydro-power which are the major aims of the projects.



- Agriculture is the process of producing food for people, fodder for cattle, fiber and many other desired products by the cultivation of certain plants and the raising of domesticated animals (livestock).
- Though India is industrially a fast developing nation, still the agriculture in India employs more than **50 percent of the population of the country and accounts for about 25 percent of the national income.**

Determinants of Agriculture

Agriculture in India is determined by a set of factors. Some of the important factors:

1. Physical factors: relief, climate and soil.
2. Institutional factors: Size of farm holdings, land tenure, and land reforms.
3. Infrastructural factors: Irrigation, power, transport, credit, market, insurance and storage facilities.
4. Technological factors: High yielding varieties of seeds, chemical fertilisers, insecticides and machinery.

Types of Farming

Owing to variations in the physical environment and culture, a variety of farming practices and cultivation systems have evolved in different parts of India.

Subsistence Farming

- A considerable proportion of farmers in the country practice subsistence farming. In this, **agricultural land holding is small.**
- As the farmers are poor, they can't apply the modern inputs which cost more.
- They grow crops with the help of family members and consumes almost the entire farm produce with little surplus to sell in the market.
- Preference is given to food crops. In addition to the **food crops, sugarcane, oilseeds, cotton, jute and tobacco** are also cultivated.
- Traditional farming method results in low productivity. In Punjab, some parts of Rajasthan, Uttar Pradesh and Madhya Pradesh subsistence farming is practiced.

Shifting Agriculture

Different names of shifting agriculture in different regions in India	
Name	Place
Jhum	Assam
Poonam	Kerala
Podu	Andhra Pradesh, Odisha
Beewar, Mashan, Penda, Beera	Various Parts of Madhya Pradesh

- This type of agriculture is performed by **tribal people in a piece of forest land after clearing the trees through felling and burning the trunks and branches.**
- Once the land is cleared, crops are grown for two to three years and the land will get abandoned as the fertility of the soil decreases.
- The farmers then move to new areas and the process will be repeated.
- They cultivate some grains and vegetable crops using the manual labour. It is also called as **"Slash and burn"** cultivation.

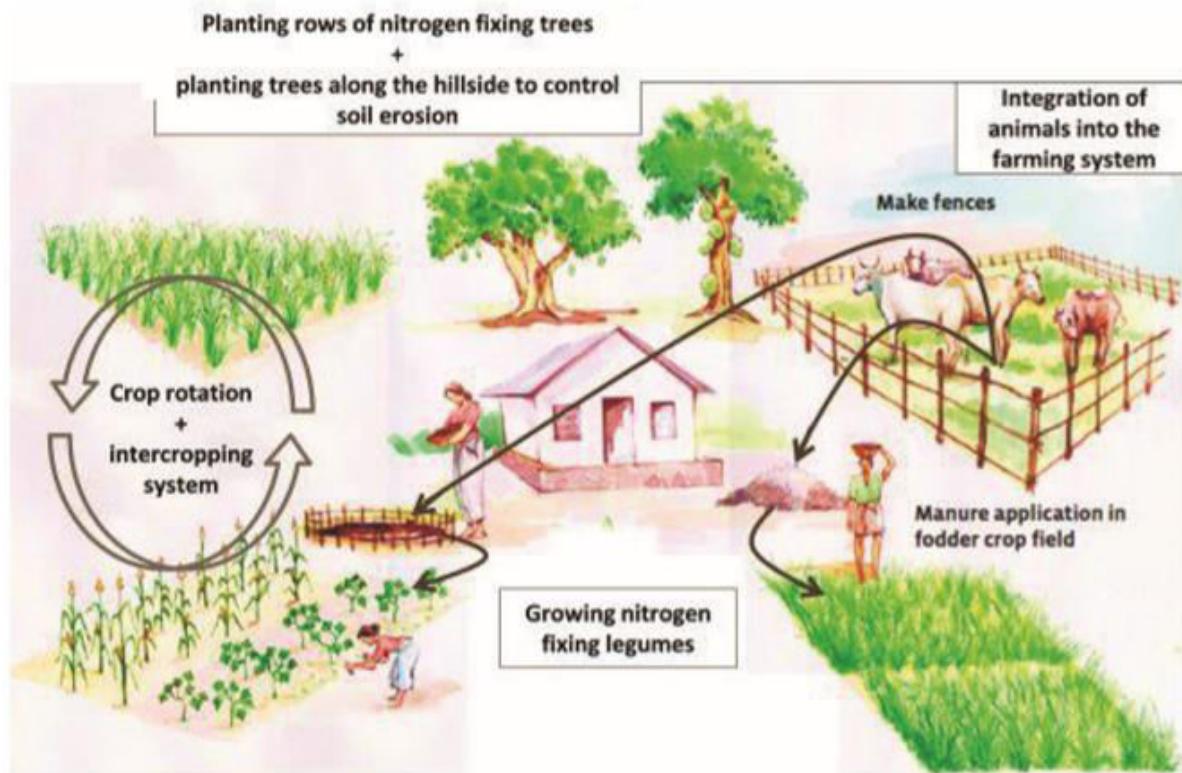
Intensive Farming

- Intensive farming is an agricultural intensification and mechanization system that aims to maximize yields from available land through various means, such as heavy use of pesticides and chemical fertilizers.
- This intensification and mechanization has also been applied to the raising of livestock with billions of **animals, such as cows, pigs and chickens, being held indoors.** They have become known as factory farms.
- Intensive farming is practiced in Punjab, parts of Rajasthan, Uttar Pradesh, and Madhya Pradesh in India.

Dry Farming

- This type of farming is practiced in arid areas where irrigation facilities are lacking. Crops cultivated in these areas can withstand dry conditions.
- The crops grown generally with the help of irrigation are also grown under **dry farming. In such circumstances, the yields are generally low.**
- Most of the areas under dry cultivation entertain only one crop per year. This is practiced in drier parts of Rajasthan, Gujarat, Madhya Pradesh etc.

Mixed Farming Agriculture



Mixed Farming Agriculture

Mixed farming is defined as a system of farm which includes **crop production, raising livestock, poultry, fisheries, bee keeping** etc. to sustain and satisfy as many needs of the farmer as possible.

Terrace Cultivation

- This type of cultivation is practiced specially in hilly areas, where lands are of sloping nature.
- The hill and mountain slopes are cut to form terraces and the land is used in the same way as in permanent agriculture.
- Since the availability of **flat land is limited**, **terraces are made to provide small patches of level land**.
- Soil erosion is also checked due to terrace formation on hill slopes.
- In our country, terrace cultivation takes place in the states of **Punjab, Meghalaya, Haryana, Uttar Pradesh, Himachal Pradesh, and Uttrakhand**.

Cropping Seasons in India		
Cropping Seasons	Major crops cultivated	
	Northern States	Southern States
Kharif Season June–September	Rice, Cotton, Bajra, Maize, Jowar, Tur	Rice, Ragi, Maize, Jowar, Groundnut
Rabi Season October–March	Wheat, Gram, Rapeseeds, Mustard, Barley	Rice, Maize, Ragi, Groundnut, Jowar
Zaid Season April–June	Vegetables, Fruits, Fodder	Rice, Vegetables, Fodder

Major Crops Cultivated in India

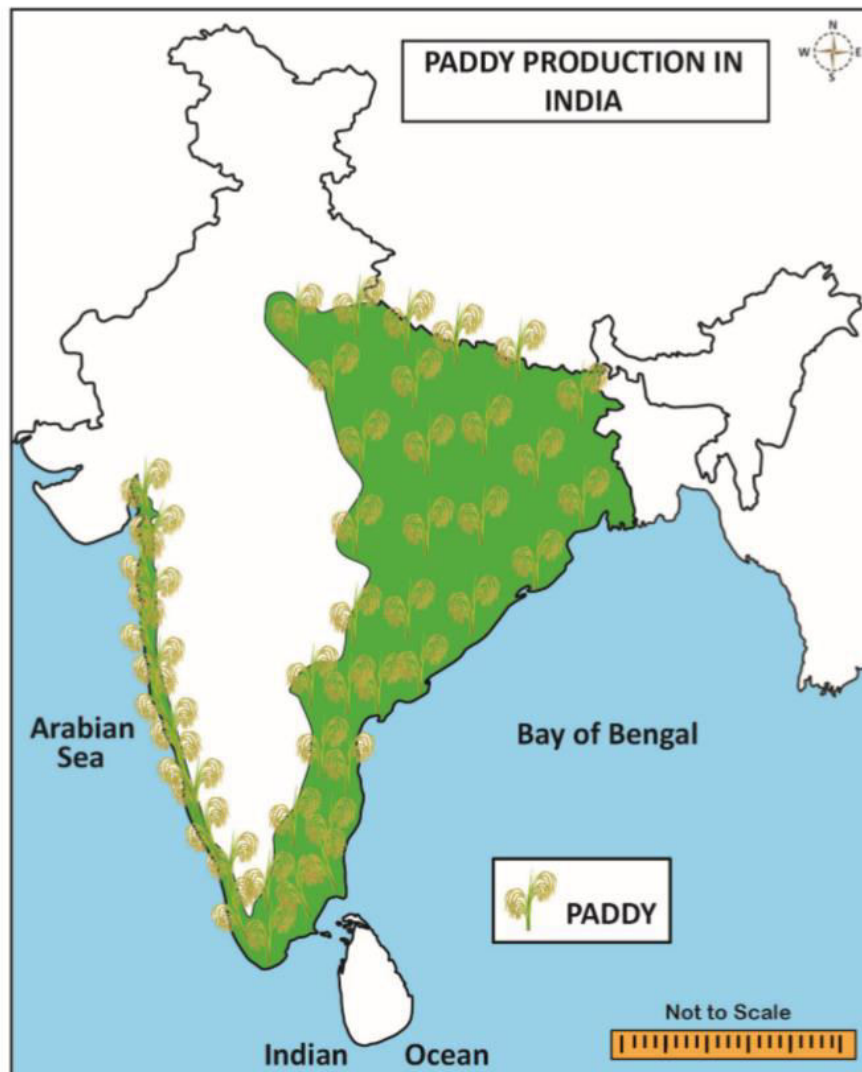
The major crops of India are divided into four major categories as follows:

1. **Food crops** (wheat, maize, rice, millets, pulses etc.).
2. **Cash crops** (sugarcane, tobacco, cotton, jute, oilseeds etc.).
3. **Plantation crops** (tea, coffee and rubber).
4. **Horticulture crops** (fruits, flowers and vegetables).

Food Crops

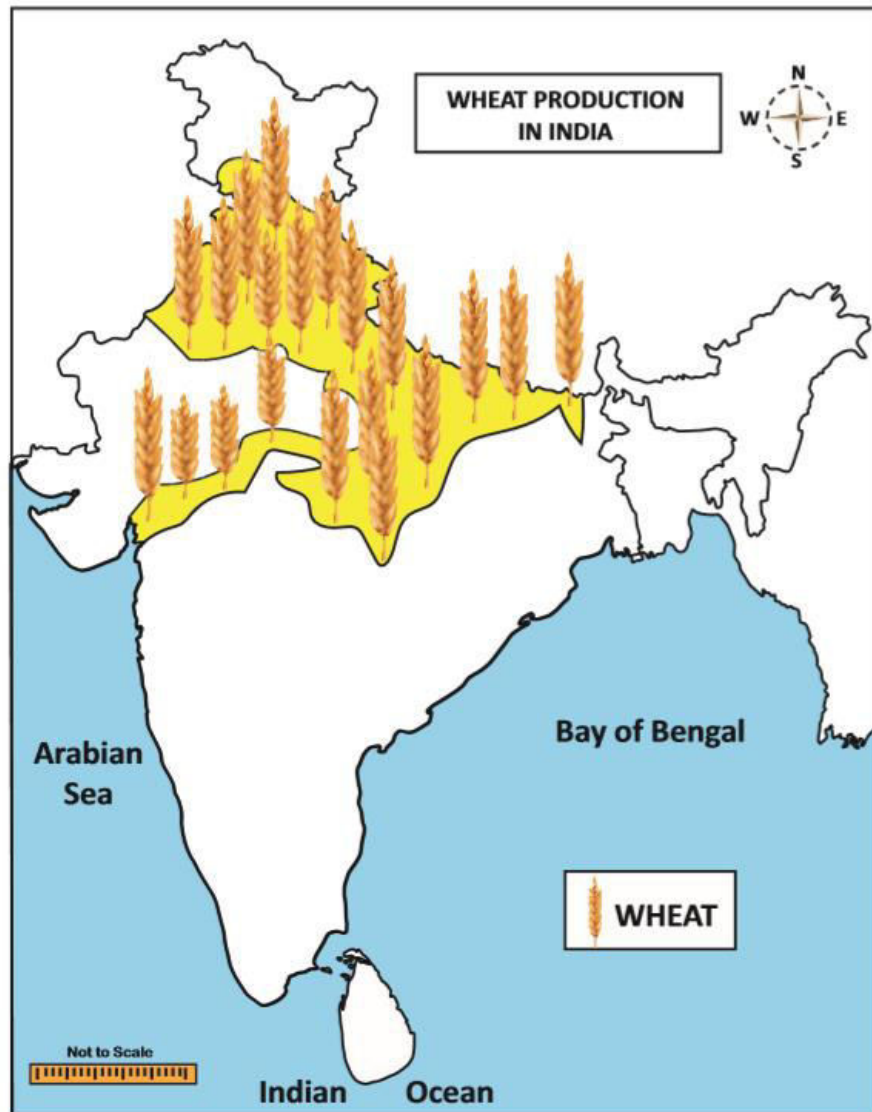
Due to its large population, Indian agriculture is largely dominated by the food crops. Food crops include cereals and pulses, amongst which **rice, wheat, jowar, bajra, maize, barley, ragi, gram and turmeric are important.**

Rice:



- Rice is an indigenous crop. India is the second largest producer of rice in the world after China. It is mainly a tropical crop, growing mainly with mean **temperatures of 24°C and annual rainfall of 150 cm.**
- Deep fertile clayey or loamy soils are suited well for rice cultivation. It also needs abundant supply of cheap labour.
- Rice in India is sown in three ways: i) **Broadcasting**, ii) **Ploughing or drilling**, and iii) **Transplanting**.
- Due to increased use of High Yielding Variety (HYV) seeds (**CR Dhan 205, AR Dhan 306, CRR 451 etc.**), many of the indigenous varieties were disappeared.
- In 2016, the first 10 leading rice producing states are West Bengal (First in India) Uttar Pradesh, Punjab, Tamil Nadu, Andhra Pradesh, Bihar, Chhattisgarh, Odisha, Assam, and Haryana

Wheat:



- Wheat is the second most important food crop of the country, after rice.
- It accounts for **22 percent of the total area** and **34 percent** of the total production of food grains in the country.
- It requires **10-15°C at the time of sowing** and **20-25°C at the time of ripening of grains**.
- Over 85% of the India's wheat production comes from 5 states namely Uttar Pradesh, Punjab, Haryana, Rajasthan and Madhya Pradesh.
- Apart from these regions, the black soil tract of the Deccan covering parts of Maharashtra and Gujarat also contribute a major wheat production.

Jowar:

- Jowar is the third important food crop of our country. **It is an indigenous plant of Africa.** The plant has a tendency to grow in adverse climatic conditions. Its grains are rich in carbohydrates, protein, minerals, and vitamins.

- Hence, it provides cheap food to the large section of the poor population. It is also used as fodder in many parts of the country.
- Jowar is essentially a crop of the Peninsular India. Maharashtra, Karnataka, and Madhya Pradesh are the leading producers of Jowar.

Bajra:

- **Bajra is an indigenous plant of Africa.** This forms the staple food for poor people. Its stalks are used as fodder for cattle and for thatching purposes.
- Bajra is a crop of dry region. Rajasthan is the largest producer of bajra followed by Uttar Pradesh, Haryana, Gujarat and Maharashtra.

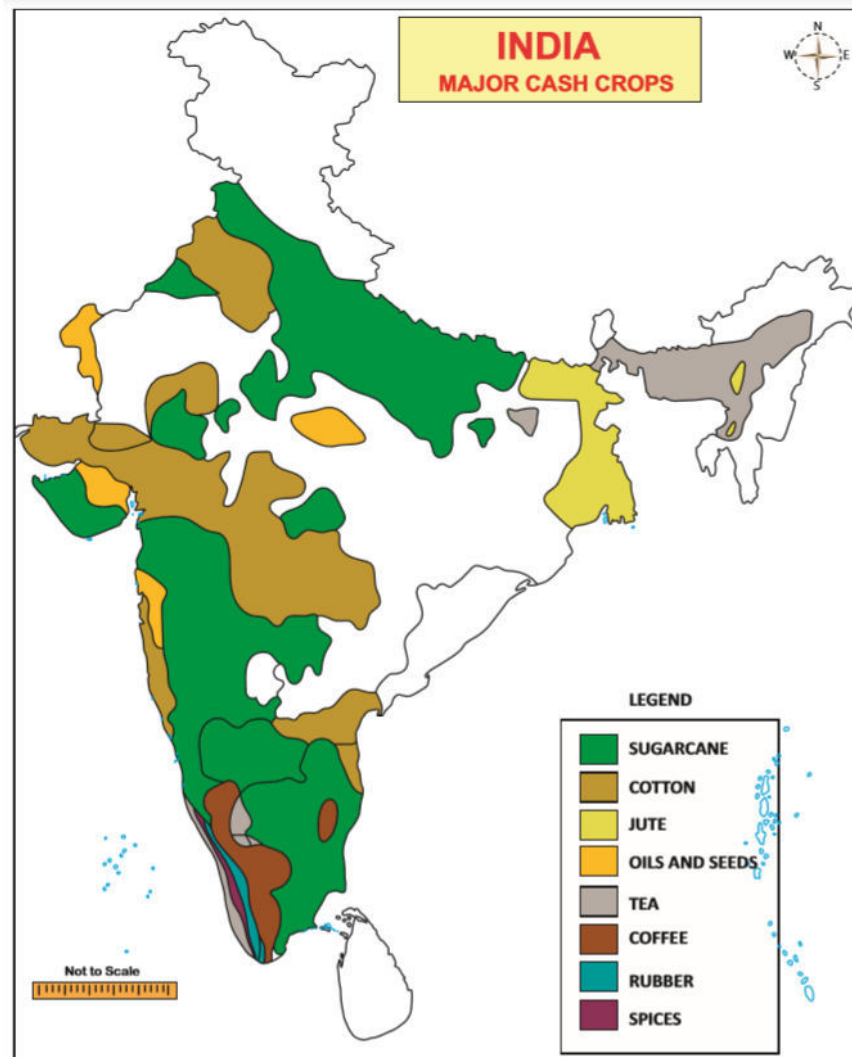
Barley:

- Barley is one of the important cereals of our country. Besides, **being poor man's diet**, it is used for making barley water, beer and whiskey.
- Rajasthan and Uttar Pradesh are the two leading producers of Barley.

Pulses:

- Pulses include a large number of crops which are mostly leguminous and rich in vegetable protein.
- They are used as human food and feeding cattle. They **fix atmospheric nitrogen in the soil** and hence are usually rotated with other crops.
- **India is the largest producer of pulses.** The major pulse growing areas are Madhya Pradesh, Uttar Pradesh, Rajasthan, Maharashtra and Andhra Pradesh.

Cash Crops



The crops which are cultivated for commercial purpose are called cash crops. These crops include sugarcane, tobacco, fibre crops (cotton, jute, and mesta) and oilseeds.

Sugarcane:

- Sugarcane is the most important cash crop of India and is the second largest producer in the world.
- This crop provides raw material for the sugar industry which is the second largest industrial category of our country.
- Besides providing **sugar, gur and khandsari**, it supplies molasses for alcohol industry and bagasse for paper industry.
- India is **ranked third in sugar production** in the world after Cuba and Brazil.
- At the state level, Uttar Pradesh is the leading producer of sugarcane followed by Maharashtra, Karnataka, Tamil Nadu and Gujarat.

Cotton:

- Cotton is the most important cash crop of India. It provides raw material to the largest industry of India. **India ranks second next to China in the production of cotton.**
- About 79% of the total area and production in the country were contributed by four states viz., Gujarat, Maharashtra, Andhra Pradesh and Punjab.

Jute:

- It is a **tropical fibre crops, grows well in the alluvial soil**. It provides raw material for Jute industry.
- It is used for manufacturing of gunny bags, carpets, hessian, ropes and strings, rugs, clothes, tarpaulins, upholstery etc.
- West Bengal is the leading state both in cultivation and production of jute. The other cultivators of jute are Bihar, Assam and Meghalaya.

Oil Seeds:

- Oil seeds, the premier source of fat in the Indian diet are derived from number of crops like groundnut, rapeseed, mustard, sesame, linseed, sunflower, castor seed, cotton seed, niger seed etc.
- These provide oil and oilcake which are used for **making lubricants, varnish, medicine, perfume, candles, soaps, manure and cattle feed.**
- Gujarat is India's largest oilseeds producing state.
- Other major producer of oilseeds are followed by Rajasthan Madhya Pradesh, Maharashtra and Andhra Pradesh.
- In **groundnut production, India is the second largest producer in the world after China.**

Plantation Crops

Plantation crops are cultivated for the purpose of exports. These are cultivated in large estates on hilly slopes. Cultivation near the coast is preferable as it facilitates exports. **Tea, coffee, rubber and spices are the major plantation crops of India.**

Tea:

- Tea is an evergreen plant that mainly grows in tropical and subtropical climates. Tea is a labour intensive and grows faster under light shade.
- Tea plants require high rainfall but its root cannot tolerate water logging. Two major varieties of tea are cultivated in India.
- They are i) **Bohea originated from China** and ii) **Assamica from India.**
- A number of hybrid varieties have been developed by mixing these two.
- India is the **second largest producer of tea after China in the world.** Assam is the larger producer of tea in India. Other states are Tamil Nadu, Kerala and West Bengal.

Coffee:

- Coffee is grown in shade and it grows effectively in the altitudes **between 1,000 and 1,500 m above mean sea level**.
- There are two main varieties of coffee.
- They are i) **Arabica (High quality-cultivated more in India)** and ii) **Robusta (Inferior quality)**.
- India is the **7th largest producer of coffee globally**. Karnataka is the leading producer of coffee in India.
- It produces 71% in India, and 2.5 % in the world (source; coffee board of India-2018).

Rubber:

- Rubber plantation were first established in **Kerala in 1902**.
- It needs hot and wet climatic conditions (**temperature above 20°C and rainfall above 300cm**).
- Most of the land under rubber belongs to small land holders. The major rubber growing areas are Tamil Nadu, Kerala, Karnataka and Andaman and Nicobar Islands.

Spices:

- **India has been world famous for its spices since ancient times**.
- These spices mostly used for flavouring or tampering cooked food and for preparing medicines, dyes etc.
- Pepper, chillies, turmeric, ginger, cardamom, clove and areca nut are the major spices cultivated in India.
- **Kerala is the leading producer of spices in India**.

Horticulture Crops

- It refers to the cultivation of **fruits, flowers and vegetables**. Fruits and vegetables are important supplement to the human diet, as they provide essential minerals, vitamins, and fibres required for maintaining health.
- India is in the **second position** in the production of fruits and vegetables. Apple is mostly produced in Himachal Pradesh, Jammu and Kashmir and Uttarakhand.
- Production of banana is concentrated in Tamil Nadu and Maharashtra. Orange is cultivated in Maharashtra, Uttarakhand, Himachal Pradesh, Jammu and Kashmir, Tamil Nadu and Karnataka.
- Grape is cultivated mainly in Uttarakhand, Himachal Pradesh, Jammu and Kashmir, Maharashtra, Andhra Pradesh, Tamil Nadu and Karnataka. India contributes about 13% of the world's production of vegetables.

Livestock

Sl. No.	Name of the Livestock	Population in Lakhs (2012)
1.	Cattle	1.91
2.	Goats	1.35
3.	Buffaloes	1.09
4.	Sheep	0.65
5.	Pigs	0.10
Source: 19th Livestock Census, Department of Animal Husbandry, Dairying & Fisheries		

- Livestock is an integral component of the farming system in India.
- The livestock sector is socially and economically very significant due to its multi-functional outputs and contribution to socio-cultural security.
- It also helps to improve food and nutritional security by providing nutrient-rich food products, generate income and employment and act as a **cushion against crop failure, provide draught power and manure inputs to the crop subsector.**
- Livestock sector contributes approximately **4 percent of national GDP (Gross Domestic Product) and 25.6 percent to agriculture GDP.**
- As per 19th Livestock Census, conducted in 2012 (Government of India, 2014), India's livestock sector is one of the largest in the world with 11.6 percent of world livestock population, which consists of cattle (37.3 percent), goats (26.4 percent), buffaloes (21.2 percent), sheep (12.7 percent) and pigs (2.0 percent) etc.

Distribution of Livestock in India in 2012

Sl. No.	Name of the State	Total No. of Livestock in Lakhs (2012)
1.	Uttar Pradesh	687.2
2.	Rajasthan	577.3
3.	Andhra Pradesh	561.0
4.	Madhya Pradesh	363.3
5.	Bihar	329.4
Source: 19th Livestock Census, Department of Animal Husbandry, Dairying & Fisheries		

Cattle

- Cattle constitute **37.3 percent of livestock** population in India. India has second largest cattle population after Brazil at World level.
- Among the states, Madhya Pradesh leads with 10.3 percent followed by Uttar Pradesh (10.2 percent) and West Bengal (8.7 percent).
- Cattle population in India belongs to different breeds. These include: **1) Milch Breed, 2) Draught breed, and 3) Mixed or General breed.**

Goats

- The goat is the poor man's cow providing milk, meat, skin and hair. It is the main source of meat for the country.
- While looking at the current status of goat population among Indian states, **Rajasthan records first with 16 percent followed by Uttar Pradesh and Bihar.**

Buffaloes

- Buffaloes are an important source of milk supply for India.
- Uttar Pradesh has the highest number of buffaloes (28.2%) followed by Rajasthan (9.6%) and Andhra Pradesh (7.9%).

Dairy, Meat and Wool Production

- According to State / UT Animal Husbandry Department, **during 2016-17, the total production of milk in our nation is 163.7 million tonnes.**

- At this time, the leading producer was Uttar Pradesh with 27.6 million tonnes (16.8 percent) followed by Rajasthan with 19.4 million tonnes (11.8 percent) and Madhya Pradesh with 13.4 million tonnes (8.2 percent) in total milk production.
- While looking at the meat, the total production is 7.4 million tonnes. Uttar Pradesh is the leading producer with 1.3 million tonnes (18.2 percent), where Maharashtra and West Bengal are estimated with 0.8 million tonnes (11.4 percent) and 0.7 million tonnes (9.6 percent) respectively in the total country's production.
- The total wool production of our nation is 43.5 million kilograms.
- The leading state in the wool production is Rajasthan with 14.3 million kilograms (32.9 percent) followed by Jammu and Kashmir with 7.3 million kilograms (16.7 percent) and Karnataka with 6.6 million kilograms (15.1 percent) in country's total wool production.

Fisheries

- Fisheries in India are a very important economic activity and a flourishing sector with varied resources and potentials.
- Fishing in India is a major industry in its coastal states, employing over **14 million people**.
- It produces about **3 percent of World's fish and occupies second place among the fish producing nations of the world after China**.
- It also helps in augmenting food supply, generating employment, raising nutritional level and earning valuable foreign exchange.
- The length of Indian coastline is **7,517 km** including the coastline of the islands, however the mainland's length is **6,100 km**. In India, fishing is categorised into two types: they are

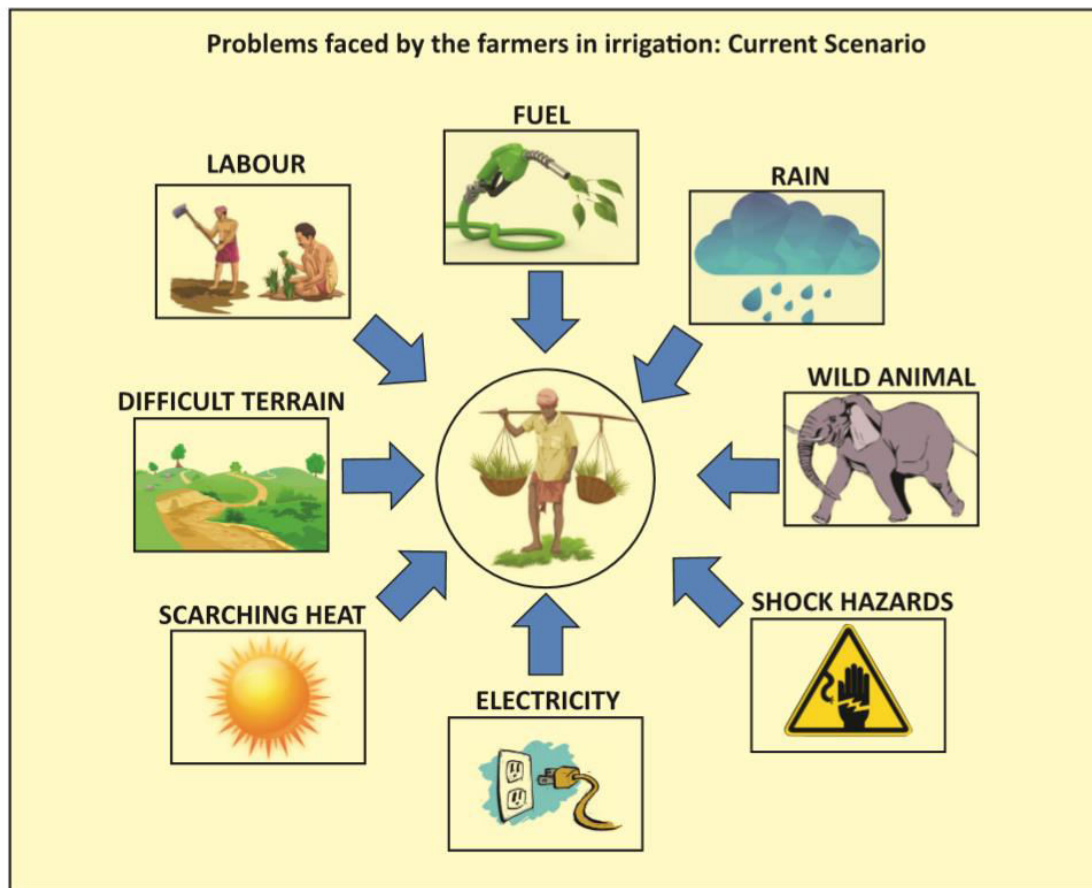
1. Marine or Sea Fisheries:

It includes coastal, off-shore and deep sea fisheries mainly on the continental shelf upto a depth of 200 m. Among the coastal states, Kerala leads in the marine fish production in India.

2. Inland or Fresh Water Fisheries:

- Rivers, lakes, canals, reservoirs, ponds, tanks etc. are the sources of fresh water and provide fresh water fisheries.
- About **50 percent** of the country's total fish production comes from the inland fisheries and Andhra Pradesh is the leading producer in India.
- In India, the important varieties of fishes caught by the fisherman are Cat fish, Herrings, Mackerels, Perches, Eels, Mulletts etc.
- In 2014-15, the total inland or fresh water fish production was 65.77 lakh tonnes and the total marine fish production was **34.91 lakh tonnes**.
- In India, the top five fish producing states are Andhra Pradesh, West Bengal, Gujarat, Kerala, and Tamil Nadu.

Major issues faced by farmers in India



Major Issues of Farmers

Indian agriculture and Indian farmers are plagued by several problems; some of them are natural and some others are manmade.

Small and fragmented land-holdings:

The problem of small and fragmented holdings is more serious in densely populated and intensively cultivated states in India. About **67 percent** of operational land holdings in India are marginal holdings (< 1 hectare).

High Costs of Inputs:

Seed is a critical and basic input for attaining higher crop yields and sustained growth in agricultural production. Unfortunately, good quality seeds are out of reach for many small and marginal farmers due to their high price.

Infertile Soil:

Indian soils have been used for growing crops over thousands of years without caring much for replenishing. This has led to depletion and exhaustion of soils resulting low productivity.

Lack of Irrigation:

Only one-third of the cropped area falls under irrigated area. To make agriculture reliable, irrigation facility has to be developed.

Lack of mechanization:

In spite of the large scale mechanization of agriculture in some parts of the country, most of the agricultural operations in larger parts are carried on by human hand using simple and conventional tools.

Soil erosion:

Large tracts of fertile land suffer from soil erosion by wind and water. Such kind of areas must be properly treated and restored to its original fertility.

Agricultural marketing:

In rural India, agricultural marketing continues in a bad shape. Due to the absence of sound marketing facility, the farmers have to depend on local traders and middlemen for the disposal of their farm products which is sold at low price. Besides, there is a fluctuation in the prices of agriculture products.

Inadequate storage facilities:

Storage facilities in the rural areas are either totally absent or grossly inadequate. Under such conditions the farmers are compelled to sell their products immediately after the harvest irrespective of the condition of market

Inadequate transport:

One of the main handicaps with Indian agriculture is the lack of cheap and efficient means of transportation. Even at present there are lakhs of villages which are not well connected with main roads or with market centres

Scarcity of capital:

Agriculture is an important industry which requires a huge capital. The role of capital plays a major role in the purchase of advanced farm machineries and equipments.

List of important Agricultural Revolutions in India	
Revolution	Related Product
Yellow Revolution	Oil seed Production (Especially Mustard and Sunflower)
Blue Revolution	Fish Production
Brown Revolution	Leather / Cocoa / Non-Conventional Products
Golden Fibre Revolution	Jute Production
Golden Revolution	Fruits / Honey Production / Horticulture Development
Grey Revolution	Fertilizers
Pink Revolution	Onion Production / Pharmaceuticals / Prawn Production
Evergreen Revolution	Overall Production of Agriculture
Silver Revolution	Egg Production / Poultry Production
Silver Fibre Revolution	Cotton
Red Revolution	Meat Production / Tomato Production
Round Revolution	Potato
Green Revolution	Food Grains
White Revolution	Milk Production

More to Know:

1. How is livestock census conducted in Tamil Nadu?

- State Government is conducting Livestock Census with the help of Department of Animal Husbandry at state level and Regional Joint Director at District level under the guidelines of Government of India Ministry of Agriculture and farmers welfare, Department of Animal Husbandry Dairying and Fisheries.
- The Livestock Census in the country started in the year **1919 – 1920**. Since then it has been conducted once in every **5 years**.
- So far 19 livestock census has been conducted and the last census was held in the year 2012. The 20th Live stock Census – 2017 was scheduled to be conducted from 16th July and will end on 15th October 2017.

2. Livestock Census:

- First Livestock Census in India was conducted with the title of Dairy Cattle Census in 1919.
- Following this, the 19th Livestock census was conducted in October 2012 and it takes place at every five years.

3. PER DROP MORE CROP : (Improving water use efficiency) - Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)

- The Government of India has been implementing Centrally Sponsored Scheme on Micro Irrigation with the objective to enhance water use efficiency in the agriculture sector by promoting appropriate technological interventions like drip & sprinkler irrigation technologies and encourage the farmers to use water saving and conservation technologies.
- The following are the five leading states which account for 78% of the total progress under Micro Irrigation scheme: **1. Andhra Pradesh, 2. Karnataka, 3. Gujarat, 4. Maharashtra, and 5. Tamil Nadu.**

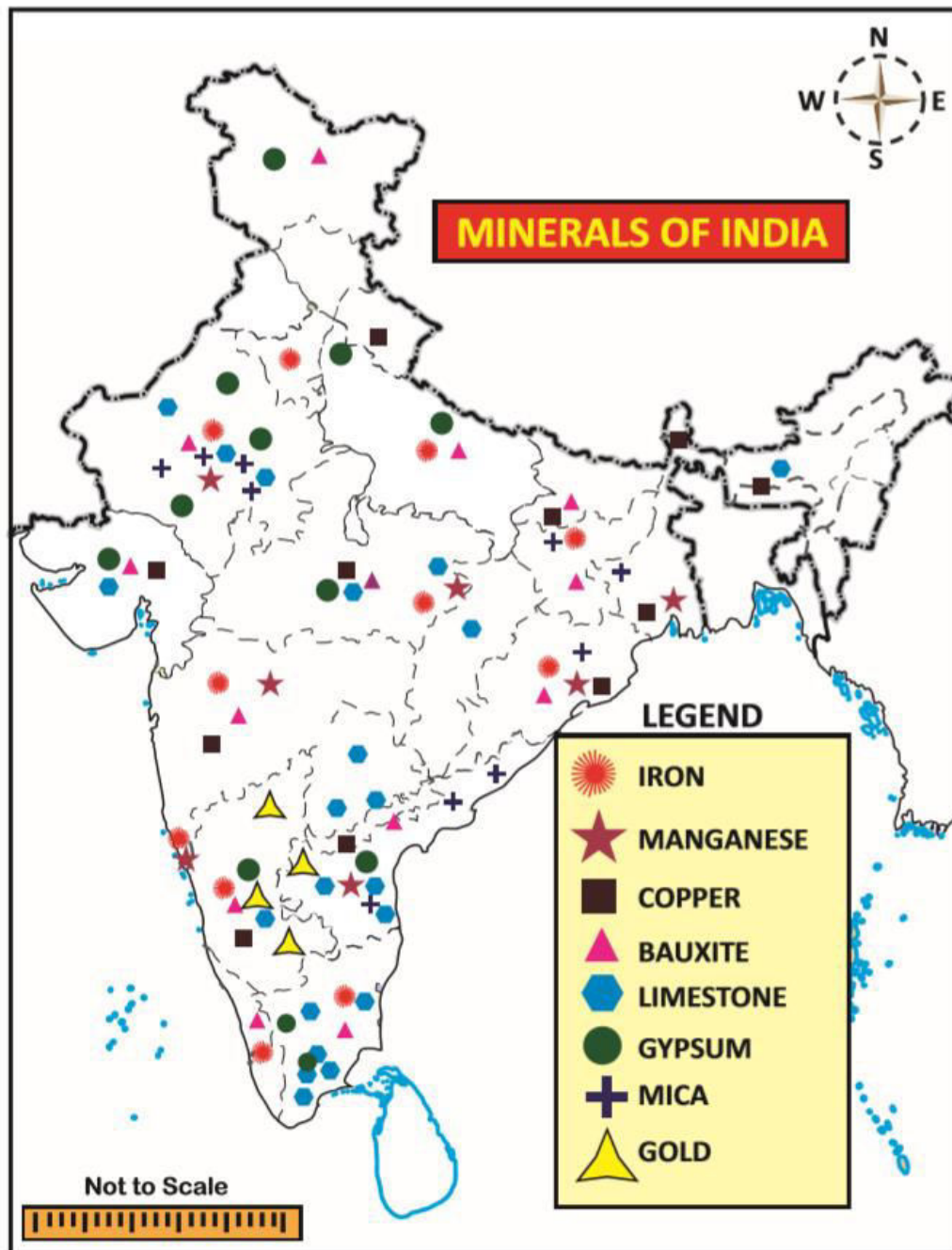
10th Social Science Lesson 5 Notes in English

5. Resources and Industries

Introduction

- Any matter or energy derived from the environment that is used by living things including humans is called a natural resource.
- Natural resources include **air, water, soil, minerals, fossil fuels, plants, wild life etc.**
- Many natural resources are used as raw materials. They play a vital role in the economic development of any region.
- Natural resources are classified on several basis. Based on continued availability, the resources are categorised into two types.
- Renewable Resources are those which have **natural regeneration after their utilisation.** Solar energy, wind energy, biogas, tidal energy, wave energy etc. are the renewable resources.
- Non- Renewable resources are the sources that **cannot be replaced again after utilisation.** Coal, petroleum, natural gas etc. fall under this category.

Minerals



Mineral is a natural substance of organic or inorganic origin with definite chemical and physical properties. The process of **extracting mineral from the earth** is known as mining. The mines near the earth crust are known as open pit mines while the deep mines are known as **shaft mines**.

Types of Minerals

On the basis of chemical and physical properties, minerals are broadly grouped under two categories. They are metallic and non-metallic minerals.

Metallic Minerals

- Metallic minerals are the minerals which contain one or more metallic elements in them.
- Metallic minerals occur in rare, naturally formed concentrations known as mineral deposits.
- These deposits consist of a variety of valuable metals such as **iron, manganese, copper, bauxite, nickel, zinc, lead, gold etc.**

Iron ore

Form of Iron ores	Iron Content (%)
Magnetite	72.4%
Hematite	69.9%
Goethite	62.9%
Limonite	55%
Siderite	48.2%

- Iron ore is the most widely distributed elements of the earth crust, rarely occurs in a free state. It enters into the composition of many rocks and minerals especially from igneous and metamorphic rocks.
- The total recoverable reserves of iron ore in India are about **9602 million tons of haematite and 3408 million tons of magnetite.**
- About **79% haematite** deposits are found in Assam, Bihar, Chhattisgarh, Jharkhand, Odisha and Uttar Pradesh.
- About 93% magnetite deposits occur in Andhra Pradesh, Goa, Karnataka, Kerala and Tamil Nadu.
- Karnataka alone contributes about 72% of magnetite deposits of India. Jharkhand is the leading producer of iron ore with 25% the country's production.
- Singhbhum, Hazaribagh, Dhanbad and Ranchi districts are its major producers. Odisha with 21% production ranks second.
- Sundargarh, Mayurbhanj, Sambalpur and Keonjhar districts are its major producers. The magnetite production of Chhattisgarh is 18% (Rajgarh and Bilaspur are its leadings districts) and the Karnataka is 20% (**Chikmangalur, Chitradurga, Shimoga and Dharwad districts are its major producers**).
- Andhrapradesh and Karnataka produce about 5% each. Kurnool, Guntur, Cuddapah and Anantapur districts in Andhra Pradesh and Salem, Namakkal, Tiruvannamalai, Tiruchirappalli, Coimbatore, Madurai and Tirunelveli districts in Tamil Nadu are notable for the production of iron ore.
- **SAIL (Steel Authority of India Limited):** The Ministry of Steel is responsible for planning and development of iron and steel industry in India.

Manganese

- Manganese is a silvery grey element. It is very hard and brittle in nature. It is always available in combination with **iron, laterite and other minerals**.
- It is an important mineral used for making iron and steel and serves as basic raw material for alloying.
- It is the most important mineral for making iron and steel. Nearly 10 kg manganese is required for manufacturing one ton of steel. It is also used in the **manufacturing of bleaching powder, insecticides, paints and batteries**.
- Manganese deposits occur mainly as metamorphosed bedded sedimentary deposits.
- The largest deposits of manganese is found in Odisha(44%) followed by Karnataka (22%), Madhya Pradesh (12%), Maharashtra & Goa(7% each), Andhra Pradesh (4%) and Jharkhand (2%).
- Rajasthan, Gujarat, Telengana and West Bengal together constitute about 2% of the India's manganese resource.
- Nagpur, Bhandara and Ratnagiri districts in Maharashtra and Balaghat and Chhindwara districts in Madhya Pradesh are the leading producers.
- Odisha is the third largest producer with **24% (Sundargarh, Kalahandi, Koraput and Bolangir districts are the major ones)**.
- Other producers are Andhra Pradesh (13%) and Karnataka (6%). Srikakulam, Visakhapatnam, Cuddapah and Guntur districts in Andhra Pradesh and the districts of Shimoga, Bellary, Chitradurga and Tumkur are the important districts of Karnataka.
- It is the most important mineral for making iron and steel. **India is the fifth largest producer of manganese in the world.**

Copper

- Copper is the **first metal that prehistoric man has started using for many purposes**. Being flexible, it can be made into utensils of any shape.
- **Brass and Bronze** are obtained when the copper alloys with zinc and tin respectively. Copper has been commonly used for making cooking utensils and other objects of common utility.
- In modern days, it is extensively used in vast variety of electrical machinery, wires and cables. Largest reserves of copper ore is in the state of Rajasthan (53.81%) followed by Jharkhand (19.54%) and Madhya Pradesh (18.75%).
- The states of Andhra Pradesh, Gujarat, Haryana, Karnataka, Maharashtra, Meghalaya, Nagaland, Odisha, Sikkim, Tamil Nadu, Telangana, Uttarakhand and West Bengal account for 7.9% of the total copper reserves of India. Jharkhand is the largest producer of copper with 62% of India's production.
- Singhbhum and Hazaribagh districts are its leading producers of copper.
- Odisha is the other major producer with 50.2% production. Rajasthan ranks third with 28% production.

- The districts of Khetri, Alwar and Bhilwara are notables in this state. The states of Uttarakhand(Dehradun and Garhwal districts),Andhra Pradesh (Guntur, Kurnool and Nellore districts), Karnataka (Chitradurga and Hassan districts) and **Tamil Nadu contributes about 7% of production each.**

Bauxite

- Bauxite is an important ore from which aluminium is extracted. It is found in the rock consisting mainly of hydrated aluminium oxides.
- Bauxite is widely distributed as surface deposits in the areas of laterite soil.
- Being light in weight and tough, **aluminium is used in the manufacture of aircraft s and automobile engines.**
- Bauxite is also used in the manufacture of cement and chemicals. The main bauxite deposits occur in Odisha – 50.2%, Gujarat – 15.8% (Junagadh, Amreli and Bhavnagar districts), Jharkhand – 11.9% (Ranchi and Gumila districts), Maharashtra – 9.9% (Sindhu durg and Ratnagiri), Chhattisgarh – 6.2% (Ballarpur and Durg districts), and Tamil nadu – 2.7%.
- Being light in weight and tough, aluminium is used in the manufacture of aircraft s and automobile engines.
- Bauxite is also used in the manufacture of cement and chemicals. Orissa is the largest producer of bauxite in India with approx. **1,370.5 million tonnes.**
- India's State and Central Government is very supportive in production of Bauxite and other Industrial Minerals in Orissa, Jharkand, Tamil Nadu.

Non-Metallic Minerals

These minerals do not contain metal in them. Mica, limestone, gypsum, nitrate, potash, dolomite, coal, petroleum etc are the non- metallic minerals.

Mica

- In ancient time, **Mica was used in ayurvedic medicine.** Mica became very popular with the development of electrical industry.
- **Abhrak is a good quality mica.** It is translucent, easily splitable into thin sheets, flat, colourless, elastic and incompressible.
- Mica is used in making of insulating properties, as it withstands high voltage and has low power loss factor.
- Since it is a non conductor of electricity, it is exclusively used in electrical goods. It is also used in making of lubricants, medicines, paints and varnishes.
- The major deposits of mica are found in Andhra Pradesh(41%) with Nellore, Visakhapatnam, West Godavari and Krishna are its major districts. Other important states in mica deposits are Rajasthan(21%) and Odisha(20%).

- Bhilwara, Jaipur and Ajmer are the notable districts in Rajasthan and, Rayagada, Bolangir and Sundargarh districts are the major producers in Odisha. Dhanbad, Palamu, Ranchi and Singhbhum districts are the major mica mines in Jharkhand state.

Lime Stone

- Limestone is associated with rocks composed of either **calcium carbonate or the double carbonate of calcium and magnesium or mixture of both**.
- Limestone also contains small quantities of silica, alumina, iron oxides, phosphorous and sulphur.
- Limestone is used in the industries of chemicals for **soda ash, caustic soda, bleaching powder, paper, cement, iron and steel, glass and fertilizers**.
- The major producing areas: Andhra Pradesh produces about 20% with major concentration in Cuddapah, Kurnool and Guntur districts.
- Telengana also accounts for about 20% of the country's production with the districts of Nalgonda, Adilabad, Warangal and Karimnagar as major producers.
- Rajasthan produces about 18% (Jodhpur, Ajmer, Bikaner and Kota districts), Madhya Pradesh about 12% (Jabalpur and Satna districts) and Tamilnadu about 8.4% (Salem, Kancheepuram, Tiruchirappalli, Thoothukkudi, Tirunelveli and Virudhunagar districts) of limestone production of India.
- In terms of the reserves of limestone, the state of Karnataka leads with 27%, followed by Andhra Pradesh and Rajasthan (12% each), Gujarat (10%), Meghalaya (9%), Telangana (8%), Chhattisgarh and Madhya Pradesh (5% each) and the remaining by other states.

Gypsum

- Gypsum is a **hydrated sulphate of calcium** which occurs as white, opaque or transparent minerals in beds of sedimentary rocks such as limestone, sandstone and shale.
- Gypsum is used in the manufacture of cement, fertilizers, wall board, plaster of paris and in soil conditioning.
- The state of Rajasthan alone accounts for **81% of its reserves. 14% of its reserves is found in Jammu and Kashmir and 2% in Tamil nadu**.
- The remaining 3% resources are found in the states of Gujarat, Himachal Pradesh, Karnataka, Uttarakhand, Andhra Pradesh and Madhya Pradesh. Rajasthan produces 82% of the country's production.
- Jodhpur, Bikaner and Jaisalmer are notable districts. Jammu and Kashmir produces 14% of country's gypsum. Baramula, Doda and Uri districts are its major producers.
- The states of Gujarat (Bhavnagar and Jamnagar districts), Uttarakhand (Dehradun and Mussourie districts), Andhra Pradesh (Nellore, Guntur and Prakasam districts) and Tamil nadu are the other producers with about 4% each.

Energy Resources

- The resources from which the electricity generated are called energy resources. Electricity is an important component of our life.
- No day to day activity takes without the use of this energy. It is also the key factor for all economic activities and industrial development.
- Energy resources can be classified into **renewable and non-renewable**.
- Coal, petroleum, natural gas and nuclear minerals are the sources of non renewable energy. Water, sun light, wind, bio gas, tides etc., are the sources of renewable energy.

Non-Renewable Energy

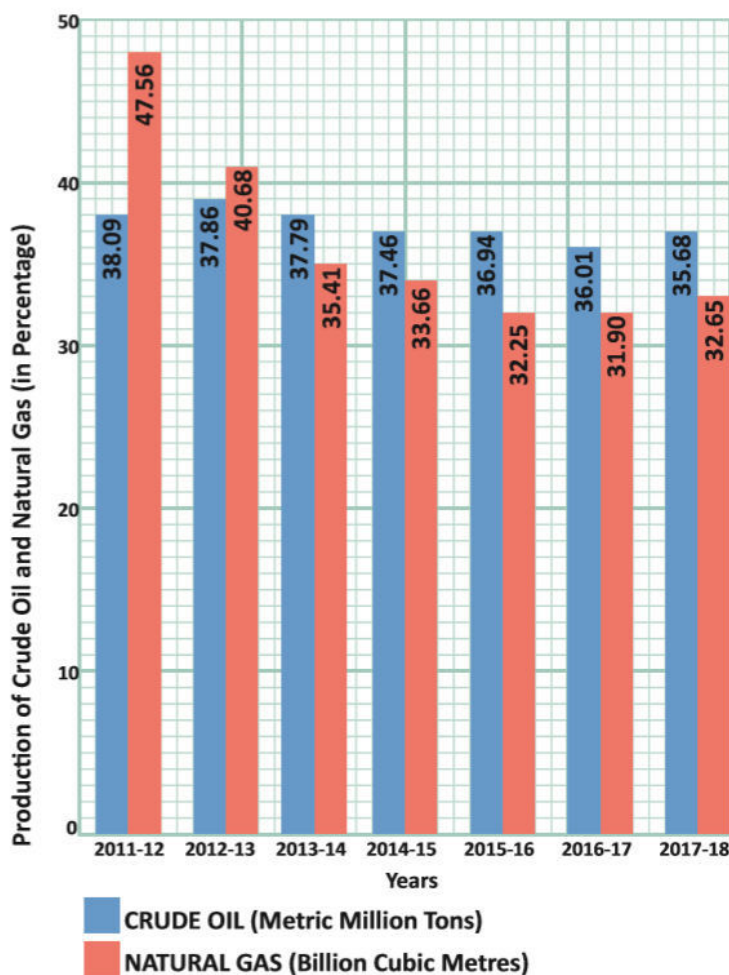
Coal

- Coal is an inflammable organic substance **composed mainly of hydrocarbons**. Coal is available in the form of sedimentary rocks.
- It is used in the generation of thermal power. It has close association with the industrial development of any country. Since it is a valuable one, it is called as **"Black Gold"**.
- Based on carbon content, it is classified in to the following types.
 1. Anthracite: contains 80 to 90% carbon
 2. Bituminous: contains 60 to 80% carbon
 3. Lignite: contains 40 to 60% carbon
 4. Peat: contains less than 40% carbon
- Coal is an important source of energy in India with its varied and innumerable uses. It can be converted into **gas, oil, electricity and thermal power**.
- Besides, it forms a basic raw material for the production of chemicals, dyes, fertilizers, paints, synthetic and explosives.
- Indian coal is mostly associated with Gondwana series of rocks and is primarily found in Peninsular India.
- The states of Jharkhand, odisha, West Bengal and Madhya Pradesh alone account for nearly 90% of coal reserves of the country.
- **About 2% of India's coal is of tertiary type** and is found mostly in Assam and Jammu & Kashmir. **Jharkhand** is the largest coal producing state in the country followed by odisha, Chhattisgarh, West Bengal, Madhya Pradesh, Andhra Pradesh and Maharashtra.
- The major coal fields of Jharkhand are Bokaro, North Karanpura, South Karanpura, Giridih, Ramgarh, Daltongunj and Rajmahal. Talcher and Ranapur in Odisha, Korba and Chirmiri in Chhattisgarh, Umaria and Singrauli in Madhya pradesh, Tandur, Singareni, Kothagudem and Ramagundam in Andhra Pradesh, Wardha, Ballarpur, Chanda and Kampati in Maharashtra and, Raniganj, Asansol and Mejia in West Bengal are the other major coal fields of India.
- **Indian lignite (brown coal)** deposits occur in the southern and western parts of Peninsular India particularly in Tamil nadu, Pudhucherry and Kerala.

- The Ministry of coal has over all responsibility of determining policies and strategies in respect of exploration and development of coal resource in India.
- **Coal India Limited (CIL), NLC India Limited (NLCIL) and Singareni Collieries Company limited (SCCL)** are its public sector under takings.

Petroleum (or) Crude oil

Crude oil and Natural Gas Production in percentage



- The word petroleum has been derived from two **Latin words petro (meaning – Rock) and oleum (meaning oil)**.
- Thus petroleum is oil obtained from rocks of the earth. Therefore, it is also called mineral oil.
- Petroleum is an inflammable liquid that is composed of hydrocarbons which constitute **90-95%** of petroleum and the remaining is chiefly organic compounds containing oxygen, nitrogen, sulphur and traces of organ metallic compounds.

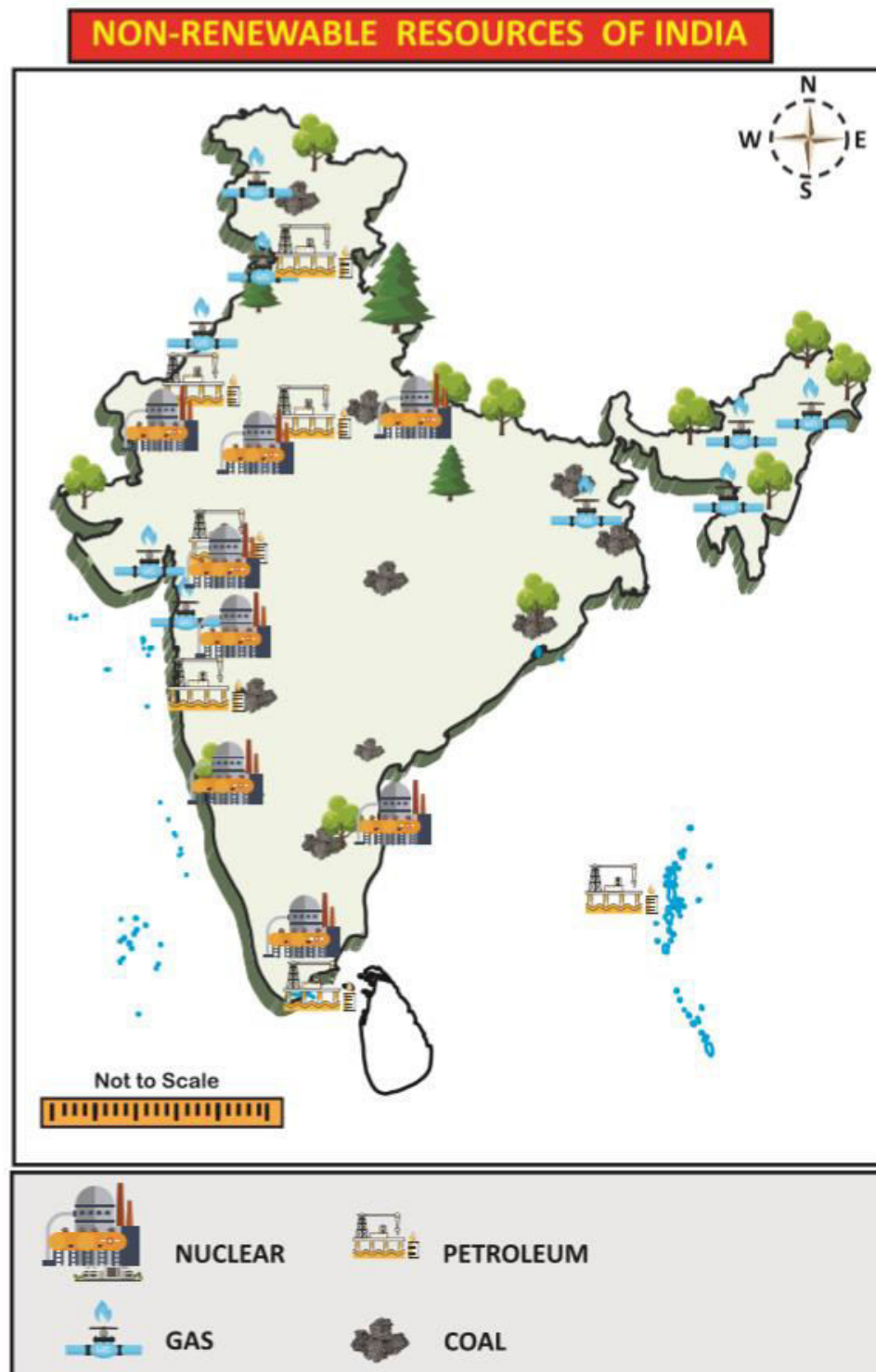
- Petroleum is used as a source of power and fuel for automobiles, aeroplanes, ships and locomotives. Lubricants, kerosene, vaseline, tar, soap, terylene and wax are its by products.
- Oil in India is obtained from both from on-shore and off-shore areas. As of 2017, the total estimated crude oil reserves of the country is 604.10 million tons. From this, 324.24 million tons (54%) are found in onshore and 279.86 million tonnes (46%) are in offshore areas.
- The production of crude oil fluctuates from year to year from 2011-12 to 2017-18 but only with marginal variations.
- The change is invariably in negative. In natural gas production also the trend is negative except the last year. The change is high in the first three years and it is low to moderate in the remaining years.

Western coast offshore oil fields	Eastern coast offshore Fields
1. Mumbai high oil fields (largest 65%)	Bharmaputra valley (Dibrugarh and Sibsagar districts of upper Assam.)
2. Gujarat coast (2nd largest)	Digboi oil fields (oldest fields in country)
3. Basseim oil field, south of Mumbai high	Nahoratiya oil fields (south west of digboi)
4. Aliabet oil field, south of Bhavanagar	Moran-Hugrija oil field (Southwest of Nahoratiya)
5. Ankleshwar	Rudrasagar-Lawa oil fields (sibsagar districts of assam)
6. Cambay-Luni Region	Surma valley (Badarpur, Masimpur, Patharia)
7. Ahmedabad-Kalol Region	offshore of Andaman and Nicobar, Gulf of Mannar, Baleswar coast, Punjab, Haryana and Uttar Pradesh.

Natural Gas

- Natural gas usually **accompanies the petroleum accumulations**. It is naturally occurring hydro carbon gas mixture consisting primarily of methane, but commonly includes varying amounts of other **higher alkanes** and sometimes a **small percentage of carbon dioxide, nitrogen and hydrogen sulphides**.
- It is formed when layers of decomposed plants and animals are exposed to intense heat and pressure over thousands of years. It is used as a source of energy for heating, cooking and electricity generation.
- It is also used as fuel for vehicles and as a chemical feedstock in the manufacture of plastics and other commercially important organic chemicals.

- India has a very large proportion of tertiary rock and alluvial deposits particularly in the extra peninsular India.
- These sedimentary rocks, which were once under the shallow seas, hold the possibility of harbouring oil and gas deposits.
- The highest concentration of natural gas is found in the Bombay high and basseim oil fields. Jagatia and Gogha in Gujarat, Nahorkatiya and Moran in Assam, Neypaltur, Mangmadam in Thanjavur district in Tamil nadu, Baranura and Atharnure ranges in Tripura, Barmer and Charaswala in Rajasthan, Miao Pung and Laptang areas in Arunachal Pradesh, Firozpur district in Punjab, Mausar and Maradpur areas in Jammu and Kashmir and Medinipur in West Bengal are the other areas where natural gas reserves have been discovered.
- The **Gas Authority of India Ltd [GAIL]** is doing pioneer work in the field of natural gas exploration. Discovery of gas made rapid strides in the **1985**.
- Oil strikes at Cauvery offshore, at Nanda in Cambay basin and Tarot in Jaisalmer basin in Rajasthan were major discoveries during 1988-89.
- Recently, it has been found that Krishna- Godavari delta has reserves of Natural gas.



Conventional Energy Sources

Thermal power

- Thermal power is generated using fossil fuels like coal, diesel, petroleum and Natural gas. National Thermal Power Corporation [NTPC] was established in 1975.

- At present NTPC has **13 coal based super thermal power projects** and **7 gas / liquid fuel based combined cycle projects** in the states of Assam, Bihar, Jharkhand, Chhattisgarh, Mizoram and West Bengal. It accounts for over 90% of the installed capacity.
- Tamil nadu produces about 5% of the total thermal electricity produced in India. Neyveli, Mettur, Thoothukudi and Ennore (Chennai) are the important thermal power stations in Tamil nadu.

Nuclear power

- The energy released during nuclear fission or fusion is used to generate electricity. Nuclear energy is generated mainly from the minerals of Uranium and Thorium. Nuclear power programme in India was initiated in **1940's when 'Tata Atomic research commission was incorporated in August 1948.**
- The first nuclear power station was setup at **Tarapur near Mumbai in 1969** with the capacity of 320 mw.
- Later atomic reactors were installed at Rawatbhata (335 MW), near Kota in Rajasthan (100 MW), Kalpakkam (440 MW) and Kudankulam (2,000 MW) in Tamil nadu and Narora (235 MW) in Uttar Pradesh, Kaiga in (235 MW) in Karnataka and Kakrapar (235 MW) in Gujarat

Renewable or NonConventional Energy Resources

Hydro power

- Power generated from water is termed as hydroelectricity. **Hydro power is the energy harnessed from running water.**
- Hydro power is considered as one of the most economic and non-polluting sources of energy. It contributes nearly **7% of global electricity production.**
- The cost of production of hydroelectricity is relatively low, making it a competitive source of renewable energy.
- It is also a flexible mode of power generation as the quantity of production can either be increased or decreased very quickly adapting to changing demands. India is fortunate to have a large potential of hydro- power potential.
- It is quite unevenly distributed in India. Of the total hydro-electric potential of the country, rivers of Assam, Arunachal Pradesh, Manipur, Nagaland and Tripura account for 30.4%, eastward flowing rivers of the peninsular India 20.9%, westward flowing rivers of the western Ghats (South of the Tapti) 10.5%, the Ganga Basin (**excluding the potential of Nepal**) 11.7%, the Indus Basin 16.0% and the rivers of central India 10.5%.

Solar Energy

- Solar Power is the conversion of sunlight into electricity, either directly using **photovoltaics (PV)** or indirectly using **concentrated solar power (CSP).**

- Concentrated solar power systems use lenses or mirrors and tracking system to focus a large area of sunlight into a small beam.
- Photovoltaics convert light into an electric current using the photovoltaic effect. The main objectives of the solar thermal energy programme, being implemented by the **Ministry of Non-Conventional Energy Source (MNES)** are market development, commercialisation and utilisation of heat energy requirement of different applications in domestic, institutional and industrial sectors.
- Solar power is used in water heaters, refrigerators, drying, street lighting, cooking, pumping, power generator, photovoltaic cells, salon parts etc. Andhra Pradesh, Gujarat, Rajasthan, Maharashtra and Madhya Pradesh are the major solar power producers.

Wind Energy

- Wind energy is **extracted from air flow using wind turbines**. It is a cheap and pollution free source of energy.
- Power from wind mills are used for pumping water and to sail propel ships. Wind power is plentiful, renewable, widely distributed clean and produces no greenhouse gas emissions during operation. These plants occupy only a less space.
- The development of wind power in **India began in 1986** with first wind farms were set up in coastal areas of Gujarat (Okha), Maharashtra (Ratnagiri) and Tamil nadu (Thoothukudi) with 55 KW Vestas wind turbines.
- The capacity has significantly increased in the last few years. India has the fourth largest installed wind power capacity in the world.

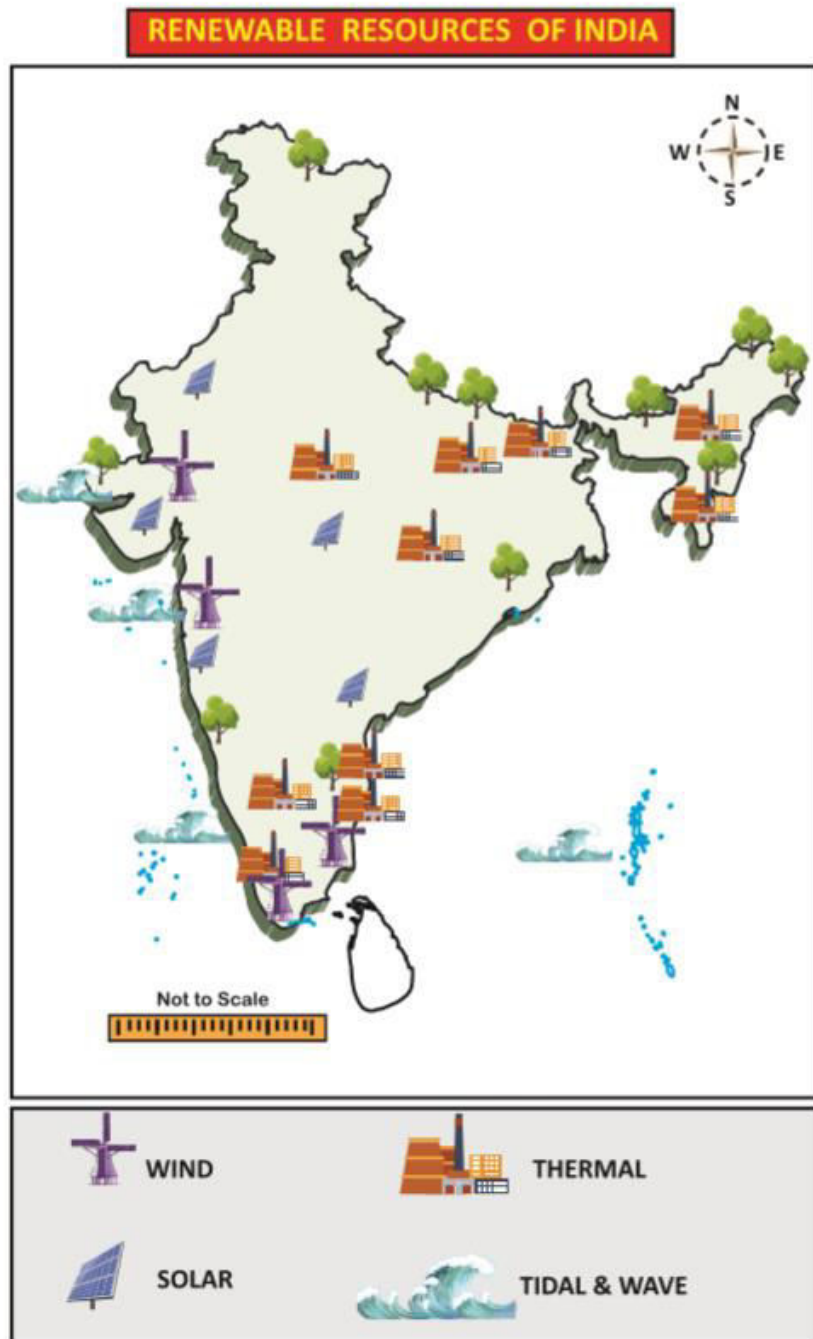
Biomass Energy

- Bio energy may be obtained through bio-degradable materials like animal dung, kitchen wastes, water hyacinth, agricultural residues and city wastes etc.
- It is clean and cheap source of energy. India has a potential of about **18 GW** of energy from Biomass.
- Currently, about **32% of total primary energy** used in India is derived from Biomass. Energy derived from biomass is mostly used for domestic purposes.

Tidal and wave Energy

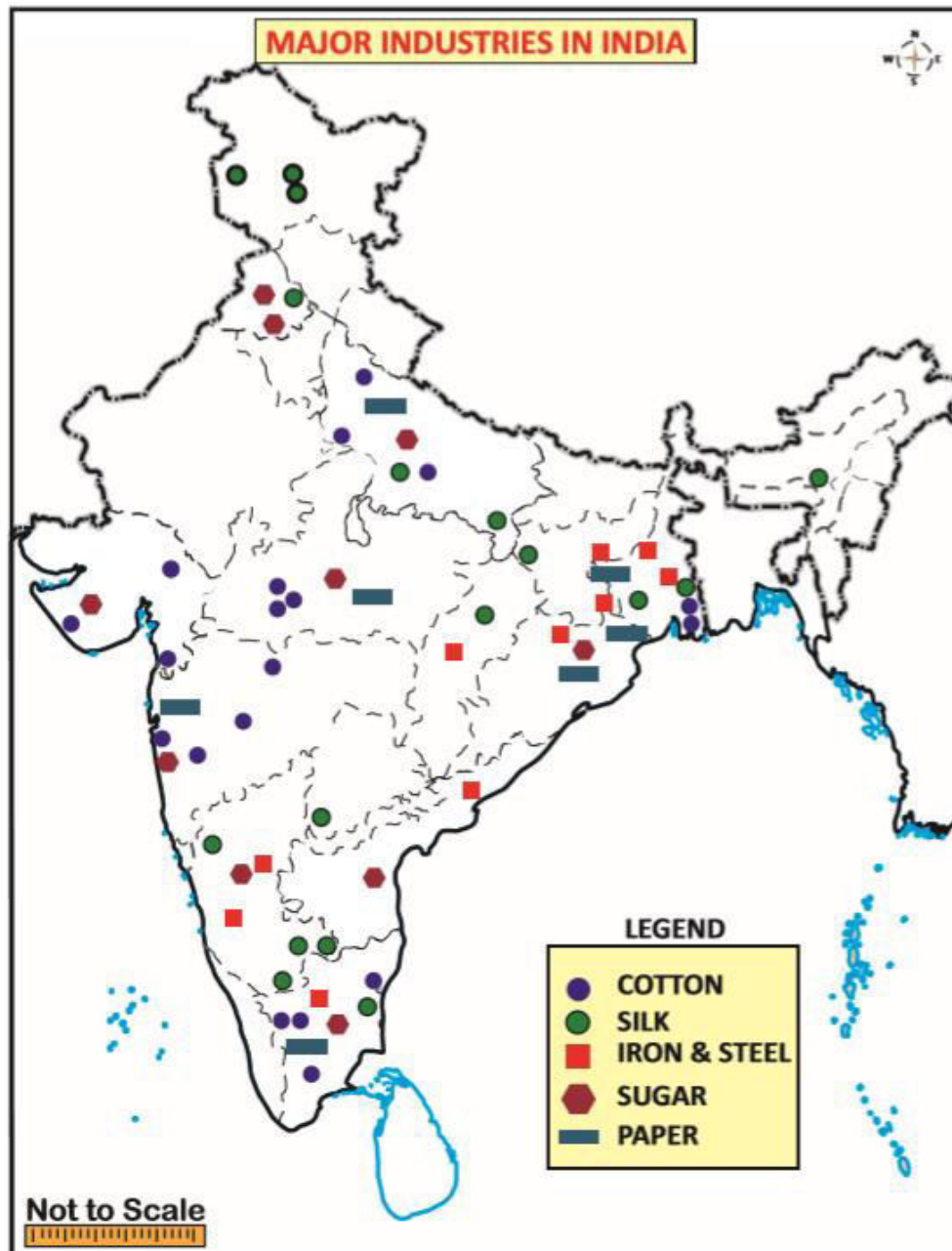
- There are two main sources of ocean energy. They are Ocean tides and Ocean waves. It is estimated that India possesses **8,000-9,000 MW** of tidal energy potential.
- The Gulf of Cambay is the best suited area with about **7,000 mw potential of tidal energy**. This is followed by **Gulf of Kachch (1,000MW) and sunderbans (100MW)**.
- At present a 900mw tidal power plant is proposed to be set up in the Gulf of Kachch region.
- Wave energy potential in India is estimated to be 40,000 MW. An wave energy power plant of 150 KW (maximum) has been installed at vizhinjam near Thiruvananthapuram.

- An another plant of this kind has been set up near Andaman& Nicobar Islands.



Industries

- It refers to the activities which convert the raw materials into finished products. This sector is called as the value addition sector.
- On the basis of the source of raw materials, Industries are classified into **the Agro based industries, Forest based industries and Mineral based industries.**



Agro based industries

These industries draw their raw materials from agricultural sector. The following part discusses the agro based industries in India.

Cotton Textile Industry

- Textile is a broad term which includes cotton, jute, wool, silk and synthetic fibre textiles. This sector in India with 3400 textiles mills with installed capacity of more than 50 million spindles and 842000 rotors is the second largest in the world.

- Traditional sectors like hand loom, handicrafts and small power-loom units are the biggest source of employment for millions of people in rural and semi urban areas. The cotton textile industries contribute about **7% of industrial output, 2% of India's GDP and 15% of the country's export earnings**.
- It is one of the largest sources of employment generation in the country. With over 45 million employees, the total employment in this industry is well over 25million worker. At present there are 1,719 textiles mills in the country.
- Out of which 188 mills are in public sector, 147 in cooperative sector and 1,284 in private sector. **The higher concentration of textile mills in and around Mumbai, makes it as "Manchester of India"**.
- Presence of black cotton soil in Maharastra, humid climate, presence of Mumbai port, availability of hydro power, good market and well developed transport facility favour the cotton textile industries in Mumbai.
- The major cotton textile industries are concentrated in the states of Maharashtra, Gujarat, West Bengal, Uttar Pradesh and Tamil nadu.
- **Coimbatore is the most important centre in Tamil nadu with 200 mills out of its 435 and called as "Manchester of South India"**.
- Erode, Tirupur, Karur, Chennai, Thirunelveli, Madurai, Thoothukudi, Salem and Virudhunagar are the other major cotton textiles centres in the state.

Jute Textiles

- Jute is a **low priced fibre** used mainly for making package materials like gunny bags. Today jute is blended with cotton and wool to produce textiles.
- India is the **largest producer of jute goods contributing 35% of the world's total output**.
- This is the second important textile industry in India after cotton textiles. Jute is the **golden fibre** which meets all the standards of goods packing with its natural, renewable, bio degradable and eco-friendly products.
- The first jute mill in India was established at Rishra near, **Kolkata in 1854** by the English man **George Auckland**.
- India tops in the production of raw jute and jute goods and second in the export of jute goods next to Bangladesh.
- Jute production includes gunny bags, canvas, pack sheets, jute web, carpets, cordage, hessians and twines.
- Now jute is also being used in plastic furniture and insulation bleached fibres to blend with wool.
- It is also mixed with cotton to make carpet and blankets. The major jute producing areas are in West Bengal and concentrated along the **Hooghly river within the radius of six kilometre of Kolkata**.

- Titagarh, Jagatdat, Budge Budge, Haora and Bhadreswar are the chief centres of jute industry. Andhra Pradesh, Bihar, Uttar Pradesh, Assam, Chhattisgarh and Odisha are the other jute goods producing areas.

Silk Industry

- India has been well known for the production of silk. Since the ancient times, India is the second largest producer of raw silk next only to China.
- Sericulture is a labour intensive industry and provides employment to **7.56 million people** make to weaker and marginalised sections of society.
- Karnataka is the largest producer of silk with an average of **8200 metric tons every year which is about one third of the total silk production of India.**
- Other major producers of silk are West Bengal, Jammu Kashmir, Bihar, Jharkhand, Chhattisgarh, Uttar Pradesh, Punjab, Assam and Tamil nadu states.
- India exports exclusively silk fabrics, silk scarves, dress material and sarees. It exports to the principal countries like **Europe, U.S.A, U.K, Russia, Saudi Arabia, Kuwait and Singapore.**

Sugar Industry

- Sugar can be produced from sugar cane, sugar-beets or any other crop which have sugar content.
- In India, sugar cane is the main source of sugar. At present this is the second largest agro based industry of India after cotton textiles. **India is the world's second largest producer of sugar cane after Brazil.**
- This industry provides employment to **2.86 lakh** workers. Sugar industry is decentralized and located near the sugarcane growing areas as they are weight loosing and bulky to transport.
- **Uttar Pradesh is the largest producer of sugar, producing about 50% of the country's total.**
- Other major producers are Maharashtra, Uttar Pradesh, Karnataka, Andhra Pradesh, Tamil nadu, Bihar, Punjab, Gujarat, Haryana and Madhya Pradesh states. These states account for more than 90% of the sugar mills and sugar production.

Forest based industries

Forest provide us with different types of material which are used as raw material for certain industries like **paper, lac, sports goods, plywood etc.**

Paper industry

- Paper Industry has emerged as a diversified and specialized industry in India that produces numerous types of papers that comes in various use such as sheet paper, paper boxes, tissues, paper bags, stationery, envelopes and printed-paper products such as books, periodicals, and newspapers.

- In India the Soft wood is the principal raw material used for making paper especially newsprint and high class printing papers.
- Paper is the pre-requisite for education and literacy and its use is an index of advancement in these two fields as well as the overall well being of the society.
- The first successful effort was made in 1867 with the setting up of the Royal Bengal paper mills at Ballyganj near Kolkata. Subsequent successful efforts were made at Lucknow in 1879, Titagarh in 1882, Pune in 1887, Raniganj in 1892, Kankinra in 1892 and Naihati in 1918.
- The raw materials for paper industry includes wood pulp, bamboo, salai and sabai grasses, waste paper and bagasse.
- West Bengal is the largest producer of paper in the country followed by Madhya Pradesh, Odisha and Tamil nadu states.

Mineral based industries

Mineral based industries use both metallic & non metallic minerals as raw materials. The major mineral based industry of country is **the iron steel industry**

Iron and steel industries

S.No	Name of Industry	Place	Establishment Year	Product
1	Tata Iron and Steel Company(TISCO)	Jamshedpur, Jharkhand	1911	Pig Iron
2	Indian Iron and Steel Company (IISCO)	Burnpur, Hirapur, Kulti, West Bengal	1972	Pig Iron & Crude steel
3	Visweshwaraya Iron Steel Ltd(VISL)	Bhadravati, Karnataka	1923	Alloy and Sponge steel
4	Hisdustan Steel Ltd (HSL) Collaborated with Russia	Bhilai, Chattisgarh	1957	Railway Equipments and Ship Building
5	Hindustan Steel Ltd(HSL) Collaborated with Germany	Rourkela, Odisha	1965	Hot and Cold rolled sheets, Galvanized sheets and electrical plates
6	Hindustal Steel Ltd(HSL) Collaborated with United kingdom	Durgapur, West Bengal	1959	Alloy steel, Construction materials and railway equipments
7	Hisdustan Steel Ltd(HSL) Collaborated with Russia	Bokaro, Jharkhand	1972	Sludge and Slog
8	Salem Steel Ltd	Salem, Tamil Nadu	1982	Stainless Steel
9	Vijayanagar Steel Plant	Tornagal, Karnataka	1994	Flat steel and Long Steel
10	Visakhapatnam Steel Plant(VSP)	Visakhapatnam, Andhra Pradesh	1981	Hot Metal

- Iron and steel industry is called a basic metallurgical industry as its finished product is used as raw material by host of other industries.
- Several industries like **engineering, heavy machines and machine tools, automobile, locomotives and railway equipment industries** use iron and steel as their primary raw material. Due to this, the steel producing capacity of a country is generally taken as an indicator of its level of industrial development.
- The modernization of the industry was started in **1907** with the establishment of **Tata Iron and Steel Company at Sakchi, now called Jamshedpur**.
- Iron and steel industry of India is mainly concentrated in the states of Jharkhand, West Bengal and Odisha.
- Proximity to the coal fields of Jharia, Raniganj, Bokaro and Karanpura and the iron ore mines of Mayurbhanj, Keonjar and Birona are responsible for this.
- This area also has sufficient deposits of limestone, dolomite, manganese, silicon and dolomite which are required for the industry.

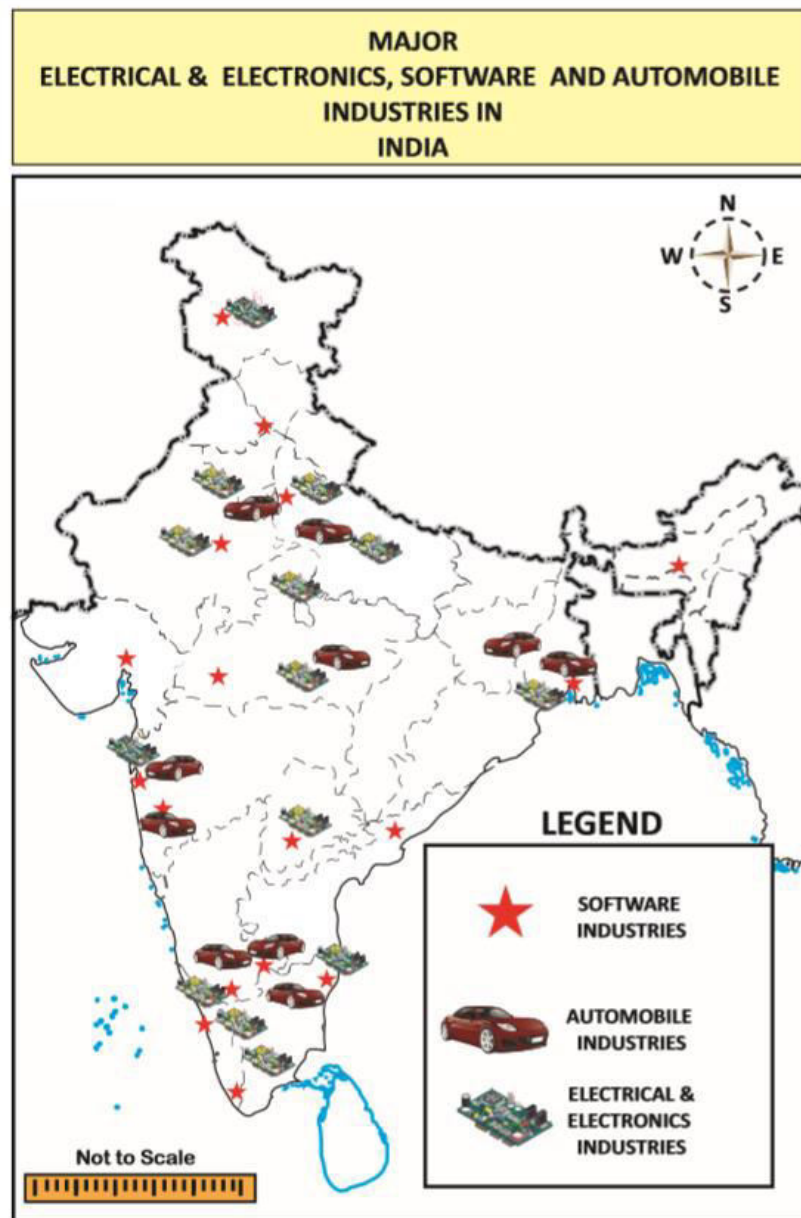
Automobile Industry

- India is set to emerge not only as a large domestic market for automobile manufacturers, but also as a crucial link in the global automotive chain. It is one of the most dynamic industrial groups in India.
- **The first automobile industry of India was started in 1947.** The industry is the Premier Automobiles Ltd located at Kurla (Mumbai).
- It was followed by the **Hindustan Motors Ltd at Uttarpara (Kolkata) in 1948.**
- At present, India is **the 7th largest** producer of automobile manufacturers which include two wheelers, commercial vehicles, passenger car, jeep, scooty, scooters, motor cycles, mopeds and three wheelers.
- Major centres are at **Mumbai, Chennai, Jamshedpur, Jabalpur, Kolkata, Pune, New Delhi, Kanpur, Bengaluru, Sadara, Lucknow and Mysuru.**
- Tata Motors, Maruti Suzuki, Mahindra & Mahindra and Hindustan Motors are the largest passenger car manufacturers of Indian companies in the country.
- Presence of foreign car companies such as Mercedes Benz, Fiat, General Motors, Toyota and the recent entry of passenger car manufacturers BMW, Audi, Volkswagen and Volvo makes the Indian automobile sector a special one.
- Tata Motors, Ashok Leyland, Eicher Motors, Mahindra & Mahindra and Ford Motors are the major Indian companies which manufacture commercial vehicles.
- **MAN, ITEC, Mercedes-Benz, Scania and Hyundai are the foreign companies** engage in the manufacture of commercial vehicles.
- Two wheeler manufacturing is dominated by Indian companies like Hero, Bajaj Auto and TVS.

- The automobile industries are found in four clusters viz; Delhi, Gurgaon and Manesar in North India, Pune, Nasik, Halol and Aurangabad in West India, Chennai, Bengaluru and Hosur in South India and Jamshedpur and Kolkata in East India.

Electrical and Electronic Industries

- Heavy electrical industries manufacture equipment used for power generation, transmission and utilization.
- Turbines for steam and hydro power plants, boilers for thermal power plants, generators, transformers, switch gears etc. are the chief products of this industry.
- The most important company in the field of heavy electrical is Bharat Heavy Electricals Ltd (BHEL). It has its plants at **Hardwar, Bhopal, Hyderabad, Jammu, Bengaluru, Jhansi and Tiruchirappalli**.
- This Industry covers a wide range of products including television sets, transistor sets, telephone exchanges, cellular telegram, computers and varied equipments for post and railway, defence and meteorological department.
- **Bengaluru is the largest producer of electronic goods in India, hence it is called as the "Electronic Capital of India".**
- The other major producers of electronic goods centers are Hyderabad, Delhi, Mumbai, Chennai, Kolkata, Kanpur, Pune, Lucknow, Jaipur and Coimbatore.



Software Industry

- India is home to some of the finest software companies in the world. The software companies in India are reputed across the globe for their efficient IT and business related solutions.
- The Indian Software Industry has brought about a tremendous success for the emerging economy.
- In India, software industry began in **1970** with the entry of Tata Consultancy Services (TCS). Along with this, L & T, Infotech, i-Flex, Accenture, Cognizant, GalaxE Solutions India Pvt Ltd and ITC Infotech are the major software industries in the country.
- At present, there are more than **500 software companies all over India**. It exports software service to nearly **95 countries in the world**.

- The main centres of IT parks are located in Chennai, Coimbatore, Thiruvananthapuram, Bengaluru, Mysuru, Hyderabad, Visakhapatnam, Mumbai, Pune, Indore, Gandhi Nagar, Jaipur, Noida, Mohali and Srinagar.

Major challenges of Indian Industries

Industries in India face many problems. Some major problems are listed below.



Challenges of Indian Industries

- Shortage and fluctuation in Power Supply.
- Non- availability of large blocks of land.
- Poor access to credit.
- High rate of interest for borrowed loan.
- Non- availability of cheap labourers.
- Lack of technical and vocational training for employees.
- Inappropriate living conditions nearby industrial estates.

More to Know:

1. **Make in India** program was launched in 2014 to put India on the world map as a major hub for global design and manufacturing.
2. The first paper mill of India was started in **1812 at Serampore in West Bengal**
3. Chennai is nicknamed as the **"Detroit of Asia"** due to the presence of major automobile manufacturing units and allied industries around the city.
4. **National Newsprint and Paper Mills (NEPA)** is at Nepanagar in Burhanpur District of Madhya Pradesh.
5. CSTRI is the only research institute in the country dedicated to the Research & Developmental activities related to silk technology. **CSTRI was established in the year 1983** by the Central Silk Board, Ministry of Textiles, Govt. of India having head quarter at Bangalore
6. Development Commissioner for Handlooms was set up as an attached nonparticipating office on **20th November, 1975** under the Ministry of Commerce. At present it is functioning under the Ministry of Textiles having headquarters at Udyog Bhawan, New Delhi.
7. The first attempt to produce iron and steel unit was set up at Porto Novo in Tamil nadu in **1830**.
8. **Ginning** is the process of cotton fiber is separated from the cotton seed.
9. National jute board is headquarter at **Kolkata**.
10. Byssinosis, also called **"brown lung disease" or "Monday fever"**, is an occupational lung disease caused by exposure to cotton dust in inadequately ventilated working environments.
11. The first cotton textile mill was established at **Fort Gloster near Kolkata in 1818**.
12. The National Institute of Wind Energy (NIWE), Chennai was established in Tamil Nadu in **1998** as an autonomous institution under the administrative control of the Ministry of New and Renewable Energy. CIWE main activities include resource assessment and testing & certification.
13. Tamil nadu has the largest installation of wind turbines in the country in the **Muppandal-Perungudi area near Kanniyakumari** is the largest concentrations of wind farm capacity at a single location in the world.
14. The first hydro-electric power station in India was established at **"Darjeeling" in 1897**.
15. Solar Energy Corporation of India Limited (A Government of India Enterprise) head quarter is located at **New Delhi**.
16. NHPC Limited (**National Hydroelectric Power Corporation**) is located in Faridabad, India

17. The **Nuclear Power Corporation of India Limited (NPCIL)** is an Indian public sector undertaking based in Mumbai, Maharashtra. It is wholly owned by the Government of India and is responsible for the generation of nuclear power for electricity. NPCIL is administered by the Department of Atomic Energy (DAE) is responsible for designing, constructing and operating the nuclear power stations in India.

18. **Compressed natural gas (CNG) (methane stored at high pressure)** is a fuel which can be used in place of gasoline, diesel fuel and propane/LPG. In comparison to other fuels, natural gas poses less of a threat in the event of a spill, because it is lighter than air and disperses quickly when released. Biomethane – cleaned-up biogas from anaerobic digestion or landfills – can be used. Natural gas vehicles are increasingly used in **Delhi, Ahmedabad, Mumbai, Pune, Kolkata Lucknow, Kanpur, Varanasi, etc.**

19. **Gail (India) Limited (GAIL) (formerly known as Gas Authority of India Limited)** is the largest state-owned natural gas processing and distribution company in India. It is headquartered in New Delhi. It has the following business segments: natural gas, liquid hydrocarbon, liquefied petroleum gas transmission, petrochemical, city gas distribution, exploration and production, GAILTEL and electricity generation.

20. The **Ministry of Petroleum and Natural Gas (MOP&NG)** is a ministry of the Government of India. It is responsible for the exploration, production, refining, distribution, marketing, import, export, and conservation of petroleum, natural gas, petroleum products, and liquefied natural gas in India.

21. **Coal India Limited (CIL)** is an Indian state-controlled coal mining company headquartered in Kolkata, West Bengal, its field offices are located at Dhanbad, Ranchi, Bilaspur, Nagpur, Sambalpur, Kothagudam and Asansol. It is the largest coal-producing company in the world.

22. **National Aluminium Company Limited, abbreviated as NALCO, (incorporated 1981)** has units in Odisha at places like Angul and Damanjodi. It was incorporated as a public sector enterprise of the Ministry of Mines, Government of India in 1981.

23. Bauxite is an oxide of aluminium; the name has been derived after the **French word Le Baux**.

24. **Hindustan Copper Ltd** is a Government-owned corporation in the central public Enterprise under the Ministry of mines, India. HCL is the only vertically integrated copper producer in India engaged in a wide spectrum of activities ranging from Mining, Beneficiation, Smelting, Refining and Continuous Cast Rod manufacturer.

25. **MOIL- Manganese Ore India Limited** state-owned manganese-ore mining company headquartered in Nagpur. With a market share of **50%**, it was the largest producer of manganese ore in India.

26. The organisations associated with minerals in India are the **Geological Survey of India** (Headquarter is at Kolkata), **Indian Bureau of Mines** (Headquarter at Nagpur) and **Non-Ferrous Material Technology Development Centre (NFTDC)**, located at Hyderabad. The Ministry of Mines is responsible for the administration of all mines and minerals (**Development and Regulation Act, 1957**).

10th Social Science Lesson 6 Notes in English

6. India - Population, Transport, Communication & Trade

Introduction

- The study on human population is one of the most important aspects in geography of any region.
- The human population has many components but the most fundamental are its **number, composition, distribution and density**.
- Therefore, it is essential to study these components. The study on these aspects also would reveal the workforce of the country.
- The population of India as per **2011 census is 1,210.19 million (1,21,01,93,422)**.
- **It shows an increase of 19.31crores from the population of 2001.** Population Census of India provides the detailed information about the demography of India.

Population

- The total number of people residing in a country at a specified period of time is called the 'Population' of that country.
- India is the second most populous country in the world next only to china. India covers only **2.4 percent** of the land area of the world, but is the home of about **17.5 percent** of the world's population.
- It shows that the proportion of population of India is far higher than the proportion of its area.
- Thus, a little more than one out of every six persons in the world is from India.
- Our population is almost equal to the combined population of the **USA, Indonesia, Brazil, Pakistan, Bangladesh and Japan** and total population of these six countries is **1214.3 million**.

Census

- Population census is the total **process of collecting, compiling, analysing or otherwise disseminating demographic, economic and social data pertaining**, at a specific time, of all persons in a country or a well-defined part of a country.
- It happens in an interval of ten years. The data collected through the census are used for administration, planning, policy making as well as management and evaluation of various programmes by the government.

Distribution and Density of Population

- The term '**Population Distribution**' refers to the way the people are spaced over the earth's surface. The distribution of population in India is quite uneven because of the vast variation in the availability of resources.

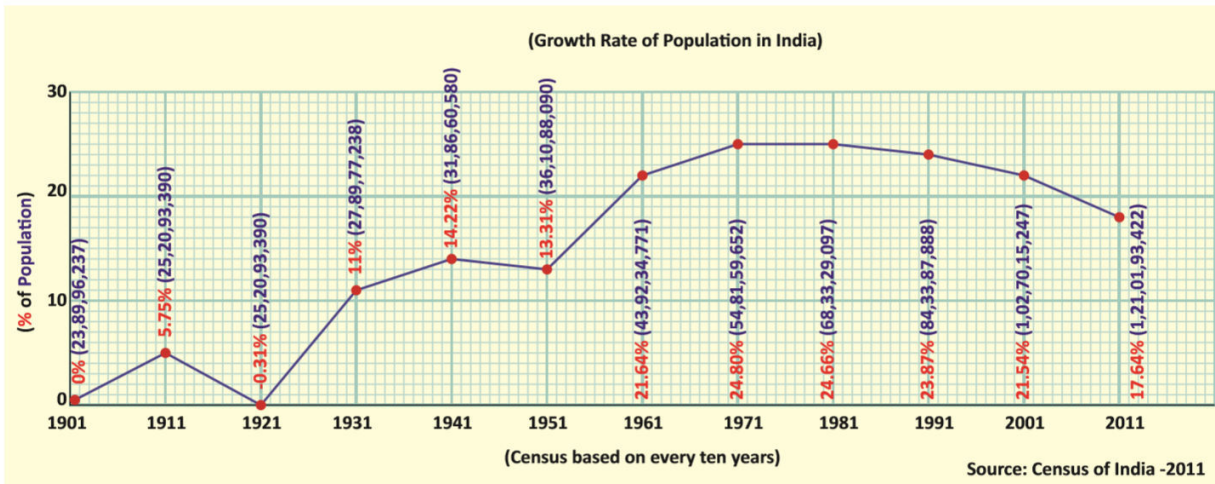
- Population is mostly concentrated in the regions of industrial centres and the good agricultural lands.
- On the other hand, the areas such as high mountains, arid lands, thickly forested areas and some remote corners are very thinly populated and some areas are even uninhabited.
- **Terrain, climate, soil, water bodies, mineral resources, industries, transport and urbanization** are the major factors which affect the distribution of population in our country.
- Uttar Pradesh is the most populous state in the country with a population of 199.5 million followed by Maharashtra (112.3 million), Bihar (103.8 million) West Bengal (91.3 million) and the combined Andhra Pradesh (84.6 million).
- These five states account for about half of the country's population. More than one fourth of the population live only in the two states of U.P and Maharashtra.
- Sikkim is the least populous state of India (0.61 million). Delhi with 16.75 million population tops among the Union territories.
- The uneven distribution of population in the country is the result of several factors such as physical, socio-economic and historical ones.
- The physical factors include relief, climate, water, natural vegetation, minerals and energy resources.
- Socio-economic factors consists of the **religion, culture, political issues, economy, human settlements, transport network, industrialization, urbanization, employment opportunity** etc.

Density of population

Spatial pattern of population Density	
Density	Places
Very Low Density (less than 150 persons per sq.km)	Arunachal Pradesh (17), Andaman and Nicobar Islands (46), Mizoram (52), Sikkim (86) Nagaland (120), Manipur (122), Himachal Pradesh (123), Jammu and Kashmir (124) and Meghalaya (132)
Low Density (150 to 300 persons per sq.km)	Arunachal Pradesh (17), Andaman and Nicobar Islands (46), Mizoram (52), Sikkim (86) Nagaland (120), Manipur (122), Himachal Pradesh (123), Jammu and Kashmir (124) and Meghalaya (132)
Moderate Density (300 to 500 persons per sq.km.)	Gujarat (308), The combined Andhra Pradesh (308), Karnataka (319), Tripura (350), Maharashtra (365), Goa (394), Assam (397) and Jharkhand (414) are the states with moderate population density. Assam has tea estates, Andhra Pradesh, Karnataka and Jharkhand
High Density (500 to 1000 persons per sq km.)	Punjab (550), Tamil Nadu (555), Haryana (573), Uttar Pradesh (828) and Kerala (859) The union territory of Dadra and Nagar Haveli(698)
Very High Density (greater than 1000 persons per sq km)	West Bengal (1029), Bihar (1102), Lakshadweep (2013), Daman and Diu (2169), Puducherry (2598), Chandigarh (9252) and Delhi (11,297).

- Population density is a better measure of understanding the variation in distribution of population.
- It is expressed as number of persons per unit area usually per sq km.
- According to 2011, the average density of population of India is **382 persons per sq.km**. India is one of the most thickly populated ten countries of the world.
- The most densely populated state of India is Bihar and the state with least population density is Arunachal Pradesh.
- Among the union territories, Delhi is the densely populated one with **11,297 per sq.km**, while Andaman and Nicobar Islands have the lowest density of population.

Population Growth and Change



- The growth rate of population is an important demographic feature. It not only helps in understanding the population change that a society has undergone in the past but also helps in predicting the future demographic characteristics of an area.
- Population growth refers to the change in the **number of inhabitants of a country/territory** during a specified period of time.
- The growth of population is expressed in percentage and is described as the growth rate of population.
- Growth of population in India has gone through the different phases. Population of the country in **1901 was 238 million and it grew to 1,210 million over a period** of little more than a century. The following are the different stages of population growth of India.
- The **Period of Stagnant Population (1901-1921)**: During the first phase of 20 years (1901-1921), the population of India grew by 15 million. The year 1921 registered a negative growth rate of -0.31% which happened only once throughout the demographic history of India and is called the year of Great Demographic Divide.
- The **Period of Steady Growth (1921-1951)**: During the second phase of 30 years (1921-1951), the population of India grew by 110 million.
- The **Period of Steady Growth (1951-1981)**: During the third phase (1951-1981), the population of India grew **from 361 million in 1951 to 683 million in 1981**. Growth rate in this period is almost doubled when compared to the previous phase of growth rate. This period is often referred to as the period of population explosion.
- The **period of High Growth with Definite Signs of Slowing Down (1981-2011)**: Population of India increased from **685 million to 1210 million** during this phase. The growth rate of population decreased from one census to other.
- This marks the beginning of a new era in the demographic history of India. Population change refers to an increase or decrease of population of an area from one period to another period.
- Population growth is influenced by the birth rate, death rate and migration. These three make the changes in population.

- Birth rate refers to the number of live births per thousand people in a year and the Death rate refers to the number of deaths per thousand people in a year.
- The rapid decline in death rate is the major cause of the rapid growth of population in India.

Migration

- It is the movement of people across regions and territories. It can be **internal (within a country) or international (between the countries)**.
- Internal migration does not change the size of population of a country but it influences the distribution of population in a nation.
- It plays an important role in changing the composition and distribution of population. In India, the mass migration is from rural to urban.
- Unemployment and under employment in the rural areas are the push factors and the employment opportunity and higher wages in the urban areas caused by the industrial development are the pull factors of migration in the country.
- **45 out of 121 crores** of people in India are reported to be migrants as per 2011 census. Migrants constitute about **37% of population**.
- Migrants are **48% from female and 52% from male**.

Population composition

- Population composition refers to the characteristics such as **age, sex, marital status, caste, religion, language, education, occupation etc.**
- The study of composition of population helps us to understand the social, economic and demographic structure of population.

Age composition

- The age composition of population refers to the number of people in different age groups in a country.
- It is one of the most basic characteristics of a population. It helps us to understand the proportion of population in dependent and independent category.
- Population of a nation is generally grouped in to three broad categories.
- In India, the children who has **less than 15 years of age constitute 29.5% and the people above 60 years constitute 8.0%**.
- So, the dependent population in India is **37.5%** and the independent population (**1659 yrs**) is **62.5%**. It shows that our country has enormous manpower.

Sex Ratio

- Sex ratio is defined as the number of females per **1000 male population**.
- This is an important social indicator to measure the extent of equality between males and females in a society at a given time.

- According to 2011 census, the sex ratio of the country is **940 females per 1000 males**.
- This suggests that the size of female population is lower than males. Only in the state of Kerala and the union territory of Puducherry the sex ratio is greater than 1000. It is **1084 in Kerala and 1038 in Puducherry**.
- The lowest sex ratio is recorded in the union territory of **Daman and Diu (618)**.

Literacy Rate

- The people who are able to read and write are known as literates. It is an important indicator of quality of people.
- The percentage of literate people to the total population is termed as literacy rate. There has been a steady improvement in the literacy levels in India. India's literacy rate as per 2011 census is **74.04%**.
- From this, the literacy rate of **male is 82.14% and the female is 65.46%**.
- It shows that still there is a vast gap (16.68%) between the male and female literacy rates.
- Kerala ranks first in the country with a literacy rate of 93.91% followed by union territory Lakshadweep with 92.28%. The lowest literacy rate is found in Bihar (63.82 %).

Occupational structure

- The economically active part of a country's population is enumerated during the census operations and stated as workers.
- Workers are placed under three fold categories in census record. They are main workers, marginal workers and non workers.
- According to the Census of India, all those who had worked for the major part of the preceding **year (at least 6 months or 183 days)** are recorded as main workers.
- Those who worked for less than six months are recorded as marginal workers and the people who have not worked at all comes under non workers.
- Work participation rate denotes the percentage of total workers i.e., total main and marginal workers to the total population in an area.
- The work participation rate in India is 39.79% in 2011, out of which the work participation rate of **male is 53.25% and the female is 25.51%**.
- **From the workers, main workers constitute 75.23% and the remaining 24.77% of the people belong to marginal workers.**

Population Dynamics

- Human population dynamics is a field that tracks factors related to changes in the size of population and its characteristics.
- Predicting population changes is an important aspect of population studies. The demographic trend affects the **economic, social, and environmental systems**.

- An increase in human population can affect the quality of natural resources like **biodiversity, air, land, and water**.
- The size of Population and characteristics undergoes changes constantly. These changes are reflected clearly in every other aspect of our country.

Problems of over Population

- In India, growing pressure of Population on resource base, created many socioeconomic, cultural, political, ecological and environmental problems.
- The Population problems vary in space and time and differ from region to region.
- Some of the major issues created by the overpopulation in our country are **overcrowding, unemployment and under employment, low standard of living, malnutrition, mismanagement of natural and agricultural resources, unhealthy environment etc.**

Urbanization

- The process of society's transformation from rural to urban is known as urbanization.
- The level of urbanization of a place is assessed based on the size of population of the towns and cities and the proportion of population engaged in non agricultural sectors.
- These two are closely linked to the process of industrialization and expansion of the secondary and tertiary sectors of economy.

Urbanization in India

S. No.	Type of Towns/ UAs/OGs	2001 (in Numbers)	2011 (in Numbers)
1	Statutory towns	3799	4041
2	Census Towns	1362	3894
3	Urban Agglomeration	384	475
4	Out Growths	962	981
Source: Statistical data 2011			

- The level of urbanization is measured in terms of percentage of urban population. The level of urbanization in the country has increased more than three times from **1901 to 2011**.

- The percentage of urban population of India was **27.82% in 2001 and it rose to 31.16% in 2011 shows an increase of 3 % in a decade.**
- The level of urbanization varies widely among the states. Goa is the most urbanized state with 62.17% of urban population.
- Himachal Pradesh is the least urbanized state with 10.04% of urban population. Among the Union territories, Delhi is the most (97.50 %) urbanized region followed by Chandigarh (97.25%).
- Among the major states, Tamil Nadu continues to be the most urbanized state with 48.4% percent of urban population followed by Kerala (47.7%) and Maharashtra (45.2%).
- As per 2011 Census, there are 7,935 towns (statutory and census) in the country. The number of towns has increased to 2,774, from 2001 census.
- In 2011, 475 Urban agglomeration (UAs) with 981 outgrowths (OGs) have been identified as Urban Agglomerations as against 384 UAs with 962 OGs in 2001 Census.
- Out of 468 UAs belongs to Class I category, 53 UAs have the population of one million and above each and these urban centres are known as **"Million Cities"**.
- These are the major urban centres in the country. Among the Million Cities, there are three major Urban Agglomerations with more than 10 million population each and are known as **"Mega Cities"**.
- They are Greater Mumbai UA (18.4 million), Delhi UA (16.3 million) and Kolkata UA (14.1million).

Impact of Urbanization

Urbanization and population concentration go hand – in – hand and are closely related to each other. A rapid rate of urbanization in a society is taken as an indicator of its economic development. Urbanization is increasing rapidly in the developing countries including India. Rural to urban migration leads to population explosion in urban areas. Metropolitan cities like Mumbai, Kolkata and Delhi have more population than that can accommodate. The urban population of India had already crossed the **377million in 2011**, which is more than the total population of USA. By **2030, more than 50%** of India's population is expected to live in urban areas. The following are the major problems of urbanization in India.

- It creates urban sprawl.
- It makes overcrowding in urban centres
- It leads to shortage of houses in urban areas
- It leads to the formation of slums
- It increases traffic congestion in cities
- It creates water scarcity in cities
- It creates drainage problem
- It poses the problem of solid waste management
- It increases the rate of crime.

Human Development

Dr. Mahabub-ul-haq defined as "it is a process of enlarging the range of people's choice, increasing their opportunities for education, health care, income and empowerment. It covers the full range of human choices from a sound physical environment to economic, social and political freedom".

Human Development Indicators: (as per UNDP)

Population trends, health outcomes, education achievements, national income and composition of resources, work and employment, human security, human and capital mobility, supplementary indicators: **perceptions of well-being and status of fundamental rights treaties are the human development indicators.**

Measuring of Human Development

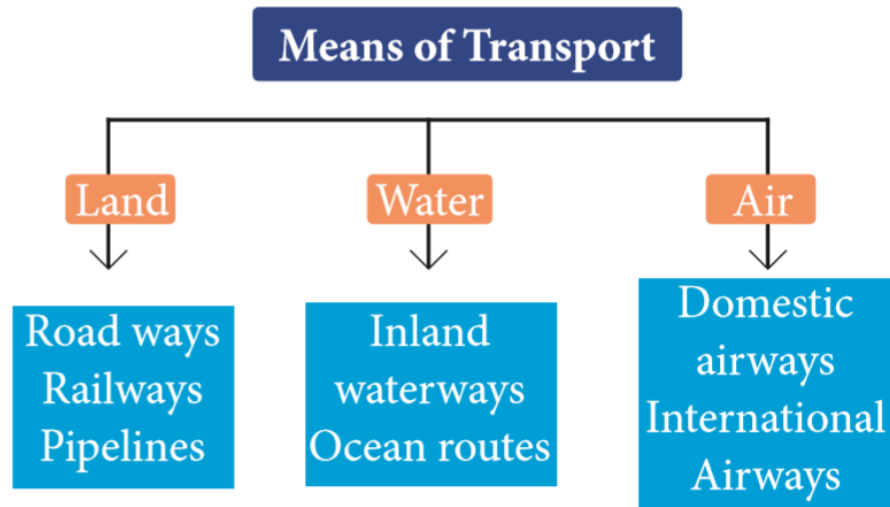
Human Development Index (HDI) is a composite index focusing on three basic dimensions of human development:

- i) Health - Life expectancy at birth
- ii) Education - Expected years of schooling for school age children and average years of schooling for the adult population.
- iii) Income - Measured by gross national income and per capita income.

Human Development Classification

- HDI classifications are based on HDI fixed cut off points, which are derived from the quartiles of distributions of the component indicators.
- The HDI of **less than 0.550** is used for low human development, **0.550 - 0.699 stands for medium human development**, **0.700 - 0.799 for high human development** and **0.8 or greater for very high human development.**

Transportation



- Transport is a system in which passengers and goods are carried from one place to another.
- Transport system is considered as the lifeline of a country. Earlier man travelled on foot or used animals for transport.
- With the discovery of wheel, transport was made easier and gradually different means of transport were developed. There are three major means of transport in the world.

Transport Network in India

Transport is one of the most important components of infrastructure and it is essential for economic development of a country, especially for a large country like India. India has a good transport network of roads, railways, airways and waterways providing necessary connectivity between different parts of the country

Roadways



- Roads play an important role in carrying goods and passengers for **short, medium and long distances**.

- It is highly suitable for short distance services. It is comparatively easy and cheap to construct and maintain roads.
- Road transport system can establish easy contact between farms, fields, factories and markets and can provide door to door transport services.
- Roads are the most universal mode of transport. Indian roads are cost efficient. It is used by all sections of people in the society.
- India has the second longest road network in the world with a total length of 56,03,293 km as of 2016.
- About 85% of passengers and 70 % of freight traffic are carried by roads every year.
- For the purpose of construction and maintenance, roads are classified into National Highways (NH), State Highways (SH), District Roads, Rural Roads (Village roads), Border Roads and International Highways.

Classification of Roads in India

National Highways (NH)

- National Highways form the most important system of road transportation in India. These highways are running through length and breadth of the country connecting capitals of states, major Ports, rail junctions, industrial and tourist centres.
- Ministry of Road Transport and Highways of India, is responsible for the development and maintenance of National Highways in India.
- The total length of the **National Highways (NHs) in India is 1,01,011 km which accounts for 1.8 % of the total road network length in 2016.**
- The longest National highway is NH-7 which runs from Varanasi in Uttar Pradesh to Kanniyakumari in Tamil Nadu covering a distance of 2369 km.
- The shortest national highway is NH-47A, which runs from Ernakulum to Kochi port (Willington Island) covering a distance of 6 km.

State Highways

- The state highways are usually roads that link important cities, towns and district headquarters within the state and connect them with national highways or highways of neighbouring states.
- These roads are administered and financed by state governments. State Highway runs to the **length of 1, 76,166 km as of 2016.**

District Roads

- District Roads provide connectivity between the district and taluk headquarters with the state highways and national highways.

- District Roads are constructed and maintained by the Public Works Department of the states. The total length of the road of this category is **5,61,940 km(16.81%) in 2016.**

Rural Roads (Village Roads)

- Rural roads connectivity is a key component of rural development. These roads are vital for providing links in the rural areas.
- It links the different villages with their neighbouring towns. They are maintained by Village Panchayats.
- The total length of rural roads in India is **39,35,337 km as of 2016.**
- Rural roads consist of Panchayat roads, (**Zilla Parishad, Panchayat Samiti, Gram Panchayat**); roads of the **Pradhan Mantri Gram Sadak Yojana (PMGSY)** and those constructed by the State PWDs.

Border Roads

- These are the roads of strategic importance in border areas. They are constructed and maintained by Border Roads Organization. It was established in **1960** for the development of the roads of strategic importance in the northern and northeastern border areas.
- Border Roads Organization has constructed world's highest road joining Chandigarh and Leh in Ladakh. This road runs at an average altitude of 4,270 meters.

Golden Quadrilateral: 5,846 km long road of 4/6 lanes connecting, India's four metropolitan cities: **Delhi-Kolkata-Chennai-Mumbai-Delhi.** This project was launched in **1999.**

North-South and East-West Corridors: NorthSouth corridor aims at connecting Srinagar in Jammu and Kashmir with Kaniyakumari in Tamil Nadu (including Kochi-Salem Spur) **with 4,076km** long road. The East-West corridor has been planned to connect Silchar in Assam with the port town of Porbandar in Gujarat **with 3,640km** of road length. **The two corridors intersect at Jhansi.**

Expressways

These are multi-lane good quality highways for high speed traffic. Some of the important expressways are;

- (i) Mumbai-Pune Road,
- (ii) Kolkata-Dumdum Airport road
- (iii) Durgapur-Kolkata road and
- (iv) Yamuna expressway between Delhi and Agra.

International Highways

- These are the roads that link India with neighbouring countries for promoting harmonious relationship with them.
- These highways have been constructed with an aid from world bank under an agreement with the **Economic and Social Commission for Asia-Pacific (ESCAP)**.
- These roads connect important highways of India with those of the neighbouring countries such as **Pakistan, Nepal, Bhutan, Bangladesh and Myanmar**.
- In India the densest road network is found in the northern plains where it is relatively easy to construct roads.
- In mountainous area, it is quite difficult to construct roads. **Road density is the highest in Kerala and lowest in Jammu & Kashmir.**

Railways



India - Railways

- Indian railway system is the main artery of the country's inland transport. Railways cater to the needs of large scale movement of traffic, both for freight and passenger, thereby contributing to economic growth.
- Railways are considered as the backbone of the surface transport system of India. It promotes national integration by bringing people together. It also promotes trade, tourism, education etc.
- Railways help in the commercialization of the agriculture sector by facilitating the quick movement of perishable goods. Its role in transporting raw materials to industries and finished goods to markets is invaluable.
- Indian railways network is the largest in Asia and second largest in the world. The length of Indian railways network **as of 2017 is 67,368 km with 7,349 railway stations**. For operations and management, the Indian Railways is organized into **17 zones**.

- 1) Northern Railway - Delhi
- 2) NorthWestern Railway - Jaipur
- 3) North-Central Railway- Allahabad
- 4) North-Eastern Railway - Gorakhpur
- 5) North-East Frontier Railway - Guwahati
- 6) Eastern Railway - Kolkata
- 7) East coast Railway - Bhubaneswar
- 8) East-Central Railway – Hazipur
- 9) West-Central Railway - Jabalpur
- 10) Central Railway - Mumbai (VT)
- 11) Western Railway - Mumbai (Churchgate)
- 12) Southern Railway - Chennai
- 13) South Central Railway - Secunderabad
- 14) South Eastern Railway - Kolkata
- 15) South-Western Railway - Hubball
- 16) South East Central Railway - Bilaspur.
- 17) South Coast Railway – Visakhapatnam.

- The Northern Railway accounts for the longest route length, followed by the Western Railway. On the basis of width of the track, the Indian railways fall under four categories.
- **Broad gauge with a width of 1.676 meter, Meter gauge with a width of 1 meter and Narrow gauge with a width of 0.762 meter and Light gauge with 0.610 meter.**
- In recent times, many developments have taken place in the Indian railways. The arrival of Konkan Railway Corporation (KRC), Mass Rapid Transit System (MRTS), Metro and Sub-Urban railways provide easy and efficient means of transport.
- These are very helpful in avoiding traffic congestion and over crowding in urban areas.

Konkan railway

- One of the important achievements of Indian Railways has been the construction of Konkan Railway in 1998.
- It connects Roha in Maharashtra to Mangaluru in Karnataka and the track measures **760 km.**
- It is considered as an engineering marvel. On its routes, the railway crosses **146 rivers and streams, nearly 2000 bridges and 73 tunnels.**
- **Asia's longest tunnel nearly 6.44 km long is in this route.** The states of Maharashtra, Goa and Karnataka are partners in this undertaking .
- The rail link between Banihal in Jammu region and Qazigund in Kashmir valley was opened in 2013.
- This rail line passes under the Pir Panjal Range through a 11.2 km long tunnel.

Metro Railways in India

- There are 8 cities with metro rail connectivity in India. **They are Kolkata (West Bengal), Chennai (Tamil Nadu), Delhi, Bengaluru (Karnataka), Gurgaon (Haryana), Mumbai (Maharashtra), Jaipur (Rajasthan) and Kochi (Kerala).**
- The metro in Kolkata is the first one in India. It is also called as Mass Rapid Transit System (MRTS).
- As of September 2018, India has 507 km of operational metro lines and 381 stations.

Pipeline transport:

- Pipelines provided a very convenient mode of transport to connect oil and natural gas fields, refineries and to the markets.
- In the past, these were used to transport water to cities and industries. Now solids can also be transported through a pipeline when converted into slurry.
- The initial cost of laying pipeline is high but subsequent running cost is minimum. It can be laid through difficult terrain as well as under water.
- It ensures steady supply of goods and reduces the transshipment losses and delays are the major advantages of pipeline transport.

- Oil field in upper Assam to Kanpur, from Salaya in Gujarat to Jalandhar in Punjab and gas pipeline from the Hazira in Gujarat to Jagadispur in Uttar Pradesh are the three important network large network of pipeline in the country.

Waterways

- A waterway is an important mode of transport for both passenger and cargo traffic in India. It is the oldest and also the cheapest means of transport and most suitable for carrying heavy and bulky materials from one country to another.
- It is a fuel-efficient and eco-friendly mode of transport. The water transport is of two types- **Inland Waterways and Ocean water ways (sea routes).**

Inland Waterways

- India has an extensive network of inland waterways in the form of rivers, canals, lakes and backwaters.
- It depends upon the depth and width of the waterways and the continuity of the water flow.
- The total navigable length of our country is **14,500 km, out of which about 5,200 km length of rivers and 4,000 km length of canals** can be used by mechanized crafts. The total cargo carried by inland waterways is just about 0.1% of the total inland traffic of India.
- For the development, maintenance and regulation of national waterways in the country, the **Inland water ways Authority was setup in 1986.**
- The major national waterways are: National Waterway

1: It extends between Haldia and Allahabad, measures 1620 km and includes the stretches of the GangaBhagirathi-Hooghly river system. National Waterway

2: This waterway includes the stretch of the Brahmaputra river between Dhubri and Sadiya a distance of 891 km. National Waterway

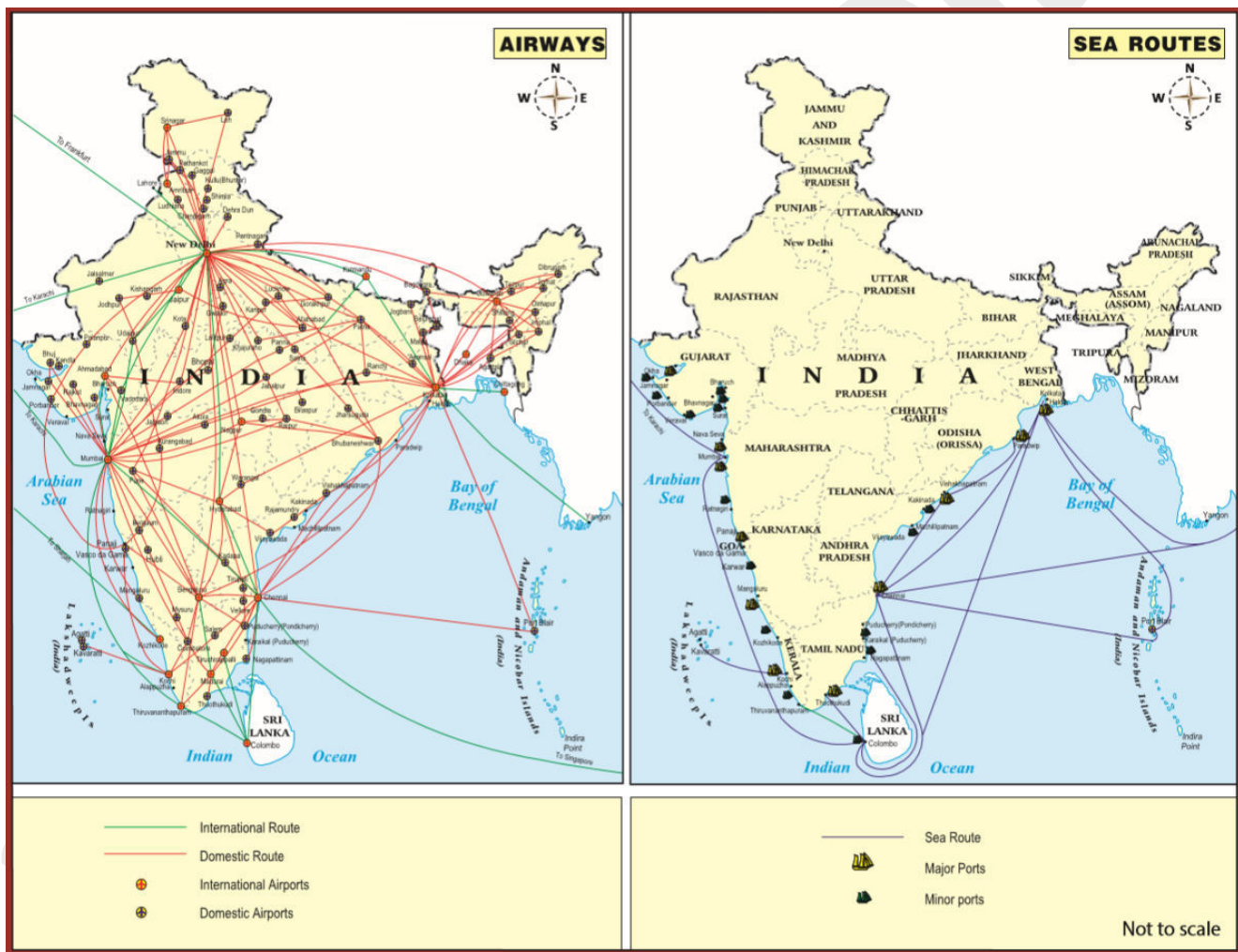
3: This waterway extends between Kollam and Kottapuram in the state of Kerala.

- It is the first national waterway in the country with **24 hour navigation facilities along its entire stretch of 205 km.**

Oceanic Routes

- Oceanic routes play an important role in the transport sector of India's economy. About 95% of India's foreign trade by volume and **70 percent** by value moves through ocean routes.
- Coastal shipping plays an important role in transport of bulk goods in India. Shipping is not only the most economical mode of transport, it is also an environment friendly mode.
- The sea and oceanic routes are mainly used for international trade and are connected through ports.

- There are **13 major and 200 minor or intermediate ports** in India. The major ports are administered by the Central Government and minor ports are managed and administered by various state governments.
- The major ports on the east coast are Kolkata (including Haldia Dock), Paradip, Visakhapatnam, Chennai, Ennore and Tuticorin.
- The major ports on the west coast are Kandla, Mumbai, Nhava Seva (Jawaharlal Nehru Port), New Mangalore, Marmagao and Kochi. India has four major shipyards.
- Hindustan shipyard in Vishakhapatnam, Garden Reach workshop in Kolkata, Mazagaon Dock in Mumbai, Kochi Shipyard in Kochi.
- **India is the second largest ship owning country in Asia and ranks 16th in the World.**



Air Transport

- Airways are the quickest, costliest, most modern and comfortable means of transport, Air transport facilitates connectivity on a national, regional and international scale. It has made accessibility easier by connecting difficult terrains like high mountains and sandy deserts.

- It carries passengers, freight and mail. Air transport plays a key role in times of emergency as well as in the event of natural and man-made calamities like floods, epidemics and wars.
- Air transport in India made a beginning on **18th February, 1918** when Henry Piquet carried a mail from Allahabad to Naini.
- In **1953, eight different airlines which were in operation in the country were nationalised.**
- Domestic Airways fly within the boundaries of a country and International Airways connect major cities of the world.
- The Indian Air lines and Air India are the two airline services run by the government of India.
- Indian Air lines provides the domestic air services and Air India provides international air services.
- Presently, there are **19 designated international airports** available in the country. These airports are managed by Airports Authority of India.
- Some of them are Netaji Subhash Chandra Bose International Airport, Kolkata, Chennai International Airport, Chennai, Indira Gandhi International Airport, Delhi, Chhatrapati Shivaji International Airport, Mumbai, Thiruvananthapuram International Airport, Thiruvananthapuram, Sardar Vallabh Bhai Patel International Airport, Ahmedabad, Bangalore International Airport, Bengaluru, Rajiv Gandhi International Airport, Hyderabad etc.
- Besides this, there are about **80 domestic airports and about 25 civil enclaves at defence air fields.**

Pavan-Hans Helicopter Ltd

- Pavan-Hans Helicopter Ltd has been providing Helicopter support services to the petroleum sector, including ONGC and oil India Ltd.
- It is a **public sector company based in New Delhi.** Its operations are based at the Juhu Aerodrome in Vile Parle (West) Mumbai.
- Pavan-Hans is a Mini Ratna-I category public sector undertaking.
- It often provides services to various state governments in India particularly north east India Inter Island, Ferry services in Andaman & Nicobar Islands, services to Lakshadweep Island etc.

Airports Authority of India (AAI)

Airports Authority of India (AAI) was constituted in 1995. It provides security to Indian Airports. AAI under the ministry of Civil Aviation is responsible for creating, upgrading, maintaining and managing civil aviation infrastructure in India.

Communication

Communication is a process that involves exchange of information, thoughts and ideas. Technology does wonders in communication fields. **Communication is categorized in to personal and mass communications.**

Personal Communication

- The exchange of information between the individuals is called personal communication. It includes **post and telegraph services, telephone, mobile phone, short message services, fax, internet, e-mail** etc.
- Personal Communication system enables the user to establish direct contact. The Indian postal network is the largest in the world with 1,55,000 post offices.
- Of these more than 1,39,000 post offices are located in rural areas. The postal service was opened to the public in the country in **1837**.
- The **first Indian postal stamp was issued in 1852 in Karachi**. Collecting and delivering mail is the primary function of the department of posts. It introduced the **Quick Mail Service in 1975** and today it covers the entire country.
- The Quick Mail Service functions on the basis of the system of **PIN (Postal Index Number) code which was introduced in 1972**.
- The premium products include the Money order, e-money order, Speed Post, Express Parcel Post, Business Post, Media Post, Satellite Post, Retail Post, Greeting Post, Data Post, Speed Net and Speed Passport Services.
- Cards and envelopes are considered firstclass mail and are airlifted between stations covering both land and air.
- The secondclass mail includes book packets, registered newspapers and periodicals. They are carried by surface mail, covering land and water transport.
- To facilitate quick delivery of mails in large towns and cities, six mail channels have been introduced recently.
- They are called Rajdhani Channel, Metro Channel, Green Channel, Business Channel, Bulk Mail Channel and Periodical Channel. **India has one of the largest telecommunication networks in Asia.**
- Apart from the urban areas more than two-thirds of the villages in India have already been covered with **Subscriber Trunk Dialing (STD)** telephone facility, while International communication can be made through ISD (International Subscriber Dialing).
- There is an uniform rate of STD facilities all over India. Telephone is a form of oral communication.
- It is considered very essential for the growth of commerce. It is the most preferred form as it provides instant communication.
- Mobile phone, fax and internet are the other personal communication used in the country.

Mass Communication Systems

- Mass Communication enables millions of people to get the information at the same time. It is a great way to provide education as well as entertainment
- It helps in creating awareness among the people regarding various national policies and programmes.
- The Mass Communication Systems can provide the information to people in two methods. They are **Print Media and Electronic Media**.

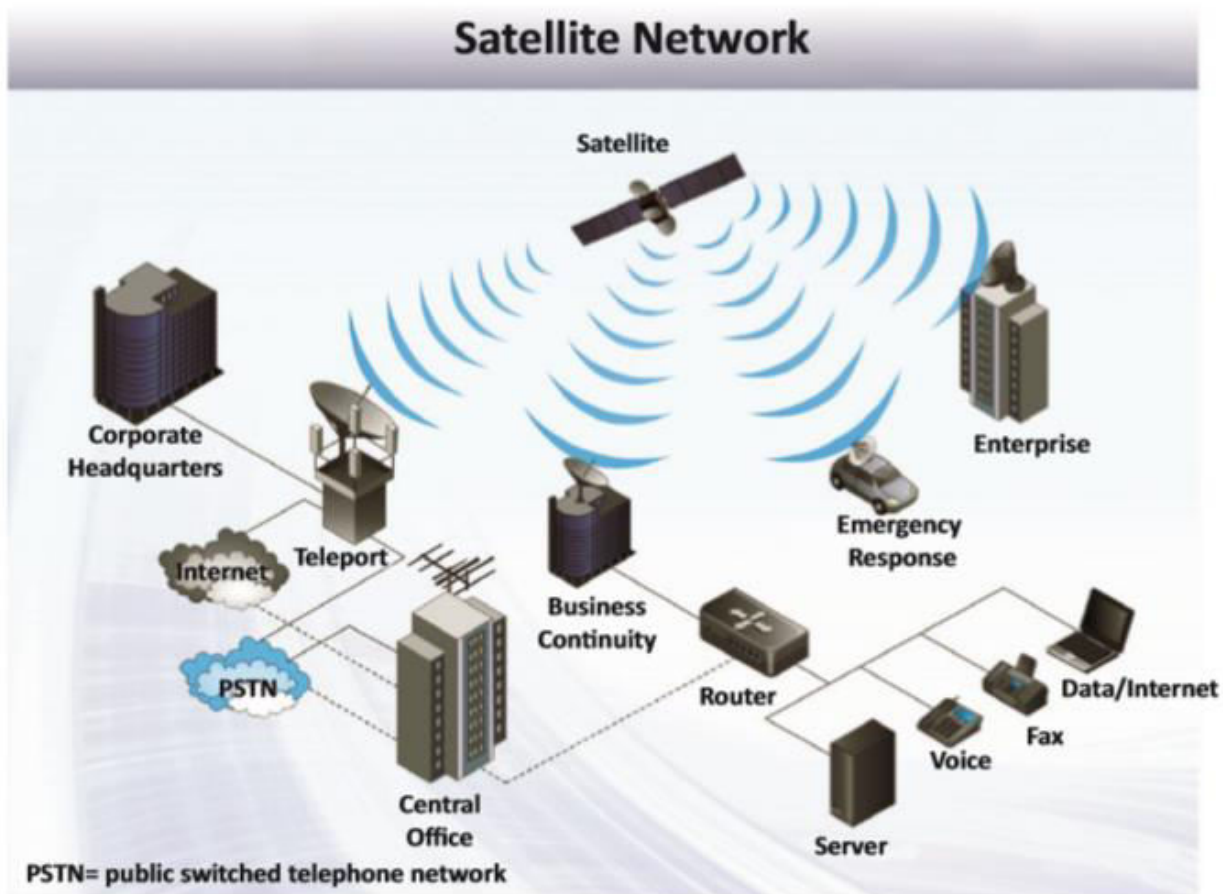
Electronic Media:

- **Radio broadcasting in India was started in 1923** by the Radio club of Bombay. Since then it gained immense popularity and changed the social and cultural life of people. It was named as **All India Radio (AIR) in 1936** and again it was renamed as **Akashwani in 1957**.
- It broadcasts a variety of programs related to information, education and entertainment. Special news bulletins are also broadcasted on special occasions like session of parliament and state legislatures.
- Television broadcasting has emerged as the most effective audio-visual medium for disseminating information and educating the masses. Television network in India is known as **Doordarshan (DD)** which started Common National Program (CNP) services and it is extended to the backward and remote rural areas.
- Internet (**contraction of interconnected network**) is the global system of interconnected computer networks that use the Internet protocol suite to link devices worldwide. Social media are interactive computer-mediated technologies that facilitate the creation and sharing of information, ideas, career interests and other forms of expression via virtual communities and networks.
- With over 460 million internet users, India is the second largest online market, ranked only behind China. By 2021, there will be in India about **635.8 million internet users**.
- Despite the large base of internet users in India, only 26 percent of the Indian population accessed the internet in 2015.
- This is a significant increase in comparison to the previous years, considering the internet penetration rate in India stood at about 10 percent in 2011.
- Furthermore, men dominated internet usage in India with 71 percent to women's 29 percent.

Print Media:

Newspapers are the most common but powerful means of communication come under print media. India has many newspapers which carry information on **local, national and international events to the people**.

Satellite Communication



- The use of Satellite in getting a continuous and synoptic view of larger area has made this communication system very vital for the country.
- Satellite images are used for weather forecasting, monitoring of natural calamities, surveillance of border areas etc.
- The communication through satellites emerged as a new era in communication in our country after the establishment of **Indian Space Research Organization (ISRO) in 1969**.
- Satellite system in India can be grouped into two-the Indian National Satellite System (INSAT) and the Indian Remote Sensing Satellite System (IRS).
- The **INSAT, established in 1983**, is a multipurpose system for telecommunication, meteorological observation and for various other programs.
- The INSAT series are used for relaying signals to television, telephone, radio, mobile phone. It is also useful in weather detection, internet and military applications.
- The **INSAT series, GSAT series, KALPANA-1, HAMSAT, EDUSAT** are the major communication satellite used for communication purpose.
- **GSAT-7A is the recent launch (December 19, 2018)** for communication programs. **INSAT-1B launched on 30th August 1983** is the first communication satellite in INSAT series.

- Trade is an important phenomenon that decides the economic growth of a country. Trade is an act (or) process of buying, selling or exchanging of goods and services.
- The primitive method of trade was known as the **Barter system where goods were exchanged for goods**.
- Later on, money was introduced as a medium of exchange in buying and selling of goods.
- The difference in value between the imports and exports is called **balance of trade**.
- The situation in which the value of exports exceeds the value of imports is termed as favourable balance of trade and the reverse position is termed as unfavourable balance of trade.

Types of Trade

- Trade in general, is of two types. They are **Internal and International**. The trade carried on within the domestic territory of a country is termed as Internal trade. It is also called as **Domestic trade or Local trade**.
- Land transport (roadways and railways) plays a major role in this trade. Local currency is used in internal trade. It helps to promote a balanced regional growth in the country i.e, **tea from Assam, coffee from Karnataka, Rubber and spices from Kerala, minerals from Jharkhand etc.,** are supplied to different parts of our country.
- Trade carried on between two or more countries is called International trade. It is also called as **external trade or foreign trade**.
- Export and Import are two components of International trade. Export means goods and services sold for foreign currency. Import means goods and services bought from overseas producers.
- Waterways and Airways play a vital role in this type of trade. Foreign currency is involved in international trade. The trade between any two countries is called **Bilateral trade**. The trade between more than two countries is called **Multilateral Trade**.

Exports

The major exports of India are tea, marine products, ores and minerals, leather products, gems and jewels, sports goods, chemicals and related products, plastics and rubber articles, articles of stones, plaster, cement, asbestos, mica, glass ware, paper and related products, base metals, optical, medical and surgical instruments, electronic items, machinery, office equipments, textiles and allied products.

Imports

The major imports are **petroleum products, pearls, precious stones and semi-precious stones, gold and telecom instruments**.

India's Trade Performance

- The volume of India's foreign trade has increased many fold since independence. During 2008 -2009, the volume of trade was 840755 crores and it rose to 1039797 crores in 2016-2017.
- The import during 2008-2009 was 1374436 crores and was with a deficit of 40679 crores.
- The import during 2016–2017 rose to 1396352 crores and was with the deficit of 356555 crores.
- It reveals that not only the balance of trade is unfavourable but also the increase in the level of deficit.

More to Know:

1. In 2007, the Government of India merged the Air India and Indian Airlines under National Aviation Corporation of India Limited (NACIL). In which NACIL (A) provides international services, NACIL (I) provides domestic services and services to neighboring countries in **south east Asia and middle East**.
2. The state of Meghalaya has no railway network.
3. The first sub-urban railway was started in **1925 in Mumbai**. **Chennai becomes the sixth** Indian city with metro railway. Gatiman Express is the fastest operational train in India. This train connects New Delhi and Agra and touches 160 km/h. This train takes a travel time of 105minutes to cover 200km journey.
4. The first train steamed off from Mumbai to Thane in 1853, covering a distance of 34 km. In **1951**, the systems were nationalized as one unit **"The Indian Railways"**. The headquarter of Indian Railways is New Delhi.
5. National Highways Authority of India (NHAI) **was established in 1995**. It is an autonomous body under the Ministry of Surface Transport.
6. Shershah suri built the shahi (Royal) road to strengthen and consolidate his empire from the Indus valley to the Sonar valley in Bengal. This road from Kolkata to Peshawar was renamed as Grand Trunk(GT) road during the British period. At present, **it extends from Amristar to Kolkata**. **It is bifurcated into 2 segments: (a) (NH)-1 from Delhi to Amristar, and (b) NH-2 from Delhi to Kolkata.**
7. The ratio between the economically active and economically inactive of population is termed as Dependency Ratio.
8. In India the first census was carried out in the year **1872**. But the first complete and synchronous census was conducted in **1881**. And the 2011 census represents **the fifteenth census of India**.

10th Social Science Lesson 7 Notes in English

7. Indian Constitution

Introduction

- The Constitution is **the fundamental law of a country which reflects the fundamental principles on which the government of that country is based.**
- It is the vehicle of a Nation's progress. More particularly, it is concerned with institutional fabric and the framework of the distribution of powers between the various organs of the government and between the Union and the States.
- **The concept of constitution was first originated in U.S.A.**

The Need for a Constitution

- All Democratic countries have a constitution that governs them. A constitution puts down **certain principles that form the basis of any kind of a state that we as citizens, desire to live in.**
- A constitution tells us the fundamental nature of our society.
- A country is usually made up of different communities of people who have different beliefs; it will be helpful in fulfilling the beliefs of different segments of citizens.

Making of Indian Constitution

- The Constitution of India was framed by a Constituent Assembly setup under the **Cabinet Mission Plan, 1946.**
- The Assembly consisted of 389 members representing Provinces (292), States (93), the Chief Commissioner's provinces (3) and Baluchistan (1).
- The Assembly held its first meeting on **December 9, 1946.** **Dr. Sachchidananda Sinha**, the oldest member, was elected as the temporary President of the Assembly.
- While the work was in progress, **Dr. Sahchidananda Sinha died.** **Dr. Rajendra Prasad** was elected as the President of the Assembly.
- Similarly, both **H.C. Mukherjee** and **V.T. Krishnamachari** were elected as the Vice-Presidents of the Assembly.
- The Assembly met for **11 sessions along with 166 days** of meetings. During the discussion, 2473 amendments were presented. Some of them were accepted.
- The Assembly worked through various committees and the draft of the Constitution was prepared by the Drafting Committee under the chairmanship of Dr. B.R. Ambedkar.
- He is recognised as the **'Father of the Constitution of India'.**
- After the draft had been discussed by the people, the press, provincial assemblies and others, the Constitution was finally adopted on **November 26, 1949, contained a Preamble, 22**

parts, 395 Articles and 8 Schedules. The drafted Constitution came into force on **26th January, 1950.**

- This day is known as the Republic Day. It is being observed every year.

Salient features of Indian Constitution

- It is the lengthiest of all the written constitutions of the world.
- It has borrowed most of its provisions from the constitutions of various countries.
- It is partly rigid and partly flexible.
- It establishes a federal system of government.
- It establishes the parliamentary system not only at the Centre but also in the states.
- It makes India as a secular state.
- It provides an independent judiciary.
- It introduces Universal Adult Franchise and accords the right to vote to all citizens above 18 years of age without any discrimination.
- It provides single citizenship.
- It makes special provisions for minorities, Scheduled Castes, Scheduled Tribes, etc.

Preamble

- The term 'preamble' refers to the introduction or preface to the Constitution. It consists of the ideals, **objectives and basic principles of the Constitution.**
- It contains the summary or essence of the Constitution. It has great value and has been described as the '**key to the Constitution**'.
- The Preamble to the Indian Constitution is based on the 'Objective Resolution', drafted by Jawaharlal Nehru, which was adopted by the Constituent Assembly on **January 22, 1947.**
- It has been amended once by the **42nd Constitutional Amendment Act of 1976**, which added three new words - **socialist, secular and integrity.**
- The Preamble begins with the phrase '**We, the People of India**'. This clearly implies that the Constitution derives its authority from the People of India.
- Thus, we can say that the people of India are the source of our Constitution.
- The Preamble of our Constitution states that India is a **Sovereign Socialist Secular Democratic Republic.** Its aim is to secure to all Indian citizens Social, economic and political justice.
- The Constitution guarantees Liberty of thought, expression, belief, faith and worship to all.
- It gives Equality of status and of opportunity to all. It wants to promote Fraternity among all Indians.

Citizenship

- The word '**Citizen**' is derived from the **Latin term 'Civis'.**

- It means resident of a **City State**. The Constitution of India provides for a single and uniform citizenship for the whole of India.
- **Articles 5 to 11 under part II of the Constitution deals with the citizenship.**

Citizenship Act of 1955

- The Citizenship Act of 1955 provides for acquisition and loss of citizenship after the commencement of the Constitution. **This Act has been amended so far eight times.**
- Originally, the Citizenship Act (1955) also provided for the commonwealth Citizenship. But, this provision was repealed by the **Citizenship (Amendment) Act, 2003.**

Acquisition of Citizenship

The Citizenship Act of 1955 prescribes five ways of acquiring citizenship, viz, **birth, descent, registration, naturalisation and incorporation of territory**: According to the Citizenship Act, 1955, the citizenship could be acquired through any of the following methods.

1. **By Birth:** All persons born in India on or after **January 26, 1950** are treated as citizens by birth.
2. **By Descent:** A person born outside India on or after January 26, 1950 shall be a citizen of India by descent, if his father is a citizen of India at the time of his birth.
3. **By Registration:** A person can acquire citizenship of India by registration with appropriate authority.
4. **By Naturalisation:** A foreigners can acquire Indian citizenship, on application for naturalization to the Government of India.
5. **By Incorporation of Territory:** In the event of a certain territory being added to the territory of India, the Government of India shall specify the persons of that territory who shall be citizen of India.

Loss of Citizenship

The Citizenship Act of 1955 prescribes three ways of losing citizenship whether acquired under the Act or prior to it under the Constitution, viz, **renunciation, termination and deprivation**.

1. It can be voluntarily renounced by a citizen.
2. It can be terminated if a person acquires the citizenship of some other country.
3. The central government can deprive a naturalized citizen, if it satisfied that the citizenship was acquired by fraud, false representation or concealment of material facts or indulges in trade with enemy countries or if the person has been sentenced to imprisonment for a period of 2 years.

Fundamental Rights

I. RIGHT TO EQUALITY



Art. 14 - Equality before law.

Art. 15 - Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.

Art. 16 - Equality of opportunity in matters of public employment.

Art. 17 - Abolition of Untouchability.

Art. 18 - Abolition of titles except military and academic.

II. RIGHT TO FREEDOM



Art. 19 - Freedom of speech and expression, assembly, association, movement, residence and profession.

Art. 20 - Protection in respect of conviction for offences.

Art. 21 - Protection of life and personal liberty.

Art. 21A - Right to elementary education.

Art. 22 - Protection against arrest and detention in certain cases.

III. RIGHT AGAINST EXPLOITATION



Art. 23 - Prohibition of traffic in human beings and forced labour.

Art. 24 - Prohibition of employment of children in factories, etc.

IV. RIGHT TO RELIGION



Art. 25 - Freedom of conscience and free profession, practice and propagation of religion.

Art. 26 - Freedom to manage religious affairs.

Art. 27 - Freedom from payment of taxes for promotion of any religion.

Art. 28 - Freedom from attending religious instruction or worship in certain educational institutions.

V. CULTURAL & EDUCATIONAL RIGHTS



Art. 29 - Protection of language, script and culture of minorities.

Art. 30 - Right of minorities to establish and administer educational institutions.

VI. RIGHT TO CONSTITUTIONAL REMEDIES



Art. 32 - It allows individuals to seek redressal for the violation of their fundamental rights.

- The Fundamental Rights are enshrined in Part III of the Constitution from **Articles 12 to 35**.
- In this regard, the framers of the Constitution derived inspiration from the Constitution of USA.
- Originally, the Constitution provided for seven Fundamental Rights. At present, there are only six Fundamental Rights.
- **Part III of the Constitution is rightly described as the Magna Carta of India.**
- While Fundamental Rights are available to all persons, certain Fundamental Rights are available only to Indian Citizens.

Right to constitutional remedies (Articles 32)

- A writ is an order or command issued by a court in writing under its seal. It is in the nature of a command or prohibition from performing certain acts that are specified in the orders of the court.
- Both the Supreme Court and the High Courts are empowered to issue five kinds of writs of **habeas corpus, mandamus, prohibition, quo warranto and certiorari**. That is why the Supreme Court is called the **"Guardian of the Constitution"**.
- According to Dr. Ambedkar, **Article 32** is **"the heart and soul of the Constitution"**.

(a) **Habeas Corpus**: Safeguards people from illegal arrests.

(b) **Mandamus**: It protects the petitioner who requires legal help to get his work done by respective public authorities.

(c) **Prohibition**: It prohibits a subordinate court from acting beyond its jurisdiction.

(d) **Certiorari**: It quashes an order issued by a subordinate court by overstepping its jurisdiction.

(e) **Quo Warranto**: It prevents usurpation of public office through illegal manner.

Suspension of Fundamental Rights

- When the President makes a Proclamation of Emergency under **Article 352**, the freedoms guaranteed under **Article 19** are automatically suspended.
- The President can suspend other fundamental rights through specific orders.
- These orders must be approved by the Parliament. But he cannot suspend the freedoms given under **Arts. 20 and 21** (protection in respect of conviction for offences and protection of life and personal liberty respectively) in any circumstances.

Directive Principles of State Policy

- The Directive Principles of State Policy are enumerated in **Part IV of the Constitution** from Articles **36 to 51**.
- The Constitution does not contain any classification of Directive Principles. However, on the basis of their content and direction, they can be classified into three broad categories, **viz, socialistic, Gandhian and liberal-intellectual**.
- These principles are not enforceable by the courts. But they are fundamental for the governance of the country.
- The Government is duty bound to apply these principles while making laws.
- They aim at promoting the Social Welfare of the people. **Dr. B.R. Ambedkar** described these principles as **'novel features'** of the Indian Constitution.

Differences between Fundamental Rights and Directive Principles of State Policy

Fundamental Rights	Directive Principles of State Policy
It was derived from the Constitution of the USA.	It was drawn on the model of the Constitution of Ireland.
Even the Government cannot take away or abridge these rights.	These are mere instructions to the Government.
These are enforceable by a court of law.	These are not enforceable in any court.
These have legal sanctions.	These have moral and political sanctions.
These rights strengthen political democracy in the country.	The implementation of these principles ensures social and economic democracy.
These are natural rights.	These lead to protect human rights.

Fundamental Duties

- The Fundamental Duties in the Indian Constitution are inspired by the Constitution of former USSR.
- In 1976, the Congress party set up the **Sardar Swaran Singh** Committee to make recommendations on fundamental duties.
- The **42nd Amendment Act of 1976** added some responsibilities of citizens to our Constitution called the Fundamental Duties.

- This amendment added a new part, namely, **Part IVA to the Constitution**.
- This new part consists of only one Article that is **Article 51A** which for the first time specified a code of ten fundamental duties of the citizens.

List of Fundamental Duties

Article 51A declares it to be the duty of every citizen of India.

- (a) To abide by the constitution and respect its ideals and institutions, the National Flag and the National Anthem.
- (b) To cherish and follow the noble ideals which inspired the national struggle for freedom
- (c) To uphold and protect the sovereignty, unity and integrity of India
- (d) To defend the country and render national service when called upon to do so
- (e) To promote harmony and the spirit of common brotherhood among all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women
- (f) To value and preserve the rich heritage of our composite culture
- (g) To protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures
- (h) To develop scientific temper, humanism and the spirit of inquiry and reform
- (i) To safeguard public property and to abjure violence
- (j) To strive towards excellence in all spheres of individual and collective activity, so that the nation constantly rises to higher levels of endeavour and achievement
- (k) To provide opportunities for education to his child or ward between the age of six and fourteen years. (The 86th Constitutional Amendment Act, 2002 has also introduced the 11th Fundamental Duty under 51A) under which all citizens of India or parents shall provide opportunities for education to their children between age of 6 and 14 years)

Centre-State Relations

The Constitution of India, being federal in structure, divides all powers between the Centre and the States. The Centre-state relations can be studied under three heads:

Legislative relations

- The Union Parliament has the power to legislate for the whole or any part of the territory of India, which includes not only the States but also the Union Territories or any other area for the time being, included in the territory of India.
- **The Seventh Schedule** of the Constitution embodies three lists namely, the **Union List, State List and Concurrent List consisting of 97, 66 and 47** items respectively.
- The Parliament enjoys the exclusive power to legislate on subjects enumerated in the Union List.
- The State Legislature has exclusive right to legislate on the State List.
- Both Parliament and State Legislatures have power to legislate on subjects contained in the Concurrent List.
- But in case of conflict between the law of the State and the Union on a subject in the Concurrent List, the law of Parliament prevails.

Administrative relations

The Administrative power of a State extends only to its own territory and with respect to which it has legislative competence, whereas the Union has exclusive executive power over:

- (a) the matters with respect to which Parliament has exclusive power to make laws and
- (b) the exercise of its powers conferred by any treaty or agreement.

Financial relations

- **Article 268-293 in Part XII** deal with the Financial relations between centre and the states. The Centre and States are empowered by the Constitution to impose various kinds of taxes.
- And certain taxes are imposed and collected by the centre and divided between centre and states based on the recommendation of the Finance Commission appointed by the President under **Article 280** of the Constitution.
- Late Prime **Minister Indira Gandhi appointed the Sarkaria Commission in 1983** to make an enquiry into the Centre-State relations.
- The Central government has implemented **180 (out of 247) recommendations** of the Commission.
- The most important is the establishment of the **Inter-State Council in 1990**.

Official Language

- **Part XVII** of the Constitution deals with the official language in **Articles 343 to 351**. Its provisions are divided into four heads namely, Language of the Union, Regional languages Language of the judiciary and texts of laws and Special directives.
- The First language committee was appointed in 1955. It submitted its report in 1956. As a follow up of the report, parliament enacted the **Official Language Act, 1963**.

- The act laid down that even after 15 year, English may continued to be used along with Hindi for all official purposes of the Union and also for transaction of business in parliament.
- Again through the **Official Languages (Amendment) Act, 1967**, it was provided that the use of English would continue indefinitely.
- The Constitution also permitted certain regional languages to be used for intra-state official transactions.
- Initially, the Constitution recognised **14 regional languages** which were included in the Eighth Schedule. At present, **22 languages are recognised**.

Emergency Provisions

The Central Government has been vested with extraordinary powers to deal with conditions of emergency. Three types of emergencies are envisaged in the Constitution:

National Emergency (Article 352)

- The President under Article 352 can declare emergency if he is satisfied that India's security is threatened due to war, external aggression or armed rebellion, or if there is an imminent danger or threat.
- When a national emergency is declared on the ground of war or external aggression it is known as external emergency.
- On the other hand, when it is declared on the ground of armed rebellion it is known as internal emergency.
- This type of emergency has been declared three times so far: in **1962, 1971 and 1975**.

State emergency (Article 356)

- Under Article 356, the President can declare an emergency in a state if the Governor reports that a situation has arisen under which the government of a State cannot be carried on in accordance with the provisions of the Constitution.
- The continuance of such an emergency beyond one year is possible only if emergency under Art. 352 are in operation or the Election Commission certifies that there are difficulties in holding Assembly elections.
- Maximum duration of the emergency can be three years. In this kind of emergency, the States lose much of their autonomy in legislative and executive matters.
- After such an announcement state legislature is suspended and the State is governed by the Governor on behalf of the President.
- For the first time, **the President's Rule was imposed in Punjab in 1951**.

Financial emergency (Article 360)

- Article 360 authorises the President to declare financial emergency if he is satisfied that the financial stability or credit of India or of any of its parts is in danger.

- In this type of emergency, salaries and allowances of any class of persons serving State or Union, including judges of the Supreme Court and High Court can be reduced by an order of the President.
- This type of emergency has not been declared in India so far.

Amendment of the Constitution

- The term amendment denotes **change, improvement and modification**.
- Usually this term is associated with one or more changes made in the Constitution of a country.
- **Article 368** of the Constitution in **Part XX**, deals with the powers of Parliament to amend the Constitution and its procedure.

Procedure of Amendment

An amendment of this Constitution may be initiated only by the introduction of a Bill for the purpose in either House of Parliament, and when the Bill is passed in each House by a majority of the total membership of that House and by a majority of not less than two-thirds of the members of that House present and voting, it shall be presented to the President who shall give his assent to the Bill and thereupon the Constitution shall stand amended in accordance with the terms of the Bill. The constitution amendment can be brought about only by the Parliament. State legislatures cannot initiate for any amendment to the Constitution.

Types of Amendments

- **Article 368** provides for three ways of amendments, that is, by a special majority of Parliament and also through the ratification of half of the states by a simple majority.
- But, some other articles provide for the amendment of certain provisions of the Constitution by a simple majority of Parliament, that is, a majority of the members of each House present and voting (similar to the ordinary legislative process).
- Notably, these amendments are not deemed to be amendments of the Constitution for the purposes of Article 368.
- Therefore, the Constitution can be amended in three ways: **1. Amendment by simple majority of the Parliament 2. Amendment by special majority of the Parliament 3. Amendment by special majority of the Parliament and the ratification of half of the state legislatures.**

Constitutional Reform Commissions

- The National Commission to Review the Working of the Constitution was set up by a resolution of the Government of India in **2000** **headed by M.N.Venkatachaliah**.
- In **April 2007**, a three member commission headed by the former Chief Justice of India **M.M.Punchchi** was set up by the then Government to take a fresh look at relative roles and responsibilities of various levels of Government and their inter-relations.

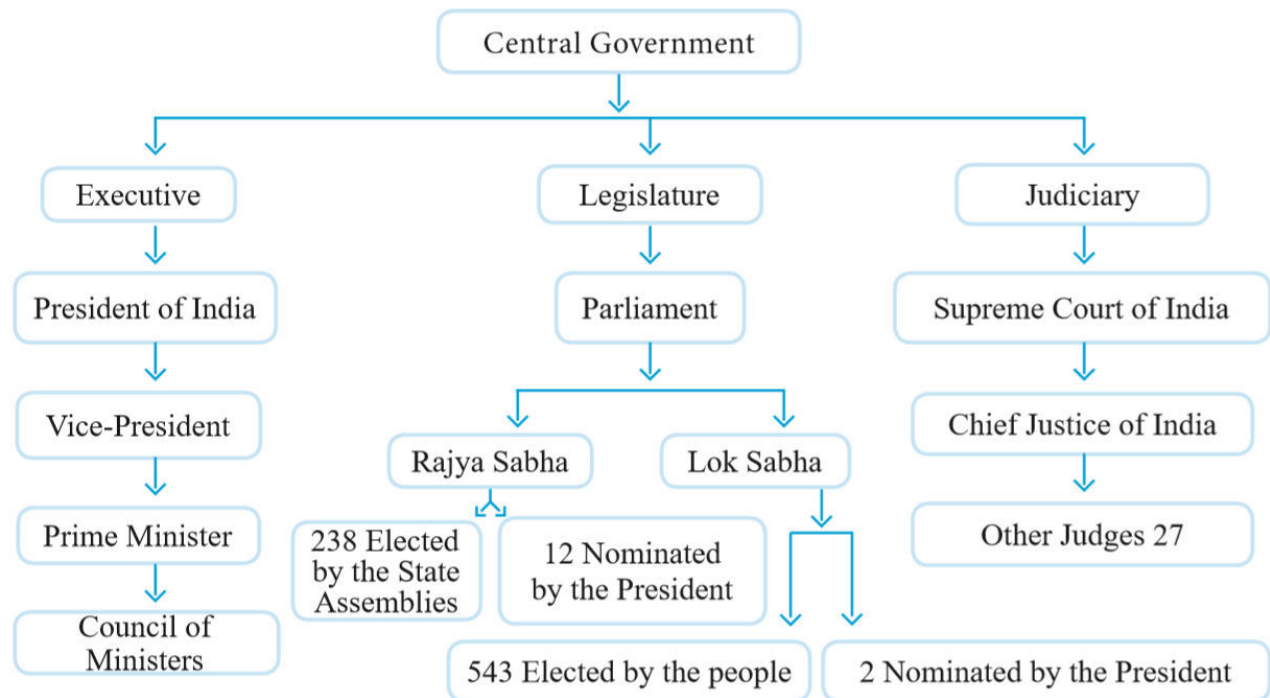
More to Know:

1. 42nd amendment of the Constitution is known as the **mini Constitution**.
2. In 2004, the Government of India decided to create new category of languages called as "classical languages". So far, the six languages are granted the classical language status namely **Tamil (2004), Sanskrit (2005), Telugu (2008), Kannada (2008), Malayalam (2013) and Odia (2014)**.
3. In 1969, the Tamil Nadu Government appointed a three-member committee under the chairmanship of **Dr. P V Rajamannar** to examine the entire question of Centre-state relations.
4. **The Union List, State List and Concurrent List consisting at present 100, 61 and 52 items respectively**. The 42nd Amendment Act of 1976 transferred five subjects to Concurrent List from State List, that is, education, forests, weights and measures, protection of wild animals and birds, and administration of justice; constitution and organisation of all courts excepts the Supreme Court and the high courts.
5. **The 86th Amendment Act of 2002** changed the subject -matter of **Article 45** and made elementary education a fundamental right under **Article 21 A**. The amended directive requires the State to provide early childhood care and education for all children until they complete the age of six years.
6. **Right to Property (Art. 31)** was deleted from the list of **Fundamental Rights by the 44th Amendment Act, 1978**. It is made a legal right under **Article 300-A** in Part XII of the Constitution.
7. **'Magna Carta'** is the Charter of Rights issued by **King John of England in 1215** under pressure from the barons. This is the first written document relating to the Fundamental Rights of citizens.
8. **Liberty, Equality and Fraternity** were the important slogans during the **French Revolution in 1789**. They are given importance in the Preamble of our Constitution.
9. **Prem Behari Narain** Raizada was the calligrapher of the Indian Constitution. The original constitution was handwritten by him in a flowing **italic style**.

10th Social Science Lesson 8 Notes in English

8. Central Government

Introduction



- The Central Government is the supreme government in our country. The head quarter of the Central Government is at New Delhi. **Articles 52 to 78 in part V** of Indian Constitution deals with the Union Executive.
- Our Constitution provides for a democratic form of government. The makers of the Indian constitution, by giving due recognition to the vastness and plural character of our nation, have provided a federal arrangement for her governance.
- The Central Government consists of three organs, namely, **Union Executive, Legislature and Judiciary**.
- The Union Executive consists of the President of India, the Vice-President, and the Council of Ministers headed by the Prime Minister, and the Attorney General of India.
- The Legislature is known as the Parliament. It consists of two houses, namely the **Rajya Sabha and the Lok Sabha**. The Union Judiciary consists of the Supreme Court of India.

The President of India

List of Presidents of India

1. Thiru. Rajendra Prasad	1950 to 1962
2. Thiru. Sarvepalli Radhakrishnan	1962 to 1967
3. Thiru. Zakir Hussain	1967 to 1969
4. Thiru. V.V Giri	1969 to 1974
5. Thiru. Fakhruddin Ali Ahmed	1974 to 1977
6. Thiru. Neelam Sanjiva Reddy	1977 to 1982
7. Thiru. Giani Zail Singh	1982 to 1987
8. Thiru. R Venkataraman	1987 to 1992
9. Thiru. Shankar Dayal Sharma	1992 to 1997
10. Thiru. K R Narayanan	1997 to 2002
11. Thiru. APJ Abdul Kalam	2002 to 2007
12. Tmt. Pratibha Patil	2007 to 2012
13. Thiru. Pranab Mukherjee	2012 to 2017
14. Thiru. Ram Nath Kovind	2017 to till now

- In the scheme of parliamentary system of government provided by the constitution, the President is the nominal executive authority.
- The chief executive of the Indian union is the President. **He is designated as the First citizen of India.**
- He is the supreme commander of the armed forces. The President is also the Constitutional head of the Union Executive.
- He is also responsible for constituting the judiciary. According to **Article 53** of the constitution, the executive power of the Union shall be vested in the President which shall be exercised by him directly or through officers subordinate to him in accordance with Constitution.

Qualification for the election as President

The constitution lays down qualifications for a Presidential candidate.

- He should be a citizen of India.
- He must have completed the age of thirty five years.
- He must not hold any office of profit under the Union, State or local Government.
- He should have the other qualifications required to become a member of the Lok Sabha.
- His or her name should be proposed by at least ten electors and seconded by another ten electors of the Electoral College which elects the President.

- The President cannot be a Member of Parliament or of a State Legislature; if he is a member of any legislature, his seat will be deemed to have been vacated on the date he / she assumes the office of President.

Election of the President

- The President is elected by an electoral college in accordance with the system of proportional representation by means of **single transferable vote**.
- The Electoral College consists of the elected members of both houses of Parliament and the elected members of the states and elected members of **National Capital Territory of Delhi and Puducherry**.
- Once elected as the President has to take an oath of office before the Chief Justice of India.
- The President is elected for a term of **five years and can be re-elected**.

Powers of the President

The powers and functions of the President of India can be broadly classified under the following categories.

Executive Powers

- The constitution vests in the President of India all the executive powers of the Central Government. **Article 77** requires that every executive action of the Union shall be taken in the name of the President.
- So he has to make many appointments to key-offices to run the administration. He appoints the Prime Minister and the other members of the Council of Ministers, distributing portfolios to them on the advice of the Prime Minister.
- He is responsible for making a wide variety of appointments.
- These include the **appointment of Governors of States, the Chief Justice and other Judges of the Supreme Court and high Courts, the Attorney General, the Comptroller and Auditor General, the Chief Election Commissioner and other Election Commissioners the Chairman and other Members of the Union Public Service Commission Ambassadors and High Commissioners to other countries**.
- He appoints a commission to investigate into the conditions of SCs, STs and other backward classes.
- He is the **supreme commander of the defense forces of India**, in this capacity the President can appoint **Army, Navy, and Air Chiefs**.

Legislative Powers

- The President is an integral part of the Union Parliament. He inaugurates the session of the Parliament by addressing it after the general election and also at the beginning of the first session each year.

- This address is essentially identical in nature to a Speech from the Throne. The President summons Parliament **at least twice in a year**.
- He may send messages to either House of the Parliament with respect to a bill pending in the House.
- All bills passed by the Parliament become **"Laws of Acts"** only after getting assent of the President.
- Money bills cannot be introduced in the Parliament without his approval. President terminates the sessions of both or any of the Houses of Parliament.
- He can even dissolve the Lok Sabha before the expiry of the term of the House. He nominates **12 persons** who are eminent in **literature, science, sports, art and social service** to the Rajya Sabha.
- He can also nominate two persons belonging to Anglo Indian Community to the Lok Sabha, if in his opinion, that community is inadequately represented in the House.

Financial Power

- Money bill can be introduced in the Parliament only with his prior recommendation.
- Annual Budget of the Central Government is presented before the Lok Sabha by the Union Finance Minister only with the permission of the President.
- He causes to be laid before the Parliament the annual financial statement **(the Union Budget)**.
- The Constitution of India places the Contingency Fund of India at the disposal of the President.
- No demand for a grant can be made except on his recommendation. He can make advances out of the contingency fund of India to meet any unexpected expenditure.
- He constitutes a finance commission after every five years or on the demand of the states to recommend the distribution of revenues between the Centre and the States.

Judicial Powers

- **Article 72** confers on the President power to grant pardons, reprieves, respites or remissions of punishment, or to commute the sentence of any person convicted of an offence.
- In all cases where the punishment or sentence is by a court martial; in all cases where the punishment or sentence is for an offence against a Union law; and in all cases where the sentence is a sentence of death.
- The President is not answerable to any court of law for exercise of his/her power **(however He can be subjected to impeachment by the Parliament)**.

Military Powers

- **Article 53(2)** lays down that **"the supreme command of the Defence Force of the Union shall be vested in the President and the exercise thereof shall be regulated by law"**.

- The President is thus declared to be the Supreme Commander of the defence Force of the country.
- In the exercise of this power, it is the President, who can declare war against a country and make peace.

Diplomatic Powers

- The President appoints **Indian diplomats to other countries** and receives foreign diplomats posted to India.
- The ambassador designate becomes ambassador after calling on the President and presenting his credentials.
- All treaties and agreements with foreign States are entered into, in the name of the President.

Emergency Powers

The President has been empowered by the Constitution to proclaim Emergency. They are follows:

Article 352 confers power on the President to make a proclamation of Emergency on the grounds of war, external aggression, or armed rebellion. This is known as National Emergency.

Article 356 confers power on the President to make a proclamation of State Emergency by declaring that the Government in a State cannot be run on in accordance of the provisions of the Constitution.

Under **Article 360**, the President is vested with the power to proclaim Financial Emergency, if he is satisfied that the financial stability or, the credit of India or any part of India is threatened, by any reason.

Removal of the President

- The President shall hold office for a term of **five years** from the date on which He enters the office.
- The President may by **writing under his hand addressed to the Vice-President**, resign his office.
- The President may, for violation of the Constitution, be removed from office by impeachment in the manner provided in **Article 61**; **The Impeachment action** can be brought about in the form of resolution in either house of the Parliament.
- It must be supported by **not less than One Fourth of the total strength** of the House for its introduction.
- The President shall, in spite of the conclusion of his term, continue to hold office until his successor enters upon his office.

Privileges of the President

According to **Article 361(1)** the President, or the Governor of a state, shall not be answerable to any court for the exercise and performance of the powers and duties of his office or for any act done or purporting to be done by him in the exercise and performance of those powers and duties.

Vice-President

- The vice-President occupies the second highest office in the country.
- He is accorded a rank next to the President in the official warrant of precedence. This office is modeled on the lines of the American Vice President.
- **Article 63** of the constitution provides for a Vice President of India.
- This office has been created to maintain the political continuity of the state.

Qualification for the election as Vice President

The constitution lays down qualifications for a Vice Presidential candidate.

- He should be a citizen of India.
- He must have completed the age of thirty five years.
- He must not hold any office of profit under the Union, State or local Government.
- He should have the other qualifications required to become a member of the Rajya Sabha.

Election and term of the Vice-President

- **Article 66(1)** the Vice President, like the president, is elected not directly by the people but the method of indirect election.
- He is elected by the members of an electoral **college consisting of the member of both Houses of Parliament.**
- The term of office of the Vice President is five years.
- His office may terminate earlier than the fixed term either by resignation, death or by removal. He is eligible for re-election.
- The Constitution does not provide a mechanism of succession to the office of the Vice – President. Under such circumstances, election to the Vice President shall be held early as possible.
- Till then deputy chairman of the Rajya sabha can perform the duties of the chairman of the Rajya sabha.

Removal of the Vice President

- The Vice President may be removed from his office by a resolution of the Council of States passed by a majority of all the then members of the council and agreed to by the House of the People.
- A resolution for this purpose may be moved only after a notice of at least a minimum of **14 days** has been given of such an intention.

Functions of the Vice President

The Vice-President is **Ex-Officio Chairman of the Rajya Sabha**. As the Chairman of the House, he carries out several functions.

- He regulates the proceeding of the House.
- He decides the order of the House.
- He decides the admissibility of a resolution or questions.
- He suspends or adjourns the House in case of a grave disorder
- He issues directions to various committees on matters relating to their functions
- When the President is unable to discharge his duties due to illness or absence from the country, he attends to the functions of the President. When the President is unable to do so due to sickness or when the post of President becomes vacant due to resignation, death, or removal by impeachment etc. the Vice-President can act as the President for a maximum period of six months.

Prime Minister

List of Prime Ministers of India

1. Thiru. Jawaharlal Nehru	1947–64
2. Thiru. Lal Bahadur Shastri	1964–66
3. Tmt. Indira Gandhi	1966–77
4. Thiru. Morarji Desai	1977–79
5. Thiru. Charan Singh	1979–80
6. Tmt. Indira Gandhi	1980–84
7. Thiru. Rajiv Gandhi	1984–89
8. Thiru. V.P. Singh	1989–90
9. Thiru. Chandra Shekhar	1990–91
10. Thiru. P.V. Narasimha Rao	1991–96
11. Thiru. Atal Bihari Vajpayee	May 1996
12. Thiru. D. Deve Gowda	1996–97
13. Thiru. I.K. Gujral	1997–98
14. Thiru. Atal Bihari Vajpayee	1998–2004
15. Thiru. Manmohan Singh	2004–14
16. Thiru. Narendra Modi	2014–till now

- **Article 74 (1) says:** There shall be a council of ministers with the Prime Minister as the head to aid and advise the President.
- He may direct the council to reconsider their advice, but is bound by the advice given after reconsideration.
- The post of Prime Minister of India has adopted the **Westminster (England) model** of constitutional democracy.
- The leader of the majority party in Lok Sabha is appointed by the President as the Prime Minister.
- The other ministers are appointed by the President on the advice of the Prime Minister. If no party commands absolute majority in the Lok Sabha, the President can summon the leader of any party who, in his opinion, can manage to form a ministry.
- The President administers to the ministers the oath of office and of secrecy.
- The salaries and allowances of the Prime Minister and the ministers are determined by the Parliament.
- A person who is not a member of the Parliament can be appointed as a minister but he has to get himself elected to the Parliament within **six months**.
- Ministers are individually as well as collectively responsible to the Lok Sabha.

Duties and functions of Prime Minister

Article 78 mentioned the duties of the Prime Minister:

- The Prime Minister decides the rank of his ministers and distributes various departments.
- The Prime Minister decides the dates and the agenda of the meeting of the Cabinet which he presides.
- The Prime Minister is the Head of the Cabinet and the other ministers are his colleagues.
- The Prime Minister informally consults two or three of his senior colleagues when he does not convene a Cabinet meeting.
- The Prime Minister supervises the work of various ministers
- To converse to the President all decisions of the Council of Ministers connecting to the government of the affairs of the Union and proposals for legislation
- The Prime Minister act as the link between the President and the Council of Ministers.
- The Prime Minister is the leader of the nation and chief spokesperson of the country.
- As the leader of the nation, the Prime Minister represents our nation at all international conferences like the commonwealth, summit of the non aligned nations and SAARC nations.

Council of Ministers

- After the elections, the President of India, on the advice of the Prime Minister, appoints the council of ministers.

- Sometimes a non – member of the Parliament too may be appointed. However, he must get elected to either of the Houses of the Parliament within a period of six months.
- The Constitution of India restricts the number of the **Council of Ministers including the Prime Minister to fifteen per cent of the total members of the Lok Sabha.**

Categories of the Ministers

The ministers are classified under three ranks (i) Cabinet Ministers (ii) Ministers of State (iii) Deputy Ministers.

Cabinet Ministers

- The Cabinet is an **informal body of senior ministers** who form the nucleus of administration.
- Important decisions of the government are taken by the Cabinet, such as **defense, finance, external affairs and home.**
- The Cabinet recommends to the President to promulgate an ordinance. It is instrumental in moving Amendments to the Constitution.
- The Finance bills have their origin in the Cabinet and then they are introduced in the Lok Sabha with the Presidents recommendations.
- The Cabinet decides the foreign policy of the Government approves international treaties and plays a significant role in the appointment of Ambassadors to various countries.

Ministers of State

These ministers belong to the second category of ministers in the council. They are also in charge of ministries or departments but they do not participate in the meetings of the cabinet unless invited to do so.

Deputy Ministers

They are the lowest ranked ministers in the cabinet. They assist either the Ministers of Cabinet or State in the performance of the duties entrusted to them.

Parliament of India

- The parliament is the legislative organ of the Union government. **Article 79 to 122 in part V** of the constitution deal with the organization, composition, duration, officers, procedures, privileges, powers and so on of the Parliament.
- The Parliament of India consists of three parts they are the President, Rajya Sabha (the council of States) and Lok Sabha (the House of the People).
- The Rajya Sabha is the Upper House and the Lok Sabha is the Lower House it is termed as bicameral legislature.

Rajya Sabha

- The council of State or Rajya Sabha consists of 250 members out of whom 238 represent the states and the Union Territories, elected by the method of indirect election.
- The **12 nominated members** shall be chosen by the President from amongst persons having '**special knowledge or practical experience in the field of literature, science, sports, art and social service.**

Qualification of the Members

A person seeking membership of Rajya Sabha must possess the following qualifications.

- He should be a citizen of India.
- He should not be less than 30 years of age.
- He should not hold any office of profit under any Government.
- He should be a person with sound mind and monetarily solvent.
- He should have such other qualification as may be approved by the Parliament for that reason from time to time.
- He should not be the member of Lok Sabha or any other legislature.

Term of House

- The Rajya Sabha is a permanent house and it cannot be dissolved. The members of the Rajya Sabha are elected for a **term of six years.**
- One third of the members of Rajya Sabha retire every **two years**, and new members are elected to fill the seats thus vacated.
- The Vice President of India is the **Ex-officio Chairperson of the Rajya Sabha.**
- The Deputy Chairperson of the Rajya Sabha is elected by the members of the Rajya Sabha.

Election

- Members of Rajya Sabha are elected by the elected members of the '**State Legislative Assemblies**' in accordance with the system of proportional representation by means of the single transferable vote.
- This process of election is called "**indirect election**" as they are not elected by the people directly.

Functions of the Rajya Sabha

Any bill (except the money bills) needs to be approved by Rajya Sabha to get passed. If the bill gets stuck for more than **six months** then President calls for a joint session of both the houses to resolve the deadlock.

- It has the same power as Lok Sabha, for passing any bill for constitutional amendment.

- The members of Rajya Sabha have the electoral power for selection of President, Vice President. Together with the members of Lok Sabha and all the State Legislative Assemblies they elect the President and Vice President.
- It has power in the impeachment procedure of president and judges of supreme court and high court.
- Rajya Sabha has the power to make a state list subject into National Importance. If two third majority of the members of Rajya Sabha passes a resolution to support it. Rajya Sabha can also create or abolish an All India Service. If majority of members (**2/3 of Total Members**) supports it.

Lok Sabha

- The Lok Sabha is the popular house of the Indian Parliament and contains elected representatives of the people. Maximum number of members can be elected for Lok Sabha is **552**.
- The Lok Sabha as of today has **543 elected members**.
- Out of these, **530 members are elected from different states and 13 members from the Union Territories**.
- The President generally nominates two members belonging to the Anglo-Indian community. At present, the Lok Sabha consists of **545 members**.

Qualification of the Members

- He should be a citizen of India.
- He should not be less than 25 years of age.
- He should have his name in electoral rolls in some part of the country.
- He should not hold any office of profit under the Union or State Government.
- He should be mentally sound and economically solvent.

The term of the House

- Generally the Lok Sabha enjoys a term of five years from the date of its first session. It can be dissolved by the President **before the expiry of its term on the advice of the Prime Minister**.
- The emergency provisions of the Constitution enable the President to prorogue or dissolve the Lok Sabha either on the advice of the Prime Minister or on being convinced that no party or no alliance of parties enjoys necessary majority support in the House.

Election

- The members of the Lok Sabha are directly elected by the people of the constituencies created on the basis of population.

- The Election Commission of India arranges, supervises and conducts elections to the Lok Sabha.
- For sake of elections to Lok Sabha the entire nation is divided into number of constituencies which are formed more or less on the basis of the population.
- **"Universal Adult Franchise"** is followed while electing the members of the Lok Sabha.
- All Indian Citizens above **18 years of age** who are registered as voters will vote for their representatives.

Functions of the Lok Sabha

- Any bill can be introduced and passed in the Lok Sabha (Including Money Bill).
- It has the same power as Rajya Sabha to participate in **case of impeachment of president and the judges of Supreme Court**.
- It has equal power as Rajya Sabha in passing any bill for constitutional amendment.
- Lok Sabha members have the power to elect the president, vice president. **Motion of no confidence can only be introduced in Lok Sabha**.
- If it is passed then the prime minister and other council of ministers need to resign from their post.

The Speaker

- The Lok Sabha is presided over by the **'speaker'** who is elected by its members.
- The office of the Speaker occupies an essential position in our Parliamentary democracy.
- The Speaker continues to be in the office even in the houses dissolved, till a new Speaker is elected by the new Lok Sabha.
- The Speaker presides over a joint sitting of the two Houses of Parliament. He has the power to decide whether a Bill is Money Bill or an ordinary one.
- The decision of the Speaker on whether a Bill is Money Bill is final.
- Under the **anti defection of 1985**, the speaker is empowered to decide whether a member of the Lok Sabha is disqualified or not on the basis of the **10th schedule** of the constitution.
- While the office of speaker is vacant or the speaker is absent from the sitting of the house, the deputy speaker presides, except when a resolution for his own removal is under consideration.

Powers and Functions of the Parliament

- The Parliament of India has the functions of Legislation, overseeing of administration, passing of Budget, ventilation of public grievances, discussion of various subjects like development plans, international relations and internal policies
- Parliament is also vested with powers to **impeach the President and to remove Judges of the Supreme Court and High Courts, Chief Election Commissioner and Comptroller and Auditor-General of India** in accordance with the procedure laid down in the Constitution

- The Parliament exercises control over the executive through asking questions and supplementary questions, moving motions of adjournment, discussing and passing resolutions, discussing and pushing censure motion or vote of no-confidence
- The Parliament has the power to change the boundaries of the States.

Attorney General of India

- The Constitution (**Article 76**) has provided for office of the Attorney General for India. He is the highest law officer in the country.
- He is appointed by the President. He must be a person who is qualified to be appointed the Judge of the Supreme Court.
- In other words, he must be a citizen of India and he must have been a judge of some **High Court for five years** or an advocate of some High Court for **10 years or eminent jurist**, in the opinion of the President.
- He holds office during the pleasure of the President. This means that he may be removed by the President at any time. He may also quit his office by submitting his resignation to the President.

Duties and Functions of Attorney General of India

- To give advice to the Government of India upon such legal matters which are referred to him by the President.
- To perform such other duties of a legal character that are assigned to him by the President and discharge the functions conferred on him by the constitution or any other law.
- In the performance of his official duties, **Attorney General of India has the right of audience in all courts in the territory of India.**
- Further he has the right to speak and to take part in the proceedings of both Houses of the Parliament or their joint sitting and any committee of the Parliament of which he may be named a member, but without a right to vote.
- He enjoys all the privileges and immunities that are available to a member of Parliament.

Judiciary

- Judiciary is the third organ of the government. It plays a vital role in protecting the rights and freedom of the citizens.
- It also plays an important role in analyzing and interpreting the provisions of laws and the Constitution.

Supreme Court

- The **"Supreme Court is the Guardian of the Constitution"**. Our constitution provides for the establishment of an independent and integrated judiciary with 'supreme court' as the uppermost court in the country.

- judiciary is autonomous of the Legislative and Executive wing of the Union and State Government.
- An integrated judiciary means a single judicial hierarchy for the whole country.
- The judiciary plays an important role in defensive the rights and freedom of the citizens.
- It plays an important role in analyzing and interpreting the necessities of laws and the constitution.

Composition of the Supreme Court

At the **commencement of the constitution in 1950** our supreme court consisted of **8 judges including the chief justice**. At present, the Supreme Court consists of 34 judges including the chief justice.

Appointment of Judges

The Chief Justice of Supreme Court in India is appointed by the President of India. The other judges are appointed by the President in consultation with the collegiums with Chief Justice Head.

Qualification of Supreme Court Judges

- He must be a citizen of India.
- He should have worked as a Judge of a High Court for at least 5 years.
- He should have worked as an advocate of High Court for at least 10 years.
- He is in the opinion of the President, a distinguished Jurist.
- The constitution also provides for the appointment of judges to the Supreme Court on an ad-hoc (temporary) basis. The Chief Justice and other judges of the Supreme Court hold the office up to the **age of 65 years**.
- The judges of the Supreme Court can resign before their term by giving their resignation in writing to the President.
- The Parliament also has power to remove the Judges by invoking impeachment provisions. The Supreme Court has its permanent seat in **"New Delhi"**.
- It may also sit any other place in India which may be decided by the Chief Justice of India with the approval of the President of India.

Powers and Functions of the Supreme Court

(a) Judicial Functions

The **"Supreme Court is the Guardian of the Constitution"**. The followings are the functions of the Supreme Court.

(b) Original Jurisdiction

The cases which are brought directly in the first instance to the Supreme Court come under original jurisdiction. These may be

(i) dispute between the Government of India and one or more States of

(ii) Dispute between two or more states

(iii) the cases involving fundamental rights (dispute over the enforcement) come under the jurisdiction of the Supreme Court. The writs issued by the Supreme Court for the enforcement of the fundamental rights are, (a) Habeas Corpus (b) Mandamus (c) Prohibition (d) Certiorari (e) Quo Warranto.

(c) Appellate Jurisdiction

- The Supreme Court is the final appellate court in the country.
- As regard the Appellate jurisdiction, the Supreme Court hears appeals against the decisions of High Court in **"civil, criminal and Constitutional"** cases with a certificate from the High Court that it is fit to appeal in the Supreme Court.
- Such a case can be brought before the Supreme Court only if the High Court certifies that the case invites a substantial of law as to the interpretation of the Constitution.

(d) Advisory Jurisdiction

The Constitution confers on the President the power to refer to the Supreme Court any question of law or fact which in his opinion is of public importance.

(e) Miscellaneous Jurisdiction

The Supreme Court is

- The law declared by Supreme Court is binding on all courts within the territory of India.
- The Supreme Court is authorized to make rules for regulating, generally the practice and procedure of the court with the approval of the President.
- The Supreme Court has complete control over its own establishment.

(f) Judicial Review

The power of the judiciary to declare a law as unconstitutional is known as **"Judicial Review"**. The Supreme Court enjoys this power. The Supreme Court of India has Individual Review Power with regard to

1) Dispute between the Centre and the States

2) To interpret and clarify a provision of the constitution about which there are some doubts and differences of opinion.

- 3) Protecting the fundamental rights,
- 4) Those laws passed by the legislatures which are not in accordance with the Constitution.

More to Know:

1. The Supreme Court of India, New Delhi was inaugurated on January 28, 1950. It succeeded the Federal Court of India, established under the Government of India Act of 1935.

2. Parliament Session

- Budget Session from February to May
- Monsoon Session from July to September W
- inter Session from November to December

3. Elected members of the Parliament from Tamil Nadu. Rajya Sabha – 18 members. Lok Sabha – 39 members

4. Money Bill

- Rajya Sabha does not have any power to **amend or reject the Money bill**.
- Lok Sabha can only introduce Money bill and once it is approved by the Lok Sabha, it is passed to Rajya Sabha for its approval.
- If Rajya Sabha fails to pass it within **14 days** then the bill gets passed without the approval of Rajya Sabha.
- Also, Lok Sabha does not need to consider the amendments proposed by the Rajya Sabha.
- Lok Sabha can reject all the proposals and pass it

5. If the posts of President and Vice-President lie vacant, Chief Justice of India works as President. This situation happened in **1969 when Chief Justice M.Hidayutalla was appointed as President of India**.

6. Casting Vote

- According to **Article (100)** of the Constitution, the vicepresident can only cast his vote when there is a tie over the Bill in the Rajya Sabha.
- It means that there is need for one vote only to pass the Bill. So vice-president using his discretion power cast his vote in favor or against the Bill.
- No members have any right to oppose his decision.

7. **Kerala and Punjab** are the States where the President's Rule was imposed for maximum number of times i.e., **nine times** in both States.

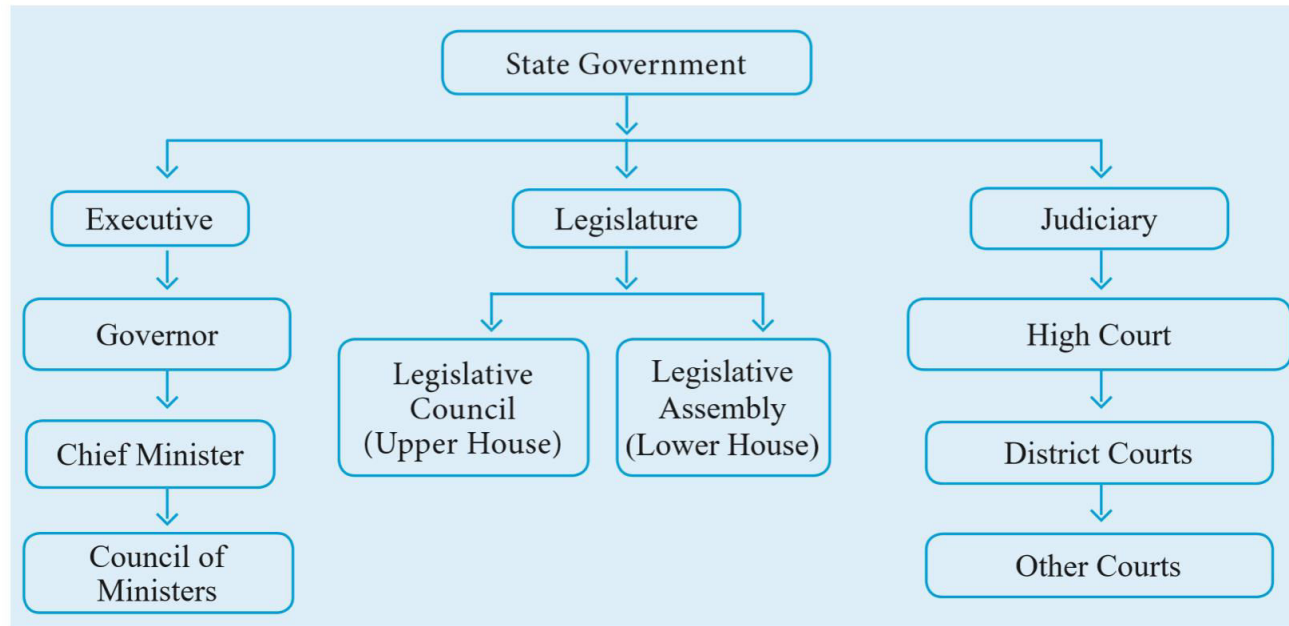
8. It is a well known fact that the President of India resides at **Rashtrapati Bhavan in New Delhi**. The residence and the office of the President are located in the same building. However he has two

other office cum residences where he conducts office at least once a year. They are 'The Retreat Building' at **Shimla** and the '**Rashtrapati Nilayam**' at **Hyderabad**. These locations one in North and other one is South symbolise the unity of the country and unity of the diverse culture of the people.

10th Social Science Lesson 9 Notes in English

9. State Government

Introduction



- The Constitution of India envisages for a federal government, having separate systems of administration for the union and the states.
- There are 28 states, 8 union territories and one national capital territory known as Delhi in India.
- The constitution contains provisions for the governance of both the union and the states.
- It lays down a uniform structure for the State Government, in part VI of the constitution from **Article 152 to 237**, which is applicable to all the states save only the state of Jammu and Kashmir which has a separate constitution for its government under Article 370 (**Not applicable now due to cancellation of Article 370**).
- The structure of the State Government, as formed in the Centre, consists of three branches. These are the **Executive, the Legislature and the Judiciary**.

The Executive

The Governor

- The Governor is the **constitutional head of the state executive**. The administration of a State is carried on in the name of the Governor.
- Generally, there is a separate Governor in each State but if the situation warrants so, the same person may be appointed as the Governor of two or more States.
- **Article 154 vests the executive power** of the State in the Governor.

- **Article 154(1)** holds that the executive power of the State shall be vested in the Governor and shall be exercised by him either directly or through officers subordinates to him in accordance with this Constitution.

Appointment

- The Governor of a State shall be appointed by the President. His usual term of office is **five years but he holds office during the pleasure of the President**.
- Generally, the Governor does not belong to the State where he is appointed. He can also be transferred from one state to another by the President.
- He can also resign any time by addressing his resignation to the President. The Legislature of a State or a High Court has no role in the removal of a Governor.
- A person may be appointed as a Governor for any number of terms.
- Two conventions have been set up in the matter of appointing a person as Governor of a State.
- He should not be a resident of the State concerned and, the State Government concerned is consulted and its views are sought regarding the proposed choice.
- According to **Article 158 (3A)**, where the **same person is appointed as Governor of two or more States**, the emoluments and allowances payable to the Governor shall be allocated among the States in such proportion as the President may by order determine.

Qualification

Article 157 and Article 158 of the Constitution of India specify eligibility requirements for the post of governor. They are as follows:

- He should be a citizen of India.
- He must have completed 35 years of age.
- He should not be a member of Parliament or of any State Legislature.
- If he is a member of any of Legislature, he automatically vacates his seat on assuming the office.
- He should not hold any other profitable occupation.

Powers and Functions of the Governor

- The Governor is the head of the state executive and he has enormous powers.
- In the exercise of functions and powers, the Governor, except in certain cases, is to be guided by the aid and advice of the Council of Ministers headed by the Chief Minister (**under Article 163**).
- As the executive head in the state level, the Governor has following functions and powers.

Executive Powers

The Constitution vests all **executive powers of the State Government in the Governor**.

- He may exercise this power either directly or through officers subordinate to him.
- He is the constitutional head of the State. All the administration is carried on in his name.

The executive powers and functions of the Governor are:

- He appoints the leader of the majority party in the State Legislative Assembly as the Chief Minister of the State.
- He appoints other members of the Council of Ministers on the recommendation of the Chief Minister.
- He appoints the Advocate - General of the state and determines his remuneration. The Advocate General holds office during the pleasure of the Governor.
- He appoints the Chairman and Members of the State Public Service Commission. However, they can be removed only by the president and not by a governor.
- He appoints the state election commissioner and determines his conditions of service and tenure of office. However, **the state election commissioner can be removed only in like manner and on the like grounds as a judge of a high court**.
- He acts as the chancellor of universities in the state.
- He also appoints the Vice Chancellors of universities in the state.
- He directly rules a State when there is the imposition of the President's rule in the State.

Legislative Powers

The Governor is an integral part of the state legislature. But, he is not a member in the either house of the legislature. In this capacity, he enjoys the following legislative powers and functions:

- He has the right to summon, prorogue the state legislature and dissolve the State Legislative Assembly.
- He can address the state legislature at the commencement of the first session after each general election and the first session of each year.
- He can send messages to the houses of the state legislature relating to a bill pending in the legislature.
- He can appoint any member of the Legislative Assembly to preside over its proceedings when the offices of both the Speaker and the Deputy Speaker fall vacant.
- He can nominate one member to the state legislature assembly from the Anglo Indian Community.
- He nominates 1/6 of the members of the State Legislative Council from amongst the persons having special knowledge or practical experience in literature, science, art, cooperative movement and social service.
- He decides on the question of disqualification of members of the state legislature in consultation with the Election Commission.

- Every bill passed by the state legislature will become law only after his signature. But, **when a bill is sent to the Governor after it is passed by the legislature, he has the options to give his assent to the bill or withhold his assent to the bill or return the bill for the reconsideration of the legislature.**
- He has to reserve any bill passed by the state legislature which endangers the position of the state High Court, for the consideration of the President.
- He can promulgate ordinances when the state legislature is not in session under **Article 213**. But, these ordinances must be approved by the legislature within six months.
- He can also withdraw an ordinance at anytime.
- He has to lay the annual reports of the State Finance Commission, the State Public Service Commission and the Comptroller and Auditor General relating to the accounts of the state, before the state legislature.

Financial Powers

The Constitution confers on the Governor, the duty to get prepared and introduced to the State Legislature, the annual budget and also the supplementary budgets, if necessary.

- He causes the **Annual Financial Statement (Budget)** of the State to be presented in the Legislative Assembly.
- He presents through the Minister of Finance of the State the Supplementary Budget of the State to the Legislative Assembly if there be such a need.
- Money Bills can be introduced in the State Legislature only with his the prior recommendation.
- No demand for any grant can be made except on his recommendation.
- He can make advances out of the state Contingency Fund to meet any unforeseen expenditure.
- He **constitutes a Finance Commission after every five years to review the financial position of the panchayats and the municipalities.**

Judicial Powers

- He appoints the Attorney-General of the State.
- He appoints Judges to the Subordinate Courts in the State.
- He makes appointment, postings and promotions of the District Judges in consultation with the State High Court.
- The Chief Justice of the High Court in the State is appointed by the President in consultation with him.
- He can pardon, commute or reprieve punishment on receipt of appeals for mercy.

Discretionary Powers

- The Governor can reserve a bill for the consideration of the president.
- He recommends for the imposition of the President's rule in the state.
- He seeks information from the Chief Minister relating to the administrative and legislative matters of the state.
- He can call the leader of any party to form ministry in the state when there is no clear-cut majority to any party in the Legislative Assembly after the general elections.
- He can dismiss the Council of Ministers when it is unable to prove the confidence of the Legislative Assembly; and
- He can dissolve the Legislative Assembly if the Council of Ministers has lost its majority.

Emergency Powers

- If the Governor is satisfied that the government of the state is not carried on in accordance with the provisions of the Constitution, he may, under **Article 356**, recommend to the President to impose President Rule in that State.
- As soon as the President Rule is imposed, the administration of the State is carried on by the Governor as the representative of the President.

Privileges of the Governor

Article 361(1) provides for the following privileges for the Governor;

- (a) The Governor of a State, is not be answerable to any court for the exercise and performance of the powers and duties of his office or for any act done or purporting to be done by him in the exercise and performance of those powers and duties.
- (b) No criminal proceedings whatsoever shall be instituted or continued against the Governor of a State, in any court during his term of office.
- (c) No process for the arrest or imprisonment of the Governor of a State, shall issue from any court during his term of office.
- (d) No civil proceedings in which relief is claimed against the Governor of a State.

Chief Minister

Chief Ministers of Tamil Nadu from 1947

Thiru.O. P. Ramaswamy	1947-1949
Thiru.P. S. Kumaraswamy Raja	1949 – 1952
Thiru.C. Rajagopalachari	1952 – 1954
Thiru.K. Kamaraj	1954 - 1963
Thiru.M. Bakthavatsalam	1963 – 1967
Thiru.C. N. Annadurai	1967 – 1969
Thiru.M. Karunanidhi	1969 – 1976
Thiru.M. G. Ramachandran	1977 – 1987
Tmt. JanakiRamachandran	January 1988
Thiru.M. Karunanidhi	1989 – 1991
Selvi.J. Jayalalithaa	1991 – 1996
Thiru.M. Karunanidhi	1996 – 2001
Selvi.J. Jayalalithaa	2001
Thiru.O.Panneerselvam	2001 – 2002
Selvi.J. Jayalalithaa	2002 – 2006
Thiru.M. Karunanidhi	2006 – 2011
Selvi. J. Jayalalithaa	2011 – 2014
Thiru.O.Panneerselvam	2014 – 2015
Selvi.J. Jayalalithaa	2015 – 2016
Thiru.O.Panneerselvam	2016 – 2017
Thiru.Edappadi K. Palaniswami	2017 – till now

- In the scheme of Parliamentary system of government provided by the constitution, the governor is the nominal executive authority and the Chief Minister is the real executive authority.
- In other words, the governor is the **head of the State while the Chief Minister is the head of the government.**

The appointment of the Chief Minister

- The Chief Minister is appointed by the Governor of the State. The leader of the majority party or majority group in the State Legislative Assembly is appointed as the Chief Minister.

- In case no party commands absolute majority, in the Legislative Assembly or the majority fails to elect its leader, the Governor can use his power and invite the leader of the other largest party to form the ministry.
- He has to prove the confidence (**majority support**) in the Legislative Assembly within the period stipulated by the Governor.
- The term of the Chief Minister is not fixed. He may remain as the Chief Minister as long as he enjoys the support of the majority of the members of the Legislative Assembly.
- He has to resign when he loses confidence of the majority in the assembly.
- It is 'understood that normally he completes **5 years term** like other members in the Legislative Assembly.

Powers and functions of the Chief Minister

The Chief Minister is the real executive head of the State administration. He has the following powers and functions.

- Relating to the council of ministers
- Relating to the Governor
- Relating to the State Legislature
- Other functions and powers.

Relating to the Council of Ministers

As the head of the Council of Ministers, the Chief Minister enjoys the following functions and powers.

- The Chief Minister recommends the persons who can be appointed as ministers by Governor.
- He allocates the portfolios among the ministers.
- He shuffles and reshuffles his ministry.
- He can ask a minister to resign or to advise the Governor to dismiss him in case of difference of opinion.
- He presides over the meetings of the Council of Ministers and influences its decisions.
- He can bring about the collapse of the council of ministers by resigning from office.
- He guides, directs, controls and coordinates the activities of all the ministers.

Relating to the Governor

The Chief Minister is the principal channel of communication between the Governor and the Council of Ministers, and he advises the Governor in relation to the appointment of the following officials:

- Advocate General of the State.

- State Election Commissioner.
- Chairman and Members of the State Public Service Commission.
- Chairman and Members of the State Planning Commission.
- Chairman and Members of the State Finance Commission.

Relating to State Legislature

The Chief Minister advises the Governor with regard to the summoning and proroguing the sessions of the state legislature.

- He announces the government policies on the floor of the house.
- He can introduce the bills in the Legislative Assembly.
- He can recommend for the dissolution of the Legislative Assembly to the Governor anytime.

Other function and powers

- As the leader of the ruling party, the Chief Minister has to control the party and develop the disciplines.
- As the leader of the state, he has to keenly consider the demands of the different sections of the people.
- As the political head of the various services, he has to supervise, control and co-ordinate the secretaries of various departments in the state level.
- For smooth functioning of the state and for good centre-state relations, he has to develop a rapport with the union government.

Council of Ministers

- The Council of Ministers are collectively responsible to the State Legislature. All the members of the Council of Ministers must be the members of the State Legislature.
- Those who are not the members at the time of their appointment, must secure their seats in the Legislature within a **period of 6 months**.
- All the ministers work as a team under the Chief Minister.
- As long as the **Chief Minister is in office, the Council of Ministers will also be in power**.
- If a no-confidence motion is passed by the Legislative Assembly, the State Ministry shall resign.
- **Article 163** provides for a Council of Ministers to aid and advice the Governor.
- According to **Article 163(1)** there shall be a Council of Ministers with the Chief Minister at the head to aid and advice the Governor in the exercise of his functions, except in so far as he is by or under this Constitution required to exercise his functions or any of them in his discretion.

Other Provisions relating to Ministers

Article 164(1) holds that the Chief Minister shall be appointed by the Governor and the other Ministers shall be appointed by the Governor on the advice of the Chief Minister, and the Ministers shall hold office during the pleasure of the Governor: **Article 164(1A) states that the total number of Ministers, including the Chief Minister, in the Council of Ministers in a State shall not exceed fifteen percent of the total number of members of the Legislative Assembly.**

The functions and powers of the Council of Ministers

- It formulates and decides the policies of the state and implements them effectively.
- It decides the legislative programmes of the Legislative Assembly and sponsors all important bills.
- It controls the financial policy and decides the tax structure for the public welfare of the state.
- It chalks out programmes and schemes for the socio-economic changes so that the state makes headway in various interrelated fields.
- It makes the important appointments of the Heads of Departments.
- It discusses and takes efforts on the dispute with other states.
- It advises the Governor on the appointment of Judges of the subordinate courts.
- It frames the proposal for incurring expenditure out of state reserves.
- It decides all the bills whether ordinary bills or money bills to be introduced in the Legislative Assembly.
- Each minister of the Council of Ministers supervises, controls and coordinates the department concerned.
- **Annual Financial Statement called as the Budget is finalised by the Council of Ministers.**

The State Legislature

- The Constitution provides a legislature for every state. Most of the States have only unicameral legislature i.e., **Legislative assembly**.
- Some State has bicameral legislatures (example Bihar, Karnataka, Maharashtra, Uttar Pradesh, Andhra Pradesh, Telangana).
- The lower house, legislative assembly represents the people of the state the upper house; Legislative Council represents special interests like teachers, graduates and local governments.

The Legislative Assembly (Lower House)

- The Legislative Assembly is a popular house. It is the real centre of power in the State. It consists of members directly elected by the people on the basis of adult franchise.
- The strength of the Assembly varies from State to State depending on the population.
- However the maximum strength of the Assembly **must not exceed 500 or its minimum strength not be below 60.**

- The term of office of the **legislative assembly is 5 years**. It can be dissolved even before the expiry of its term.
- The size of the Legislative Council cannot be more than one-third the membership of the Legislative Assembly (lower house) of that state.
- **But its size cannot be less than 40, except in Jammu and Kashmir where there are 36 by an act of Parliament.**
- The members draw the salary and allowances passed by the State legislature from time to time. Composition
- The Legislative Assembly of Tamil Nadu consists of **235 members out of which 234 members** are directly elected by the people from the constituencies on the basis of adult franchise and one member is nominated by the Governor from the Anglo-Indian community.
- However, seats shall be reserved in the house for the scheduled castes and scheduled tribes.

Cabinet and Cabinet Committees

- A smaller body called Cabinet is the nucleus of the council of minister.
- It consists of only the cabinet ministers.
- It is the real centre of authority in the state government.
- The cabinet works through various committees called cabinet committees. They are of two types - **standing and ad hoc**. The former are of a permanent nature while the latter are of a temporary nature.

The Speaker

- The Legislative Assembly elects two of its members as the Speaker and Deputy Speaker.
- The Speaker vacates his office, if he cannot continue to be a member of the Assembly. He may also resign his office at any time.
- The speaker may be removed from office by a resolution of the Assembly after giving a **14 days' notice**.
- Such a resolution must be passed by a majority of the members present at the time of voting.
- The speaker does not vacate his office, when the Assembly is dissolved. He continues to be the Speaker until the first sitting of the new Assembly.
- While the office of the speaker is vacant, the Deputy Speaker performs his functions.

The Legislative Council (Upper House)

- The legislative Council is the upper House of the State Legislature. It is constituted as a permanent House.
- **Article 171(1)** provides that the total number of members in the Legislative Council of a State shall not exceed one-third of the total number of members in the Legislative Assembly of that State, but not less than 40 members in any case.

- **The Vidhan Parishads (Legislative Council)** forms a part of the state legislatures of India. In Six of India's 28 states (**Bihar, Karnataka, Maharashtra, Uttar Pradesh, Andhra Pradesh, Telangana**) the Legislative Council serves as the indirectly elected upper house of a bicameral legislature.
- It is also a permanent house because it cannot be dissolved. Every Member of Legislative Council (MLC) serves for a **six-year term**, with terms staggered so that the terms of **one-third of members expire every two years**.
- MLCs must be citizens of India not under **30 years of age**, mentally sound and not bankrupt, and his name should be in the voter's list of the state from which he or she is contesting the election.

Election to Legislative Council

- 1/3 of the members are elected by local bodies.
- 1/12 of the members are elected by Graduates of the universities in the State.
- 1/12 of the members are elected by Graduate teachers.
- 1/3 of the members are elected by the members of the Legislative Assembly.
- 1/6 is nominated by the Governor who is eminent in the field of literary excellence, art, social services or Co-operation.

The Chairman

- The Chairman (**chair person he / she**) is the Presiding Officer of the Upper house.
- The Members elect a Chairman and a deputy chairman from among themselves.
- In the absence of the chairman, the deputy chairman officiate the functions of the Legislative Council.

Abolition or Creation of Legislative Councils

- Article 169 deals with the creation or abolition of Legislative Council in a State.
- **Article 169** holds that if the state Legislative Assembly passes a resolution by a majority of not less than **2/3rd** of the members present and voting and by the majority of total strength of the House, requesting the Parliament to create or abolish the state Legislative council then the Parliament may by law provide for the abolition and creation of the Legislative Council.

Functions of the State Legislature

The powers and functions of the State Legislature are almost the same as that of Parliament.

Legislative powers

- The State Legislature can pass laws on all subjects mentioned in the State List as per the constitution.

- It can also pass laws on concurrent subjects. The State made law in a concurrent subject will become inoperative when the centre also passes a law on the same subject.
- The passing of Bill into law follows the same procedure, as in the union parliament.
- Every bill passes through three readings. Then it becomes an Act with the Governor's assent.

Financial Powers

- The Legislature controls the finances of the State.
- The Lower House enjoys greater power than the Upper House in money matters.
- Money bills can be introduced only in the Lower House or the Assembly.
- No new tax can be levied without the sanction and permission of the Assembly.

Controls over the Executive

- The Legislature controls the Executive. The Council of Ministers is responsible to the Assembly.
- The Ministers have to answer questions asked by the members of the Legislature.
- They can be removed from office if the Assembly passes a vote of **"no confidence motion"** against the Ministry.

Wide powers

- In State having two Houses, the Legislative Assembly enjoys more powers than the Legislative Council.
- The **Assembly has complete control over the state finance**. The Council cannot vote for grants.
- The Council of Ministers is responsible only to the Assembly.

Judiciary of State

High Courts

- The institution of high court originated in India in **1862** when the high courts were set up at **Calcutta, Bombay and Madras**. In the course of time, each province in British India came to have its own high court.
- After **1950**, a high court existing in a province became the high court for the corresponding state.
- The High Courts are the highest courts at State level, but being part of integrated Indian judiciary they work under the superintendence, direction and control of the Supreme Court.
- The Constitution of India provides for a high court for each state, but the **Seventh Amendment Act of 1956** authorised the Parliament to establish a common high court for two or more states or for two or more states and a union territory.

- For example, the States of Punjab and Haryana and the Union Territory of Chandigarh have a common High Court situated at Chandigarh. Similarly, the High Court of Guwahati is common for seven northeastern States of Assam, Nagaland, Manipur, Meghalaya, Mizoram, Tripura and Arunachal Pradesh. Delhi, though not a State, has its own separate High Court.
- Every High Court has a Chief Justice and a number of judges. The number of judges varies from State to State. The number of judges of each High Court is determined by the President.
- At present there are **25 High Courts for 28 States (including new Andhra Pradesh High Court established in 1st January 2019 at principal seat in Amravati) and eight Union Territories.**

Appointment of the Judges

Every High Court consists of a Chief Justice and such other Judges as appointed by the President from time to time (**Article 216**).

Jurisdiction and Powers of High Court

At present, a high court enjoys the following jurisdiction and powers:

Original Jurisdiction

- In their judicial capacity, **the High Courts of the Presidency towns (Bombay, Calcutta and Madras) have both original and appellate jurisdictions**, while other High Courts have mostly appellate jurisdiction.
- Only in matters of admiralty, probate, matrimonial and contempt of Court, they have original jurisdiction.
- The Presidency High Courts have original jurisdiction in which the amount involved is **more than `2000 and in criminal cases** which are committed to them by the Presidency Magistrates.

Appellate Jurisdiction

- As Courts of appeal, all High Courts entertain appeals in civil and criminal cases from their subordinate Courts as well as on their own.
- They have, however, no jurisdiction over tribunals established under the laws relating to the Armed Forces of the Country.

Writ Jurisdiction

- Under **Article 226** of the constitution, the High Courts are given powers of issuing writs not only for the enforcement of the Fundamental Rights, but also for other purposes.
- In exercise of this power, a Court may issue the same type of writs, orders or directions which the Supreme Court is empowered to issue under **Article 32**.
- The jurisdiction to issue writs under this Article is larger in the case of High Courts, for which the Supreme Court can issue them only where a Fundamental Right has been

infringed, a High Court can issue them not only in such cases, but also where an ordinary legal right has been infringed.

Habeas Corpus

The writ of habeas corpus is issued to a detaining authority, ordering the detainer to produce the detained person in the issuing court, along with the cause of his or her detention, if the detention is found to be illegal, the court issues an order to set the person free.

Mandamus

The writ of mandamus is issued to a subordinate court, an officer of government, or a corporation or other institution commanding the performance of certain acts or duties.

Prohibition

The writ of prohibition is issued by a higher court to a lower court prohibiting it from taking up a case because it falls outside the jurisdiction of the lower court. Thus, the higher court transfers the case to it.

Quo Warranto

The writ of quo Warranto is issued against a person who claims or usurps a public office. Through this writ the court inquires 'by what authority' the person supports his or her claim.

Certiorari

The writ of certiorari is issued to a lower court directing that the record of a case be sent up for review, together with all supporting files, evidence and documents, usually with the intention of overruling the judgment of the lower court. It is one of the mechanisms by which the fundamental rights of the citizens are upheld. Supervisory Jurisdiction

- High court has the power of superintendence over all courts and tribunals functioning in its territorial jurisdiction (except military courts or tribunals) Thus, it may

(a) Call for returns from them;

(b) Make an issue, general rules and prescribe forms for regulating the practice and proceedings of them.

(c) Prescribe forms in which books, entries and accounts are to be kept by them; and

(d) Settle the fees payable to the sheriff, clerks, officers and legal practitioners of them.

Control over Subordinate Courts

A high court has an administrative control and other powers over them

(a) It is consulted by the governor in the matters of appointment, posting and promotion of district judges and in the appointments of persons to the judicial service of the **state (other than district judges)**.

(b) It deals with the matters of posting, promotion, grant of leave, transfers and discipline of the members of the judicial service of the state **(other than district judges)**.

(c) It can withdraw a case pending in a subordinate court if it involves a substantial question of law that requires the interpretation of the Constitution. It can then either dispose of the case itself or determines the question of law and return the case to the subordinate court with its judgment.

(d) Its law is binding on all subordinate courts functioning within its territorial jurisdiction in the same sense as the law declared by the Supreme Court is binding on all courts in India.

Court of Record

All the decisions and decrees issued by the High Court are printed and are kept as a record for future references by the **Court as well as by the lawyers**, in such a need arises. Thus, it also acts as a Court of Record.

Power of Judicial Review

- Judicial review is the power of a high court to examine the constitutionality of legislative enactments and executive orders of both the Central and state governments.
- Though the phrase judicial review has nowhere been used in the Constitution, the provisions of **Articles 226 and 227** explicitly confer the power of judicial review on a high court. The **42nd Amendment Act of 1976** curtailed the judicial review power of high court.
- It debarred the high court's from considering the constitutional validity of any central law. However, **the 43rd Amendment Act of 1977** restored the original position.

More to Know:

1. The High Court of Madras is the one of the three High Courts in India established in the three Presidency Towns of Bombay, Calcutta and Madras by letters patent granted by Queen Victoria, bearing date **26 June 1862**. The High Court building is the second largest judicial complex in the world after London.
2. The Tamil Nadu Legislative Council was abolished by **Tamil Nadu Legislative Council (Abolition) Bill, 1986**. The Act came into force on the 1st November 1986.
3. In Tamil Nadu, according to the strength of **Legislative Assembly (234 members)**, the number of ministers may be up to **36, i.e. 15 percent of 234**.

3. Sarkaria Commission on Centre , State relations suggested that the appointment of the Governor should be made:

- i) From a panel to be prepared by the State Legislature or
- ii) From a panel to be prepared by the State Government (in effect the Chief Minister) or invariably with the concurrence of the State Chief Minister ; or
- iii) Invariably in consultation with the State Chief Minister.

4. The Constitution of Jammu and Kashmir was adopted on the **17 November, 1957 and came into force on 26 January, 1957**. The Constitution of India grants special status to Jammu and Kashmir among Indian states, and it is the only state in India to have a separate constitution. The Directive Principles of the State Policy and fundamental duties of the constitution are not applicable to the state of Jammu and Kashmir. Right to Property, which is denied as a fundamental right to rest of the India, is still guaranteed in Jammu and Kashmir.

10th Social Science Lesson 10 Notes in English

10. Gross Domestic Product and its Growth: an Introduction

The GDP is the **market value of all the final goods and services** produced in the country during a time period. Every part of the definition is important.

Goods and services: as you know by now, **goods are tangible items while services are activities which are intangible.**

Market value:

- This is the price at which goods and services are sold in the market. The GDP measures all the goods and services produced in the country.
 - For this, we have to add all the goods and services produced. However a nation produces a wide range of goods like rice, shoes, trains, milk, clocks, books and bicycles.
 - If only the quantities are taken into account, there is no meaningful way to add these up. For example, how do you add 1000 litres of milk with 500 clocks?! Likewise there is no meaningful way to add the quantities of services since a wide range of services are produced, such as the work done by doctors, police, fire brigade, teachers, bus drivers and district collectors.
 - When we cannot add the quantity of one type of good with another type of good or one type of service with another type of service, certainly there is no sensible way to add the quantities of goods produced with those of services produced! How would we add the quantity of milk produced in the country with the service produced by teachers?!
 - The GDP solves this problem by measuring the goods and services in the currency of the country, which is the rupee in the case of India.
 - The rupee values are derived from the prices at which the goods and services are sold in the market.
 - Only those goods and services with a market value are included in the GDP. This implies that unless a good or service is sold in the market, it is not included in the GDP.
 - For example if you pay ₹ 50 to get a manuscript typed in a computer centre, the service is included in the GDP since it is sold in the market.
 - If you type the manuscript yourself, the service typing a manuscript is not included in the GDP since you did not purchase it for a price in the market.
- Final goods and services:** **Economists Tyler Cowen and Alex Tabarrok** say that “final goods and services” are the goods and services which will be used or consumed and will not form a part of other goods and services. The goods and services which will be used for producing other goods and services and will form a part of the goods and services produced are called “**intermediate goods**”.
- Only the final goods are included in the GDP. Intermediate goods are not counted in calculating the GDP because their value is included in the final goods.

- So if the intermediate goods are included in the GDP it will result in what is called **"double counting"**. For example, a cup of tea bought in a hotel is a final good because it is consumed and does not form a part of producing something else.
- So the market value of the cup of tea, being a final good, is included in the GDP. Sugar which is mixed in the tea is an intermediate good because it is used in making tea and forms a part of the tea served.
- Suppose the tea is priced ₹ 10 a cup, of which the value of sugar used is ₹ 2. So the price of the cup of tea includes the ₹ 2 price of the spoon of sugar. If this value of sugar is included in the GDP, it will be counted twice: as a spoon of sugar and again as a part of the cup of tea. This is **"double counting"** and to avoid it the intermediate goods like sugar are excluded from GDP.
- Should the market value of utensils used to brew the tea be included in the GDP? You may argue that since the utensils are bought not as final goods but to produce tea, they are intermediate goods and so they should not be included in the GDP.
- However the utensils, unlike sugar, do not form a part of the final good, the cup of tea. For this reason they should be included in the GDP.

National Income

- 'National Income is a measure of the total value of goods and services produced by an economy over a period of time, normally a year'.
- Commonly National Income is called as **Gross National Product (GNP) or National Dividend**.

Various terms associated with measuring of National Income

Gross National Product (GNP)

Gross National Product is the total value of (goods and services) produced and income received in a year by domestic residents of a country. It includes profits earned from capital invested abroad.

$$\text{GNP} = C + I + G + (X - M) + \text{NFIA}$$

C = Consumption I = Investment G = Government Expenditure X-M = Export – Import NFIA = Net Factor Income from Abroad)

Gross Domestic Product (GDP)

Gross Domestic Product (GDP) is the total value of output of goods and services produced by the factors of production within the geographical boundaries of the country.

Net National Product (NNP)

Net National Product (NNP) is arrived by making some adjustment with regard to depreciation that is we arrive the Net National Product (NNP) by deducting the value of depreciation from Gross National Product. **(NNP = GNP – Depreciation)**

Net Domestic Product (NDP)

Net Domestic Product (NDP) is a part of Gross Domestic Product, Net Domestic Product is obtained from the Gross Domestic Product by deducting the Quantum of tear and wear expenses (depreciation) **$NDP = GDP - Depreciation$**

Per Capita Income (PCI)

Per capita Income or output per person is an indicator to show the living standard of people in a country. It is obtained by dividing the National Income by the population of a country.

$Per\ capita\ Income = National\ Income / Population$

Personal Income (PI)

Personal income is the total money income received by individuals and households of a country from all possible sources before direct taxes, therefore, personal income can be expressed as follows **$(PI = NI - corporate\ Income\ Taxes - Undistributed\ corporate\ profits - social\ security\ contribution + Transfer\ payment)$** .

Disposable Income (DI)

Disposable income means actual income which can be spent on consumption by individuals and families, thus, it can be expressed as **$DPI = PI - Direct\ Taxes$** (From consumption approach **$DI = Consumption\ Expenditures + Savings$**)

Gross Domestic Product (GDP)**Produced in the country:**

- GDP of India includes only the market value of goods and services produced in India.
- For example the market value of apples produced in Kashmir are included in our GDP since Kashmir is in India.
- The market value of apples produced in California, even if they are sold in Indian markets, are not included in our GDP because California is in the U.S.

Produced during a time period:

- The GDP of a country measures the market value of goods and services produced only during the specified time period.
- The goods and services produced in earlier periods are not included. If an year is the specified time period, the GDP of 2018 will include the market value of goods and services produced only during 2018.
- So a bicycle produced in 2017 will not be included in the GDP measure for 2018. In India the GDP is measured both annually and quarterly.

- The annual GDP is for a financial year which is from April of say 2017 to March 31, 2018. This is written as 2017-18.
- The quarterly GDP estimates are for each of the four quarters into which India's financial year is divided: First quarter, denoted Q1: April, May and June Second quarter, or Q2: July, August, September Third Quarter or Q3: October, November, December Fourth Quarter, or Q4: January, February, March.
- The **annual GDP for financial year 2017 - 18** will include only the goods and services produced during this financial year and will exclude the goods and services produced in the previous years.
- Likewise GDP for Q2 will include only the goods and services produced in Q2 and will not include the goods and services produced in Q1.

Gross Domestic Product (GDP) definition

- Gross Domestic Product (GDP) represents the economic health of a country.
- It represents a sum of a country's production which consists of all purchases of goods and services used by individuals, firms, foreigners and the governing bodies.
- The monetary value of all the finished goods and services produced within a country's border in a specific time period.

$$\text{GDP} = C + I + G + (X - M)$$

C = Consumption I = Investment G = Government Expenditure (X - M) = X = Exports - M = Imports

Methods of GDP Calculating

Expenditure Approach:

- In this method, the GDP is measured by adding the expenditure on all the final goods and services produced in the country during a specified period.
- The different types of expenditure are shown in this equation: $Y = C + I + G + (X - M)$

The Income Approach:

This method looks at GDP from the perspective of the earnings of the men and women who are involved in producing the goods and services. The income approach to measuring GDP (Y) is

$$Y = \text{wages} + \text{rent} + \text{interest} + \text{profit}$$

Value-Added Approach:

- A cup of tea served to you in a hotel is a **"final good"**. The goods used to produce it, tea powder, milk, and sugar, are "intermediate goods" since they form a part of the final good, the cup of tea.

- One way to measure the market value of the cup of tea is to add the value produced by each intermediate good used to produce it. Each intermediate good, the tea powder, milk and sugar, adds value to the final output, the cup of tea.
- In the value-added approach the value added by each intermediate good is summed to estimate the value of the final good.
- The sum of the value added by all the intermediate goods used in production gives us the total value of the final goods produced in the economy.

Importance of GDP

1. Study of Economic Growth.
2. Unequal distribution of wealth.
3. Problems of inflation and deflation.
4. Comparison with developed countries of the world.
5. Estimate the purchasing power.
6. Public Sector.
7. Guide to economic planning.

Limitations of GDP

The GDP is the most widely used measure of the state of the economy. While appreciating its usefulness, we should be aware of some of its limitations.

Several important goods and services are left out of the GDP:

- The GDP includes only the goods and services sold in the market.
- The services provided by parents to their children is very important but it is not included in the GDP because it is not sold in the market.
- Likewise clean air, which is vital for a healthy life, has no market value and is left out of the GDP.

GDP measures only quantity but not quality:

- In the 1970s schools and banks did not permit the use of ballpoint pens. This is because the ones available in India were of very poor quality.
- Since then, not only has there been a substantial increase in the quantity of ballpoint pens produced in India but their quality has also improved a lot.
- The improvement in quality of goods is very important but it is not captured by the GDP.

GDP does not tell us about the way income is distributed in the country:

The GDP of a country may be growing rapidly but income may be distributed so unequally that only a small percentage of people may be benefitting from it.

The GDP does not tell us about the kind of life people are living:

A high level of per capita real GDP can go hand-in-hand with very low health condition of people, an undemocratic political system, high pollution and high suicide rate.

Composition of Gross Domestic Product (GDP)

Indian economy is broadly divided into three sectors which contribute to the GDP namely Agriculture and allied activity, Industry and Services.

Primary Sector: (Agricultural Sector)

- Agricultural sector is known as primary sector, in which agricultural operations are undertake.
- Agriculture based allied activities, production of raw materials such as cattle farm, fishing, mining, forestry, corn, coal etc. are also undertaken.

Secondary Sector: (Industrial Sector)

- Industrial sector is secondary sectors in which the goods and commodities are produced by transforming the raw materials.
- Important industries are Iron and Steel industry, cotton textile, Jute, Sugar, Cement, Paper, Petrochemical, automobile and other small scale industries.

Tertiary: (Service Sector)

- Tertiary sector is known as service sector it includes Government, scientific research, transport communication, trade, postal and telegraph, Banking, Education, Entertainment, Healthcare and Information Technology etc.
- In the 20th century, economists began to suggest that, traditional tertiary services could be further distinguished from "quaternary" and "quinary" service sectors.

Contribution of different sectors in GDP of India

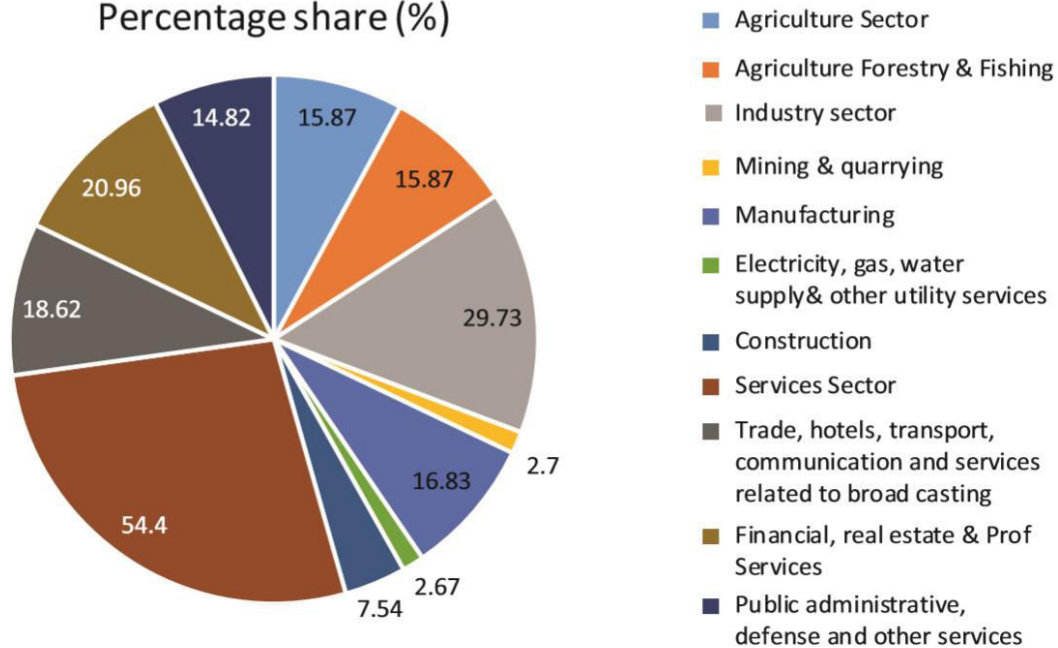
Sector-wise Contribution in GDP of India

Year	Agriculture(%)	Industry(%)	Service(%)
1950-51	51.81	14.16	33.25
1960-61	42.56	19.30	38.25
1970-71	41.95	20.48	37.22
1980-81	35.39	24.29	39.92
1990-91	29.02	26.49	44.18
2000-01	23.02	26.00	50.98
2010-11	18.21	27.16	54.64
2011-12	17.86	27.22	54.91
2012-13	17.52	26.21	56.27
2013-14	18.20	24.77	57.03
2015-16	17.07	29.08	52.05
2016-17	17.09	29.03	52.08
2017-18	17.01	29.01	53.09

Source: Central Statistics Office

- Services sector is the largest sector of India. Gross Value Added (GVA) at current prices for Services sector is estimated at **92.26 lakh crore in 2018-19**.
- Services sector accounts for **54.40% of total India's GVA of 169.61 lakh crore** Indian rupees. With GVA of ` **50.43 lakh crore**, **Industry sector contributes 29.73%**.
- While, Agriculture and allied sector shares 15.87%. India is 2nd larger producer of agriculture product.
- India accounts for 7.39 percent of total global agricultural output.
- In Industrial sector, India world rank is 6 and in Service sector, India world rank is 8. Contribution of Agriculture sector in Indian economy is much higher than world's average (6.4%).
- Contribution of Industry and Services sector is lower than world's average **30%** for Industry sector and **63% for Services sector**.

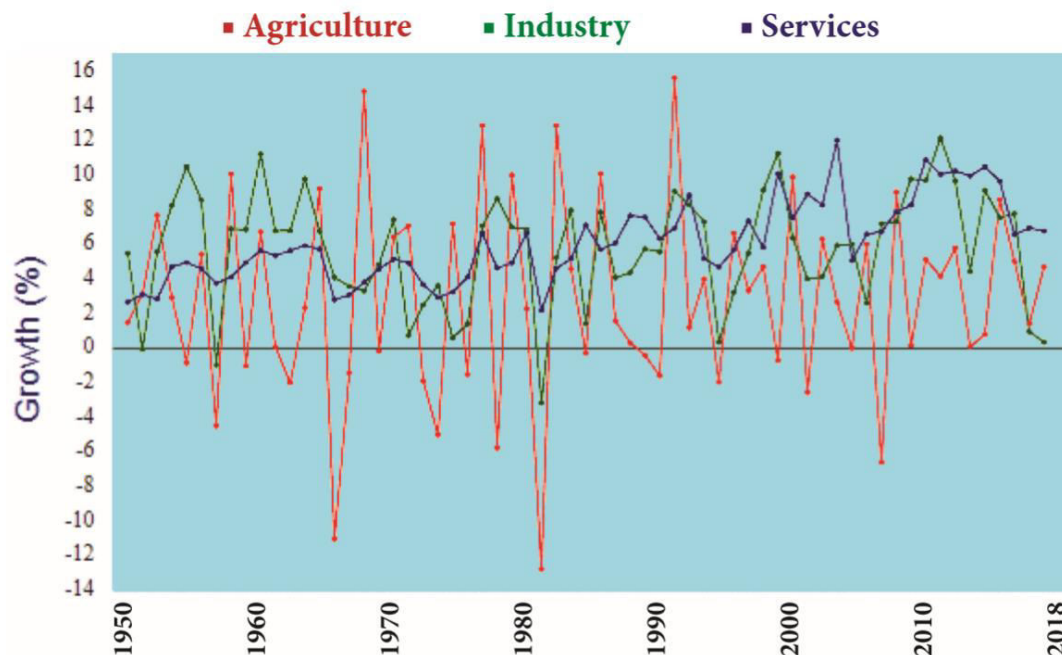
Sector-wise contribution of GDP (2018-19) Percentage share (%)



Source: Statistics times.com.

Note: The Table shows that Sector-wise contribution in GDP of India for the year 2018 - 2019.

Sectorwise GDP Growth of India (1950-2018)



Economic Growth and Development

- As per the economist Amartya Sen, economic growth is one aspect of economic development. Also, united nation see it like this "Economic development focuses not only

on man's materialistic need but it focuses on overall development or rise in its living standards.

Economic Growth

Differences between Economic Growth and Economic Development

Comparison between Economic Growth and Economic Development	Economic Growth	Economic Development
Definition / Meaning	It is the positive quantitative change in the output of an economy in a particular time period	It considers the rise in the output in an economy along with the advancement of HDI index which considers a rise in living standards, advancement in technology and overall happiness index of a nation.
Concept	Economic growth is the "Narrower" concept	Economic development is the "Broader" concept
Nature of Approach	Quantitative in nature	Qualitative in nature
Scope	Rise in parameters like GDP, GNP, FDI, FII etc.	Rise in life expectancy rate, infant, improvement in literacy rate, infant mortality rate and poverty rate etc.
Term / Tenure	Short term in nature	Long-term in nature
Applicability	Developed nation	Developing economies

Measurement Techniques	Increase in national income	Increase in real national income i.e. per capita income
Frequency of Occurrence	In a certain period of time	Continuous process
Government Aid	It is an automatic process so may not require government support/aid or intervention	Highly dependent on government intervention as it includes widespread policies changes so without government intervention it is not possible
Wealth Distribution	Economic growth does not emphasize on the fair and equal distribution of wealth/income among all its people.	It focuses on a balanced and equitable distribution of wealth among all individual and tries to uplift the downgrade societies.

- It is the quantitative measure which considers the rise in the output produced in an economy or nation in a particular period in its monetary value.

- The key parameters of economic growth in any economy are its Gross Domestic Product (GDP) and gross national product which helps in measuring the actual size of an economy.
- For example, we say GDP of India is **2.8 trillion USD and ranked 6th in globe whereas GDP of the United States of America is 19.3 trillion USD and ranked one.**
- It shows how much the production of goods and services has increased compared from last year in a quantitative manner. It has many parameters to measure and few of them are human Resources.
- They are Natural Resource, Advancement in technology, Capital formation, Political and social economic factors.

Economic Development

- Economic development projects a broader picture of an economy which takes into account an increase in production level or output of an economy along with an improvement in the living standard of its citizens.
- It focuses more on socioeconomic factors rather than the just quantitative increase in production.
- Economic development is a qualitative measure which measures improvement in technology, labour reforms, rising living standards, broader institutional changes in an economy.
- Human development Index (HDI) is apt tool to measure the real development in an economy.

Developmental Path based on GDP and Employment

- In the development path of India, it first undertook the policy of closed trade. This was to give a thrust to domestic industries and reduce dependence on foreign products and companies.
- Trade and interaction with the outside world remained limited. This outlook continued till **1991** when India finally decided to open its borders to free trade and liberalized its economy by allowing foreign companies to enter the Indian economy.
- A thrust was given to employment generation under the Five Year plans. This was to make up for a rising population and lacking jobs to absorb the increased workforce size.
- Rural development was also given importance in India, for the important constituent it was of the Indian landscape.
- Poverty alleviation came as a corollary of rural development and a part of the development path of India.
- India inherited a poverty-stricken economy from the British rule, which had destroyed its resource base completely. The public sector was given significant importance, Private companies and industries were subject to strict regulations and standards.
- It was believed that the government was the sole protector of the people and would work towards social welfare.

- India has sustained rapid growth of GDP for most of the last two decades leading to rising per capita incomes and a reduction in absolute poverty.
- Per capita incomes have doubled in **12 years**. In Per capita income, placing India just inside the Middle Income Country category. Life expectancy at birth is **65 years** and **44%** of children under 5 are malnourished.
- The literacy rate for the population **aged 15 years and above is only 63% compared to a 71%** figure for lower middle income countries.
- India has followed a different path of development from many other countries. India went more quickly from agriculture to services that tend to be less tightly regulated than heavy industry.
- There are some emerging manufacturing giants in the Indian economy.

Factors supporting Indian development

- A fast-growing population of working age. There are **700 million** Indians under the **age of 35** and the demographics look good for Indian growth in the **next twenty years** at least.
- India is experiencing demographic transition that has increased the share of the working-age population from **58 percent to 64 percent** over the last two decades.
- India has a strong legal system and many English-language speakers. This has been a key to attracting inward investment from companies such as those specialising in Information Technology.
- Wage costs are low in India and India has made strides in recent years in closing some of the productivity gap between her and other countries at later stages of development.
- India's economy has successfully developed highly advanced and attractive clusters of businesses in the technology space.
- For example witness the rapid emergence of Bangalore as a hub for global software businesses.
- External economies of scale have deepened their competitive advantages in many related industries.

Growth of GDP and Economic Policies

- Many Economic Policies have been framed by the Government of India since independence for increasing rate of economic growth and economic development.
- The important economic policies are

Agriculture policy

- Agricultural policy is the set of government decisions and actions relating to domestic agriculture and imports of foreign agricultural products.
- Governments usually implement agricultural policies with the goal of achieving a specific outcome in the domestic agricultural product markets.

- Some over arching themes include risk management and adjustment, economic stability, natural resources and environmental sustainability research and development, and market access for domestic commodities.
- Some Agricultural policies are **Price policy, land reform policy, Green Revolution, Irrigation policy, Food policy, Agricultural Labour Policy and Co-operative policy.**

Industrial Policy

- Industrial development is a very important aspect of any economy.
- It creates employment promotes research and development, leads to modernization and ultimately makes the economy self-sufficient. In fact, industrial development even boosts other sectors of the economy like the agricultural sector (new farming technology) and the service sector.
- It is also closely related to the development of trade. Several industrial policies since **1948, Industrial policy** on large scale industries Eg. Textile Industry policy, Sugar Industry policy, Price policy of industrial growth, Small scale industrial policy and Industrial Labour policy.

New Economic Policy

- The economy of India had undergone significant policy shifts in the beginning of the 1990s.
- This new model of economic reforms is commonly known as the **LPG or Liberalisation, Privatisation and Globalisation** model.
- The primary objective of this model was to make the economy of India the fastest developing economy in the globe with capabilities that help it match up with the biggest economies of the world.
- These economic reforms had influenced the overall economic growth of the country in a significant manner.

Some other policies in India

- Trade Policy

Import and Export policy (International Trade Policy), Domestic Trade Policy.

- Employment policy
- Currency and Banking Policy
- Fiscal and Monetary Policy
- Wage Policy
- Population Policy

GDP Growth of India

- India's economic growth story since the 1990s has been steady, stable, diversified, resilient and reflect strong macro economics fundamentals.

- Despite fluctuations in recent quarters due to disruptions caused by two major structural reforms - demonetisation and the Goods and Services Tax (GST).
- The world Bank projected a growth rate of **7.3% in the year 2018-19 and 7.5% 2019-2020**.
- India's average economic growth between **1970 and 1980 has been 4.4%** which rise by **1% point to 5.4% between the 1990 and 2000**.
- According to IMF World Economic Outlook (October-2018), GDP growth rate of India in 2018 is projected at 7.3% and India is 5th fastest growing nation of the world just behind Bangladesh.

More to Know:

Gross National Happiness (GNH)

- Gross National Happiness (GNH) is a philosophy that guides the government of Bhutan. It includes an index which is used to measure the collective happiness and well-being of a population. Gross National Happiness is instituted as the goal of the government of Bhutan in the Constitution of Bhutan, enacted on **18 July 2008**.
- The term Gross National Happiness was coined in **1972** during an interview by a British journalist for the Financial Times at Bombay airport when the then **king of Bhutan, Jigme Singye Wangchuck**, said "Gross National Happiness is more important than Gross National Product."
- In 2011, The UN General Assembly passed Resolution "Happiness: towards a holistic approach to development" urging member nations to follow the example of Bhutan and measure happiness and well-being and calling happiness a **"fundamental human goal."**
- GNH is distinguishable from Gross Domestic Product by valuing collective happiness as the goal of governance, by emphasizing harmony with nature and traditional values as expressed in the 9 domains of happiness and 4 pillars of GNH.
- The four pillars of GNH's are 1) sustainable and equitable socio-economic development; 2) environmental conservation; 3) preservation and promotion of culture; and 4) good governance.
- The nine domains of GNH are psychological well-being, health, time use, education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards. Each domain is composed of subjective (survey-based) and objective indicators.
- The domains weigh equally but the indicators within each domain differ by weight.

Human Development Index

- In **1990 Mahbub ul Haq**, a Pakistani Economist at the United Nations, introduced the Human Development Index (HDI).
- The HDI is a composite index of life expectancy at birth, adult literacy rate and standard of living measured as a logarithmic function of GDP, adjusted to purchasing power parity.

- India climbed one spot to **130 out of 189 countries** in the latest human development rankings released today by the United Nations Development Programme (UNDP).
- India's HDI value for 2017 is 0.640, which put the country in the medium human development category.
- Between **1990 and 2017**, India's HDI value incased from **0.427 to 0.640**, an increase of nearly 50 percent – and an indicator of the country's remarkable achievement in lifting millions of people out of poverty.
- Between **1990 and 2017**, India's life expectancy at birth too increased by nearly 11 years, with even more significant gains in expected years of schooling.
- Today's Indian school-age children can expect to stay in school for **4.7 years** longer than in 1990. Whereas, India's GNI per capita increased by a staggering **266.6 %** between **1990 and 2017**.

Gross value added (GVA)

- Gross value added (GVA) is the measure of the value of goods and services produced in an area, industry or sector of an economy.
- In national accounts GVA is output minus intermediate consumption; it is a balancing item of the national accounts' production account.
- GVA is linked as a measurement to Gross Domestic Product (GDP), as both are measures of output.
- The relationship is defined as **GVA + taxes on products - subsidies on products = GDP**
GVA = GDP + subsidies - (direct, sales) taxes.

Estimation of GDP

- The Central Statistical Organisation (CSO), under the Ministry of Statistical department keeps the records.
- It's processes involves conducting an annual survey of industries and compilation of various indexes like the Index of Industrial Production (IIP) Consumer Price Index (CPI) etc.

The modern concept of GDP was first developed by **Simon Kuznets** for a **US Congress report in 1934**.

In **1867-68** for the first time **Dadabhai Navroji** had ascertained the Per Capital Income in his book "**Poverty and UnBritish Rule of India**".

10th Social Science Lesson 11 Notes in English

11. Globalization and Trade

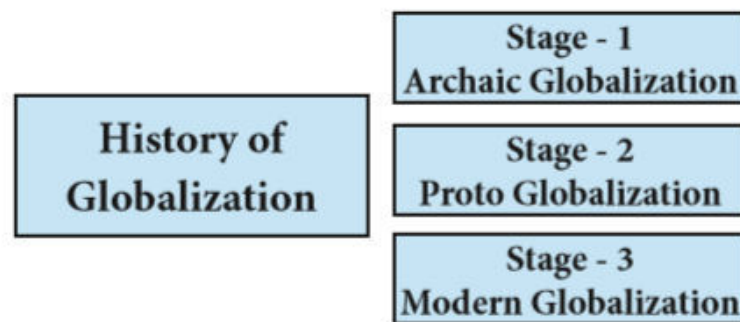
Introduction

- **Liberalization, Privatization and Globalization (LPG)** have become a much talked of subjects among politicians, economists and businessmen in modern days.
- These three expressions are the supporting pillars of which the edifice of new economic policy of our Government has been erected and implemented **since 1991**.

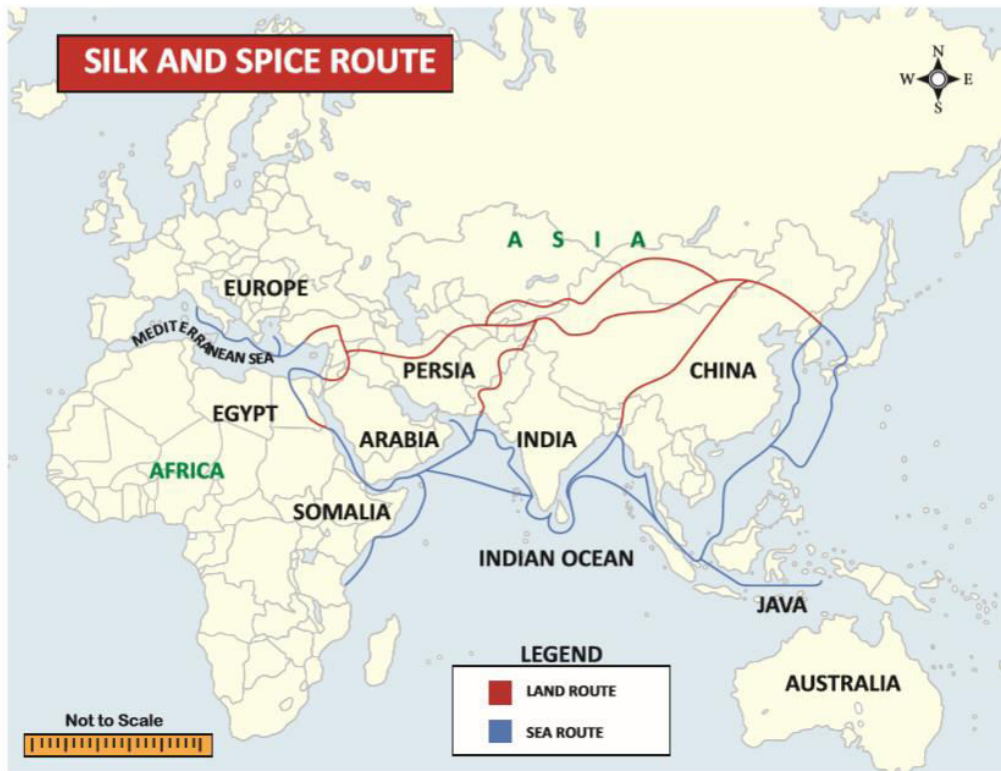
Globalization

- Globalization is the process of integrating various economies of the world without creating any barriers in the free flow of goods and services, technology, capital and even labour or human capital.
- Under globalization, the international markets for goods and services are integrated.
- Globalization is the integration of a country with the world economy.
- Basically, globalization signifies a **process of internationalization plus liberalization**.

History of Globalization



The term of 'Globalization' was introduced by **Pro. Theodore Levitt**. The historical backround of globalization can be discussed on three stages.



Silk Route and Spice Route

Archaic Globalization

- **Andre Gunder Frank** argued that a form of globalization has been in existence since the rise of trade links between Sumer and Indus valley civilization in the **third millennium BC (BCE)**.
- An early form of globalized economics and culture, known as **Archaic globalization** existed during the **Hellenistic Age**.
- When commercialized urban centers were focused around the axis of Greek culture over a wide range that stretched from India to Spain with such cities as **Alexandria, Athens, and Anthioch, as its center**.
- An early form of globalization in the trade link between the Roman Empire, Parthian Empire and the Han Dynasty made the commercial links between these powers inspired the development of the **Silk Road**.
- The Islamic Golden Age was also an important early stage of globalization.
- The advent of the Mongol Empire, though destabilizing to the commercial centers of the Middle East and China, greatly facilitated travel along the Silk Road.
- These Pre-modern phase of global exchange are sometimes known as archaic globalization.

Proto Globalization

- The next phase is known as proto - globalization.

- It was characterized by the rise of maritime European empires, in the **16th and 17th** centuries, **first the Portugues and Spanish Empires, and Dutch and British empires.**
- In the 17th century, globalization became private business phenomenon like British East India Company [**founded in 1600**] described as the first multinational company, and the first Dutch East India Company [**found in 1602**] were established.
- In 16th century, Portuguese started establishing trading posts [factories] from Africa to Asia and Brazil.

Modern Globalization

- The 19th century witnessed the advent of globalization approaching its modern form. Between the globalization in the 19th and in the 20th century there are significant differences.
- There are two main points one is the global trade in the 19th century as well as the capital, investment and the economy and another one is the global trade in the 20th century shows a higher share of trade in merchant production, a growth of the trade in services and the rise of production and trade by multinational firms.
- Multinational trade contracts and agreements have been signed, like the **General Agreement on Tariffs and Trade [GATT]** and **World Trade Organization [WTO]**.
- From **1890 and up to World War 1** instability trade was a problem, but in the post war period there has mostly been economic expansion which leads to stability.
- Technological changes have caused lower transporting costs, it takes just a few hours to transport goods between continents today.

Trade and Traders in South India historical perspective



Kalinga Trade route map

Southern Indian trade guilds were formed by merchants in order to organize and expand their trading activities. Trade guilds become channels through which Indian culture was exported to other lands. **South India trade was dominated by the Cholas, and it replaced the Pallavas.**

Early Traders

- In the year 1053 AD (CE) **the Kalinga traders (Modern Orissa)** brought red colored stone decorative objects for trade and also cotton textile to Southeast Asia at an early date. Several trade guilds operated in medieval Southern India such as the **Gatrigas, Nakaras, Mummuridandas, Ayyavole -500 Settis, Birudas, Gavaras, etc.**
- Some European Traders in South India. This was due to the trading activities of the various European companies which came to India during this period.
- The discovery of a new all-sea route from Europe to India Via cape of Good Hope by Vasco do Gama had for reaching repercussions on the civilized world.
- India's coastal and maritime trade was monopolized by the Europeans.

The Portuguese

- The Portuguese under the leadership of Vasco da Gama landed at Calicut on the **17th May, 1498.**

- Profits of goods brought by Vasco da Gama to Portugal were to 60 times cost of the entire expedition to India.
- The arrival of **Pedro Alvarez cabral in India in 1500AD (CE)** and the second trip of Vasco da Gama in 1502 led to the establishment of trading station at Calicut Cochin and Cannanore.
- Cochin was the early capital of the Portuguese in India.

The Dutch in South India

- Dutch undertook several voyages from 1596 and formed the **Dutch East India company (VOC) I 1602.**
- In 1605, Admiral van der Hagen established Dutch Factory at Masulipatnam and Pettapoli (Nizamapatanam), Devanampatinam.
- In 1610, upon negotiating with the king of Chandragiri, found another factory at Pulicut. Other commodities exported by the Dutch were indigo, saltpeter and Bengal raw silk. Pulicut was the headquarters of the Dutch in India.
- Nagapatnam on the Tanjore coast acquired from the **Portuguese in 1659.**

The British Company (UK)

- On **31st December, 1600**, Queen Elizabeth granted charter to The East India Company. On the south-eastern coast, the English established at **Masulipatnam in 1611 and near Pulical in 1626.**
- The Sultan of Golconda granted the English the "Golden Fireman" in 1632 by which they were allowed to trade freely in their **"Kingdom Ports".**
- In 1639, built a fortified factory in Madras which known as Fort St.George, which soon displaced Masulipatnam as headquarters of the English settlement on the coromandel coast.

The Danes

- The Danes formed an East India company and arrive in India in 1616.
- The Danish settlements were established at **Tranguebar (in Tamil nadu) in 1620** which was the headquarters of Danes in India.
- They failed to strengthen themselves, in India and in 1845 were forced to sell all their India settlements to the British.

The French

- The first French factory in India was established in 1668 by obtaining permission from the Sultan of Golconda.
- In 1693, the Dutch captured Pondicherry but was handed back to the French.
- In **1701**, Pondicherry was the headquarters of the French. Settlements in the East after **1742** Political motives began to overshadow the desire for commercial gain.

- Recently, the Government of India has set up Special Economic Zones in Southern States especially in Tamilnadu, Andhra, Karnataka and Kerala with a view to boost exports. Nanguneri Sez, Ennore Sez, Coimbatore Sez are some in Tamilnadu.

Globalization in India

- In India the period after **1980-81** was marked by severe balance of payment difficulties mainly due to hike in oil price and Gulf war in **1990-91** and hostilities in West Asia.
- When the new government took over in June 1991. India had unprecedented balance of payment crisis.
- The finances of the central, and state Government had reached a situation of near bankruptcy.
- With the downgrading of India's credit rating by some international agencies, there was heavy flight of capital out of India. Since India lost its credit worthiness in the international market, the government mortgaged **40 tons of gold to the Bank of England**.
- Under these circumstances, the government for 1991-92 presented its budget in July 1991 with a series of policy changes which underlined globalization, liberalization and privatization. This has come to be called as India's new economic policy.
- These policies were strengthened when India signed the Dunkel Draft in 1994.

Reforms made to adopt Globalization:- (New Economic policy in India)

1. Abolition of Industrial licensing, except for a few industries.
2. Reduction in the number of industries reserved for public sector.
3. Fixation of a realistic exchange rate of rupee to exchange exports of Indian goods.
4. Foreign private sector by making rupee convertible on trade, on current account and by reducing import duties.
5. Foreign exchanges regulations were suitably amended
6. The Statutory Liquidity Ratio (SLR) was reduced to increase lending by RBI.

Multi National Corporation (MNC)

Indian Multi National Companies			
Company	Headquarter	Type of Industry	Countries of operating
Hero Motocorp	New Delhi	Automobile	Columbia, Bangladesh, Africa
Bajaj	Pune	Automobile	United Arab Emirates(UAE), Bangladesh
TVS	Chennai	Automobile	Brazil,Chile,Colombia, Mexico,Peru
State Bank of India	Mumbai	Banking	Australia,Bangladesh, Belgium
Bharti Airtel	New Delhi	Communication	South Asia, Africa
Micromax Informatics	Gurgaon	Electronics	Nepal, Srilanka, Bangladesh
Amul	Anand (Gujarat)	Food product	US, Thailand, Malaysia, Hong Kong, Japan,
ONGC	Delhi	Fuel	Brazil, Colombia, Iran
Dr. Reddy's Laboratories	Hyderabad	Medical Laboratory	Brazil, Mexico, Jamaica
Infosys	Bengaluru	Software	America, Europa, Africa

- Multi National Corporation is a Corporate organization which owns or controls production of goods or services in at least one country other than its home country.
- Otherwise called Multinational Corporations (MNCs) or Transnational Corporation (TNC) or Multinational Enterprise (MNE).

Evolution of MNC

- Like, the East India Company, which came to India as a trading company and then its net throughout the country to become politically dominant, these multinationals first start their activities in extractive industries or control raw materials in the host countries during 1920s and then slowly entered.
- The manufacturing and service sectors after 1950s. Most of the MNC's at present belong to the four major exporting countries viz., **USA, UK, France, Germany**.
- **However, the largest is American. 11 of the 15 largest** multinationals are American, In 1971, the American Corporations held 52 percent of the total world stock of foreign direct Investment.
- **Great Britain held 14.5 percent followed by France 5 percent and Federal Republic of Germany 4.4 percent and Japan 2.7 percent.**
- In 1969 the American Multinationals alone produced approximately 140 billion dollars worth of goods.

- The American multinationals realize quite substantial returns to the extent of 34 percent in Asiatic countries and 22 percent in African countries.
- They then acquire enormous powers in host countries, which smoothens the free flow of funds across international boundaries.
- They purchase the best brains in these countries and resort to unfair practices.
- With their huge resources, the MNCs are able to invest in research and development and exploit technological developments to manufacture new products, and discover new processes.

Growth of MNCs in India

- A common form of MNC Participation in Indian industry is through entering into cooperation with Indian industrialists.
- Trends of liberalization in the **1980s** gave a substantial spurt to foreign collaborations. This would be clear from the fact that of the total **12,760 foreign** collaboration agreements in **40 years between 1948-1988**.
- As a result of liberalized foreign investment policy (FIP) announced in July-Aug 1991 there has been a further spurt of foreign collaborations and increase in flow of foreign direct investment.

Reasons for the growth MNC

Expansion of Market territory.

As the operations of large sized firms expand, they seek more and more extension of their activities beyond the physical boundaries of the country in which they are incorporated.

Marketing superiorities:

- A multinational firm enjoys a number of marketing superiorities over the national firms.
- It enjoys market reputation and faces less difficulty in selling its products. It adopts more effective advertising and sales promotion techniques.

Financial Superiorities

It has financial resources and a high level of funds utilization. It has easier access to external capital markets. Because of its international reputation it is able to raise more international resources.

Technological superiorities:

The main reason why MNCs have been encouraged by the underdeveloped countries to participate in their industrial development is on account of the technological superiorities which these firms possess as compared to national companies.

Product innovations:

MNCs have research and development engaged in the task of developing new products and superior designs of existing products.

Advantages of MNC

1. Producing the same quality of goods at lower cost and without transaction cost
2. MNC reduce prices and increase the Purchasing power of consumers world wide
3. A MNCs is able to take advantage of tax variation.
4. Spurring job growth in the local economies

Disadvantages of MNC

1. They are a way for the corporations to develop a monopoly (for certain products)
2. They are also a detrimental effect on the environment.
3. The introduction of MNC in to a host country's economy may also lead to the downfall of smaller, local business.
4. MNC breach ethical standards, accusing them of evading ethical laws and leveraging their business agenda with capital.

Fair Trade Practices and World Trade Organization

Fair Trade is a way of doing business that ultimately aims **to keep small farmers an active part of the world Market place, and aims to empower consumer** to make purchases that support their values. Fair Trade is a set of business practices voluntarily adopted by the producers and buyers of agricultural commodities and hand-made crafts that are designed to advance many economic, social and environmental goals, including,

- Raising and stabilizing the incomes of small Scale farmers, farm workers and artisans.
- More equitably distributing the economic gains, opportunities and risks associated with the production and sale of these goods.
- Increasing the organizational and commercial capacities of producer groups.
- Promoting labor rights and the right workers to organize.
- Promoting safe and sustainable farming Methods and working conditions.

Fair trade is about better prices, decent working conditions and fair terms of trade for farmers and workers. It's about supporting the development of thriving farming and worker communities that have more central over their futures and protecting the environment in which they live and work.

Beneficiaries of Fair trade practices:**Consumer:**

- Consumer support enables **Fair Trade Organisation** to be advocates and comparing for wider reform of International trading rules.
- They can choose from an even growing range of great products.
- By buying Fair trade labeled products consumers support producers who are struggling to improve their lives.

Trader/companies:

- Since, it **launch in 2002** the Fair trade mark has become the most widely, recognized social and development label in the world.
- Fair trade offers companies a credible way to ensure that their trade has a positive impact.

Producers:

- Stable prices that cover the costs of sustainable production.
- Market access that enable buyers to trade with producers who would otherwise be excluded from market.
- Partnership (**Producers are involved in decisions their future**). The Empowerment of farmers and workers

Principles of Fair trade Organization

- Creating Opportunities for Economically Disadvantaged producers
- Transparency and Accountability
- Fair Trading Practices and Payment of a Fair Price
- Ensuring no child Labour and Forced Labour
- Commitment to Non Discrimination, Gender Equity and freedom of association
- Providing Capacity Building and Promoting Fair Building
- Respect for the Environment.

GATT: (General Agreement of Trade and Tariffs)

- GATT was signed by **23 countries in 1947**. India was one of the founder members of GATT.
- In the **seventh Round 99 countries** participated. In the Eighth Round of 1986, (Uruguay Round), 117 countries participated.
- The Director General of GATT Arthur Dunkel came up with a Draft Final Act, known as Dunkel Draft and on **April 15, 1994** the Final Act was ultimately approved and signed.
- GATT's primary purpose was to increase International Trade by reducing various tariffs, quotas and subsidies while maintaining meaningful regulations.

World Trade Organization (WTO)

- The signing of the Final Act of the Uruguay Round by member nations of GATT in April 1994 paved the way for setting up of the WTO.
- An agreement to this effect was signed by **104** members. The WTO Agreement came into force from **January 1, 1995** (the present membership of WTO is **164 countries**)



Objectives of W.T.O

- To set and enforce rules for international trade
- To provide a forum for negotiating and monitoring further trade liberalization
- To resolve trade disputes
- Introduction the sustainable development and environment can go together
- To ensure that developing countries, secure a better share of growth in world Trade
- To resolve trade disputes
- To increase the transparency of decision making processes
- Introduction sustainable development the development and environment can go together
- To ensure full employment and broad increase in effective demand.

Trade Related aspects of Intellectual Property Rights (TRIPs)

- Intellectual Property Right may be defined as **"Information with a commercial Value"** Under TRIPs Patent shall be available for any invention whether product or process in all fields of industrial technologies.
- Trips agreement covers seven areas of intellectual's property rights i.e. Copy rights, Trade Market, Trade Secrets, Industrial Design, Geographical appellations Integrated circuits and Patents.

Trade Related Investment Measures (TRIMs)

The Uruguay Round Agreement on TRIMs refers to certain conditions (or) restrictions imposed by a government in respect of foreign investment in the country in order to give adequate provisions for the home industries to develop.

Impact and Challenges of Globalization**Positive Impact**

- A better economy introduces rapid development of the capital market
- Standard of living has increased
- Globalization rapidly increase better trade so that more people are employed
- Introduced new technologies and new scientific research patterns
- Globalization increasing the GDP of a country
- It helps to increase in free flow of goods and also to increase Foreign Direct Investment.

Negative Impact

- Too much flow of capital amongst countries, Introduces unfair and immoral distributors of Income
- Another fear is losing national integrity. Because of too much exchange of trade, independent domestic policies are lost
- Rapid growth of the economy has required a major infrastructure and resource extraction. This increase negative ecological and Social costs
- Rapid increases in exploitation of natural resources to earn foreign exchange
- Environmental standards and regulations have been relaxed.

Challenges of Globalization

- The benefits of globalization extend to all countries that will not happen automatically.
- The fear that globalization leads to instability in the developing world
- The industrial world that increased global competition will lead in race to the bottom in wages, labour right, and employment practice
- It leads to global imbalance
- Globalization has resulted with the embarrassment
- Globalization has led to an increase in activities such as child labor and slavery
- People started consuming more junk food. This caused, the degradation of health and spread of diseases
- Globalization has led to environmental degradation.

More to Know:**1. The WTO mentions five types of subsidies:**

- Cash subsidies, such as the grants mentioned above
- Tax concessions, such as exemptions, credits, or deferrals
- Assumption of risk, such as loan guarantees
- Government procurement policies that pay more than the free-market price
- Stock purchases that keep a company's stock price higher than market levels. These are all considered subsidies because they reduce the cost of doing business.

2. World Trade Organization (WTO):

Head Quarter: Geneva, Switzerland

Purpose: Regulation, International trade

Members of WTO: Director General, Four Deputy Director General, and other **600 Official Staff** from around 80 member countries.

3. Rounds of GATT

- First in Geneva (Switzerland) (1947)
- Second in Annecy (France) in 1949
- Third in Torquay (UK) in 1950 – 51
- Fourth, fifth, and Sixth in Geneva (Switzerland) in 1956, 1960-61, 1964 -67
- Seventh in Tokyo (Japan) in 1973 – 79
- Eighth and final round at Punta del Este (Uruguay) in 1986 – 1994, known as 'Uruguay Round'.

4. Fair trade food product such as coffee, tea, cocoa, honey and bananas. Non-food commodities include crafts, textile and flowers.

5. FERA (Foreign Exchange Regulation Act 1974)

This Act referred directly to the operations of MNCs in India

6. FEMA (Foreign Exchange Management Act 1999)

Under FEMA the emphasis is on 'Management' rather than 'regulation'

7. Foreign Contribution (regulation) Act, 2010

FCRA, 2010 has been enacted by the Parliament to consolidate the law to regulate the acceptance and utilization of foreign contribution or foreign hospitality by certain individuals or associations or companies and to prohibit acceptance and utilization of foreign contribution or foreign hospitality for any activities detrimental to national interest and for matters connected therewith or incidental thereto. The flow of foreign contribution to India is regulated under

- Foreign Contribution (Regulation) Act, 2010

- Foreign Contribution (Regulation) Rules, 2011

8. Top 10 Largest Multinational Companies in India 2018

1. Sony Corporation
2. Hewlett Packard (HP)
3. Tata Group
4. Microsoft Corporation
5. IBM
6. Nettle
7. Procter & Gamble
8. City Group
9. Pepsi Company
10. The Coca-Cola Company

10th Social Science Lesson 12 Notes in English

12. Early Revolts against British Rule in Tamil Nadu

Introduction

- After defeating the French and their Indian allies in the three Carnatic Wars, the East India Company began to consolidate and extend its power and influence. However, local kings and feudal chieftains resisted this.
- The first resistance to East India Company's territorial aggrandisement was from Puli Thevar of Nerkattumseval in the Tirunelveli region.
- This was followed by other chieftains in the Tamil country such as **Velunachiyar, Veerapandiya Kattabomman, the Marudhu brothers, and Dheeran Chinnamalai**. Known as the Palayakkarars Wars, the culmination of which was Vellore **Revolt of 1806**, this early resistance to British rule in Tamilnadu is dealt with in this lesson.

Resistance of Regional Powers against the British

Palayams and Palayakkarars

- The word "**palayam**" means a domain, a military camp, or a little kingdom. Palayakkarars (**Poligar is how the British referred to them**) in Tamil refers to the holder of a little kingdom as a feudatory to a greater sovereign.
- Under this system, palayam was given for valuable military services rendered by any individual. This type of Palayakkarars system was in practice during the **rule of Prataba Rudhra of Warangal in the Kakatiya kingdom**.
- The system was put in place in Tamilnadu by Viswanatha Nayaka, when he became the **Nayak ruler of Madurai in 1529**, with the support of his minister Ariyanathar. Traditionally there were supposed to be **72 Palayakkarars**.
- The Palayakkarars were free to collect revenue, administer the territory, settle disputes and maintain law and order. Their police duties were known as **Padikaval or Arasu Kaval**.
- On many occasions the Palayakkarars helped the Nayak rulers to restore the kingdom to them.
- The personal relationship and an understanding between the King and the Palayakkarars made the system to last for about two hundred years from the Nayaks of Madurai, until the takeover of these territories by the British.

Eastern and Western Palayams

- Among the **72 Palayakkarars**, created by the Nayak rulers, there were two blocs, namely the prominent eastern and the western Palayams.

- The eastern Palayams were **Sattur, Nagalapuram, Ettayapuram, and Panchalamkurichi** and the prominent western palayams were **Uthumalai, Thalavankottai, Naduvakurichi, Singampatti, Seithur**.
- During the seventeenth and eighteenth centuries the Palayakkars dominated the politics of Tamil country. They functioned as independent, sovereign authorities within their respective Palayams.

Revenue Collection Authority to the Company Rule

- The Nawab of Arcot had borrowed money from the East India Company to meet the expenses he had incurred during the Carnatic Wars.
- When his debts exceeded his capacity to pay, the power of collecting the land revenue dues from southern Palayakkarars was given to the East India Company.
- Claiming that their lands had been handed down to them over sixty generations, many Palayakkarars refused to pay taxes to the Company officials.
- The Company branded the defiant Palayakkarars as rebels and accused them of trying to disturb the peace and tranquillity of the country.
- This led to conflict between the East India Company and the Palaykkarars which are described below.

Palayakkarars' Revolt 1755-1801

Revolt of Puli Thevar 1755–1767

- In **March 1755 Mahfuzkhan (brother of the Nawab of Arcot)** was sent with a contingent of the Company army under Colonel Heron to Tirunelveli.
- Madurai easily fell into their hands. Thereafter Colonel Heron was urged to deal with Puli Thevar as he continued to defy the authority of the Company.
- Puli Thevar wielded much influence over the western palyakkarars. For want of cannon and of supplies and pay to soldiers, Colonel Heron abandoned the plan and retired to Madurai. **Heron** was recalled and dismissed from service.

Confederacy and Alliance with Enemies of the British

- Three Pathan officers, Nawab Chanda Sahib's agents, named **Mianah, Mudimiah and Nabikhan Kattak** commanded the Madurai and Tirunelveli regions. They supported the Tamil playakkarars against Arcot Nawab Mohamed Ali.
- Puli Thevar had established close relationships with them. Puli Thevar also formed a confederacy of the Palayakkars to fight the British.
- With the exception of the **Palayakkarars of Sivagiri**, all other Maravar Palayams supported him.

- Ettayapuram and Panchalamkurichi also did not join this confederacy. Further, the English succeeded in getting the **support of the rajas of Ramanathapuram and Pudukottai**.
- Puli Thevar tried to get the support of Hyder Ali of Mysore and the French. **Hyder Ali could not help Puli Thevar** as he was already locked in a serious conflict with the Marathas.

Kalakadu Battle

- The Nawab sent an additional contingent of sepoy to Mahfuzkhan and the reinforced army proceeded to Tirunelveli. Besides the **1000 sepoy of the Company, Mahfuzkhan received 600 more sent by the Nawab**.
- He also had the support of cavalry and foot soldiers from the Carnatic. Before Mahfuzkhan could station his troops near Kalakadu, **2000 soldiers from Travancore joined the forces of Puli Thevar**.
- In the battle at Kalakadu, Mahfuzkhan's troops were routed.

Yusuf Khan and Puli Thevar

- The organized resistance of the palayakkarars under Puli Thevar gave an opportunity to the English to interfere directly in the affairs of Tirunelveli.
- Aided by the Raja of Travancore, from **1756 to 1763**, the palyakkarars of Tirunelveli led by Puli Thevar were in a constant state of rebellion against the Nawab's authority.
- Yusuf Khan (also known as Khan Sahib or, before his conversion to Islam, **Marudhanayagam**) who had been sent by the Company was not prepared to attack Puli Thevar unless the big guns and ammunition from Tiruchirappalli arrived.
- As the English were at war with the French, as well as with Hyder Ali and Marathas, the artillery arrived only in **September 1760**.
- Yusuf Khan began to batter the Nerkattumseval fort and this attack continued for about two months. On **16 May 1761** Puli Thevar's three major forts (Nerkattumseval, Vasudevanallur and Panayur) came under the control of Yusuf Khan.
- In the meantime, after taking Pondicherry the English had eliminated the French from the picture.
- As a result of this the unity of palyakkarars began to break up as French support was not forthcoming.
- **Travancore, Seithur, Uthumalai and Surandai** switched their loyalty to the opposite camp. Yusuf Khan who was negotiating with the palayakkarars, without informing the Company administration, was charged with treachery and hanged in **1764**.

Fall of Puli Thevar

- After the death of Khan Sahib, Puli Thevar returned from exile and recaptured Nerkattumseval in **1764**.

- However, he was defeated by **Captain Campbell in 1767**. Puli Thevar escaped and died in exile.

Velunachiyar (1730–1796)

- Born in **1730** to the **Raja Sellamuthu Sethupathy of Ramanathapuram**, Velunachiyar was the only daughter of this royal family.
- The king had no male heir. The royal family brought up the princess Velunachiyar, training her in martial arts like valari, stick fighting and to wield weapons.
- She was also adept in horse riding and archery, apart from her proficiency in English, French and Urdu.
- At the **age of 16**, **Velunachiyar** was married to Muthu Vadugar, the Raja of Sivagangai, and had a daughter by name Vellachinachiar.
- In **1772**, the Nawab of Arcot and the Company troops under the command of Lt. Col. Bon Jour stormed the Kalaiyar Kovil Palace.
- In the ensuing battle Muthu Vadugar was killed. Velunachiyar escaped with her daughter and lived under the protection of Gopala Nayakar at Virupachi near Dindigul for eight years.
- During her period in hiding, Velunachiyar organised an army and succeeded in securing an alliance with not only Gopala Nayakar but Hyder Ali as well.
- **Dalavay (military chief) Thandavarayanar** wrote a letter to Sultan Hyder Ali on behalf of Velunachiyar asking for 5000 infantry and 5000 cavalry to defeat the English.
- Velunachiyar explained in detail in Urdu all the problems she had with East India Company. She conveyed her strong determination to fight the English.
- Impressed by her courage, Hyder Ali ordered his Commandant Syed in Dindigul fort to provide the required military assistance.
- Velunachiyar employed agents for gathering intelligence to find where the British had stored their ammunition.
- With military assistance from Gopala Nayakar and Hyder Ali she recaptured Sivagangai. She was crowned as Queen with the help of Marudhu brothers.
- She was the first female ruler or queen to resist the British colonial power in India.

Rebellion of Veerapandya Kattabomman 1790-1799

- Veerapandya Kattabomman became the **Palayakkarar of Panchalamkurichi** at the age of thirty on the death of his father, Jagavira Pandya Kattabomman.
- The Company's administrators, James London and Colin Jackson, had considered him a man of peaceful disposition.
- However, soon several events led to conflicts between Veerapandya Kattabomman and the East India Company.

- The Nawab, under the provisions of a treaty signed in **1781**, had assigned the revenue of the Carnatic to the Company to be entirely under their management and control during the war with Mysore Sultan.
- **One-sixth of the revenue was to be allowed to meet the expenses of Nawab and his family.** The Company had thus gained the right to collect taxes from Panchalamkurichi.
- The Company appointed its Collectors to collect taxes from all the palayams. The Collectors humiliated the palayakkarars and adopted force to collect the taxes.
- This was the bone of contention between the English and Kattabomman.

Confrontation with Jackson

- The land revenue arrear from Kattabomman was **3310 pagodas in 1798**. Collector Jackson, an arrogant English officer, wanted to send an army to collect the revenue dues but the Madras Government did not give him permission.
- On **18 August 1798**, he ordered Kattabomman to meet him in Ramanathapuram. But Kattabomman's attempts to meet him in between proved futile, as Jackson refused to give him audience both in Courtallam and Srivilliputhur.
- At last, an interview was granted and Kattabomman met Jackson in **Ramanathapuram on 19 September 1798**. It is said that Kattabomman had to stand for three hours before the haughty Collector Jackson.
- Sensing danger, Kattabomman tried to escape, along with his minister Sivasubramanianar. Oomaithurai suddenly entered the fort with his men and helped the escape of Kattabomman.
- At the gate of the Ramanathapuram fort there was a clash, in which some people including **Lieutenant Clarke were killed**. Sivasubramanianar was taken prisoner.

Appearance before Madras Council

- On his return to Panchalamkurichi, Kattabomman represented to the Madras Council about how he was ill-treated by the collector Jackson.
- The Council asked Kattabomman to appear before a committee with **William Brown, William Oram and John Casamajor** as members.
- Meanwhile, Governor Edward Clive, ordered the release of Sivasubramanianar and the suspension of the Collector Jackson.
- Kattabomman appeared before the Committee that sat on **15 December 1798** and reported on what transpired in Ramanathapuram. The Committee found Kattabomman was not guilty.
- Jackson was dismissed from service and a new **Collector S.R. Lushington** appointed. Kattabomman cleared almost all the revenue arrears leaving only a balance of **1080 pagodas**.

Kattabomman and the Confederacy of Palayakkarars

- In the meantime, Marudhu Pandiyar of Sivagangai formed the South Indian Confederacy of rebels against the British, with the neighbouring palayakkars like **Gopala Nayak of Dindigul and Yadul Nayak of Aanamalai**.
- Marudhu Pandiyar acted as its leader. The Tiruchirappalli Proclamation had been made. Kattabomman was interested in this confederacy.
- Collector Lushington prevented Kattabomman from meeting the Marudhu Brothers. But Marudhu Brothers and Kattabomman jointly decided on a confrontation with the English.
- Kattabomman tried to influence **Sivagiri Palayakkarars**, who refused to join. Kattabomman advanced towards Sivagiri. But the Palayakkarars of Sivagiri was a tributary to the Company.
- So the Company considered the expedition of Kattabomman as a challenge to their authority. The Company ordered the army to march on to **Tirunelveli**.

The Siege of Panchalamkurichi

- In **May 1799**, **Lord Wellesley** issued orders from Madras for the advance of forces from Tiruchirappalli, Thanjavur and Madurai to Tirunelveli. Major Bannerman commanded the troops.
- The Travancore troops too joined the British. On **1 September 1799**, an ultimatum was served on Kattabomman to surrender. Kattabomman's "**evasive reply**" prompted Bannerman to attack his fort.
- Bannerman moved his entire army to Panchalamkurichi on **5 September**. They cut off all the communications to the fort.
- Bannerman deputed Ramalinganar to convey a message asking Kattabomman to surrender. Kattabomman refused.
- Ramalinganar gathered all the secrets of the Fort, and on the basis of his report, Bannerman decided the strategy of the operation. In a clash at **Kallarpatti**, **Sivasubramanianar** was taken a prisoner.

Execution of Kattabomman

- Kattabomman escaped to Pudukottai. The British put a prize on his head. Betrayed by the rajas of Ettayapuram and Pudukottai Kattabomman was finally captured. **Sivasubramanianar was executed at Nagalapuram on the 13 September**.
- Bannerman made a mockery of a trial for Kattabomman in front of the **palayakarars on 16 October**. During the trial Kattabomman bravely admitted all the charges levelled against him.
- Kattabomman was **hanged from a tamarind tree in the old fort of Kayathar**, close to Tirunelveli, in front of the fellow Palayakkars.
- Thus ended the life of the celebrated Palayakkarars of Panchalamkurichi. Many folk ballads on Kattabomman helped keep his memory alive among the people.

The Marudhu Brothers

- **Periya Marudhu or Vella Marudhu (1748–1801) and his younger brother Chinna Marudhu (1753-1801)** were able generals of Muthu Vadugar of Sivagangai. After Muthu Vadugar's death in the **Kalaiyar Kovil battle Marudhu brothers** assisted in restoring the throne to Velunachiyar.
- In the last years of the eighteenth century Marudhu Brothers organised resistance against the British.
- After the death of Kattabomman, they worked along with his brother Oomathurai. They plundered the granaries of the Nawab and caused damage and destruction to Company troops.

Rebellion of Marudhu Brothers (1800–1801)

- Despite the suppression of Kattabomman's revolt in 1799, rebellion broke out again in 1800. In the British records it is referred to as the Second Palayakkarar War.
- It was directed by a confederacy consisting of **Marudhu Pandyan of Sivagangai, Gopala Nayak of Dindugal, Kerala Varma of Malabar and Krishnaappa Nayak and Dhoondaji of Mysore**. In **April 1800** they meet at Virupachi and decided to organise an uprising against the Company.
- The uprising, which broke out in Coimbatore in **June 1800**, soon spread to Ramanathapuram and Madurai.
- The Company got wind of it and declared war on Krishnappa Nayak of Mysore, Kerala Varma of Malabar and others. The Palayakars of Coimbatore, Sathyamangalam and Tarapuram were caught and hanged.
- In **February 1801** the two brothers of Kattabomman, Oomathurai and Sevathaiah, escaped from the Palayamkottai prison to Kamudhi, from where Chinna Marudhu took them to Siruvayal his capital.
- The **fort at Panchalamkurichi** was reconstructed in record time. The British troops under Colin Macaulay retook the fort in April and the Marudhu brothers sought shelter in Sivagangai.
- The English demanded that the Marudhu Pandys hand over the fugitives (**Oomathurai and Sevathaiah**). But they refused. Colonel Agnew and Colonel Innes marched on Sivagangai.
- In **June 1801 Marudhu Pandys** issued a proclamation of Independence which is called Tiruchirappalli Proclamation.

Proclamation of 1801

- The Proclamation of 1801 was an early call to the Indians to unite against the British, cutting across region, caste, creed and religion.

- The proclamation was pasted on the walls of the **Nawab's palace in Tiruchirappalli fort and on the walls of the Srirangam temple**. Many palayakkars of Tamil country rallied together to fight against the English.
- Chinna Marudhu collected nearly **20,000 men to challenge the English army**. British reinforcements were rushed from Bengal, Ceylon and Malaya.
- The rajas of Pudukkottai, Ettayapuram and Thanjavur stood by the British. Divide and rule policy followed by the English spilt the forces of the palayakkarars soon.

Fall of Sivagangai

- In May 1801, the English attacked the rebels in Thanjavur and Tiruchirappalli. The rebels went to Piranmalai and Kalayarkoil.
- They were again defeated by the forces of the English. In the end the superior military strength and the able commanders of the English Company prevailed.
- The rebellion failed and Sivagangai was annexed in 1801. The Marudhu brothers were executed in **the Fort of Tirupathur near Ramanathapuram on 24 October 1801**.
- Oomathurai and Sevathaiah were captured and beheaded at Panchalamkurichi on **16 November 1801**.
- **Seventy-three rebels** were exiled to Penang in Malaya. Though the palayakkarars fell to the English, their exploits and sacrifices inspired later generations. Thus the rebellion of Marudhu brothers, which is called South Indian Rebellion, is a landmark event in the history of Tamil Nadu.

Carnatic Treaty, 1801

- The suppression of the Palayakkarars rebellions of **1799 and 1800–1801** resulted in the liquidation of all the local chieftains of Tamilnadu.
- Under the terms of the **Carnatic Treaty of 31 July 1801**, the British assumed direct control over Tamilagam and the Palayakkarar system came to an end with the demolition of all forts and disbandment of their army

Dheeran Chinnamalai (1756–1805)

- **Born as Theerthagiri in 1756 in the Mandradiar royal family of Palayakottai**, Dheeran was well trained in silambu, archery, horse riding and modern warfare. He was involved in resolving family and land disputes in the Kongu region.
- As this region was under the control of the Mysore Sultan, tax was collected by Tipu's Diwan Mohammed Ali.
- Once, when the Diwan was returning to Mysore with the tax money, Theerthagiri blocked his way and confiscated all the tax money.

- He let Mohammed Ali go by instructing him to tell his Sultan that “Chinnamalai”, who is between Sivamalai and Chennimalai, was the one who took away taxes. Thus he gained the name “**Dheeran Chinnamalai**”.
- The offended Diwan sent a contingent to attack Chinnamalai and both the forces met and fought at the Noyyal river bed. Chinnamalai emerged victorious.
- Trained by the French, Dheeran mobilised the Kongu youth in thousands and fought the British together with Tipu.
- After Tipu’s death Dheeran Chinnamalai built a fort and fought the British without leaving the place. Hence **the place is called Odanilai**.
- He launched guerrilla attacks and evaded capture. Finally the English captured him and his brothers and kept them in prison in Sankagiri.
- When they were asked to accept the rule of the British, they refused. So they were hanged at the top of the **Sankagiri Fort on 31 July 1805**.

Vellore Revolt 1806

- Before reducing all palayakkarars of south Tamilnadu into submission the East India Company had acquired the revenue districts of Salem, Dindigul at the conclusion of the war with Tipu in **1792**.
- Coimbatore was annexed at the end of the **Anglo-Mysore War in 1799**. In the same year the Raja of Thanjavur whose status had been reduced to that of a vassal in 1798 gave up his sovereign rights over that region to the English.
- After the suppression of resistance of **Kattabomman (1799) and Marudhu Brothers (1801)**, the British charged the Nawab of Arcot with disloyalty and forced a treaty on him.
- According to this **Treaty of 1801**, the Nawab was to cede the districts of North Arcot, South Arcot, Tiruchirappalli, Madurai and Tirunelveli to the Company and transfer all the administrative powers to it.

Grievances of Indian Soldiers

- But the resistance did not die down. The dispossessed little kings and feudal chieftains continued to deliberate on the future course of action against the Company Government.
- The outcome was the **Vellore Revolt of 1806**. The objective conditions for a last ditch fight existed on the eve of the revolt. The sepoys in the British Indian army nursed a strong sense of resentment over low salary and poor prospects of promotion.
- The English army officers’ scant respect for the social and religious sentiments of the Indian sepoys also angered them.
- The state of peasantry from which class the sepoys had been recruited also bothered them much.

- With new experiments in land tenures causing unsettled conditions and famine breaking out in **1805 many of the sepoys' families** were in dire economic straits. The most opportune situation came with the sons and the family members of Tipu being interned in Vellore Fort.
- The trigger for the revolt came in the form of a new military regulation notified by the **Commander-in Chief Sir John Cradock**.
- According to the new regulations, the Indian soldiers were asked not to wear caste marks or ear rings when in uniform.
- They were to be cleanly shaven on the chin and maintain uniformity about how their moustache looked.
- The new turban added fuel to fire. The most objectionable addition was the leather cockade made of animal skin.
- The sepoys gave enough forewarning by refusing to wear the new turban. Yet the Company administration did not take heed.

Outbreak of the Revolt

- On **10 July 1806**, in the early hours, guns were booming and the Indian sepoys of the **1st and 23rd regiments** raised their standard of revolt. Colonel Fancourt, who commanded the garrison, was the first victim.
- **Colonel McKerras of the 23rd regiment** was killed next. Major Armstrong who was passing the Fort heard the sound of firing. When he stopped to enquire he was showered with bullets.
- About a dozen other officers were killed within an hour or so. Among them **Lt. Elly and Lt. Popham** belonged to His Majesty's battalion.

Gillespie's Brutality

- **Major Cootes, who was outside the Fort, informed Colonel Gillespie, the cavalry commandant in Arcot.**
- **Gillespie** reached the fort along with a squadron of cavalry under the command of Captain Young at **9.00 am**.
- In the meantime, the rebels proclaimed **Fateh Hyder, Tipu's eldest son, as their new ruler and hoisted the tiger flag of Mysore sultans** in the Fort. But the uprising was swiftly crushed by Col. Gillespie, who threw to winds all war ethics.
- In the course of suppression, according to an eyewitness account, eight hundred soldiers were found dead in the fort alone.
- Six hundred soldiers were kept in confinement in Tiruchirappalli and Vellore awaiting Inquiry.

Consequences of Revolt



- Six of the rebels convicted by the Court of Enquiry were blown from the guns; five were shot dead; eight hanged. Tipu's sons were ordered to be sent to Calcutta.
- The officers and men engaged in the suppression of the revolt were rewarded with prize money and promotion. Col. Gillespie was given **7,000 pagodas**.
- However, the **commander-in chief Sir John Cradock**, the **Adjutant General Agnew** and **Governor William Bentinck** were held responsible for the revolt, removed from their office, and recalled to England.

- The military regulations were treated as withdrawn.

Estimate of Revolt

- The Vellore Revolt failed because there was no immediate help from outside.
- Recent studies show that the organising part of the revolt was done perfectly by **Subedars Sheik Adam and Sheik Hamid and Jamedar Sheik Hussain of the 2nd battalion of 23rd regiment and two Subedars and the Jamedar Sheik Kasim of the 1st battalion of the 1st regiment**. Vellore Revolt had all the forebodings of the Great Rebellion of 1857.
- The only difference was that there was no civil rebellion following the mutiny. The 1806 revolt was not confined to Vellore Fort. It had its echoes in **Bellary, Walajabad, Hyderabad, Bengaluru, Nandydurg, and Sankaridurg**.

More to Know:

Gopala Nayak, the Palayakkarar of Virupachi

- Gopala Nayak spearheaded the famous Dindigul League, which was formed with Lakshmi Nayak of Manaparai and Poojai Nayak of Devadanapatti.
- He drew inspiration from Tipu Sultan who sent a deputation to show his camaraderie. He led the resistance against the British from Coimbatore and later joined Oomaidurai, Kattabomman's brother.
- He put up a fierce fight at Aanamalai hills where the local peasants gave him full support. But Gopala Nayak was overpowered by the British forces in 1801.

Kuyili

- Kuyili, a faithful friend of Velunachiyar, is said to have led the unit of women soldiers named after Udaiyaal.
- Udaiyaal was a shepherd girl who was killed for not divulging information on Kuyili.
- Kuyili is said to have walked into the British arsenal (1780) after setting herself on fire, thus destroying all the ammunition.

Ondiveeran

- Ondiveeran led one of the army units of Puli Thevar. Fighting by the side of Puli Thevar, he caused much damage to the Company's army.
- According to oral tradition, in one battle, Ondiveeran's hand was chopped off and Puli Thevar was saddened.
- But Ondiveeran said it was a reward for his penetration into enemy's fort causing many heads to roll.

10th Social Science Lesson 13 Notes in English

13. Anti-Colonial Movements and the Birth of Nationalism

Introduction

- On **23 June 1757** the **Nawab of Bengal Siraj-ud-daulah** was defeated by the East India Company at the Battle of Plassey. The battle was orchestrated by Robert Clive, commander-in-chief of the East India Company, who managed to get the clandestine support from Mir Jafar, the uncle of Siraj-ud-daulah and the chief of the Nawab's army.
- Clive was helped by the Jagat Seths (moneylenders from Bengal) who were aggrieved by Siraj-ud-daulah's policy.
- The Battle of Plassey was followed by the plunder of Bengal. Between **1757 and 1760**, the company received **₹ 22.5 million from Mir Jafar**, who became the new Nawab of Bengal.
- The same money was later invested to propel the industrial revolution in Britain, which rapidly mechanised the British textile industry.
- On the other hand, India was led to the path of de-industrialisation and forced to create a market for the products manufactured in Britain. The plunder of India by the East India Company continued for **another 190 years**.
- After Plassey, the British adopted a policy of territorial expansion. Soon the remaining parts of the Indian subcontinent came under their control.
- British brought systemic changes in land revenue administration, army, police, judicial system and other institutions of governance. The early Indian response to colonial exploitation and the colonial political and economic domination consisted of two elements.
- The response in the **late 18th and early 19th century** was restorative in nature. Tribal uprisings and peasant rebellions made an attempt to restore the old order.
- The second response appeared in the second half of the 19th century in the form of Indian nationalism that imagined India as a nation emphasising on a consciousness of unity and national aspiration.
- In this lesson the story of resistance and a varied range of response against the British rule in the Indian subcontinent from the early and mid-nineteenth century to the early twentieth century are outlined.
- In the process the nature of British rule, its policies and administrative apparatus, which adversely affected almost all the sections of the society are analysed.

Peasant and Tribal Resistance

- While the urban elite of India was busy responding to the western ideas and rationality by engaging in various socio-religious reform movements, a far more aggressive response to the British rule emerged in rural India. The traditional elite and peasantry along with the tribals revolted.

- They were not necessarily seeking the removal of British but rather the restoration of the pre-colonial order. The concept of private property rights in **land, rigorous collection of land revenue, encroachment of tribal land by the nontribal people, the interference of Christian missionaries** in the socio-religious life of the local people were a few of the many issues which added to the sense of resentment against the British.
- The tribal people, in particular, started looking at them as invaders and encroachers. The fundamental aspect of various tribal and peasant revolts was that all of them tried to eliminate the most immediate and visible cause of their misery.
- There were nearly a hundred peasant uprisings during British rule. They can be classified into the following categories:

a. **Restorative rebellions** – Agitation of this type relates to attempts to restore old order and old social relations.

b. **Religious Movements** – Such agitations were led by religious leaders who fought for the liberation of the local populace by restructuring society on certain religious principles.

c. **Social Banditry** – The leaders of such movements were considered criminal by the British and the traditional elite but were looked upon by their people as heroes or champions of their cause

d. **Mass Insurrection** – Usually leaderless and spontaneous uprising.

Changes in the Revenue System

- The East India Company restructured the Mughal revenue system across India in such a manner that it increased the financial burden on the peasants.
- There was no widespread system of private ownership of the land in preBritish India.
- Similarly, zamindars and others who were to collect revenue and remit it to the govt were never given the possession right on land. So the changes introduced by the British in land tenures, significantly altered the agrarian relations.

Subletting of Land

- The practice of letting out and subletting of land complicated the agrarian relations.
- The zamindar often sublet land to many **subordinate lords who in return collected a fixed amount of revenue from the peasant**. This increased the tax burden on the peasants.

Peasant Uprising

Peasant revolts began to erupt in the early **19th century** and continued till the very end of British rule in India. Many of these revolts were led by religious leaders, who treated the British rule as an invasion into the socio religious life of the people of India.

Farazi Movement

- Farazi movement launched by **Haji Shariatullah in 1818**, in the parts of eastern Bengal, advocated the participants to abstain from unIslamic activities.
- This brought him into direct conflict with the Zamindars and subsequently with British, who favoured the Zamindars to suppress the peasant uprising.
- After the **death of Shariatullah in 1839**, the rebellion was led by his **son Dudu Mian** who called upon the peasants not to pay tax.
- It gained popularity on a simple doctrine that land and all wealth should be equally enjoyed by the common folk.
- Dudu Mian laid emphasis on the egalitarian nature of religion and declared that **"Land belongs to God"**, and collecting rent or levying taxes on it was therefore against divine law.
- Large numbers of peasants were mobilised through a network of village organisations. There were violent clashes throughout 1840s and 1850s with the zamindars and planters.
- After the death of Dudu **Mian in 1862**, the was revived in the 1870s by Noah Mian.

Wahhabi Rebellion in Barasat

- The Wahhabi rebellion was an **antiimperial and antilandlord movement**. It originated in and around **1827**, in the Barasat region of Bengal. It was led by an Islamic preacher **Titu Mir** who was deeply influenced by the Wahhabi teachings.
- He became an influential figure among the predominately Muslim peasantry oppressed under the coercive zamindari system. However, the fact that the majority of zamindars were Hindus, gave this movement an anti-Hindu complexion.
- On **6 November 1831** the first major attack was launched in the town of Purnea. Titu Mir immediately declared freedom from British rule.
- Soon there was retaliation from the British and a large number of troops were sent to **Narkelberia**.
- Titu Mir along with his **50 soldiers were killed** in the struggle. In the end, the peasant rebellion clearly showed an awareness of the power structure in rural society and a strong will to restructure authority.
- The rebels were quite familiar with the political source of oppression, demonstrated in their actions against the Zamindar houses, their grain stocks, the moneylenders, and the merchants.
- At times the British state machinery, which came forward to protect these local agents of oppression, was also attacked. These characteristics were reflected in the peasant movements of the 20th century too.

Tribal Uprising

- Under colonial rule, for the first time in Indian history, government claimed a direct proprietary right over forests.

- The British rule and its encouragement of commercialisation of forest led to the disintegration of the traditional tribal system.
- It encouraged the incursion of tribal areas by the non-tribal people such as **moneylenders, traders, land-grabbers, and contractors**.
- This led to the widespread loss of adivasi land and their displacement from their traditional habitats.
- Tribal resistance was therefore, a response against those who either introduced changes in the peaceful tribal life or took undue advantage of the innocence of the tribal people.

Kol Revolt

- One major tribal revolt, the Kol uprising of 1831-32, took place in Chota Nagpur and Singbhum region of Jharkhand and Orisa, under the leadership of Bindrai and Singhrai.
- The Raja of Chhota Nagpur had leased out to moneylenders the job of revenue collection. The usury and forcible eviction of tribals from their land led to the resentment of Kols.
- The initial protest and resistance kols was in the form of plunder, arson and attacks on the properties of outsiders.
- This was followed by the killing of moneylenders and merchants. The tribal leaders adopted varied methods to spread their message such as the beating of drums and the circulation of arrows accompanied by a warning to all outsiders to leave.
- Kols organised an insurrection in 1831-32, which was directed against government officers and moneylenders.
- The Kol rebels took control of the king's palace. They even succeeded in forming an independent government there.
- The British suppressed the rebellion with great violence.

Santhal Hool (Insurrection)

- Santhals, scattered in various parts of eastern India, when forced to move out of their homeland during the process of creation of zamins under Permanent Settlement, cleared the forest area around the **Rajmahal Hills**.
- They were oppressed by the local police and the European officers engaged in the railway construction.
- Pushed out of their familiar habitat, the Santhals were forced to rely on the moneylenders for their subsistence.
- Soon they were trapped in a vicious circle of debt and extortion. Besides this, Santhals also felt neglected under the corrupt British administration and their inability to render justice to their legitimate grievances.

Outbreak

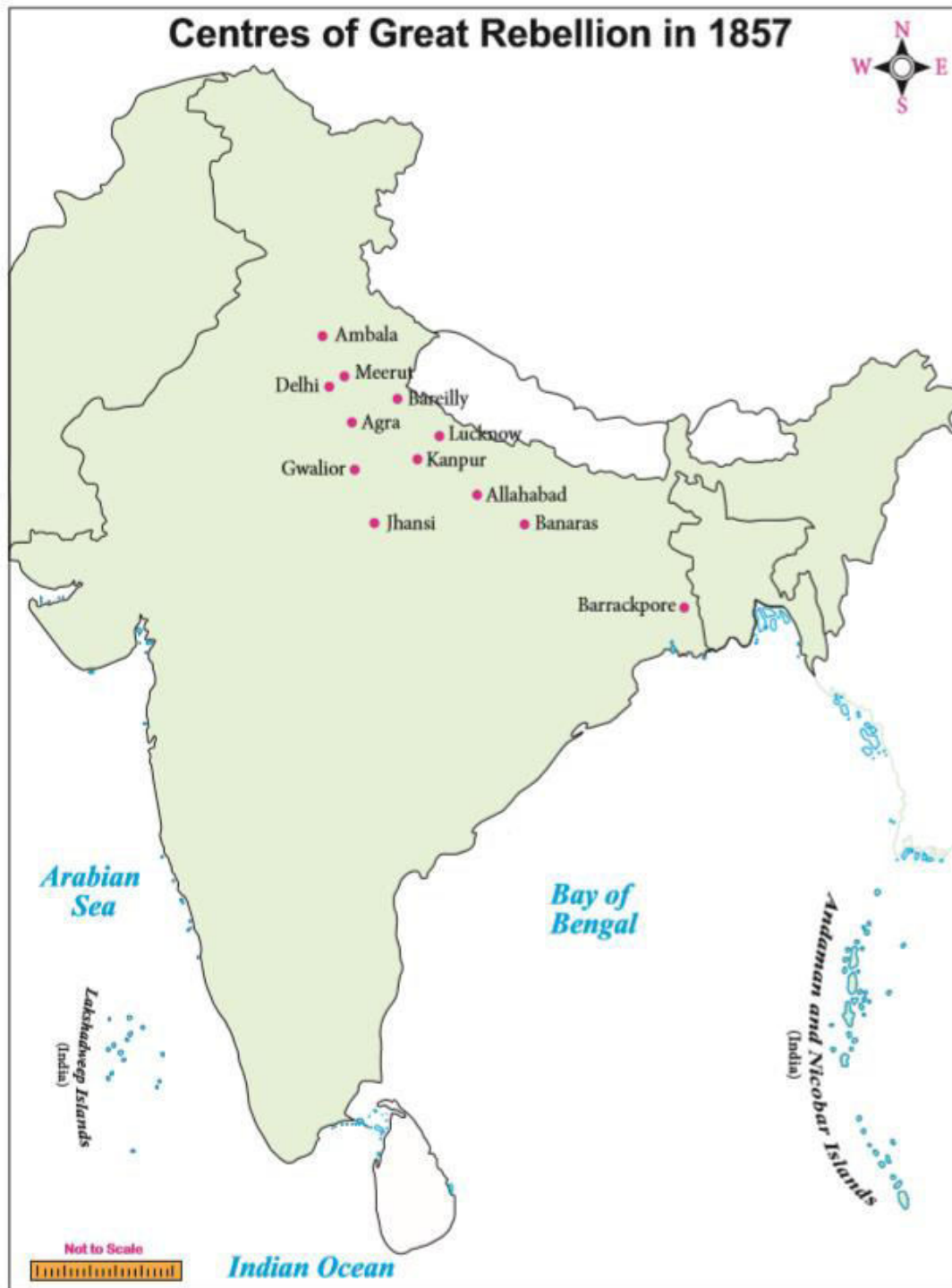
- Around 1854 activities of social banditry led by a person named Bir Singh was reported from different places.
- These were directed against mahajans and traders. Following this Bir Singh was summoned to the zamindari court, where he was beaten up and humiliated. Bir Singh along with his friends retaliated by committing further dacoities on the mahajans and merchants.
- The repressive measures only angered the Santhals. In **1855, two Santhal brothers Sidhu and Kanu** proclaimed that they had received a divine message from the God, asking them to lead the rebellion.
- On June 30, 1855 they announced that God has ordered them **"to slaughter all the mahajans and daroga, to banish the traders and zamindars and all rich Bengalis from their country.... And to fight all who resisted them, for the bullets of their enemies would be turned into water"**.
- Two Darogas (chief police officers) were killed by the santhal crowd. By July 1855 the rebellion has taken the form of open insurrection against the mahajans, the zamindars and the British officials.
- They marched with bows, poisoned arrows, axes and swords taking over the Rajmahal and Bhagalpur by proclaiming that the Company rule was about to end. In response villages were raided and properties destroyed by the British.
- Nearly **15 to 25 thousand rebels** were murdered before the insurrection was finally suppressed. These events compelled the British government to restructure their policies towards the tribal people.
- In **1855 an act was passed to regulate the territories** occupied by the Santhals. The Act formed the territory into a separate division called Santhal Pargana division.

Munda Rebellion

- One of the prominent tribal rebellions of this period occurred in Ranchi, known as **Ulugulan rebellion (Great Tumult)**.
- The Munda people were familiar with the cooperative or collective farming known as **Khuntkatti (joint holding)** land system.
- It was totally eroded by the introduction of private ownership of land and the intrusion of merchants and moneylenders. The Munda people were also forcefully recruited as indentured labourers to work on plantations.
- The corrupt police, lack of access to justice and the disillusionment with Christian missionaries aggravated the miseries of Munda people. In the 1890s tribal chiefs offered resistance against the alienation of tribal people from their land and imposition of bethbegari or forced labour.
- The movement received an impetus when Birsa Munda declared himself as the messenger of God. Birsa claimed that he had a prophecy and promised supernatural solutions to the problem of Munda people and the establishment of Birsait Raj.

- The Munda leaders utilised the **cult of Birsa Munda** to recruit more people to their cause. A series of night meetings were held and a revolt was planned. On the **Christmas day of 1889**, they resorted to violence.
- Buildings were burnt down and arrows were shot at Christian missionaries and Munda Christian converts.
- Soon police stations and government officials were attacked. Similar attacks were carried out over the next few months. Finally the resistance was crushed and Birsa Munda was arrested in **February 1900** who later died in jail.
- **Birsa Munda** became a folk hero who is to this day celebrated in many folk songs. The Munda rebellion prompted the British to formulate a policy on Tribal land.
- The **Chotanagpur Tenancy Act (1908)** restricted the entry of non-tribal people into the tribal land.

The Great Rebellion of 1857



- In 1857, British rule witnessed the biggest challenge to its existence. Initially, it began as a mutiny of Bengal presidency sepoys but later expanded to the other parts of India involving a large number of civilians, especially peasants.
- The events of 1857–58 are significant for the following reasons:

1. This was the first major revolt of armed forces accompanied by civilian rebellion.

2. The revolt witnessed unprecedented violence, perpetrated by both sides.
3. The revolt ended the role of the East India Company and the governance of the Indian subcontinent was taken over by the British Crown.

Causes

Annexation Policy of British India

- In the **1840s and 1850s**, more territories were annexed through two major policies: The Doctrine of Paramountcy.
- British claimed themselves as paramount, exercising supreme authority. New territories were annexed on the grounds that the native rulers were corrupt and inept. The Doctrine of Lapse.
- If a native ruler failed to produce a biological male heir to the throne, the territory was to 'lapse' into British India upon the death of the ruler.
- **Satara, Sambalpur, parts of the Punjab, Jhansi and Nagpur** were annexed by the British through the Doctrine of Lapse.

Insensitivity to Indian Cultural Sentiments

- There was always a suspicion among the people regarding British intentions. In 1806 the sepoys at Vellore mutinied against the new dress code, which prohibited Indians from wearing religious marks on their foreheads and having whiskers on their chin, while proposing to replace their turbans with a round hat.
- It was feared that the dress code was part of their effort to convert soldiers to Christianity. Similarly, in **1824, the sepoys at Barrackpur near Calcutta** refused to go to Burma by sea, since crossing the sea meant the loss of their caste.
- The sepoys were also upset with discrimination in salary and promotion. Indian sepoys were paid much less than their European counterparts.
- They felt humiliated and racially abused by their seniors.

The Revolt

- The precursor to the revolt was the circulation of rumors about the cartridges of the new Enfield rifle.
- There was strong suspicion that the new cartridges had been greased with cow and pig fat.
- The cartridge had to be bitten off before loading (pork is forbidden to the Muslims and the cow is sacred to a large section of Hindus). On **29 March a sepoy named Mangal Pandey** assaulted his European officer.
- His fellow soldiers refused to arrest him when ordered to do so. Mangal Pandey along with others were court-martialled and hanged.

- This only fuelled the anger and in the following days there were increasing incidents of disobedience.
- Burning and arson were reported from the army cantonments in **Ambala, Lucknow, and Meerut**.

Bahadur Shah Proclaimed as Emperor of Hindustan

- On **11 may 1857** a band of sepoys from Meerut marched to the Red Fort in Delhi. The sepoys were followed by an equally exuberant crowd who gathered to ask the Mughal Emperor Bahadur Shah II to become their leader.
- After much hesitation he accepted the offer and was proclaimed as the **Shahenshah-e-Hindustan (the Emperor of Hindustan)**. Soon the rebels captured the north-western province and Awadh.
- As the news of the fall of Delhi reached the Ganges valley, cantonment after cantonment mutinied till, by the beginning of June, British rule in North India, except in Punjab and Bengal, had disappeared.

Civil Rebellion

- The mutiny was equally supported by an aggrieved rural society of north India. Sepoys working in the British army were in fact peasants in uniform.
- They were equally affected by the restructuring of the revenue administration. The sepoy revolt and the subsequent civil rebellion in various parts of India had a deep-rooted connection with rural mass.
- The first civil rebellion broke out in parts of the North-Western provinces and Oudh. These were the two regions from which the sepoys were predominately recruited.
- A large number of **Zamindars and Taluqdars** were also attracted to the rebellions as they had lost their various privileges under the British government.
- The talukdar-peasant collective was a common effort to recover what they had lost.
- Similarly, artisans and handicrafts persons were equally affected by the dethroning of rulers of many Indian states, who were a major source of patronage.
- The dumping of British manufactures had ruined the Indian handicrafts and thrown thousands of weavers out of employment.
- Collective anger against the British took the form of a people's revolt.

Prominent Fighters against the British

- The mutiny provided a platform to aggrieved kings, nawabs, queens, and zamindars to express the anti-British anger.
- **Nana Sahib, the adopted son of the last Peshwa Baji Rao II**, provided leadership in the Kanpur region.

- He had been denied pension by the Company. Similarly, Begum **Hazrat Mahal in Lucknow and Khan Bahadur in Bareilly** took the command of their respective territories, which were once ruled either by them or by their ancestors. Another such significant leader was Rani Lakshmi Bai, who assumed the leadership in Jhansi.
- In her case Dalhousie, the Governor General of Bengal had refused her request to adopt a son as her successor after her husband died and the kingdom was annexed under the Doctrine of Lapse.
- Rani Lakshmi Bai battled the mighty British Army until she was defeated. **Bahadur Shah Jafar, Kunwar Singh, Khan Bahadur, Rani Lakshmi Bai and many others** were rebels against their will, compelled by the bravery of the sepoys who had defied the British authority.

Suppression of Rebellion

- By the beginning of **June 1857, the Delhi, Meerut, Rohilkhand, Agra, Allahabad and Banaras** divisions of the army had been restored to British control and placed under martial law.
- The British officers were given the power to judge and take the life of Indians without due process of law. **William Howard Russell**, the correspondent of the London Times, who was in India in 1858, met an officer who was a part of the column that under Colonel Neill's orders marched from Allahabad to Kanpur.
- The officer reported that 'in two days, 42 men were hanged on the roadside, and a batch of 12 men was executed because their faces were turned the wrong way when they were met on the march.
- '**Even boys who had playfully flaunted rebel colours and beaten a tom-tom were not spared. Every Indian who appeared in sight was shot or hung on the trees that lined the road; villages were burnt....**'

Causes of Failure

- There is hardly any evidence to prove that the **rebellion of 1857** was organised and planned. It was spontaneous.
- However, soon after the siege of Delhi, there was an attempt to seek the support of the neighboring states.
- Besides a few Indian states, there was a general lack of enthusiasm among the Indian princes to participate in the rebellion. The Indian princes and zamindars either remained loyal or were fearful of British power.
- Many a time they acted as a fifth column. Those involved in the rebellion were left with either little or no sources of arms and ammunition.
- The emerging English-educated middle class too did not support the rebellion. One of the important reasons for the failure of the rebellion was the absence of a central authority.

- There was no common agenda that united the individuals and the aspirations of the Indian princes and the various other feudal elements fighting against the British. In the end, the rebellion was brutally suppressed by the British army.
- The rebel leaders were defeated due to the lack of weapons, organisation, discipline, and betrayal by their aides. **Delhi was captured by the British troops in late 1857.** Bahadur Shah was captured and transported to Burma.

India Becomes a Crown Colony

- The British were shocked by the events of 1857. The British Parliament adopted the **Indian Government Act, in November 1858**, and India was pronounced as one of the many crown colonies to be directly governed by the Parliament.
- The responsibility was given to a member of the cabinet, designated as the Secretary of State for India.
- The transfer of power from the East India Company to the British Crown also meant that there was a regular parliamentary review of Indian affairs.

Changes in the Administration

- British rule and its policies underwent a major overhaul after 1857. British followed a cautious approach to the issue of social reform.
- Queen Victoria proclaimed to the Indian people that the British would not interfere in traditional institutions and religious matters. It was promised that Indians would be absorbed in government services.
- Two significant changes were made to the structure of the Indian army. The number of Indians was significantly reduced. Indians were restrained from holding important ranks and position.
- The British took control of the artillery and shifted their recruiting effort to regions and communities that remained loyal during 1857.
- For instance, the British turned away from Rajputs, Brahmins and North Indian Muslims and looked towards non-Hindu groups like the **Gorkhas, Sikhs, and Pathans**.
- British also exploited the caste, religious, linguistic and regional differences in the Indian society through what came to be known as **"Divide and Rule"** policy.

Peasant Revolts under Crown

Indigo Revolt 1859-60

- Before synthetic dyes were created, natural indigo dye was highly valued by cloth makers around the world. Many Europeans sought to make their fortunes by becoming indigo planters in India.

- They employed peasants to grow the indigo, which was processed into dye at the planters factories.
- The dye was then exported to Europe. By the early 19th century, India supplied the vast majority of the indigo to Britain. The system was oppressive. The peasants were forced to grow the crop. The British planter gave the cultivator a cash advance to help pay for the rent of the land and other costs.
- This advance needed to be repaid with interest. The planters forced the peasant grow indigo, rather than food crops.
- At the end of the season, the planters paid the cultivators low prices for their indigo.
- Moreover, the small amount the peasant earned was not enough to pay back the cash advance with interest. So they fell into debt.
- However, the peasants again would be forced to enter into another contract to grow indigo. The peasants were never able to clear their debts. Debts were often passed from father to son.
- **The Indigo Revolt began in 1859.** The rebellion began as a strike, as the peasants of a village in Bengal's Nadia district refused to grow any more indigo. The movement quickly spread to the other indigo-growing districts of Bengal. The revolt then turned violent.
- The peasants, both Hindu and Muslim, participated in the revolt, and women – armed with pots and pans—fought alongside the men. Indian journalists in Calcutta wrote articles about the brutality of the planters. The **1860 play Nil Darpan ("Mirror of the Indigo") by Dina Bandhu Mitra**, did much to draw attention in India and Europe to the plight of the indigo growers. The indigo industry quickly declined in Bengal.
- By the end of the 19th century, the demand for natural indigo dye began to decline worldwide, as man-made blue dyes came into use.

Deccan Riots 1875

- After the transfer of power to the Crown, **deindustrialisation** forced workers out of the land.
- Heavy taxation ruined agriculture. Famine deaths increased. The first recorded incident of rioting against the moneylenders in the Deccan was in **May 1875, in Supa a village near Poona.**
- Similar cases of riots were reported from close to **30 villages in Poona and Ahmadnagar.**
- The rioting was directed mostly at the Gujarat moneylenders. Under British rule peasants were forced to pay revenue directly to the government.
- Also, under a new law moneylenders were allowed to attach the mortgaged land of the defaulters and auction it off.
- This resulted in a transfer of lands from the cultivators to the non-cultivating classes. Trapped in the vicious cycle of debt and unable to pay the outstanding amount the peasant was forced to abandon cultivation.

The Foundation of Indian National Congress (1870 – 1885)

Rise of Nationalism

- The second half of the 19th century saw the emergence of national political consciousness among a new social class of English educated Indians.
- The Indian intelligentsia played a critical role in generating a national consciousness by exposing a large number of people to the idea of nation, nationalism and various democratic aspirations.
- They articulated modern notions of citizenship, the idea of the **state, civil society, human rights, equality before the law, liberty, the distinction between public and private, sovereignty, democracy** and so on.
- The flourishing of print media both in the vernacular and in English played a significant role in circulating such ideas.
- Even though they were numerically small they had a national character and capacity to establish contacts on an all India scale. They were working as lawyers, journalists, government employees, teachers or doctors.
- They took the initiative to float political outfits, such as **Madras Native Association (1852) East India Association (1866), Madras Mahajana Sabha (1884), Poona Sarvajanik Sabha (1870), The Bombay Presidency Association (1885) and many others.**
- The British directed their policies to trample on the aspirations of Indians, who were exposed to English education and Western ideas and therefore had strong belief in modern values and institutions.
- However, the national consciousness in the late 19th century was also rooted in a glorification and celebration of Indian past, in which various religious and cultural symbols were used to kindle the patriotic zeal among the people.

Economic Critique of Colonialism

- One of the most significant contributions of early Indian nationalists was the formulation of an economic critique of colonialism. India was economically subjugated and transformed into a supplier of raw material to the British industries.
- Simultaneously it became a market to dump English manufactures and for the investment of British capital.
- So the colonial economy was a continuous transfer of resources from India to Britain without any favourable returns back to India. **This is called "the drain of wealth". Dadabhai Naoroji, Justice Ranade, and Romesh Chandra Dutt**, played a significant role in making this criticism about colonial economy.
- They clearly understood that the prosperity of the British lay in the economic and political subjugation of India.
- They concluded that colonialism was the main obstacle to the Indian's economic development.

Objectives and Methods

The formation of the **Indian National Congress in 1885** was intended to establish an all India organisation. It was the culmination of attempts by groups of educated Indians politically active in three presidencies: Bombay, Madras, and Calcutta. A.O. Hume lent his services to facilitate the formation of the Congress. **Womash Chandra Banarjee was the first President (1885)** Indian National Congress. The first session of the Indian National Congress was held on **28 December 1885**. The early objectives were to develop and consolidate sentiments of national unity; but also professed loyalty to Britain. The techniques included appeals, petitions and delegations to Britain, all done within a constitutional framework. Some of the key demands were the following:

- creation of legislative councils at provincial and central level
- increasing the number of elected members in the legislative council
- separating judicial and executive functions
- reducing military expenditure
- reduction of Home Charges
- extension of trial by jury
- holding civil services exams in India as well as in England.
- police reforms
- reconsideration of forest laws
- promotion of Indian industries and an end to unfair tariffs and excise duties.

These show the vast gap between the interests of the upper sections of Indian society and the large mass of common people.

Question of Poverty

According to the early Congress leaders the economic exploitation of India was the primary reason for the abysmal and the growing poverty of India. Therefore, early Indian nationalists advocated industrialisation.

Militant Nationalism

- The methods of moderate leaders failed to yield any substantive change in the British attitude towards the moderate demands of early Indian nationalists. They were criticised by a group of leaders known as “extremists”.
- Instead of prayers and petitions, these militants were more focused on self-help and the use of religious symbols to bridge the gap between the elite and the masses.
- The partition of Bengal gave a fillip to those who were advocating militant direct action programmes to fight the exploitative British policies.

Partition of Bengal

- In 1899, **Lord Curzon** was appointed the Viceroy of India. Instead of engaging with the nationalist intelligentsia for handling the problem of famine and plague, Curzon resorted to repressive measures to undermine the idea of local self-government, autonomy of higher educational institutions and gag the press.
- **Partition of Bengal in 1905** was the most unpopular of all. The partition led to widespread protests all across India, starting a new phase of the Indian national movement.
- The idea of partition was devised to suppress the political activities against the British rule in Bengal by creating a Hindu-Muslim divide.

Hindu–Muslim Divide

- It was openly stated that the objective of partition was to curtail Bengali influence and weaken the nationalist movement.
- By placing Bengal under two administrative units Curzon reduced the Bengali - speaking people to a linguistic minority in a divided Bengal.
- Curzon assured Muslims that in the new province of East Bengal Muslims would enjoy a unity, which they never enjoyed since the days of the Mughals.
- Instead of dividing the Bengali people along the religious line partition united them. The growth of regional language newspapers played a role in building a sense of proud Bengali identity.

Anti- Partition Movement

- The leaders of both the groups - extremist and moderate - were critical of partition. Initially, the objective of the anti-partition campaign was limited to changing the public opinion in England. So they protested through prayers, press campaigns, petitions, and public meetings.
- However, despite widespread protest, **partition of Bengal was announced on 19 July 1905**. With the failure to annul the partition moderate leaders were forced to rethink their strategy and look for new techniques of protest.
- The boycott of British goods was one such method. However, the agenda of Swadeshi Movement was still restricted to secure an annulment of partition and the moderates were very much against utilising the campaign to start a full-fledged passive resistance.
- The militant nationalists, on the other hand, were in favour of extending the movement beyond Bengal and to initiate a full-scale mass struggle.
- The day Bengal was officially partitioned – **16 Oct 1905** – was declared as a day of mourning. Thousands of people took bath in the Ganga and marched on the **streets of Calcutta singing Bande Mataram**

Boycott and Swadeshi Movement in Bengal (1905–1911)

Boycott and swadeshi were always interlinked to each other and part of the wider plan to make India self-sufficient. Four major trends can be discerned during the Swadeshi Movement in Bengal.

1. **The Moderate Trend** – Faith in British rule and their sense of justice and democratic practice. The moderate leaders were not ready to wrest power from British in one single movement and therefore Boycott and Swadeshi Movement was of limited significance to them.
2. **Constructive Swadeshi** – Rejected the selfdefeating modest approach of moderates and focused on self-help through swadeshi industries, national schools, arbitration courts and constructive programmes in the villages. It remained non-political in nature.
3. **Militant Nationalism** – A section of Indian nationalists who had little patience for the non-political constructive programmes. They ridiculed the idea of self-help and were more focused on a relentless boycott of foreign goods.
4. **Revolutionary terrorism** – A far more radical response to the British rule in India was to fight British with violent methods. British officials who were anti-swadeshi or repressive towards the native population were targeted. It also marked the shift from the mass-based movement to individual action.

Constructive Swadeshi

- The constructive programmes largely stressed upon self-help. It focused on building alternative institutions of self-governance that would operate free of British control
- It also laid emphasis on the need of selfstrengthening of the people which would help in creating a worthy citizen for the political agitation.
- Swadeshi shops sprang all over the **place selling textiles, handlooms, soaps, earthenware, match and leather goods.**

Passive Resistance

- From 1906 the Swadeshi Movement took a turn where the repeal of partition was no longer on the agenda.
- For many leaders, the movement was to be utilized for propagating the idea of the political independence or Swaraj across India.
- Under this new direction, the swadeshi programme included four points: boycott of foreign goods, boycott of government schools and colleges, courts, titles and government services, development of Swadeshi industries, national schools, recourse to armed struggle if British repression went beyond the limits of endurance.
- The method of passive resistance had no practical utility in a situation where there is a ruthless and mighty administration on the side and on the other the militarily weaker people.

- Resistance in such a situation can be provided through relentless non-cooperation and disobedience.

Militant Nationalism

Lala Lajpat Rai of Punjab, Bala Gangadhar Tilak of Maharashtra and Bipin Chandra Pal of Bengal were three prominent leaders during the Swadeshi period and were referred to as Lal-Bal-Pal triumvirate. Punjab, Bengal, and Maharashtra emerged as the hotbed of militant nationalism during the Swadeshi Movement. In South India Tuticorin became the most important location of Swadeshi activity with the launch of a Swadeshi Steam Navigation company by V.O. Chidambaranar.

Swaraj or Political Independence

- One of the common goals of the extremist leaders was to achieve Swaraj or Self Rule. However, the leaders differed on the meaning of Swaraj.
- For **Tilak Swaraj was the attainment of complete autonomy and total freedom from foreign rule.**
- Unlike the moderates who were critical of the reckless revolutionaries, militant nationalists were sympathetic towards the extremists.
- However, the political murders and individual acts of terrorism were not approved by the militant leaders.
- The British brutally crushed the Swadeshi Movement by jailing prominent leaders for long spells of imprisonment. Revolutionaries were hanged to death. The press was crushed.

Home Rule Movement (1916–1918)

- The Indian national movement was revived and also radicalised during the **Home Rule Movement (1916-1918), led by Lokamanya Tilak and Annie Besant.** World War I and Indian's participation in it was the background for the Home Rule League.
- When Britain declared war against Germany in 1914, the moderate and liberal leadership extended their support to the British cause.
- It was hoped that, in return, the British government would give self-government after the war.
- Indian troops were sent to several theatres of World War. But the British administration remained non-committal to such goals.
- What was seen as a British betrayal to the Indian cause of self-government led to a fresh call for a mass movement to pressurise the British government.

Towards Charting a Common Path

- The 1916 Annual Session of Congress began with two significant developments. One, moderate leaders **Pherozeshah Mehta and Gokhale**, two main voices of opposition against the militant faction, had **died in 1915.**

- The rising popularity of Annie Besant was the other factor which compelled the moderates to put up a common front against the colonial government. In the **Lucknow session of Indian National Congress (1916)**, it was decided to admit the militant faction into the party.
- Tilak set up the first **Home Rule League in April 1916**. In September 1916, after repeated demands of her impatient followers, Annie Besant decided to start the Home Rule League without the support of Congress.
- Both the leagues worked independently. The Home Rule Leagues were utilised to carry extensive propaganda through, press, speeches, public meetings, lectures, discussions and touring in favour of self-government.
- They succeeded in enrolling young people in large numbers and extending the movement to the rural areas.
- The Home Rule Movement in India borrowed much of its principles from the Irish Home Rule Movement.

Objectives of the Home Rule Movement

- To attain self-government within the British Empire by using constitutional means.
- To obtain the status of dominion, a political position accorded later to Australia, Canada, South Africa, and New Zealand.
- To use non-violent constitutional methods to achieve their goals.

Lucknow Pact (1916)

- The Home Rule Movement and the subsequent reunion of moderate and the militant nationalists opened the possibility of fresh talks with the Muslims.
- Under the **Lucknow Pact (1916)**, the Congress and the Muslim League agreed that there should be self-government in India as soon as possible.
- In return, the Congress leadership accepted the concept of separate electorate for Muslims.

British Response

- The response of the government of British India to the Home Rule Movement was not consistent.
- Initially it stated that there should be reform to accommodate more Indians in local administrative bodies.
- As the demand for **Swaraj was raised by Tilak and Annie Besant that gained popularity**, the British used the same old ploy to isolate the leaders by repressing their activities.
- In 1919 the British government announced the Montagu-Chelmsford reforms which promised gradual progress of India towards self-government.
- This caused deep disappointment to Indian nationalists. In a further blow the government enacted what was called the Rowlatt Act which provided for arbitrary arrest and strict punishment.

More to know:

1. I mean by self-government that the country shall have a government by councils, elected by the people, elected with the power of the purse and the government is responsible to the house.... India should demand self-government not based on loyalty to the British government or as a reward for her services in the war but as a right based on the principle of national self-determination. – **Annie Besant (in September 1915)**

2. According to Anthropologist Kathlene Gough British rule brought ... disruption and suffering among the peasantry which was more prolonged and widespread than had occurred in Mughal times. Ranajit Guha writes, 'agrarian disturbances in many forms and on scales ranging from local riots to war-like campaigns spread over many districts were endemic throughout the first three quarters of British rule until the very end of the nineteenth century.'

3. The siege of Kanpur was an important **episode in the rebellion of 1857**. The besieged Company forces and civilians in Kanpur were unprepared for an extended siege and surrendered to rebel forces under Nana Sahib, in return for a safe passage to Allahabad. The boats in which they were proceeding were burned and most of the men were killed, including British Commander of **Kanpur Major General Hugh Wheeler**.

4. **'Tribes' who are they?**

The modern usage of word tribe in India restricts the definition to distinguish them (tribes) from the rest of the Indian society, a stratified system based on caste. Often the term is misused to refer to isolated groups. Tribes in India were and are very much part of the Indian society. They in fact have acted for long as part of Indian peasantry subsisting through shifting cultivation.

10th Social Science Lesson 14 Notes in English

14. Nationalism: Gandhian Phase

Introduction

- Mahatma Gandhi arrived in India in **1915 from South Africa** after fighting for the civil rights of the Indians there for about twenty years.
- He brought with him a new impulse to Indian politics. He introduced satyagraha, which he had perfected in South Africa, that could be practiced by men and women, young and old.
- As a person dedicated to the cause of the poorest of the poor, he instantly gained the goodwill of the masses.
- Before Gandhi, the constitutionalists appealed to the British sense of justice and fair play. The militants confronted the repression of the colonial state violently.
- Gandhi, in contrast, adopted non violent methods to mobilise the masses and mount pressure on the British. In this lesson we shall see how Gandhi transformed the Indian National Movement.

Gandhi and Mass Nationalism

Evolution of Gandhi

- Mohandas Karamchand Gandhi was born on **2 October 1869** into a well to do family in Porbandar, Gujarat.
- His father Kaba Gandhi was the Diwan of Porbandar and later became the Diwan of Rajkot. His mother Putlibai, a devout Vaishnavite, influenced the young Gandhi. After passing the matriculation examination, **Gandhi sailed to England in 1888** to study law.
- After becoming a barrister in **June 1891** Gandhi returned to India as a firm believer in British sense of justice and fair play.
- His experiences in London had not prepared him for the racial discrimination he would encounter in South Africa.
- On returning to India, Gandhi's attempt to practice in Bombay failed. It was during this time that a Gujarati firm in South Africa, sought the services of Gandhi for assistance in a law-suit.
- Gandhi accepted the offer and left for South Africa in **April 1893**. Gandhi faced racial discrimination for the first time in South Africa.
- On his journey from Durban to Pretoria, at the Pietermaritzburg railway station, he was physically thrown out of the first class compartment. Indians were treated only as coolies. But Gandhi was determined to fight.
- Gandhi called a meeting of the Indians in the Transvaal and exhorted them to form an association to seek redress of their grievances.

- He continued to hold such meetings, petitioned to the authorities about the injustices which were in violation of their own laws. Indians in the Transvaal had to pay a **poll tax of £ 3**, could not own land except in areas marked for them, and could not move outdoors after 9 p.m. without a permit.
- He launched a struggle against such unjust laws. Gandhi was introduced to the works of Tolstoy and John Ruskin. He was deeply influenced by **Tolstoy's The Kingdom of God is Within You, Ruskin's Unto this Last and Thoreau's Civil Disobedience**. Gandhi's ideas were formed due to a blend of Indian and Western thought.
- Despite being deeply influenced by Western thinkers he was highly critical of Western civilisation and industrialisation.
- Inspired by Ruskin Gandhi established the **Phoenix Settlement (1905) and the Tolstoy Farm (1910)**. Equality, community living and dignity of labour were inculcated in these settlements. They were training grounds for the satyagrahis.

Satyagraha as a Strategy in South Africa

- Gandhi developed satyagraha (**devotion to the truth, truth-force**) as a strategy, in which campaigners went on peaceful marches and presented themselves for arrest in protest against unjust laws.
- He experimented with it for fighting the issues of immigration and racial discrimination. Meetings were held and registration offices of immigrants were picketed.
- Even when the police let loose violence no resistance was offered by the satyagrahis. Gandhi and other leaders were arrested.
- Indians, mostly indentured labourers turned hawkers continued the struggle despite police brutality.
- Finally, by the **Smuts-Gandhi Agreement** the poll tax on indentured labourers was abolished. Gandhi's stay in South Africa was a learning experience for him.
- It was there that Gandhi realised that people of different religions, regions, linguistic groups could be welded into one to fight against exploitation.
- After the outbreak of the First World War, Gandhi returned to India.

Gandhi's Early Satyagrahas in India

- Gandhi regarded Gopal Krishna Gokhale, whom he had met on previous visits to India, as his political guru.
- On his advice, Gandhi travelled the length and breadth of the country before plunging into politics. This enabled him to understand the conditions of the people.
- It is on one of these journeys through Tamil Nadu that Gandhi decided to discard his following robes and wear a simple dhoti.
- **Gandhi before returning to India visited England where he enlisted for the War to offer ambulance services.**

- Considering himself a responsible citizen of the Empire he believed it was his duty to support England in its difficult times and even campaigned for the recruitment of Indians in the army. However, his views changed over the years.

Champaran Satyagraha

- In Champaran in **Bihar the tinkathia system** was practiced. Under this exploitative system the peasants were forced by the European planters to cultivate indigo on three-twentieths of their land holdings.
- Towards the end of nineteenth century German synthetic dyes had forced indigo out of the market.
- The European planters of Champaran, while realising the necessity of relieving the cultivators of the obligation of cultivating indigo, wanted to turn the situation to their advantage.
- They enhanced the rent and collected illegal dues as a price for the release of cultivators from the obligation.
- Resistance erupted. **Rajkumar Shukla**, an agriculturist from Champaran who suffered hardships of the system, prevailed on Gandhi to visit Champaran.
- On reaching Champaran, Gandhi was asked by the police to leave immediately. When he refused he was summoned for trial.
- The news spread like wild fire and thousands swarmed the place in support of Gandhi. Gandhi pleaded guilty of disobeying the order, and the case had to be finally withdrawn.
- According to Gandhi, **"The country thus had its first objectlesson in Civil Disobedience"**. He was assisted by Brajkishore Prasad, a lawyer by profession, and Rajendra Prasad, who became the first President of independent India.
- The Lieutenant Governor eventually formed a committee with Gandhi as a member which recommended the abolition of the tinkathia system, thereby ending the oppression of the peasants by the Indigo Planters.
- The success of Champaran satyagraha, followed by his fruitful intervention in **Ahmedabad mill strike (1918) and the Kheda Satyagraha (1918)** helped Gandhi establish himself as a leader of mass struggle.
- Unlike earlier leaders, Gandhi demonstrated his ability to mobilise the common people across the country.

Rowlatt Satyagraha and Jallianwala Bagh Massacre

- In the aftermath of the First World War, people expected liberal political reforms from the British. The **Government of India Act 1919**, however, caused disappointment, as it did not transfer real power to the Indians.

- Besides, the government began to enforce the permanent extension of war time restrictions. The Rowlatt Act was enacted which provided for excessive police powers, arrest without warrant and detention without trial.
- Gandhi called it a '**Black Act**' and in protest called for a nation-wide **satyagraha on 6 April 1919**. It was to be a non-violent struggle with fasting and prayer, and it was the earliest anticolonial struggle spread across the country.
- The anti-Rowlatt protest was intense in Punjab, especially in Amritsar and Lahore. Gandhi was arrested and prevented from visiting Punjab.
- On **9 April** two prominent local leaders **Dr. Saifuddin Kitchlew and Dr. Satyapal** were arrested in Amritsar leading to protests in which a few Europeans were killed. Martial law was declared.

General Dyer's Brutality

- On **13 April 1919** a public meeting was arranged at Jallianwala Bagh in Amritsar. As it happened to be Baisaki day (**spring harvest festival of Sikhs**) the villagers had assembled there in thousands.
- General Reginald Dyer, on hearing of the assemblage, surrounded the place with his troops and an armoured vehicle.
- The only entrance to the park that was surrounded on all sides by high walls was blocked, and firing took place without any warning.
- The firing lasted for ten minutes till the troops ran out of ammunition. According to official estimates 379 were killed and more than thousand injured.
- Unofficial estimates put the toll at more than a thousand. After the incident martial law was declared and many people in the Punjab especially Amritsar were flogged and forced to crawl on the streets. The brutality enraged Indians.
- Rabindranath Tagore returned his knighthood. Gandhi surrendered his **Kaiser-i-Hind** medal.

Khilafat Movement

- The First World War came to an end in **1918**. The Caliph of Turkey, who was considered the head of Muslims of the world, was given a harsh treatment.
- A movement was started his support called the Khilafat Movement. Led by the **Ali brothers, Maulana Mohamed Ali and Maulana Shaukat Ali**, it aimed to restore the prestige and power of the Caliphate.
- Gandhi supported the movement and saw in it an opportunity to unite Hindus and Muslims. He presided over the All India Khilafat Conference held at Delhi in November 1919.
- Gandhi supported Shaukat Ali's proposal of three national slogans, Allaho Akbar, Bande Mataram and Hindu-Musslamanki Jai.

- The Khilafat Committee meeting in Allahabad on **9 June 1920** adopted Gandhi's non-violent noncooperation programme. Non-Cooperation was to begin on **1 August 1920**

Non-Cooperation Movement and Its Fallout

The Indian National Congress approved the non-cooperation movement in a special session held in Calcutta on **September 1920**. It was subsequently passed in the Nagpur Session held on **December 1920**, Chaired by **Salem C.Vijayaraghavachariar**. The programme of non-cooperation included:

1. Surrender of all titles of honours and honorary offices.
2. Non-participation in government functions.
3. Suspension of practice by lawyers, and settlement of court disputes by private arbitration.
4. Boycott of government schools by children and parents.
5. Boycott of the legislature created under the 1919 Act.
6. Non-participation in government parties and other official functions.
7. Refusal to accept any civil or military post.
8. Boycott of foreign goods and spreading the doctrine of Swadeshi.

No-Tax Campaign and Chauri Chaura Incident

- Programmes such as no-tax campaigns caught the imagination of the kisans (peasants). Gandhi announced a no-tax campaign in **Bardoli in February 1922**.
- These movements greatly enhanced Gandhi's reputation as a national leader, especially the peasants. Gandhi made a nation-wide tour.
- Wherever he visited there was a bonfire of foreign cloth. Thousands left government jobs, students gave up their studies in large numbers and the lawyers gave up thriving practices. Boycott of British goods and institutions were effective.
- The boycott of the Prince of Wales' visit to India was successful. During this boycott trade unions and workers participated actively.
- However, Gandhi suddenly withdrew the movement because of the Chauri Chaura incident.
- On **5 February 1922** a procession of the nationalists in Chauri Chaura, a village near Gorakhpur in present-day **Uttar Pradesh** provoked by the police turned violent.
- The police finding themselves outnumbered shut themselves inside the police station. The mob burnt the police station 22 policemen lost their lives. Gandhi immediately withdrew the movement.

- This was done much against the wishes of many congressmen including young leaders like Jawaharlal Nehru and Subhas Chandra Bose who thought the movement was gaining momentum. Gandhi was arrested and was released only in **1924**.
- Gandhi believed that the movement failed not because of any defect in the means employed, viz. non-violent non-cooperation but because of lack of sufficiently trained volunteers and leaders.
- Soon after the Khilafat Movement also came to an end as the office of the Caliph (Caliphate) was abolished in Turkey.

Swarajists

- Meanwhile Congress was divided into two groups viz. pro-changers and no changers. Some of the Congressmen led by **Motilal Nehru and C.R. Das** wanted to contest the elections and enter the legislature.
- They argued that the national interest could be promoted by working in the Legislative Councils under Dyarchy and wrecking the colonial government within. They were called the pro-changers.
- Staunch followers of Gandhi like **Vallabhbhai Patel, C. Rajaji and others**, known as no-changers, wanted to continue non-cooperation with the government.
- Despite the opposition **C.R. Das and Motilal Nehru** formed the Swaraj Party on **1 January 1923**, which was later approved by a special session of the Congress.
- Swaraj Party members were elected in large numbers to the Imperial Legislative Assembly and the various Provincial Legislative Councils.
- They effectively used the legislature as a platform for propagation of nationalist ideas. In Bengal, they refused to take charge of transferred subjects, as they did not want to cooperate with the government.
- They exposed the true nature of the colonial government. However, the Swaraj Party began to decline after the death of its leader **C.R. Das in 1925**.
- Some of the Swaraj Party members began to accept government offices. Swaraj Party withdrew from the legislatures in **1926**.

Constructive Programme of Gandhi

- After the Chauri Chaura incident, Gandhi felt that the volunteers and the people had to be trained for a non-violent struggle.
- As a part of this effort he focused on promoting Khadi, Hindu-Muslim unity and the abolition of untouchability. He exhorted the Congressmen, **"Go throughout your districts and spread the message of Khaddar, the message of Hindu-Muslim unity, the message of anti-untouchability and take up in hand the youth of the country and make them the real soldiers of Swaraj."**

- He made it compulsory for all Congress members to wear khaddar. The All India Spinner's Association was formed. Gandhi believed that without attaining these objectives Swaraj could never be attained.
- Despite the cooperation of the Hindus and Muslims during the Khilafat Movement and the Non-Cooperation Movement, the unity was fragile.
- The 1920s saw a series of communal riots between the Hindus and the Muslims. Hindu Mahasabha was gaining in popularity under **Madan Mohan Malaviya and the Muslim League under the Ali Brothers**.
- Gandhi undertook a **21day a fast in between 1924** to appeal to the hearts of the Hindus and Muslims involved in communal politics. Serious efforts by Gandhi and Muhammad Ali Jinnah, who at that time believed Swaraj was possible only with Hindu-Muslim unity, failed to stem the communal riots.

Boycott of Simon Commission

- On **8 November 1927**, the British Government announced the appointment of the Indian Statutory Commission. Composed of seven members headed by Sir John Simon it came to be widely known as the Simon Commission.
- It was an all-white commission with no Indian member. Indians were angered that they had been denied the right to decide their own constitution.
- All sections of India including the Congress and the Muslim League decided to boycott the commission.
- Wherever the Commission went there were protests, and black flag marches with the slogan '**Go Back Simon**'.
- The protesters were brutally assaulted by the police. In one such assault in Lahore, Lal Lajpat Rai was seriously injured and died a few days later.

Nehru Report

- The Simon boycott united the different political parties in India. An all party conference was held in **1928** with the objective to frame a constitution for India as an alternative to the Simon Commission proposals.
- A committee under the leadership of Motilal Nehru was formed to outline the principles on the basis of which the constitution was to be drafted. The committee's report, known as the Nehru Report, recommended, Dominion status for India.
- Elections of the Central Legislature and the Provincial Legislatures on the basis of joint and mixed electorates.
- Reservation of seats for Muslims in the Central Legislature and in provinces where they are in a minority and for the Hindus in North-West Frontier Province where they were in a minority.

- Provision of fundamental rights, and universal adult franchise. Jinnah proposed an amendment to the reservation of seats in the Central Legislature. He demanded that one-third of the seats be reserved for Muslims.
- **Tej Bahadur Sapru** supported him and pleaded that it would make no big difference. However, it was defeated in the All Party Conference. Later he proposed a resolution which came to be known as **Jinnah's Fourteen Points**.
- However, it was also rejected. Jinnah who was hailed as Ambassador of Hindu-Muslim Unity thereafter changed his stand and began to espouse the cause of a separate nation for Muslims.

The Struggle for Poorna Swaraj and Launch of Civil Disobedience Movement

- Meanwhile some congressmen were not satisfied with dominion status and wanted to demand complete independence.
- In the Congress session held in **Lahore in December 1929** with Jawaharlal Nehru as the President, Poorna Swaraj was declared as the goal.
- It was also decided to boycott the Round Table Conference and launch a Civil Disobedience Movement.
- **26 January 1930** was declared as Independence Day and a pledge was taken all over the country to attain **Poorna Swaraj** non-violently through civil disobedience including non-payment of taxes.
- The Indian National Congress authorised Gandhi to launch the movement.

Salt Satyagraha Movement

A charter of demands presented to the Viceroy Lord Irwin with an ultimatum to comply by **31 January 1930** included:

- Reduction of expenditure on army and civil services by 50%
- Introduction of total prohibition
- Release of all political prisoners
- Reduction of land revenue by 50%

Abolition of salt tax.

- When the Viceroy did not respond to the charter of demands, Gandhi launched the Civil Disobedience Movement.
- The inclusion of abolition of salt tax was a brilliant tactical decision. Salt was an issue which affected every section of the society.
- It transformed Civil Disobedience Movement into a mass movement drawing all sections of the population including women to the streets.

- At the break of dawn on **12 March 1930** Gandhi set out from Sabarmati Ashram with **78** of its inmates. The procession became larger and larger when hundreds joined them along the march.
- At the age of 61 Gandhi covered a distance of **241 miles in 24 days to reach Dandi at sunset on 5 April 1930**. The next morning, he took a lump of salt breaking the salt law.

Salt Satyagraha in Provinces

- In Tamil Nadu, C. Rajaji led a similar salt march from **Tiruchirappalli to Vedaranyam**. Salt marches took place in Kerala, Andhra and Bengal.
- In the North West Frontier Province Khan Abdul Ghaffar Khan led the movement. He organized the Khudai Khidmatgar, also known as the Red Shirts.
- Government crushed the movement with brutal force, causing in many casualties. The soldiers of the Garhwali regiment refused to fire on unarmed satyagrahis.
- Gandhi was arrested at midnight and sent to Yeravada Jail. Jawaharlal Nehru, Khan Abdul Ghaffar Khan and other leaders were swiftly arrested.
- Soon other forms of protests such as boycott of foreign cloth, picketing of liquor shops, non-payment of taxes, breaking of forest laws etc. were adopted.
- Women, peasants, tribals, students, even children and all sections participated in the nation-wide struggle.
- It was the biggest mass movement India had ever witnessed. More than **90,000 people** were arrested.

Round Table Conferences

- In the midst of the movement the First Round Table Conference was held at London in **November 1930**.
- Ramsay Macdonald, the British Prime Minister, proposed a federal government with provincial autonomy.
- There was a deadlock over the question of separate electorates for the minorities. The Congress did not attend it as its leaders were in jail.
- The Conference closed without any decision on the question. It was clear that without Congress participation the discussions were of no value. Gandhi was released unconditionally.

Gandhi-Irwin Pact

- Lord Irwin held talks with Gandhi which resulted in the Gandhi-Irwin Pact on **5 March 1931**.
- The British agreed to the demand of immediate release of all political prisoners not involved in violence, return of confiscated land and lenient treatment of government employees who had resigned.

- It also permitted the people of coastal villages to make salt for consumption and non-violent picketing.
- The Congress agreed to suspend the Civil Disobedience Movement and attend the conference.
- Gandhi attended the Second Round Table Conference which began on **7 September 1931**.
- Gandhi refused to accept separate electorates for minorities. As a result, the second conference ended without any result.

Renewal of Civil Disobedience Movement

- On returning to India, Gandhi revived the Civil Disobedience Movement. This time the government was prepared to meet the resistance. Martial law was enforced and Gandhi was arrested on **4 January 1932**.
- Soon all the Congress leaders were arrested too. Protests and picketing by the people were suppressed with force.
- Nearly **80,000 people** were arrested within four months. The nationalist press was completely gagged. Despite Government's repressive measures it is worth mentioning here that the movement continued till **April 1934**.
- In the meantime, the Third Round Table Conference was held from **17 November to 24 December 1932**. The Congress did not participate in the conference as it had revived the Civil Disobedience Movement.

Communal Award and Poona Pact

- On **16 August 1932**, Ramsay MacDonald, announced the Communal Award. It provided separate electorates to the minorities, viz. Muslims, Sikhs, Indian Christians, Anglo-Indians and women and the "**depressed classes**".
- Gandhi strongly opposed the inclusion of depressed classes in the list of minorities.
- Gandhi argued that it would not only divide the Hindus but also make the campaign against untouchability meaningless, as they would be considered distinct from the Hindus.
- However, he supported reservation of seats. **B.R. Ambedkar**, the leader of the depressed classes, strongly argued for the separate electorate, as it, according to him, would give them political representation and power.
- On **20 September 1932**, Gandhi went on a fast unto death against the separate electorates for the depressed classes. Madan Mohan Malaviya, Rajendra Prasad and others held talks with Ambedkar and M.C. Rajah the leaders of the depressed classes.
- After intense negotiations an agreement was arrived between Gandhi and Ambedkar. Known as the Poona Pact, its main terms were:
- The principle of separate electorates was abandoned.
- Instead, the principle of joint electorate was accepted with reservation of seats for the depressed classes.

- Reserved seats for the depressed classes were increased from 71 to 148. In the Central Legislature 18 percent of the seats were reserved.

Campaign Against Untouchability

- Gandhi devoted the next few years towards abolition of untouchability. His engagement with Dr. B.R. Ambedkar made a big impact on his ideas about the caste system.
- He shifted his base to the Satyagraha Ashram at Wardha. He undertook an allIndia tour called the Harijan Tour.
- He started the **Harijan Sevak Sangh** to work for the removal of discriminations. He worked to promote education, cleanliness and hygiene and giving up of liquor among the depressed class.
- He also undertook two fasts in **1933** for this cause. An important part of the campaign was the Temple Entry Movement.
- **8 January 1933** was observed as '**Temple Entry Day**'. His campaign earned the ire of the orthodox Hindus and an attempt was made on his life by obscurantists upper caste Hindus.
- But this did not deter his mission. The work among the depressed classes and the tribals took the message of nationalism to the grassroots.

Beginnings of Socialist Movements

- Inspired by the **Russian Revolution of 1917** the Communist Party of India (CPI) was founded at Tashkent, Uzbekistan in **October 1920**.
- M.N. Roy, Abani Mukherjee, and M.P.T. Acharya were some of its founding members.
- The British government in India made vigorous efforts to suppress the communist movement by foisting a series of cases in the 1920s.
- In a further attempt to eliminate the threat of communism **M.N. Roy, S.A. Dange, Muzaffar Ahmed, M. Singaravelar** among others were arrested and tried in the **Kanpur Conspiracy Case of 1924**.
- The charge on them was "**to deprive the King Emperor of his sovereignty of British India, by complete separation of India from imperialistic Britain.**"

Foundation of Communist Party

- The communists used it as a platform to propagate their views and to expose the '**true colour of British rule in India**'.
- In an attempt to form a party an All India Communist Conference was held at **Kanpur in 1925**.
- Singaravelar gave the Presidential Address. It led to the founding of the Communist Party of India in Indian soil.
- The Communists organised workers' and peasants' organisations in different parts of India.

- A number of strikes were organised in the 1920s. Their efforts eventually led to the establishment of the **All India Workers' and Peasants' Party in 1928**.
- The progress in this direction was halted with the Meerut Conspiracy Case in 1929.
- Muzaffar Ahamed, S.A. Dange, S.V. Ghate, G. Adhikari, P.C. Joshi, S.S. Mirajkar, Shaikat Usmani, Philip Stratt and twenty-three others were arrested for organising a railway strike. They were charged with conspiring to overthrow the British government of India.

Revolutionary Activities

- The youths who were disillusioned with the sudden withdrawal of the Non Cooperation Movement by Gandhi took to violence. In **1924 Hindustan Republican Army (HRA)** was formed in Kanpur to overthrow the colonial rule by an armed rebellion.
- In 1925 Ram Prasad Bismil, Ashfaqulla Khan and others held up a train carrying government money and looted in Kakori, a village near Lucknow. They were arrested and tried in the Kakori Conspiracy Case.
- Four of them were sentenced to death while the others were sentenced to imprisonment.
- Bhagat Singh, Sukhdev and their comrades reorganized the HRA in Punjab. Influenced by socialist ideas they renamed it as Hindustan Socialist Republican Association in 1928.
- Sanders, a British police officer, responsible for the lathi charge that led to Lala Lajpat Rai's death was assassinated.
- Bhagat Singh along with B.K. Dutt threw a smoke bomb inside the **Central Legislative Assembly in 1929**.
- It was not intended to hurt anyone. They threw pamphlets and shouted '**Inquilab Zindabad**' and '**Long Live the Proletariat**'.
- He along with Rajguru was arrested and sentenced to death. Bhagat Singh's daring and courage fired the imagination of the youth across India, and he became popular across India.
- During the Gandhi-Irwin negotiations there was wide-spread demand to include the case of **Bhagat Singh and Rajguru**. The Viceroy was not willing to commute the death sentence.
- In April 1930, the Chittagong Armoury Raid was carried out by Surya Sen and his associates. They captured the armories in Chittagong and proclaimed a provisional revolutionary government.
- They survived for three years raiding government institutions. In **1933 Surya Sen** was caught and hanged after a year.

Left Movement in the 1930s

- By the 1930s the Communist Party of India had gained strength in view of the economic crisis caused by world-wide Great Depression. Britain transmitted the effects of Depression to its colonies.

- The effects of Depression were reflected in decline in trade returns and fall in agricultural prices.
- The governmental measures included forcible collection of land revenue which in real terms had increased two-fold due to a **50%** fall in agricultural prices, the withdrawal of money in circulation, retrenchment of staff and expenditure on developmental works.
- In this context, the Communist Party, fighting for the cause of peasants and industrial workers hit by loss of income and wage reduction, and problems of unemployment gained influence and was therefore banned in **1934**.
- The Congress, as a movement with a wide spectrum of political leanings, ranging from the extreme Left to the extreme Right, welded together by the goal of Swaraj, emerged as a powerful organisation.
- There was a constant struggle between the right and left in the Congress during the 1930s.
- In **1934** the Congress Socialist Party was formed by Jayaprakash Narayan, Acharya Narendra Dev and Minoo Masani.
- They believed that nationalism was the path to socialism and that they would work within the Congress. They worked to make Congress pro-peasant and pro-worker.

First Congress Ministries under Government of India Act, 1935

- The **Government of India Act 1935** was one of the important positive outcomes of the Civil Disobedience Movement.
- The key features of the Act were provincial autonomy and dyarchy at the centre. The Act provided for an all India Federation with **11 provinces, 6 Chief commissioner's provinces** and all those Princely states which wished to join the federation. The Act also provided autonomy to the provinces.
- All the subjects were transferred to the control of Indian ministers. Dyarchy that was in operation in provinces was now extended to the central government.
- The franchise, based on property, was extended though only about ten percent of the population enjoyed the right to vote. By this Act Burma was separated from India.

Congress Ministries and their Work

- The **Government of India Act 1935** was implemented with the announcement of elections in 1937.
- The Congress immensely benefitted because of the Civil Disobedience Movement. The Congress called off its programme of boycott of legislature and contested elections. It emerged victorious in seven out of the eleven provinces.
- It formed ministries in 8 provinces – Madras, Bombay, Central Provinces, Orissa, Bihar, United Provinces, North West Frontier Province. In Assam it formed a coalition government with Assam Valley Muslim Party led by Sir Muhammad Sadullah.

- The Congress Ministries functioned as a popular government and responded to the needs of the people. The salaries of ministers were reduced from **Rs. 2000 to Rs. 500** per month.
- Earlier action taken against nationalists were rescinded. They repealed the Acts which vested emergency powers in the government, lifted the ban imposed on political organisations except the Communist Party, and removed the restrictions on the nationalist press.
- Police powers were curbed and reporting by the CID on political speeches discontinued. Legislative measures were adopted for reducing indebtedness of the peasantry and improving the working conditions of the industrial labour.
- Temple entry legislation was passed. Special attention was paid to education and public health.

Resignation of Congress Ministries

- In **1939** the Second World War broke out. The colonial government of India entered the War on behalf of the Allies without consulting the Congress ministries.
- The Congress ministries resigned in protest. Jinnah who had returned from London with the determination of demanding separate state for Muslims, revived the **Muslim League in 1934**.
- He was one of the staunchest critics of the Congress Ministries. He declared the day when the Congress Ministries resigned as the '**Day of Deliverance**'.
- By 1940 he was demanding a separate state for the Muslims arguing that in an independent India the Muslims would lose all political power to the Hindus.

National Movement during the Second World War, 1939–45

- In **1939 Subhas Chandra Bose** became the President of the Congress by defeating Pattabhi Sitaramayya, the candidate of Gandhi.
- When Gandhi refused to cooperate, Subhas Chandra Bose resigned his post and started the Forward Bloc.
- The Communists initially opposed the War, calling it an imperialist war. However, with the Nazi attack on the Soviet Union, they called it the '**People's War**' and offered cooperation to the British.
- As a result, in 1942, the ban on the Communist Party of India was lifted.

Hindu Communalism, Muslim Communalism and Indian Nationalism

- The Muslim League dubbed the Congress as a Hindu organisation and claimed that it alone was the representative of the Muslims of India.
- Similarly, the **Hindu Mahasabha** and the **Rashtriya Swayamsevak Sangh (RSS)** took a pronounced anti-Muslim stance.

- Both Hindu Mahasabha and Muslim League claimed that the interests of the Hindus and Muslim were different and hostile to each other.
- The British policy of divide and rule, through measures such as Partition of Bengal, Communal Award, had encouraged the vested interests out to exploit the religious differences.
- In **1933, Rahmat Ali** a student of Cambridge University conceived the idea of Pakistan, comprising the provinces of Punjab, Kashmir, North West Frontier Province, Sind and Baluchistan.
- Muhammad Iqbal, who was advocating Hindu-Muslim unity later changed his stance and began to campaign for the formation of a separate state for Muslims.
- Indian Nationalism represented by Gandhi, Nehru, Vallabhbhai Patel and others opposed the idea of partitioning the country.

Developments leading to Quit India Movement

Individual Satyagraha

- In August **1940 Viceroy Linlithgow** made an offer in return for Congress' support for the war effort.
- However, the offer of dominion status in an unspecified future was not acceptable to the Congress. However, it did not want to hamper the British during its struggle against the fascist forces of Germany and Italy.
- Hence Gandhi declared limited satyagraha which would be offered by a few individuals. The objective was to convey to the world that though India was opposed to Nazism it did not enter the War voluntarily.
- Vinobha Bhave was the first to offer satyagraha on **17 October 1940**. The satyagraha continued till the end of the year. During this period more than 25,000 people were arrested.

Cripps Mission

On **22 March 1942**, the British government sent a mission under Cabinet Minister Sir Stafford Cripps as the Japanese knocked on the doors of India. The negotiations between the Cripps Mission and the Congress failed as Britain was not willing to transfer effective power immediately. The Cripps Mission offered:

1. Grant of Dominion Status after the War
2. Indian Princes could sign a separate agreement with the British implying the acceptance for the demand of Pakistan.
3. British control of defence during the War. Both the Congress and the Muslim League rejected the proposal. Gandhi called the proposals as a post-dated cheque on a crashing bank.

"Do or Die" Call by Gandhi

- The outcome of the Cripps Mission caused considerable disappointment. Popular discontent was intensified by war time shortages and steep rise in prices.
- The All India Congress Committee that met at Bombay on **8 August 1942** passed the famous Quit India Resolution demanding an immediate end to British rule in India. Gandhi gave a call to do or die.
- Gandhi said, 'We shall either free India or die in the attempt; we shall not live to see the perpetuation of our slavery.'
- A non-violent mass struggle under Gandhi was to be launched. But early next morning on **9 August 1942** Gandhi and the entire Congress leadership was arrested.

Role of Socialists

- With Gandhi and other prominent leaders of the Congress in jail, the Socialists provided the leadership for the movement.
- Jayaprakash Narayan and Ramanand Misra escaped from prison and organised an underground movement.
- Women activists like Aruna Asaf Ali played a heroic role. Usha Mehta established Congress Radio underground which successfully functioned till **November 1942**. British used all its might to suppress the revolt.
- Thousands were killed with machine guns and in some cases airplanes were used to throw bombs. Collective fines were imposed and collected with utmost rigour.
- Gandhi commenced a twenty-one day fast in February **1943** which nearly threatened his life. Finally, the British government relented. Gandhi was released from jail in **1944**.

People's Response

- As news spread to different parts of India, a spontaneous protest broke out everywhere. The people protested in whatever form that they could, such as hartals, strikes, picketing. The government suppressed it with brute force.
- People attacked government buildings, railway stations, telephone and telegraph lines and all that stood as symbols of British authority.
- This was particularly widespread in Madras. Parallel governments were established in Satara, Orissa, Bihar, United Provinces and Bengal. Though the movement was suppressed, it demonstrated the depth of nationalism and the readiness of the people to sacrifice for it.
- Nearly **7000 people were killed and more than 60,000** jailed. Significantly it also demonstrated the weakening of the colonial hegemony over the state apparatus. Many officials including policemen helped the nationalists.
- Railway engine drivers and pilots transported bombs and other materials for the protestors.

Subhas Chandra Bose and INA

- Subhas Chandra Bose who had left the Congress was now under house arrest. He wanted to strike British hard by joining its enemies. In **March 1941**, he made a dramatic escape from his house in disguise and reached Afghanistan.
- Initially he wanted to get the support of Soviet Union. After the Soviet Union joined the Allied Powers which included Great Britain, he went to Germany.
- In **February 1943**, he made his way to Japan on a submarine and took control of the Indian National Army.
- The Indian National Army Captain Lakshmi Sahgal headed it (Azad Hindu Fauj) had earlier been organized by Gen.
- **Mohan Singh with Indian prisoners of war** with the support of Japanese in Malaya and Burma. Bose reorganised it into three brigades: Gandhi Brigade, Nehru Brigade and a women's brigade named after Rani of Jhansi.
- Subhas Chandra Bose formed the Provisional Government of Free India in Singapore. He gave the slogan '**Dilli Chalo**'. INA was deployed as part of the Japanese forces. However, the defeat of Japan stopped the advance of INA.
- The airplane carrying Subhas Chandra Bose crashed bringing to an end his crusade for freedom. The British government arrested the INA officers and put them on trial in the Red Fort.
- The trial became a platform for nationalist propaganda. The Congress set up a defence committee **comprising Nehru, Tej Bahadur Sapru, Bhulabhai Desai and Asaf Ali**.
- Though the INA officers were convicted they were released due to public pressure. The INA exploits and the subsequent trials inspired the Indians.

Towards Freedom

Royal Indian Navy Revolt

- The Royal Indian Navy ratings revolted at Bombay in February 1946. It soon spread to other stations involving more than **20,000** ratings.
- Similar strikes occurred in the Indian Air Force and the Indian Signal Corps at Jabalpur. Thus the British hegemonic control ceased even in the armed forces.
- Despite the victory in the War, it left the British completely weakened. British surrender in South-East Asia to the Japanese was a big blow to imperial prestige.
- All the political leaders were released and the ban on Congress was lifted.

Negotiating Independence:

Simla Conference

- The Wavell Plan was announced on **14 June 1945**. It provided for an interim government, with an equal number of Hindus and Muslims in the Viceroy's Executive Council. All portfolios, except war portfolio, was to be held by Indian ministers.

- However, in the Shimla Conference, the Congress and the Muslim League could not come to an agreement.
- Jinnah demanded that all the Muslim members should be from the Muslim League and they should have a veto on all important matters. In the provincial elections held in early 1946 the Congress won most of the general seats and the Muslim League won most of the seats reserved for the Muslims thus bolstering its claim.

Cabinet Mission

- In Britain, the Labour Party had won a landslide victory and Clement Atlee became the Prime Minister.
- He declared that he wanted to transfer power at the earliest. He sent a **Cabinet Mission comprising Pethick Lawrence, Sir Strafford Cripps and A.V. Alexander**.
- Rejecting the demand for Pakistan, it provided for a Federal government with control over defence, communications and foreign affairs.
- The provinces were divided into three groups viz. Non-Muslim Majority Provinces, Muslim Majority Provinces in the Northwest and the Muslim Majority Provinces in the Northeast.
- A Constituent Assembly was to be elected and an interim government set up with representation for all the communities. The Congress and the Muslim League accepted the plan. However, both interpreted it differently.
- The Congress wanted the division of the provinces to be temporary while the Muslim League wanted it to be a permanent arrangement.

Direct Action Day Call by Muslim League

- Difference arose between Congress and Muslim League when the former nominated a Muslim member.
- The League argued it was to be the sole representative of the Muslims and withdrew its approval. Jinnah declared **16 August 1946 as the 'Direct Action Day'**.
- Hartals and demonstrations took place which soon turned into Hindu-Muslim conflict. It spread to other districts of Bengal.
- The district of Noakhali was the worst affected. Gandhi left for the worst affected regions and toured them on barefoot bringing the communal violence under control and spreading the message of peace and nonviolence.

Mountbatten Plan

The interim government headed by Jawaharlal Nehru was formed in September 1946. After some hesitation the Muslim League joined it in **October 1946**. Its representative Liaquat Ali Khan was made the Finance Member. In **February 1947**, **Clement Atlee** declared that power would be transferred by **June 1948**. Lord Mountbatten was sent as Viceroy to India with the specific task of transfer of power. On **3 June 1947** the Mountbatten Plan was announced. It proposed:

- Power would be transferred on the basis of dominion status to India and Pakistan. Princely states would have to join either India or Pakistan.
- Boundary commission was to be set up under Radcliffe Brown and the award would be announced after the transfer of power.
- Punjab and Bengal Legislative Assemblies would vote on whether they should be partitioned.

Independence and Partition

- The Mountbatten Plan was given effect by the enactment of the **Indian Independence Act on 18 July 1947** by the British Parliament.
- The Act abolished the sovereignty of the British Parliament over India. India was partitioned into two dominions – India and Pakistan. On 15 August 1947 India won independence.

**More to Know:**

1. 'Real Swaraj will come not by acquisition of authority by a few, but by the acquisition of the capacity by all to resist authority, when abused.' - M. K. Gandhi

2. The British enacted the first forest act in 1865. This act restricted the access of the forest dwellers to the forest areas to collect firewood, cattle fodder and other minor forest produce such as honey, seeds, nuts, medicinal herbs. **The Indian Forest Act of 1878** claimed that original ownership of forests was with the state. Waste lands and fallow lands were included as forest. Shifting cultivation practiced by, the tribal people, was prohibited. Alienation of forests from local control was stiffly resisted by the aggrieved adivasis (tribals) and the nationalists. The most striking evidence of continuing struggles of the tribal groups was the one waged by **Alluri Sitarama Raju in Rampa. Raju made Adivasi areas in the Eastern Ghats (the forest area along the Visakapatnam and Godavari district) his home**. The Adivasis who were organized by Alluri Sitarama Raju lived in abject poverty. They were also harassed by police, forest and revenue officials in 'Manyam' (forest area). Raju's efforts at fighting corrupt officials to protect the interests of Rampa tribals prompted the British to target his life. A special Malabar Police team was sent to quell the uprisings **(1922-24)** of Rampa Adivasis. Alluri Sitarama Raju attained martyrdom for the cause of forest dwellers.

3. Dyarchy, a system of dual government introduced under the **Government of India Act 1919**, divided the powers of the provincial government into Reserved and Transferred subjects. The Reserved Subjects **comprising finance, defence, the police, justice, land revenue, and irrigation** were in the hands of the British. The Transferred Subjects that included local self-government, education, public health, public works, agriculture, forests and fisheries were left under the control of Indian ministers. The system ended with the introduction of provincial autonomy in 1935.

10th Social Science Lesson 15 Notes in English

15. Freedom Struggle in Tamil Nadu

Introduction

- Tamil Nadu showed the lead in resisting colonial rule. As early as the late eighteenth century the Palayakarars, resisted the English attempts to establish their political hegemony in Tamil Nadu.
- Even after the defeat of the Palayakarars, an uprising was organised by Indian sepoy and officers in **Vellore Fort in 1806** that had its echoes in several cantonments in south India.
- Thanks to the introduction of Western education and eventual emergence of educated Indian middle class, the struggle against the British took the constitutional path.
- The freedom struggle in Tamil Nadu was unique, because from the beginning it was not only a struggle for independence from the English rule but also a struggle for independence from social disability imposed by the obnoxious caste system.
- In this lesson we shall study the role played by nationalists wedded to diverse ideologies in Tamil Nadu.

Early Nationalist Stirrings in Tamil Nadu

- By the middle of the nineteenth century a group of educated middle class emerged in Madras and began to show interest in public affairs.
- As in other parts of India, they formed political associations, such as the Madras Native Association and the Madras Mahajana Sabha to articulate their grievances.

Madras Native Association

- The Madras Native Association (MNA) was the earliest organisation to be founded in south India to articulate larger public rather than sectarian interests.
- It was started by **Gazulu Lakshminarasu, Srinivasanar** and their associates in **1852**. It consisted primarily of merchants.
- The objective was to promote the interests of its members and their focus was on reduction in taxation. It also protested against the support of the government to Christian missionary activities.
- It drew the attention of the government to the condition and needs of the people. One of the important contributions of the MNA was its agitation against torture of the peasants by revenue officials.
- These efforts led to the establishment of the Torture Commission and the eventual abolition of the Torture Act, which justified the collection of land revenue through torture.
- However, by **1862**, the Madras Native Association had ceased to exist.

Beginnings of the Nationalist Press: The Hindu and Swadesamitran

- The appointment of T. Muthuswami as the first Indian Judge of the **Madras High Court in 1877** created a furore in Madras Presidency.
- The entire press in Madras criticized the appointment of an Indian as a Judge. The press opposed his appointment and the educated youth realized that the press was entirely owned by Europeans.
- The need for a newspaper to express the Indian perspective was keenly felt. **G. Subramaniam, M. Veeraraghavachari and four other friends** together started a newspaper **The Hindu in 1878**.
- It soon became the vehicle of nationalist propaganda. G. Subramaniam also started a Tamil nationalist periodical **Swadesamitran in 1891** which became a daily in 1899.
- The founding of The Hindu and Swadesamitran provided encouragement to the starting of other native newspapers such as Indian Patriot, South Indian Mail, Madras Standard, Desabhimani, Vijaya, Suryodayam and India.

Madras Mahajana Sabha

- Madras Mahajana Sabha (MMS) was the earliest organisation in south India with clear nationalist objectives. It was the training ground for the first generation of nationalist leaders.
- On **16 May 1884 MMS** was started by M. Veeraraghavachari, P. Anandacharlu, P. Rangaiah and few others. P. Rangaiah became its first president. P. Anandacharlu played an active role as its secretary.
- The members met periodically, debated public issues in closed meetings, conducted hall meetings and communicated their views to the government.
- The objective of MMS was to create a consensus among people of different parts of the Presidency on various issues of public interest and to present it to the government.
- Its demands included conduct of simultaneous civil services examinations in England and India, abolition of the Council of India in London, reduction of taxes and reduction of civil and military expenditure.
- Many of its demands were adopted later by the **Indian National Congress founded in 1885**.

Moderate Phase

- Provincial associations such as the Madras Mahajana Sabha led to the formation of an all-India organisation, the Indian National Congress. Leaders from different parts of India attended several meetings before the formation of the Congress.
- One such meeting was held in **December 1884** in Theosophical Society. It was attended by Dadabhai Naoroji, K.T. Telang, Surendranath Banerjee and other prominent leaders apart from G. Subramaniam, Rangaiah and Anandacharlu from Madras.

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- Out of a total of **72 delegates 22 members** were from Madras. G. Subramaniam through his writings advanced the cause of nationalism.
- He ranks with Naoroji and Gokhale for his contribution to the understanding of the economic exploitation of India by the British.
- The second session of the Indian National Congress was held in Calcutta in 1886, with Dadabhai Naoroji in the Chair.
- The third session was held at Makkis Garden, now known as the Thousand lights, in **Madras in 1887** with Badruddin Tyabji as president.
- Out of the 607 all India delegates of **362** were from Madras Presidency.

Swadeshi Movement

- The **partition of Bengal (1905)** led to the Swadeshi Movement and changed the course of the struggle for freedom.
- In various parts of India, especially Bengal, Punjab and Maharashtra popular leaders emerged. They implemented the programme of the Calcutta Congress which called upon

the nation to promote Swadeshi enterprise, boycott foreign goods and promote national education.

- The Swadeshi movement made a deep impact in Tamil Nadu. The Congress carried on a vigorous campaign for boycott of foreign goods.

Response in Tamilnadu

- V.O. Chidambaranar, V. Chakkaraiyar, Subramania Bharati and Surendranath Arya were some of the prominent leaders in Tamilnadu.
- Public meetings attended by thousands of people were organised in various parts of Tamilnadu.
- Tamil was used on the public platform for the first time to mobilise the people. **Subaramania Bharati's** patriotic songs were especially important in stirring patriotic emotions.
- Many journals were started to propagate Swadeshi ideals. Swadesamitran and India were prominent journals.
- The extremist leader Bipin Chandra Pal toured Madras and delivered lectures which inspired the youth. Students and youth participated widely in the Swadeshi Movement.

Swadeshi Steam Navigation Company

- One of the most enterprising acts in pursuance of swadeshi was the launching of the Swadeshi Steam Navigation Company at **Thoothukudi by V.O. Chidambaranar**.
- He purchased two ships Gallia and Lavo and plied them between Thoothukudi and Colombo.
- However, due to cutthroat competition from the European company and the blatantly partisan role played by the government, V.O.C's efforts ended in failure.

Tirunelveli Uprising

- V.O.C joined with Subramania Siva in organising the mill workers in Thoothukudi and Tirunelveli.
- In **1908**, he led a strike in the European-owned Coral Mills. It coincided with the release of Bipin Chandra Pal. V.O.C and Subramania Siva, who organised a public meeting to celebrate the release of Bipin, were arrested.
- The two leaders were charged with sedition and sentenced to rigorous imprisonment. Initially V.O.C. was given a draconian sentence of two life imprisonments.
- The news of the arrest **sparked riots in Tirunelveli** leading to the burning down of the police station, court building and municipal office.
- It led to the death of four people in police firing. V.O.C. was treated harshly in prison and was made to pull the heavy oil press. Others to be arrested included **G. Subramaniam and Ethiraj Surendranath Arya**.

- To avoid imprisonment Subramania Bharati moved to Pondicherry which was under French rule. Bharati's example was followed by many other nationalists such as Aurobindo Ghosh and V. V. Subramanianar.
- The brutal crackdown on Swadeshi leaders virtually brought the Swadeshi Movement to a close in Tamil Nadu.

Revolutionary Activities in Tamil Nadu

- As elsewhere the Swadeshi movement inspired the youth. Left leaderless, they turned to the revolutionary path.
- Pondicherry provided a safe haven for the revolutionaries. Many of these revolutionaries in Tamil Nadu were introduced and trained in revolutionary activities at India House in London and in Paris.
- **M.P.T. Acharya, V.V. Subramanianar and T.S.S. Rajan** were prominent among them. Revolutionary literature was distributed by them in Madras through Pondicherry.
- Radical papers such as India, Vijaya and Suryodayam came out of Pondicherry.
- Such revolutionary papers and Bharati's poems were banned as seditious literature.
- These activities in Pondicherry intensified with the arrival of **Aurobindo Ghosh and V.V. Subramanianar in 1910**. These activities continued till the outbreak of the First World War.

Ashe Murder

- In 1904 **Nilakanta Brahmachari** and others started Bharata Matha Society, a secret society.
- The objective was to kill British officials and thereby kindle patriotic fervour among the people.
- **Vanchinathan of Senkottai**, was influenced by this organisation. On 17 June 1911 he shot dead **Robert W.D'E. Ashe, Collector of Tirunelveli in Maniyachi Junction**.
- After this he shot himself. Divorced from the people these young revolutionaries, despite their patriotism, failed to inspire and mobilize the people.

Annie Besant and the Home Rule Movement

- While the extremists and revolutionaries were suppressed with an iron hand, the moderates hoped for some constitutional reforms.
- However, they were disappointed with the **Minto-Morley reforms** as it did not provide for responsible government. Despite this the Congress extended support to the British war effort in the hope of getting more reforms. Thus when the national movement was in its ebb, Annie Besant, an Irish lady and leader of the Theosophical Society, proposed the Home Rule Movement on the model of Irish Home Rule League.
- She started **Home Rule League in 1916** and carried forward the demand for home rule all over India.

- **G.S. Arundale, B.P. Wadia and C.P. Ramaswamy** assisted her in this campaign. They demanded home rule with only a nominal allegiance to British Crown.
- She started the newspapers **New India** and **Commonweal** to carry forward her agenda.
- She remarked, **"Better bullock carts and freedom than a train deluxe with subjection"**.
- Under the **Press Act of 1910** Annie Besant was asked to pay hefty amount as security. She wrote two books, **How India wrought for Freedom** and **India: A Nation** and a pamphlet on self-government.
- Students joined the movement in large numbers who were trained in Home Rule classes.
- They were formed into boy scouts and volunteer troops. Annie Besant and her coworkers were interned and prohibited from making public speeches or involve in any political activity.
- Annie Besant was elected the President of the **Congress session of 1917**.
- Members of the Home Rule Movement such as **B.P. Wadia** played a key role in organising the working classes by forming trade unions.
- Not only did they succeed in improving their working conditions, they made them part of the struggle for freedom.
- However, with the rise of Gandhi as a national leader Annie Besant and the Home Rule Leagues were eclipsed.

Non-Brahmin Movement and the Challenge to Congress

- In the meanwhile, there was rapid growth in education in the **Madras Presidency**. There was an increase in the number of educated non Brahmins.
- Intense political and social activity discussed above politicised the educated non-Brahmins.
- They raised the issue of caste discrimination and unequal opportunities in government employment and representation in elected bodies, which were dominated by Brahmins.
- Further, the Congress was also overwhelmingly composed of Brahmins.

The South Indian Liberal Federation

- The non-Brahmins organised themselves into political organisations to protect their interests.
- In **1912** the **Madras Dravidian** Association was founded. C. Natesanar played an active role as its secretary.
- In **June 1916** he established the Dravidian Association Hostel for non-Brahmin students. He also played a key role in bridging the differences between two leading non-Brahmin leaders of the time, **Dr. T.M. Nair and P. Thyagarayar**.
- Both of them were earlier part of the Congress and were disillusioned by how non-Brahmins were sidelined in the organisation.

- On **20 November 1916** a meeting of about thirty non-Brahmins was held under the leadership of P. Thyagarayar, Dr. T.M. Nair and C. Natesanar at Victoria Public Hall in Chennai.
- The South Indian Liberal Federation (SILF) was founded to promote the interests of the non-Brahmins. They also launched three newspapers: Justice in English, Dravidian in Tamil and Andhra Prakasika in Telugu.
- Soon the SILF began to be popularly known as Justice Party after its English daily. The Justice Party also held several conferences throughout the Presidency to set up branches.

Demand for Reservation

- The Non-Brahmin Manifesto was released outlining its objectives viz., reservation of jobs for non-Brahmins in government service, and seats in representative bodies.
- It opposed the Home Rule Movement as a movement of Brahmins and feared that Home Rule might give them more power.
- It also criticised the Congress as a party of the Brahmins. Montagu's announcement of political reforms in the **Parliament in 1917** intensified political discussions in Tamil Nadu.
- The Justice Party demanded communal representation (**i.e. representation for various communities in society**).
- The Madras Government was also supportive of the Justice Party as the latter believed that English rule was conducive for the development of the non-Brahmins.
- The **Act of 1919** provided reservation of seats to non-Brahmins, a move criticised by the Congress but welcomed by the Justice Party.

Justice Ministry

- The Congress boycotted the elections of 1920. The **Justice Party won 63 of 98** elected seats in the Legislative Council.
- A. Subburayalu of the Justice Party became the first chief minister. After the 1923 elections, Raja of Panagal of the Justice Party formed the ministry.
- The Justice Party introduced various measures for the benefit of non-Brahmins. They were reservation of appointments in local bodies and education institutions, establishment of Staff Selection Board which later became the **Public Service Commission**, **enactment of Hindu Religious Endowment Act and Madras State Aid to Industries Act**, **abolition of devadasi system**, **allotment of poramboke lands (waste government lands)** to the poor for housing and extension of primary education to the depressed classes through fee concessions, scholarships and mid-day meals.

Government's Repressive Measures: Rowlatt Act

- Given the important contribution of India (especially the soldiers who fought in far-off lands in the cause of Empire) in World War I Indians expected more reforms from Britain.

- However, a draconian Anarchical and Revolutionary Crimes Act, popularly known as the Rowlatt Act, after the name of Sir Sidney Rowlatt, who headed the committee that recommended it was passed in **1919**.
- Under the Act anyone could be imprisoned on charges of terrorism without due judicial process.
- Indians were aghast at this. Gandhi gave voice to the anger of the people and adopted the Satyagraha method that he had used in South Africa.

Rowlatt Satyagraha

- On **18 March 1919** Gandhi addressed a meeting on Marina Beach. On 6 April 1919 hartal was organised to protest against the "**Black Act**". Protest demonstrations were held at several parts of Tamil Nadu.
- Processions from many areas of the city converged in the Marina beach where there was a large gathering. They devoted the whole day to fasting and prayer in the Marina beach.
- Madras Satyagraha Sabha was formed. Rajaji, Kasturirangar, S. Satyamurty and George Joseph addressed the meeting. A separate meeting of workers was addressed by V. Kalyanasundaram (Thiru. V. Ka) B.P. Wadia and V.O.C. An important aspect of the movement was that the working classes, students and women took part in large numbers.

Khilafat Movement

- Following the Jallianwala Bagh Massacre General Dyer who was responsible for it was not only acquitted of all charges but rewarded.
- After the First World War the Caliph of Turkey was humiliated and deprived of all powers.
- To restore the Caliph the Khilafat Movement was started. Muslims who had largely kept from the nationalist movement now joined it in huge numbers.
- In Tamil Nadu Khilafat Day was observed on **17 April 1920**, with a meeting presided over by Maulana Shaukat Ali. Another such conference was held at Erode. Vaniyambadi was as the epicenter of Khilafat agitation.

Non-Cooperation Movement

- Tamil Nadu was active during the Non-cooperation Movement. C. Rajaji and E.V. Ramaswamy (**EVR, later known as Periyar**) provided the leadership.
- Rajaji worked closely with Yakub Hasan, founder of the Madras branch of the Muslim League.
- As a result, the Hindus and the Muslims cooperated closely during the course of the movement in Tamil Nadu.
- A Congress volunteer corps was set up to distribute pamphlets, carry flags during processions and to maintain order in the meetings. They also played an important part in picketing of liquor shops.

No Tax Campaigns and Temperance Movement

- As part of the non-cooperation movement, in many places, cultivators refused to pay taxes. A no-tax campaign took place in Thanjavur.
- Councils, schools and courts were boycotted. Foreign goods were boycotted. There were a number of workers' strikes all over region, many of them led by nationalist leaders.
- One of the important aspects of the movement in Tamil Nadu was the temperance movement or movement against liquor. Toddy shops were picketed. Demonstrations and hartals were organised in all parts of the Presidency. There were also agitations by communities against the Criminal Tribes Act.
- In **November 1921** it was decided to organise civil disobedience. Rajaji, Subramania Sastri and EVR were arrested.
- The visit of Prince of Wales on **13 January 1922** was boycotted. In the police repression two were killed and many injured.
- The Non-Cooperation Movement was withdrawn in **1922** after the Chauri Chaura incident in which 22 policemen were killed.

E.V.R. and the Constructive Programme

- E.V.R. played an important role in Tamil Nadu during this period. He campaigned vigorously for the promotion and sale of khadi.
- In his opposition to consumption of liquor he cut down an entire coconut grove owned by him. He also played a key role in the satyagraha for temple entry in Vaikom, then under Travancore.
- It was a time when the depressed classes were not even permitted to walk on the streets around the temple or come within a certain distance of the upper castes.
- After the major leaders of Kerala were arrested, EVR went to Vaikom and galvanised the movement.
- He was arrested and sentenced to one-month imprisonment. He refused to leave Vaikom even after his release. He was arrested again for making inspiring speeches and was sentenced to six months rigorous imprisonment.
- When he returned to Erode after his release he was arrested for his speeches to promote khadi. In **June 1925**, the ban on the roads around the temple in Vaikom was lifted.
- For his contribution against caste discrimination and temple entry **agitation in Vaikom**, Periyar was hailed as 'Vaikom Hero'.

Cheranmadevi Gurukulam Controversy

- However, by this time **E.V.R.** had become increasingly dissatisfied with the Congress. He felt it was promoting the interests of the Brahmins alone.
- The **Cheranmadevi Gurukulam** controversy and opposition to communal representation within the Congress led E.V.R. to leave the Congress.

- To further the cause of national education, a gurukulam was established in **Cheranmadevi** by **V.V. Subramanianar**.
- It received funds from the Congress. However, students were discriminated on the basis of caste. Brahmin and Non-Brahmin students were made to dine separately and the food served too was different.
- The issue was brought to the notice of E.V.R. who questioned the practice and severely criticised it along with another leader, **Dr P. Varadarajulu**.
- In the Kanchipuram Conference of the Tamil Nadu Congress Committee held on **21 November 1925**, he raised the issue of representation for non-Brahmins in the legislature.
- His efforts to achieve this since 1920 had met with failure. When the resolution was defeated, he left the Conference along with other non-Brahmin leaders who met separately.
- Soon E.V.R. left the Congress and started the Self Respect Movement.

Swarajists–Justicites Rivalry

- Following the withdrawal of the Non Cooperation Movement, the Congress was divided between 'no-changers' who wanted to continue the boycott of the councils and 'prochangers' who wanted to contest the elections for the councils.
- Rajaji along with other staunch Gandhian followers opposed the council entry. Along with **Kasturirangar and M.A. Ansari, Rajaji** advocated the boycott of the councils.
- Opposition to this led to the formation of the Swaraj Party within the Congress by Chittaranjan Das and Motilal Nehru.
- In Tamil Nadu the Swarajists were led by S. Srinivasanar and S. Satyamurti.

Subbarayan Ministry

- In the elections held in **1926**, the Swarajists won the majority of the elected seats.
- However, it did not accept office in accordance with the Congress policy. Instead they supported an independent, P. Subbarayan to form the ministry.
- The Swarajists did not contest the 1930 elections leading to an easy victory for the Justice Party. The Justice Party remained in office **till 1937**.

Simon Commission Boycott

- In **1927** a statutory commission was constituted under Sir John Simon to review the Act of 1919 and to suggest reforms.
- However, to the great disappointment of Indians, it was an all-white commission with not a single Indian member.
- So the Congress boycotted the Simon Commission. In Madras, the Simon Boycott Propaganda Committee was set up with S. Satyamurti as the president.
- There was widespread campaign among the students, shopkeepers, lawyers and commuters in train to boycott.

- The arrival of **Simon Commission in Madras on 18 February 1929** was greeted with demonstrations and hartals. Black flags were waved against the Commission. The police used force to suppress the protest.

Civil Disobedience Movement

Towards Poorna Swaraj

- In the 1920s, Congress with Gandhi in leadership, was transforming into a broadbased movement in Tamil Nadu.
- The Madras session of the Indian National Congress in 1927 declared complete independence as its goal. It appointed a committee under Motilal Nehru to frame the constitutional reforms in opposition to the Simon Commission.
- In the 1929 Lahore session of the Congress, Poorna Swaraj (complete independence) was adopted as the goal and on **26 January 1930** the national flag was hoisted by Jawaharlal Nehru on the banks of river Ravi as the declaration of independence.

Salt March to Vedaranyam

- When the Viceroy did not accept the demands put forward by Gandhi, he launched the Civil Disobedience Movement by setting out on a Salt Satyagraha with a march to Dandi on **12 March 1930**.
- The Civil Disobedience Movement was a mass movement with the participation of students, shopkeepers, workers, women, etc.
- Demonstrations, hartals, staging of swadeshi dramas and songs were the order the day in both rural and urban areas.
- Tamil Nadu was in the forefront of the Civil Disobedience Movement. In the city of Madras, shops were picketed and foreign goods boycotted. Rajaji organised and led a salt satyagraha march to Vedaranyam.
- The march started from Tiruchirappalli on 13 April 1930 and reached Vedaranyam in Thanjavur district on **28 April**.
- A special song was composed for the march by Namakkal V. Ramalinganar with the lines, **"A War is ahead sans sword, sans bloodshed...Join this march."**
- Despite a brutal crackdown by the police, the marching satyagrahis were provided a warm reception along the route.
- On reaching **Vedaranyam 12 volunteers** under the leadership of Rajaji broke the salt law by picking up salt. Rajaji was arrested. T.S.S. Rajan, Rukmani Lakshmipathi, Sardar Vedarathnam, C. Swaminathar and K. Santhanam were among the prominent leaders who participated in the Vedaranyam Salt Satyagraha.

Widespread Agitations in Tamil Districts

- The satyagrahis under the leadership of T. Prakasam and K. Nageswara Rao set up a camp at Udayavanam near Madras.
- However, the police arrested them. It led to a hartal in Madras. The clashes with the police in Tiruvallikeni which lasted for three hours on **27 April 1930** left three dead.
- Volunteers who attempted to offer salt Satyagraha in Rameswaram were arrested. Similar attempts at Uvari, Anjengo, Veppalodai, Thoothukudi and Tharuvaikulam were stopped. Mill workers struck work across the province.
- Woman participated enthusiastically. Rukmani Lakshmipathi was the first woman to pay penalty for violation of salt laws. Police used brutal force to suppress the movement.
- Bhashyam, popularly known as Arya, hoisted the national flag atop Fort St. George on **26 January 1932**.
- Satyamurti actively picketed shops selling foreign clothes, organised processions and distributed pamphlets. N.M.R.Subbaraman and K. Kamaraj also played an important role.

Martyrdom of Tirupur Kumaran

- On **11 January 1932** a procession carrying national flags and singing patriotic songs was brutally beaten by the police in Tirupur. O.K.S.R. Kumaraswamy, popularly Tirupur Kumaran, fell dead holding the national flag aloft.
- He is hailed as Kodikatha Kumaran. Thus, civil disobedience movement was one of the largest mass movements in Tamil Nadu with participation of people from all sections of the society.

First Congress Ministry

- The **Government of India Act of 1935** introduced Provincial Autonomy. The Council of Ministers, responsible to the legislature, administered the provincial subjects.
- However, the Governor was empowered to disregard the advice of the elected government.
- In the **1937 election** the Congress emerged victorious. The Justice Party was trounced. Congress victory in the elections clearly indicated its popularity with the people. Rajaji formed the first Congress Ministry.
- He introduced prohibition on an experimental basis in Salem. To compensate for the loss of revenue he introduced a sales tax. On the social question, he opened temples to the 'untouchables'.
- Efforts of T. Prakasam led to the appointment of a committee to enquire into the condition of the tenants in the Zamindari areas.
- However, excepting debt conciliation boards to reduce rural indebtedness, no other measure was adopted.
- When the British involved India in the Second World War without consulting the elected Congress ministries, the latter resigned.

Anti-Hindi Agitation

- One of the controversial measures of Rajaji was the introduction of Hindi as a compulsory subject in schools.
- This was considered to be a form of Aryan and North Indian imposition detrimental to Tamil language and culture, and therefore caused much public resentment. E.V.R. led a massive campaign against it.
- He organised an anti-Hindi Conference at Salem. It formulated a definite programme of action.
- The Scheduled Castes Federation and the Muslim League extended its support to the anti-Hindi agitation. Natarajan and Thalamuthu, two of the enthusiastic agitators died in prison.
- A rally was organised from Tiruchirappalli to Madras. More than **1200 protestors including E.V.R.** were arrested.
- After the resignation of the Congress Ministry, the Governor of Madras who took over the reigns of administration removed Hindi as compulsory subject.

Quit India Struggle

- Failure of the Cripps Mission, war time shortages and price rise created much discontent among the people. On **8 August 1942** the Quit India resolution was passed and Gandhi gave the slogan '**Do or Die**'.
- The entire Congress leadership was arrested overnight. K. Kamaraj while returning from Bombay noticed that at every railway station the police waited with a list of local leaders and arrested them as they got down.
- Kamaraj gave the police the slip and got down at Arakkonam itself. He then worked underground and organised people during the **Quit India Movement**.
- Rajaji and Satyamurti were arrested together when they went about distributing pamphlets. The movement was widespread in Tamilnadu and there were many instances of violence such as setting fire to post offices, cutting of telegraph lines and disrupting railway traffic.
- Undying Mass Movement All sections of the society participated in the movement. There were a large number of workers strike such as strikes in **Buckingham and Carnatic Mills, Madras Port Trust, Madras Corporation and the Electric Tramway**.
- Telegraph and telephone lines were cut and public building burnt at Vellore and Panapakkam.
- Students of various colleges took active part in the protests. The airport in **Sulur** was attacked and trains derailed in Coimbatore.
- Congress volunteers clashed with the military in Madurai. There were police firings at **Rajapalayam, Karaikudi and Devakottai**.
- Many young men and women also joined the INA. The Quit India Movement was suppressed with brutal force.

More to Know:

1. A temple entry programme with “harijans” in Madurai Meenakshiamman temple was organised (9 July 1939) by Vaidyanathar, L.N. Gopalsamy, President and Secretary of Madurai Harijana Sevak Sangh respectively. The Temple Entry Authorisation and Indemnity Act, 1939 for the removal of the civil and social disabilities against the “depressed classes” was passed.

2. **Agitation for Removal of Neill Statue (1927)** James Neill of the Madras Fusiliers (infantry men with firearms) was brutal in wreaking vengeance at Kanpur (‘the Cawnpur massacre’, as it was called) in which many English women and children were killed in the Great Rebellion of 1857. Neill was later killed by an Indian sepoy. A statue was erected for him at Mount Road, Madras. Nationalists saw this as an insult to Indian sentiments, and organised a series of demonstrations in Madras. Protesters came from all over the Madras Presidency and were led by S. N. Somayajulu of Tirunelveli. Many were arrested and sentenced to prison. Gandhi, who visited Madras during the same time, gave his support to the agitation. The statue was finally moved to Madras Museum when Congress Ministry, led by C. Rajaji, formed the government in 1937.

3. George Joseph

George Joseph, a barrister and eloquent speaker, played a leading role in organising and publicising the cause of Home Rule League in Madurai. Though born in Chengannur (Alappuzha district, Kerala State), he chose to settle down in Madurai and practice as a people’s lawyer. In the course of his long public life, he led the Vaikom Satyagraha in Kerala, as he viewed it as an issue of civil rights for all citizens of India. He championed the cause of the “Criminal Tribes” of Tamilnadu. He was fondly called “**Rosaappu Durai**” by the people of Madurai for the services he rendered to the affected communities. He helped the Harvey Mill workers of Madurai to set up **Madurai Labour Union (1918)**. The Union’s initial struggles resulted in higher wages and reduced work hours for the mill workers.

4. Tamil Nadu was then part of the Madras Presidency which included large parts of the present-day states of Andhra Pradesh (Coastal districts and Rayalaseema), Karnataka (Bengaluru, Bellary, South Canara), Kerala (Malabar) and even Odisha (Ganjam).

5. Prominent Nationalists of Tamil Nadu in the Moderate phase

The early nationalists believed in constitutional methods. Their activities consisted of conducting hall meetings and deliberating the problems of the country in English. These views were communicated to the government in a language couched in a liberal discourse in the form of petitions, prayers, memoranda, and as evidence in various government commissions of enquiry. When, at the time of Partition of Bengal, Tilak and other leaders adopted popular methods such as mass public meetings, and used vernacular languages to address the larger public, the early nationalists came to be known as moderates. The distinguished Tamil Moderates from Madras: **V.S. Srinivasa Sastri, P.S. Sivasamy, V. Krishnasamy, T.R. Venkatramanar, G.A. Natesan, T.M. Madhava Rao, and S. Subramaniam**. The primary contribution of moderates lies in exposing the

liberal claims of the British: they exposed how the British exploited India and their hypocrisy in following democratic principles in England and imposing an unrepresentative government in the colonies.

10th Social Science Lesson 16 Notes in English

16. Social Transformation in Tamil Nadu

Introduction

- Europeans established their political power over Indian subcontinent in the latter half of the eighteenth century. While they were concerned with annexing India, by the beginning of the nineteenth century they were reordering Indian society.
- New revenue settlements were made. Influenced by British Utilitarian ideas and evangelicals they also tried to impose their cultural superiority over the Indian people. Indigenous traditions were treated as primitive.
- Indian society was portrayed as conservative where human beings were discriminated on the basis of caste, gender, language and creed. This caused a reaction among the Indians.
- During the nineteenth century, educated Indians from different parts of the country began to feel the humiliation and responded by seeking their socio-cultural identity from their past.
- However, they understood some merits in the colonial arguments and were ready to reform. **Raja Rammohan Roy** was among the pioneers in this process. Roy and many like him came to be known as social reformers. They were preparing a social and cultural sphere to counter the cultural hegemony of Europe.
- It resulted in the social and religious reform movements in modern India. This particular historical development is also identified as the Indian renaissance. Renaissance is an ideological and cultural phenomenon.
- It is closely tied to modernity, rationalism and the progressive movement of the society. Critical thinking is at its root. A new philosophical tradition centring around human rationality and equality is its characteristic.
- The basic inspiration of renaissance is humanism and questioning the fundamentalist religious practices that denied humans their dignity. This ideology of humanism stimulated creative energy in all spheres of social life and knowledge such as **language, literature, philosophy, music, painting, architecture, etc.**

Tamil Renaissance

- The cultural hegemony of colonialism and the rise of humanism brought several changes in the socio-cultural life of the Indian subcontinent. Modern Tamil Nadu too experienced such a historical transition.
- Tamil language and culture played a significant role in their identity construction. The introduction of **printing press, linguistic research on Dravidian languages**, etc... under pinned the process of Tamil renaissance.

- Although religious literature was taken up predominantly for publication in the early years after the advent of printing technology, things began to change gradually.
- Works that can be described as secular were taken up for publishing.

Advent of the Printing Technology

- Tamil was the first nonEuropean language that went into print. As early as in 1578, Tamil book, ThambiranVanakkam, was published from Goa. In 1709, a full-fledged printing press had been established thanks to **Ziegenbalg in Tranquebar**.
- Thirukkural was one of the earliest Tamil literary texts to be published in 1812. This led the resurgence of interest among Tamil scholars in publishing the more ancient Tamil classics around that period.
- In the nineteenth century, Tamil scholars like **C.W. Damotharanar (1832–1901)**, and **U.V. Swaminathar (1855–1942)** spent their lifetime in the rediscovery of the Tamil classics. C. W. Damotharanar collected and edited different palm-leaf manuscripts of the Tamil grammar and literature.
- His editions included such texts as Tolkappiyam, Viracholiyam, Iraiyanar-Akapporul, IlakkanaVilakkam, Kaliththokai and Culamani. U.V. Swaminathar a student of Meenakshisundaranar, took efforts to publish the classical texts such as **Civakachinthamani (1887)**, **Paththupattu (1889)**, **Chilapathikaram (1892)**, **Purananuru (1894)**, **Purapporul-Venpa-Malai (1895)**, **Manimekalai (1898)**, **Ainkurunuru (1903)** and **Pathitruvalu (1904)**.
- This provided the Tamil people with a revelation about their heritage. Therefore, the rediscovery of ancient classics and their publication is considered the foundation of Tamil renaissance.
- The publication of these ancient literary texts created an awareness among the Tamil people about their historical tradition, language, literature and religion. Modern Tamils founded their social and cultural identity on the ancient Tamil classics, collectively called the Sangam literature.
- **Linguists, historians and Tamil scholars** recognised the uniqueness of Tamil culture, which had a separate and independent cultural existence before the coming of the Aryans into the Tamil land.
- In 1816, **F.W. Ellis (1777–1819)** who founded the College of Fort St George, formulated the theory that the south Indian languages belonged to a separate family which was unrelated to the Indo-Aryan family of languages.
- **Robert Caldwell (1814–1891)** expanded this argument in a book titled, A Comparative Grammar of the **Dravidian or South Indian Family of Languages**, in 1856. He established the close affinity between the Dravidian languages in contrast with Sanskrit and also established the antiquity of Tamil.

- Tamil intellectuals of this period identified the fundamental differences between **Tamil/Dravidian/ Egalitarian and Sanskrit/ Aryan/Brahmanism**. They argued that Tamil was a language of Dravidian people, who are non-Brahmin and their social life was casteless, gender-sensitised and egalitarian.
- Tamil renaissance contributed to the origin and growth of Dravidian consciousness in the Tamil country. These ideas are exemplified in the Tamil invocation song in the play, **Manonmaniam** written by **P. Sundaranar (1855–1897)**.
- Tamil renaissance questioned the cultural hegemony of Brahminism. These developments were reflected in art, literature, religion, etc. **Ramalinga Adigal (1823–1874)**, popularly known as Vallalar, questioned the existing Hindu religious orthodoxy. **Abraham Pandithar (1859–1919)** gave prominence to Tamil music and published books on the history of Tamil music.
- **C.W. Damotharanar, U.V. Swaminathar, Thiru Vi. Kaliyanasundaram (1883–1953), Parithimar Kalaighnar (1870-1903), Maraimalai Adigal (1876–1950), Subramania Bharathi (1882– 1921), S. Vaiyapuri (1891–1956), and the poet Bharatidasan (1891–1964)**, in their own ways and through their writings, contributed to the revival of Tamil literature.
- Meanwhile, **M. Singaravelar (1860–1946)** an early pioneer in Buddhist revival, promoted communism and socialism to counter the colonial power. **Pandithar Iyothethassar (1845–1914) and Periyar E.V. Ramasamy (1879–1973)** held high the radical philosophy to defend the rights of the socially underprivileged and marginalised section of the people.
- In addition, the twentieth century Tamil language movements such as Tani Tamil Iyakkam and Tamil Isai Iyakkam, made a significant cultural impact in creating a pure Tamil free from the influence of Sanskrit.

V.G. Suryanarayana Sastri (Parithimar Kalaighnar)

- **V.G. Suryanarayana Sastri (1870-1903)**, born near Madurai, was professor of Tamil at the Madras Christian College.
- He was one of the earliest scholars to identify the influence of Sanskrit on Tamil, and adopted a pure Tamil name for himself: Parithimar Kalaighnar.
- He was the first to argue that Tamil is a classical language, and demanded that the University of Madras should not call Tamil a vernacular language. Influenced by Western literary models, he introduced the sonnet form in Tamil.
- He also wrote novels and plays, and a number of essays on science. Tragically, he died at the young age of **only 33**.

Maraimalai Adigal

- **Maraimalai Adigal (1876–1950)** is considered the father of Tamil linguistic purism and the founder of Tani Tamil Iyakkam (**Pure Tamil Movement**). He wrote commentaries on the Sangam texts, Pattinappalai and Mullaipattu.

- As a young man, he worked in a journal, Siddhanta Deepika. Later he served as a Tamil teacher in the Madras Christian College for many years.
- He was inclined towards nonBrahmin movement. His teachers such as P. Sundaranar and Somasundara Nayagar were key influences in his life.

Tani Tamil Iyakkam (Pure Tamil Movement)

- Maraimalai Adigal promoted the use of pure Tamil words and removal of the Sanskrit influence from the Tamil language.
- The movement made a great impact on Tamil culture especially in language and literature. The beginnings of the movement are usually dated to **1916** even though the process of identifying influence of foreign words in Tamil and eliminating them can be dated much earlier to the late nineteenth century.
- His daughter Neelambikai, played an important role in its foundation. He changed his own name Vedachalam and took on the pure Tamil name of **Maraimalai Adigal**.
- **His journal Jnanasagaram was renamed Arivukkadal and his institution, Samarasa Sanmarga Sangam, was re-christened as Potu Nilai Kalakam.** The movement was critical of Hindi, Sanskrit and the Brahminical hegemony in Tamil society.
- Neelambikai compiled a dictionary that provided pure Tamil equivalents to Sanskrit words that had crept into Tamil vocabulary.
- This movement paved the way for later social movements that countered Brahminical and the Sanskrit tradition in Tamil society.

Rise of the Dravidian Movement

- In India, Brahmins enjoyed a high social status, based on their birth, and held great social privileges.
- In Madras Presidency, Brahmins dominated all the fields of society, especially politics, education and job opportunities in the government.
- The 1911 census showed that Brahmins were slightly over 3 per cent of Madras Presidency's population, and non Brahmins 90 per cent.
- Yet in the ten years from **1901 to 1911** Madras University turned out 4,074 Brahmin graduates compared with only 1,035 non-Brahmin graduates.
- Numbers for other groups, based on how the population came to be classified then, included Indian Christian 306, Mohammedan 69 and European and Eurasian 225.
- In this context, the Dravidian movement emerged as a defence of the non-Brahmins against the Brahmin dominance.
- An organisation called The Madras Non-Brahmin Association was founded in 1909 to help the non-Brahmin students.
- In 1912 **C. Natesanar, a medical doctor, founded the Madras United League, later renamed as Madras Dravidian Association to support Dravidian uplift.**

- The organisation focused on educating and supporting non-Brahmin graduates and conducting regular meetings to share their grievances.
- Meanwhile, Natesanar founded a hostel, the Dravidian Home, at **Triplicane (Madras) in July 1916** to address the lack of hostels for the non-Brahmin students which hindered their educational development.
- In addition, the home had a literary society for the benefit of non-Brahmin students.

South Indian Liberal Federation (Justice Party)

- As World War I was in progress the British government was considering the introduction of representative institutions for Indians after the War. Fearing that such political reforms would further strengthen the political power of Brahmins, educated non-Brahmins decided to organise themselves politically.
- On **20 November 1916** around **30 prominent** non Brahmin leaders including **Dr. C. Natesanar, Sir Pitti Theyagarayar, T.M. Nair and Alamelu Mangai Thayarammal** came together to form the South Indian Liberation Federation (SILF).
- In the meantime, at a meeting held in the Victoria Public Hall the Non-Brahmin Manifesto was released in December 1916.
- The manifesto articulated the voice of the non-Brahmin communities and surveyed the general condition of the non-Brahmins in Madras Presidency.
- The association started publishing three newspapers: Dravidian in Tamil, Justice in English and Andhra Prakasika in Telugu, to propagate the ideals of the Party.
- The first election, under the Montagu-Chelmsford Reforms, was held in **1920** after the introduction of the Dyarchy form of government in the provinces. The Justice Party won the election and formed the first-ever Indian cabinet in Madras.
- A. Subbarayalu became the Chief Minister of the Madras Presidency and the party formed the government during **1920–1923 and 1923–1926**. In the context of Congress Party boycotting the legislature, the Justice Party continued to remain in office till 1937 elections were held.
- In the 1937 elections the Indian National Congress contested the elections for the first time and trounced the Justice Party.

Programmes and Activities

- The Justice Party is the fountain head of the non-Brahmin Movement in the country. The Justice Party government widened education and employment opportunities for the majority of the population and created space for them in the political sphere.
- Tamil Nadu's legacy of social justice owes its existence to the formative years of Justice Party in power.
- The Justices removed the legal hindrances restricting inter-caste marriages and broke the barriers that prevented Depressed Classes from the use of public wells and tanks. The

Justice Party government ordered that public schools accommodate the children of the Depressed Classes.

- Hostels were established for the students belonging to this social group in 1923. In the meantime, the Madras legislature under the Justice Party government was the first to approve participation of women in the electoral politics in 1921.
- This resolution created space for woman and thus facilitated **Muthulakshmi Ammaiyar** to become the first woman legislator in India in **1926**.
- The Justice Party worked towards legislating provisions for communal representation – reservations for various communities. Two **Communal Government Orders (16 September 1921 and 15 August 1922)** were passed to ensure equitable distribution in appointments among various castes and communities as a part of achieving social justice.
- The Justice Party rule established the **Staff Selection Board in 1924** for the selection of government officials and encouraged all the communities to share the administrative powers.
- In 1929, the Government of British India adopted the pattern and established the Public Service Commission. The Justice Party further concentrated on reforms in religious institutions.
- Tamil Nadu has a large number of temples and these commanded huge resources. In general, the resources were monopolised and exploited by the dominant caste in the society and led to mismanagement of public resources.
- The Justice Party introduced the **Hindu Religious Endowment (HRE) Act in 1926** and enabled any individual, irrespective of their caste affiliation, to become a member of the temple committee and govern the resources of the religious institutions.

Self-Respect Movement (Suyamariyathai Iyakkam)

- The Self-Respect movement, while critiquing the then prevailing social, political and economic relations, introduced a programme of non-Brahmin uplift in Tamil Nadu.
- The movement was concerned with the marginalised sections of the society and criticised Brahminism and the cultural hegemony of the Brahmin.
- It advocated a casteless society devoid of rituals and differences based on birth. The movement declared rationality and self-respect as the birthright of all human beings and held these as more important than self-rule.
- The movement declared illiteracy as a source for women's subordination and promoted compulsory elementary education for all. It campaigned for the empowerment of women and questioned the superstitious beliefs in the society.
- The movement demanded women's emancipation, deplored superstitions, and emphasised rationality.

- The movement also advocated self-respect marriage. Race was central to self-respect concept, which argued that the non-Brahmin Dravidian people had been systematically subjugated by **Aryan Brahmins over the course of their long history**.
- **The Self-Respect Movement championed not only the cause of the non-Brahmin Hindus**, but also that of the Muslims. The Self-Respect Movement extolled the lofty principles of Islam such as equality and brotherhood.
- They exhorted the Muslims to admit into their fold the depressed sections of the Hindu society, in order that they might enjoy the equality and brotherhood of Islam. Muslim elite considered the Tamil Muslims as Dravidians.
- Yet Periyar did not hesitate to attack certain customs like wearing of purdah by Muslim women. He wanted the Dravidian Muslims to follow Mustapha Kemal Pasha of Turkey and Amanullah of Afghanistan who initiated reforms in Islamic society.

Periyar E.V.R.

- **Periyar E.V. Ramasamy (1879– 1973)** was the founder of the Self-Respect Movement. He was the son of a wealthy businessman in **Erode, Venkatappa and Chinna Thayammal**. Though possessing little formal education, he engaged in critical discussions with scholars, who used to be patronised by his devout father.
- As a young man, he once ran away from home and spent many months in Varanasi and other religious centres. The firsthand experience of orthodox Hindu religion led to his disillusionment with religion.
- On his return, he took care of his family business for some years. His selfless public service and forthrightness made him a popular personality.
- He held different official positions of Erode that included the Chairmanship of **Municipal Council (1918–1919)**. In the context of the rise of the non Brahmin Justice Party after 1917, the Congress inducted non-Brahmin leaders such as Periyar and P. Varadarajulu, at the initiative of C. Rajaji.
- Periyar resigned all the government positions to support the **Non Cooperation Movement (1920–1922)**.
- He gave up his profitable business and became an active member of the Congress. He promoted khadi and sold it on the streets of Tamil Nadu. He cut down 500 coconut trees in his farm to support the campaign for prohibition.
- He held the positions of Secretary and President of the Tamil Nadu Congress Committee. As president of the Tamil Nadu Congress Committee, Periyar proposed a resolution regarding the rights of **“Untouchables” to temple entry**.
- **In the name of “caste dharma” the “lower caste” people were denied access to the temples and the streets surrounding the temple.**
- In Vaikom (a town in the then Princely State of Travancore and in present day Kerala), people protested against this practice.

- In the initial stages George Joseph of Madurai played big role. After the local leaders were arrested Periyar led the movement and was imprisoned. People hailed him as **Vaikom Virar (Hero of Vaikom)**.
- In the meantime, he was disturbed by the castebased discrimination in the dining hall at the Cheranmadevi Gurukulam (school), which was run by V.V.Subramaniam (a Congress leader) with the financial support of the Tamil Nadu Congress Committee.
- Periyar was disappointed when, despite his objections and protests against this discrimination, the Congress continued to support the iniquitous practice in the Gurukulam.
- Periyar was keen on the introduction of reservation in representative bodies such as the legislative council for non-Brahmins. He wanted to pass the resolution in the annual conference of the **Tamil Nadu Congress Committee in 1925 at its Kanchipuram** session but in vain.
- The Congress's inability in addressing these concerns made him quit the Congress in 1925.
- Following his disillusionment, Periyar started the Self-Respect movement in 1925. Periyar understood the relevance of mass communication in spreading rationalist thought.
- He started a number of newspapers and journals such as **Kudi Arasu (Democracy) (1925), Revolt (1928), Puratchi (Revolution) (1933), Paguththarivu (Rationalism) (1934), and Viduthalai (Liberation) (1935)**.
- Kudi Arasu was the official newspaper of the SelfRespect Movement. It brought out the multiple voices and ideas of Non-Brahmins, women and religious minorities.
- Usually, Periyar wrote a column and expressed his opinion on social issues in each of its issues. He frequently wrote columns under the pseudonym of Chitraputtiran.
- Over the years, Periyar visited many countries and interacted with intellectuals all over.
- He visited **Singapore and Malaya (1929– 1930, 1954), Egypt, U.S.S.R. (modern Russia), Greece, Turkey, Germany, England, Spain, France and Portugal (1931–32), and Burma (1954 to attend the 2500th birth Anniversary of the Buddha)**.
- His experience of travelling in the Soviet Union and Europe carried Periyar towards socialist ideals.
- Periyar had a close relationship with Singaravelar who is considered the first communist of south India and a pioneer of Buddhism.
- In 1936, Periyar got Dr. B. R. Ambedkar's Annihilation of Caste translated into Tamil immediately after it was written. He also supported Ambedkar's demand for separate electorates for scheduled castes.
- In 1937, in opposition to the Rajaji's government's move to introduce compulsory Hindi in schools, he launched a popular movement to oppose it. The **anti-Hindi agitation (1937–39)** had a big impact on Tamilnadu's politics. Periyar was imprisoned for his role in the movement.
- When he was still in jail, Periyar was elected the president of the Justice Party. Thereafter the Justice Party merged with the Self-Respect Movement. It was rechristened as **Dravidar Kazhagam (DK) in 1944**.

- **Rajaji, the Chief Minister of Madras State (1952–54)**, introduced a vocational education programme that encouraged imparting school children with training in tune with their father's occupation.
- Periyar criticised it as Kula Kalvi Thittam (caste-based education scheme) and opposed it tooth and nail. His campaigns against it led to the resignation of Rajaji. **K. Kamaraj became Chief Minister of the Madras State.**
- **Periyar died at the age of ninety four (1973).** His mortal remains were buried at Periyar Thidal, Madras.

Periyar's Anti-Hindi Stance

- Periyar emphasised that the caste system in south India is linked with the arrival of Brahmins from the North.
- Ancient Tamil society, he said, had a different stratification based on **tinais (regions)**, determined by natural surroundings and the means of livelihood or occupation of the people.
- Anti-north Indian campaigns had made Periyar to take an anti-Hindi stand.

Periyar on Religion

- Periyar's experiences taught him that it was necessary to eradicate religion in order to impart progress and justice.
- Periyar advocated atheism to deconstruct the established practices of faith, culture and custom. **Periyar wanted religion to be replaced by rationalism.** 'Religion means you accept superstitious beliefs', he asserted.
- Periyar spent his entire life campaigning against superstitions through Thinkers or Rationalists Forums he had formed.
- Periyar objected to the hereditary priesthood in temples. He argued that eligible individuals, who have a proper religious knowledge, should become priests rather than being based on caste.
- He encouraged the people to boycott the Brahmin priests and their Vedic rituals. He advocated inter-caste and Self-Respect Marriages devoid of any such rituals.

Periyar, a Feminist

- Periyar was critical of patriarchy. He condemned child-marriage and the devadasi system (institution of temple girls).
- Right from 1929, when the Self-respect Conferences began to voice its concern over the plight of women, Periyar had been emphasising women's right to divorce and property. Periyar objected to terms like **"giving in marriage"**.
- This, he said, treats woman as a thing. He wants it substituted by **"valkaithunai,"(companion)** a word for marriage taken from the Tirukkural.

- Peiyar's most important work on this subject is *Why the Woman is Enslaved?* Periyar believed that property rights for women would provide them a social status and protection.
- He welcomed equal rights for males and females in property, guardianship and adoption. He was a strong champion of birth control and contraception, and said that motherhood was a burden to women.
- In 1989, Government of Tamil Nadu fulfilled the dream of radical reformers by the introduction of the **Hindu Succession Tamil Nadu Amendment Act of 1989**, which ensured the equal rights to ancestral property for women in inheritance.
- This Act became a trendsetter and led to similar legislation at the national level.

Rettaimalai Srinivasan

- **Rettaimalai Srinivasan (1859–1945)**, popularly known as Grandpa (Thatha), was born in 1859 at Kanchipuram.
- He fought for social justice, equality and civil rights of the marginalised in the caste order. He was honoured with such titles as **Rao Sahib (1926)**, **Rao Bahadur (1930)** and **Divan Bahadur (1936)** for his selfless social services.
- His autobiography, **Jeeviya Saritha Surukkam (A Brief Autobiography)**, published in 1939, is one of the earliest autobiographies.
- Rettaimalai Srinivasan who had experienced the horrors of untouchability worked for the progress of the deprived castes. He founded the **Adi Dravida Mahajana Sabha in 1893**.
- He served as president of the Scheduled Castes' Federation and the Madras Provincial Depressed Classes' Federation. He constantly engaged in discussions with leaders of the Indian National Congress and the Justice Party on questions involving the depressed castes.
- Rettaimalai Srinivasan met Gandhi in South Africa and was closely associated with him. He became a member of the Madras Legislative Council in 1923 and influenced the Justice Party to take affirmative action to safeguard the interests of the depressed and deprived sections of the society.
- A close associate of Dr B.R. Ambedkar, he participated in the first and second Round Table Conferences held in **London (1930 and 1931)** and voiced the opinions of the marginalised sections of the society. He was a signatory to the **Poona Pact of 1932**.

M.C. Rajah

- **Mylai Chinnathambi Raja (1883–1943)**, popularly known as M.C. Rajah, was one of the prominent leaders from the "depressed class".
- Rajah started his career as a teacher and wrote different textbooks for schools and colleges. He was one of the founding members of the South Indian Liberal Federation (Justice Party). He became the first elected **Legislative Council Member (1920–26)** from the depressed classes in Madras province.

- He functioned as the Deputy Leader of Justice Party in the Madras Legislative Council. Later, he left the Justice Party. M.C. Rajah demanded abolition of untouchability and organised a number of political meetings and conferences for the “**untouchable castes**” to have access to public wells and pathways to burial grounds.
- In addition, he advocated the use of such as terms, Adi-Dravida and AdiAndhra. In 1928, he founded the All India Depressed Classes Association and was its long time leader.
- Rajah had earlier called for separate electorate; but after the Poona Pact, he supported the idea of joint electorates.

Labour Movements in Tamil Nadu

- The **First World War (1914–18)** provided stimulus to industrial growth in India. These industries, catering to war time needs, had employed a huge number of workers.
- At the end of the War there were retrenchments across the industries, as the war time requirements receded. Combined with high prices, this gave a momentum to the labour movement.
- The nationalists realising the value of organised labour power began to support the cause of labour. **B.P. Wadia, M. Singaravelar, Thiru. Vi. Kalyanasundaram** and others initiated the formation of labour unions in the Madras Presidency.
- In **1918**, India's first organised trade union, the Madras Labour Union, was formed. The first All India Trade Union Conference (AITUC) was held on 31 October 1920 in Bombay. The delegates discussed several resolutions.
- These included a demand for protection from police interference in labour disputes, the maintenance of an unemployment register, restriction on exporting foodstuffs, compensation for injuries, and health insurance.
- In addition, the delegates demanded that Indian workers be given some representation in the government, just as employers had representatives on legislative councils. **M. Singaravelar (1860–1946)**, was a pioneer in the labour movement activities in the Madras presidency.
- He was born in Madras and graduated from the Presidency College, University of Madras. He advocated Buddhism in his early life. He knew many languages, including **Tamil, English, Urdu, Hindi, German, French and Russian** and wrote about the ideas of **Karl Marx, Charles Darwin, Herbert Spencer and Albert Einstein in Tamil**.
- He organised the first ever celebration of **May Day in 1923**. He was one of the early leaders of the Communist Party of India.
- He published a Tamil newspaper, **Thozhilalan (Worker)** to address the problems of the working class. He was closely associated with Periyar and the SelfRespect Movement.

Language Agitation before Indian Independence

- In general, language is a dominant symbol of identity and it is associated with culture and sentiments of any society. Tamil regained its prominence in the latter half of the nineteenth and early twentieth century.
- **Maraimalai Adigal's** Pure Tamil Movement, the language reforms of Periyar and Tamil Isai Movement helped to galvanise the Tamil language.
- Tamil renaissance that led the Dravidian consciousness made a great intervention in the development of modern Tamil language and its art forms.
- Agamic temples did not permit rituals in Tamil. Tamil songs had a marginal place in musical concerts. Abraham Pandithar systematically studied the history of Tamil music and attempted to reconstruct the ancient Tamil musical system.
- He founded the **Tanjore Sangitha Vidya Mahajana Sangam in 1912** and it became the kernel of the Tamil Isai Movement (Tamil Music Movement). The movement gave importance to the singing of Tamil compositions in music concerts.
- The first Tamil Isai Conference was held in **1943**, to discuss the status of Tamil music. The implementation of Hindi as a compulsory language in Tamil Nadu, at various points of time, was seen as a threat to Tamil language and culture.
- C. Rajaji, the Premier of Madras Presidency, introduced Hindi as a compulsory subject in schools. This created a stiff opposition in Madras province.
- Periyar declared that the introduction of Hindi over Tamil would deny the Dravidians of their job opportunities. Maraimalai Adigal pointed out that the Tamil language would suffer with the introduction of Hindi.
- The anti-Hindi campaigners considered it an ideological battle against Brahminism and the hegemony of Sanskrit over Tamil.
- They saw Sanskrit as a vehicle for propagation of **Brahmanical ideology, there by preserving the caste hierarchies and gender inequalities.**
- The agitation was marked by massive protest meetings, demonstrations, and hunger strikes. Tens of thousands of people took part in the agitation.

Women's Movements

- There were several streams of women's movements and organisations established in the early twentieth century to address the question of women empowerment in Madras Presidency.
- **Women's India Association (WIA) and All India Women's Conference (AIWC)** are the important among them in Tamil Nadu.
- **WIA was started in 1917 by Annie Besant**, Dorothy Jinarajadasa and Margaret Cousins at Adyar, Madras. The Association published pamphlets and bulletins in different languages to detail the problems of personal hygiene, marriage laws, voting rights, child care and women's role in the public.

- In the meantime, **WIA formed the All India Women's Conference (AIWC) in 1927** to address the problem of women's education and recommended that the government implement various policies for the uplift of women. Women's liberation was one of the important objectives of the Self-Respect Movement.
- Self respecters led by Periyar E.V.R. worked for gender equality and gender sensitisation of the society. The movement provided a space for women to share their ideas. There were several women activists in the movement.
- **Muthulakshmi Ammaiyar, Nagammai, Kannamma, Nilavathi, Muvalur Ramamirtham, Rukmani Ammal, Alarmelmangai Thayammal, Nilambikai, and Sivakami Chidambaranar** are prominent among them.
- There was a custom of dedicating young girls to the Hindu temples as a servant of God, known as devadasi.
- Though intended as a service to god it soon got corrupted leading to extensive immorality and abuse of the women. Dr. Muthulakshmi Ammaiyar, was in the forefront of the campaign pressing for a legislation to abolish this devadasi system.
- The **Madras Devadasis (Prevention of Dedication) Act 1947** was enacted by the government.

More to Know:

1. In 1930, **Muthulakshmi Ammaiyar** introduced in the Madras Legislative Council a Bill on the "prevention of the dedication of women to Hindu temples in the Presidency of Madras". The Bill, which later became the Devadasi Abolition Act, declared the "**pottukattu ceremony**" in the precincts of Hindu temples or any other place of worship unlawful, gave legal sanction to devadasis to contract marriage, and prescribed a minimum punishment of five years' imprisonment for those found guilty of aiding and abetting the devadasi system. The Bill had to wait for over **15 years** to become an Act.
2. The Non-Brahmin Manifesto pointed out that though "**Not less than 40 out of the 41 1/2 millions of the Madras Presidency were nonBrahmins**", "in what passes for the politics in Madras they have not taken the part to which they are entitled". Arguing that a government conducted on "**true British principles of justice and equality of opportunity**" was in the best interests of India, it declared, that "**we are deeply devoted and loyally attached to British rule**".

10th Social Science Lesson 17 Notes in English

17. Food Security and Nutrition

Introduction

Food is defined as any substance that people eat and drink to maintain life and growth. Food security would denote a person's ability to eat enough, stay active and lead a healthy life.

Food Security

- The United Nation's Food and Agriculture Organisation defines food security as follows: **"Food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food which meets their dietary needs and food preferences for an active and healthy life."**
- (FAO, 2009) While this comprehensive definition highlights the need for food to be nutritious, in addition to that there are certain other aspects that are required to achieve nutrition security.
- According to eminent agricultural scientist M.S.Swaminathan, nutrition security is: "physical, economic and social access to a balanced diet, safe drinking water, environmental hygiene, primary health care and primary education".
- The concept of food security has continuously evolved over the last five decades or so. Initially it referred to the overall food supply for a global, regional or national context.
- From this idea of food security, which means food supply/food production that addressed the overall adequacy, it became clear that the term had to be relevant at the community, household and individual level.

Basic components of food and nutrition security

The term was broadened to include the three basic components of food and nutrition security. They are availability, access and absorption:

1. Availability of food is physical availability of food stocks in desired quantities, which is a function of domestic production, changes in stocks and imports;
2. Access to food is primarily a matter of purchasing power and is therefore closely linked with the capabilities and employment opportunities to earn. Capabilities and opportunities in turn are related to one's access to assets and education.
3. Absorption of food is the ability to biologically utilise the food consumed. Several factors such as nutrition, knowledge and practices, safe and hygienic environmental conditions allow for effective biological absorption of food and health status.

Availability and Access to Food Grains

Triennium average centered around	Area (Million ha)	Production (Million tonnes)	Yield (Kg/ha)
1951-52	98.79	54.00	546.65
1971-72	122.07	103.54	848.18
1991-92	124.29	174.75	1406.02
2013-14	122.63	258.27	2106.00
2017-18	126.98	279.51	2201.00

Source: Agricultural Statistics at a Glance, 2018; Economic Survey, 2017-18.

- Thus food security for people in a country is not only dependent on the quantum of food available but also on the ability of people to purchase/access food and to stay in appropriate healthy environment.
- Just as other developmental issues, food security of people is also related to a country's overall development process. After Independence, India chose to adopt a planned developmental model.
- After an initial focus on agriculture, **industrialisation was given priority**. The recurrent droughts experienced by India pushed her to be dependent on imports of food grains. However, the available foreign exchange reserve could not permit open market purchases and import of grains.
- India had to plead for food grains from richer countries at concessional rates. United States of America extended assistance through its **Public Law 480 (PL 480)** scheme to India during early **1960s**. This situation was popularly known as '**Ship to Mouth**' existence.
- A country with a massive population growing hungry was perceived to be a potential candidate for revolution. The American administration and philanthropic organisations like Ford Foundation formulated a plan to increase food production in the country by introducing **High Yielding Varieties (HYV)** of wheat and rice.
- This programme was implemented in select districts where irrigation was assured. The results were promising and the programme was extended to cover a larger number of districts.
- Thus, Green Revolution was born in the country paving way for self-sufficiency in food grain production. Increased food grain production was made possible by an increase area cultivated with HYV of rice and wheat as also an increase in the yield of these major cereal crops.
- Area under food grains was a little more than 98 million hectares during early **1950s**. The country was producing just 54 million tonnes of food grains then with an average yield of food grains of **547 kg per hectare**.
- The food situation has steadily improved over a period of 65 years. Area under foodgrain cultivation has grown to 122 million hectares, with an increase of five-fold increase in food grain production.

- Yield of food grains has increased four-fold between the time of independence and at present. This growth in food grain production was made possible by the HYV programme, which was implemented as a package.
- Apart from introducing fertiliser-responsive high-yielding varieties of rice and wheat, it ensured the availability of subsidised chemical fertilisers for the farmers.
- Cheaper farm credit was disbursed to farmers through co-operative banks and societies. Minimum support price (MSP) for the crops were announced at the beginning of the season and the state procured the harvested grains through the Food Corporation of India (FCI).
- The FCI had built huge storage godowns and built buffer stocks of food grain during the harvest season to be distributed all through the year. The rapid increase in food grain production was accompanied by appropriate technological interventions in the dairy, poultry and fisheries sectors.
- As a result, the milk production in the country witnessed an eight-fold increase, egg production grew 40-fold and fish production by **13-fold between the time of Independence and mid-2000s**.
- However, India could not succeed in attaining self-sufficiency in the production of pulses and oil seeds. Therefore, India depends on imports to meet the requirements of people.

Public Distribution System

- The increase in food grain production need not result in increase in access to food for all. Given the unequal distribution of income and the level of poverty that persists in Indian economy, the government took steps to distribute food grains at subsidised rates through the Public Distribution System (PDS).
- The nature, scope and functioning of PDS varies from state to state While Tamil Nadu has adopted an 'Universal' PDS, the rest of the states in India had a 'Targeted' PDS. Under universal PDS all the family ration card holders are entitled to the supplies from PDS.
- In the targeted PDS, the beneficiaries are identified based on certain criteria and given their entitlements, leaving out the rest.
- Both the Union and the State governments subsidised the supplies distributed through PDS. The level and quantum of subsidy also varied across states. Subsequently, the **National Food Security Act (NFSA)** was passed by the Indian parliament in **2013**.
- The NFSA covers 50% of urban households and 75% of the rural households. These households are known as priority households identified based on a set of criteria.
- Priority households of this country now have the right to food supplied through PDS. The Union government supplies rice at the rate of ` 3 per kg, wheat at the rate of ` 2 per kg, and **millets at the rate of ` 1 per kg under NFSA**.
- Tamil Nadu continues to have the universal system of PDS and supplies rice at free of cost to all card holders.

Role of Consumer Cooperatives in Food Security

- Consumer cooperatives play an important role in the supply of quality goods at responsible rates to common people. There is a three-tier structure of consumer cooperative societies in India.
- They are primary consumer cooperative societies. Central consumer cooperative stores and state level consumer federations. More than **50,000 village** level societies are engaged in the distribution of consumer goods in rural areas.
- There are many benefits to consumer cooperatives such as health care, insurance, housing etc.. This scheme is playing an important role in food security in India.
- For example out of all fair price shops running in Tamil Nadu, **around 94%** are being run by cooperatives.

Purchasing Power

Purchasing power is the value of a currency expressed in terms of the amount of goods or services that one unit of money can buy. Price increases purchasing power declines and vice versa.

Factors affecting Purchasing Power

Over population

The population growth rate in India is high as **1.7 per 1000**. Large population leads to increasing demand, but supply was not equal to the demand. So, the normal price level will be going an higher. So it affect purchasing power, especially in rural population.

Increasing prices of essential goods

Even though there has been a constant growth in the GDP and growth opportunities in the Indian economy, there have been steady increase in the prices of essential goods. The continuous rise in the prices erodes the purchasing power and adversely affect the poor people. During **2015–16 an average rate of 2% food inflation**, the prices of pulses rose by about 40%.

Demand for goods

When demand for goods increases, the price of goods increases then the purchasing power is affected.

Price of goods affect the value of currency

When the price increases the purchasing power decreases and finally the value of currency decreases and vice versa.

Production and supply of goods

The production and supply of goods decline, the price of goods increases, then the purchasing power is affected.

Poverty and inequality

- There exists a huge economic disparity in the Indian economy. The proportion of income and assets owned by top **10% of Indian goes on increasing**. This has led to an increase in the poverty level in the society.
- Generally purchasing power is affected by poverty and unequal distribution of wealth also. Purchasing power affects every aspect of economics, from consumers buying goods to investors and stock prices to a country's economic prosperity.
- As such, a country's government institutes policies and regulations to protect a currency's purchasing power and keep an economy healthy. One method to monitor purchasing power is through the Consumer Price Index.

Agricultural Policy in India

- The new agricultural policy based on export of agricultural goods was announced by the Central government in **2018**.
- This policy states that the government has decided to remove export restrictions on most organic and processed agricultural products.
- The main reason is to give an assurance that organic or processed agricultural products will not be under any export restrictions such as export duty, export bans and quota restriction.
- Agricultural policy of a country is mostly designed by the Government for raising agricultural production and productivity and also for raising the level of income and standard of living of farmers within a definite time frame.
- This policy is formulated for all round and comprehensive development of the agricultural sector.

The following are some of the important objectives of india's agricultural policy

Raising the productivity of inputs

One of the important objectives of India's agricultural policy is to improve the productivity of inputs so purchased like, **HYV seeds, fertilisers, pesticides, irrigation projects etc.**

Raising value-added per hectare

Agricultural policy is to increase per hectare value-added rather than raising physical output by raising the productivity of agriculture in general and productivity of small and marginal holding in particular.

Protecting the interests of poor farmers

Agricultural policy is proposed to protect the interests of poor and marginal farmers by abolishing intermediaries through land reforms, expanding institutional credit support to poor farmers etc.

Modernising agricultural sector

Here the policy support includes the introduction of modern technology in agricultural operations and application of improved agricultural inputs like HYV seeds, fertilizers etc.

Environmental degradation

Agricultural policy of India has set another objective to check environmental degradation of natural base of Indian agriculture.

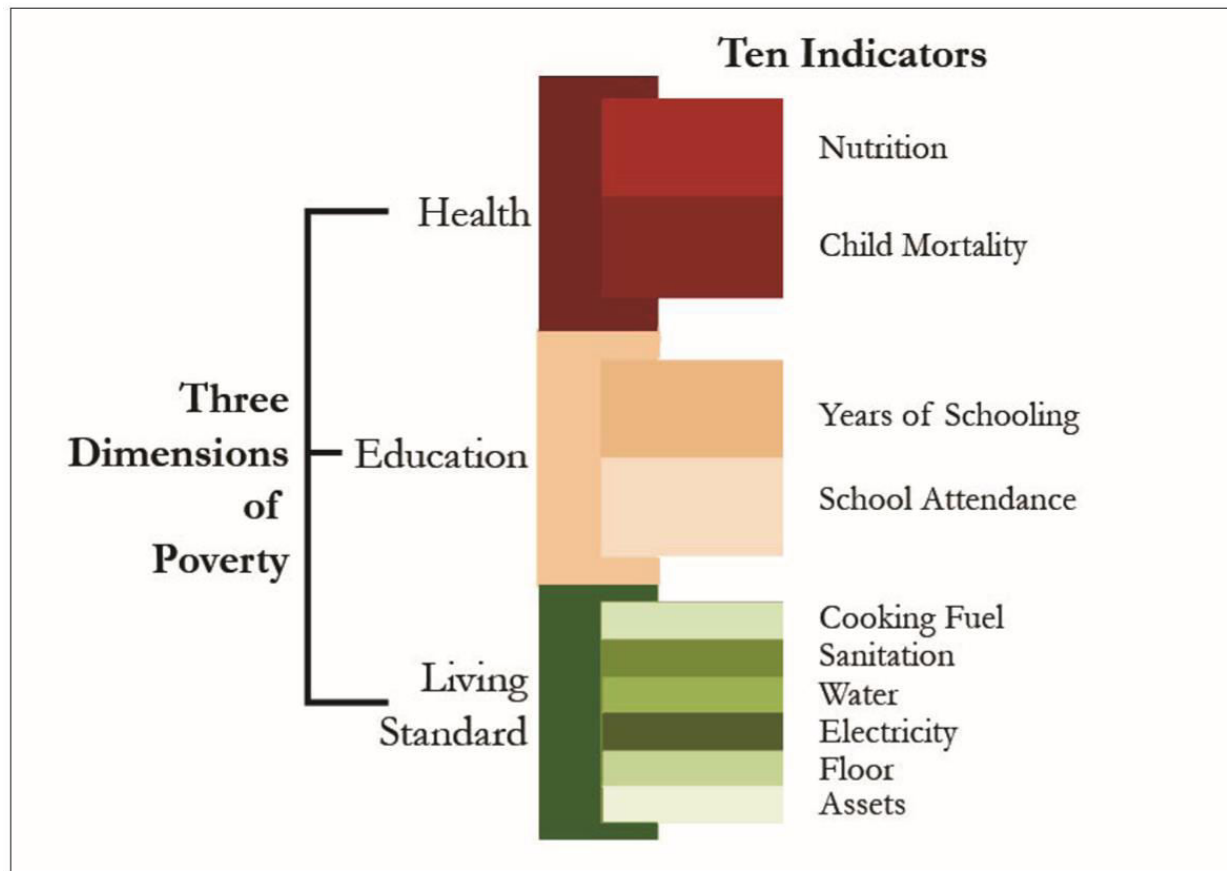
Removing bureaucratic obstacles

The policy has set another objective to remove bureaucratic obstacles on the farmers' co-operative societies and self-help institutions so that they can work independently.

Multi-dimensional Nature of Poverty

- Multi-dimensional poverty measures can be used to create a more comprehensive picture. They reveal who is poor, how they are poor and the range of disadvantages they experience.
- As well as providing a headline measure of poverty, multi-dimensional measures can be broken down to reveal the poverty level in different areas of a country, and among different subgroups of people.
- The Multi-dimensional Poverty Index (MPI) was launched by **the United Nations Development Programme (UNDP) and the Oxford Poverty Human Development Initiative (OPHI) in 2010.**
- The basic philosophy and significance of MPI is that it is based on the idea that poverty is not unidimensional, and that it is rather multi-dimensional.
- Multi-dimensional poverty is made up of several factors that constitute poor people's experience of deprivation such as **health, education, living standards, income, disempowerment, quality of work and threat from violence.**

Multi-dimensional Poverty Index 2018 in India



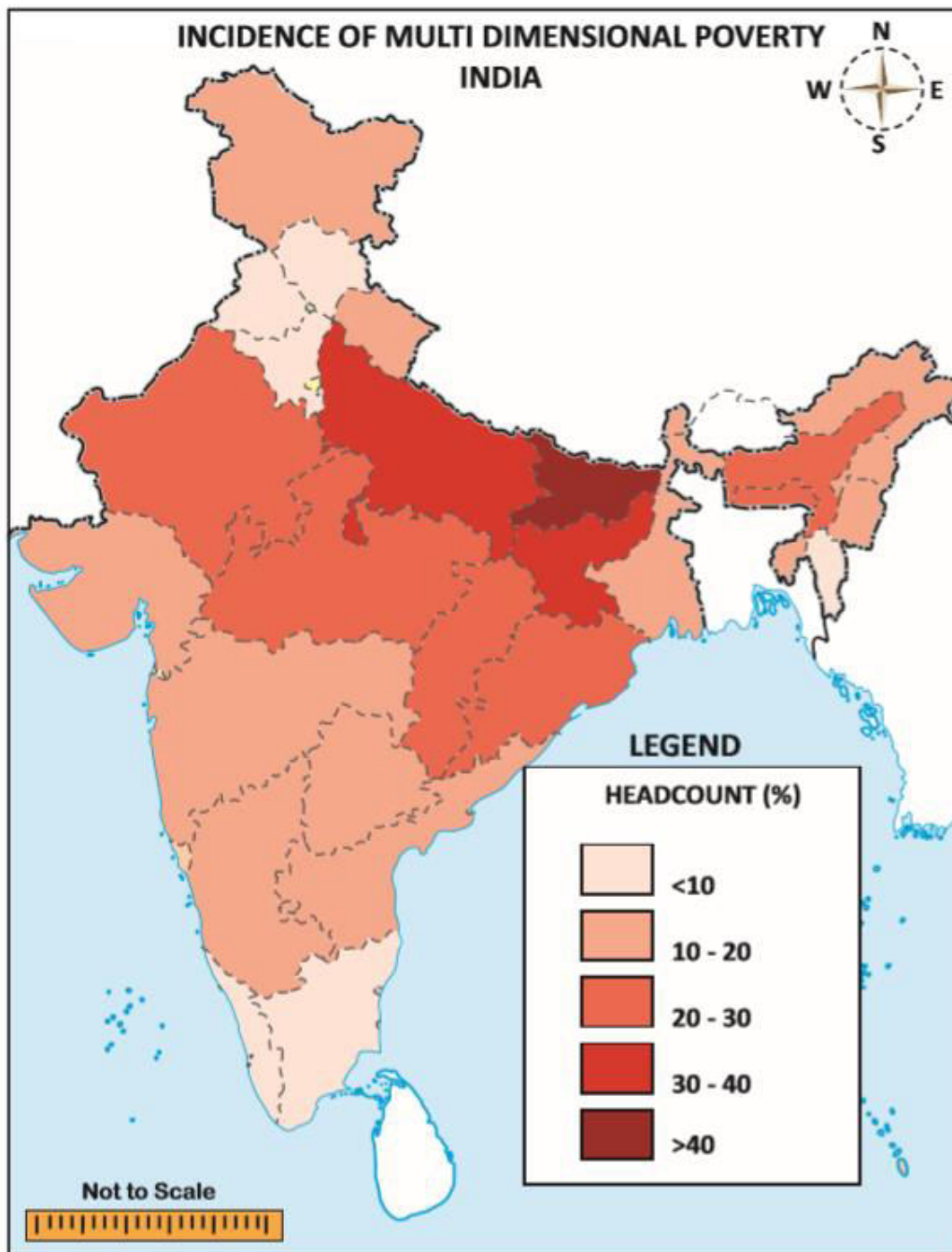
Multi-dimensional Poverty Index 2018 report prepared by the United Nations Development Programme (UNDP) and the Oxford Poverty and Human Development Initiative makes the following observations about India.

1. India has reduced its poverty rate drastically from 55% to 28% in 10 years, with 271 million people moving out of poverty between 2005-06 and 2015-16.
2. India still had 364 million poor people in 2015-16, the largest for any country, although it is down from 635 million in 2005-06.
3. Of the 364 million people who were MPI poor in 2015-16, 156 million were children whereas in 2005-06 there were 292 million poor children in India. This represents a 47% decrease or 136 million fewer children growing up in multi-dimensional poverty.
4. 80% of people belonging to ST were poor in 2005-06 and 50% of them were still poor in 2015-16.
5. Bihar with more than half its population in poverty was the poorest state in 2015-16.
6. The four poorest states Bihar, Jharkhand, Uttar Pradesh and Madhya Pradesh were still home to 196 million MPI poor people, which was over half of all the MPI poor people in India.
7. Kerala, one of the least poor regions in 2006, reduced its MPI by around 92%.

Multi-dimensional Poverty Index 2018 Report in Tamil Nadu**Top and Bottom MPI districts in Tamil Nadu**

S. No	Top 5 Districts	Rank	Bottom 5 Districts	Rank
1	Kancheepuram	1	Dharmapuri	32
2	Chennai	2	Perambalur	31
3	Cuddalore	3	Ramanathapuram	30
4	Coimbatore	4	Virudhunagar	29
5	Nagapattinam	5	Ariyalur	28

- Over the last decades, Tamil Nadu has made a significant progress in poverty reduction. The districts in Tamil Nadu are classified into three categories, namely high-poverty districts (more than 40% of the population living below poverty line), moderately poor districts (30% to 40%) and low level poverty districts (**below 30%**).
- After **1994**, poverty has declined steadily in both rural and urban areas of Tamil Nadu and the state has a smaller share of India's poor relative to its population. After 2005, the poverty reduction in this state has been faster than in many other states in India.
- Tamil Nadu leads in the poverty alleviation programmes during 2014–2017. Government of India is implementing many policies and programmes to eradicate poverty.
- These policies and programmes, if continued, will completely eradicate the poverty in the state. In future, Tamil Nadu can become a model of development in india.



Nutrition and Health Status

Status of Nutrition

- We noted earlier that food security includes nutrition security too. Though our country has reached self-sufficiency in food production, the nutrition status of the population has not seen corresponding levels of improvement.

- In 2015–16, 27% of the rural women and 16% of the urban women (in the age group of 15– 49 years) were counted as undernourished or chronically energy deficient by the National Family Health Survey.
- More than half of the women in the reproductive age group (15–49 years) in both rural and urban India were anaemic in 2015– 16. As regards children, about 60% of the rural and 56% of the urban children (in the age group of 6–59 months) are counted to be anaemic, in 2015– 16.
- About 41% of the rural and 31% of urban children are stunted, that is, they are not of the required height in correspondence to their age.
- Another indicator of nutrition deficiency among children is “**underweight**”, which is weight in relation to age. In India, in 2015–16, **about 20% of children (in the age group of 6–59 months) in rural and urban India are estimated to be underweight.**
- Thus, though our country has reached selfsufficiency in food production, we are yet to attain food security for all.

Nutrition and Health Status in Tamil Nadu

- Nutrition plays a crucial role in human health and well-being. At the national level, despite higher economic growth, improvements in human development indicators like nutrition levels of the population have been unacceptably slow.
- A large number of Indian children are stunted. A substantial number of Indian children and women are underweight, anaemic and suffer from micronutrient deficiencies.
- To address these concerns, the Central and state governments have been channelling substantial resources into various health and nutrition schemes and programmes like **Integrated Child Development Services (ICDS), mid-day meals, Reproductive and Child Health Programmes (RCH) and National Rural Health Mission (NRHM).**
- However, an effective scaling up of these efforts is required to mitigate the incidence of under-nutrition in the country.
- Tamil Nadu has played a pioneering role in bringing about significant changes in the health and nutrition status of children under six years of age, pregnant women, lactating mothers and adolescent girls.
- The Government of Tamil Nadu’s successive budget outlays for nutrition and health are the highest in the country.
- The performance of the ICDS scheme and the **Puratchi Thalaivar MGR Nutritious Meal Programme (PTMGRNMP)** in Tamil Nadu are considered one of the best in the country.
- The Government of Tamil Nadu’s policy for “A Malnutrition Free Tamil Nadu” guides the state’s long-term multi-sectoral strategy for eliminating malnutrition.
- The goal is “**reducing human malnutrition of all types to the levels of best performing countries**”. In Tamil Nadu, ICDS is being implemented through 54,439 Child Centres

(comprising 49,499 Anganwadi Centres and 4,940 Mini Anganwadi Centres) in 434 Child Development Blocks (**385 rural, 47 urban and 2 tribal**).

- With steady expansion into unreached areas, increasing coverage of marginalised groups, enhanced allocations and enlarged scope of services, ICDS is now considered to be one of the world's largest programmes of its kind and a model for the holistic development of the child.
- To ensure that services reach the intended beneficiaries, the programme has been universalised and convergence promoted with allied departments dealing with **health, education, drinking water, sanitation etc.**
- The PTMGRNMP is considered to be the largest noon meal programme in the country for combating malnutrition among children, increasing primary school enrolment and reducing dropout rates.
- Other states in the country have modelled their noon meal programmes along the lines of Tamil Nadu's pioneering efforts.

More to Know:

1. Some Nutrition Programmes in Tamil Nadu

Purachi Thalaivar M.G.R. Nutrition Meal Programme:

It is being implemented in the rural areas from 1 July 1982 and in urban areas for the school students from 1984, old age pensioners from 1983 and for pregnant women from 1995.

National Programme of Nutritional Support to Primary Education

General ICDS Projects and World Bank Assisted Integrated Child Development Services:

The services started in 1991 in 318 blocks covering 24 districts. In 1999 this extended to 318 rural blocks and 19,500 centres.

Pradhan Manthri Gramodaya Yojana Scheme (PMGYS):

In this scheme, nutrition supplementation in the form of weaning food is given to children in the age group of 6 months to 36 months in the unreached hamlets.

Tamil Nadu Integrated Nutrition Programme:

This project was started in 1980 targeting at 6 to 36 months old children and pregnant and lactating women.

Mid-Day Meal Programme:

This programme has been introduced for children between ages 2 and 14 attending balwadis or schools at the expense of ` 0.90 per beneficiary. This programme covered 5.57 crore children in 4,426 blocks.

2. Important ongoing Schemes in Tamil Nadu

1. Under **Dr. Muthulakshmi Reddy Maternity Benefit Scheme**, financial assistance to the tune of ` 12,000 is being disbursed to poor pregnant women with the aim of meeting expenses on nutritious diet, to compensate for loss of income during the delivery period and to avoid low birth weight of new born babies in three installments to those availing antenatal care, delivering and immunising the babies born in government institutions.
2. The **Chief Minister's Comprehensive Health Insurance Scheme** was launched in the state in 2011-12 with the aim to provide Universal Healthcare to All by providing free medical and surgical treatment in Government and private hospitals to any family whose annual income is less than ` 72,000 by meeting all expenses relating to the hospitalisation of the beneficiary.
3. **Tamil Nadu Health Systems Projects (TNHSP)** has launched ambulance services free of cost (The 108 Emergency Ambulance Service).
4. The **School Health Programme** mainly emphasises on providing comprehensive healthcare services to all students studying in Government and Government-aided schools.
5. The **National Leprosy Eradication programme** is being implemented in the state with the aim to detect and to provide sustained regular treatment to all leprosy patients.

3. Boosting peer group engagement

- Efforts will be made to strengthen the '**Padhumaiyar Kuzhu**' for empowering girls and making them persuasive catalysts of change
- Innovative approaches will be considered for drawing adolescent girls into the programme, connecting them with various services and encouraging their participation in activities. A mobile centre was rolled for widening the reach of services in nine districts
- Distribution and monitoring of the '**Padhumaiyar card**' will be further strengthened

4. TN commitment on Nutrition

- **Amartya Sen, Noble Prize winning Economist**, has observed that in India, hunger is not enough of a political priority.
- The public expenditure on health is very low and funds allocated to programmes like child nutrition remain unspent.
- It is only in States like Tamil Nadu that he sees a political will and commitment to tackle these issues by setting goals like achieving the status of a "**Malnutrition Free State**".

5. Purchasing Power Parity (PPP)



- A concept related to purchasing power is purchasing price parity (PPP). PPP is an economic theory that estimates the amount that needs to be adjusted to the price of an item, given exchange rates of the two countries, in order for the exchange to match each currency's purchasing power.
- PPP can be used to compare countries income levels and other relevant economic data concerning the cost of living, or possible rates of inflation and deflation.
- Recently, **India became the third largest economy in terms of PPP**. China became the largest economy, pushing the US to the second position.

6. Fair Price Shops

- At present, 33,222 Fair Price Shops are serving 1.98 crore families. Out of 33,222 Fair Price shops, 31,232 are run by the cooperative societies, 1,394 are run by the Tamil Nadu Civil Supplies Corporation and **596** are run by women self-help groups.
- To improve accessibility to PDS, it is necessary that they are located in close proximity to habitations.
- Accordingly, it has been proposed to open new fair price shops so that, no card holder walks more than 1.5 km.

7. National Food Security Act in Tamil Nadu

- On **1 November 2016**, Tamil Nadu became the last state in the country to implement the National Food Security Act after holding out for three years.

- In a government order issued on **27 October**, the state specified that while it was enforcing the law, it would be modifying its provisions

8. Bio Metric Smart Family Cards

- The Government of Tamil Nadu has declared that **SMART family cards** will be issued in lieu of existing family cards.
- It has also been mentioned that the Director of Census Operations under the National Population Registry is conducting bio-metric capturing of **10 fingerprints**, two iris and face scan of citizens to issue Unique Identification Number.
- After completion of this process of bio-metric capturing, it has been proposed to adopt this data to issue bio-metric SMART family cards.
- The advantage is that since it is based on unique identity, the data duplication of members and bogus cards can be eliminated.

9. Buffer Stock

- Buffer stock is the stock of food grains, namely wheat and rice, procured by the government through the Food Corporation of India (FCI).
- The FCI purchases wheat and rice from the farmers in states where there is surplus production. The farmers are paid a pre-announced price for their crops. This price is called **Minimum Support Price (MSP)**.
- The MSP is declared by the government every year before the sowing season to provide incentives to farmers for raising the production of these crops.
- The purchased foodgrains are stored in granaries. Buffer stock is done to distribute foodgrains in the deficit areas and among the poorer strata of the society at a price lower than the market price also known as the Issue Price.
- This also helps resolve the problem of shortage of food during adverse weather conditions or during the periods of calamity.

10. Minimum Support Price

- Minimum Support Price is a price fixed by an expert group for a particular crop by considering various costs involved in the cultivation of that crop.
- After announcing the MSP, the State will open procurement centres in places where these crops are widely grown.
- However, the farmers are free to sell in the open market if they get a better price for their crop produce.
- On the other hand, if the open market price is lower than the MSP, the farmers would get an assured price (the MSP) by selling their produce to the FCI.

- Thus, with the implementation of MSP farmers are certain about the price they would get at the end of the crop season. Further, farmers also get insulated against any price crash during the harvest season.

10th Social Science Lesson 18 Notes in English

18. Government and Taxes

Introduction

- Tax is levied by government for the development of the state's economy. The revenue of the government depends upon **direct and indirect taxes**.
- Direct taxes are levied on income of the persons and the indirect taxes are levied on goods and services by which the government mobilises its "**financial resources**".

Role of Government in Development Policies

The role of government and development policies

In India, the three levels of governments, namely, **union, state and local**, have been carrying out various functions for the benefit of people and society at large. These roles are into divided into seven categories for easy understanding.

Defence:

This is an essential security function to protect our nation from our enemies. We know that we have three services, namely, **army, navy and air force**. The Union government is responsible for creating and maintaining defence forces.

Foreign policy:

In today's world, we need to maintain friendly relationships with all the other countries in the world. India is committed to world peace. We should also maintain **cordial economic relationships through exports and imports**, sending and receiving investments and labour. This service is also provided by the Union government.

Conduct of periodic elections:

- India is a democratic country. We elect our representatives to Parliament and state assemblies.
- The Union government creates laws and administrative system and conducts elections to these two legislature institutions. Similarly the state governments conduct elections to local bodies within the state.

Law and order:

- Both the Union and state governments enact numerous laws to protect our rights, properties and to regulate our economy and society.

- To settle disputes, the Union government has a vibrant judicial system consisting of courts at the **national, state and lower levels and state governments** take the responsibility for administering the police force in respective states.

Public administration and provision of public goods:

- The government generally administers the economy and society through various departments, for example, revenue department, schools, hospitals, rural development and urban development.
- The list of departments with the Union and state governments are available in the public domain. The local governments provide public goods like **local roads, drainage, drinking water and waste collection and disposal**.

Redistribution of income and poverty alleviation:

- Governments collect various taxes to finance the various activities mentioned earlier.
- The taxes are collected in a way that the high-income people can bring in more tax revenue to the government than the poor.
- The governments also spend money such that the poor are given some basic necessities of life like **food, shelter, clothing education, health care and monthly income to the very poor persons**.
- Thus collecting taxes and spending for the poor is how the government redistributes income and introduces measures to reduce poverty.

Regulate the economy:

- The Union government, through the Reserve Bank of India, controls money supply and controls the interest rate, inflation and foreign exchange rate.
- The main objective is to remove too much of fluctuation in these rates.
- The Union also controls the economy through various other agencies such as **Securities Exchange Board of India and Competition Commission of India** All the governments in India run public sector enterprises to provide important goods and services at affordable rates to the people.

Tax

- The origin of the word "**tax**" is from "**taxation**," which means an **estimate**. Taxation is a means by which governments finance their expenditure by imposing charges on citizens and corporate entities.
- The main purpose of taxation is to accumulate funds for the functioning of the government machinery.
- Tax has come into forefront on account of the new concept of "**welfare state**". Modern governments do not confine themselves to law and order only.

- The importance of public finance (tax) has vastly increased in recent years. Taxes are compulsory payments to government without expectation of direct return (or) benefit to the tax payer.
- Prof. Seligman also defined a tax as **“a compulsory contribution from a person to the government to defray the expenses incurred in the common interest of all, without reference to special benefits conferred.”**

Why Taxes?

- The levying of taxes aims to raise revenue to fund governance or to alter prices in order to affect demand. States and their functional equivalents throughout history have used money provided by taxation to carry out many functions.
- Some of these include expenditures on economic infrastructure (**transportation, sanitation, public safety, education, healthcare systems, to name a few**), military, scientific research, culture and the arts, public works and public insurance and the operation of government itself.
- A government's ability to raise taxes is called its fiscal capacity. When expenditures exceed tax revenue, a government accumulates debt. A portion of taxes may be used to service past debts.
- Governments also use taxes to fund welfare and public services. These services can include education systems, pensions for the elderly, unemployment benefits and public transportation.
- **Energy, water and waste management systems are also common public utilities.** According to the proponents of the theory of money creation, taxes are not needed for government revenue, as long as the government in question is able to issue fiat money.
- The purpose of taxation is to maintain the stability of the currency, express public policy regarding the distribution of wealth, subsidising certain industries or population groups or isolating the costs of certain benefits such as highways or social security.

Tax system

- Every type of tax has some advantages and some disadvantages. So we have a tax system, that is, a collection of variety of taxes.
- All countries use a variety of taxes. There are some characteristics of tax system that economists think should be followed while designing a tax system.
- These characteristics are called as canons of taxation. From **Adam Smith**, many economists have given lists of canons of taxation. It is important to recall those common among them for discussion here.

Canon of equity

- Since tax is a compulsory payment, all economists agree that equity is the cardinal principle in designing the tax system.
- The equity principal says that the rich should pay more tax revenue to government than the poor, because rich has more ability than the poor to pay the tax.
- Moreover, after payment of tax, you will find the economic difference is reduced between the rich and the poor.
- You can do an exercise to find out which of the taxes adhere to the canon of equity.

Canon of Certainty

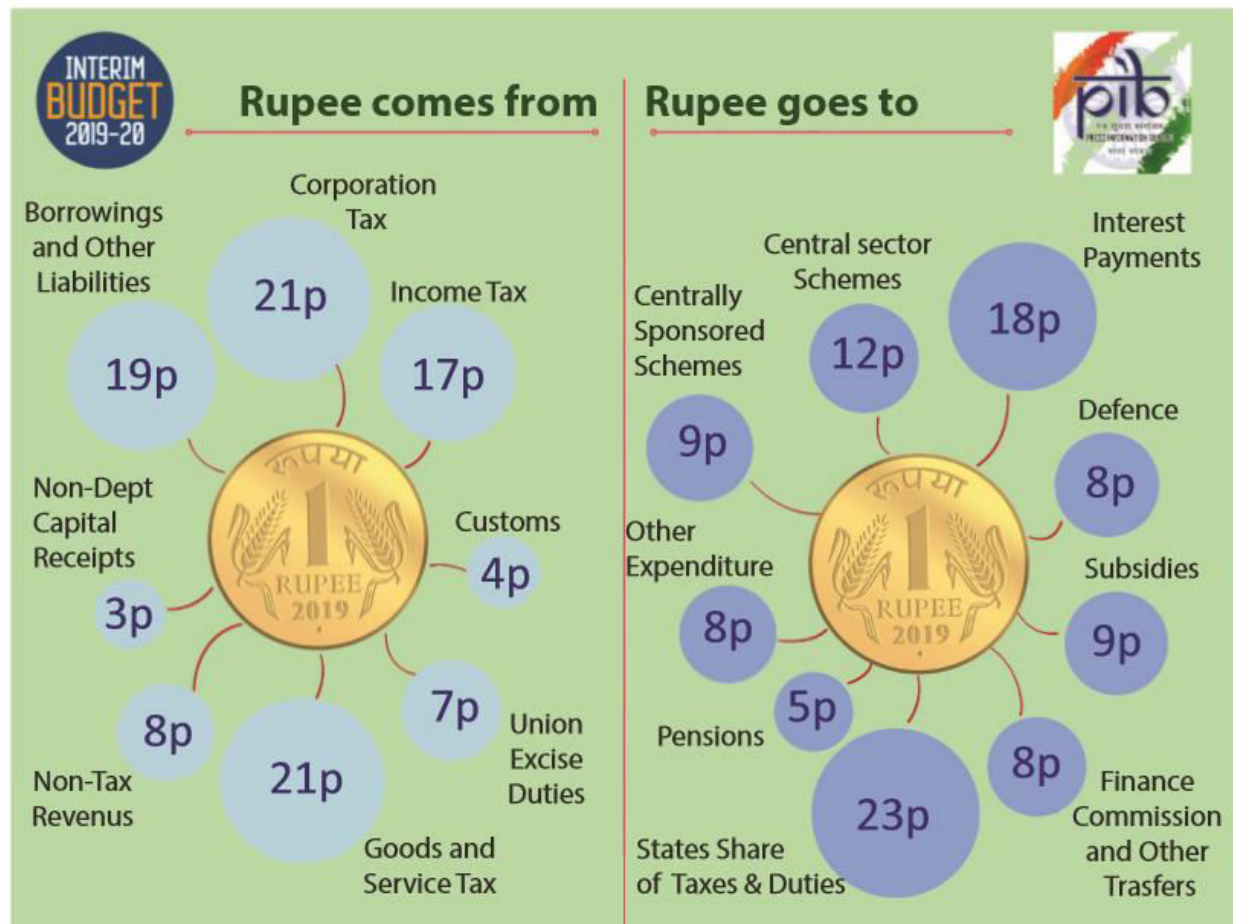
- Government should announce in advance the tax system so that every tax payer will be able to calculate how much tax amount one may have to pay during a year to the government.
- In other words, government should not change the tax system frequently and should not announce sudden changes in the tax system.

Canons of Economy and Convenience

- These two canons are related. As tax payers we incur a cost to process our accounts and pay the tax, for example, salary paid to accountants and auditors. Similarly government also pays salary to its taxmen and run huge institutions.
- If the tax is simple, then the cost of collecting taxes (**tax payer cost + tax collector cost**) will be very low.
- Further, tax should be collected from a person at the time he gets enough money to pay the tax. This is called canon of convenience. A convenient tax reduces the cost of collecting tax.

Canons of Productivity and Elasticity

- Government should choose the taxes that can get enough tax revenue to it. In other words, it should choose a few taxes that can fetch more tax revenue, instead of lots of taxes and each one of them getting a little tax revenue.
- This is canon of productivity. Tax is paid by the people out their incomes.
- Therefore the tax system should be designed in such a way that the people automatically pay more tax revenue if their incomes grow. This is called canon of elasticity. In a broader sense, as the economy is growing the people will get more income and consequently they will also pay more tax revenue to government if the tax system is elastic.



Types of Taxes

Direct Taxes

A tax imposed on an individual or organisation, which is paid directly, is a direct tax. The burden of a direct tax cannot be shifted to others. **J.S. Mill** defines a direct tax as **“one which is demanded from the very persons who it is intended or desired should pay it.”** Some direct taxes are income tax, wealth tax and corporation tax.

Income tax

Income tax is the most common and most important tax levied on an individual in India. It is charged directly based on the income of a person. The rate at which it is charged varies, depending on the level of income.

Corporate tax

Income	For Indian Companies	For Foreign Companies
Less than ₹ 50 crore	25%	40%
More than ₹ 50 crore	30%	40%

This tax is levied on companies that exist as separate entities from their shareholders. It is charged on royalties, interest gains from sale of capital assets located in India and fees for a technical services and dividends. Foreign companies are taxed on income that arises or is deemed to arise in India.

Wealth tax

Wealth tax is charged on the benefits derived from property ownership. The same property will be taxed every year on its current market value. The tax is levied on the individuals and companies alike.

Indirect Taxes

If the burden of the tax can be shifted to others, it is an indirect tax. The impact is on one person while the incidence is on the another person. Therefore, in the case of indirect taxes, the tax payer is not the tax bearer. Some indirect taxes are **stamp duty, entertainment tax, excise duty and goods and service tax (GST)**.

Stamp duty

Stamp duty is a tax that is paid on official documents like marriage registration or documents related to a property and in some contractual agreements.

Entertainment tax

Entertainment tax is a duty that is charged by the government on any source of entertainment provided. This tax can be charged on **movie tickets, tickets to amusement parks, exhibitions and even sports events**.

Excise duty

An excise tax is any duty on manufactured goods levied at the movement of manufacture, rather than at sale. Excise is typically imposed in addition to an indirect tax such as a sales tax.

Goods and service tax (GST)

- The goods and service tax (GST) is one of the indirect taxes. The GST was passed in Parliament on **29 March 2017**. **The act came into effect on 1 July 2017**.
- The motto is **one nation, one market, one tax**. Goods and service tax is defined as the tax levied when a consumer buys a good or service.
- That aims to replace all indirect taxes levied on goods and services by the Central and state governments.
- GST would eliminate the cascading effect of taxes on the production and distribution of goods and services. It is also a **"one-point tax"** unlike value-added tax (VAT), which was a multipoint tax.

How Taxes Are Levied?

Tax is levied by the government progressively, proportionately as well as regressively

Progressive tax

Example:

Tax Base	Tax Rate	Amount of Tax
₹10,000	10%	₹1000
₹20,000	15%	₹3000
₹30,000	25%	₹7500
₹40,000	40%	₹16000

Progressive tax rate is one in which the rate of taxation increases (multiplier) as the tax base increases (multiplicand). The amount of tax payable is calculated by multiplying the tax base with the tax rate. In the case of a progressive tax, the multiplicand (income) increases. When income increases, the tax rate also increases. This is known as a progressive tax

Proportionate taxes

Example:

Tax Base	Tax Rate	Amount of Tax
₹10,000	10%	₹1000
₹20,000	10%	₹2000
₹30,000	10%	₹3000
₹40,000	10%	₹4000

Tax levied on goods and service in a fixed portion is known as proportionate taxes. All tax payers contribute the same proportion of their incomes. In this method, the rate of taxation is the same regardless of the size of income. The tax amount realised varies in the same proportions that of income.

Regressive Taxes

Progressive Tax	Income increase	Tax also Increase	E.g. Income Tax
Proportional Tax	Income Increase	Tax Decrease	E.g. Corporate Tax
Regressive Tax	Income change	Same tax always	E.g. Sales Tax

It implies that higher the rate of tax lower the income groups than in the case of higher income groups. It is a very opposite of progressive taxation.

Black Money

Black money is funds earned on the black market on which income and other taxes have not been paid. The unaccounted money that is concealed from the tax administrator is called black money.

Causes of Black Money

Several sources of black money are identified as causes.

1. Shortage of goods:

Shortage of goods, whether natural or artificial, is the root cause of black money. Controls are often introduced to check black money.

2. Licensing proceeding:

It is firmly believed that the system of controls permits, quotas and licences are associated with mal distribution of commodities in short supply, which results in the generation of black money

3. Contribution of the industrial sector:

Industrial sector has been the major contributor to **black money**. For example, the Controller of Public Limited Companies tries to buy commodities at low prices and get them billed at high amounts and pockets the difference personally.

4. Smuggling:

Smuggling is one of the major sources of black money. When India had rigid system of exchange controls, precious metals like **gold and silver, textiles and electronics goods** were levied a heavy excise duty. Bringing these goods by evading the authorities is smuggling.

5. Tax structure:

When the tax rate is high, more black money is generated.

Tax Evasion

- Tax evasion is the illegal evasion of taxes by individuals, corporations and trusts.
- Tax evasion often entails taxpayers deliberately misrepresenting the true state of their affairs to the tax authorities to reduce their tax liability and includes dishonest tax reporting, such as declaring less income, profits or gains than the amounts actually earned, or overstating deductions.
- Tax evasion is an activity commonly associated with the informal economy.
- One measure of the extent of tax evasion is the amount of unreported income, which is the difference between the amount of income that should be reported to the tax authorities and the actual amount reported. Tax evasion activities included
 1. Underreporting income
 2. Inflating deductions or expenses
 3. Hiding money
 4. Hiding interest in offshore accounts

Causes of tax evasion

- Tax evasion resulting in black money prevents the resource mobilisation efforts of the Union government. Shortage of funds distorts implementation of developmental plans and forces the government to resort to deficit financing in case public expenditure is inelastic.

- Tax evasion interferes with the declared economic policies of the government by distorting saving and investment patterns and availability of resources for various sectors of the economy.
- Tax evasion undermines the equity attribute of the tax system. Honest taxpayers willingly bear disproportionate tax burden, feel demoralised and lured to join the tax evaders' camp.
- Tax evasion and black money encourage the concentration of economic power in the hands of undeserving groups in the country, which, in turn, is a threatening to the economy in its way.
- Evasion of tax consumes time and energy of tax administration to disentangle the intricate manipulations of tax dodgers.

Tax evasion penalties

- If a person will fully commits the act of tax evasion, he may face felony charges. Tax evasion penalties include imprisonment of up to five years and high amount as fines.
- The defendant may also be ordered to pay for the costs of prosecution
- Other tax evasion penalties include community service, probation and restitution depending on the circumstances of the case
- Tax evasion penalties can be harsh, depending on the severity of the crime.

Tax and other Payments

S. No.	Tax	Payments
1	Tax is compulsory to the government without getting any direct benefits	Fee is the payment for getting any service
2	If the element of revenue for general purpose of the state predominates, the levy becomes a tax	While a fee is a payment for a specific benefit privilege although the special to the primary purpose of regulation in public interest.
3	Tax is a compulsory payment	Fee is a voluntary payment.
4	If tax is imposed on a person, he has to pay it; otherwise he has to be penalised	On the other hand fee is not paid if the person do not want to get the service
5	In this case, tax payer does not expect any direct benefit. Example: Income tax, gift box, wealth tax, VAT etc.	Fee payer can get direct benefit for paying fee. Examples: stamp fee, driving license fee, government registration fee

Taxes are compulsory payments to government without expectation of direct return (or) benefit to the tax payer. Payment includes income received from production and supply of goods and services of public enterprises and revenue from administrative activities. Payments from nontax sources other than tax income is known as payments. Some payments are fees, fines and penalties, and forfeitures.

Taxes and Development

The role of taxation in developing economics is as follows.

1. Resource mobilisation:

Taxation enables the government to mobilise a substantial amount of revenue. The tax revenue is generated by imposing direct taxes such as personal income tax and corporate tax and indirect taxes such as **customs duty, excise duty, etc.**

2. Reduction in inequalities of income:

Taxation follows the principle of equity. The direct taxes are progressive in nature. Also certain indirect **taxes, such as taxes on luxury goods**, is also progressive in nature.

3. Social welfare:

Taxation generates social welfare. Social welfare is generated due to higher taxes on certain undesirable products like alcoholic products.

4. Foreign exchange:

Taxation encourages exports and restricts imports, Generally developing countries and even the developed countries do not impose taxes on export items.

5. Regional development:

Taxation plays an important role in regional development, **Tax incentives such as tax holidays** for setting up industries in backward regions, which induces business firms to set up industries in such regions.

6. Control of inflation:

Taxation can be used as an instrument for controlling inflation. Through taxation the government can control inflation by reducing the tax on the commodities.

More to Know:

1. Recent Legislative Initiatives to curb Black Money in India

1. Constitution of the Special Investigation Team (SIT) on Black Money under Chairmanship and Vice-Chairmanship of two former Judges of Hon'ble Supreme Court.
2. Enactment of a comprehensive law – The Black Money (Undisclosed Foreign Income and Assets) and Imposition of Tax Act, 2015.

3. Constitution of Multi-Agency Group (MAG) consisting of officers of Central Board of Direct Taxes (CBDT), Reserve Bank of India (RBI), Enforcement Directorate (ED) and Financial Intelligence Unit (FIU) for the investigation of recent revelations in Panama paper leaks.
4. Double Taxation Avoidance Agreements (DTAAs)/Tax Information Exchange Agreements (TIEAs)/Multilateral Conventions.
5. Foreign Account Tax Compliance Act (FATCA).
6. Money-laundering Act, 2002 through the Finance Act, 2015.
7. Enactment of the Benami Transactions (Prohibition) Amendment Act, 2016 .
8. Launching of 'Operation Clean Money' on 31 January 2017.
9. Lokpal and Lokayukta act.
10. The Real Estate (Regulation and Development) Act, 2016.

2. Structure of Goods and Service Tax (GST)

State Goods and Service Tax (SGST):

Intra state (within the state) VAT/sales tax, purchase tax, entertainment tax, luxury tax, lottery tax and state surcharge and cesses

Central Goods and Service Tax (CGST):

Intra state (within the state) Central Excise Duty , service tax, countervailing duty, additional duty of customs, surcharge, education and secondary/higher secondary cess

Integrated Goods and Service Tax (IGST):

Inter state (integrated GST) There are four major GST rates: **5%, 12%, 18% and 28%**. Almost all the necessities of life like vegetables and food grains are exempted from this tax.

3. France was the first country to implement GST in **1954** and many other European countries introduced GST in 1970-80.

4. In India taxes are collected by all the three tiers of government. There are taxes that can be easily collected by the Union government. In India almost all the direct taxes are collected by the Union governments. Taxes on goods and services are collected by both Union and state governments. The taxes on properties are collected by local governments. In India we collect more tax revenue through indirect taxes than through direct taxes. The major indirect taxes in India are customs duty and GST. Both these taxes have different tax rates for different goods and services. The governments try to design in such a way that the rich consumers pay more tax than the poor.

However, poor still pay more through these taxes. Therefore, many argue we should reduce the indirect taxes and increase the collection through direct taxes. Indian tax system adheres to all the canons of taxation. But there are arguments that often the equity principle is compromised and productivity is lost when we tinker with tax system to the advantage of a few. We announce the tax system once in a year in the annual budget. It is very rarely breached by announcing mid-year tax changes. Therefore, Indian tax system adheres to canon of certainty more than anything else.

5. In India, Income Tax was introduced for the first time **in 1860 by Sir James Wilson** in order to meet the losses sustained by the Government on account of the Mutiny of **1857**.

6. Taxation in India has its roots from the period of **Manu Smriti and Arthashastra**. The present Indian tax system is based on this ancient tax system.

10th Social Science Lesson 19 Notes in English

19. Industrial Clusters in Tamil Nadu

Introduction

Industrialisation

- Generally, **“any human activity which is engaged in the conversion of raw materials into readily usable materials is called an industry”**.
- Industrialisation refers to the process of using modern techniques of production to produce goods that are required by both consumers and other producers on a large scale.
- While some consumer goods such as phones and television sets meet the requirements of consumers, industries also produce goods like components, machine parts and machines that are required by other producers.
- The historical process of a steady increase in the number and scale of manufacturing in a country exists for a long time. It is important for several reasons.
- In this chapter we will learn the nature of industrialisation of Tamil Nadu, importance of industrial clusters, how industrial clusters have developed in Tamil Nadu and the role of government initiatives in promoting industries.

Importance of Industrialisation

To understand importance of industries, we need to understand why the share of agriculture in an economy's income and employment decreases with development.

First, demand for food remains constant with regard to income. Therefore, as an economy grows and incomes increase, consumers tend to spend a lesser share of their income on products from the agricultural sector.

Second, even the food that is consumed is subject to more transformation as an economy expands and there is greater division of labour between **people and between regions**. Food products are taken over longer distances, processed and branded. This also requires that food products have to be preserved. As a result, the prices that farmers get tend to be much less compared to the prices at which consumers buy.

Third, there are limits to the ability of agriculture to absorb labour due to the declining marginal productivity of land. As a result, labour productivity in the agricultural sector cannot increase much. Wages too cannot therefore increase and as a result poverty levels may remain high, especially when more and more people continue to rely on agriculture for their livelihood. Due to all these factors, there is a need for an economy's production and employment base to diversify away from agriculture. Development economics therefore recognises the need for structural transformation of the economy where the share of non-agricultural sectors tend to get increase

steadily. Such transformation and diversification through industrialisation is therefore seen as important for an economy's development.

What benefits does industrialisation bring to an economy?

- As stated earlier, it is essential to produce inputs to other producers in an economy. Even agriculture requires inputs from industry such as fertilisers and tractors to increase productivity.
- Second, a market exists for both producers and consumer goods. Even services like **banking, transport and trade** are dependent on production of industrial goods.
- Third, by using modern methods of production, industries contribute to better productivity and hence lower cost of production of all goods produced.
- It therefore helps people to buy goods at a cheaper rate and help create demand for more products. Fourth, through such expansion of production, **industrialisation helps to absorb the labour force coming out of agriculture.**
- Employment generation is therefore an important objective of industrialisation. Fifth, a related advantage of industrialisation is therefore technological change. Through use of modern techniques, industrialisation contributes to learning of such methods and their improvement.
- As a result labour productivity, ie, output per unit of labour input increases, which can help workers earn higher wages.
- **Sixth**, expanding incomes lead to more demand for goods and services. If an economy is not able to produce enough to meet such demand, it has to rely on imports and therefore spend a lot of foreign exchange.
- If the economy does not earn enough from exporting, it will be difficult to meet the growing demand. Industrialisation therefore helps an economy to save and also generate foreign exchange through exports.

Types of Industries

Industries can be classified on the basis of

(a) Users:

If the output is consumed by the final consumer, it is called a consumer goods sector. If the output is consumed by another producer, it is called a capital goods sector. There are industries that produce raw materials for other industries such as cement and steel. Such industries are called basic goods industries.

(b) Type of Inputs Used:

Industries are also classified based on the kind of raw material used such as agro-processing, textiles sector, rubber products, leather goods, etc.

(c) Ownership:

Firms may be privately owned, publicly owned (by the government, central or state), jointly owned by the private and public sector, or cooperatively owned (cooperatives).

(d) Size:

- Firms may be large, small or medium based on their volume of output, sales or employment or on the basis of the amount of investments made. The Indian government normally uses the investment criterion to decide whether a **firm is small, medium or large**.
- There are also micro or tiny enterprises that are smaller than even small firms. This classification is important because the government often provides financial, infrastructural or subsidy support to the smaller firms to promote them. The small sector is seen as important for two reasons.
- One, it is believed to generate more employment than the large-scale sector, which is likely to use more advanced and automated technologies and therefore may not generate enough employment.
- Second, the small scale sector allows for a larger number of entrepreneurs to emerge from less privileged backgrounds. Till the **1980s**, it was widely believed that large firms are more efficient and can out compete the smaller firms.
- But at present, based on experiences of industrialisation in different parts of the world, it is believed that when small firms specialising in one sector are geographically concentrated in specific locations, and linked to one another through production and learning, they tend to be equally if not more efficient than large scale enterprises. Such agglomerations of small firms are called industrial clusters.

Industrial Clusters

- Industrial clusters are groups of firms in a defined geographic area that share common markets, technologies and skill requirements. An important aspect of clusters is the nature of inter-firm networks and interactions.
- **Clusters where firms specialise in one stage of the production process and supply inputs or absorb the output of another firm in the cluster is critical to the efficiency and competitiveness of the cluster.**
- The advantages of industrial clusters or districts was first observed by the famous economist **Alfred Marshall in the 1920s** when he tried to understand the working of clusters of small firms in the metal-working and textile regions in England.
- While the notion of an '**industrial district**' was developed by Marshall, it was only after the success of small firms in Italy in the 1980s that it became popular.
- Policy-makers in developing countries like India began to promote them actively as they realized that there several such small firm clusters in the country.
- The following are the chief characteristics of a successful cluster.

1. geographical proximity of small and medium enterprises (SMEs)
 2. sectoral specialization
 3. close inter-firm collaboration
 4. inter-firm competition based on innovation
 5. a socio-cultural identity, which facilitates trust
 6. multi-skilled workforce
 7. active self-help organisations, and
 8. supportive regional and municipal governments.
- Firms are therefore expected to collaborate and compete with one another at the same time.
 - By collaborating, they can expand their capacity and also learn from one another. Through competition, they are forced to become more efficient.
 - Apart from the Chennai region, industrial growth has been concentrated in several small town clusters, throughout the state, with the western region being more dominant.
 - These clusters specialise in a range of activities like **clothing, home furnishings, textiles, leather, poultry, coir products, transport equipment servicing, engineering services and auto component making.**

How Do Clusters Originate?

- Clusters may arise due to many factors. Certain clusters evolve over a long time in history when artisans settle in one locality and evolve over centuries.
- Handloom weaving clusters are one examples of this development. Or else, in some sectors, when a large firm is established, a cluster of firms may emerge to take care of its input and service requirements.
- At times, governments may decide to encourage manufacturing using raw materials from a region, which may also lead to emergence of clusters.

Historical Development of Industrialisation in Tamil Nadu

- There is lot of evidence for presence of industrial activities such as textiles, shipbuilding, iron and steel making and pottery in precolonial Tamil Nadu.
- Given the vast coastline, **the region has been involved in trade with both South-East and West Asia for several centuries.** Colonial policies also contributed to the decline of the handloom weaving industry due to competition from machine made imports from England.
- But some industries also developed during the colonial period and provided the basis for subsequent industrialisation in the state.

Industrialisation in the Colonial Period

- There are two sets of factors that have contributed to the process. The introduction of cotton cultivation in western and southern Tamil Nadu by the colonial government led to the

emergence of a large-scale textile sector in these parts, which involved ginning, pressing, spinning and weaving operations.

- The introduction of railways also expanded the market for cotton yarn and helped develop the sector. Second, increase in trade during this period led to industrial development around two of the most active ports in the region, **Chennai and Tuticorin**.
- The Chennai region also saw the beginning of the automobile sector during this period along with leather. The **growth of jaggery industry in south Tamil Nadu** is another example of this.
- Match factories too emerged during the colonial period in the **Sivakasi region**, which later on became a major centre for fireworks production and printing. Port-related activity too contributed to the growth of the region.
- Leather production was also taking place in **Dindigul, Vellore and Ambur areas**. In Western Tamil Nadu, the emergence of textiles industries also led to demand and starting of textile machinery industry in the region.
- This textile machinery industry in turn led to the rise of a number of small workshops for repair and producers of machinery components.
- Another major development in the western region is the introduction of electricity from **hydro-electric power in the 1930s**. Availability of electricity allowed for use of oil engines for drawing ground water.
- This led to both expansion of agriculture as well as increase in demand for oil engines. In turn, it led to emergence of workshops for servicing engines and also for addressing the demand for spare parts.
- Foundries began to be set up and agricultural machinery began to be produced.

Post-Independence to early 1990s

- Soon after independence, several large enterprises were set up by both the central and state governments in different segments such as the **Integral Coach Factory in Chennai** to make railway coaches and the **Bharat Heavy Electricals Limited (BHEL) in Tiruchirapalli** manufacture to boilers and turbines.
- BHEL in turn led to the emergence of an industrial cluster of several small firms catering to its input requirements. Heavy Vehicles Factory was set up to manufacture tanks in Avadi on the outskirts of Chennai.
- Standard Motors too started manufacturing cars in Chennai. **Ashok Motors (later Ashok Leyland) and Standard Motors** together helped form an automobile cluster in the Chennai region.
- The Avadi industrial estate was established in the 1950s to support the small and medium companies supplying to the large firms in the region.
- More hydro-electric power projects in the state were also initiated to increase the spread of electrification.

- The government played a major role in all these processes. The Salem Steel Plant was set up in 1973 to produce stainless steel.
- The Coimbatore region also witnessed diversification from textiles to textile machinery as well as agricultural machinery like electric motors and pumpsets for drawing ground water.
- The 1970s and 1980s saw the setting up of emergence of powerloom weaving clusters in the Coimbatore region as well as expansion of **cotton knitwear cluster in Tiruppur** and **home furnishings cluster in Karur**.
- This period also saw more encouragement of the small and medium sector with setting up of industrial estates by the state government in different parts.
- The Hosur industrial cluster is a successful case of how such policy efforts to promote industrial estates helped develop industries in a backward region.

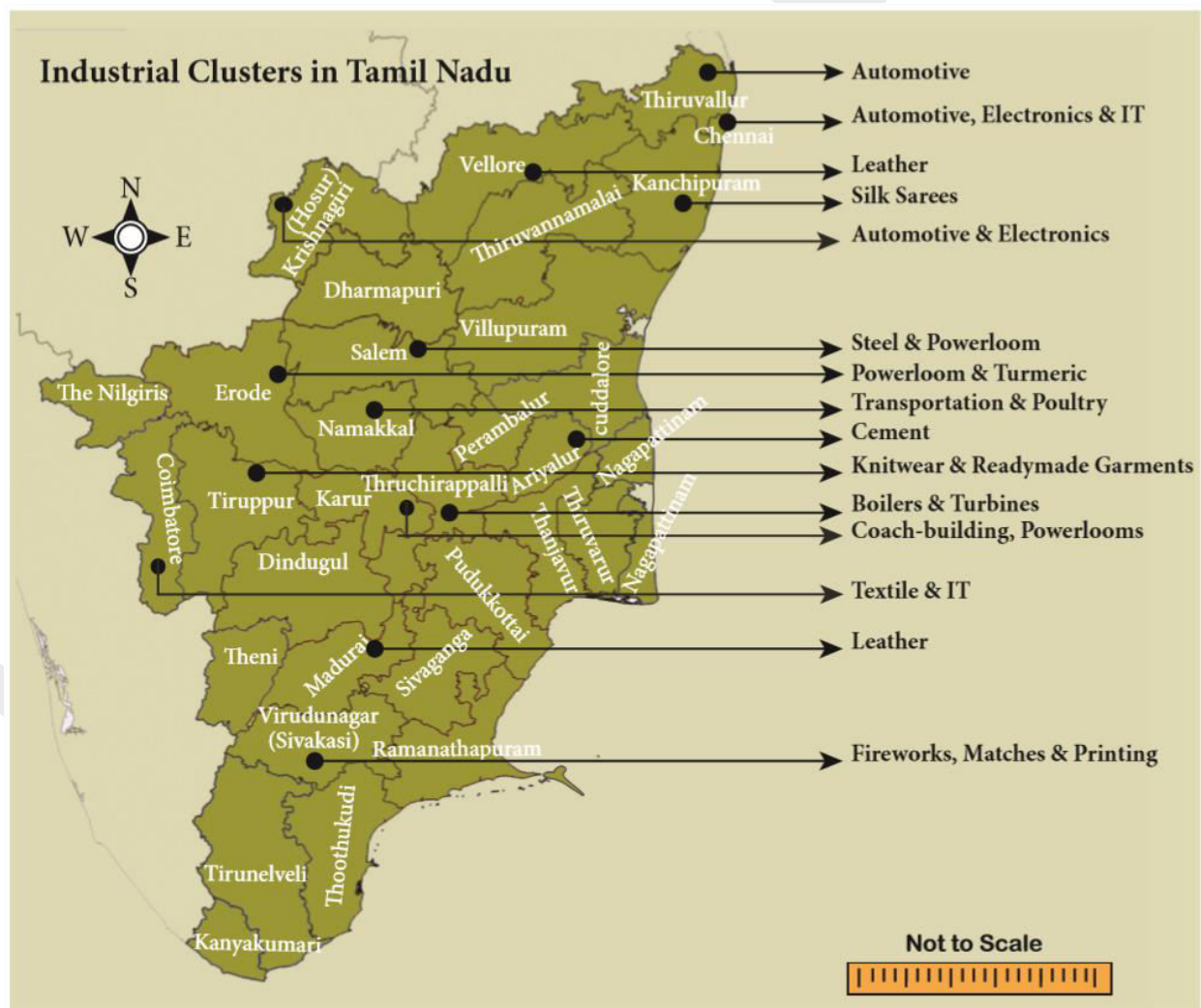
Industrialisation in Tamil Nadu – Liberalization Phase

- The final phase of industrialisation is the post-reforms period since the early 1990s. The reforms made the state governments more responsible for resource mobilisation and they were forced to compete with each other to attract private investments for industrialisation.
- Incentives such as **cheap land, tax concessions and subsidised** but quality power were all offered to woo investors. Trade liberalisation and currency devaluation also helped open up export markets. This led to two major developments.
- First, because of trade liberalisation measures, exports of textiles, home furnishings and leather products began to grow rapidly.
- Second, efforts to attract investments led to entry of leading multinational firms (MNCs) into the state, especially in the automobile sector.
- Since automobile sector relies heavily on component makers, entry of MNCs not only brought along other MNC component suppliers but also opened up new market opportunities for domestic component producers.
- Chennai region also emerged as a hub for electronics industry with MNCs such as **Nokia, Foxconn, Samsung and Flextronics opening plants on the city's outskirts**. A significant share of these investments has come up in special economic zones in the districts bordering Chennai.
- Tamil Nadu has often been hailed as a model for successfully using the SEZ route to attract productive investments. Other important industries in the state that evolved over a much longer period include **sugar, fertilizers, cement, agricultural implements, iron and steel, chemicals, transformers and paper**.
- Because of all these factors, Tamil Nadu at present has the largest number of factories among all states in India and also has the largest share of workforce employed in manufacturing.
- Importantly, it is more labour intensive compared to other industrially advanced states like Maharashtra and Gujarat. The major industries are **automobiles, autocomponents, light and**

heavy engineering, machinery, cotton, textiles, rubber, food products, transport equipment, chemicals, and leather and leather goods. Unlike other states, the industries are spread across all regions of the state (**there are 27 clusters in 13 districts**) with many of them being export oriented as well.

- The state has a well-developed network of roads, rail, air and major ports. The diffusion of industrialisation also implies a widening of the social base of entrepreneurship.
- Unlike in North India where entrepreneurs and business groups are drawn mostly from merchant communities, in Tamil Nadu, the entrepreneurs come from a dispersed social background, with a relatively small size of capital.
- Further, the spatial spread of industries is higher. The state also has a better mix of large, small and household industries.
- This diffused process of industrialisation and corresponding urbanisation has paved the way for better rural-urban linkages in Tamil Nadu than in most other states.

Major Industrial Clusters and Their Specialisation in Tamil Nadu



Automotive Clusters

- **Chennai is nicknamed as "The Detroit of Asia"** because of its large auto industry base. Chennai is home to large number of auto assembly and component making firms.
- While there were a few domestic firms like TVS, TI Cycles, Ashok Leyland and Standard Motors earlier, in the postreform period, several **MNC firms like Hyundai, Ford, Daimler-Benz and Renault-Nissan** have opened factories in the region.
- This in turn has attracted a number of component suppliers from foreign countries. Many local firms too cater to component production for all these firms. Hosur is another auto cluster with firms like **TVS and Ashok Leyland** having their factories there. Coimbatore region is also developing into an auto component cluster.

Truck and Bus Body Building Industry Clusters

- The **Namakkal Tiruchengode** belt in western Tamil Nadu is known for its truck body building industry.
- About 150 of the 250 units in this sector are located in this cluster including 12 large-sized body building houses.
- Karur is another major hub with more than 50 units. Many entrepreneurs were previous employees in a big firm involved in body building who came out to set up their own units.

Textile Clusters

- Tamil Nadu is home to the largest textiles sector in the country. Because of the development of cotton textile industry since the colonial period, Coimbatore often referred as the **"Manchester of South India"**.
- At present, most of the spinning mills have moved to the smaller towns and villages at a radius over **100 to 150 km** around the Coimbatore city. Tamil Nadu is the biggest producer of cotton yarn in the country.
- **Palladam and Somanur**, small towns near Coimbatore and the villages near these towns, are home to a dynamic powerloom weaving cluster as well. Powerloom is however more widespread with Erode and Salem region too having a large number of power loom units.
- **Tiruppur** is famous for clustering of a large number of firms producing cotton knitwear. It accounts for nearly 80% of the country's cotton knitwear exports and generates employment in the range of over three lakh people since the late 1980s.
- It is also a major producer for the domestic market. Because of its success in the global market, it is seen as one of the most dynamic clusters in the Global South.
- While initially most firms were run by local entrepreneurs, at present, some of the leading garment exporters in India have set up factories here.
- Apart from body building, Karur is a major centre of exports of home furnishings like table cloth, curtains, bed covers and towels.

- **Bhavani and Kumrapalayam** are again major centres of production of carpets, both for the domestic and the global markets.
- Apart from such modern clusters, there are also traditional artisanal clusters such as Madurai and Kanchipuram that are famous for silk and cotton handloom sarees.
- Even these clusters have witnessed a degree of modernisation with use of powerlooms in several units.

Leather and Leather Goods Clusters

- Tamil Nadu accounts for 60 per cent of leather tanning capacity in India and 38 per cent of all leather footwear, garments and components.
- Hundreds of leather and tannery facilities are located around Vellore and its nearby towns, such as **Ranipet, Ambur and Vaniyambadi**.
- The Vellore district is the top exporter of finished leather goods in the country. Chennai also has a large number of leather product making units involved in exports.
- There is another clustering of leather processing in Dindigul and Erode. The leather products sector too is a major employment generator.

Fireworks, Matches and Printing Cluster

- Sivakasi region, once famous for its match industry has now become a major centre for printing and fireworks in the country.
- It is believed to contribute to **90% of India's fireworks production, 80% of safety matches and 60% of offset printing solutions**.
- The offset printing industry has a high degree of specialisation among firms with several of them undertaking just one operation required for printing.
- All these industries have their origin in the colonial period and at present offer employment to a large number of workers.

Electronics and Information Technology (IT) Clusters

- After the economic reforms started in the early 1990s, the state has seen the entry of hardware and electronics manufacturers like **Nokia, Foxconn, Motorola, SonyEricsson, Samsung and Dell** making cellular handset devices, circuit boards and consumer electronics.
- They have all been set up in the Chennai region. While Nokia has been closed down, Chennai still continues to be a minor electronics hub in the country.
- Similarly, with the expansion of the software sector, Chennai and, to a limited extent Coimbatore, have emerged as centres for software services

The Policy Factors that Helped the Industrialisation Process in Tamil Nadu

Policy factors can be divided into three aspects:

Education

Industries require skilled human resources. Apart from a lot of attention to primary education to promote literacy and basic arithmetic skills, the state is known for its vast supply of technical human resources. It is home to one of the largest number of **engineering colleges, polytechnics and Industrial Training Centres in the country.**

Infrastructure

- The widespread diffusion of electrification has contributed to the spread of industrialisation to smaller towns and villages in the state.
- Along with electrification, **Tamil Nadu is known for its excellent transport infrastructure, especially minor roads** that connect rural parts of the state to nearby towns and cities.
- A combination of public and private transport has also facilitated rural to urban connectivity and therefore connect small producers to markets better.

Industrial Promotion

- Apart from investments in education and transport and energy infrastructure, active policy efforts were made to promote specific sectors and also industrialisation in specific regions.
- Policies to promote specific sectors like automobile, auto components, bio technology and Information and communication Technology sectors have been formulated in the post reform period.
- In addition, the state has put in place several industrial promotion agencies for both large enterprises and the small and medium segments, as well as to provide supporting infrastructure.

The following are some agencies that have played a key role in industrialization in the state

SIPCOT (State Industries Promotion Corporation of Tamil Nadu), 1971

SIPCOT was formed in the year 1971 to promote industrial growth in the state by setting up industrial estates.

TANSIDCO (Tamil Nadu Small Industries Development Corporation), 1970

TANSIDCO is a state-agency of the state of Tamil Nadu established in the year 1970 to promote small-s

cale industries in the state. It gives subsidies and provide technical assistance for new firms in the small scale sector.

TIDCO (Tamil Nadu Industrial Development Corporation), 1965

TIDCO is another government agency to promote industries in the state and to establish industrial estates.

TIIC (Tamil Nadu Industrial Investment Corporation Ltd.), 1949

TIIC is intended to provide low-cost financial support for both setting up new units and also for expansion of existing units. Though it is meant to meet the requirements of all types of firms, **90% of support goes to micro, small and medium enterprises.**

TANSI (Tamil Nadu Small Industries Corporation Ltd.), 1965

TANSI was formed in 1965 to take over the small scale-units that were set up and run by the Department of Industries and Commerce. It is supposed to be the first industrial corporation operating in the domain for small enterprises.

Emerging Services Sector in Tamil Nadu

- With technological changes, industries too are not able to absorb labour. Automation has been reducing the need for labour in manufacturing.
- The services sector has emerged as a much bigger employer over the last three decades.
- Tamil Nadu has become a hub for some important and dynamic service sectors such as software services, healthcare and education services.
- Healthcare and educational services are diffused across major cities, Chennai and Coimbatore in particular.
- **Software services is, however, largely confined to Chennai.** Only in the last ten years, a few software firms have moved to Coimbatore.

Issues with Industrialisation

- Though Tamil Nadu has emerged as a relatively highly industrialised state in the country, the state faces a few issues in sustaining the process.
- To begin with, **some clusters, especially chemicals, textiles and leather clusters, tend to generate a lot of polluting effluents** that affect health.
- The effluents also pollute water bodies into which effluents are let into and also adjoining agricultural lands. This issue requires urgent attention.
- Second, employment generation potential has declined because of use of frontier technologies because of the need to compete globally.
- Quality of employment also has suffered in recent years as most workers are employed only temporarily. This issue too requires urgent attention among policy makers

Entrepreneur

Entrepreneur is an innovator of new ideas and business processes. He possesses management skills, strong team building abilities and essential leadership qualities to manage a business.

Entrepreneurship

Entrepreneurship is a process of a action of an entrepreneur who undertakes to establish his enterprise. It is the ability to create and build something.

Role of an Entrepreneur

Entrepreneurs play a most important role in the economic growth and development of a country's economy.

1. They promote development of industries and help to remove regional disparities by industrialising rural and backward areas.
2. They help the country to increase the GDP and Per Capita Income.
3. They contribute towards the development of society by reducing concentration of income and wealth.
4. They promote capital formation by mobilising the idle savings of the citizens and country's export trade.
5. Entrepreneurs provide large-scale employment to artisans, technically qualified persons and professionals and work in an environment of changing technology and try to maximise profits by innovations.
6. They enable the people to avail better quality goods at lower prices, which results in the improvement of their standard of living.

More to Know:

1. Startup India Scheme (Launched 16-Jan-2016):

Startup India Scheme is an initiative of the Indian government, the primary objective of which is the promotion of startups, generation of employment and wealth creation.

2. Standup India Scheme (Launched 5-April-2016):

Standup India Scheme is to facilitate bank loans between `10 lakh and `1 crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower and one woman borrower per bank branch for setting up a greenfield enterprise.

3. Special Economic Zones (SEZs)

A policy was introduced on in **April 2000** for the settling up of special Economic Zones in the country with a view to a hassle-free environment for exports. Units may be set up in SEZ units are on a self-certification basis. The policy provides for setting up of SEZs in the public, private, joint

sector or by state governments. It is also envisaged the some of the existing **Export Processing Zones, would be converted in to Special Economic Zones.**

Accordingly, the government has converted Export Processing Zones located at following places.

- Nanguneri SEZ – A multi product SEZ, Thirunelveli
- Ennore SEZ – Thermal power project, Vayalur
- Coimbatore SEZ – IT Parks
- Hosur SEZ – Auto Engineering, Electronics, Defence and Aerospace
- Perambalur SEZ – Multi product SEZ
- Autocity SEZ – Automobile/Auto Components, Tiruvallur
- India-Singapore SEZ – IT & ITES, Electronic Hardware, Logistics and Warehousing – Thiruvallur District
- Bio-Pharmaceuticals SEZ – Clinical Research Organisation, Poison Control Centre, Centre for Regenerative Medicine, Medicine Research

4. Madras Export Processing Zone (MEPZ)

MEPZ is a Special Economic Zone in Chennai. It is one of the seven export processing zones in the country set up the central government. It was established in 1984 to promote foreign direct investment, enhance foreign exchange earnings and create greater employment opportunities in the region. The MPEZ headquarters is located on GST Road in Tambaram, Chennai.

5. Information Technology Specific Special Economic Zones:

In order to make development more inclusive, Tier II cities such as Coimbatore, Madurai, Trichy, Tirunelveli, Hosur and Salem have been promoted as IT investment destinations apart from the Chennai region. To facilitate this, ELCOT has established ELCOSEZs (IT Specific Special Economic Zones) in the following eight locations:

- Chennai – Sholinganallur
- Coimbatore – Vilankurichi
- Madurai – Ilandhaikulam
- Madurai – Vadapalanji-Kinnimangalam
- Trichy – Navalpattu

Companies desiring to set up units in the state can avail themselves of the facilities provided in ELCOSEZs. The possibility of setting up ELCOSEZs in new locations will be explored based on demand and viability. (Map Information Communication Technology Policy - 2018–19)

- Tirunelveli – Gangaikondan
- Salem – Jagirammappalayam
- Hosur – Viswanathapuram

6. Global South

Countries in the southern hemisphere are called Global South countries

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10th Social Science Lesson 20 Notes in English

20. India's Foreign Policy

Introduction

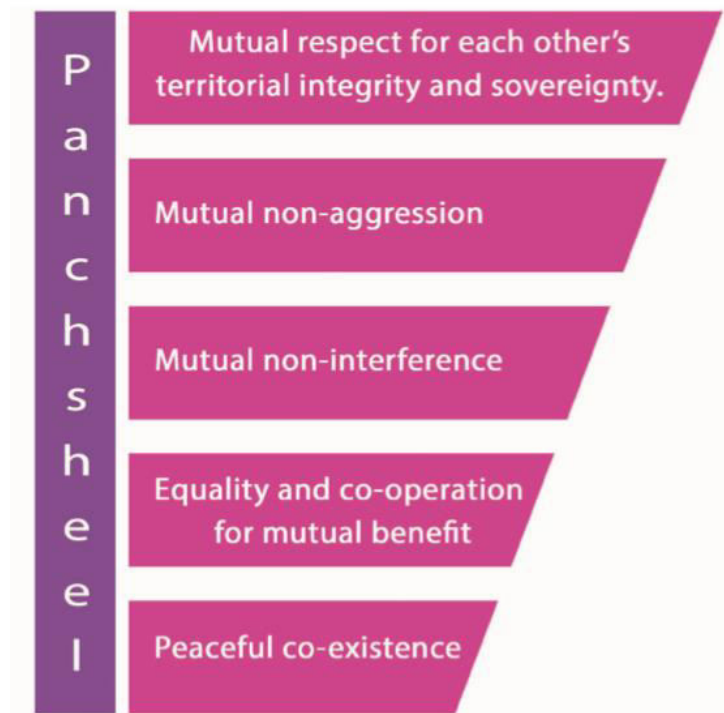
- Foreign policy can be defined as a country's policy that is **conceived, designed and formulated to safeguard and promote her national interests** in her external affairs, in the conduct of relationships with other countries, both bilaterally and multilaterally.
- It seeks to secure the best interests of the people, territory and economy of the country. It is a direct reflection of country's traditional values and overall national policies, her aspirations and self-perception.
- Nations have also been interdependent. Interdependence has been an incontrovertible fact of international relations. An objective and **goal-oriented foreign policy** has the potential to achieve improved relations with other nations and accelerate growth.
- The main tools of foreign policy are treaties and executive agreements, appointing ambassadors, foreign aid, international trade and armed forces.

Main Objectives of Our Foreign Policy

- National security
- National prosperity
- Increasing the number of friendly nations
- Achieving world peace and enable every nation to peacefully co-exist
- Economic development

Panchsheel

(derived from Sanskrit words, **panch = five, sheel = virtues**) The Five Principles of Peaceful Coexistence (Panchsheel) between India (Prime Minister Jawaharlal Nehru) and China (Premier Chou-En-Lai) was signed on **28 April 1954**, which stated that the two governments entered into an agreement based on the following principles:



These principles were incorporated in the Bandung Declaration signed in the AfroAsian Conference held in 1955 in Indonesia.

Basic Determinants of a Foreign Policy

- Geographical position and size of territory
- Nation's history, traditions and philosophical basis
- Natural resources
- The compulsion of economic development
- Political stability and structure of government
- The necessity of peace, disarmament and non-proliferation of nuclear weapons
- Military strength
- International milieu

Foreign Policy in 1950s and 1960s

- The period from Independence through **1950s and 1960s** constituted the most idealistic phase of India's foreign policy under the guidance of India's first Prime Minister, Jawaharlal Nehru.
- The new nations that got independence after the long period of colonial struggle found themselves in a very difficult situation with respect to economic development.
- So it was necessary to align with either of the blocs – **United States of America (USA)** or **Union Soviet Socialist Republic (USSR)**.

- Nehru, India's first Prime Minister, was opposed to the rivalry of the two superpowers (America and Russia) who were trying to extend their influence over the newly emerged nations of Asia and Africa.
- So he chose the path of Non-Alignment (i.e., **not aligning with any bloc**) in the face of the bipolar order of the Cold War and tried to form a third bloc of nations in international affairs.
- The aim of India's foreign policy of that time was 'world co-operation, world peace, end of colonial imperialism, racial equality and non-alignment'.
- **"Broadly, non-alignment means not tying yourself off with military blocs.... It means trying to view things, as far as possible, not from the military point of view, though that has to come in sometimes, but independently, and trying to maintain friendly relations with all countries". – Jawaharlal Nehru**

The Non-Aligned Movement (NAM) in 1961

- The term '**Non-Alignment**' was coined by **V. Krishna Menon** in his speech at the United Nations in **1953**. Non-alignment has been regarded as the most important feature of India's foreign policy.
- It aimed to maintain national independence in foreign affairs by not joining any military alliance. It was the largest political grouping of countries in a multilateral fora.
- The Non-Aligned Movement (NAM) was formed with a membership of **120 countries and 17 states as observers and 10 international organisations**.
- Non-aligned countries have been successful in establishing a foundation of economic co-operation among underdeveloped countries.
- Another noteworthy fact is that it has transformed from a political movement to an economical movement.
- The founding fathers of Non-Aligned Movement : **Jawaharlal Nehru of India, Tito of Yugoslavia, Nasser of Egypt, Sukarno of Indonesia, and Kwame Nkumarah of Ghana were the founding fathers of NAM.**

India's Foreign Policy during Cold War Era

- The Non-alignment roots did not prevent India from entering into an alignment with the Soviet Union by the **Indo-Soviet treaty of 1971 (20-year pact of 'peace, friendship and co-operation')**.
- Then India embarked on a substantial programme of military modernisation. In **1974**, India also conducted its first nuclear test at Pokhran under Subterranean Nuclear Explosions Project, in response to **China's nuclear test in 1964 at Lop Nor**.
- Changing global conditions determine the foreign policy details, yet India's foreign policy was based on certain well defined principles.

- These principles are not mere idealistic but pragmatist too. India got her political freedom in the aftermath of a disastrous Second World War, and India had to be redeemed from acute poverty illiteracy, and chaotic socio-economic conditions.
- Hence our new nation could not afford to military entanglements and military alliances. Independent India had to defend its democratic system, and at the same time evolve and enforce means to salvage the nation from backwardness.
- Avoidance of military blocs was then not an option but a necessity. Now Alliance did mean neutrality, but the freedom of nations to decide on issues independently. Non-alliance did not mean demilitarisation of nations.
- It was meant to ensure de-escalation of conflicts and tension. To a large extent, it enabled India to concentrate on socioeconomic development.
- India withstood two wars with Pakistan during this period. The disastrous Sino-Indian conflict would not make Non-alliance un-pragmatic and it revealed inadequacy in military build-up.
- Even wither discarding the 'Non-Alliance' India could enormously strengthen her defence system and could become a nuclear power.
- Flaws or faults in details of foreign policy executions have been addressed time and again but India's basic policy of nonAlliance is still in force.
- The NAM is meant for mutual assistance among nations for peace and progress. The foreign policy stance of India was
 1. Supporting the cause of decolonisation
 2. Staunch opponent of the apartheid regime in South Africa
 3. Accepted the importance of defence preparedness

New Developments: in the 1990s and the 20th Century

- During the 1990's along with the fall of the Soviet Union, a new global economic order (**Liberalisation, Privatisation, and Globalisation**) emerged with the support of the western powers. **Unipolar (USA centric)** world along with the emerging new economic order compelled the nations including India to revise their foreign and economic policies.
- India entered into pacts with global economic forum (GATT) and entered into bilateral, trilateral, multilateral agreements.

Its nuclear experiments resulted in intimidatory reactions from the western world. This shifts in India's policy manifested in various ways such as

1. Better relations with China – the Look East Policy (1992)
2. The second nuclear test at Pokhran (1998) in Rajasthan
3. Defence procurement relationship with Israel
4. Energy diplomacy with Arab countries and Iran
5. Agreeing to US nuclear missile defence program and

6. India's vote against Iran at the International Atomic Energy Agency

India in the Resurgent 21st Century

- The structure of the international system has changed. The foremost task of India's foreign policy is to enable the domestic transformation of India.
- By this, we mean making possible the transformation of India's economy and society while promoting our values of pluralism. From a foreign policy perspective, economic prosperity is now seen as the key to India's attainment of a Great Power status.
- At present, our foreign policy acts as a means to generate inward investment, business and technology for domestic growth and development.
- This will be facilitated by enhancing regional co-operation and stability in South Asia. India has adjusted to meet the needs of intensified economic engagement with the world, which is designed to meet the needs of an increased inflow of capital, technology, ideas and innovation for our development and our re-emergence as one of the world's leading economies.
- The consistent high economic growth in this period has not only helped empower a large number of our citizens but has also led to increased engagement of India with the outside world.
- India engages with current global subjects and articulates its international policies in order to gain a prominent place and makes its presence felt in on a global scale.
- It has joined new global groups like the Group of 20 (G-20), **India, Brazil, South Africa (IBSA), and Brazil, Russia, India, China, South Africa (BRICS)**, which gives more scope for India to play a larger role in global affairs. India's global security concerns are reflected in its military modernisation, maritime security and nuclear policies.
- India has emerged as a major voice in global decision-making and management, and as a bridge and balancing power in the emerging global strategic architecture.
- The response of our policymakers at economic, political and strategic level have enabled India to emerge as a potential great power though it faces enormous developmental challenges.
- These challenges include sustaining the country's economic growth rate, ensuring energy and security.
- Non-military issues like **climate change, energy security, competition for scarce resources, food and water security, pandemics and migration**.
- Though numerous and formidable, these challenges are not beyond the reach of India's policy establishment.

Basic Concepts of India's Foreign Policy

- Preservation of national interest
- Achievement of world peace

- Disarmament
- Fostering cordial relationship with other countries
- Solving conflicts by peaceful means
- Independence of thought and action as per the principle of NAM
- Equality in conducting international relations
- Anti-colonialism, anti-imperialism, antiracism

Policy of Disarmament

- Our tradition and national ethos is to practice disarmament. As a peace-loving nation, India champions the cause of qualitative and quantitative disarmament right from the beginning.
- Since independence, global nonproliferation has been a dominant theme of India's nuclear policy.
- So India supported UN disarmament programme. Indian nuclear programme in **1974 and 1998** is only done for strategic purposes. The two themes of India's nuclear doctrine are
 1. No first use
 2. Credible minimum deterrence

It has decided not to use nuclear power for 'offensive purposes' and would never use against any non-nuclear state.

IndoUS civilian nuclear deal marks a significant progress in India's foreign policy.

SAARC – South Asian Association for Regional Cooperation



- SAARC is an economic and geopolitical organisation of eight countries that are primarily located in South Asia.
- The SAARC policies aim to promote welfare economics, collective self reliance among the countries of South Asia and to accelerate socio-cultural development in the region.
- SAARC Disaster Management Centre was set up at New Delhi. The Centre is a sleek body of professionals working on various dimensions of disaster risk reduction and management in South Asia.
- SAARC satellite is a proposed communication– cum-meteorology satellite by **Indian Space Research Organisation (ISRO)** for the SAARC region.
- The member countries are Afghanistan, Bangladesh, Bhutan, India, Nepal, Maldives, Pakistan and Sri Lanka.

Contemporary context: change and continuity in India's Foreign Policy

a) Prioritising an integrated neighbourhood: Neighbourhood First policy

- India's foreign policy has always regarded the concept of neighbourhood as one of widening concentric circles, around the central axis of historical and cultural commonalities.
- India gives political and diplomatic priority to her immediate neighbours and the Indian Ocean Island states such as **Maldives**.
- This centrality of neighbours in India's foreign policy stems from the clear understanding that a peaceful periphery is essential for India to achieve her multifarious developmental goals.
- India provides neighbours with support as needed in the form of resources, equipment and training.
- Greater connectivity and integration is provided so as to improve the **free flow of goods, people, energy, capital and information**.

b) Bridging diplomacy and development

- One of the major objectives of India's foreign policy has been to leverage international partnership for India's domestic development.
- This includes improving technological access, sourcing capital, gaining market access and securing natural resources.

c) A gradual transition from 'Look East' to 'Act East' policy

- South East Asia begins with North East India. Myanmar is our land bridge to the countries of the **Association of the Southeast Asian Nations (ASEAN)**.
- The purpose is to ensure a stable and multipolar balance of power in the Indo-Pacific and to become an integral part of Asia.
- This policy emphasises a more productive role for ASEAN and East Asian countries.
- The three big elements in our eastern policy are stronger emphasis on physical connectivity, commercial and security-related.

d) Economic development

- Currently India's political moves are being influenced by economic imperatives. Many nations are moving to forge better relationship with India.
- Accelerated, balanced and inclusive economic development is India's primary goal.
- India achieves this by ensuring peace and security and by leveraging the nation's international partnership, to obtain all that is needed to **fuel economic development, markets, investment, technology, linkage, mobility of personnel, fair global governance** and a stable and fair environment conducive for growth.

e) India as a leading power

- India is a member of **the G20, the East Asia Summit and the BRICS coalition**, a testament to its status as a large country with a fast-growing economy.

- India aspires for permanent membership on the UN Security Council.
- And India now has an increasing range of interests, which are anchored in different parts of the world and which stem from a wide range of factors such as the need to secure energy, vital natural resources, the imperative of maintaining open shipping lanes, seeking investments and trade opportunities overseas and the need to secure trade access.

Conclusion

Difference between Domestic Policy and Foreign Policy

Domestic Policy	Foreign Policy
◆ Domestic policy is the nation's plan for dealing issues within its own nation. ◆ It includes laws focusing on domestic affairs, social welfare, health care, education, civil rights, economic issues and social issues.	◆ Foreign policy is the nation's plan for dealing with other nations. ◆ Trade, diplomacy, sanctions, defence, intelligence and global environments are the types of foreign policy.

- Today India has formal diplomatic relations with most of the nations, besides being the world's second most populous country, largest democracy and one of the fastest growing country.
- Though India is not in any major military alliance, our relations with the major powers have acquired a strategic depth.
- Our common fight against terrorism is a particular element of strength.
- India has sought to achieve its security and socio-economic advancement while at the same time working for peace, freedom, progress and justice to all nations and peoples.
- Thus India adheres to the foreign policy principle that 'in international relations there is no permanent friend and no permanent foe, only the interests are permanent'.
- New challenges forced India to adjust to new realities. Even then, basic framework of its foreign policy remained more or less the same.

More to Know:

1. Foreign Policy is a combination of strategies carefully formulated by a nation for maintaining relationship with other nations.
2. Diplomacy is the instrument for implementing foreign policy of a state.
3. The Buddha advocated avoidance of force and adoption of peaceful means to settle disputes between states.
4. The Ministry of External Affairs of India also known as Foreign Ministry comes under Government of India is responsible for the conduct of foreign relations of India. The foreign Service

Training Institute, New Delhi established in 1986 provides training for officers of Indian Foreign Services (IFS).

5. The Constitution of India 1950 Article 51

Lays down Directive Principles of India's foreign policy. The state shall endeavour to

- Promote International peace and security
- Maintain just and honourable relations between nations
- Foster respect for international law and international organisation
- Encourage settlement of international disputes by arbitration.

10th Social Science Lesson 21 Notes in English

21. India's International Relations

Introduction



- Independent India has been consistently fostering world peace and international cooperation. India abjured military alliances, but has been active in cooperating and co-ordinating with other nations for peace and economic development.
- As the first Prime Minister of India Jawaharlal Nehru stated **"We can neither be absolutely dependent or independent, but we live in a world of interdependence."** India would prefer a peaceful, wealthy neighbourhood responsive to its own needs and wishes.
- India has always been known as a peace-loving country and has strived hard to champion the cause of peace in the world.
- For the country to progress in an adequate manner, the maintenance of international relations has been regarded as an important area.
- Being a country with a huge population, India is surrounded by many neighbouring countries with whom she has traditionally tried to maintain friendly and good neighbourly relations

India and Its Neighbours

India's position is unique in its neighbourhood. India's neighbours had been a part of a homogenous culture prevailing in the Indian subcontinent for last five thousand years.

- India is a vast country with Pakistan and Afghanistan to the north-west
- China, Nepal, Bhutan to the north
- Bangladesh to the east
- Myanmar to the far east Sri Lanka (**from south-east**) and Maldives (**from south-west**) are two countries that lie close to India separated by the Indian Ocean. India has cordial historical, religious, economic, ethnic and linguistic relationship with all of these countries. Let us know about India's relations with its neighbours.

India and Afghanistan

- Indo-Afghan relation was strengthened by the **Strategic Partnership Agreement (SPA)**. SPA provides assistance to re-build Afghan's infrastructure, institutions, agriculture, water, education, health and providing duty-free access to the Indian market.
- India helped Afghans in the construction of **Salma Dam** in the Herat Province.
- India announced 500 scholarships for the children of the martyrs of Afghan Security Forces in school and colleges both in Afghanistan and in India.
- India is also supporting Afghanistan to improve its public health and small-scale industries.
- India is at the forefront of the promotion of investment in Afghanistan and a consortium of public and private Indian companies has been selected to make one of the biggest investments in the mining sector.
- To harness India's sports potential, India has built **Kandahar International Cricket Stadium**. India's Self Employed Women's Association imparts training on sustainable livelihood and to be self reliant.
- Thus India is contributing proactively to the development of Afghanistan in the form of monetary aids and funds.

India and Bangladesh

- India was the first nation to acknowledge Bangladesh (**the former East Pakistan**) as an independent country.
- India and Bangladesh share the longest land boundary of **4096.7 kilometres**. India has plans to implement the proposed rail connectivity between **Agartala (India) and Akhaura (Bangladesh)**.
- Bangladesh has granted India road transit facility through its territories from Kolkata to Agartala via Dhaka under BBIN-MVA (Bangladesh, Bhutan, India, Nepal Motor Vehicle Agreement).

- The Farakka accord on sharing of Ganga waters signed in 1977 is a historic agreement. India and Bangladesh share **54 common rivers** and a bilateral Joint River Commission is working to maximise benefits from common river systems.
- The Government of India provides grant assistance for project under 'Aid to Bangladesh' for the construction of buildings, laboratories, dispensaries and deep tube wells. In addition, scholarships are granted by ICCR (Indian Council for Cultural Relations) every year to students from Bangladesh and it has initiated a Tagore Chair in University of Dhaka.
- Both the countries jointly inaugurated the construction of **130-kilometre Bangladesh India Friendship Pipeline between Siliguri in West Bengal and Parbatipur (Bangladesh)**.



India and Bhutan

- Bhutan, a small Himalayan kingdom, popularly known as a land of thunderbolt, is one of the poorest countries of the world.
- The diplomatic relations between India and Bhutan were established in **1968** with the appointments of a resident representative of India in Thimphu.
- Bhutan is a landlocked nation. So it is highly dependent on India for access to sea. India is the principal contributor in the economic development of Bhutan. India declared the bilateral trade relation known as '**Bharat to Bhutan**' (B2B).
- India provides scholarship to Bhutanese students to study in prestigious institutions of higher learning and offered help in setting up a digital library in Bhutan.

- The prestigious Nehru-Wangchuk Scholarship is being awarded to deserving and talented Bhutanese nationals to undertake studies in selected premier Indian educational institutions.
- The hydel power sector represents one of the main indicators of bilateral co-operation between India and Bhutan. So far, Government of India has constructed three hydroelectric projects in Bhutan (**Chukha, Kurichchu and Tala**).
- India has helped Bhutan in developing that country's infrastructure by establishing telecommunication and in the construction of hospitals, roads and bridges.

India and China

- In terms of geographic and demographic dimension, skilled manpower and civilisational depth, China is the only country in the region which qualifies for comparison with India.
- China, being the manufacturing hub of the world, is strategically very important to India. India and China share similarity of view on many fronts like **World Trade Organisation**, international climate change talks and reforms of the World Bank.
- **Shanghai Cooperation Organisation**, which was China's initiative, has granted the observer status to India, while SAARC had granted the observer status to China.
- Both sides have established more dialogue mechanisms covering diverse sectors. Bilateral trade has registered enormous growth.
- India and China have signed an educational exchange programme. Under this agreement, scholarships are awarded to **25 students**, by both sides, in recognised institutions of higher learning in each other's country.

India and Maldives

- Maldives is located south of Lakshadweep Islands in the Indian Ocean. The relationship with Maldives is important for India given its strategic location and geographical proximity.
- India and Maldives share **ethnic, linguistic, cultural, religious and commercial links** steeped in antiquity and enjoy cordial and multi-dimensional relations. Trade and tourism are being developed between the two countries.
- Both countries have agreed to strengthen cooperation to enhance maritime security in the Indian Ocean Region through coordinated patrolling and aerial surveillance and exchange of information.

India and Myanmar

- India's second largest border is shared with Myanmar (**known as Burma till 1989**). Four North-Eastern Indian states – **Arunachala Pradesh, Nagaland, Manipur and Mizoram** – also share their borders with Myanmar.
- Myanmar is India's gateway to South East Asia. India is building the Kaladan Multi-Model Transit Transport, a road-river-port cargo transport project to link Kolkata to Sittwe in Myanmar.

- A project aiming to connect Kolkata with Ho Chi Minh City on the South Sea for the formation of an economic zone will have a road pass through Myanmar, Cambodia and Vietnam and work on the first phase connecting Guwahati with Mandalay is currently underway.
- Myanmar is an important partner in our energy needs for petroleum and natural gas. Some of the Indian companies such as **Essar, GAIL and ONGC Videsh Ltd.** have invested in Myanmar's energy sector.

India and Nepal



- Nepal is a natural buffer between India and China. Being a small landlocked country, Nepal depends on India for economic support and transit facilities.
- India shares borders in five Indian states – **Sikkim, West Bengal, Bihar, Uttar Pradesh and Uttarakhand** – with Nepal. People residing in the border districts on both sides share deeper cultural bonds.
- Indian firms are the biggest investors in Nepal. India provides substantial financial and technical development assistance with the focus on infrastructure, irrigation, health, energy projects and community development.
- India built the **204-kilometre long Mahendra Raj Marg** to link Kathmandu and India. Nepal is endowed with fast-flowing rivers and its terrain is ideal for hydroelectric power generation.
- India has taken up the work of **5600 MW Pancheshwar project**, which remained stalled for 18 years after agreement.
- Nepali and Indian people visit each other's country for religious pilgrimage. Pashupati and Janakpur are traditional centres in Nepal whereas Varanasi and the four Dhaams (**Badrinath, Puri, Dwaraka and Rameshwaram**) are important pilgrimage destinations in India.

- The bond of friendship further increased when India included Nepalese language in the VIII schedule of the Constitution.
- A joint hydropower project is being built on the Sharda River. This power plant helps both India and Nepal with respect to electricity production and irrigation facilities.
- From the environmental perspective, there are a number of tiger reserves along Indo-Nepal border.
- The governments of India and Nepal have signed three sister-city agreements for twinning of **Kathmandu-Varanasi, Lumbini-Bodhgaya and Janakpur-Ayodhya**.



India and Pakistan

- Since the bifurcation of territory, which demarcated **India and Pakistan in 1947**, the two nations have had strained relations due to disagreements over a number of key issues. Terrorism remains our core concern in the relationship with Pakistan.
- Pakistan has been antagonistic when maintaining relations with India. But India has made extreme efforts to improve and stabilise relations with Pakistan.
- The cross-border firing between India and Pakistan and the terrorist attacks combined have taken its toll on the Kashmiris, who have suffered poor living standards and an erosion of human rights.
- Kashmir is the bone of contention between India and Pakistan, which has brought the two countries into an open clash many times.
- Cross-border terrorism is a major irritant. India tried to bring a positive change in the relationship of the two countries through bilateral agreements such as **Shimla Agreement and Lahore Declaration**.

India and Sri Lanka

- India has cultural, historical and religious ties with Sri Lanka. Separated by the narrow expanse of the **Palk Strait**, **India and Sri Lanka** have shared excellent trade relations committing to each other in both bilateral free trade agreements as well as developing interactions through SAARC.
- The relationship between India and Sri Lanka can generally be termed as friendly, except for the brief spell in which the Tamil ethnic problem cast its shadow on the relations between the two countries.
- India and Sri Lanka has conventionally close to each other. India is among the top investors in Sri Lanka and its investments are in diverse areas including petroleum retail, IT, real estate, telecommunication and tourism.
- On the other hand, the Sri Lankan investments in India include **Brandix (garment city in Vishakhapatnam)**, MAS Holdings, John Keels, Hayleys, apart from the other investments in the freight servicing and logistic sector. India offers scholarship slots annually to deserving Sri Lankan students.
- Sri Lanka is also a partner in Nalanda University Project of India.

India's Relationships with Developed Countries



A developed country is a sovereign state that has a highly developed economy and advanced technological infrastructure relative to other less industrialised nations. India has been balancing the superpowers with great care and had been trying to reap the maximum benefit for its domestic development.

a. USA

- India and the United States of America has signed a **Communications Compatibility and Security Agreement (COMCASA)** that will lead to a new generation of bilateral military partnership. It is valid for a period of **10 years**.
- COMCASA gives India access to advanced communication technology used in U.S. defence equipment and allows real-time information sharing between the militaries of the two countries.

b. European countries

- There has been a significant progress in all areas particularly the growing cooperation and exchanges include defence, counterterrorism, nuclear energy and space. French space launch pads are used by ISRO.
- India and France are cooperating on **developing smart cities Chandigarh, Nagpur and Puducherry**.
- India and France launched the International Solar Alliance, which brings together countries between Tropic of Cancer and Tropic of Capricorn for cooperation on solar energy.

c. Australia

- India and Australia have built strategic trust over the years slowly yet steadily. Australia and India are committed to working together to enhance maritime co-operation with India's bilateral naval exercise (**AUSINDEX**).
- The Australia India Council broadens the relationship between Australia and India raising awareness and promoting exchanges.

d. Japan

- India decided to introduce the **Japan's Shinkansen system**. It is a highest class of high-speed railway system with safety and accuracy. Delhi Metro is one of the most successful examples of Japanese co-operation.
- **Mumbai-Ahmedabad High Speed Railway (MAHSR)** is another area of co-operation. The Government of Japan has offered **20 seats** per year to Indian nationals for a master's degree course in the University of Japan for serving the Indian Railways.
- In the manufacturing sector Japan announced its co-operation of training **30,000** Indian people in the **Japan India Institute of Manufacturing (JIM)** providing Japanese style manufacturing skills to enhance India's manufacturing industry base and contribute to '**Make in India**' and '**Skill India**' initiatives.
- In 2017, the first four JIMs were started in the states of Gujarat, Karnataka, Rajasthan and Tamil Nadu and JEC (two Japanese Endowed Courses in engineering colleges) was established in Andhra Pradesh.

- Recent initiatives include the establishment of three India-Japan Joint Laboratories in the area of information and communication technology (**Internet of Things, Artificial Intelligence and Big Data Analytics**).

India and West Asia



- West Asia includes **Egypt, the Arabian Peninsula, Turkey and Iran**. India and West Asia enjoy pre-historical ties. Trade relations were established between the civilisations of Mesopotamia and the Indus Valley.
- West Asia stands as a region of considerable significance for India, economically as well as strategically.
- West Asia is gateway to landlocked and energyrich Central Asia. With the advent of the new millennium, there has been extraordinary turnaround in the relationship between the **Gulf Cooperation Council (GCC)** countries and India.
- A trilateral agreement called the Chabahar Agreement was signed between India, Afghanistan and Iran, which has led to the establishment of transit and transport corridor among three countries using Chabahar port.
- This port is seen as golden gateway for India to access landlocked markets of Afghanistan and Central Asia bypassing Pakistan. In medieval times, comments a noted scholar M.S. Agwani, **"the Indian expertise in medicine, mathematics and astronomy was highly valued by Arab and Iranian scholars who eventually made it part of their own intellectual traditions."**

India and International Organisations

- India is a potential superpower and has a growing international influence all around the world. Being a newly industrialised country, India has a great history of collaboration with several countries.
- It has acted as prominent member of several international organisations and has been a founding member of some. India is a member of formal groupings like **UNO, NAM, SAARC, G20 and the Commonwealth.**
- India has been extending a helping hand to the UNO, in all her efforts in ending military conflicts, and in promoting peace and progress among the nations.

BRICS

Name of the global groupings	Name of the member countries	Objectives
IBSA	India, Brazil, South Africa	To focus on agriculture, education, energy, trade, culture and defence among others
BCIM	Bangladesh, China, India, Myanmar	To respond to threats such as natural disasters and data breaches and protect business interests
MGC (Mekong Ganga cooperation)	India, Cambodia, Laos, PDR Myanmar, Thailand, Vietnam	To create necessary infrastructural facilities in the Ganga-Mekong basin
BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)	Bangladesh, India, Myanmar, Sri Lanka, Thailand, Bhutan and Nepal	To strengthen and improve the technological economic cooperation, international trade and foreign direct investment cooperation
RCEP (Regional Comprehensive Economic Partnership)	Australia, Brunei, Cambodia, China, India, Indonesia, Japan, Korea, Laos, Malaysia, Myanmar, New Zealand, Philippines, Singapore, Thailand, Vietnam	To achieve modern high-quality and mutually beneficial agreement that covers trade in goods, trade in service, investments, technical cooperation dispute settlement and other issues
EAS (East Asia Summit)	10 ASEAN nations + 8 strategic partners including US, China, India, Japan	To promote peace and stability
GCC Gulf Cooperation Council	Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, United Arab Emirates, India	To achieve unity based on their common objectives and their similar political and cultural identities
BBIN	Bangladesh, Bhutan, India, Nepal	For energy development
SCO (Shanghai cooperation organization)	India, Kazakhstan, China, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan	For security-related concerns, resolving border issues, intelligence sharing and countering terrorism

- **Brazil, Russia, India, China and South Africa** are leading emerging economies and political powers at the regional and international level. The BRICS organisation's headquarters is in Shanghai, China.
- BRICS opened up a possibility for countries of the Global South to challenge the Global North.
- India is an active member and this collaboration paves way for India to build its global profile.



Reason for the formation of BRICS

To be an alternative to World Bank and IMF to challenge U.S. supremacy To provide self-owned and self-managed organisations to carry out developmental and economical plans in its member nations

Objectives of BRICS

- To achieve regional development
- It acts as a bridge between developed and developing countries
- To contribute extensively to development of humanity
- To establish a more equitable and fair world
- Boost intra BRICS trade in their local currencies to increase trade cooperation and cope with the current international financial crisis
- To promote the technological information exchange among the member states
- To enhance inclusive economic growth that will lead to an increase in the creation of jobs, fight against poverty and accelerate the economic transformation of members.

The financial architecture of BRICS

- The New Development Bank (NDB) is a multilateral development bank. Its primary focus is lending for infrastructure projects.
- It aims to contribute to development plans established nationally through projects that are socially, environmentally and economically sustainable.
- It gives priority to projects aimed at developing renewable energy sources.
- The Contingent Reserve Arrangement (CRA) is a framework for providing protection against global liquidity pressures, which includes currency issues.

BRICS payment system

At the **2015 BRICS Summit**, ministers from the BRICS nations initiated consultations a payment system that would be an alternative to the Society for **Worldwide Interbank Financial Telecommunication (SWIFT)** system.

The factors that bolster co-operation among members

- First, the common need among developing countries to construct an economic order that reflects the current situation will drive the BRICS efforts.
- In this matter, the idea of NDB and CRA are defining changes and will have huge geo-economic and geopolitical impact.
- Second, the BRICS alternative idea in the landscape of global governance will attract support from other countries.
- Third, the expansion of BRICS interaction to other sector will make it more strong partnership.

OPEC

- OPEC, the Organisation of the Petroleum Exporting Countries (a group of oilproducing nations), is an intergovernmental organisation **founded in Baghdad, Iraq, and headquartered in Vienna, Austria. Iran, Iraq, Kuwait, Saudi Arabia and Venezuela** are the OPEC's Founder Members.
- There are three categories of memberships: Founder Members, Full Members and Associate Members. At present there are **15 member** nations (**two are located in South America, six in the Middle East and seven in Africa**).
- OPEC membership is open to any country that exports crude oil and which shares the ideals of the organisation

OPEC's mission

- To coordinate oil policies in its member countries
- Help stabilise oil markets
- To secure fair and stable income to petroleum producers
- An efficient, economic and regular supply of oil to consuming nations

- A fair return on capital to those investing in the petroleum industry

How does OPEC help other countries?

- The OPEC Fund for International Development (OPID) is an institution that helps finance projects with low interest loans.
- It also provides grants to social and humanitarian projects. OPEC has an Information Centre with over **20,000 volumes** including books, reports, maps and conference proceedings related to petroleum, energy and the oil market.
- The Information Centre is open to the public and is often used by researchers and students.

India's relationship with OPEC

- India is one of the biggest consumers of crude oil. OPEC obviously has vested interest in India's economic growth. We **import 86% of crude oil, 70% natural gas, 95% of cooking gas from OPEC countries**.
- India has been identified as a great partner for OPEC mainly because of its high oil demand. India doesn't have enough oil reserves.
- India can't produce oil. Devoid of necessary oil reserves India strongly focuses on agriculture, and industrial production.

Conclusion

Apart from economic and trade cooperation, India also aspires to have a warm relationship with its neighbours and extended neighbours in the field of education, health, fighting terrorism, disaster management, employment for its citizens, curbing organised crimes, technology development and so on.

More to Know:

1. The OPEC LOGO



It is the result of an international design competition held in 1969. An Austrian designer Svoboda won the competition with her design, which combined the different letters of the organisation's name in a rounded design.

2. The acronym **BRICS** was coined by **Jim O'Neill**, a famous British economist. He predicted that by year 2050 Brazil, Russia, India and China would become bigger than the six most industrialised nations in dollar terms and would completely change the power dynamics of the last 300 years.
3. One of the oldest maritime trading routes ran from ancient Sumeria via Bahrain to the Indus Civilisation called Meluha.
4. Ashoka had sent his son Mahinda and daughter Sangamitra to Ceylon (Sri Lanka) for the propagation of Buddhism. **Chola kings Rajaraja I and Rajendra I** conquered the northern part of Ceylon.
5. LoC (Line of Control)

The Ceasefire line determined in **1949** was called the **LoC** after **1972**. This is the boundary that came to be agreed between India and Pakistan under the Shimla Agreement of 1972. It was called Radcliffe Line at the time of partition in 1947, (Radcliffe was the chairman of the border commission.) This is now called LoC.

6. McMahon Line:

This is the boundary line between India and China, east of Bhutan. It was determined **1914** at a conference of representatives of British India, Tibet and China. The Secretary of State for India (in British Cabinet), Arthur Henry McMahon, represented British India at the Conference.

7. Gur Padmasambhava, a Buddhist saint who went to Bhutan from India, played an influential role in spreading Buddhism and cementing traditional ties between people of both nations.

8. The Teen Bigha Corridor is a strip of land belonging to India on the West Bengal– Bangladesh border, which was leased to Bangladesh in **2011**.

9. From the Indus Civilisation to the kingdom of Chandragupta Maurya, India and Afghanistan have a deep-rooted multi-faceted relationship. During the reign of Kanishka, a large number of Indian missionaries went to China, Central Asia and Afghanistan to preach their religion. Khan Abdul Ghaffar Khan of Baluchistan (a border province in today's Pakistan) was a prominent leader of the Indian Independence movement and active supporter of the Indian National Congress.

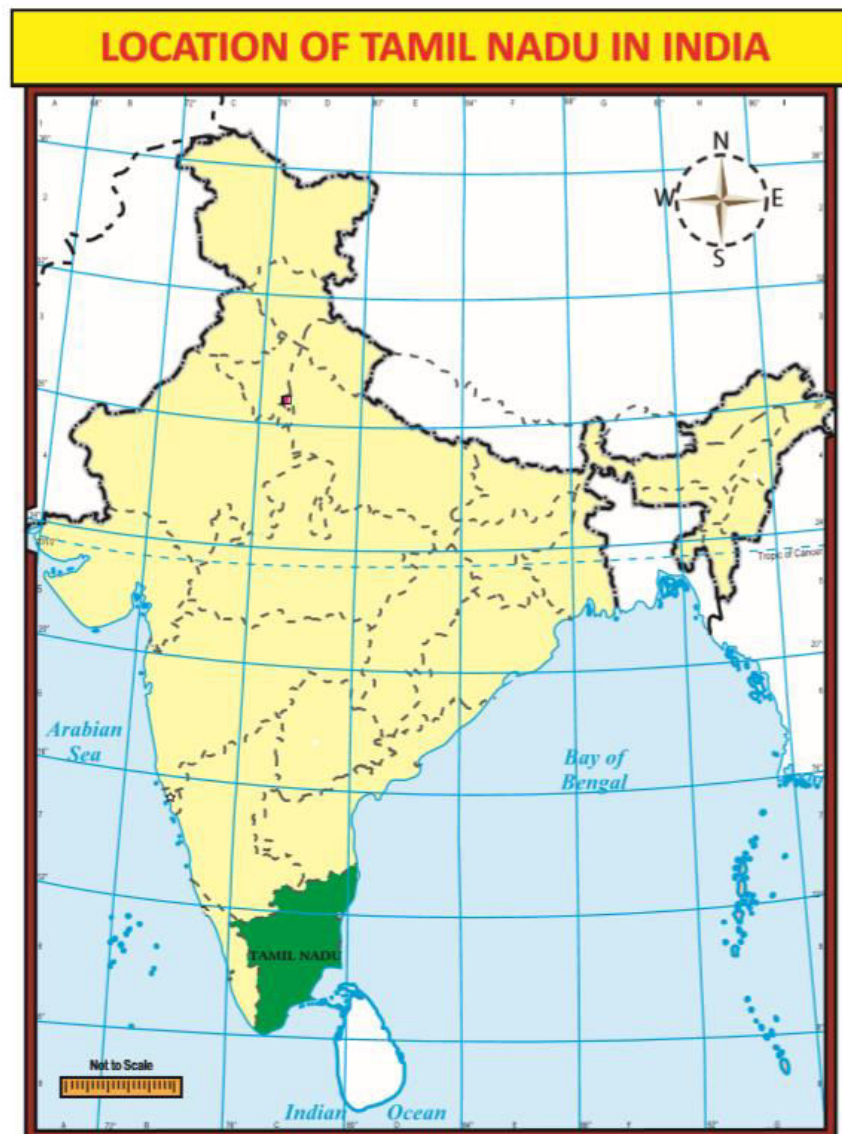
10. The countries that share the most number of neighbours touching its borders are China and Russia.

10th Social Science Lesson 22 Notes in English

22. Physical Geography of Tamil Nadu

Introduction

- The study of one's own region is the first step to become a global citizen. The purpose of studying our local territory is to understand life in our environment.
- We shall learn about the geography of Tamil Nadu. You will get to know about the **etymology, history of formation, location, size, physical divisions, rivers, climate, soil and natural vegetation of Tamil Nadu** in this chapter.
- Our state Tamil Nadu has a hoary past with a variety of cultural practices and traditions. Its exquisite physiography and climate makes our state unique in India. It has long **and sunny beaches, waterfalls, hills, forests and varied flora and fauna.**



Formation of Tamil Nadu

- During Sangam age, the Tamizham was ruled by three great emperors – **Cheras, Cholas and Pandyas** – and virtuous kings ruling small kingdoms like **Adhiyaman and Pari**.
- For a short time, the Tamil country was ruled by the Kalabras, but not much about their time is recorded or known.
- After the Kalabras, the Tamil country came under the control of the **Pallavas, Cholas, Pandyas, Marathas, Mughals and Vijayanagara** empires in succession until the British took administrative control over the entire country, starting from Madras.
- During the British period, our country was divided into three presidencies, namely Madras, Bombay and Calcutta for political and military purposes.
- Tamil Nadu and parts of Andhra Pradesh, Kerala, Karnataka and Orissa (Odisha) constituted the Madras Presidency.
- After independence, following the linguistic division of states, Telugu-speaking areas were bifurcated from the Madras state.
- After bifurcation, there were only **13 districts in Madras state**. The Madras state was renamed as Tamil Nadu by **C.N. Annadurai**, former Chief Minister of Tamil Nadu, on **January 14, 1969**.

Location and Size

- Tamil Nadu is one of the 28 states of India, located in the southern most part of the country. This landmass extends from **8°4'N to 13°35'N latitudes and from 76°18'E to 80°20'E longitudes**.
- Its eastern and western extremities are defined by the Point Calimere and the hills of Anaimalai respectively.
- The northern extremity of the state is marked by Pulicat lake and the southernmost point is Cape Comorin. It covers an area of **1,30,058 sq.km** and is the **11th largest state in India**. It covers **4% of the area of our country**.

Boundaries and Neighbours

- Tamil Nadu is bounded by Bay of Bengal in the east, Kerala in the west, Andhra Pradesh in the north, Karnataka in the northwest and Indian Ocean in the south.
- Gulf of Mannar and Palk Strait separate Tamil Nadu from the Island of Sri Lanka, which lies to the southeast of India.
- The state has **1,076 km long coastline**, the second-longest in India after Gujarat.

Administrative Divisions

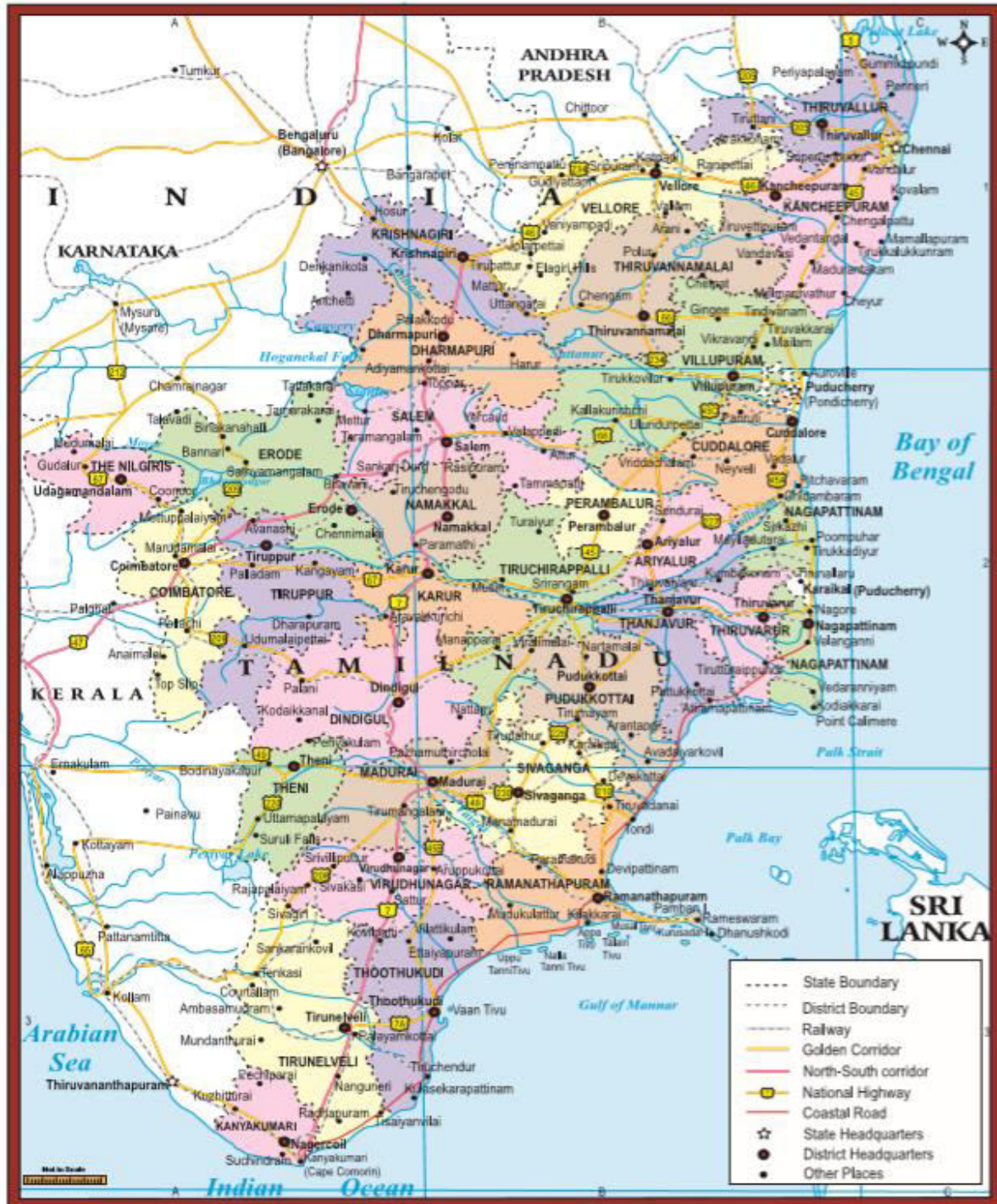
- Already we have learnt that the state of Tamil Nadu had only **13 districts** at the time of its formation.

- After that, the state was reorganised several times for the purpose of administrative convenience.
- At present there are **38 districts** in Tamil Nadu, including the newly created districts such as Kallakurichi, Tenkasi and Chengalpet. The administrative divisions of the state are given in the following table.

Divisions	Numbers
Districts	35 (32+3)
Revenue Divisions	76
Taluks	226
Firkas	1,127
Revenue Villages	16,564
Municipal Corporations	15
Municipalities	125
Panchayat Unions (Blocks)	385
Town Panchayats	561
Village Panchayats	12,618
Lok Sabha Constituencies	39
Assembly Constituencies	234
Source: maps of india.com 2019	

Physiographic Divisions

TAMIL NADU - POLITICAL



- Have you ever thought what kind of landforms on which you live? Have you ever noticed the landscapes you come across while travelling from one place to another? Have you ever wondered how these landforms were formed?
- Let's see the major physical features of Tamil Nadu and their characteristics. Tamil Nadu is located on the Peninsular Plateau, known as Deccan Plateau.

- It is also a part of the ancient Gondwana land that broke away 135 million years ago during Cretaceous Period. Tamil Nadu has many unique land features which include high eroded mountains, shallow deep valleys and plains.
- The topography of the state slopes towards east. Based on the major differences in relief, Tamil Nadu is divided into the physical divisions of **Western Ghats, Eastern Ghats, Plateaus, Coastal and Inland plains.**

Western Ghats

- Western Ghats extends from the Niligris in the north to Marunthuvazh Malai at Swamithope in Kanyakumari district in the south.
- Height of the Western Ghats ranges from **2,000 to 3,000 metres**. It covers an area of about **2,500 sq.km.**
- Though the Western Ghats is a continuous range, it has some passes. The passes are Palghat, Shencottah, Aralvaimozhi, and Achankoil.
- The Niligris, Anaimalai, Palani hills, Cardamom hills, Varusanadu, Andipatti and Agasthiyar hills are the major hills of Western Ghats .

Nilgiri Hills

- The Nilgiri hills is located in the Northwestern part of Tamil Nadu. It consists of **24 peaks with more than 2,000 metres height. Doddabetta is the highest peak (2,637 metres) of this hills followed by Mukkuruthi (2,554 metres).**
- Ooty and Coonoor are the major hill stations located on this hills. It has more than 2,700 species of flowering plants and the state animal Nilgiri Tahr is found in this hill.
- Much of the Nilgiris natural montane grasslands and shrublands have been disturbed or destroyed by extensive tea plantations and cattle grazing.

Anaimalai

- Anaimalai is located in the border of Tamil Nadu and Kerala. It is located to the south of Palghat Gap.
- Anaimalai Tiger Reserve, Aliyar Reserved Forest, Valparai hill station, Kadamparai hydroelectric Power Plant are located on this hills.
- Aliyar and Tirumurthy dams are located at the foothills of this range.

Palani Hills

- Palani hills are the eastward extension of the Western Ghats. Except its western part, these hills are located in Dindigul district. Vandaravu (2,533 metres) is the highest peak in the Palani hills.
- Vembadi Shola (2,505 metres) is its second highest peak. The hill station of **Kodaikanal (2,150 metres)** lies in the south central portion of the range.

Cardamom Hills

- These hills are also known as Yela Mala hills located in the southwestern part of Tamil Nadu. It acquires its name from the cardamom spice, which is commonly grown here.
- Pepper and coffee are the other crops cultivated over the hills. They meet the **Anaimalai hills in the northwest, the Palani hills in the northeast and Varusanadu and Andipatti hills in the southeast.**

Varusanadu and Andipatti Hills

Peaks in Western Ghats	Height(m)
Doddabetta	2,637
Mukkuruthi	2,554
Vembadisolai	2,505
Perumalmalai	2,234
Kottaimtalai	2,019
Pagasura	1,918

- Another eastward extension of Western Ghats is Varusanadu and Andipatti hills. Megamalai (the highway mountain), Kalugumalai, Kurangani hill station, and Suruli and Kumbakarai waterfalls are found on these hills.
- Srivilliputhur Grizzled Squirrel Wild life Sanctuary is located in the southern slope of these hills in Virudhunagar district. Vaigai river and its tributaries originate in this region.

Pothigai Hills

- Its major part lies in Tirunelveli district with its southern slope in the Kanyakumari district. Pothigai hills are called with different names such as the Shiva Jothi Parvath, Agasthiyar hills and Southern Kailash.
- These hills feature richest biodiversity in the Western Ghats. This area is known for its rich evergreen forest, waterfalls and ancient temples. **Kalakkad Mundanthurai Tiger Reserve is located in this region.**

Mahendragiri Hills

- This continuous range is situated along the border of Kanyakumari and Tirunelveli districts and is a part of the southern range of the Western Ghats.

- Its average height is **1,645 metres**. ISRO Propulsion Complex, a test facility for Indian Space Research Organisation's launch vehicles and satellite propulsion systems, is situated on the lower slopes of this mountain.

The Eastern Ghats

- Unlike Western Ghats, Eastern Ghats is a discontinuous and irregular one. It is dissected at many places by the rivers, which drain into the Bay of Bengal.
- Its height ranges from **1,100 to 1,600 metres**. These hills separate the plains from plateaus. **Javadhu, Servarayan, the Kalrayan, Kollimalai and Pachaimalai** are the major hills of the Eastern Ghats of Tamil Nadu and are located in northern districts of the state.

Javadhu Hills

- Javadhu hills are an extension of the Eastern Ghats spread across parts of Vellore and Tiruvannamalai districts and separates these two districts.
- Many peaks with the height of **1,100–1,150 metres** are located in this range. Melpattu is its highest peak.
- The Vainu Bappu Observatory (VBO) Kavalur, which began operations in **1967**, is located on these hills. Many parts of this range are covered with bluish grey granites.
- It is noted for its fruit bearing trees, medicinal herbs and sandalwoods. Due to illegal logging, sandalwood trees are disappeared now.

Kalvarayan Hills

- The name '**Kalvarayan**' comes from the word '**Karalar**', the ancient name of the present tribes. It is another major range of hills in the Eastern Ghats of Tamil Nadu.
- This range, along with the Pachaimalai, Aralvaimalai, Javadhu and Servarayan hills, separates the river basins of Cauvery and Palar.
- The height of this hill ranges from **600 to 1,220 metres**. These hills have two sections. The northern section is referred as the Chinna Kalvarayan and the southern one the Periya Kalvarayan.
- The average height of **Chinna Kalvarayan** is 825 metres and the **Periya Kalvarayan** is 1,220 metres.

Servarayan Hills

Peaks in Eastern Ghats	Height(m)
Shervarayan temple	1,623
Mazhamalai	1,500
Urgamalai	1,486
Kuttirayan	1,395
Muganur	1,279
Valsamalai	1,034

Districts	Hills
Coimbatore	Maruthamalai, Velliangiri and Anaimalai
Dharmapuri	Theertha malai, Chitteri and Vathalmalai
Dindigul	Pazhamalai and Kodaikanal
Erode	Chenni hills and Sivan hills
Vellore	Javadhu, Yelagiri and Rathinamalai hills
Namakkal	Kolli hills
Salem	Servarayan, Kanjamalai and Chalk hills
Villupuram	Kalvarayan and Gingee hills
Perambalur	Pachaimalai
Kanyakumari	Marunthuvazhmalai
Tirunelveli	Mahendragiri and Agasthiyarmalai
The Nilgiris	Nilgiri hills

Major hills in Tamil Nadu

- It is a mountain range located near the Salem city with the height ranging from **1,200 to 1,620 metres**. The name of the range comes from a local deity, Servarayan.
- The highest peak in the southern part of the Eastern Ghats is located in this range. The peak is Solaikaradu and its height is 1,620 metres.

- The hill station Yercaud, which is known as poor man's Ooty, is located on this range. Seravarayan temple is its highest point (**1623 metres**).

Kolli Hills

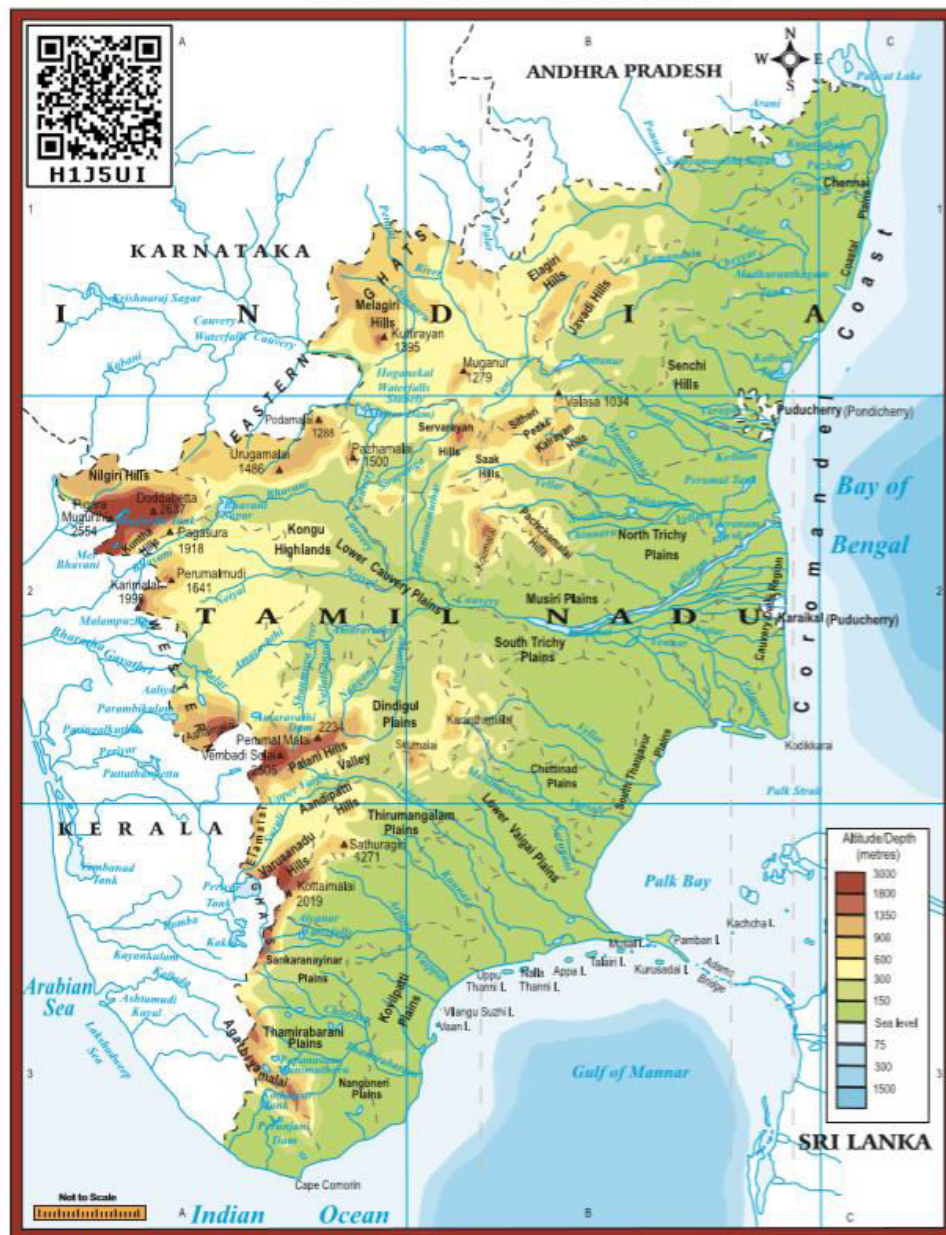
- It is a small mountain range located in Namakkal district. It covers an area of about **2,800 sq.km**. It rises up to **1300 metres**.
- This is a mountain range that runs almost parallel to the east coast of South India. Arpaleeswarar temple located on this range is an important pilgrim centre.
- It has the largest cover of evergreen or shola forest when compared to other parts of the Eastern Ghats.
- Several coffee plantations, fruits, flowers and silver oak estates are found in this region.

Pachaimalai

- It is the lowest hill range, spreads over the districts of Perambalur, Tiruchirapalli and Salem. In Tamil language, pachai means green.
- The vegetation in this range is greener than the vegetative cover of the other hills in this region. Hence it is named as '**Pachai malai**'.
- Jackfruit is a popular seasonal agricultural product of this hills.

Plateaus

TAMIL NADU - PHYSICAL



- Plateaus of Tamil Nadu are located between the Western Ghats and the Eastern Ghats. It is roughly triangular in shape and covers an area of about **60,000 sq.km**. Its height increases from east to west.
- Its height ranges between **150 and 600 metres**. This plateau is broader in the north and very narrow in the south. It has many subdivisions.
- Bharamahal plateau is a part of the Mysore plateau situated in the northwestern part of Tamil Nadu. Its height ranges from **350 to 710 metres**.

- Dharmapuri and Krishnagiri districts are located in this region. Coimbatore plateau lies between the Nilgiris and Dharmapuri districts. Its height varies from **150 to 450 metres**. This region includes Salem, Coimbatore and Erode districts. The area of this plateau is about **2,560 sq.km**.
- Its height varies from **352 to 710 metres**. Moyar river separates this plateau from the Mysore plateau.
- Rivers like Bhavani, Noyyal and Amaravathi, which originate from Western Ghats, form valleys in this region.
- Many intermontane plateaus are found in the region of the Nilgiris. Sigur plateau is one such plateau.
- Madurai plateau found in Madurai district extends up to the foothills of the Western Ghats. Vaigai and Thamirabarani basins are located in this zone.

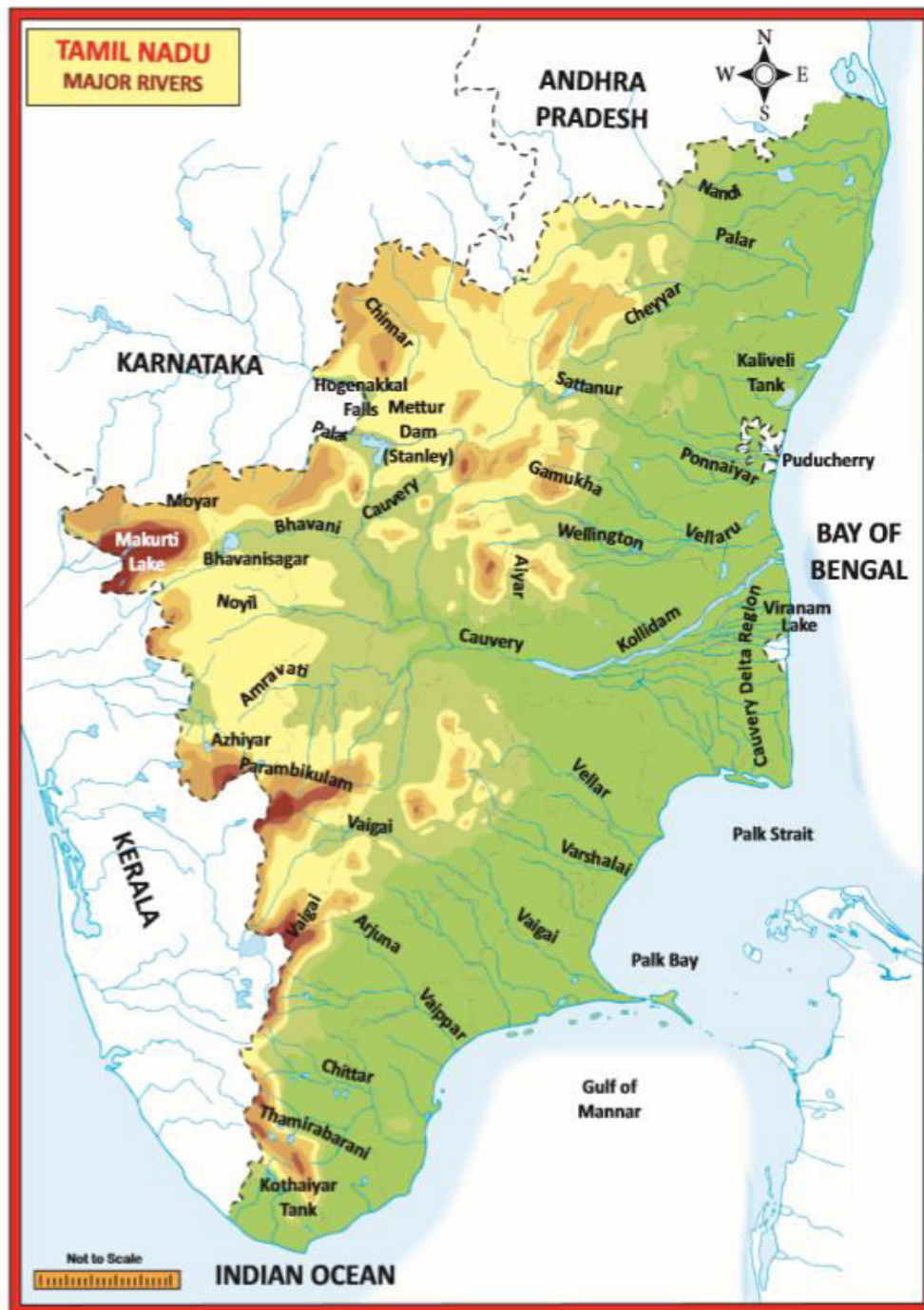
Plains

- The plains of Tamil Nadu may be divided into two, namely inland plains and coastal plains. Inland plains are drained by the rivers Palar, Ponnaiyar, Cauvery and Thamirabarani.
- Cauvery plains is one of the most important fertile plains of the state. The plains of Cauvery is found in Salem, Erode, Karur, Tiruchirapalli, Pudukottai, Thanjavur, Tiruvarur and Nagapattinam districts.
- Coastal plains of Tamil Nadu are also called Coromandel or Cholanmandalam (**land of Cholas**) plain, which extends from Chennai to Kanyakumari. It is formed by the rivers that flow towards east drain in the Bay of Bengal.
- It is more than **80 kilometres** wide at some places. Though it is an emerged coast, some parts are submerged into the sea.
- The sand dunes formed along the coast of Ramanathapuram and Thoothukudi districts are called Teri.
- Coral rocks are found at the head of Gulf of Mannar in the east coastal plain.

Beaches

- The Coromandel Coast along the Bay of Bengal consists of many beautiful and exotic beaches. The golden sands of Tamil Nadu beaches are scattered with palm and casuarinas groves.
- **Marina and Elliot beaches of Chennai, Kovalam and Silver beaches of Kanyakumari** are some of the famous beaches in Tamil Nadu.

Drainage



- Rivers of Tamil Nadu are its lifeline. Though it has many rivers, **the rivers of Cauvery, Palar, Ponnaiyar, Vaigai and Thamirabarani** are the notable ones.
- Most of the rivers of Tamil Nadu originate from Western Ghats and flow towards east and drain into the Bay of Bengal.
- All the rivers of the state are non-perennial except Thamirabarani. It is perennial as it is fed by both the southwest and northeast monsoons.

Cauvery

- The river Cauvery originates at **Talacauvery in the Brahmagiri hills of Kodagu(coorg) district** of Karnataka in the Western Ghats.
- About **416 km** of its course falls in Tamil Nadu. It serves as the boundary between Karnataka and Tamil Nadu for a distance of 64 km.
- It forms Hogenakkal waterfalls in Dharmapuri district. Mettur Dam, also called as the Stanley Reservoir, is located across this river in Salem district.
- A tributary called Bhavani joins Cauvery on the right bank about 45 km from the Mettur Reservoir. Thereafter, it takes easterly course to enter into the plains of Tamil Nadu. Two more tributaries, Noyyal and Amaravathi, confluence the river on the right bank at Thirumukkudal 10 km from Karur.
- The river is wider in this region, where it is called as '**Agandra Cauvery**'. In Tiruchirappalli district, the river branches into two parts.
- The northern branch is called Coleroon or Kollidam and the southern branch remains Cauvery. From here, the Cauvery delta begins.
- After flowing for about **16 km**, the two branches join again to form the '**Srirangam Island**'.
- The Grand Anaicut, also called as Kallanai was built across the river Cauvery. After Kallanai, the river breaks into a large number of distributaries and forms a network all over the delta.
- The network of distributaries within the delta of Cauvery in the coast is called as the '**Garden of Southern India**'. It merges into Bay of Bengal to the south of Cuddalore.

Palar

- The Palar river rises beyond Talagavara village in the Kolar district of Karnataka. The Palar drains an area of **17,871 sq.km**, out of which nearly 57% lies in Tamil Nadu and the rest in the states of Karnataka and Andhra Pradesh.
- Ponnai, Goundinya Nadhi, Malattar, Cheyyar and Kiliyar are its major tributaries. Its total length is **348 km**, out of which **222 km** of its course falls in Tamil Nadu.
- It flows through the districts of Vellore and Kancheepuram before entering into Bay of Bengal near Kuvattur.

Then Pennaiyar/Then Ponnaiyar

- It originates from the **eastern slope of Nandi Durga hills in eastern Karnataka**. It drains an area of **16,019 sq.km**, of which nearly 77% lies in Tamil Nadu.
- It flows for a **distance of 247 km** in the southeasterly direction in the districts of Krishnagiri, Dharmapuri, Vellore, Tiruvannamalai, Cuddalore and Villupuram. It branches into two, viz.
- Gadilam and the Ponnaiyar near Tirukoilur Anaicut. Gadilam joins the Bay of Bengal near Cuddalore and Ponnaiyar near the Union Territory of Puducherry. Chinnar, Markandanadhi, Vaniar and Pambar are its tributaries.

- Heavy rain at the river's source cause sudden but short-lived floods. The river is extensively dammed for irrigation, especially in Tamil Nadu.
- There are reservoirs at Krishnagiri and Sathanur across this river. The Ponnaiyar is considered sacred by Hindus and festivals are held during the Tamil month of **Thai** (January–February).

Vaigai

- Vaigai river rises from the **eastern slopes of the Varusanadu hills of Western Ghats of Tamil Nadu**.
- It drains an area of **7,741 sq.km**, which lies entirely in the state of Tamil Nadu. It flows through the districts of Madurai, Sivaganga and Ramanathapuram.
- Its length is 258 km. It discharges its water into the Ramnad Big Tank and some other small tanks.
- The surplus water from the tanks is finally discharged into Palk Strait near Ramanathapuram.

Thamirabarani

- The name is interpreted as **Thamiram (copper) and Varuni (streams of river)**. The water of this river gives a copper like appearance due to the presence of dissolved suspended red soil.
- It originates from a peak in Pothigai hills on the Western Ghats above Papanasam in the Ambasamudram taluk.
- The origin of the river is associated with Sage Agasthiyar. It courses through the districts of Tirunelveli and Thoothukudi and finally flow into the Bay of Bangal near Punnaikayal in Thoothukudi district.
- Karaiyar, Servalar, Manimuthar, Gadanathi, Pachaiyar, Chittar and Ramanathi are its main tributaries.

District	Waterfalls
Dharmapuri	Hogenakkal
Thirunelveli	Kalyanatheertham, Courtallam
Theni	Kumbakkarai and Suruli
Namakkal	Agayagangai
The Nilgiri	Catherine and Pykara
Salem	Kiliyur
Virudhunagar	Ayyanar
Coimbatore	Vaideki, Sengupathi, Siruvani and Kovaikutralam
Tiruppur	Tirumurthy
Madurai	Kutladampatti
Kanyakumari	Tirparappu, Kaalikesam, Ulakkai and Vattaparai

Major waterfalls in Tamil Nadu

Climate

- The Tropic of Cancer divides India roughly into two equal parts and the state Tamil Nadu lies to the south of Tropic of Cancer, which is near the Equator.
- As it receives vertical sunrays, the temperature of the state is relatively high throughout the year. Though the state falls within the hot climatic zone, the east coast of Tamil Nadu enjoys tropical maritime climate.
- The Bay of Bengal and Indian Ocean influence the climate of the coastal regions. The annual temperature ranges from 18° to 43° and the annual rain fall is **958.5 mm**.
- While the east coast experiences tropical maritime climate, the western region of the state enjoys the mountainous climate. This climate prevails over the Blue Mountains, Anaimalai and the Kodaikanal hills.
- Thick forests and high altitude make the climate of these areas cool and pleasant. Thus stations in this region attract thousands of people during the summer season.
- Low altitude and distance from the sea are the reasons for high temperature and dry conditions in the central part of Tamil Nadu.

- The migration of vertical sun's rays leads to the formation of different seasons in Tamil Nadu as follows.

Seasons of Tamil Nadu	
Season	Period
Winter Season	January-February
Summer Season	March- May
Southwest Monsoon	June-September
Northeast Monsoon	October -December

Winter Season

- During January and February, the vertical rays of the sun fall between the Tropic of Capricorn and the Equator.
- Hence, Tamil Nadu and India on the whole receive slanting rays from the sun. So, the weather is slightly cooler during these months.
- The difference between summer and winter temperature is not very high. Winter temperature in Tamil Nadu varies from **15°C to 25°C**.
- However, in the hill stations, the winter temperature drops below 5°C occasionally. Some valleys in the **Nilgiris record even 0°C**.
- This drop in temperature leads to the formation of thick mist and frost. This season is practically dry.

Summer Season

- The apparent migration of the sun towards north during March, April and May results in the reception of vertical sun's rays by South India.
- Thus there is a steady rise in temperature from the equator. Hence, Tamil Nadu located to the south of Tropic of Cancer, experiences high temperature. Generally the temperature varies from **30°C to more than 40°C**.
- During this season particularly in the month of May, southern part of the state receives some rainfall from pre-monsoon showers (**Mango/Blossom showers**) and some parts experience convectional rainfall.

Southwest Monsoon

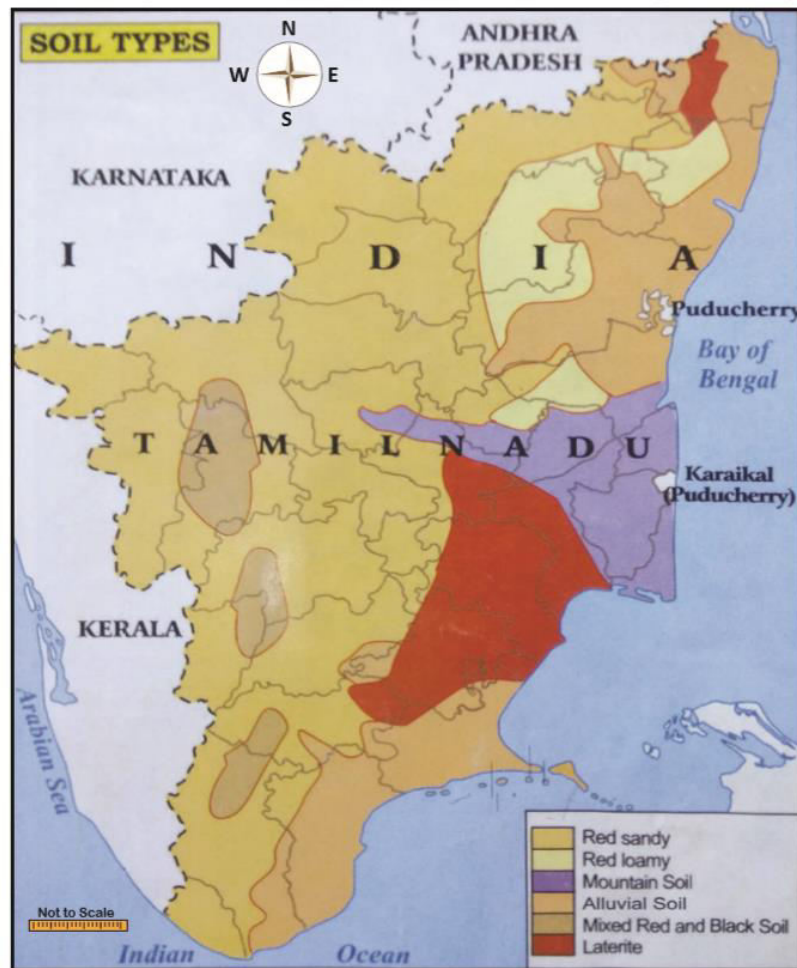
- The intense heating of the landmass of the north by the sun during March to May creates a well-developed low pressure in North India, which draws wind from the Indian Ocean.
- This results in the formation of southwest monsoon. During this season, Tamil Nadu is located in the rain shadow region for the wind, which blows from the Arabian Sea. As a result, Tamil Nadu receives only a meagre rainfall from this monsoon.

- Rainfall during this season decreases from west to east. Coimbatore plateau receives an average of 50 cm rainfall.
- However, the southern districts like Kanyakumari, Tirunelveli and The Nilgiris record **50–100 cm** rainfall during this period. The rainfall is scanty in the eastern part of the state.

Northeast Monsoon

- The northeast monsoon season commences from the month of October and lasts till mid-December.
- The high pressure created over Central Asia and northern part of India becomes the source for the northeast monsoon winds.
- The apparent migration of the sun from Tropic of Cancer to the Tropic of Capricorn causes a change in receiving temperature and air pressure during this season. It makes the wind to blow towards Bay of Bengal from North India.
- After reaching Bay of Bengal, the wind gets deflected by Coriolis force and takes the northeast direction. Hence it is known as northeast monsoon.
- As the northeast monsoon is a part of returning of southwest monsoon wind, it is also called as the retreating monsoon. This is the main rainy season for Tamil Nadu, accounting for its 48% of annual rainfall.
- Coastal districts of the state get nearly 60% of their annual rainfall and the interior districts get about 40–50% of the annual rainfall during this season.
- Tropical cyclones are common during this season. Cyclone originating from the Bay of Bengal bring heavy rainfall to the east coastal regions of Tamil Nadu.
- **More than 50% of the state's rainfall is received from tropical cyclones during this period and east coastal region receives 100 to 200 cm of rainfall.**
- The rainfall received by the central and northwestern parts is 50–100 cm. The cyclones sometimes disturb the cultivation of crops and cause severe damage to life and property.

Soils of Tamil Nadu



- Soil is the loose material mainly formed by the weathering and erosion of rocks. It forms an important element of agriculture.
- It provides essential minerals and nutrients for the growth of vegetation. Soil is one of the important non-renewable resources in the world. It takes **300–1,000 years** to form two inches of soil.
- The soil of a place depends on the factors like climate, parent rocks and vegetative cover of the respective places.
- The soils in Tamil Nadu are broadly classified into five types according to their characteristics. They are alluvial, black, red, laterite and saline soils.

Alluvial Soil

- Alluvial soils are formed by the deposition of silt by the rivers. Alluvial soils are generally fertile as they are rich in minerals such as lime, potassium, magnesium, nitrogen and phosphoric acid. It is deficient in nitrogen and humus.
- It is porous and loamy. Paddy, sugarcane, banana and turmeric are cultivated in this soil. It is found in the river valley regions and the coastal plains of Tamil Nadu.

- Generally this type of soil is found in the districts of **Thanjavur, Tiruvarur, Nagapattinam, Villupuram, Cuddalore, Tirunelveli and Kanyakumari**. It is also found to a small extent along the river valleys in few interior districts.

Black Soil

- Black soils are formed by the weathering of igneous rocks. It is also known as **regur soil**. As cotton grows well in this soil, it is also called as black cotton soil.
- This soil is developed over the Deccan lava granite region under semiarid conditions. It is fine textured and clayey in nature. It is poor in phosphoric acid, nitrogen and organic matter.
- Chief minerals found in this soil are calcium, magnesium, carbonates, potash and lime. Cotton, sorghum, cumbu and fodder crops are the major crops cultivated in the black soil regions of Tamil Nadu.
- Black soils are found extensively in the districts of Coimbatore, Madurai, Virudhunagar, Tirunelveli and Thoothukudi.

Red Soil

- Red soils cover over two-thirds of the total area of Tamil Nadu. They are found particularly in the central districts of the state.
- This soil is sandy and loamy in texture. However, the characteristic features of the red soil vary according to its formation and climatic condition under which the soil was formed. Red soil is porous, friable and non-retentive of moisture.
- The colour of the soil is due to the presence of high content of iron oxides. This soil is poor in nitrogen, phosphorus, acids and humus. **paddy, ragi, tobacco and vegetables** are the chief crops grown in this soil.
- Almost all types of crops can be grown in this soil with the application of manure and irrigation facilities. It is dominantly found in Sivagangai and Ramanathapuram districts.

Laterite Soil

- This soil is formed by the process of intense leaching. Laterite soils are found in some parts of **Kancheepuram, Tiruvallur and Thanjavur districts** and some patches over the mountainous region in the Nilgiris.
- Crops grown in this soil are paddy, ginger, pepper and plantains. It is also suitable for the cultivation of tea and coffee plants.

Saline Soil

- Saline soils in Tamil Nadu are confined to the Coromandel coast. Vedaranyam has a pocket of saline soil.
- However, the tsunami waves on **December 26, 2004** brought a lot of sand and deposited it all along the east coast of Tamil Nadu.

- The tsunami made the coastal areas unsuitable for cultivation to a considerable extent.

Soil Erosion

- Soil is a non-renewable resource. It is very difficult to replace the soil once it gets degraded.
- Deforestation, overgrazing, urbanisation and heavy rain are responsible for soil erosion in Tamil Nadu.
- Soil erosion reduces the fertility of soils, which in turn reduces agricultural productivity. So, it is necessary to take intensive care to conserve the soil resources.

Natural Vegetation

- Natural vegetation refers to the forest cover. Landforms, nature of soil, temperature and rainfall are the major factors that control the distribution of natural vegetation. As per **National Forest Policy, 1988**, a minimum of one-third of the total geographical area must be under forest cover.
- The total forest cover of Tamil Nadu is far lower than this. According to the Tamil Nadu State of Forest Report - 2017 assessment, the area under forest in the state is **26,281 sq.km, which constitutes 20.21% of the total area.**
- Tamil Nadu constitutes 2.99% of India's forest cover. The forest types in the state varies from wet evergreen to scrub forests.
- The Western Ghats, the longest hill range in the state, is one of the 25 global hotspots of bio-diversity and one of the three mega centres of endemism in India.
- The following table shows the categories of forest and their areal extent classified under the provision of Indian Forest Act.

Forest Type	Area(sq.km)
Reserved Forest	19,459
Protected Forest	1,782
Unclassified Forest	1,266
Total	22,507
Source: Tamil Nadu statistical Handbook - 2016	

Forest Types

The forest in the state is broadly divided into five types as follows

Districts with prominent forest cover in Tamil Nadu	
District	Area (sq km)
Dharmapuri	3,280
Coimbatore	2,627
Erode	2,427
Vellore	1,857
The Nilgiris	1,583
Dindigul	1,662

Tropical Evergreen Forest

- This forest type is found in the regions that receive heavy rainfall. It is a dense, multilayered forest. It is found in the upper slopes of Western Ghats of Tirunelveli, Kanyakumari, the Nilgiris and Coimbatore districts.
- The major tree species of this forest are cinnamon, Malabar ironwood, panasa, java plum/jamun, jack, kindal, ayani and crape myrtle.
- The semievergreen type of forest in the state is found over the regions of sub-tropical climate over the Eastern Ghats.
- The prominent regions are **Servarayan, Kollimalai and Pachaimalai**. Species of Indian mahogany, monkey teak, woolly cassia, jack and mango trees are common in this region.

Montane Temperate Forest

- It is found in sheltered valleys of Anaimalai, Nilgiris and Palani hills over a 1000 metres altitude. They are known as '**Sholas**'.
- The trees in this forest are evergreen and usually short. Nilgiri champa, wights litsea and rose apple are the common trees found in this forest.

Tropical Deciduous Forest

- This type of forest lies in the margin of semi-evergreen and evergreen forests. The trees in this forest shed their leaves during the dry season.
- The trees reach up to a height of **30 metres**. Some trees of this forest are silk cotton, kapok, kadamba, dog teak, woman's tounge, axlewood and siris.
- Bamboos are also common in this type of forests. Some trees of this forest are economically important.

Mangroves

- This type of forest is found in the coastal areas, river deltas, tails of islands and over sea faces where accretion is in progress.
- The vegetation is typically evergreen, moderate in height and has leathery leaves. The vegetation of this forest is adapted to survive in tidal mud and salt water.
- Asiatic mangrove, white mangrove, wild jasmine/Indian pivot etc. are some of the notable trees of this forest.
- **Pichavaram, Vedaranyam, Muthupet, Chatram and Thoothukudi** are the places in Tamil Nadu where the mangrove forest is found to a considerable extent.

Tropical Thorn Forest

- Thorn forest in Tamil Nadu is found where there is a little rainfall. These forests are found from plains up to **400 meters altitude**.
- The common trees of this forest are rusty acacia, wheel, neem and palm. Shrubs are common vegetation in this type of forest.
- This type of forest is found in the districts of Dharmapuri, Ramanathapuram, Virudhunagar and some parts of interior districts.

Wild life

S.No	Wildlife Sanctuaries in Tamil Nadu	District	Year of Establishment
1	Mudumalai Wildlife Sanctuary	The Nilgiris	1940
2	Mundanthurai Wildlife Sanctuary	Tirunelveli	1962
3	Point Calimere Wildlife Sanctuary	Nagapattinam	1967
4	Indira Gandhi Wildlife Sanctuary	Coimbatore	1976
5	Kalakad Wildlife Sanctuary	Tirunelveli	1976
6	Vallanadu Black Buck Sanctuary	Thoothukudi	1987
7	Grizzled Giant Squirrel Wildlife Sanctuary	Virudhunagar	1988
8	Kanyakumari Wildlife Sanctuary	Kanyakumari	2007
9	Sathyamangalam Wildlife Sanctuary	Erode	2008
10	Megamalai Wildlife Sanctuary	Theni and Madurai	2009
11	Point Calimere Wildlife Sanctuary - Block A and Block B	Thanjavur and Tiruvarur	2013
12	Kodaikanal Wildlife Sanctuary	Dindigul and Theni	2013
13	Gangaikondan Spotted Deer Sanctuary	Tirunelveli	2013
14	Cauvery North Wildlife Sanctuary	Dharmapuri and Krishnagiri	2014
17	Nellai Wildlife Sanctuary	Tirunelveli	2015

S.No	Bird Sanctuaries in Tamil Nadu	District	Year of Establishment
1	Vettangudi Birds Sanctuary	Sivaganga	1977
2	Pulicat Lake Birds Sanctuary	Tiruvallur	1980
3	Karikili Birds Sanctuary	Kancheepuram	1989
4	Kanjirankulam Birds Sanctuary	Ramanathapuram	1989
5	Chitrangudi Birds Sanctuary	Ramanathapuram	1989
6	Koonthankulam-Kadankulam Birds Sanctuary	Tirunelveli	1994
7	Vellode Birds Sanctuary	Erode	1997
8	Vedanthangal Birds Sanctuary	Kancheepuram	1998
9	Udayamarthandapuram Birds Sanctuary	Tiruvarur	1998
10	Melaselvanur-Keelselvanur Birds Sanctuary	Ramanathapuram	1998
11	Vaduvoor Birds Sanctuary	Tiruvarur	1999
12	Karaivetti Birds Sanctuary	Ariyalur	2000
13	Theerthangal Bird Sanctuary	Ramanathapuram	2010
14	Sakkarakottai Tank Birds Sanctuary	Ramanathapuram	2012
17	Oussudu Lake Birds Sanctuary	Villupuram	2015

S. No	Biosphere Reserves in Tamil Nadu
1	Nilgiri Biosphere Reserve
2	Gulf of Mannar Biosphere Reserve
3	Agasthiyarmalai Biosphere Reserve

- Animals and birds live in forests constitute the wild life. Tamil Nadu has a variety of wild animals, birds and reptiles. hills are an **ideal refuge for elephants, bisons, tigers, deer and monkeys**.
- Several Wildlife sanctuaries and National Parks have been set up to protect the animal life in the state.
- The hills of the state provide an ideal condition for a variety of animals and plants life. The list of Wild life Sanctuaries, National parks and Biosphere Reserves of Tamil Nadu are listed in the following tables

Tamil Nadu is a state with varied climate, landforms and resources. This makes our state a distinct one among the Indian states. In Tamil Nadu, If the available resources are utilised rationally, it may continue to be at top in the country. So, it is the duty of the every individual to strive towards achieving this goal.

Natural Disasters in Tamil Nadu

- A sudden natural catastrophe that causes great damage or loss to lives and properties is called as disaster. The alteration of natural environment by the technology and developmental activities increase the frequency of disasters all over the world.
- So, it is necessary to aware the measures to be adopted during different types of natural disasters to reduce the risk caused by them According to United Nations office for Disaster Risk Reduction, **Disaster Risk Reduction(UNDRR)** is the concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters.
- This includes reducing exposure to hazards, lessening the vulnerability of people and property, wise management of land and environment, and improving preparedness and early warning for adverse events.
- Here we will discuss about the natural disasters in Tamil Nadu and the measures to be adopted before, during and after different disasters.

Landslide

- A collapse of a mass of earth or rock from a mountain or cliff is called landslide. Water is the most common trigger of a landslide.

- Nilgiris in Tamil Nadu is identified as one of the most vulnerable districts in the country and landslides pose a major threat in this area.
- The other regions which are prone to land slides are Coimbatore and palani hill of Dindigul district where Kodaikanal hill station is located.

Risk Reduction Measures

Before:

Create awareness; stay alert and awake; monitor the news updates; make evacuation plan; listen for any unusual sounds that might indicate moving debris such as trees cracking, boulders knocking and consider leaving the place of landslide if it is safe to do so.

During

If indoors:

Find cover in the section of the building that is farthest away from the approaching landslide; take shelter under a strong table or bench. Hold on firmly and stay until all movement has ceased.

If outdoors

Move quickly away from its likely path, keeping clear of embankments, trees, power lines and poles; avoid crossing roads and bridges and stay away from the landslide because the slope may experience additional failures for hours to days afterwards.

After

Stay away from the slide area; listen to local radio or television stations for the latest emergency information; watch for flooding, which may occur after a landslide or debris flow; check for injured and trapped persons near the slide, without entering the direct slide area.

Flood

- Flood is a common one in the coastal districts of Tamil Nadu during northeast monsoon. The recent flood occurred in the state was in 2015.
- The **2015 South Indian floods** resulted from heavy rainfall generated by the annual northeast monsoon in **November–December 2015**.
- They affected the Coromandel Coast region of the South Indian states of Tamil Nadu and Andhra Pradesh.
- More than 500 people were killed and over **1.8 million** people were displaced. With the estimates of damages and losses ranging from nearly **200 billion**, the floods were the costliest natural disasters of the year 2015.

- Tamil Nadu was the worst affected state by this flood. Generally the districts of Kancheepuram, Tiruvallur, Cuddalore, Villupuram, Thanjavur, Tiruvarur, Nagapattinam, Pudukkottai, Ramanathapuram, Tirunelveli and Kanyakumari are the most flood prone districts of the state.

Risk Reduction Measures

Before:

Know about relief centres and evacuation routes; keep emergency phone numbers and important information; fold and roll up things on to higher ground.

During:

Be quick, keep safe and ensure that children and elderly are safe by leaving the house to a higher ground; turn off all electrical appliances and gas; leave the area before its get too late; do not drive through the water; stay away from power lines or broken power transmission cables and try to keep away from flood water.

After:

Make sure to get back inside your house, keep all power and electrical appliances off before it is okay to put them on and wear appropriate dress before cleaning house which is necessary to clean the contamination.

Cyclone

- The coastal regions of Tamil Nadu are often hit by the tropical cyclones formed in Bay of Bengal during northeast monsoon. Occurrence of flood, losses to lives and properties are the recurring one in the state.
- Based on the cyclone hit areas, the state of Tamil Nadu can be divided into five zones namely very high, high, medium, low and very low cyclone prone zones. Southern part of Chennai, eastern part of kancheepuram, eastern part of Villupuram, northeastern part of Cuddalore and Union Territory of Puducherry fall under the very high cyclone prone zone.
- Nagapattinam, Tiruvallur, Tiruvarur (**except northwestern part**), southern part of Thanjavur, eastern part of Pudukkottai, eastern part of Cuddalore, middle portion of Villupuram, eastern part of Tiruvannamalai, western part of kancheepuram, northeastern part of Vellore and northern part of Chennai districts are included in the high cyclone prone zone.

Risk Reduction Measures

Before:

Ignore rumours, stay calm, don't be panic; Keep your mobile phones charged to ensure connectivity; use sms; listen to radio; watch TV; read newspapers for weather updates. Keep your documents and valuables in water proof containers; prepare an emergency kits with essential items for survival; secure your house; carry out repairs; don't leave sharp objects loose; untie cattle/animals for their safety. Fishermen should keep a radio set with extra batteries handy; keep boats and rafts tied up safely and don't venture out in the sea.

During:

Take care of the old and young, keep all family members inside the house; switch of all electrical appliances, stay in an empty room, movable items should be kept securely tied; try to help your neighbours but, don't go out during cyclone.

After:

Those who shifted to the cyclone centre must remain there till instructions are received; strictly avoid loose electrical wires after the cyclone; beware of snakes and other animals immediately after the cyclone; clear debris and carcasses from/near the premise after the cyclone and report losses truthfully and accurately to the authorities.

Drought

- Tamil Nadu is water deficit state. It is almost a regular one and not a seasonal one. It depends mostly on northeast monsoon for its rain. Its failure ends in disastrous.
- The total assessed water resources in the state amount to **1,587 TMC (Thousand million cubic feet)** while the state government's demand estimate is 1,894 TMC. Demand exceeds supply by 19.3%, this happens when rainfall is "normal".
- The government classifies groundwater blocks into different categories. Only 145 of 385 such blocks are classified safe. The others are in various stages of depletion: over-exploited, critical and semi-critical.
- About 2% of the blocks are already saline. About 64% of the total area of the state is drought prone. Coimbatore, Dharmapuri, Kanyakumari, Madurai, Ramanathapuram, Salem, Tirunelveli, and Tiruchirappalli are the districts which are more drought prone.
- According to the desertification atlas prepared by the ISRO, about 12 percent of the total geographical area is under desertification and land degradation.
- Theni, Virudhunagar, the Niligris and Kanyakumari are the worst affected districts. To manage the water deficit, rain water harvesting and water conservation methods have to be implemented strictly.

Forest Fire

- Tamil Nadu is a tropical state. The high temperature during summer leads to occasional forest fire in deciduous and thorn forests.

- The recent fire accident in the state took place in 2018. The tragedy happened **on March 11 when 37 people from Chennai and Erode** regions were returning after a trekking trip to the Kurangani hills in Theni district.
- The groups were struck in the middle of a forest fire, which ultimately killed 23 people. In the aftermath of the Kurangani forest fire, Tamil Nadu government has banned trekking in the state for two months every year (**February 15 to April 15**).

Risk Reduction Measures

Before:

Create defensible space to separate your home from flammable vegetation and materials (30 feet); follow all local fire and building codes; keep all trees and shrubs trimmed. Use approved fire resistant materials; make evacuation plans with family members which include several options with an outside meeting place.

During:

Listen to radio; watch tv; read newspapers for updates; if adequate water are available fill buckets with water. turn a light on a room in case of smoke; turn off gas and electrical appliances and be ready to evacuate all family members.

After:

Check with fire officials before attempting to return to your home; use caution when re-entering a burned area - flare ups can occur; check grounds for hot spots and check the roof and exterior areas for sparks and embers.

Tsunami

- Though Tsunami is not a common one in India, its incident in **2004** alerted India and the state of Tamil Nadu on this aspect.
- Almost all the countries situated around the Bay of Bengal were affected by the tsunami waves in the morning hours of **26 December 2004** (between 09:00 and 10:30 hrs IST).
- The killer waves were triggered by an earthquake measuring 8.9 on the Richter scale that had an epicentre near the west coast of Sumatra in Indonesia.
- Waves rose up to 6-10 metres and the impact was felt up to the East African coast affecting Somalia, Tanzania and Kenya.

Tremors and Tidal Waves in South India

- Tremors and Tidal waves hit South India and Large Scale devastation was reported. Over a thousand people have been killed in tidal waves in Tamil Nadu, Andhra Pradesh, and Andaman and Nicobar Islands.

- Tamil Nadu was the "worst affected" state of India in this incident. More than 1,500 people have been killed in the state. Casualties reported were very high in **Nagapattinam (700), Kanyakumari (250) and Cuddalore (200) districts.**
- Around 125 deaths have been recorded in the state capital of Chennai. Earlier, the tsunami was reported in India in 1881 and 1941.

Risk Reduction Measures

Before:

If you live in a coastal area, know about tsunami risk and local warning arrangements; develop household emergency plan; know where the nearest high ground is and how you will reach it.

During:

Take your get away kit, don't travel areas at risk; move immediately nearest high ground; if you can't escape tsunami, go to an upper storey of the building or climb onto a roof or tree or grab a floating objects; never go to the shore to watch tsunami and listen to local radio stations as emergency management.

After:

Continue to listen to the radio; don't return to the evacuation zone until authorities have given all clear; check yourself for injuries and get first aid and help others.

Earthquakes

India is a vast country which experiences many earthquakes at different periods. Generally high risk zones of the country are located in the north and central parts. The state of Tamil Nadu is located in the moderately low risk zone.

Earthquakes in Tamil Nadu

26 September 2001:

A moderate quake occurred in the Bay of Bengal, off the coast of the Union Territory of Puducherry, resulting in three deaths and minor damage to property in Puducherry and coastal Tamil Nadu. It had a magnitude of 5.6 on Richter scale.

7 June 2008:

A mild earthquake occurred in the Palar Valley region in Tamil Nadu. It had a magnitude of 3.8 on Richter scale and was felt in many parts of Vellore district.

12 August 2011:

A mild earthquake occurred in the Cauvery basin in Ariyalur district. It had a magnitude of 3.5 on Richter scale and was felt in several districts in southern Tamil Nadu. It resulted in one death and caused minor damages in the districts of Cuddalore, Villupuram, Perambalur and Tiruchirappalli.

In 2012:

Chennai experienced a mild tremor with its epicentre in the Indian Ocean.

Risk Reduction Measures**During:**

Take cover under a strong table or any other piece of furniture and remain under cover until the shaking stops.

After:

Proceed cautiously once the earthquake has stopped and always avoid roads, bridges that might have been damaged by the earthquake.

More to know:

1. As per, the States Reorganisation Act, 1956, state boundaries were reorganised on some linguistic basis.
2. All districts of Tamil Nadu except the Chennai, The Nilgiris and Kanyakumari were bifurcated at different points of time
3. Pamban, Hare, Krusadai, Nallathanni Theevu, Pullivasal, Srirangam, Upputanni, Island Grounds, Kattupalli Island, Quibble Island and Vivekananda Rock Memorial are some major islands of Tamil Nadu
4. Coriolis Force: An apparent force acts as a result of the earth's rotation deflects moving objects (such as projectiles or air currents) to the right in the northern hemisphere and to the left in the southern hemisphere.
5. Chinnakallar near Valparai is the 3rd wettest place in India and the wettest place in Tamil Nadu.
6. Desertification is one of the major problems of Tamil Nadu. According to the desertification atlas prepared by the ISRO. about 12% of the total geographical area is under desertification and land degradation. Theni, the Nilgiris and Kanyakumari are the worst affected districts. About 12,000 hectares (120 Sq.km) were affected by sand deposition in Theni and Rajapalayam.
7. Role of Mangroves in Coastal Zone Management. Mangroves helps in the prevention of coastal erosion from waves and storms. It also protects coral reefs and sea grass meadows from being smothered in sediments.

8. Pichavaram mangrove forest is located near Chidambaram, Cuddalore district. This is the second largest mangrove forest in the world covering about 1,100 hectares (11 sq.km) of area. It is separated from the Bay of Bengal by a sandbar. It consists of species like Avicennia and Rhizophora. It also supports the existence of rare varieties of shell and fin fishes

9. Some methods of water conservation are: Protection of water from pollution; redistribution of water; rational use of groundwater; population control; renovation of traditional water sources; use of modern irrigation methods; increasing forest cover; changing crop pattern; flood management and use of geothermal water are some of the major water conservation methods.

10th Social Science Lesson 23 Notes in English

23. Human Geography of Tamil Nadu

Introduction

- Human geography refers to the study of ways of development of human societies and their operation in relation to their physical environment.
- This chapter focuses on the distribution, characteristics and utilisation of different resources in Tamil Nadu.
- We have studied earlier that the earth is endowed with a variety of natural resources such as **landforms, rivers, soil, natural vegetation, water and wildlife**. These resources are useful only when they are utilised.
- Human beings use these resources using their intelligence and skill. Thus, the human beings are the most significant resource on the earth surface.
- They turn all these natural resources into useful products with their skills and abilities.

Agriculture

- The word "**agriculture**" is derived from the Latin words "**ager and cultura**", which means field and growing.
- Agriculture is a practice of farming that includes the cultivation of crops, rearing of animals, birds, forestry, fisheries and other related activities. Agriculture is the major occupation in Tamil Nadu.
- Agriculture has been the mainstay of the state's economy since independence with more than 65% of the population depends upon this sector for their living. Agriculture provides employment for rural people on a large scale.
- There is a strong link between agriculture and economic growth. Agriculture constitutes about **21% of the state's economy**.
- However, it fluctuates from one year to another. Paddy, millets and pulses are the principal food crops of the state.
- Sugarcane, cotton, sunflower, coconut, cashew, chillies, gingelly, groundnut, tea, coffee, cardamom and rubber are the major commercial crops.

Geographical determinants of Agriculture

Landform, climate, soil and irrigation are the factors that determine the growth of agriculture.

Landform

- Tamil Nadu is a land of diverse landscape comprising of hills, plateaus and plains. Among them the plains are most suitable for agriculture.

- The plains with alluvial soil enhances agricultural productivity. Example: Plains of cauvery. Agriculture in the plateau is moderate and is poor on the hills.

Climate

- Tamil Nadu is situated in the tropical zone, which is nearer to the equator. The state experiences a tropical climate.
- Hence, the temperature in Tamil Nadu is relatively high almost throughout the year. So, only the tropical crops are cultivated.
- Water is another limiting factor of agriculture. Northeast monsoon is the major source of rainfall for Tamil Nadu.
- Therefore, the major cropping season begins with this season. The rainfall in this season and the irrigation facilities affect agriculture to a large extent.

Soil

Types and regions of Agriculture Practices in Tamil Nadu

Farming type	Area practiced
Subsistence intensive agriculture }	Practiced all over Tamil Nadu with few exceptions.
Plantation Agriculture }	Hill slopes of Eastern and Western Ghats.
Mixed farming	Banks of River Cauvery and Thenpennai.

- Soil is one of the most essential elements of agriculture. It provides essential minerals or nutrients for the growth of crops and vegetation.
- The regions of river valleys and the coastal plains are the most agriculturally productive regions of the state as they are covered with fertile alluvial soil.

Irrigation

Monsoon rainfall in the state is highly irregular. Further it is seasonal. Hence, irrigation becomes necessary for successful cultivation of crops in the state. In the dry regions, rain-fed crops are cultivated.

Cropping Seasons in Tamil Nadu

Name	Sowing	Harvesting	Major crops
Sornavari (chittirai pattam)	April-May	August-September	Millets and cotton
Samba (Adipattam)	July-August	January-February	Paddy and sugarcane
Navarai	November - December	February-March	Fruits, vegetables, cucumber and watermelon

Farmers select different crops for different seasons of cultivation. It is based on the temperature and availability of moisture in the soil. Accordingly, the state has the following cropping seasons.

Distribution of major crops in Tamil Nadu

Paddy

- Paddy is the most important staple food crop of Tamil Nadu. Ponni and kichadi samba are the major varieties of paddy grown in Tamil Nadu.
- About **3 million hectares** of the state is under rice cultivation. Though it is cultivated all over Tamil Nadu, its cultivation is highly concentrated in **Thanjavur, Tiruvarur, Tiruvallur, Kancheepuram, Villupuram, Cuddalore and Tirunelveli** districts.
- It ranks third in the production of rice among the states of India.
- The deltaic region of river cauvery (the undivided Thanjavur district) is the major rice-producing region of Tamil Nadu. So, this region is rightly called as the "**Granary of Tamil Nadu.**"

Millets

- Millets form staple food of nearly one- third of human population of Tamil Nadu. **Sorghum/jowar (cholam), ragi (kezhvaragu) and bajra (kambu)** are the major millets. These are grown not only in drier areas but also in the coastal plains.
- Sorghum is grown in the Coimbatore plateau and Kambam valley. Ragi is grown in Coimbatore, Dharmapuri, Vellore and Cuddalore districts.
- Bajra is mostly cultivated in Ramanathapuram, Tirunelveli, Karur, Perambalur and Salem districts.

Pulses

- Pulses are the major source of protein. Bengal gram, black gram, green gram, cowpea and horse gram are the important pulses grown in Tamil Nadu.
- Pulses are grown in a wide range of climatic conditions mostly in drier regions with or without irrigation. Mild cool climate and a low to moderate rainfall are best suited for these crops. Pulses serve as excellent fodder.
- Pulses are grown in almost all districts in the state except Chennai, Nilgiris and Kanyakumari. Coimbatore leads in the production of Bengal gram. Vellore and Kanyakumari districts produce red gram.
- **Tiruvarur, Nagapattinam and Thoothukudi** districts are the principal producers of green gram and black gram. Horse gram is widely cultivated in Dharmapuri and Krishnagiri districts.

Oil Seeds

- Groundnut, gingelly castor, coconut, sunflower and mustard are some of the oilseeds that are grown in Tamil Nadu.
- Apart from its use in food preparation, it is used in industries as a lubricant, in the manufacture of varnish, soaps, candles, cosmetics and pharmaceuticals. Groundnut is the major oilseed of the state.
- The cultivation of groundnut is mostly concentrated in Vellore, Tiruvannamalai, Villupuram, Salem and Pudukottai districts. It is also grown to some extent in Dharmapuri, Cuddalore, Perambalur and Madurai.
- Erode, Ramanathapuram, Sivagangai and Virudhunagar districts are its minor producers. Coconut is grown in Coimbatore, Thanjavur and Kanyakumari districts.

Sugarcane

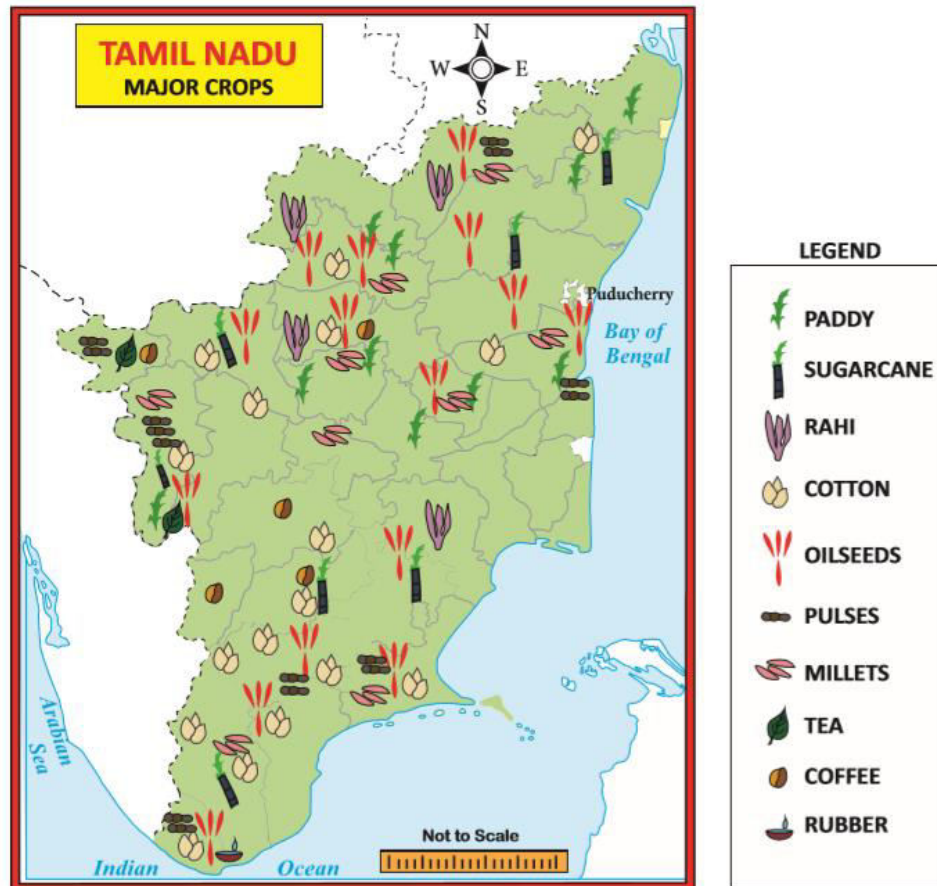
- It is one of the major cash crops of the state. It is an annual crop. It requires high temperature and heavy rainfall.
- It grows well in the tropical region. Major sugarcane-producing districts are **Tiruvallur, Kancheepuram, Vellore, Cuddalore, Tiruchirapalli, Coimbatore, Erode and Tirunelveli**.

Cotton

- Cotton is a fibre and cash crop. It requires black soil, long frost-free condition and warm and humid weather for its cultivation.
- Humid weather in the early stages and hot, dry weather during harvest period is suitable for this crop. It is predominantly cultivated in Coimbatore plateau and Vaigai-Vaippar river basins.

- It is also cultivated in **Madurai, Ramanathapuram, Virudhunagar, Tirunelveli, Thoothukudi, Salem and Dharmapuri districts.**

Plantation crops



- Tea, coffee, cashew, rubber and cinchona are the major plantation crops of the state. Tamil Nadu ranks second in area and production of tea in India next to Assam.
- Tea plantations are found in the hills of the Nilgiris and Coimbatore. The Nilgiris is the notable regions for tea plantations. Coffee plants are grown in the hills of Western Ghats as well as Eastern Ghats.
- It is also found in the hilly slopes of Dindigul, Madurai, Theni and Salem districts. Yercaud, Kolli Hills and Kodaikanal are notable for coffee plantations.
- Tamil Nadu stands second in area and production of coffee next to Karnataka. Rubber plantations are significant in Kanyakumari.
- Pepper is confined to the warm and wet slopes of Eastern and Western Ghats of Tamil Nadu. Cashew is extensively cultivated in Cuddalore district. Cinchona is planted at heights varying from **1060 to 1280 metres** in Anaimalai hills.
- Cardamom estates are located at few places in the hills of Madurai region at an elevation of **915 to 1525 metres.**

Livestock/Animal Husbandry

Livestock has remained an integral part of socio-economic fabric of rural people. The number of cattle found in Tamil Nadu is **88,92,473**. There are **47,86,680** sheep, **81,43,341** goats and **11,73,48,894** poultry animals.

Goat

- Goat is also known as '**poor man's cow**' in India. It forms a very important component in dry land farming system. In the marginal or undulating lands unsuitable for rearing of other types of cattle like cow or buffalo, goat is the best alternative.
- With very low investments, goat rearing can be made into a profitable venture for small and marginal farmers.

Sheep

- Sheep is used for multiple purposes like wool, meat, milk, skins and manure, and forms an important component of the rural economy, particularly in the arid, semi-arid and mountainous areas of Tamil Nadu.
- It provides a dependable source of income to the shepherds through the sale of wool and animals. A variety of cattle breeds are reared in the state for the milk and forms a major component of the rural economy.
- The poultry hub of Tamil Nadu are Namakkal, Salem, Erode and Coimbatore districts.

Fishing

Since Tamil Nadu is a coastal state, fishing is one of the major occupations in the state. With widespread reservoirs and rivers, inland fishing also is also seen to a considerable extent. There are about **2500 species of fishes** found in different aquatic environments.

Marine Fishing

- The length of the coastline of Tamil Nadu is **1076 km (13% of the country's coastline)**. The coastal region of the state covers an area of **0.19 million sq.km**.
- **An area of 41,412 sq.km** of continental shelves of the state favours coastal fishing and Tamil Nadu is one of the leading states in marine fish production.
- Marine fishing is also called inshore fish or neritic fishing, carried out in oceans and seas. Large mechanised boats are used for fishing. In ocean or seawaters, fishing within few kilometres from the shoreline is called inshore fishing and the fishing far from the shore typically 20–30 miles out in water hundreds and thousands of feet deep is called off-shore fishing.
- The fish varieties caught are sharks, flying fish, crouch, catfish, silver bellies, and crabs. Chennai, Kanyakumari, Tirunelveli, Nagapattinam, Thanjavur and Ramanathapuram

districts contribute about 40% to marine fish production in the state. Their coastal location favours fishing in these regions.

- The state has three major fishing harbours, three medium fishing harbours and 363 fish landing centres. The export of marine products from the state during **2007– 08 accounted for 72,644 metric tons.**

Inland Fishing

- Inland fishing is carried out in lakes, rivers, ponds, estuaries, backwaters and swamps. Oysters and prawns are cultured in original nurseries. Catamaran, diesel boats and floating nets are used in fishing.
- Tamil Nadu Fisheries Department has introduced several programmes for the betterment of fishing. The major programmes are aquaculture in farm ponds and irrigation tanks, fish seed bank, fish seed rearing, ornamental fish culture and the establishment of Fish Farmer Development Agency.
- Vellore district leads in the production of inland fish production with 10% of state's production. Cuddalore, Sivagangai and Virudhunagar districts stand second with 9% of inland fish catch each. Fishing sector contributes **1.25%** of state's economy.

Water Resource

Surface Water Resources	Numbers
River Basin	17
Reservoirs	81
Tanks	41,127
Tube wells and other wells	4,98,644
Open wells	15,06,919
Total (Million Cubic metres)	2046788 MCM
<i>Source: Statistical handbook of Tamil Nadu - 2017</i>	

- Water is the precious gift of nature to humankind and millions of other species living on the earth. Tamil Nadu constitutes **4% of India's land area and is inhabited by 6% of India's population, but has only 2.5% percent of India's water resources.**

- More than 95% of the surface water and 80% of the ground water have already been put into use.
- Major uses of water include human/animal consumption, irrigation and industrial use. The state is heavily dependent on monsoon rains.
- The annual average rainfall is around 930 mm (47% during the northeast monsoon, 35% during the southwest monsoon, 14% in summer and 4% in winter).

Multipurpose River Valley Projects

Multipurpose river valley projects are basically designed for the development of irrigation for agriculture and hydropower generation. However, they are used for many other purposes as well.

Mettur Dam

The Mettur Dam was constructed in a gorge, where river Cauvery enters the plains. It is one of the oldest dam in India. It provides irrigation to Salem, Erode, Karur, Tiruchirappalli, Thanjavur, Tiruvarur and Nagapattinam districts for about **2,71,000 acres of farmland**. The dam, park, major hydroelectric power stations and hills on all sides make this dam an important tourist spot.

Bhavani Sagar Dam

The Bhavani Sagar Dam is located **80 km away from Coimbatore city in the district of Erode**. It has been constructed across the river Bhavani. This dam is one of the biggest earthen dams in the country.

Amaravathi Dam

- The Amaravathi dam is situated **25 km away from Udumalpet in Tirupur district**. The dam has been constructed across the river Amaravathi, a tributary of Cauvery.
- The dam was built primarily for irrigation and flood control. A small hydropower station has also been installed recently.
- This reservoir is notable for the significant population of mugger crocodiles. It is also a familiar tourist spot.

Krishnagiri Dam

Krishnagiri dam is situated at a distance of **7 km from Krishnagiri towards Dharmapuri**. This dam drains an area of **5428 sq.km**. This is a famous tourist spot too. This dam is flooded with tourists during the weekends.

Sathanur Dam

- Sathanur Dam was constructed across the river Thenpennai in Chengam taluk. It is in the midst of Chennakesava hills. The waterholding capacity of the dam is **7321 million cubic feet (full level: 119 feet)**.
- About **7183 hectares** of land is drained by the left bank canal and **905 hectares** by the right bank canal of this dam. It irrigates the land in Thandrapet and Tiruvannamalai blocks.
- There is also a large crocodile farm and a fish grotto. Parks are maintained inside the dam for tourists and the gardens are used by the film industry.

Mullaiperiyar Dam

- Mullaiperiyar dam was built by the British administration in **1895**. It has been constructed on the Periyar river, which originates from Thekkady hills of Kerala.
- The dam was built mainly for watering the farming land of Tamil Nadu, which is perennially drought-prone. Though the dam is located in the state of Kerala, most of its water is used to irrigate Tamil Nadu. The dam is **175 feet in height and 1200 feet in length**.

Vaigai Dam

- This dam built across the river Vaigai near Andipatti. The dam with a height of 111 feet can store water up to 71 feet.
- It is located 7 km from Andipatti and 70 km from Madurai. This dam was opened on **21 January, 1959**.
- The dam has a unique garden that deserves the surname '**Little Brindavan**'. It is a popular picnic spot in Theni district.

Manimuthar Dam

Manimuthar dam is located about **47 km from Tirunelveli**. The gorgeous garden of the dam is located about 5 km from the dam and is accessible through a zig-zag ghat road. Pleasure boating and waterfalls are additional tourist attractions near the dam.

The Papanasam Dam

It is also known as Karaiyar dam and is located about 49 km away from Tirunelveli. The dam is used to irrigate **34,861 hectares of land** in Tirunelveli and Thoothukudi districts. It generates 28 MW of hydro power.

Parampikulam Aliyar Project

It is a joint venture of Tamil Nadu and Kerala states. It envisages the construction of seven interconnected reservoirs by harnessing the water of seven rivers, which include major rivers of Parambikulam and Aliyar. Parappalar project is located near Ottanchatram. Its storage capacity is **167 million cubic feet of water**. It is about 75 km from Madurai and is in Palani taluk.

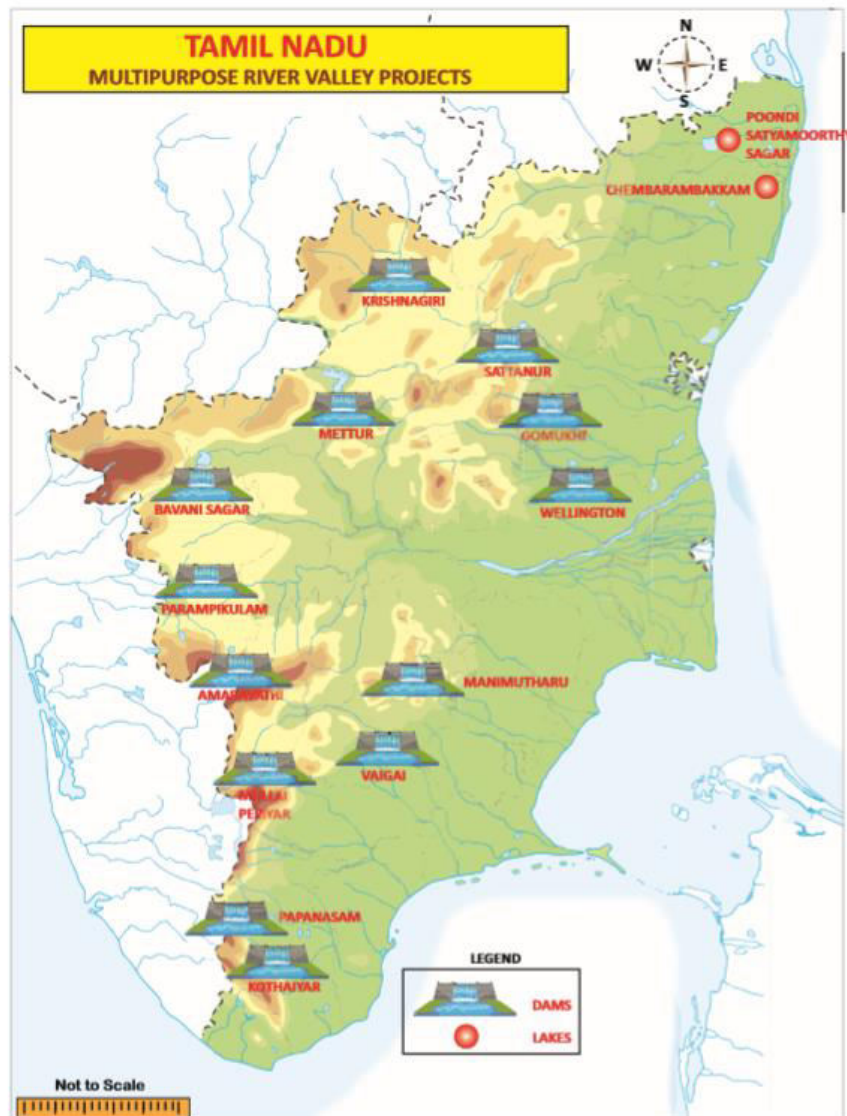
Surface water Resources

The total surface water potential of the state is about **24,864 mcm (million cubic metre)**. There are **17 major river basins** in the state with 81 reservoirs and about **41,262 tanks**. Most of the surface water has already been tapped, primarily for irrigation, where water use is largest. An area of 24 lakh hectares of the land are irrigated by surface water through major, medium and minor schemes.

Ground Water Resources

The utilizable groundwater resource of the state is **22,423 mcm**. The current level of utilization of water is about **13,558 mcm which is about 60 percent** of the available recharge, while about **8875 mcm (40 percent)** is the balance available for use.

Water Resource Management



- Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources.
- The demand for water in Tamil Nadu is increasing at a fast rate both due to increasing population and also due to larger per capita needs triggered by economic growth.
- The per capita availability of water resources is just 900 cubic metres when compared to the national average of **2,200 cubic metres**.
- Agriculture is the largest consumer of water in the state using **75%** of the state's water resources. Demands from other sectors such as domestic and industries have been growing significantly.
- The state is heavily dependent on monsoon rains. Since the state is entirely dependent on rains for recharging its water resources, monsoon failures lead to acute water scarcity and severe droughts. So, it is important to save water for us and the future generation.

Mineral Resources

- Tamil Nadu is the leading holder of country's resources of vermiculite, magnetite, dunite, rutile, garnet, molybdenum and ilmenite.
- The state accounts for the country's **55.3% of lignite, 75% of vermiculite, 69% of dunite, 59% of garnet, 52% of molybdenum and 30%** of titanium mineral resources. Important minerals are found in the state are as follows: Neyveli has large lignite resources. Coal is also available in Ramanathapuram.
- Oil and gas are found in the Cauvery basin. Iron deposits are found in Kanjamalai region in Salem district and Kalrayan Malai region of Tiruvannamalai district.
- Magnesite ores are available near Salem. Bauxite is found in Servarayan Hills, Kotagiri, Udagamandalam, Palani and Kollimalai areas.
- Gypsum is obtained in Tiruchirappalli, Tirunelveli, Thoothukudi and Virudhunagar districts. Ilmenite and rutile are found in the sands of Kanyakumari beach.
- Limestone is available in Coimbatore, Cuddalore, Dindigul, Kancheepuram, Karur, Madurai, Nagapattinam, Namakkal, Perambalur Ramanathapuram, Salem and Tiruvallur districts.
- Magnesite is obtained in Coimbatore, Dharmapuri, Karur, Namakkal, the Nilgiris, Salem, Tiruchirappalli, Tirunelveli and Vellore districts. Feldspar, quartz, copper and lead are also found in some parts of the state.

Industries

Industries use raw materials and convert them into usable product or goods. Textiles, sugar, paper, leather, cement, electrical equipment, automobiles, information technology and tourism are the major industries of Tamil Nadu.

Textile Industry

- Textile industry is one of the traditionally well-developed industries in Tamil Nadu. The textile mills are concentrated in Coimbatore, Tirupur, Salem, Palladam, Karur, Dindigul, Virudhunagar, Tirunelveli, Thoothukudi, Madurai and Erode.
- Tamil Nadu has about **3,50,000** power looms manufacturing cotton fabrics and accounts for 30% of India's exports of textiles products.
- Erode in Tamil Nadu is well known for marketing of handloom, power loom and readymade garments.
- Coimbatore is also known as the '**Manchester of Tamil Nadu**'. Coimbatore, Tirupur and Erode contribute a major share to the state's economy through textiles.
- So, this region is referred as '**Textile Valley of Tamil Nadu**'. Karur is known as '**The Textile capital of Tamil Nadu**'.

Silk Textiles

- Tamil Nadu occupies fourth position in the country in silk production. Kancheepuram silk is unique in its quality and is known for its traditional value all over the world.
- The annual silk production in Tamil Nadu is around **1200 metric tons**. Kancheepuram, Arani, Kumbakonam, Salem, Coimbatore, Madurai and Tirunelveli are the important silk-weaving centres in Tamil Nadu.
- Ramanathapuram has some specialised areas for the manufacturing of synthetic silk clothes.

Leather Industry

GI Tag

GI (Geographical Indication) is a name or sign used on products which corresponds to a specific geographical location. It provides rights and protection of holders.

Some important GI Tags of Tamil Nadu are:

Place	Products
Arani	Silk
Kancheepuram	Silk
Coimbatore	Wet Grinder and Coracotton
Thanjavur	Paintings, Art plate, Doll and veenai
Nagercoil	Temple Jewellery
Erode	Turmeric
Salem	Venpattu(salem silk)
Bhavani	Jamakkalam
Madurai	Sungudi
Swamimalai	Bronze Icons
Nachiarkovil	Kuthuvilakku
Pattamadaai	Mat
Nilgiri	Orthodox Embroidery
Mahabalipuram	Stone sculpture
Sirumalai	Hill banana
Eathomozhi	Coconut

- Tamil Nadu accounts for 60% of leather tanning processes of India and **38%** of all leather footwear, garments and components.
- Hundreds of leather tanneries are located around Vellore and nearby towns, such as Ranipet, Ambur and Vaniyambadi.
- The Vellore district is the top exporter of finished leather goods in the country.
- Vellore leather accounts for more than **37%** of the country's export of leather and leather-related products (**such as finished leathers, shoes, garments and gloves**). **Central Leather Research Institute (CLRI)**, a CSIR research laboratory, is located in Chennai.

Paper Industry

- Many paper industries are located in the state. Tamil Nadu Newsprint and Papers Limited (TNPL) is a government of Tamil Nadu enterprise producing newsprint and printing and writing paper at its mill located at **Kagithapuram in Karur district**.
- **It was started in 1979 with an installed capacity of 2.45 lakh MT** of production per annum.
- TNPL is one of the most accomplished mills in the world, producing different varieties paper of acceptable quality primarily from bagasse and pulpwood.
- Other paper mills of the state are found in Pukkathurai of Kancheepuram district, Bhavanisagar, Pallipalayam, Paramathi Vellore, Coimbatore, Udumalaipet, Thoppampatti, Nilakkotai and Cheranmahadevi.

Cement Industry

- Cement production and consumption continue to grow despite the general recession in the economy. India is one of the largest cement producers and ranked second in the world with an annual production capacity of **181 million tons**.
- Tamil Nadu Cements Corporation Limited (**TANCEM**) is one among the major cement producers in Tamil Nadu operating two cement units: one at Ariyalur and another at Alangulam.
- Asbestos cement sheet plant at Alangulam and stoneware pipe unit at Virudhachalam are the other units of TANCEM.
- Sankar Cement, Zuari Cement, Ultratech Cement, Madras Cement and Dalmia Cement are the major private cement brands produced in Tamil Nadu.

Information Technology

- According to National Association of Software and Services Companies (**NASSCOM**), the southern states continue to account for more than half of the country's total export of software.
- Tamil Nadu and Andhra Pradesh together account for **59.6%** of India's total software exports.
- Tamil Nadu is the second largest software exporter in the country next to Karnataka.

Special Economic Zones

- Special economic zones (SEZs) provide an internationally competitive and hasslefree environment for exports. Units in SEZ manufacture goods and provide a range of services. SEZs are located in **Nanguneri, Ennore, Hosur and Perambalur**.
- IT & ITES SEZ named TIDEL-II and TIDEL-III and Bio-Pharmaceuticals SEZ are located in Chennai and Coimbatore SEZ called the TIDEL Park-IV is located in the city.

Manufacturing & Engineering Industry

- The manufacturing industry is one of the vibrant sectors of the state economy and contributes significantly to the industrial output.
- The manufacturing industry broadly covers manufacture of machinery and equipment, motor vehicles, basic metal and alloy industries, metal products and repair of capital goods.
- Tamil Nadu's share of the industrial output is around 11–12% of the country's output and 15% of the country's exports excluding software. Tamil Nadu accounts for about 17% of India's software exports.

Automobile Industries

- The share of Tamil Nadu in all-India production of automobiles and heavy vehicles is rather significant.
- Automobile industry plays a crucial role in the state's economy and has been one of the key driving factors contributing 8 percent to state GDP and giving direct employment to 2,20,000 people.
- Tamil Nadu accounts for about 21% of passenger cars, 33% of commercial vehicles and 35% of automobile components produced in India.
- Major automobile manufacturers like **Ford, Hyundai, HM-Mitsubishi, Ashok Leyland, and TAFE** have their manufacturing base in Tamil Nadu.

Chemical & Plastic Industry

The chemical industry is one of the fastest growing sectors of industry and the economy. The sector contributes **13% to the state's GDP and constitutes 8% of the total exports of the country.**

Handlooms and Powerlooms

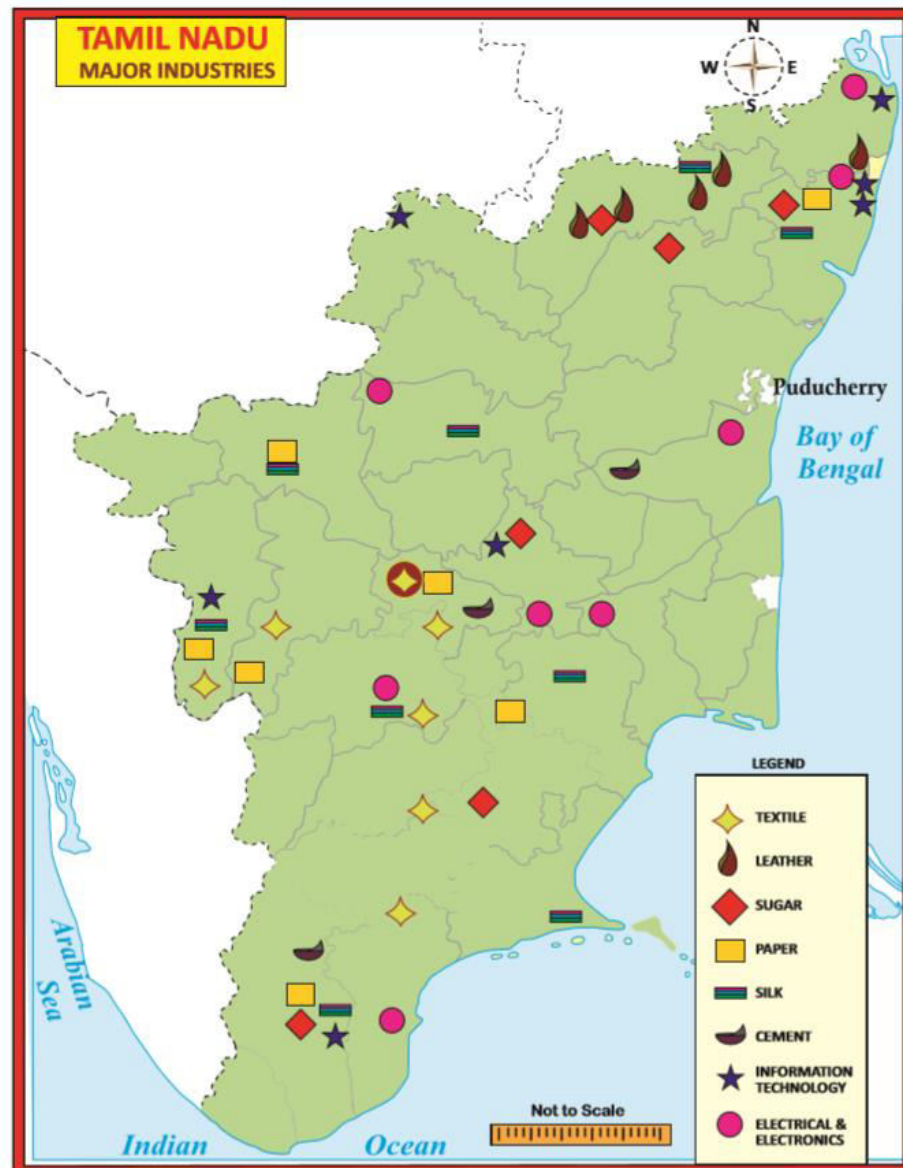
The handloom sector in the state is the single largest cottage industry providing livelihood to a large number of rural people and promoting export earnings. The handloom sector and its related economic activities generate gainful employment for more than **4.29 lakh weaver households and 11.64 lakh weavers in the state.** These societies mainly produce the cloth required for the scheme of **'Free Supply of Uniforms to School Children and Free Distribution of Sarees and Dhotis Scheme'.**

Sugar Industry

Sugar industry in Tamil Nadu is an important agro-based industry. It plays a vital role in the economic development of the state, particularly in rural areas. The sugar industry provides large-scale direct employment to several thousands and indirect employment to several lakhs of farmers and agricultural labourers in the rural areas who are involved in cultivation of sugarcane, harvesting, transporting and other services. There are **34 sugar mills in Tamil Nadu, in which 16 are in the cooperative sector and 18 in the private sector.**

Tourism Industry

- Tourism is considered as an industry because of its enormous potential in creating employment for a large number of people. In recent years, the state has emerged as one of the leading tourist destinations for both domestic and foreign tourists.
- Tourism in Tamil Nadu is promoted by Tamil Nadu Tourism Development Corporation (TTDC).
- The state currently ranks the highest among Indian states with about **25 crore arrivals (in 2013)**. **The annual growth rate of this industry stood at 16%**. Approximately 28 lakh foreign and 11 crore domestic tourists visit our state annually.
- The presence of ancient monuments, pilgrim centres, hill stations, a variety of natural landscapes, long coastline, along with rich culture and heritage make Tamil Nadu the best destination for tourists.



- The term '**population**' refers to the number of people living in a defined area. The statistical study of the characteristics of human population is called demography.
- Demographers make a deep and detailed study of the population. The rapid increase of population may be responsible for retarding economic growth.
- Hence, overpopulation is one of the major problems confronting our nation with all its evil effects.

Growth of Population in Tamil Nadu

- The total population of Tamil Nadu is 72,140,703 or 7.21 crores as per 2011 Census. Its population was 6.24 crore in 2001 and registered a growth of nearly 1 crore population in a decade.
- The male and female population of the state in 2011 is 36,137,975 and 36,009,055 respectively and it was **31,400,909 and 31,004,770 in 2001**.
- It shows that the population of the state is shared almost 50% each by male and female. The growth rate of population in the decade 2001–2011 was 15.61% while in the previous decade it was 11.19%.
- The population of Tamil Nadu forms 5.96% of country's total population as per 2011 Census. In 2001, it was 6.07%.

Distribution of Population

Based on the actual size of population, Tamil Nadu is divided into the following regions.

Regions of High Population

Chennai has the highest urban population with 4.219 million people, but the city ranks second in the district-wise count, next to Coimbatore district, which had 4.224 million people as per 2011 Census. **Coimbatore, Chennai, Tiruvallur, Kancheepuram, Villupuram, Dharmapuri, Salem, Madurai and Tirunelveli** are the most populous districts in the state. Agriculture and industrial development are the main causes of high concentration of population of these districts.

Regions of Moderate Population

Tiruvannamalai, Cuddalore, Tiruchirapalli and Thanjavur districts have a population 30–35 lakh. Vellore, Dindugal, Virudhunagar and Thoothukudi districts each have a population of 15–20 lakh. Other than agriculture, small-scale industries and fishing along the coastal areas are the major occupations of people in these districts.

Regions of Sparse Population

The coastal districts Nagapattinam, Tiruvarur, Pudukottai, Ramanathapuram and Sivagangai have a less than 15 lakh. The Nilgiris district has a population of less than 10 lakh (764,826) population and it is the least populated district as per 2011 Census.

Population Density

- The density of population in Tamil Nadu is 555 per sq.km as per the 2011 Census, while it was 480 per sq.km in 2001.
- The state ranks 12th among the Indian states in population density. The national average density of population as per the 2011 Census is 382.
- Chennai is the densest district with 26,903 persons per sq.km followed by **Kanyakumari (1106), Tiruvallur (1049), Kancheepuram (927), Madurai (823), Coimbatore (748), Cuddalore (702), Thanjavur (691), Nagapattinam (668), Salem (663), Vellore (646) and Tiruchirappalli (602).**
- These are the regions with high density of population. The least density of population is recorded in the Nilgiris (288 per sq.km) and the other districts have moderate density of population.

Religion

Hinduism, Christianity and Islam are the major religions in the state. The Hindus constitute 87.58% of the population, followed by Christians (6.12%) and Muslims (5.86%). Jainism (0.12%), Sikhism (0.02%) and Buddhism (0.02%) also have a presence in the state. People of other religions constitute 0.01% and the percentage of people with unstated religion is 0.26%.

Urban and Rural Population

As per 2011 Census, the urban population of Tamil Nadu is 3,49,17,440, which constitutes 48.40% of the total population of the state. The rural population of the state is 3,72,29,590, which constitutes 51.60% of the state population.

Sex Ratio

- The sex ratio represents the number of females per 1000 males. The sex ratio of the state increased from **987 in 2001 to 995 in 2011.**
- The sex ratio in India is 940 in 2011 as against 933 in 2001. It shows that the sex ratio is more favourable in the state than the country.
- As per 2011 Census, 15 out of 32 districts have recorded the sex ratio of more than 1000 and a similar trend was noticed in the 2001 Census also. Only Sivagangai has recorded the sex ratio of exactly 1000.
- It is noted that 12 districts have the sex ratio of less than 1000 and it ranges between 980 and 1000.
- The highest sex ratio is found in the Nilgiris district (1041) followed by Thanjavur district (1031). The lowest sex ratio is reported in Dharmapuri district (946) followed by Salem district (954).

Literacy Rate

- The literacy rate of Tamil Nadu as per the 2011 Census is 80.33%. It was 73.45% in 2001. The male literacy rate is 86.81% and the female literacy rate is 73.86%. The corresponding rates in 2001 were 82.42% for males and 64.43% for females.
- It may be observed that more than three-fourths of the population is literate among males in all the districts (except Dharmapuri), while more than two-thirds of the population is literate among females in all but eight districts.
- The districts are Dharmapuri (60.03%), Krishnagiri (64.86%), Tiruvannamalai (65.71%), Villupuram (63.51%), Salem (65.43%), Erode (65.07%), Perambalur (66.11%) and Ariyalur (62.22%).
- The literacy rate for India as per 2011 census is 74.04, of which the male literacy rate is 82.14 and the female literacy rate is 65.46. In 2001, the literacy rate of India stood at 64.8. It was 75.3 and 53.7 for males and females, respectively.
- The district of Kanyakumari has reported the highest literacy rate (92.14%) while Dharmapuri district has the lowest rate (64.71%).
- A high level of literacy rate is also seen in Chennai (90.33%), Thoothukudi (86.52%), the Nilgiris (85.65%) and Kancheepuram (85.29%) districts.

Transport and Communication

Types of the Roads	Length (Km)
National Highways	4994
State Highways	57291
Corporation & Municipalities Road	23350
Panchayat Union	147543
Village Panchayat Union	21049
Others(Forest Roads)	3348
Commercial	12.13
Non commercial	20.34 Lakhs
Source: Statistical Handbook of Tamil Nadu - 2017	

Roadways

The State has a total road length of 167,000 km, In which 60,628km are maintained by state Highways Department. It ranks second in India with a share of over 20% in total road projects under operation in the Public-Private Partnership (PPP) model.

Railways

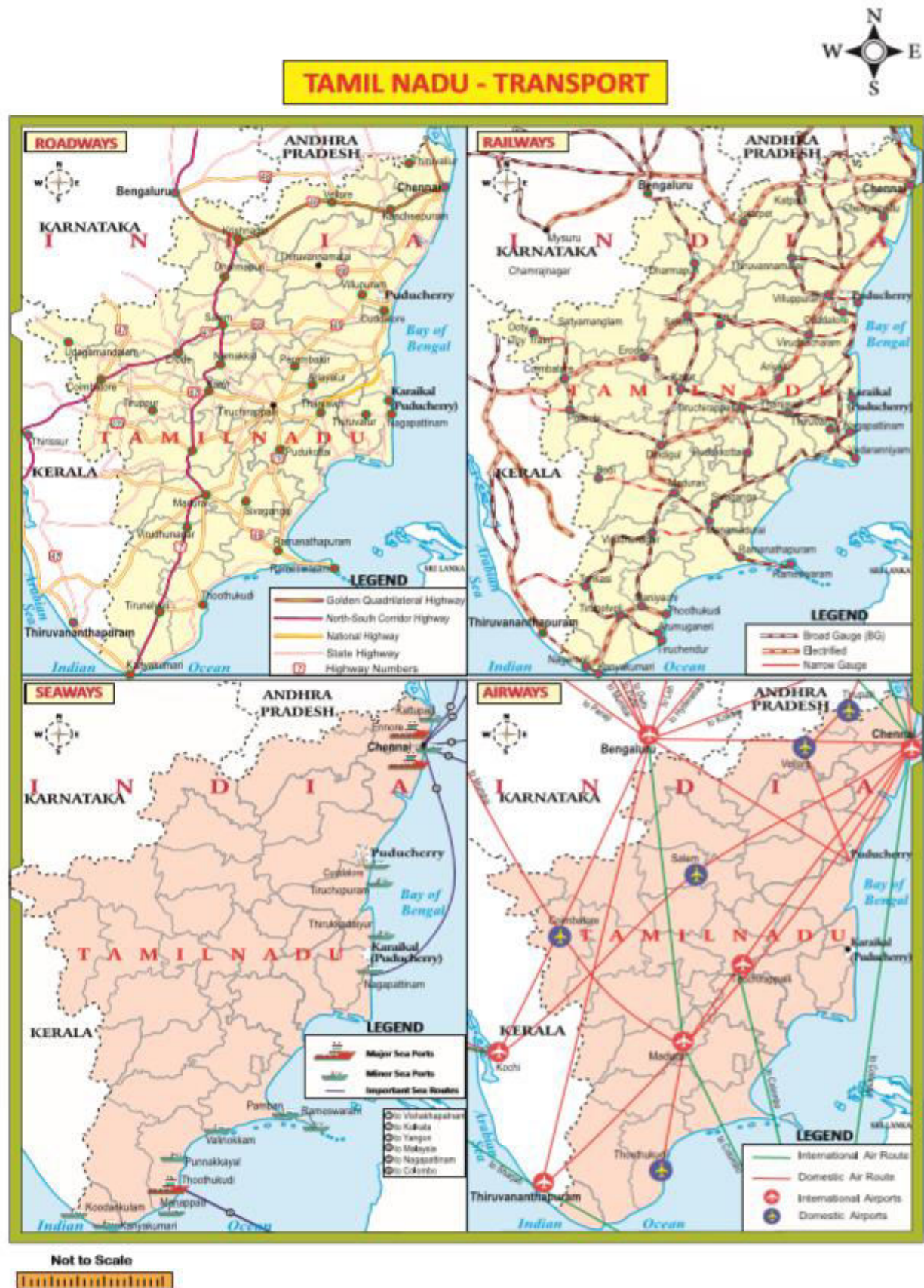
- Tamil Nadu has a well-developed rail network as part of Southern Railway, headquartered at Chennai.
- The present Southern Railway network extends over a large area of India's southern peninsula, covering Tamil Nadu, Kerala, Puducherry, minor portions of Karnataka and Andhra Pradesh.
- Tamil Nadu has a total railway track length of 6,693 km with 690 railway stations in the state. The system connects it with most of the major cities in India.
- Main rail junctions in the state include Chennai, Coimbatore, Erode, Madurai, Salem, Tiruchirappalli and Tirunelveli.
- Chennai has a well-established suburban railway network, a mass rapid transport system(MRTS) and is currently developing a Metro system, with its first underground stretch in operation since May 2017.

Airways

- Tamil Nadu has four major international airports. Chennai International Airport is currently the third largest airport in India after Mumbai and Delhi. Other international airports in Tamil Nadu include Coimbatore, Madurai and Tiruchirapalli airports.
- It also has domestic airports at Tuticorin and Salem connecting several parts of the country.
- Increased industrial activity has given rise to an increase in passenger traffic as well as freight movement, which has been growing at over 18% per year.

Waterways

- Tamil Nadu has three major ports. They are in Chennai, Ennore and Tuticorin. It has an intermediate port at Nagapattinam and 15 minor ports.
- The ports are currently capable of handling over 73 million metric tonnes of cargo annually **(24% share of India)**.
- All the minor ports are managed by the Tamil Nadu Maritime Board, Chennai Port. This is an artificial harbour and the second principal port in the country for handling containers. It is currently being upgraded to have a dedicated terminal for cars capable of handling 4,00,000 vehicles.
- Ennore intermediate port was recently converted as a major port and handles the major coal and ore traffic in Tamil Nadu.



Communication**Postal Districts and Headquarters in Tamil Nadu**

Zone /districts	Head quarters
Chennai	Chennai
Western	Coimbatore
Central	Thiruchirapalli
Southern	Madurai

Communication is derived from the Latin word *communicare*, meaning 'to share'. The act of conveying or exchanging information is called means of communication. They are mass communication and personal communication.

Trade

Major Exports of Tamil Nadu	
(i) Agricultural Products	tobacco, cereals, cotton, sugarcane, paddy, groundnut, spices and vegetables.
(ii) Leather Products	wallets, purses, pouches, handbags, belts, footwear and gloves
(iii) Gems and Jewellery	pearls, precious stones, gold jewellery, decorations and antiques
(iv) Chemicals and related products	paper, chemicals, rubber and glass.

Export and import are the two components of trade. Export means goods and services sold for foreign currency. Tamil Nadu contributes **12.2%** to the country's exports. Import refers to goods and services are brought from overseas producers. Tamil Nadu imports many goods from outside. The difference between the values of export and import is called the balance of trade.

Imports of Tamil Nadu

- Machineries like transport equipment, machine tools, non-electrical machinery, electrical machinery, pharmaceutical products, petroleum, fertilizers and newsprint are its major imports.
- The state contributes **10.94%** to the country's trade through major ports. The above discussion shows that Tamil Nadu is an important state of India in terms of size, population, resources and economic development.
- People in the state are well secured. The new schemes introduced by the state government periodically have enabled notable progress in various fields.

Man made Disasters in Tamil Nadu

Definition

A disastrous events caused directly or indirectly by human actions are called as manmade disaster. Man-made disaster can include hazardous material spills, fires, groundwater contamination, transportation accidents, structure failures, mining accidents, explosions and acts of terrorism.

Industrial Disaster

- Disasters caused by industrial companies either by accident, negligence, or incompetence fall under industrial disasters. Electrical faults seem to be the major reason for industrial disasters in the country.
- Overheating, aging of the material and use of sub-standard quality of electrical gadgets have been the main factors contributing to the increasing fire accidents in industries.
- Electricity is not just a life line; It can also take away life when handled improperly'. Apart from these, explosions, leaking of poisonous gases, injuries and deaths caused by machines are the other causes of industrial disasters.
- **Sivakasi, is considered the "fireworks capital" of India.** Series of industrial accidents causing deaths are reporting frequently in the regions of Virudhunagar and Sivakasi where a number of fireworks and match units are in operation. An explosion occurred on **5 September, 2012** in a private firework company.
- In this incident 40 workers were killed and more than 70 workers were injured. Various measures are being taken by the Government to reduce the fire accidents and casualties caused by industries.
- In another industrial accident which took place at Coimbatore on **2nd February 2016** in a tyre melting unit, six migrant workers were critically injured.

Stampede

- A situation in which a large number of animals or people running in the same direction in an uncontrolled way causing injuries and deaths is called stamping On **21st April, 2019** seven

people were killed and 10 injured in a stampede during a local festival at a temple near Thuraiyur in Tamil Nadu.

- The incident took place when hundreds of devotees gathered at the Karuppasamy temple in Muthiampalayam village for the 'padikasu' (temple coin) distribution ceremony.

Mitigation

Hazard mitigation refers to any sustained action taken to reduce or eliminate the longterm risk to human life and property from hazardous conditions.

- Regular maintenance of machines and wires may reduce the frequency of accidents,
- Creating awareness and training the workers to be cautious during work hours may help them to reduce risk during disasters
- Wearing specially designed dresses and other safety materials would help the workers to protect themselves from any serious injuries
- Conducting periodical medical camps would help them to assess their health status. The Provision of having life insurance policies will secure their future
- Besides these, the administration should be employees friendly and ready to extend their help in case of any untoward incidents.

Road Accidents

- The road accidents in India is on very high level. Tamil Nadu leads in the number of road accidents in the country. Increase in road traffic, high speed of vehicles and violation of traffic rules are the causes of major of accidents.
- In 2013, 14504 accidents had taken place in the state which resulted in **15563 deaths**. In the ten years from 2002-2012, Tamil Nadu tops the list in number of road accidents among the states of India.
- It is reported that about 15 percent of accidents of the country takes place in Tamil Nadu.
- The figure of 2017 also puts Tamil Nadu on top with recording of 16157 deaths out of 147913 deaths recorded in the country. Death toll came down rapidly in 2018 to 12213 deaths, a decline of 24.5 percent

Risk Reduction Measures

Before:

Avoid Speeding, Drunk and driving, use helmets and seat belts and follow traffic rules

After:

Call police or ambulance; seek medical attention; make an accurate record and exchange information.

Basic Road Safety Rules

- Aware of the road signals
- Stop, look and cross
- Listen and ensure whether a vehicle is approaching
- Don't rush on roads
- Cross roads in pedestrian crossings
- Don't stretch hands while driving vehicles
- Never cross road at bends and stay safe in a moving vehicle.

Accelerated changes in demographic and economic trends disturb the balance which leads to increased frequency and the negative impact of disaster. At present the society face a challenging mix of demographic, ecological and technological condition which make population more vulnerable to the impact of the calamities. Though the number of natural disasters are in decline than they were in the past, the increasing level of magnitude poses a threat. Besides the various measures taken by the government and the public, education on awareness regarding the disasters may help in the reduction of risks during disasters

More to Know:

1. For the management of disasters in the state, the following forces and organizations are in service.

- (i) State Disaster Management Authority (Chairman-Chief Minister)
- (ii) Relief/ Disaster Management Department
- (iii) Police
- (iv) Forest Department
- (v) Fire and Civil Defence Services
- (vi) Health Services
- (vii) Transport Department
- (viii) Public Works Department
- (ix) Veterinary Services
- (x) Food & Civil Supplied Department.

The Organizations at District Level

- (i) District Magistrate (Chairman District Collector)

- (ii) Revenue Department
- (iii) Civil Administration,
- (iv) Local Police,
- (v) Civil Defence,
- (vi) Fire & Emergency Services,
- (vii) Home Guards (also Local Community, Non-Governmental Organisations, Voluntary Agencies) etc.

2. Disaster emergency contact number 1077 - Control room of District Collector/Magistrate.

3. NH - 44 is the longest national highway in Tamil Nadu which runs from Hosur to Kanniyakumari (627.2 km) Via Dharmapuri-Salem-KarurDindigul-Madurai-Tirunelveli.

4. NH - 785 is the shortest national highway in Tamil Nadu which runs from Madurai to Natham (38 km).

5. The list of IT parks in Tamil Nadu

Tidel Park, Ascendas, Mahindra world city 4 IT & ITES SEZ TIDEL-II, IT & ITES SEZ TIDEL-III, Coimbatore SEZ - Tidel Park

6. A special economic zone (SEZ) is an area in which the business and trade laws are different from the rest of the country. SEZs are located within a country's national borders, and their aims include increased trade balance, employment, increased investment, job creation and effective administration

7. Second Green Revolution (Eco-Farming or Organic Farming)

In organic farming synthetic fertilizers, pesticides, growth regulator and livestock feed additives are not used. This type of farming rely on crop rotation, crop residues, animal manure, off-farm organic wastes and biological pest control to maintain soil productivity. This farming method is being adopted by very few farmers in the state. It has to be increased in number.

8. TANTEA (**TANTEA Tamil Nadu Tea Plantation Corporation Limited**) is one of the Biggest Black Tea Producers in India with high quality clonal tea. Its plantation spreads over nearly 4500 hec. Tamil Nadu Dairy Development Corporation Ltd. was transformed into the newly registered Tamil Nadu Co-operative Milk Producers Federation Limited Popularly known as "Aavin".

9. India observed 2018 as national year of millets. FAO has decided to observe 2023 as the International year of millets.

10. To promote organic farming a central scheme named 'National Project on Organic Farming' was launched Apart from general things (**creating awareness, promoting organic fertilizers, training, capacity building etc.**), the scheme provides financial assistance through Capital Investment Subsidy Scheme for agro-waste compost production units, bio-fertilizers/ bio-pesticides production units, development and implementation of quality control regime, human resource development etc.

11. The Tamil Nadu Rice Research Institute (TRRI) is an Indian research institute working in the field of rice under Tamil Nadu Agricultural University (TNAU). It is situated at Aduthurai, in Thanjavur district, it was established in **April, 1985** in TNAU to meet the research requirements of the region with the help of existing Agricultural Colleges and Research centres and perform lead function for rice and rice based cropping system research.