

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
 UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU  
**Geography of Tamil Nadu and Its Impact on Economic Growth**

**Location and Size:**

- Tamil Nadu is one of the 28 states of India, located in the southernmost part of the country.
- It extends from 8°4'N to 13°35'N latitudes and from 76°18'E to 80°20'E Longitudes. Its extremities are
  - Eastern – Point Calimere
  - Western – hills of Anaimalai
  - Northern – Pulicat Lake
  - Southern – Cape Comorin
- It covers an area of 1,30,058 sq.km and is the 11<sup>th</sup> largest state in India.
- It covers 4% of the area of our country.

**Boundaries and Neighbours:**

- Tamil Nadu is bounded by the Bay of Bengal in the east, Kerala in the west, Andhra Pradesh in the north, Karnataka in the Northwest and Indian Ocean in the south.
- Gulf of Mannar and Palk Strait separate Tamil Nadu from the Island of Sri Lanka, which lies to the Southeast of India.
- The state has 940 km long Coastline, the second-longest in India after Gujarat.

**Administrative Divisions:**

- Already we have learnt that the state of Tamil Nadu had only 13 districts at the time of its formation.
- After that, the state was Reorganised several times currently 38 districts for the administrative Convenience.

**Physiographic Divisions:**

- Tamil Nadu is located on the Peninsular Plateau, known as Deccan Plateau.
- It is also a Part of the ancient Gondwana land that broke away 135 million years ago during Cretaceous Period.
- Tamil Nadu is divided into the Physical divisions of Western Ghats, Eastern Ghats, Plateaus, Coastal and Inland plains.

### Western Ghats:

- Western Ghats extend from the Niligris in the north to Marunthuvazh Malai at Swamithope in Kanyakumari district in the South.
- Height of the Western Ghats ranges from 2,000 to 3,000 metres.
- It covers an area of about 2,500 sq.km.
- Though the Western Ghats is a continuous range, it has some Passes.
- The passes are Palghat, Shencottah, Aralvaimozhi, and Achankoil.
- The Niligris, Anaimalai, Palani hills, Cardamom hills, Varusanadu, Andipatti and Agasthiyar hills are the major hills of Western Ghats.

### Nilgiri Hills:

- The Nilgiri hill is located in the Northwestern part of Tamil Nadu.
- It consists of 24 peaks with more than 2,000 metres height.
- Doddabetta is the highest peak (2,637 metres) of these hills followed by Mukkuruthi (2,554 Metres).
- Ooty and Coonoor are the major hill Stations located on this hill.
- It has more than 2,700 species of flowering plants and the state Animal Nilgiri Tahr is found in this hill.

### Anaimalai:

- Anaimalai is located in the border of Tamil Nadu and Kerala.
- It is located to the South of Palghat Gap.
- Anaimalai Tiger Reserve, Aliyar Reserved Forest, Valparai hill station, Kadamparai hydroelectric Power Plant are Located on this hills.
- Aliyar and Tirumurthy Dams are located at the foothills of this range.

### Palani Hills:

- Palani hills are the eastward extension of The Western Ghats.
- These hills are located in Dindigul district.
- Vandaravu (2,533 metres) is the highest peak in the Palani hills.
- Vembadi Shola (2,505 metres) is its second highest peak.
- The hill station of Kodaikanal (2,150 metres) lies in the south-central portion of the range.

### Cardamom Hills:

- These hills are also known as Yela Mala Hills located in the southwestern part of Tamil Nadu.
- It acquires its name from the Cardamom spice, which is commonly grown here.
- Pepper and coffee are the other crops Cultivated over the hills.
- They meet the Anaimalai hills in the northwest, the Palani hills in the northeast and Varusanadu and Andipatti Hills in the southeast.

### Varusanadu and Andipatti Hills:

- Another eastward extension of Western Ghats is Varusanadu and Andipatti hills.
- Megamalai (the highway mountain), Kalugumalai, Kurangani hill station, and Suruli and Kumbakarai waterfalls are found on these Hills.
- Srivilliputhur Grizzled Squirrel Wild Life Sanctuary is located in the southern slope of these hills in Virudhunagar district.
- Vaigai River and its tributaries originate in this region.

### Pothigai Hills:

- Its major part lies in Tirunelveli district with its southern slope in the Kanyakumari district.
- Pothigai hills are called with different names Such as the Shiva Jothi Parvath, Agasthiyar hills And Southern Kailash.
- These hills feature richest Biodiversity in the Western Ghats.
- This area is known for its rich evergreen forest, waterfalls and ancient temples.
- Kalakkad Mundanthurai Tiger Reserve is located in this region.

### Mahendragiri Hills:

- This continous range is situated along the border of Kanyakumari and Tirunelveli Districts and is a part of the southern range of the Western Ghats.
- Its average height is 1,645 Metres.

### The Eastern Ghats:

- Unlike Western Ghats, Eastern Ghats is a Discontinuous and irregular one.
- It is dissected at many places by the rivers, which drain into the Bay of Bengal.
- Its height ranges from 1,100 to 1,600 metres.
- These hills separate the Plains from plateaus. Javadhu, Servarayan, the Kalrayan, Kollimalai and Pachaimalai are the Major hills of the Eastern Ghats of Tamil Nadu and are located in northern districts of the state

### Javadhu Hills:

- Javadhu hills are an extension of the Eastern Ghats spread across parts of Vellore and Tiruvannamalai districts and separates these two districts.
- Many peaks with the height of 1,100–1,150 metres are located in this range.
- Melpattu is its highest peak.
- Many parts of this Range are covered with bluish grey granites.
- It is noted for its fruit bearing trees, medicinal Herbs and sandalwoods.
- Due to illegal logging, Sandalwood trees are disappeared now.

### Kalvarayan Hills:

- The name 'Kalvarayan' comes from the Word 'Karalar', the ancient name of the present Tribes.
- It is another major range of hills in the Eastern Ghats of Tamil Nadu.
- This range, along With the Pachaimalai, Aralvaimalai, Javadhu and Servarayan hills, separates the river basins Of Cauvery and Palar.
- The height of this hill Ranges from 600 to 1,220 metres.

### Servarayan Hills:

- It is a mountain range located near the Salem city with the height ranging from 1,200 To 1,620 metres.
- The name of the range comes from a local deity, Servarayan.
- The highest peak in the southern part of the Eastern Ghats is Located in this range.
- The peak is Solaikaradu and its height is 1,620 metres.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- The hill station Yercaud, which is known as poor man's Ooty, is Located on this range.
- Seravarayan temple is its highest point (1623 metres).

**Kolli Hills:**

- It is a small mountain range located in Namakkal district.
- It covers an area of about 2,800 sq.km.
- It rises up to 1300 metres.
- This is a Mountain range that runs almost parallel to the East coast of South India.
- Arpaleswarar temple Located on this range is an important pilgrim Centre.
- It has the largest cover of evergreen or Shola Forest when compared to other parts of the Eastern Ghats.
- Several coffee plantations, Fruits, flowers and silver-oak estates are found in this region.

**Pachaimalai:**

- It is the lowest hill range, spreads over the districts of Perambalur, Tiruchirapalli and Salem.
- In Tamil language, pachai means green.
- The vegetation in this range is greener than the Vegetative cover of the other hills in this region.
- Hence it is named as 'Pachai malai'.
- Jackfruit is a popular seasonal agricultural product of this Hills.

**Plateaus:**

- Plateaus of Tamil Nadu are located between the Western Ghats and the Eastern Ghats.
- It is roughly triangular in shape and covers an area of about 60,000 sq.km.
- **Bharamahal plateau** is a part of the Mysore Plateau situated in the northwestern part of Tamil Nadu.
- Its height ranges from 350 to 710 Metres.
- Dharmapuri and Krishnagiri districts are located in this region.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- **Coimbatore plateau** lies between the Nilgiris and Dharmapuri districts. Its height varies from 150 to 450 metres.
- This region includes Salem, Coimbatore and Erode districts.
- **Moyar River** Separates this plateau from the Mysore plateau.
- Rivers like Bhavani, Noyyal and Amaravathi, which originate from Western Ghats, form valleys in this region.
- Many Intermontane plateaus are found in the region Of the Nilgiris. Sigur plateau is one such plateau
- **Madurai plateau** found in Madurai district Extends up to the foothills of the Western Ghats.
- Vaigai and Thamirabarani basins are located in this zone.

**Plains:**

- The plains of Tamil Nadu may be divided into two, namely
  - Inland plains
  - Coastal plains
- Inland plains are drained by the rivers Palar, Ponnaiyar, Cauvery and Thamirabarani.
- A Cauvery plain is one of the most important fertile plains of the state.
- The plains of Cauvery is found in Salem, Erode, Karur, Tiruchirapalli, Pudukottai, Thanjavur, Tiruvarur and Nagapattinam districts.
- Coastal plains of Tamil Nadu are also Called Coromandel or Cholamandalam (land Of Cholas) plain, which extends from Chennai to Kanyakumari.
- It is formed by the rivers that Flow towards east drain in the Bay of Bengal.
- It is more than 80 kilometres wide at some places.
- Though it is an emerged coast, some parts are submerged into the sea.
- The sand dunes Formed along the coast of Ramanathapuram and Thoothukudi districts are called Teri.
- Coral Rocks are found at the head of Gulf of Mannar in the east coastal plain.

**Beaches:**

- The Coromandel Coast along the Bay of Bengal consists of many beautiful and exotic beaches.
- The golden sands of Tamil Nadu Beaches are scattered with palm and casuarinas Groves.
- Marina and Elliot beaches of Chennai, Kovalam beach in Kanchipuram and Silver Beach in Cuddalore are some of the famous Beaches in Tamil Nadu.

**Drainage:**

- Rivers of Tamil Nadu are its lifeline.
- Though it has many rivers, the rivers of Cauvery, Palar, Ponnaiyar, Vaigai and Thamirabarani are the Notable ones.
- Most of the rivers of Tamil Nadu Originate from Western Ghats and flow towards East and drain into the Bay of Bengal.
- All the Rivers of the state are non-perennial except Thamirabarani.
- It is perennial as it is fed by both the southwest and northeast monsoons.

**Cauvery:**

- The river Cauvery originates at Talacauvery in the Brahmagiri hills of Kodagu (coorg) district of Karnataka in the Western Ghats.
- Total length of Cauvery River is 805 km.
- About 416 km of its course falls in Tamil Nadu.
- It serves as the boundary between Karnataka and Tamil Nadu for a distance of 64 km.
- It forms Hogenakkal waterfalls in Dharmapuri district.
- Mettur Dam, also called as the Stanley Reservoir, is located across this River in Salem district.
- A tributary called Bhavani joins Cauvery on the right bank about 45 km from the Mettur Reservoir.
- Thereafter, it takes easterly course to enter into the plains of Tamil Nadu.
- Two more tributaries, Noyyal and Amaravathi, confluence the river on the Right bank at Thirumukkudal 10 km from Karur.
- The river is wider in this region, where it is called as ‘Agandra Cauvery’.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- In Tiruchirappalli district, the river Branches into two parts.
- The northern Branch is called Coleroon or Kollidam and the southern branch remains Cauvery.
- From Here, the Cauvery delta begins.
- After flowing Forabout 16 km, the two branches join again to form the 'Srirangam Island'.
- The Grand Anaicut, also called as Kallanai was built across The River Cauvery.
- After Kallanai, the river breaks into a large number of distributaries and forms a network all over the delta.
- The Network of distributaries within the delta of Cauvery in the coast is called as the 'Garden of Southern India'.
- It merges into Bay of Bengal to the south of Cuddalore.

#### **Nadanthai Vaazhi Cauvery Project**

- Nadanthai Vaazhi Cauvery Project in Tamil Nadu Reach is Massive Rejuvenation programme for Cauvery and its Tributaries with the prime objective to conserve, rejuvenate and augment the water resources in Cauvery Basin and to effectively curb sewerage pollutant has been initiated in line with Namami Gange Programme.

#### **Palar:**

- The Palar River rises beyond Talagavara Village in the Kolar district of Karnataka.
- The Palar drains an area of 17,871 sq.km, Out of which nearly 57% lies in Tamil Nadu and the rest in the states of Karnataka and Andhra Pradesh.
- Ponnai, Goundinya Nadhi, Malattar, Cheyyar and Kiliyar are its major Tributaries.
- Its total length is 348 km, out of Which 222 km of its course falls in Tamil Nadu.
- It flows through the districts of Vellore and Kancheepuram before entering into Bay of Bengal near Kuvattur.

**Then Pennaiyar / Then Ponnaiyar:**

- It originates from the eastern slope of Nandi Durga hills in eastern Karnataka.
- It drains an area of 16,019 sq.km, of which nearly 77% lies in Tamil Nadu.
- It flows for a distance of 247 km in the southeasterly direction in the Districts of Krishnagiri, Dharmapuri, Vellore, Tiruvannamalai, Cuddalore and Villupuram.
- It Branches into two, viz. Gadilam and the Ponnaiyar near Tirukoilur Anaicut.
- Gadilam joins the Bay of Bengal near Cuddalore and Ponnaiyar near the Union Territory of Puducherry.
- Chinnar, Markandanadhi, Vaniar and Pambar are its Tributaries.
- Heavy rain at the river's source Cause sudden but short-lived floods.
- The river is extensively dammed for irrigation, especially in Tamil Nadu.
- There are reservoirs at Krishnagiri and Sathanur across this river.
- The Ponnaiyar is considered sacred by Hindus and festivals are Held during the Tamil month of Thai (January–February).

**Vaigai:**

- Vaigai River rises from the eastern slopes of the Varusanadu hills of Western Ghats of Tamil Nadu.
- It drains an area of 7,741 sq.km, which Lies entirely in the state of Tamil Nadu.
- It flows through the districts of Madurai, Sivaganga and Ramanathapuram.
- Its length is 258 km.
- It Discharges its water into the Ramnad Big Tank and some other small tanks.
- The surplus water from the tanks is finally discharged into Palk Strait near Ramanathapuram.

**Thamirabarani:**

- The name is interpreted as Thamiram (copper) and Varuni (streams of river).

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- The water of this river gives a copper like Appearance due to the presence of dissolved Suspended red soil.
- It originates from a peak in Pothigai hills on the Western Ghats above Papanasam in the Ambasamudram taluk.
- The origin of the river is associated with Sage Agasthiyar.
- It courses through the districts of Tirunelveli and Thoothukudi and finally flow into the Bay of Bangal near Punnaikayal in Thoothukudi district.
- Karaiyar, Servalar, Manimuthar, Gadanathi, Pachaiyar, Chittar and Ramanathi are its main tributaries.
- It is the only perennial river in South India.

**Water Resource:**

- Water is the precious Gift of nature to humankind and millions of other species living on the earth.
- Tamil Nadu constitutes 4% of India's land area and is inhabited by 6% of India's population, but has only 2.5% percent of India's water resources.
- More than 95% of the Surface water and 80% of the ground water have already been put into use.

**Surface Water Resources Numbers:**

- **River Basin 17**
- **Reservoirs 81**
- **Tanks 41,127**
- **Tube wells and other Wells 4,98,644**
- **Open wells 15,06,919**
- Total (Million Cubic Metres) 2046788 MCM

**Multipurpose River Valley Projects:**

- Multipurpose river valley projects are basically designed for the development of Irrigation for agriculture and hydropower Generation.
- However, they are used for many other purposes as well.

**Mettur Dam:**

- The Mettur Dam was constructed in a gorge, where river Cauvery enters the Plains.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- It is one of the oldest dam in India.
- It provides irrigation to Salem, Erode, Karur, Tiruchirappalli, Thanjavur, Tiruvarur and Nagapattinam districts farmlands.

**Bhavani Sagar Dam:**

- The Bhavani Sagar Dam is located 80 km away from Coimbatore city in the district of Erode.
- It has been constructed across the river Bhavani.
- This dam is one of the biggest earthen Dams in the country.

**Amaravathi Dam:**

- The Amaravathi dam is situated 25 km away from Udumalpet in Tirupur district.
- The Dam has been constructed across the river Amaravathi, a tributary of Cauvery.
- The dam was built primarily for irrigation and flood Control.
- A small hydropower station has also been installed recently.

**Krishnagiri Dam:**

- Krishnagiri dam is situated at a distance of 7 km from Krishnagiri towards Dharmapuri.

**Sathanur Dam:**

- Sathanur Dam was constructed across the River Thenpennai in Chengam taluk.
- It is in the midst of Chennakesava hills.
- It irrigates the land in Thandrapet and Tiruvannamalai Blocks.
- There is also a large crocodile farm and a Fish grotto.
- Parks are maintained inside the dam for tourists and the gardens are used by the film Industry.

**Mullaiperiyar Dam:**

- Mullaiperiyar dam was built by the British Administration in 1895.
- It has been constructed on the Periyar river, which originates from Thekkady hills of Kerala.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- The dam was built mainly for watering the farming land of Tamil Nadu, which is perennially drought-prone.

**Vaigai Dam:**

- This dam built across the river Vaigai near Andipatti.
- The dam with a height of 111 feet can Store water up to 71 feet.
- It is located 7 km from Andipatti and 70 km from Madurai.
- This dam was opened on 21 January, 1959.

**Manimuthar Dam:**

- Manimuthar dam is located about 47 km From Tirunelveli.

**Papanasam Dam:**

- It is also known as Karaiyar dam and is Located about 49 km away from Tirunelveli.
- The dam is used to irrigate Tirunelveli and Thoothukudi districts.
- Parampikulam Aliyar Project it is a joint venture of Tamil Nadu and Kerala states.
- It envisages the construction of seven interconnected reservoirs by harnessing the water of seven rivers, which include Major Rivers of Parambikulam and Aliyar.
- Parappalar project, is located near Ottanchatram.
- Its storage capacity is 167 million cubic feet of water.
- It is about 75 km From Madurai and is in Palani taluk.

**Water Resource Management:**

- Water resource management is the activity of planning, developing, distributing and managing the optimum use of water resources.
- The demand for water in Tamil Nadu is increasing at a fast rate both due to increasing Population and also due to larger per capita needs triggered by economic growth.
- Demands from other sectors such as domestic and Industries have been growing significantly.
- The State is heavily dependent on monsoon rains.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Since the state is entirely dependent on rains recharging its water resources, monsoon Failures lead to acute water scarcity and severe droughts.
- So, it is important to save water for us and the future generation.

**Climate:**

- Tropic of Cancer divides India roughly into two equal Parts and the state Tamil Nadu lies to the south Tropic of Cancer, which is near the Equator.
- As it receives vertical sunrays, the temperature of the state is relatively high throughout the year.
- Though the state falls within the hot climatic Zone, the east coast of Tamil Nadu enjoys Tropical maritime climate.
- The Bay of Bengal and Indian Ocean influence the climate of the coastal Regions.
- While the east coast experiences tropical Maritime climate, the western region of the state enjoys the mountainous climate.
- Low altitude and distance from the sea are the reasons for high Temperature and dry conditions in the central Part of Tamil Nadu.
- The migration of vertical Sun's rays leads to the formation of different Seasons in Tamil Nadu as follows.

**Seasons of Tamil Nadu:**

**Winter Season:**

- During January and February, the vertical Rays of the sun fall between the Tropic of Capricorn and the Equator.
- Hence, Tamil Nadu and India on the whole receive slanting rays from the sun. So, the weather is slightly cooler during these months.
- Winter temperature in Tamil Nadu varies from 15°C to 25°C.
- However, in the hill stations, the winter temperature drops below 5°C occasionally.
- Some valleys in the Nilgiris record even 0°C.
- This drop in Temperature leads to the formation of thick mist and frost. This season is practically dry.

### Summer Season:

- The apparent migration of the sun towards North during March, April and May results in the reception of vertical sun's rays by South India.
- Thus, there is a steady rise in temperature from the equator.
- Hence, Tamil Nadu located to the south of Tropic of Cancer, experiences High temperature.
- Generally, the temperature Varies from 30°C to more than 40°C.
- During this season particularly in the month of May, Southern part of the state receives some Rainfall from pre-monsoon showers (Mango/Blossom showers) and some parts experience Convectional rainfall.

### Southwest Monsoon:

- The intense heating of the landmass of the North by the sun during March to May creates a well-developed low pressure in North India, which draws wind from the Indian Ocean.
- This results in the formation of southwest Monsoon.
- During this season, Tamil Nadu is Located in the rain shadow region for the wind, which blows from the Arabian Sea.
- As a result, Tamil Nadu receives only a meagre rainfall from this monsoon.
- Rainfall during this season Decreases from west to east. Coimbatore plateau Receives an average of 50 cm rainfall.
- However, the southern districts like Kanyakumari, Tirunelveli and The Nilgiris record 50–100 cm Rainfall during this period.
- The rainfall is scanty in the eastern part of the state.

### Northeast Monsoon:

- The northeast monsoon season commences from the month of October and lasts till mid-December.
- The high pressure created over Central Asia and northern part of India becomes the source for the northeast monsoon winds.
- The apparent migration of the sun from Tropic of Cancer to the Tropic of Capricorn causes a Change in receiving temperature and air pressure during this season.

- It makes the wind to blow Towards Bay of Bengal from North India and get Deflected by Coriolis force and takes the northeast Direction.
- Hence it is known as northeast Monsoon.
- As the northeast monsoon is a part of returning of southwest monsoon wind, it is also called as the retreating monsoon.
- This is the Main rainy season for Tamil Nadu, accounting for its 48% of annual rainfall.
- Coastal districts of the state get nearly 60% of their annual rainfall and the interior districts get about 40–50% of the Annual rainfall during this season.
- Tropical cyclones are common during this Season.
- Cyclone originating from the Bay of Bengal Bring heavy rainfall to the east coastal regions of Tamil Nadu.
- More than 50% of the state's rainfall is received from tropical cyclones during this period and east coastal region receives 100 to 200 cm of Rainfall.
- The rainfall received by the central and north western parts is 50–100 cm.
- The cyclones sometimes disturb the cultivation of crops and cause severe damage to life and property.
- Chinnakallar near Valparai is the 3<sup>rd</sup> wettest place in India and the wettest place in Tamil Nadu.

#### Soils:

- The soils in Tamil Nadu are broadly classified into five types according to their Characteristics. They are
  - Alluvial soil
  - Black Soil
  - Red soil
  - Laterite soil
  - Saline soil

#### Alluvial Soil:

- Alluvial soils are formed by the deposition of silt by the rivers.
- It is found in the river Valley regions and the coastal plains of Tamil Nadu.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- Generally, this type of soil is found in the Districts of Thanjavur, Tiruvarur, Nagapattinam, Villupuram, Cuddalore, Tirunelveli and Kanyakumari.
- It is also found to a small extent along the river valleys in few interior districts.

**Black Soil:**

- Black soils are formed by the weathering of igneous rocks.
- It is also known as regur Soil.
- As cotton grows well in this soil, it is also called as black cotton soil.
- Black soils are found extensively in the districts of Coimbatore, Madurai, Virudhunagar, Tirunelveli and Thoothukudi.

**Red Soil:**

- Red soils cover over two-thirds of the Total area of Tamil Nadu.
- They are found particularly in the central districts of the state.
- It is dominantly found in Sivagangai and Ramanathapuram districts.

**Laterite Soil:**

- This soil is formed by the process of intense leaching.
- Laterite soils are found in some parts of Kancheepuram, Tiruvallur and Thanjavur districts and some patches over the Mountainous region in the Nilgiris.

**Saline Soil:**

- Saline soils in Tamil Nadu are confined to the Coromandel coast. Vedaranyam has a Pocket of saline soil.
- However, the tsunami Waves on December 26, 2004 brought a lot of Sand and deposited it all along the east coast of Tamil Nadu.
- The tsunami made the coastal Areas unsuitable for cultivation to a considerable Extent.

**Soil Erosion:**

- Soil is a non-renewable resource.
- It is very difficult to replace the soil once it gets degraded.
- Deforestation, overgrazing, urbanisation and Heavy rain are responsible for soil erosion in Tamil Nadu.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Soil erosion reduces the fertility of soils, which in turn reduces agricultural Productivity.
- So, it is necessary to take intensive care to conserve the soil resources.

**Natural Vegetation & Wildlife**

- The Forest and Wildlife Management in Tamil Nadu shall be done with the objectives of creating healthy and resilient forests through innovations, community partnership, collaboration and scientific management.
- Forests are probably the most well-known nature-based solutions for climate change, but there are many more - including mangroves, wetlands, coral reefs, peat lands and other landscapes.
- Forests contribute significantly towards environmental upkeep, climatic balance and are mainly instrumental for the rainfall pattern.
- Tamil Nadu is the southern-most State of the country and covers an area of 1,30,060sq km which is 3.96 % of the geographical area of the country.
- Physiographically, the State can be divided into four major regions, namely, Coastal Plains, Eastern Ghats, Central Plateau and Western Ghats
- under National Forest Policy 1988, State Forest Policy 2018 and Sustainable Development Goals (SDGs).
- It will be the commitment of the Department to increase the forest cover by protection, restoration, afforestation and reforestation
- The State Forest Policy 2018 aims for strict enforcement of forest laws, restoration of degraded forests, improving water harvesting potential of all forest catchment areas, strengthening of Protected Areas, acquisition of wildlife corridors and extension of wildlife habitats.
- Establishment of Three Rescue and Rehabilitation Centres, Pallikaranai Conservation Centre, Kazhuveli Conservation Centre, Biodiversity Museum and Conservation Centre, Remodeling of Guindy Children's Park, Botanical Garden near Chennai, Longwood Shola Conservation Centre and Modernization of Theppakadu Elephant Camp are some of the important Projects initiated by the department for conservation of wildlife and biodiversity in the State

- Forest Wealth of Tamil Nadu As per the latest India's State of Forest Report, 2021(Biennial), based on the interpretation of Indian Remote Sensing (IRS) Satellite data, the forest cover in the State is 26,419.23 sq km which is 20.31% of the State's Geographical area.
- In terms of forest canopy density classes, the State has 3,593.01 sq.km of very dense forest (VDF) (2.76 % of geographical area), 11,034.03 sq.km of moderately dense forest (MDF) (8.48% of geographical area) and 11,792.19 sq.km of open forest (9.07 % of geographical area).
- Forest cover inside the Reserved Forest Area (RFA) is 17531 sq km and the Forest cover outside the RFA is 8888 sq km.
- Tamil Nadu has shown an increase in forest cover of 55.21 sq km as per the India State of Forest Report 2021 as compared to India State of Forest Report 2019 (Dharmapuri – Highest Forest Cover).
- The Tree cover in Tamil Nadu has been estimated at 4424 sq.km assessed through sampling-based methodology.
- The total Forest and Tree Cover in the State is 30843.23 sq.km which is 23.71% of the State's geographical area.
- The forests in Tamil Nadu can be classified into nine forest type groups which are further divided into 39 forest types. The major forest type groups are as below:
  - Tropical wet evergreen,
  - Tropical semi evergreen,
  - Tropical moist deciduous,
  - Littoral and swamp,
  - Tropical dry deciduous,
  - Tropical thorn,
  - Tropical dry evergreen,
  - Sub-Tropical Broad-leaved hill,
  - Montane wet temperate
- Western Ghats is one of the 36 global biodiversity hotspots with distinctive biogeographic region.

- The region has significant levels of biodiversity.
- It is one of the 3 mega centres of endemism in India.
- The State is also endowed with a unique coastline home to mangroves, coral reefs enclosed with rich biodiversity.
- Eastern Ghats of Tamil Nadu contribute to the vast richness of the biodiversity in the State.
- Protection and conservation of rare and endangered species, restoration and improvement in the quality of the forests are aimed at enriching biodiversity of Tamil Nadu's forests as envisaged in the National Wildlife Action Plan 2017-2031

### **Tropical Evergreen Forest**

- This forest type is found in the regions that receive heavy rainfall.
- It is a dense, multi-layered forest.
- It is found in the upper slopes of Western Ghats of Tirunelveli, Kanyakumari, the Nilgiris and Coimbatore districts.
- The major tree species of this forest are cinnamon, Malabar ironwood, panasa, java plum/jamun, jack, kindal, ayani and crape myrtle.
- The semi-evergreen type of forest in the state is found over the regions of sub-tropical climate over the Eastern Ghats.
- The prominent regions are Servarayan, Kollimalai and Pachaimalai.
- Species of Indian mahogany, monkey teak, woolly cassia, jack and mango trees are common in this region.

### **Montane Temperate Forest**

- It is found in sheltered valleys of Anaimalai, Nilgiris and Palani hills over a 1000 metres altitude.
- They are known as 'Sholas'.
- The trees in this forest are evergreen and usually short.
- Nilgiri champa, wights litsea and rose apple are the common trees found in this forest.

### **Tropical Deciduous Forest**

- This type of forest lies in the margin of semi -evergreen and evergreen forests.
- The trees in this forest shed their leaves during the dry season.
- The trees reach up to a height of 30 metres.
- Some trees of this forest are silk cotton, kapok, kadamba, dog teak, woman's tounge, axlewood and siris.
- Bamboos are also common in this type of forests.
- Some trees of this forest are economically important.

### **Mangroves Forest**

- This type of forest is found in the coastal areas, river deltas, tails of islands and over sea faces where accretion is in progress.
- The vegetation is typically evergreen, moderate in height and has leathery leaves.
- The vegetation of this forest is adapted to survive in tidal mud and salt water.
- Asiatic mangrove, white mangrove, wild jasmine/Indian pivot etc. are some of the notable trees of this forest.
- Pichavaram, Vedaranyam, Muthupet, Chatram and Thoothukudi are the places in Tamil Nadu where the mangrove forest is found to a considerable extent.

### **Tropical Thorn Forest**

- Thorn forest in Tamil Nadu is found where there is a little rainfall.
- These forests are found from plains up to 400 meters altitude.
- The common trees of this forest are rusty acacia, wheel, neem and palm.
- Shrubs are common vegetation in this type of forest.
- This type of forest is found in the districts of Dharmapuri, Ramanathapuram, Virudhunagar and some parts of interior districts.
- Tamil Nadu has been a pioneer in conservation of forests and wildlife and in setting up Protected Areas (PA) that comprise National Parks, Wildlife Sanctuaries, Conservation Reserves and Community Reserves.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- 5 Tiger Reserves have been constituted especially for protecting tiger as an umbrella species giving thrust for conserving forests and wildlife.
- It is a matter of pride that Tamil Nadu has 36.13% (8378.528 sq. km) of forest area as Protected.

### **National Parks**

- National Parks are notified under Sec 35 of the Wildlife (Protection) Act, 1972 as an area which needs to be protected by reason of its ecological, faunal, floral, geomorphological, or zoological significance.
- The Government has notified the following 5 National Parks in the State, known for their ecological, geomorphological and natural significance.

<b>Park</b>	<b>Area</b>	<b>Place</b>
Gulf of Mannar Marine Park	52,602.00	Ramanathapuram & Tuticorin, Tirunelveli and Kanyakumari-1986
Indira Gandhi National Park	11,710.00	Coimbatore-1989
Guindy National Park	270.57	Chennai-1978
Mukurthi National Park	7,846.00	Nilgiris - 2001
Mudumalai National Park	10,323.00	Nilgiris - 2005

### **Wildlife Sanctuaries**

- Wildlife sanctuaries are areas notified under Sec 18 and 26A of Wildlife (Protection) Act 1972 owing to their ecological, faunal, floral, geomorphological, natural or zoological significance.
- These areas are notified for the purpose of protecting, propagating or developing wildlife or its environment.
- Details of wildlife sanctuaries in Tamil Nadu are as follows.

<b>S. No</b>	<b>Wildlife Sanctuary</b>	<b>Area</b>	<b>Place</b>	<b>Year</b>
1.	Mudumalai Wildlife Sanctuary	21,776.0	Nilgiris	1940
2.	Mundanthurai Wildlife	58,207.58	Tirunelveli and	1962

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

	Sanctuary		Tenkasi	
3.	Point Calimere Wildlife Sanctuary	1,728.81	Nagapattinam	1967
4.	Indira Gandhi Wildlife Sanctuary	84,149.00	Coimbatore, Tiruppur	1976
5.	Kalakad Wildlife Sanctuary	22,358.00	Tirunelveli and Tenkasi	1976
6.	Vallanadu Black Buck Sanctuary	1641.00	Tuticorin	1987
7.	Grizzled Giant Squirrel Wildlife Sanctuary	48,520.00	Virudhunagar	1988
8.	Kanyakumari Wildlife Sanctuary	40,239.55	Kanyakumari	2007
9.	Sathyamangalam Wildlife Sanctuary	141,160.94	Erode	2008
10.	Megamalai Wildlife Sanctuary	26,910.81	Theni and Madurai	2009
11.	Point Calimere Wildlife Sanctuary, Block A&B	12,407.27	Thanjavur, Tiruvarur & Nagapattinam	2013
12.	Kodaikanal Wildlife Sanctuary	60,895.482	Dindigul and Theni	2013
13.	Gangaikondan Spotted Deer Sanctuary	288.40	Tirunelveli	2013
14.	Cauvery North Wildlife Sanctuary	50,433.48	Krishnagiri	2014
15.	Nellai Wildlife Sanctuary	35,673.33	Tenkasi	2015
16.	Kadavur Slender Loris Sanctuary	11806.56	Karur and Dindigul	2022
17.	Cauvery South Wildlife Sanctuary	68640.613	Krishnagiri & Dharmapuri	2022

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

**Bird Sanctuaries**

- The State of Tamil Nadu is well known globally for attracting large number of migratory birds.
- Every year migratory birds from different parts of the world, flock to various tanks, ponds and lakes in Tamil Nadu as they find the best ecological conditions and habitats for feeding, breeding and raising their young ones.
- Tamil Nadu State notified Vedanthangal Bird Sanctuary way back in 1936, which is the first Bird Sanctuary in India.
- Tamil Nadu Government has notified 17 Bird Sanctuaries as below: -

S. No	Bird Sanctuary	Area	Place	Year
1.	Vettangudi Bird Sanctuary	38.40	Sivaganga	1977
2.	Pulicat Lake Bird Sanctuary	15,367	Tiruvallur	1980
3.	Karikili Bird Sanctuary	61.21	Kanchee puram	1989
4.	Kanjirankulam Bird Sanctuary	104.00	Ramanatha puram	1989
5.	Chitragudi Bird Sanctuary	47.63	Ramanatha puram	1989
6.	Koonthankulam-Kadankulam Bird Sanctuary	129.00	Tirunelveli	1994
7.	Vellode Bird Sanctuary	77.18	Erode	1997
8.	Vedanthangal Bird Sanctuary	30.00	Kanchee puram	1936
9.	Udayamarthandpuram Bird Sanctuary	45.28	Tiruvarur	1998
10.	Melaselvanur-Kilaselvanur Bird Sanctuary	593.08	Ramanatha puram	1998
11.	Vaduvor Bird Sanctuary	128.10	Tiruvarur	1999
12.	Karaivetti Birds Sanctuary	453.71	Ariyalur	2000
13.	Theerthangal Bird Sanctuary	29.29	Ramanatha puram	2010
14.	Sakkarakottai Tank Bird	230.49	Ramanatha	2012

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

	Sanctuary		puram	
15.	Oussudu Lake Bird Sanctuary	331.785	Villupuram	2015
16.	Kazhuveli Bird Sanctuary	5151.60	Villupuram	2021
17.	Nanjarayan Tank Birds Sanctuary	125.865	Tiruppur	2022

### Conservation Reserves

- Conservation Reserves are legally Protected Areas for conservation of floral and faunal species.
- These areas are declared as Conservation Reserve in consultation with local communities.
- The State Government notified the following two Conservation Reserves under Sec 36A of the Wildlife Protection Act, 1972.

S. No	Conservation Reserve	Area	Place	Year
1.	Thiruppudaimaruthur Birds Conservation Reserve	2.84	Tirunelveli	2005
2.	Suchindrum-Theroor - Managudi Conservation Reserve	484.77	Kanniyakumari	2015
3.	Dugong Conservation Reserve in Palk Bay	44834.00	Thanjavur	2022

### Tiger Reserves

- The "Project Tiger" was launched in April, 1973 with the objective to ensure maintenance of a viable population of Tigers in India for scientific, economic, aesthetic, cultural and ecological values, and to preserve for all times, areas of biological importance as a national heritage for the benefit, education and enjoyment of the people.
- The State of Tamil Nadu has been a Pioneer in declaring a Tiger Sanctuary at Mundanthurai way back in 1962, eleven years before the launch of 'Project Tiger' in the country.
- Tamil Nadu has notified the following five Tiger Reserves in the State.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

<b>S. No</b>	<b>Tiger Reserve</b>	<b>Place</b>
1.	Kalakad Mundanthurai Tiger Reserve	Tirunelveli and Tenkasi
2.	Anamalai Tiger Reserve	Coimbatore and Tiruppur Districts
3.	Mudumalai Tiger Reserve	The Nilgiris
4.	Sathyamangalam Tiger Reserve	Erode
5.	Srivilliputhur Megamalai Tiger Reserve	Virudhunagar, Theni and Madurai

### **Elephant Reserves**

- Project Elephant was launched by Government of India in 1992 with the objective to protect elephants and their habitat.
- The key objective of the Project Elephant is to protect elephant corridors and elephant habitat for the survival of elephant population in the wild.
- For the purpose of habitat and corridor management and based on spatial distribution of elephant movements, Elephant Reserves are notified encompassing two or more Districts and States.
- An area of 1,19,748.26 hectares in KMTR and Kanyakumari Wildlife Sanctuary was notified as Agasthyamalai Elephant Reserve in 2022- 23.
- There are 5 Elephant Reserves in Tamil Nadu.

<b>S. No</b>	<b>Elephant Reserve</b>	<b>Place</b>
1.	Nilgiris – Eastern Ghat (Nilgiri Elephant Reserve)	Nilgiris, Erode, Dharmapuri Krishnagiri
2.	Nilambur Silent Valley - Coimbatore Elephant Reserve (Nilambur Elephant Reserve)	Coimbatore, Nilgiris
3.	Periyar Elephant Reserve (Srivilliputhur Elephant Reserve)	Theni, Virudhunagar, Tenkasi
4.	Anamalai – Parambikulam Elephant Reserve (Anamalai Elephant Reserve)	Coimbatore, Dindigul

5.	Agasthyamalai Elephant Reserve	Tirunelveli and Kanyakumari
----	--------------------------------	-----------------------------

### Biosphere Reserves

- Biosphere Reserves are sites established by countries and recognized under UNESCO's Man and the Biosphere (MAB) Programme to promote sustainable development based on local community efforts and sound science.
- The programme of Biosphere Reserve was initiated by UNESCO in 1971.
- The purpose of the formation of Biosphere Reserves is to conserve “in situ” all forms of life, along with its support system, in its totality, so that it could serve as a referral system for monitoring and evaluating changes in natural ecosystems.
  - **Nilgiris Biosphere Reserve - The Nilgiris**
  - **Gulf of Mannar Biosphere Reserve - Ramanathapuram, Thoothukudi, Tirunelveli and Kanyakumari Districts**
  - **Agasthiyarmalai Biosphere Reserve - Kanyakumari, Tenkasi and Tirunelveli Districts**

### Arignar Anna Zoological Park, (AAZP)

- Vandalur Arignar Anna Zoological Park is the oldest zoo in the country which was established in the year 1855 in Chennai and later shifted to its present location in Vandalur reserve forest in the year 1985.
- Spread over an area of 602 hectares of land, it is one of the largest zoos in Southeast Asia, that houses the animals in naturalistic enclosures simulating their natural habitat

### Advanced Institute for Wildlife Conservation (AIWC)

- The State of Tamil Nadu has established the Advanced Institute for Wildlife Conservation (Research, Training & Education) with the objective to infuse scientific knowledge in wildlife protection and law enforcement and thereby bolster conservation efforts in the State.

### Green Tamil Nadu Mission

- Green Tamil Nadu Mission was launched with the objective to increase forest and tree cover in the State from 23.7% to 33% of its geographical area by the year 2030 – 2031.
- This will support the State's plan to create additional carbon sink of 50 – 60 million tons in its forest and tree cover by the year 2030 – 2031, by forest land restoration and increasing tree cover outside forests.
- Under the Mission, native trees of economic and ecological significance shall be planted on suitable public lands such as urban areas, farm lands, educational institutions, temple lands, sacred groves, industrial areas, tank foreshore, padugai lands etc.

### Tamil Nadu Wetlands Mission

- The wetlands are among the most productive life supporting system of the world with immense socio economic, ecological and bio-aesthetic importance.
- Wetlands provides diverse tangible and intangible benefits to humankind on a sustainable basis and directly supports livelihoods of millions of people and provide enormous ecosystem goods and services like water purification, ground water recharge, biodiversity conservation, climate change mitigation and adaptation, etc.
- Under the Tamil Nadu Wetlands Mission 13 Wetlands of international significance have been declared as Ramsar sites after a period of 20 years making Tamil Nadu a leading State in the Country with highest number of 14 Ramsar sites out of total 75 Ramsar sites in the Country.
- The details of 14 Ramsar sites are as follows: -
  - Pallikaranai Marsh Reserve Forest - Chennai
  - Karikili Bird Sanctuary - Chengalpattu
  - Vedanthangal Bird Sanctuary - Chengalpattu
  - Pichavaram Mangrove - Cuddalore
  - Vellode Bird Sanctuary - Erode
  - Suchindram Theroor Wetland Complex - Kanyakumari

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- Vembanur Wetland Complex - Kanyakumari
- Chitrangudi Bird Sanctuary - Ramanathapuram
- Gulf of Mannar Marine Biosphere Reserve - Ramanathapuram
- Kanjirankulam Bird Sanctuary - Ramanathapuram
- Koonthankulam Bird Sanctuary - Tirunelveli
- Udhayamarthandapuram Bird Sanctuary - Thiruvarur
- Vaduvur Bird Sanctuary - Thiruvarur
- Point Calimere Wildlife and Bird Sanctuary - Nagapattinam and Thiruvarur
- Wetland Mithras (Iranilangalin Nanbargal) in wetlands of India portal.
- The “Tamil Nadu Wetlands Mission” envisages to make the wetlands conservation and management a people’s movement.
- Accordingly, wetland mitras (Iranilangalin Nanbargal) shall be rolled in each district, so that the local communities own the wetlands and facilitate the efforts of the Government in protecting these unique productive ecosystems for the future generations.
- Tamil Nadu Coastal Restoration Mission Due to increasing vagaries of climate change and pressure caused by the burgeoning population, the coastal ecosystem and the livelihood of coastal population are likely to be severely affected in the near future.
- The Government will implement the “Tamil Nadu Coastal Restoration Mission” with the objective of preventing sea erosion, reducing marine pollution and conserving marine biodiversity.

**Thanthai Periyar Wildlife Sanctuary**

- "Thanthai Periyar Wildlife Sanctuary" with an extent of 80,567 hectares in the forest areas of Anthiyur and Gopichettipalayam Taluk in Erode district to link the Nilgiris Biosphere with Cauvery South Wildlife Sanctuary.
- This will be the 18th wildlife Sanctuary in the State.
- International Bird Centre at Marakkanam Tamil Nadu is located in the Central Asian Flyway and hosts a large number of migratory birds every year.

## Institutions

### State Board for Wildlife

- Tamil Nadu State Wildlife Board has been constituted under Sec 6 of the Wildlife (Protection) Act, 1972.
- The Board is headed by Honourable Chief Minister of Tamil Nadu.
- The Board comprises 3 members from Legislative Assembly, 14 official members and 13 nonofficial members.
- The Board advises the State Government in formulation of policies and guidelines for protection and conservation of the wildlife and specified plants.
- It also advises the Government on various measures for protection and conservation of wildlife.

### Zoo Authority of Tamil Nadu

- Zoo Authority of Tamil Nadu was constituted by the Government of Tamil Nadu in 2005.
- It functions under the Chairmanship of the hon'ble Chief minister to facilitate the development of zoos, with direct access to the funds and grants from the Central Zoo Authority, Central Government, State Government and other agencies.

### Tamil Nadu State Wetland Authority (TNSWA)

- The Tamil Nadu State Wetlands Authority is the nodal authority for the Conservation, Protection and Ecological restoration of all wetlands in State of Tamil Nadu.
- The State of Tamil Nadu was one of the pioneer States in constituting the State Wetlands Authority in the year 2016 which was subsequently reconstituted in the year 2019 after the wetlands (Conservation and Management) Rules 2017
- The Tamil Nadu State Wetlands Authority has been constituted under the Chairpersonship of the Hon'ble Minister for Forests.

### **Compensatory Afforestation Fund Management and Planning Authority (CAMPA)**

- Tamil Nadu Compensatory Afforestation Fund Management and Planning Authority (TN CAMPA) is a statutory Authority framed under the Compensatory Afforestation Fund Act, 2016, and the Compensatory Afforestation Rules, 2018.
- TN CAMPA provides an integrated framework for the promotion of compensatory afforestation, using the Net present value of the diverted forest land, for the compensation of the forest land diverted for non-forestry purposes.

### **Tamil Nadu Wildlife Crime Control Bureau**

- Combat forest and wildlife crime through a well-designed institutional network of trained forest personnel
- Gather information related to wildlife crime and illegal trade including Tran's boundary trade.

### **Nilgiri Tahr**

- Project Nilgiri Tahr was sanctioned at a cost of 25.13 crores over a period of 5 years to protect the endangered Nilgiri Tahr, to develop better understanding of Nilgiri Tahr population, distribution of species to understand their movement patterns and habitat use through radio telemetry study to reintroduce Nilgiri Tahr to their historic habitats.

### **State Forest Commission**

- Government has issued orders for constitution of State Forest Commission to recommend policy changes needed in Forest Conservation, expansion of green cover, participation of Tribals in Forest Management, prevention of man animal conflict etc., in the Forest Department.

### **Conservation and Management of Coastal Ecosystems**

- Tamil Nadu is having a long coastline of 1,076 Km covering 14 coastal districts.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Special attention being accorded for the management of the fragile ecosystem of coastal areas with a thrust on mangrove forests, wetlands, and the corals in Gulf of Mannar Marine National Park.
- Considering their vital role in the coastal ecosystem the degraded mangrove area is being restored consistently.

**Welfare of Tribal and other forest fringe communities**

- Tamil Nadu has 7.21 lakh tribal population as per 2011 census which constitutes 1.10% of the total population.
- The socio-cultural life of tribal community is centred around nature.

**Ecotourism Tourism**

- Ecotourism Tourism is one sector that has the potential to drive socio economic change and economic prosperity if done responsibly.
- Tamil Nadu has great untapped potential which can be explored.
- Responsible ecotourism activities shall be promoted that not only helps to preserve the natural heritage but also helps to create jobs and promote the local culture and heritage.
- The Ecotourism policy framework shall mandate use of sustainable and appropriate tourism Guidelines with sharing of resources with the local community.

**Tamil Nadu Forest Plantation Corporation Limited (TAF CORN)**

- TAF CORN Established in the year 1974, having mandate to raise, maintain and harvest Eucalyptus clonal pulpwood and cashew clonal plantations to meet the needs of paper industries, to increase the productivity, potential of forests, to provide rural employment, to conserve soil and moisture and to supply firewood to fulfill the needs of the rural people.

**Tamil Nadu Tea Plantation Corporation Limited (TANTEA)**

- The Government of Tamil Nadu established the “Government Tea Project” in the Nilgiris in 1968.
- This Corporation is maintaining plantations over an area of 4053.758 ha. on the lands in Nilgiris and Anaimalai.

## Wildlife – Environment Initiatives

### Tamil Nadu State Action Plan on Climate Change (TNSAPCC)

- The Government of Tamil Nadu (GoTN) recognizes that Climate Change is a serious issue and has introduced a slew of measures to combat climate change.
- This reflects the commitment of the Government in addressing the critical issue of climate change.
- The Government understands the importance of implementing the State Action Plan on Climate Change (SAPCC) and has prepared TNSAPCC 2.0 (2022-2030) for both the opportunities and risks presented by a changing climate.
- The SAPCC incorporates the goals, ambitions, policies and action plans that Government has conceived and plans to implement.
- The State has addressed the climate strategies aligned with the National Missions under the National Action Plan for Climate Change.
- TNSAPCC has identified the following seven vulnerable sectors viz.
  - Sustainable Agriculture
  - Water Resources
  - Forests & Biodiversity
  - Coastal Area Management
  - Enhanced Energy Efficiency & Solar Mission
  - Sustainable Habitat
  - Knowledge Management

### Tamil Nadu Green Climate Company (TNGCC)

- The Tamil Nadu Government, under the Department of Environment, Climate Change & Forest has set up the Tamil Nadu Green Climate Company (TNGCC) which is a Not-for-Profit Company and a unique platform to respond to Climate Change in the State.
- TNGCC is a first of its kind ambitious initiative by the State Government and will act as a Special Purpose Vehicle (SPV) to address the Climate Crisis in the State, which has become more widespread in recent times and calls for

immediate attention to Climate Policy, leading to purposeful and equitable long-term solutions.

#### **Tamil Nadu Green Climate Fund (TNGCF)**

- To boost the investments in green infrastructure in the State, the Environment, Climate Change & Forests Department has committed Rs.100 crore for setting up the Tamil Nadu Green Climate Fund (TNGCF) with a target of Rs.2,000 crore to be managed by TNIFMC.

#### **Tamil Nadu Governing Council on Climate Change**

- In order to ensure that all activities are in line with the objectives of Tamil Nadu Climate Change Mission, the Government after careful examination, have decided to set up the Tamil Nadu Governing Council on Climate Change.
- Tamil Nadu is pioneer in India to set up a Governing Council exclusively for Climate Change.

#### **Green Tamil Nadu Mission**

- To increase the total area under the forest and tree cover in Tamil Nadu to 33 percent of the land area of the State, the Government has announced the Green Tamil Nadu Mission.
- Under the Mission, a Massive Tree Plantation Programme of indigenous and diverse species, in coordination with multiple departments, public and private institutions will be rolled out as a people's movement over next 10 years.

#### **Tamil Nadu Wetlands Mission**

- With the objective of ecological restoration of wetlands in Tamil Nadu, the Mission will identify and map 100 wetlands in 5 years and restore the ecological balance with a focus on livelihood options.
- Under this Mission, a wetland inventory process will be initiated using digital technologies and an Integrated Management Plan for Ecological restoration of wetlands would be undertaken through a participatory process involving local communities and all other relevant stakeholders.

### **Tamil Nadu Climate Change Mission**

- Combating and mitigating the impact of climate change is a major concern for a coastal State like Tamil Nadu.
- During the Budget Speech for the year 2021-2022, this Government announced the launch of Hon'ble Chief Minister's Tamil Nadu Climate Change Mission to focus on climate change adaptation and mitigation activities.
- Tamil Nadu Climate Change Mission is a first of its kind at the sub-national level.
- District Climate Change Mission Government has decided to set up District Climate Change Missions to strengthen the climate response of Government of Tamil Nadu at the grass root level.
- In accordance with the above objective, District Climate Change Mission shall be set up in every District in Tamil Nadu.
- The District Collector shall be the chairman of the District Climate Change Mission.
- The District Forest Officer shall be the District Climate Officer.
- District Climate Change Mission shall coordinate with the activities of the Tamil Nadu Climate Change Mission in developing Climate Smart Villages, Climate Resilient Green Temples, Green Schools, Creation of Bio-shield, Blue Flag Beach, Sustainable Habitat, Carbon enrichment programme and Waste to energy power generation.

### **Tamil Nadu State Coastal Zone Management Authority (TNSCZMA)**

- To regulate CRZ activities and to check violations in CRZ areas, the MoEF&CC, GoI has constituted a State Coastal Zone Management Authority (SCZMA) at the State level.

### **District Coastal Zone Management Authority (DCZMA)**

- The District Coastal Zone Management Authorities under the Chairmanship of the respective Coastal District Collectors were formed by the State Government in 1998.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- These Authorities convene periodical meetings to take decisions pertaining to Coastal Regulation Zone.

**Environment Management Agency of Tamil Nadu (EMAT):**

- In order to execute and monitor the river cleaning programmes and lake conservation programmes funded by the Ministry of Environment, Forests and Climate Change, (MoEF&CC), Govt. of India, the Environment Management Agency of Tamil Nadu (EMAT) was created in the year 2002.

**State Environment Impact Assessment Authority (SEIAA) – Tamil Nadu**

- Under the EIA Notification, it is mandatory to obtain prior Environmental Clearance for certain new projects, expansion or modernization of existing projects based on their potential environmental impact.
- Projects falling under Category ‘A’ in the Schedule of the Notification requires Environmental Clearance from the Ministry of Environment, Forest & Climate Change (MoEF&CC), Government of India and for matters falling under Category ‘B’, depending upon the thresh-holds of the activities, requires clearance at the State Environment Impact Assessment Authority (SEIAA)

**Chief Minister’s Green Fellowship Programme (CMGFP)**

- The programme aims to disseminate climate change awareness by means and ways to attract younger generations and students and to create a pool of green ideas and technological interventions that will reduce the Environment Climate change impacts and to conserve Nature.
- Chief Minister’s Green Fellowship Programme will be implemented in 38 districts of Tamil Nadu.
- The CMGFP will be housed under the Director of Environment and Climate Change for planning, coordination, supervision and monitoring of all aspects of Chief Minister Green Fellowship Programme.
- The Green Fellows will provide necessary support for the District Climate Change Mission Units in their action towards adaptation and mitigation for Climate Change.

### **Green School programme**

- Schools shall undertake various green measures like energy efficiency by using solar lighting and use of solar pumps, setting up of solar borewell, adapting rain harvesting, composting, creating vegetables garden, medicinal garden and planting of fruit trees, reducing water use, recycling of waste water, creating a plastic free environment etc.

### **Tamil Nadu Pollution Control Board**

- Government of Tamil Nadu established Tamil Nadu Prevention and Control of Water Pollution Board.
- TNPCB functions under the Environment, Climate Change and Forest Department.
- It is the statutory organization responsible for abatement and control of environmental pollution in the State by enforcing Central Acts pertaining to environmental protection.

### **National Air Quality Monitoring Programme**

- Under the CPCB funded National Air Quality Monitoring Programme (NAMP), the TNPCB monitors Ambient Air Quality (AAQ) for parameters like Particulate matter PM10 and PM2.5, Sulphur dioxide (SO<sub>2</sub>) and Nitrogen dioxide (NO<sub>2</sub>)

### **Meendum Manjappai Express – Exhibition on Wheels**

- It is also proposed to launch the Manjappai Express - multi stakeholder targeted exhibition train travelling the entire State of Tamil Nadu in the month of June, 2023 on World Environment Day to create massive awareness to Students, Self Help Groups (SHGs) & General Public on impact of plastics and reviving our ecofriendly tradition in the fight against single use plastics.

### **Agriculture in Tamil Nadu**

- Tamil Nadu is classified under semi-dry subhumid to dry humid tropics in the geographical system.
- It is the 11th largest State in India with an area of 1.30 lakh Sq.Km and the seventh most populous State with a population of 7.21 crore.

- It comprises four percent of the total area, six percent of the population and three percent of the water resources at all India level.
- Tamil Nadu has 79.38 lakh land holders cultivating an area of 59.71 lakh hectare (As per to 10th Agricultural Census).
- 93% of total land holdings are owned by Marginal and Small farmers, operating 62 % of the total cultivable lands.
- Remaining seven percent are medium and large farmers operating 38% of the total cultivable lands.
- The average land holding size of Tamil Nadu is only 0.75 hectare (National average land holding size - 1.08 hectare).
- Agriculture is the source of livelihood for 70 percent of the people living in rural areas of Tamil Nadu.
- It is of paramount importance to give thrust to agriculture as the changes in agricultural front are most likely to bring out major changes in the economic development of Tamil Nadu.
- The double cropped area had increased by 1.17 lakh hectare from 13.22 Lakh Hectare in the year 2020 – 2021 compared to 14.39 lakh hectare during the year 2021 - 2022.

#### **Productivity of Tamil Nadu at National level**

- First Position - Maize, Oilseeds, Groundnut, Sugarcane
- Second Position – Rice
- Third Position – Coconut
- Fourth Position - Nutri Rich Cereals (Ragi, Cumbu, Varagu, Thenai)
- Various agricultural technologies are exhibited in the meetings and downloading of 'Uzhavan App' by the farmers is also being facilitated.

#### **Land Use Pattern of Tamil Nadu (Lakh Hectare)**

- Gross Cropped area - 63.48
- Current fallow lands - 8.00
- Other Fallow lands - 18.64
- Net Cropped area - 49.09
- Cropping intensity (%) - 129.33

### Average Rainfall of Tamil Nadu

- The annual average rainfall of Tamil Nadu is 937.5 mm.

### Sources of Irrigation

- The details of net area irrigated using various sources of irrigation across the State are as below:

Sources	% with reference to Net Area Irrigated
Canals	23.35
Tanks	14.00
TubeWells/ Bore wells	18.64
Open wells	43.87
Others	0.14
Total	100

- The net area irrigated by tube wells, borewells and open wells is 63 percent, by canals is 23 percent and by tanks is 14 percent.

### Food Grain Production in Tamil Nadu

Crop	Production (Metric Tonnes)
Rice	80.75
Millets	38.25
Pulses	8.00
Oilseeds	15.40
Cotton	4.50*
Sugarcane	227.50

### Schemes in Agriculture

#### Kalaignarin All Village Integrated Agricultural Development Programme (KAVIADP)

- The Government of Tamil Nadu is implementing Kalaignarin All Village Integrated Agricultural Development Programme based on the concept of development of the villages is the actual development.
- This scheme is being implemented in convergence in one fifth of the total village panchayats in Tamil Nadu, every year, selected by the Rural

Development and Panchayat Raj Department for the implementation of the Anaithu Grama Anna Marumalarchi Thittam.

- The fallow land clusters in the selected villages are provided with Electric or Solar powered irrigation facilities, along with drip irrigation and planting of perennial fruit trees and cultivation of Agricultural crops as inter crops, which is the special feature of this scheme.
- This scheme will be implemented in 2504 village Panchayats.

#### **Tamil Nadu Millet Mission (Five-year Programme)**

- More than 40 % of lands in Tamil Nadu are rainfed.
- The development of rainfed lands is very important for the inclusive growth of Agriculture in all the districts
- Dryland Development Mission implemented for the development of drylands in the last six years, the Millet Mission will be implemented in 25 districts in the next five years from 2023-2024 to 2027-2028 to cater to the welfare of the dryland farmers by encouraging cultivation.

#### **State Agriculture Development Scheme**

- The State Agricultural Development Scheme is a compendium of schemes comprising various components for ensuring good returns to the farmers, following modern technologies with good cultivation practices in all the parts of Tamil Nadu.

#### **Nel Jeyaraman Traditional Paddy Varieties Conservation Mission**

- The traditional Paddy varieties with medicinal importance like Thuyamalli, Seeraga Samba, Mappillai Samba, Karuppu Kavuni, Athoor Kichili Samba, Thanga Samba, Keerai Samba and other varieties are being cultivated.
- Apart from creating awareness about these varieties among the people, the objective of this mission is to produce the seeds through seed multiplication and distribute the seeds to farmers.

#### **Making Youth into Agri Entrepreneurs**

- The objective of this scheme is to attract young Agricultural graduates into Farming by making them expert in providing technical advisories to the farmers besides becoming as an Agri Entrepreneur in rural areas.

- Under this scheme, a subsidy of Rs.2 lakh will be provided to the youth who have completed their degree in Agriculture / Horticulture /Agricultural Engineering to start their own agriculture related business.

### **Promotion of Organic Farming**

- The Government of Tamil Nadu has released Tamil Nadu Organic Farming Policy, 2023 in March 2023 with various components to promote Organic Farming.
- This is a mile stone in Organic Farming.

### **Green Cover through Agro Forestry**

- Forests play a major role in sustaining agriculture over years.
- Forest prevents soil erosion and provides good rainfall.
- This scheme has been framed with an objective of increasing the forest area and the income of farmers by providing high value tree saplings.

### **Tamil Nadu State Seed Development Agency (TANSEDA)**

- TANSEDA was established in 2015
- Noble ambition of supplying good quality seeds to the farmers at right time.

### **Agricultural Extension Centres**

- Agricultural Extension Centres act as an Integrated Centre for stocking and distribution of critical Agricultural inputs and dissemination of all advisories to the farming community right from sowing to harvest.

### **Soil Health Management**

- Soil Testing Laboratories Soil test based nutrient management and need based fertilizer application is the essential to double the crop production and triple the farmers income.
- In Tamil Nadu, 36 Soil Testing Laboratories and 16 Mobile Soil Testing Laboratories are functioning for the analysis of soil and irrigation water and distribution of test results to the farmers.

### **ATMA (Agricultural Technology Management Agency)**

- This scheme aims to take up extension activities analyzing the technologies required by the farmers and special agricultural activities at village level,

### **Providing three phase free electricity to farmers**

- Government of Tamil Nadu is providing free electricity to farmers since 1990.
- 23.37 lakh number of free electricity connections have been provided to the farmers.

### **Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP)**

- To enhance the productivity and climate resilience of irrigated agriculture, to avoid mono cropping, to improve water management and to increase market opportunities for farmers

### **Crop Insurance**

- Crop Insurance scheme is being implemented in Tamil Nadu to support the farmers financially at the time of unforeseen eventualities and to continue agriculture.
- Natural hazards such as floods, storms, droughts, pest and disease attacks caused by seasonal changes have become a major challenge for agriculture.

### **Digital Agriculture**

- GRAINS (Growers Online Registration of Agriculture Inputs System) – One Platform - The GRAINS portal, an Unified Farmer’s Service Interface Portal will be utilized for availing all the scheme benefits by the farmers in the current year under a single platform.
- The following information will be integrated with the GRAINS portal.
  - Details of the farmers linked with land details
  - Geo – referencing of all land parcels of 16,721 villages
  - Land holding wise collection of crop cultivation details (Electronic e–Crop Registration System)

### **Livelihood Development of Tribal Farmers**

- e Government of Tamil Nadu is implementing this scheme with the objective of improving the livelihood of the Scheduled Tribal farmers in the hilly areas and forests by integrating the schemes of the agriculture – Farmers Welfare Department

### Area wise coverage of crops

#### Paddy

- Rice is the staple food for the people of Tamil Nadu Paddy cultivation is important to ensure the food security. In total, Paddy is grown in 35% of the gross cropped area.

#### Millets

- In Tamil Nadu, the major millets such as Sorghum, Cumbu, Ragi, Maize and the minor millets such as Varagu, Panivaragu, Kuthiraivali, Samai and Tenai are cultivated in a normal area of 8.94 lakh hectare.

#### Pulses

- Cultivation of Pulses improves the soil health and provides rich source of protein to human.
- Redgram, Blackgram, Green gram and Horse gram are the important pulse crop of Tamil Nadu and normally grown in an area of 8.17 lakh hectare.
- To attain self-sufficiency in Pulses production, National Food Security and Nutrition Mission and National Agricultural Development Schemes were implemented.
- To increase the Redgram crop area and Production “Redgram Special Zone” was formed in Krishnagiri, Dharmapuri, Tiruvannamalai and Salem districts.
- Oilseeds in Tamil Nadu, Oilseed crops are cultivated in a normal area of 3.95 lakh hectare.
- Further, “Special Oilseeds Zone” will be formed by integrating major Oilseeds growing districts of Tamil Nadu.

#### Cotton

- Cotton is the most important natural fibre and commercial crop cultivated in Tamil Nadu.
- This crop provides Cotton lint to the textile industries as well as raw material for fodder industry as its seeds are rich in protein.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Cotton plays an important role in the economic development of Tamil Nadu, is cultivated in a normal area of 1.62 lakh hectares with production of 3.92 lakh bales of cotton.

**Coconut**

- Coconut is a perennial crop giving income throughout the year.
- To increase the production and productivity of Coconut, various schemes are implemented by the State and Coconut Development Board.
- Coconut is cultivated in an area of 4.44 lakh Ha with an average annual production of 51,282 lakh nuts and the productivity of 11,526 nuts per Ha.

**Sugarcane Cultivation:**

- Sugarcane is cultivated in an average area of 1.48 Lakh Hectares with an average productivity of 109 Metric Tonne per Hectare in Tamil Nadu.
- About 65 to 75 per cent of sugarcane produced in Tamil Nadu is used as raw material for Sugar Mills.
- Top Sugarcane Growing Districts - Kallakurichi - 24,747

**Tamil Nadu Sugar Corporation (TASCO)**

- The Tamil Nadu Sugar Corporation was established in 1974 as a Government Corporation under the Corporations Act (1956).
- Arignar Anna Sugar Mill at Kurungulam, Thanjavur District and Perambalur Sugar Mill at Eraiyyur, Perambalur District are the two functioning under Tamil Nadu Sugar Corporation.

**Horticulture - Plantation Crops**

- Tamil Nadu is one among the leading horticulture States in India, contributing 6.09 percent of production out of 5.47 percent of area at National level.
- In Tamil Nadu, Horticulture crops like Fruits, Vegetables, Plantation crops, Spices and Condiments, Aromatic and Medicinal crops and Flowers are cultivated in an area of 15.88 lakh Hectares with a total production of 231 lakh Metric tonnes.

### Tamil Nadu - Position in Area of various Horticultural crops at National Level

- First -Clove, Tamarind, Jasmine (Gundumalli)
- Second –, Cocoa, Chrysanthemum, Tuberose
- Third -. Banana, Amla, Coconut, Black Pepper

### Tamil Nadu - Position in Production of various Horticultural crops at National Level

- First - Clove, Tamarind, Jasmine (Gundumalli), Tuberose
- Second - Coconut
- Third - Amla, Watermelon, Chrysanthemum, Bittergourd

### Fruit Crops

#### Major fruit growing districts of Tamil Nadu

Crop name	Area (Ha)	Major fruit growing districts
Mango	1,47,983	Krishnagiri (32,450), Dharmapuri (15,983), Dindigul (15,801), Thiruvallur (11,515), Theni (9,471).
Banana	1,02,188	Erode (17,609), Thoothukudi (8,366), Coimbatore (7,731), Theni (6,403), Thirunelveli(5,768).
Water melon	15,476	Chengalpattu (7,393), Villupuram (2,303), Thiruvallur (1,719), Salem (768), Thiruvannamalai (553).
Guava	14,436	Dindigul (2,201), Madurai (1,688), Virudhunagar (1,382), Cuddalore (1,208), Villupuram (1,100)
Acid lime	13,770	Dindigul (3,601), Tenkasi (3,031), Trichy (1,024), Theni (801), Virudhunagar (757).
Other Fruits	32,206	Dindigul (6,233), Theni (2,678), Tenkasi (2,159), Namakkal (1,824), Salem (1,748)

- Jack mission will be implemented in 21 districts such as Cuddalore, Villupuram, Dindigul, Salem, Kanniyakumari, Theni etc., by establishing

integrated cluster for Panruti Jack and by introducing new jack varieties suitable for regions.

- Further, importance will be given for horticulture crops in high demand such as Dragon fruits, Avocado, Date Palm, Mangosteen, Fig, Olive etc.

### Vegetable Crops

Crop name	Area (Ha)	Major vegetable growing districts
Small Onion	55,123	Perambalur (8,258), Trichy (6,774), Thoothukudi (6,662), Namakkal (5,320), Dindigul (4,598).
Tomato	41,545	Dharmapuri (12,137), Krishnagiri (11,501), Salem (4,144), Dindigul (2,290), Thirupur (2,174)
Brinjal	24,015	Dharmapuri (3,880), Salem (2,933), Thiruvannamalai (2,290), Krishnagiri (1,935), Ranipet (883)
Moringa	21,501	Dindigul (5,623), Karur (3,080), Theni (2,936), Thirupur (2,090), Thoothukudi (1,842).
Bhendi	18,967	Dharmapuri (3,654), Salem (2,851), Thiruvannamalai (2,025), Ranipet (787), Thirupathur (775).
Other Vegetables	1,18,397	Krishnagiri (22,939), Dindigul (9,200), Salem (8,920), Dharmapuri (8,772), Nilgiris (8,202).

- Moringa Mission will be implemented in Theni, Dindigul, Thoothukudi, Tiruppur, Ariyalur, Madurai and Karur Districts.

### Plantation Crops

Crop Name	Area (Ha)	Major plantation crops growing districts
Coconut	4,46,153	Coimbatore (89,926), Thirupur (68,277), Thanjavur (40,977), Dindigul (29,346), Kanniyakumari (24,830)
Cashew	86,117	Ariyalur (30,584), Cuddalore (29,489), Pudukkottai (5,788), Villupuram

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

Tea	69,588	Nilgiris (55,754), Coimbatore (11,191), Theni (1,621), Thirunelveli (804), Kanniyakumari (214)
Coffee	33,108	Dindigul (10,960), Nilgiris (7,357), Salem (7,029), Theni (3,106), Coimbatore (2,248)
Rubber	28,433	Kanniyakumari (28,332), Nilgiris (55), Thenkasi (42)
Other Plantation Crops	1,35,899	Namakkal (21,076), Kallakurichi (16,065), Salem (14,325), Dharmapuri (13,996), Erode (10,146)

### Spices and Condiments

#### Major spices and condiments growing districts of Tamil Nadu

Crop name	Area (Ha)	Major spices and condiments growing districts
Red Chillies	53,933	Thoothukudi (15,039), Ramanathapuram (15,036), Sivagangai (3,619), Salem (1,923), Thiruvannamalai (1,907)
Turmeric	25,559	Dharmapuri (8,618), Erode (4,754), Salem (4,172), Kallakurichi (2,420), Namakkal (1,504)
Tamarind	14,409	Dindigul (3,208), Theni (1,557), Dharmapuri (1,294), Madurai (1,112), Krishnagiri (993)
Coriander	7,523	Thoothukudi (2,354), Virudhunagar (1,731), Ramanathapuram (1,711), Krishnagiri (882), Thirupur (192)
Black pepper	6,980	Namakkal (2,344), Salem (1,411), Dindigul (1,293), Nilgiris (986), Kanniyakumari (322)
Other Spices and Condiments	12,815	Coimbatore (2,345), Nilgiris (1,952), Theni (1,614), Dindigul (1,395), Krishnagiri (936)

- From this year (2023-24), considering the marketing opportunities for chilli, Chilli Zone will be implemented by integrating Ramanathapuram, Virudhunagar, Sivagangai and Thoothukudi districts to improve chilli production, value addition and storage facilities.

## Flowers

### Major flower crops growing districts of Tamil Nadu

Crop name	Area (Ha)	Major flower growing districts
Jasmine (Gundumalli)	12,896	Madurai (1,614), Dharmapuri (1,415), Erode (1,138), Thiruvallur (1,119), Krishnagiri (897)
Chrysanthemum	9,218	Krishnagiri (3,531), Dharmapuri (2,346), Salem (1,622), Thiruvannamalai (902), Cuddalore (110).
Tuberose	7,102	Dharmapuri (2,778), Thiruvannamalai (1,552), Erode (416), Dindig
Marigold	3,534	Krishnagiri (1,953), Thiruvannamalai (422), Dharmapuri (290), Pudukkottai (126), Cuddalore (110)
Rose	3,379	Krishnagiri (1,748), Dharmapuri (294), Thiruvannamalai (276), Namakkal (166), Salem (155).
Jasmine (others)	4,219	Thiruvannamalai (742), Dindigul (646), Dharmapuri (481), Coimbatore (378), Virudhunagar (350).
Other flowers	5,259	Thiruvannamalai (1,252), Salem (965), Dharmapuri (912), Dindigul (540), Namakkal (532)

- Total Flowers cultivated area = 45,607 ha

### National Horticulture Mission (NHM)

- It has been proposed to promote the cultivation of Jasmine, jack, chillies and curry leaf on cluster basis.
- For stabilizing the supply of Tomato and onion, subsidy will be provided to ensure production.
- To increase the production of winter season vegetable crops like chow-chow, beans, peas etc, subsidy will be provided.

- Cultivation of crops under Protected condition will be spread over to all the districts.

#### **National Agriculture Development Programme (NADP)**

- National Agriculture Development Programme is being implemented with an objective to ensure holistic development of Agriculture and allied sectors.
- Integrating horticulture-based farming with livestock, fishery, agro forestry and value addition.

#### **National Mission on Edible Oil – Oil Palm (NMEO-OP)**

- In Tamil Nadu, to increase the area and production of edible oil crops, the National Mission on Edible Oil -Oil Palm Scheme is being implemented by the Department of Horticulture and Plantation Crops

#### **State Horticulture Development Scheme (SHDS)**

- To increase the area and production of Horticultural crops and to enhance the farmers income, State Horticulture Development scheme has been implemented.

#### **Palmyrah Development Mission (PDM)**

- To give importance to the ‘State tree of Tamil Nadu’ ‘Palmyrah’, Palmyrah Development Mission is implemented.
- The components such as distribution of 10 lakh palmyrah seed nuts, establishment of 124 value addition units for palmyrah products, distribution of equipment to 510 beneficiaries for palmyrah value addition, distribution of palmyrah tree climbing and harvesting equipment to 1000 beneficiaries.

#### **Tamil Nadu Irrigated Agriculture Modernization Project (TNIAMP)**

- TNIAMP is a Multi-Disciplinary Project is being funded by World Bank.
- The main objective of the programme is to accelerate crop diversification from crops requiring more water to less water requiring and highly remunerative horticultural crops, through promotion of hi-tech cultivation technologies and water conservation technologies in the proposed sub basins.

### **Uzhavar Sandhai**

- The initiation of the scheme of Uzhavar Sandhai in the year 1999 for the benefit of both Farmers and Consumers.
- Currently, Uzhavar Sandhais are functioning in 183 locations - First – Madurai.

### **e-Vaadagai Mobile App**

- e-Vaadagai Mobile App has been developed by the Agricultural Engineering Department to facilitate the farmers to book required agricultural machinery.
- Farmers are greatly benefitted as they can book the required agricultural machinery from their place itself without visiting the Agricultural Engineering Department (AED) offices.

### **Chief Minister's Scheme of Solar Powered Pumpsets**

- Solar Powered Pumpsets are being installed by giving priority to the farmers in the villages.

### **e National Agriculture Market (eNAM)**

- Tamil Nadu occupies first position in e- Payment in the entire Nation.
- The United Nations has declared 2023 as “International Year of Millets”.
- During 2023-24, Millet Processing Centres will be established for value addition of Millets which would fetch additional income to the farmers.

### **Tamil Nadu State Agricultural Marketing Board (TNSAMB)**

- The State Agricultural Marketing Board was established in the year 1970 and reconstituted as a Statutory Board in accordance with the "Tamil Nadu Agricultural Produce Marketing (Regulation) Act 1987".

### **Geographical Indication Tag (GI Tag)**

- Geographical Indications (GI) are a form of intellectual property rights that protect the products or goods that originate from a specific geographical region and have distinctive qualities or reputations associated with that region.
- GI can be applied to agricultural, handicraft, industrial, or food products.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- **For example**, Darjeeling tea, Basmati rice, Kanchipuram silk, and Champagne are some of the well-known GI products in the world.
- Geographical Indication tags in India are valid for 10 years, and after this period, they can be renewed to continue safeguarding the product's unique identity and reputation.
- India is one of the leading countries in terms of GI registration and protection.
- India enacted the Geographical Indications of Goods (Registration and Protection) Act in 1999,
- Tamil Nadu is leading state to get GI tag more than 50 products ,some of them are
  - **Kanchipuram Silk Sarees**
  - **Madurai Sungudi Sarees**
  - **Thanjavur Dolls**
  - **Coimbatore Wet Grinder**
  - **Thirubuvanam Silk Sarees**
  - **Tanjore Paintings**
  - **Karaikudi Kottan**
  - **Dindigul Lock**
  - **Kodaikanal Malai Poondu**
  - **Sirumalai Hill Bananaethamozhy Tall Coconutsalem Silk**
  - **Pathamadai Mat**
  - **Arni Silk**

#### **Moringa Export Zone**

- Considering the export potential of Moringa and its value added products, the Government had declared the area comprising seven districts viz., Theni, Dindigul, Karur, Thoothukudi, Ariyalur, Tiruppur and Madurai as Moringa Export Zone.
- During Phase I, a special export facilitation center for Moringa has been established and functioning in Madurai.

### **Establishment of Small Food Parks/ Agro Processing Clusters**

- Small Food Parks in an area of 10 acres each are being established in seven locations viz., Cuddalore, Theni, Dindigul, Krishnagiri, Tiruvannamalai, Salem and Madurai

### **International Flower Auction Centre**

- Krishnagiri district for the benefit of farmers and exporters.
- The software for flower auction has been developed.

### **Tamil Nadu Agricultural University**

- Tamil Nadu Agricultural University has been supporting the efforts of the Government through Agricultural Education, Research and Extension.
- Tamil Nadu Agricultural University is offering 12 Under graduate, 32 Post graduate and 28 Doctoral degree programmes through its 18 Constituent Colleges.
- In addition, through 4 Constituent Diploma Institutes of Tamil Nadu Agricultural University, Diploma in Agriculture, Horticulture and Agricultural Engineering are also being offered.

### **Organic Certification**

- Tamil Nadu Organic Certification Department is a certification body established by the Government of Tamil Nadu in 2007.
- The Tamil Nadu Organic Certification Department has been accredited by Agricultural and Processed Food Export Development Authority (APEDA) for certifying the System of Organic Crop Production, in accordance with Marketing aspects.
- The certification issued by Tamil Nadu Organic Certification Department is equivalent to the standards of European Union and Swiss Organic Farming Ordinance.
- The scope of Organic Certification is valid for a period of one year.
- The Organic regulations ensure the avoidance of synthetic chemical fertilizers, pesticides, weedicides and genetic engineering.
- Tamil Nadu Organic Certification Department also issued certificate for the Organic produce for export purpose.

- The major products certified for export are Coconut, Virgin Coconut Oil, Coffee, Moringa, Tea, Cocoa, Turmeric and Jaggery.

### **Tamil Nadu Watershed Development Agency (TAWDEVA)**

- The Tamil Nadu Watershed Development Agency was established in the year 2002 all watershed programmes in the State like Drought Prone Areas Programme (DPAP), Integrated Wasteland Development Programme (IWDP), National Watershed Development Project for Rainfed Areas (NWDPA) and Integrated Watershed Management Programme (IWMP)
- Watershed Development Fund (WDF) assisted by NABARD.
- "Climate Proofing of Rainfed Watersheds in Salem and Virudhunagar Districts of Tamil Nadu" under National Adaptation Fund for Climate Change (NAFCC)

### **Project Objectives**

- To adapt to the adverse impact of climate change through soil and water conservation.
- To ensure sustainable livelihoods through promotion of crop diversification and alternate livelihoods.
- To build capacity of the community to adapt to climate change.

### **Agriculture Allied Sector**

- Animal husbandry is an integral component of agriculture supporting livelihood of more than two-thirds of the rural population.
- It is one of the rapidly expanding sectors in the State, playing a significant role in rural economy by providing gainful employment to a large number of small, marginal farmers and landless agricultural labourers and raising their economic status.
- Livestock is a natural capital that can act as a living bank with offspring as interest, and an insurance against income shocks in times of crop failure and natural calamities.

### **Livestock Wealth in Tamil Nadu**

- Tamil Nadu has vast resources of livestock and poultry, which play a vital role in improving the socio-economic status of the rural people.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Tamil Nadu has 245 lakh of livestock and 1207.80 lakh poultry (2019 census).
- **Goat - 98.88 Lakhs [Highest]**
- **Cattle – 95.19 Lakhs**
- Tamil Nadu ranks 1<sup>st</sup> in Poultry, 4<sup>th</sup> in Sheep, 7<sup>th</sup> in Goats, 13<sup>th</sup> in Cattle and 14<sup>th</sup> in Buffalo population in the country.

**Native breeds of cattle**

- Kangeyam (Tiruppur, Erode, Coimbatore and Karur districts)
- Umbalachery (Thanjavur, Tiruvarur, Nagapattinam and Cuddalore districts)
- Alambadi (Dharmapuri, Erode and Salem districts)
- Pulikulam (Sivagangai, Madurai, Dindigul and Theni districts)
- Bargur (Erode District)
- Toda buffaloes (The Nilgiris District)
- Bargur buffaloes (Erode District)

**National Animal Disease Control Programme (NADCP)**

- Under this programme, it is envisaged to control Foot and Mouth Disease (FMD) and Brucellosis by vaccination in eligible Bovine population.
- Foot and Mouth disease, is a viral disease that is highly contagious in cloven-footed animals and causes heavy economic loss to the farmers.
- The disease is controlled by vaccination at regular intervals.

**Jallikattu - The Traditional and Cultural Identity of Tamil Nadu**

- Jallikattu, a 5,000-year-old traditional event of rural people of Tamil Nadu, has a history associated with the socio-cultural ethos of Tamil Nadu.
- Jallikattu events are to be conducted as per the Tamil Nadu Prevention of Cruelty to Animals (Conduct of Jallikattu), Rules 2017.
- Suitable Standard Operating Procedures (SOP) are framed and implemented and every year Jallikattu.

### **Tamil Nadu Animal Welfare Board (TNAWB)**

- The Government of Tamil Nadu reconstituted the Animal Welfare Board of Tamil Nadu in 2022 to monitor and address the animal welfare issues in the State.
- The Tamil Nadu Animal Welfare Board is headed by the hon'ble Chief minister as the Chairman, while the Hon'ble Minister of Fisheries-Fishermen Welfare and Animal Husbandry is the Vice-Chairman.

### **Vallalar Palluyir Kappagangal**

- A new scheme named “Vallalar Palluyir Kaapagangal” has been announced in order to commemorate the 200th birth Anniversary of saint Vallalar, who epitomized compassion for all living beings.
- The scheme is aimed to support the Non-Governmental Organizations which take care of abandoned and injured pet animals and strays.

### **Tamil Nadu Livestock Development Agency (TNLDA)**

- Tamil Nadu Livestock Development Agency was established in 2002 to increase the production of milk and productivity through cattle and buffalo breeding and is implementing cattle and buffalo breeding programmes.

### **National Artificial Insemination Programme (NAIP)**

- To produce better calves, increase milk production and increase farmer's income in districts where Artificial Insemination coverage is less than 50%, with an aim of providing Artificial Insemination services to all breedable females of reproductive age.

### **Tamil Nadu Veterinary and Animal Sciences University (TANUVAS)**

- Tamil Nadu is a pioneering state in providing quality health care to animals.
- With the purpose of providing cutting-edge veterinary care for animals, Asia's First Veterinary University was founded in 1989.
- To impart education in different branches of Veterinary and Animal Sciences as the university may determine.

### **Dairy Sector**

- India continues to be the largest producer of milk in the world, with a total milk production of 221.06 million tonnes in 2021-22.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- In India, the per capita availability of milk is 444 grams per day in 2021-22.
- As per Basic Animal Husbandry Statistics 2022, milk production in Tamil Nadu is 10.10 million tonnes during 2021-22, contributing a share of 4.57% of total milk production in the country.
- The milk production in Tamil Nadu has increased during this period by 4.75% when compared to 2020-21.
- The per capita availability of milk has increased from 316 grams per day in 2019-20 to 362 grams per day during 2021-22.
- Milk Production – 10108 Lakh Metric Tonnes.
- The Tamil Nadu Dairy Development Corporation was formed in the year 1972.
- Tamil Nadu Dairy Development Corporation were transferred to the apex level society i.e.,
- Tamil Nadu Co-operative Milk Producers Federation “BRAND NAME – AAVIN”
- The reputation for quality and reliability has made aavin a trusted brand across the world and Aavin products like Ultra Heat Treatment (UHT) Milk and Ghee have been exported to Qatar, UAE, Dubai, Srilanka, Hongkong and Singapore.

**Fisheries**

- Coastal length - 1,076 km
- Number of Coastal Districts – 14
- Marine Fish Production (2021-22) - 5.95 lakh MT
- The sector’s contribution to the State agriculture GDP is 5.78%.

**Inland Fisheries**

- Tamil Nadu is endowed with 3.85 lakh ha of inland water resources.
- The inland fishery resources include reservoirs, major and minor irrigation tanks, ponds, rivers and other water bodies which are amenable to both capture and culture fisheries.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Tamil Nadu possess 3.85 lakh hectare inland water spread area comprising reservoirs, major and minor irrigation tanks, ponds, rivers, backwaters and other water bodies.
- The inland fisheries sector supports the livelihood of 2.36 lakh inland fisherfolk of the State.

**WebGIS based Mobile app ‘Thoondil’**

- The Department of Fisheries and Fishermen Welfare in association with the National Centre for Coastal Research (NCCR), Ministry of Earth Sciences (MoES), created a mobile application “THOONDIL”, a Web GIS based Decision Support System for monitoring the movements of fishing vessels and registering the crews venturing for fishing.
- This application assists the fishermen by dispensing vital information on real time positioning, navigation to safe locations, facility to mark fishing grounds, Potential Fishing Zones (PFZ), weather forecast and fishing trip records etc.

**Conservation of Sea Turtles**

- In order to conserve the Sea Turtles, the Government has notified to fix ‘Turtle Excluder Devices (TEDs)’ before the cod end of trawl nets.
- Upto five nautical mile radius around the turtle nesting and breeding grounds is prohibited for fishing during turtle nesting and breeding season.

**District Fish Farmers Development Agencies (DFFDA)**

- The Government of Tamil Nadu has formed District Fish Farmers Development Agencies (DFFDA) in 38 Districts except Chennai, to popularize fish culture, channelize subsidies to the fish farmers and to generate employment opportunities in rural areas.
- These DFFDA are functioning under the Chairmanship of the respective District Collectors.

**Kisan Credit Cards (KCC) to Fishers and Fish Farmers**

- To meet out the working capital requirements of fishers and fish farmers, the Union Government has extended the Kisan Credit Card (KCC) facility to fisheries sector and the scheme is being implemented in the State.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- Interest subvention is available at 2% per annum at the time of disbursal of loan and additional interest subvention of 3% per annum in case of prompt repayment as Prompt Repayment Incentive.

**Tamil Nadu Fishermen Welfare Board (TNFWB)**

- To provide social security and to ensure well being of fishermen and labourers engaged in fishing and allied activities, Tamil Nadu Fishermen Welfare Board (TNFWB) was established in 2007.
- TNFWB is headed by the Minister for Fisheries.

**Tamil Nadu State Apex Fisheries Co-Operative Federation Limited (TAFCOFED)**

- Tamil Nadu State Apex Fisheries Co-operative Federation Limited is a registered Apex society under Tamil Nadu Co-operatives Societies Act, 1983.
- TAFCOFED was registered on 6.11.1991 and functioning since 19.10.1992 with its headquarters at Chennai.
- At present, 474 Marine Fishermen Cooperative Societies, 198 Marine Fisher Women Cooperative Societies, 153 Inland Fishermen / Fisherwomen Cooperative Societies and 10 District Fishermen Cooperative Federations have been enrolled as members in TAFCOFED.

**Tamil Nadu Fisheries Development Corporation Limited (TNFDC)**

- The Tamil Nadu Fisheries Development Corporation Limited (TNFDC) was registered under Companies Act in 1974 as a public sector undertaking.

**Tamil Nadu Dr. J Jayalalithaa Fisheries University (TNJFU)**

- Tamil Nadu Dr.J Jayalalithaa Fisheries University (TNJFU) is a State Government funded University established on 19.06.2012 at Nagapattinam as per Tamil Nadu Fisheries University Act, 2012.

**Mineral Resources in Tamil Nadu**

**Mines and Minerals**

- Tamil Nadu is known for its rich industrial minerals such as lignite, limestone, magnesite etc., and widely used minor minerals like Black and Multi Colour Granites

- The Department of Geology and Mining was established in the year 1983 with the prime objective of exploration of minerals by utilizing modern technologies and to generate revenue to Government through effective and efficient mineral administration to, by regulating mining activities revenue generated from mineral resources Rs.1572.84 crore in 2022-23.
- The Government has established a District Mineral Foundation Trust Fund in all districts of the State except Nilgiris for the welfare of the people in the areas affected due to mining activities.
- Many projects have been implemented through the District Mineral Foundation Trust Fund in infrastructure, education, drinking water, health, sanitation, welfare of the aged and differently abled people, welfare of women and children, skill development, environment and pollution control and irrigation sectors.
- Mineral Resources Tamil Nadu is endowed with major minerals, oil and natural gas and minor minerals.

### Major minerals

#### Lignite

- The chemical composition of lignite is carbon.
- This is an energy mineral and it is found in three areas namely Neyveli, Mannargudi and Ramanathapuram.
- The Neyveli Lignite Corporation India Limited (NLCIL) has been mining Lignite in Neyveli over an extent of 25,900 hectares in Cuddalore district.
- The total reserves of Lignite in these areas is estimated at 34,764 million tonnes.

#### Limestone

- The chemical composition of Limestone is Calcium Carbonate ( $\text{CaCO}_3$ ).
- It is utilized for manufacturing lime, cement, chemicals, fertilizers and in metallurgical industries.

#### Crystalline Limestone

- It is a type of limestone, made mostly of calcium carbonate ( $\text{CaCO}_3$ ) in the form of calcite or aragonite.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- It mainly occurs in Salem, Tirunelveli, Thoothukudi, Karur, Dindigul, Madurai, Virudhunagar, Coimbatore and Kanniyakumari districts.

### **Non-Crystalline Limestone or Fossiliferous Limestone**

- Limestone occurs predominantly in Ariyalur, Tiruchirapalli, Perambalur and Thoothukudi districts.

### **Marl**

- It is a material, rich in carbonate minerals, clays and silt.
- It is used in manufacturing of Fertilizers and Cement.
- It occurs as a sedimentary deposit in association with Fossiliferous Limestone in Ariyalur District.

### **Magnesite**

- The chemical composition is  $MgCO_3$ , Magnesium Carbonate mineral.
- Its wide use in refractories as flux in blast furnace, ceramic filters, sintering, conditioners and abrasives.
- Chalk hills of Salem districts have the world's best Magnesite.

### **Bauxite**

- The chemical composition of Bauxite is  $Al_2O_3 \cdot H_2O$
- Bauxite is also used in refractory, cement, chemical and paint industries and in refining of petroleum products.
- The Kolli and Shervaroy hills in Namakkal and Salem district respectively contain good deposits of Bauxite.

### **Graphite**

- Graphite is a naturally occurring crystalline Carbon.
- It is used in electrode, atomic reactors, crucible industry, insulators, and foundry units.
- Graphite occurs mainly in Madurai and Sivaganga districts.

### **Atomic Minerals**

- Atomic minerals such as Monazite, Garnet, Ilmenite, Rutile, Sillimanite, Zircon and Leucoxene.
- They are used as abrasives, semiconductors, and in atomic reactors.

- It is available in the beach sand in Tirunelveli, Thoothukudi and Kanniyakumari districts.
- The Indian Rare Earths (India) Limited has been mining these minerals in Kanniyakumari district
- Garnet also occurs as placer deposit in Tiruchirapalli district and as rock forming deposits in Madurai district.

### **Vermiculite**

- It is brownish yellow in colour and it is a micaceous mineral.
- It is used for manufacture of vermitiles and is used as insulators.
- It is found in Tirupattur district.

### **Molybdenum**

- It is used to make alloys to increase strength, hardness, electrical conductivity and resistance to corrosion and wear.
- Molybdenum mainly occurs in Dharmapuri and Krishnagiri Districts.
- It is used to make alloys to increase strength, hardness, electrical conductivity and resistance to corrosion and wear.

### **Tungsten**

- It is a rare metal found naturally on earth almost exclusively as compounds with other elements.
- Tungsten is commonly used in heavy metal alloys such as high-speed steel from which cutting tools are manufactured.
- It is available in Madurai district.

### **Platinum Group of Elements (PGE)**

- The Platinum group elements are Osmium, Iridium, Ruthenium, Rhodium, Platinum, and Palladium.
- Platinum (Pt) is the most popular element of PGE.
- Most valued for their wide range of industrial, medical, and electronic applications.
- Platinum is probably the most recognized because of its use in jewellery, but its main application is in the manufacture of catalytic converters.
- Platinum group of elements occurs in Namakkal district.

## Minor minerals

### Granite

- Tamil Nadu has rich deposits of Granite.
- The quarrying of Granite in India was pioneered by Tamil Nadu in 1970s
- Granites of various shades occur in the districts of Krishnagiri, Madurai, Virudhunagar, Salem and Dindigul.
- Varieties quarried in Tamil Nadu are Kunnam black, Paradiso, Zebra white, Red wave, Tiger skin, Kashmir white and Desert brown. Black Granite occurs in the districts of Krishnagiri, Dharmapuri, Salem, Villupuram and Tiruvannamalai.

### Quartz

- Districts Salem, Karur, Tiruppur, Namakkal, Dindigul, and Dharmapuri districts have good deposits of Quartz.
- It is mainly used in glass, refractory, abrasives and electrical industries.

### Feldspar

- Salem, Dindigul, Karur, Tiruppur and Namakkal districts have good deposits of Feldspar.
- It is mainly used in foundry, paint and ceramic industries.

### Fire Clay

- Alumina Silicates with varying amounts of impurities such as Iron Oxides, Lime, Magnesia, alkali, and free Silica.
- The main use of fire clay is in refractory, cement industries, ceramic articles and as decorative tiles.
- It is found in the districts of Perambalur, Ariyalur and Cuddalore.

### Silica Sand

- It is mainly used in glass industries and in foundries as moulding catalysts
- It is available in the districts of Nagapattinam, Villupuram, Cuddalore, Thiruvarur and Chengalpattu.

### Gypsum

- Gypsum is used in the manufacture of Plaster of Paris and also in cement, fertilizer and pesticides industries.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- The mineral is available in Perambalur, Coimbatore and Tiruppur Districts.

**Soapstone**

- It is used in the manufacture of talcum powder and decorative articles.
- It occurs mainly in the districts of Salem and Namakkal.

**Production of Major Mineral**

- Lignite is the largest produced mineral in Tamil Nadu.
- Graphite is the least produced mineral in Tamil Nadu.

**Initiatives**

- Restoration of abandoned mines and quarries for public utility.
- The abandoned quarries in Tamil Nadu were brought to public utility such as rainwater harvesting structures, dumping yards for Construction and Demolition waste and aquaculture purposes.

**Differential Global Positioning System (DGPS)**

- DGPS which is a technique used to improve the accuracy of GPS (Global Positioning System) location measurements.
- Drone Technology will be utilized to prevent illicit mining / quarrying.
- “In order to control the illicit transportation of minerals, the vehicles transporting the minerals from mines and quarries will be monitored directly through online by installing GPS instruments”.

**Geo-Park**

- The Geo- Park is one of the best natural sites in the world to study the geological features which makes the place unique in Geological history.
- Fossil wood from Thiruvakkarai refers to the petrified wood found in the village of Thiruvakkarai in Viluppuram district.
- The petrified wood is believed to have been formed during the Cretaceous period, around 100 million years ago, when the region was covered by forests.
- The fossil wood from Thiruvakkarai is known for its unique patterns and colours.

**Tamil Nadu Minerals Limited**

- Government of Tamil Nadu established the Tamil Nadu Minerals Limited popularly known as TAMIN during April 1978.
- TAMIN was setup to extract, process and market granite raw blocks, granite products, major and minor minerals and mineral based products.
- TAMIN is also the largest producer of natural graphite flakes in India.
- TAMIN is the only authorized manufacturer of Indian Standard Sand popularly known as Ennore Sand which is used as a reference material for quality testing by every cement company in India.

**Tamil Nadu Magnesite Limited**

- India is ranked 9th among the Magnesite producing countries in the world.
- Tamil Nadu continued to be the major magnesite producing State with the highest share of 47% in total output.
- Salem Magnesite reserve is famous for its molecular structure and is suitable for manufacturing refractory bricks.

**Tamil Nadu Tourism**

- Tourism is a rapidly growing economic sector that significantly impacts trade, job creation, investment, infrastructure development and social inclusion.
- As a multi-faceted industry, tourism has the potential to contribute positively to sustainable development goals, including the conservation of cultural and natural heritage.
- The World Travel and Tourism Council (WTTC) estimates that between 2022 and 2032, Travel and Tourism's contribution to the global economy is expected to grow at an average annual rate of 5.8%, more than double the growth rate estimated for the global economy travel and tourism industry made a remarkable recovery after the pandemic, with its contribution to GDP increasing by \$1 trillion and creating 18.2 million jobs.

**Tourism in India**

- India's rich cultural heritage and diverse landscapes make it a popular tourist destination.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- The tourism industry in India is one of the largest contributors to the country's economy, employing millions of people.
- Tourism continues to play an important role as a foreign exchange earner for the country.
- According to the Indian Tourism Statistics Report 2022, released by the Ministry of Tourism, Foreign Exchange Earnings (FEE) from tourism were US\$ 8.797 billion compared to US\$ 6.959 billion in 2020, registering a positive growth of 26.4%.
- According to the World Travel and Tourism Council (WTTC), the tourism industry in India contributed USD 178 billion in revenue, which accounted for 5.8% of the country's GDP in 2021.
- The sector also employed 32 million people, which accounted for 7% of India's total employment.
- Additionally, 94% of the spending was from domestic visitors.

### **Tourism in Tamil Nadu**

#### **Tourist Visits to Tamil Nadu**

- Tourism as a service sector is a pivotal contributor to the growth story of Tamil Nadu.
- The geographical, cultural and environmental diversity of Tamil Nadu has positioned it as one of the most visited States in India by both domestic and foreign tourists.
- In 2021, the State ranked first in domestic tourist visits and second in foreign tourist visits.

#### **Domestic Tourist Visits**

- In 2021, Tamil Nadu contributed to a significant 17.02% of domestic tourist visits, with over 115 million tourists visiting the State.
- In six out of the last seven years, Tamil Nadu ranked 1<sup>st</sup> in domestic tourist visits, continuing its dominance in the domestic tourism market.

#### **Foreign Tourist Visits**

- Tamil Nadu ranked second in Foreign Tourist Visits, with 1.23 million foreign visitors to Tamil Nadu.

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- The countries contributing a significant share of tourists visiting Tamil Nadu are the USA, the UK, Australia, Canada, China, Malaysia, Germany, Russia, Sri Lanka and Bangladesh.
- The Group of Monuments at Mamallapuram, one of the six UNESCO World Heritage Sites in the State, ranked as the most visited Heritage Monument among foreign tourists, representing a share of almost 45% of tourist visits.
- Mamallapuram received 1,44,984 visitors, while the second-ranked monument, the Taj Mahal, received 38,922 visitors.
- Tamil Nadu features six monuments on the list of the top 10 most popular Heritage monuments visited by foreign tourists, including Fort Museum (Thirumayam), Fort Vattakottai, Gingee Fort, Rock Cut Jain Temple (Sittannavasal) and Tiger headed Rock cut temple, Saluvankuppam.

**The State is home to:**

- More than 36,627 temples such as Meenakshi Amman Temple-Madurai, Nataraja Temple- Chidambaram, Ramanathaswamy Temple-Rameswaram, Arunachaleswarar Temple -Thiruvannamalai etc.
- 1,076 km coastal line, accounting for more than 13% of India's total coastal line.
- 17 wildlife sanctuaries, 5 national parks, 17 bird sanctuaries and 5 tiger reserves.
- 6 UNESCO World Heritage Sites, namely
  - Group of Monuments at Mamallapuram
  - Brahadeeswarar Temple at Thanjavur
  - Gangaikonda Cholapuram at Ariyalur
  - Airavatheeswarar Temple at Darasuram
  - Nilgiris Mountain Railway
  - Western Ghats
- The Department of Tourism has identified ten Focus Tourism Segments for development and promotion in years to come.
  - Heritage & Pilgrimage Tourism

MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU

- Coastal Tourism
- Adventure Tourism
- Eco & Wildlife Tourism

### Medical and Wellness Tourism

- MICE Tourism
- Rural and Plantation Tourism
- Caravan Tourism
- Cultural Tourism
- Culinary Tourism

### Connectivity

- The State's strategic location, robust infrastructure and connectivity setup make it an accessible tourism destination.

### Airports

- Tamil Nadu has four international airports, viz. Chennai, Madurai, Trichy and Coimbatore and two domestic airports at Salem and Thoothukudi.

### Railway Network

- Tamil Nadu's rail network density is higher than the national average.
- The Southern Railway, headquartered in Chennai provides excellent connectivity to all destinations in the State through a well-developed railway network of over 4,000 km.
- Main railway junctions in the State include Chennai, Madurai, Coimbatore, Salem, Erode and Tiruchirapalli.
- Road Network Tamil Nadu boasts of a well-developed road network of 70,562 km providing connectivity to all tourist destinations in the State.
- The Government of Tamil Nadu established the Department of Tourism on 01.04.1995.
- Tamil Nadu Tourism Development Corporation on 30.06.1971 to develop and promote tourism in the State.

### **Tourism Survey for 38 Districts:**

- The Department of Tourism will conduct a tourism survey in all 38 districts of the State in accordance with the norms prescribed by the United Nations World Tourism Organisation (UNWTO).

### **Festivals**

#### **Tamil Nadu International Balloon Festival**

- The 8<sup>th</sup> edition of the Tamil Nadu International Balloon Festival was held in Achipatti, Pollachi, coinciding with the Pongal Festival from January 13<sup>th</sup> to January 15<sup>th</sup>, 2023.

#### **International Kite Festival**

- The first edition of Tamil Nadu International Kite Festival was organised for three days, from 13<sup>th</sup> August 2022 to 15<sup>th</sup> August 2022, at TTDC Ocean View, ECR Mamallapuram.

#### **Tourism Promotion**

- The Tamil Nadu Tourism Website serves as a one-stop destination for all tourism-related activities in Tamil Nadu.

#### **TravelXP**

- TravelXP is a renowned name in the tourism industry, recognised for its exceptional travel content and captivating shows.

#### **Tamil Nadu Tourism Destination Development Scheme**

- The Department of Tourism launched a new scheme called the “Tamil Nadu Tourism Destination Development Scheme” in 2021 to identify and develop tourist destinations/ attractions in the State with a focus on enhancing tourist experiences at the destination.

#### **Scheme for Tourist Guide Registration**

- “Tamil Nadu Tourist Guide Registration Scheme, 2023” for registration and skill upgradation of Tourist Guides.
- This initiative aims to ensure that all Tourist Guides in the State are registered and trained to provide visitors with a high level of service.
- Under this scheme, Tourist Guides will be classified into three categories: General Guide, Expert Guide and Linguist Guide.

### **Tourism Policy**

- The Department of Tourism has formulated the “Tamil Nadu Tourism Policy”, which would catalyse the tourism industry to become a leading employer and driver of economic growth.
- The goal is to establish a sustainable tourism ecosystem in Tamil Nadu, focusing on ensuring the safety and quality of the tourist experience and creating a supportive atmosphere for tourism investment.

### **Tamil Nadu Tourism Awards**

- The first-ever Tamil Nadu Tourism Awards was hosted on September 27th 2022, on the occasion of World Tourism Day.
- 52 awards were presented in 17 different categories covering various stakeholders such as Tour Operators, Airlines, Accommodation units, Restaurants, Tourist Guides, etc.

### **Launch of Cruise Tourism**

- Cruise Tourism is an important segment of the Global Tourism Industry, and Tamil Nadu has excellent potential to develop this sector with its long coastline of over 1,076 km.
- On behalf of the Tamil Nadu Tourism Department, Cordelia Cruises, a premium cruise line with luxurious amenities on board, This initiative is viewed as an important landmark for Tamil Nadu Tourism.

### **Tamil Nadu Tourism Promotion and Development Committee**

- "Tamil Nadu Tourism Promotion and Development Committee" to advise the Government on measures needed for the rapid development of tourism and tourist centres in the State.

### **Tourism Task Force**

- A Tourism Task Force was constituted for the first time in Tamil Nadu.
- The Task Force intends to bring together stakeholders from various sectors, such as educational institutions, private companies and non-profit organisations.

**MANIDHANAHEYAM FREE IAS ACADEMY – TNPSC - IV & VAO EXAM  
UNIT – IX – DEVELOPMENT ADMINISTRATION IN TAMIL NADU**

- The Task Force aims to utilise the strengths and resources of these stakeholders to assess the industry's current status and identify areas of improvement to promote tourism in Tamil Nadu.

### **Chennai Vizha**

- The 1<sup>st</sup> edition of Chennai Vizha – National Handicrafts, Handlooms and Food exhibition will be held during the summer holidays from 29th April to 14th May 2023 at the Island Grounds in Chennai.

### **Major Scheme**

#### **Swadesh Darshan 2.0 Scheme**

- The Ministry of Tourism, Government of India (MoT, GoI) has revamped its Flagship Scheme for holistic destination development.
- The Swadesh Darshan 2.0 follows an integrated approach for the development of destinations, which will provide core tourism products and ancillary requirements such as connectivity, performing arts infrastructure, public health, hygiene and safety and other such requirements that impact tourists.
- Under this scheme, two destinations from Tamil Nadu, Mamallapuram and Nilgiris, will be taken up for development.

#### **PRASHAD Scheme**

- The Ministry of Tourism, Government of India (MoT, GoI) has launched the Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD) Scheme to enhance the tourism attractiveness of identified pilgrimage destinations by providing well-planned tourism infrastructure.
- Under the Scheme, the Navagraha Temples, including Alangudi, Kanchanur, Thingalur and Thiruvankadu have been identified for infrastructure development.

#### **Swachhata Pakhwada Campaign**

- The Swachhata Pakhwada Campaign is a significant initiative by the Government of India to promote cleanliness and sanitation in the country.
- It is an essential component of the Swachh Bharat Mission, which aims to create a cleaner and healthier India for all its citizens.

### **Tamil Nadu Tourism Development Corporation (TTDC)**

- The Tamil Nadu Tourism Development Corporation (TTDC) was established on June 30th, 1971.
- To promote tourism in Tamil Nadu. Its key activities include providing accommodation.
- Conducting various tours, operating boat houses and organising fairs and festivals across the State.
- At present, TTDC operates 28 hotels directly.
- New Food and Beverage Vertical- “Amuthagam” the Food and Beverage (F&B) vertical of TTDC has been developed as a separate vertical under the brand name "Amuthagam" to increase the focus on the restaurant business.
- TTDC is currently operating and maintaining Pilgrim rest houses (Yatri Niwas) at Rameswaram, Tiruvannamalai and Kancheepuram under the brand name of “Aalayam”.
- TTDC operates nine boat houses at Muttukadu, Mudaliarkuppam, Ooty, Pykara, Kodaikanal, Yercaud, Pichavaram, Courtallam and Valankulam.

### **International recognition**

- Blue Flag Beach, Kovalam
- It is first beach in Tamil Nadu and the 9th beach in India to be awarded the prestigious Blue Flag certification by the Denmark-based Foundation for Environment Education (FEE).
- Criteria for qualifying for the certification include eco-friendly environment, safety services, water quality and educational and accessibility standards.

### **47<sup>th</sup> India Tourism and Industrial Fair 2023**

- India Tourist and Industrial Fair, every year from December/January to March for a period of 70 days at Island Grounds, Chennai.
- The 47<sup>th</sup> edition of the Fair was conducted from January 4<sup>th</sup> to March 23<sup>rd</sup>, 2023, under the theme of "Rethinking Tourism”.