

APPOLO STUDY CENTRE

10TH HISTORY

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10TH HISTORY

Unit 5 - Social and Religious Reform Movements in the 19th Century

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.

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.

Ram Mohan 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.

Ram Mohan 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 of 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 Ram Mohan 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 Iswar Chandra Vidyasagar 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.

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, Satyarthprakash, 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.

Jyotiba Phule

Jyotiba Govindrao Phule was born in 1827 in Maharashtra. Phule is chiefly known as Jyotiba Phule and Savitribai Phule 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. Jyotiba 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

Say id 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 Wanotavi (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.

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. Behramji 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 Reforms 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.

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 SanmargaSangam 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, whocondemned 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. Muthukutt had no opportunity to have any systematic schooleducation but acquired knowledge of variousreligious texts. He preached the ideas of equalityand advocated the rights of depressed classpeople in the face of stiff opposition from uppercastes as well as the princely state of Travancore.Vaikunda Swamikal criticised therule of the British and the rule of Rajah ofTravancore as the rule of White devils andBlack devils respectively.

He visited Tiruchendur temple andexperienced a new vision. Calling himselfVaikundar, he requested the people to give up allthe irrelevant rites and rituals in their worship.His preaching's against the prevailing religiousorder brought about a considerable changein the attitude of the lower caste people. In1833, Vaikundar commenced his meditation atSamithoppu for the abolition of caste differencesand social integration of the society. During thisperiod, he led a life of a hermit.In south Travancore, there were manyrestrictions on lower caste people such as whatthey could wear and not wear. At a time whenthere was prohibition on certain sections onwearing headgear he advocated the wearing ofa turban in protest. It gave a sense of honourto the oppressed people and offered a spirit ofself-respect.

A new confidence was installedin the minds of his followers. Like the other contemporary reform movements of India in the 19th century, Vaikunda Swamigal condemned the worship of idols. Thelow 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 variouscastes. He organized inter-dining to accomplish it. Even though he was imprisoned by theMaharajah of Travancore, he never gave up his principles. His followers called him respectfullyas Ayya (father). His cult was also known asAyya Vazhi (The Path of Ayya). His messageemancipated the people from the unjust socialcustoms and superstitious beliefs. His ideas arecollected into a text called Akila Thirattu.

C. Iyothee Thassar

Pandithar Iyothee Thassar (1845–1914) was a radical Tamil scholar, writer, siddha medicine practitioner, journalist and socio-political 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 Sabhain 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.

(b) Decolonisation in India

Dyarchy in Provinces

The decolonization process started in India from the beginning of the twentieth century with the launch of the Swadeshi Movement in 1905. The outbreak of the First World War brought about rapid political as well as economic changes. In 1919, the Government of India Act introduced Dyarchy that provided for elected provincial assemblies as well as for Indian ministers to hold certain portfolios under Transferred Subjects. The Montague declaration read: ‘Increasing association of Indians in every branch of the administration and the gradual development of self-government in India as an integral part of the British Empire. This measure of the British government was “to buy the political peace needed to expand the tax base.” The Indian National Congress rejected Dyarchy and decided to boycott the legislature.’

Unit - 10

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... underpinned 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 non-European language that went into print. As early as in 1578, Tamil book, *Thambiran Vanakkam*, was published from Goa. In 1709, a full-fledged

printing press had been established thanks to 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, Ilakkana Vilakkam, 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), Manimekhalai (1898), Ainkurunuru (1903) and Pathitru pathu (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

Kalaigarnar (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 Isaiyakkam, made a significant cultural impact increasing a pure Tamil free from the influence of Sanskrit.

V.G. Suryanarayana Sastri (Parithimar Kalaignar)

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 Kalaignar. 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 non-Brahmin 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 Theagarayar, 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 Non-Brahmin Manifesto pointed out that though "Not less than 40 out of the 411/2 millions" of the Madras Presidency were non-Brahmins, "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".

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 election 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 Justice Party 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 women 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 caste-based 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 Self-Respect 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 Tamil Nadu'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 tinai (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 "valkai thunai," (companion) a word for marriage taken from the Tirukkural. Periyar'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 Sabhain 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 terms, Adi-Dravida and Adi-Andhra. 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

Labour Statue in Marina Beach The First World War (1914–18) provided stimulus to industrial growth in India. These industries, catering to wartime 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 Self-Respect 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, Alarmel mangai Thayammal, Nilambikai, and Sivakami Chidambaran 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 Devadasi (Prevention of Dedication) Act 1947 was enacted by the government.

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 devadasi 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.

5. 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 19.31 crores from the population of 2001. Population Census of India provides the detailed information about the demography of India. Along with population, we will study about the transport and communication of India in this chapter.

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).

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 consist of the religion, culture, political issues, economy, human settlements, transport network, industrialization, urbanization, employment opportunity etc.

Density of population

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.

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 (827) 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 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. The following table shows the decadal growth rate of population from 1901 to 2011.

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 into three broad categories. In India, the children who have 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 (16- 59 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 Pondicherry 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 threefold 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 come 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 the economy.

Urbanization in India

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%).

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

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 (14.1 million).

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 377 million 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.

Means of Transport		
Land	Water	Air
<ul style="list-style-type: none"> • Road ways • Railways • Pipelines 	<ul style="list-style-type: none"> • Inland • waterways • Ocean routes 	<ul style="list-style-type: none"> • Domestic airways • International Airways

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.

1. Classification of Roads in India

a. 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.

b. 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.

c. 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.

d. 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.

e. 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 north-eastern 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: North-South 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.

f. 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.

g. 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

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 railway 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 16 zones. 1) Northern Railway - Delhi 2) North- Western 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 and 16) South East Central Railway - Bilaspur.

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 overcrowding in urban areas.

a. 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.

b. 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).

a. 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 Ganga- Bhagirathi-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.

b. 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, mostmodern 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 Airlines and Air India are the two airline services run by the government of India. Indian Airlines 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.

a. 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.,

b. 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.

Them 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, SpeedNet and Speed Passport Services. Cards and envelopes are considered first class 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 regard in 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 about 635.8 million internet users in India. 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

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 equipment's, 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.



1. Gross Domestic Product and Its Growth: An Introduction

The GDP is defined follows:

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 of 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

1. 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)

2. 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.

3. 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.

$$(\text{NNP} = \text{GNP} - \text{Depreciation})$$

4. 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) $NDP = GDP - Depreciation$

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

6. 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

$(PI = NI - corporate\ Income\ Taxes - Undistributed\ corporate\ profits - social\ security\ contribution + Transfer\ payment)$.

7. 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 values of apples produced in Kashmir are included in our GDP since Kashmir is in India. The market values 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 1 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.

1. Several important goods and services are left out of the GDP: The GDP includes only the goods and services sold in the market. The service 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.

2. 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.

3. 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. **4. 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.

1. Primary Sector: (Agricultural Sector)

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

2. 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.

3. 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

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. 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 $GVA + \text{taxes on products} - \text{subsidies on products} = \text{GDP}$ $GVA = \text{GDP} + \text{subsidies} - (\text{direct, sales}) \text{ taxes}$.

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	37.27
1980- 81	35.39	24.29	39.92
1990- 91	29.02	26.29	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

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

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.

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 its entire people.	It focuses on a balanced and equitable distribution of wealth among all individual and tries to uplift the downgrade societies.

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 increased 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.

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.

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.

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

1. 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 overarching 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.

2. 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.

3. 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- economic 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.

NOTE

- ❖ In 1867-68 for the first time Dadabhai Navroji had ascertained the Per Capital Income in his book "Poverty and Un- British Rule of India".
- ❖ The modern concept of GDP was first developed by Simon Kuznets for a US Congress report in 1934.
- ❖ 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.

10th ECONOMICS VOL - II
Unit 5
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 recognizes 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, industrialization 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 outcompete 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.

- geographical proximity of small and medium enterprises (SMEs)
- sectoral specialisation
- close inter-firm collaboration
- inter-firm competition based on innovation
- a socio-cultural identity, which facilitates trust
- multi-skilled workforce
- active self-help organisations, and
- 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, auto components, 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 post-reform 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.

Global South

Countries in the southern hemisphere are called Global South countries

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 percent 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, Sony- Ericsson, 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.

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 - Jagirammalayam

- Hosur – Viswanathapuram

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-scale 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.

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

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.

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.

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.

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.

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 an 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.

- They promote development of industries and help to remove regional disparities by industrialising rural and backward areas.
 - They help the country to increase the GDP and Per Capita Income.
 - They contribute towards the development of society by reducing concentration of income and wealth.
 - They promote capital formation by mobilising the idle savings of the citizens and country's export trade.
 - 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.
 - They enable the people to avail better quality goods at lower prices, which results in the improvement of their standard of living.
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