

Material for
Study Visit of the Department - related
Parliamentary Standing Committee
on Science & Technology, Environment &
Forests to
Tirupati on January 6, 2014



Ministry of Environment & Forests
Govt. Of India

Tirupati

General

Tirupati is a major pilgrimage town located in Chittoor district of Andhra Pradesh. It is located at the foothills of Eastern ghats at coordinates of 13.65⁰N and 79.42⁰E. As per 2011 census, though Tirupati has a total population of 4,59,985 persons but it draws more than 180 lakhs pilgrims annually and is one of the busiest pilgrimage centers in the World. Tirupati is known as the abode of the Hindu god Venkateshwara Swamy and is famous for Lord Venkateshwara swamy temple in Tirumala.

Tirupati is rich with forests, water bodies & agricultural areas and about 55.4 % & 3.74% of the total area is under reserved forests and water bodies respectively. The area is drained by Swarnamukhi river basin which is further divided into sub basins which act as drinking and irrigation water source. Currently, Kalyani, Gogharbham, Papavinasam tanks are used for providing drinking water to Tirupati and Tirumala urban settlements.

Sewage Management: An STP of capacity 25MLD located at Tukivakam village was commissioned during 1999 to treat the sewage generated from Tirupati city. The facility is spread out in an area of 74 acres but a total of 299.5 acres of land is available. The treatment involves screening and natural aeration in stabilization ponds followed by facultative ponds with a total retention time of 10 days. The treated sewage is discharged on land for irrigation during summer while it is discharged into Swarnamukhi river during rainy season. The STP is inadequate for treat the total sewage generated from the city. 3MLD of treated sewage is sent to M/s Lanco Industries Ltd which is further treated in a full fledged treatment plant and used for quenching of coke.

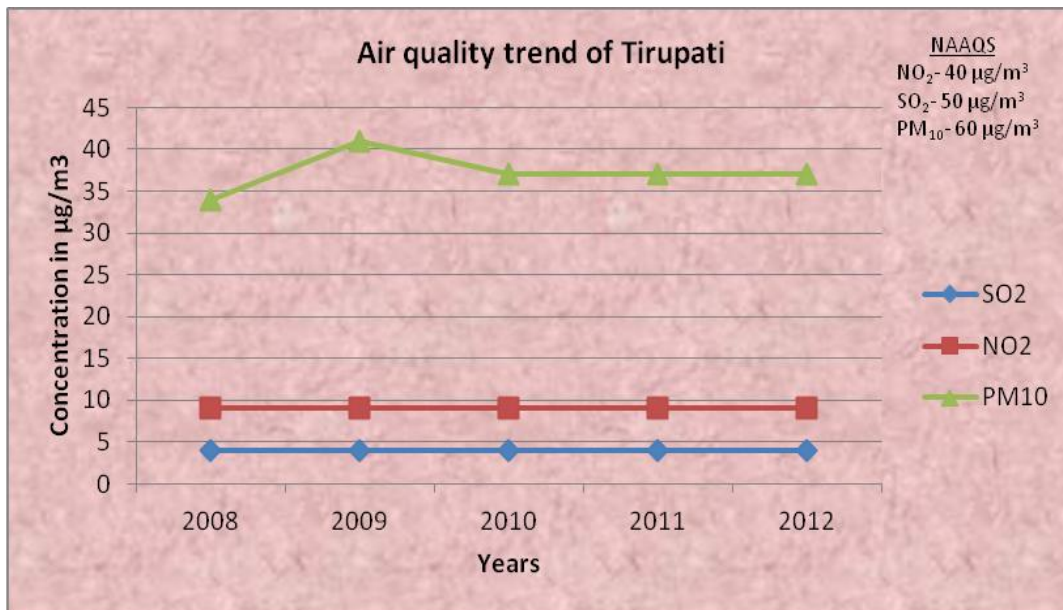
Solid waste Management: Around 130-145MT of solid waste is generated from Tirupati from households, commercial buildings, markets, construction debris etc. The entire solid waste is being collected, transported and dumped at the Ramapuram dumpsite located at a distance of 18KM from city. Currently, there is no scientific segregation, processing or engineered landfill facility in Tirupati but however it is proposed to establish solid waste processing cum landfill facility with an estimated budget of 30 crores.

Bio-medical Waste Management: Tirupati has over 120 hospitals and health care facilities in Tirupati. Common Bio-medical Waste Treatment Facility has been established by AWM consultancy at Pachakapallam, Vedurukuppam Mandalam about 60 kms from Tirupati. The wastes are collected from all the health care units by M/s AWM consultancy and subjected to incineration/ autoclaving.

Salient points of Environmental Monitoring:

- One CAAQM station is commissioned at Tirumala and parameters PM10, CO, O3, NOx, NH3 & Benzene are monitored
- One real time noise monitoring station is installed at Tirumala
- One NAMP station is established in a sensitive zone at Tirupati and one at Tirumala and is monitored twice by APPCB.

The ambient air quality of Tirupati city is depicted in Figure below with respect to SO₂, NO₂ and PM₁₀. The annual average concentration of SO₂, NO₂ and PM₁₀ are within National Standard (NAAQS).



Name of the City	State	2008			2009			2010			2011			2012				
		SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	NO ₂	PM ₁₀	SO ₂	
Tirupati	A.P.	4	9	34	4	9	41	4	9	37	4	9	37	4	4	9	37	4

Eco City Project

The Eco-city programme has been conceptualized for improving environment and achieving sustainable development through a comprehensive urban improvement system employing practical, innovative and non-conventional solutions. The **overall objective** of the Ecocity project under Tenth Five-Year Plan is to improve environment and bring in visible results through implementation of identified environmental improvement projects in the selected small and medium towns/cities. The towns/cities are selected based on the following criteria:

- Size of the town/city (less than 5 lakhs population);
- Cultural/historical/heritage/tourism importance;
- Environmental Improvement Needs;
- Scope for public-private partnerships and private investment;
- Generators of economic momentum/urbanization;
- Public participation in decision-making process; and

➤ Regional distribution of towns

Vrindavan in Uttar Pradesh, Ujjain in Madhya Pradesh, Puri in Orissa, Tirupati in Andhra Pradesh, Kottayam in Kerala, Thanjavour in Tamil Nadu were selected under the Programme

Tirupati Municipal Council had submitted a Project proposal in the year 2002 on 'Tirupati Eco-City Core Area Development' with a total estimated budget of ` 807.16 lakhs, containing four components. The financial assistance from CPCB was limited to ` 164.49 lakhs, while the remaining expenditure was to be met by Tirupati Municipal Corporation, Tirumala Tirupati Devasthanams and private parties. The following components were proposed by Tirupati Municipal Council:

1. Improvement of Traffic & Transportation System,
2. Planation & Landscaping & Urban Design,
3. Improvement of Sewerage and Drainage and
4. Garbage Collection & Disposal System

The project Area of "Core Area Development" is bounded by the boundary of Govindraja Swamy Temple on the West, Gandhi Road on the North, Railway Station on the South and Seshachalam road on the East. The Govindraja Swamy Temple is the main tourist attraction feature in the project area. The important spots in the project area included five temples, Hathiramji Mutt, Koneru water body, Tirupati Railway Station, TTD Bus stand and other commercial establishments.

After examining the proposal, CPCB has approved the preparation of Detailed Project Reports on the following components on 'Core Area Development':

1. **Covering/ Improvement of storm water drains** on the northern, southern and western side of the Govindarajaswamy temple and other open drains near Koneru.
2. **Improvement of roads** - railway station Road, Roads on all four sides of Koneru, town Bank Road, road beside Hotel Bhimas Deluxe.
3. **Improvement of Parking facilities** - involves only surface paving without undertaking construction of any building/multi-storeyed parking.
4. **De-silting of Koneru and replenishment with fresh water.**

Under the Eco-City Project, the storm water drains were covered on northern, southern and western side of the Govindarajaswamy temple at a total cost of ` 21.22 lakhs, Koneru was connected to Narsimha Tirtha by pipeline to replenish

water on permanent basis at a cost of ` 17.09 lakhs and the stagnant drains in the Core Area were cleaned/de-silted at a total cost of ` 1.66 lakhs.