

# TIRUCHIRAPPALLI

PROPOSAL FOR DRAFT MASTER PLAN - 2041



DIRECTORATE OF TOWN AND COUNTRY PLANNING GOVERNMENT OF TAMILNADU



#### Master Plan for Tiruchirappalli Local Planning Area

Name of Local Planning Authority	:	Tiruchirappalli Local Planning Authority
Reference No.	:	246/2011/TD-3
Directorate of Town and Country Planning Reference No.	:	30302/2005/MP3

Member Secretary/ Joint Director (FAC), Tiruchirappalli Local Planning Authority, Tiruchirappalli Assistant Director Town and Country Planning, Chennai

#### Joint Director of Town and Country Planning, Chennai

#### Director of Town and Country Planning, Chennai

#### Secretary to Government, Housing and Urban Development Department, Government of Tamil Nadu

#### PROFORMA

#### Name of the Office : District Town and Country Planning Office, Tiruchirappalli

#### Name of the LPA : Tiruchirappalli

I. Proposal

1.	Letter number and date of Joint Director in which proposals submitted to DTCP	:	Letter number: 246/2011/TD-3, Date: 09.01.2024
2.	Letter number and date of DTCP in which proposals submitted to Government	:	Letter number:30302/2005/MP/TCP-2, Date: 09.01.2024
]	II. Notification:		
3.	The G.O. details of notification under Section 10(1)	:	G.O.Ms.No.240, H&UD (UD-4) Department, dated 24.09.2013
4.	The G.O. details of notification under Section 10(6)	:	G.O.Ms.No.88, H&UD (UD-4) Department, dated 30.06.2021
II	I. CONSTITUTION		

#### 5. The G.O. details in which Tiruchirappalli authority Members was constituted u/s G.O.Ms.No.100, H&UD (UD-4) Department, dated 14.08.2023

:

:

:

#### IV. CONSENT

11(3) of the Act

6. The G.O.details in which the Government accorded consent under Section 24

#### **V. SUBMISSION**

- Notification in form No. I in the : Tamil Nadu Government Gazette Under Section 26.
- Notification in form No. I in District Gazette under Section 26(1).
- 9. Letter No and date in which Director of Town and Country Planning has given advice on

O&S under Section 26(2).

10. Resolution No and date in : which the Tiruchirappalli LPA approved the Draft Master plan

#### **VI. APPROVAL**

11. Submission of master plan to Government for final approval Under section 28. :

:

12. The G.O. details in which Government accorded its Approval under section 28.

#### VII. PUBLICATION DETAILS OF APPROVAL

13. The Tamil Nadu : Government Gazette Under section 30.

#### MEMBER SECRETARY / JOINT DIRECTOR (FAC), TIRUCHIRAPPALLI LOCAL PLANNING AUTHORITY, TIRUCHIRAPPALLI.

### TIRUCHIRAPPALLI LOCAL PLANNING AREA

#### **MASTER PLAN**

#### SCRUTINIZED AND CERTIFIED THAT

- 1. The boundary of the Master Plan has been marked in red line in the plan.
- 2. Reports and all the plans have been authenticated.
- 3. The categorization in zoning map and the categorization in zoning regulation are tallied and found correct.
- 4. All the procedures prescribed in Master Plan are followed.
- 5. (Preparation, Publication and sanction)

#### MEMBER SECRETARY / JOINT DIRECTOR (FAC), TIRUCHIRAPPALLI LOCAL PLANNING AUTHORITY, TIRUCHIRAPPALLI.

## **TABLE OF CONTENTS**

1.	INTRODUCTION
1.1	Purpose of Master Plan1
1.2	Need for the Master Plan2
1.3	Master Plan for Tiruchirappalli LPA3
1.4	GIS based Master Plan4
1.5	Preparation of the Draft Master Plan 2021-20419
1.6	Methodology9
1.6.1	Exisitng Land use map10
1.6.2	Inception Report13
1.6.3	Vision Formulation15
1.6.4	Data Collection15
1.6.5	Study of previous planning initiatives15
1.6.6	Issues, Potentials, Projected requirements & Draft Proposals
1.7	Vision Statement
2.	PROFILE OF TIRUCHIRAPPALLI
2.1	Location & Regional Setting19
2.2	Transport Network and Connectivity25
2.2.1	Road Connectivity25
2.2.2	Rail Connectivity26
2.2.3	Air Connectivity
2.2.4	Sea Port27
2.2.5	Freight movement In and Around Trichy LPA27
2.3	History of the Region

4.6.2	Soil Type
4.6.1	Drainage
4.6	Geomorphology
4.5.1	Geological Landforms76
4.5	Geology76
4.4	Lineaments
4.3	Climate and Rainfall74
4.2	Topography72
4.1	Geography72
4.	PHYSICAL FEATURES
3.7.3	Population Projection of LPA69
3.7.2	Population Projection using various methods
3.7.1	Population Projection Methods
3.7	Population Projection
3.6	Literacy Rate
3.5	Schedule Caste and Schedule Tribes Population
3.4	Sex Ratio
3.3	Population Density
3.2.1	Average Growth Rate Ranking of Villages
3.2	Growth Rate
3.1	Population Distribution46
3.	DEMOGRAPHY
2.0.2	
2.3.1 2.3.2	History of Tiruchirappalli Region
<b>221</b>	Liston of Tiruchirappalli Pagion

5.	ECONOMY	83
5.1	General Economic Profile	83
5.1.1	Work Participation Rate and Occupational Structure	83
5.1.2	GDDP	89
5.2	Agriculture and Allied Activities	89
5.3	Industries	94
5.3.1	Existing Industrial Base	94
5.3.2	MSME Profile	95
5.3.3	Service Sector	97
5.4	Trade and Commerce10	00
5.4.1	Export Performance1	00
5.5	Employment projection10	04
6.	HERITAGE & TOURISM10	06
6.1	Heritage & Cultural Tourism10	08
6.1.1	Well known Spots	08
6.1.2	Lesser-known Spots1	13
6.1.3	Temples under ASI1	18
6.2	Eco-Tourism and Educational Tourism12	23
6.2.1	Mukkombu (upper anaicut)1	23
6.2.2	Butterfly Park1	24
6.2.3	Anna Science Planetarium1	25
6.2.4	Government Museum1	26
6.3	Important Festivals1	30
6.4	Tourism handling capacity13	30

7.	MOBILITY
7.1	Access and connectivity137
7.1.1	Introduction137
7.1.2	Railway Connectivity137
7.1.3	Bus Connectivity140
7.1.4	Air connectivity141
7.1.5	Air Funnel Zone
7.2	Traffic & Roads Network143
7.2.1	Existing Road Network143
7.2.2	Freight movement
7.2.3	Air freight movement151
7.2.4	Traffic analysis
7.2.5	Design Service volume152
7.2.6	Classified Volume Count154
7.3	Road Safety162
7.3.1	Accident Pattern162
7.4	SUMMARY
8.	PHYSICAL INFRASTRUCTURE
8.1	Water supply165
8.1.1	Source and Quantity165
8.1.2	Infrastructure for Water Supply165
8.1.3	Projected Requirement169
8.2	Sewerage and sanitation170
8.2.1	Sewerage generation and Treatment170
8.2.2	Sanitation171
8.2.3	Existing Gap in Sewage Treatment171

8.2.4	Projected Requirement174
8.3	Solid waste management175
8.3.1	Solid waste Generation175
8.3.2	Composition of Solid Waste177
8.3.3	Treatment Facilities177
8.3.4	Projected Requirement
8.4	Storm water drainage178
8.4.1	Existing Situation
8.5	Electricity
8.5.1	Projected Requirement180
8.6	Summary
9.	SOCIAL INFRASTRUCTURE
9.1	Health
7.1	104
9.2	Education
9.2	Education187
9.2 9.3	Education
<b>9.2</b> <b>9.3</b> 9.3.1	Education       187         Socio-Cultural Infrastructures       191         Library       191
<ul><li>9.2</li><li>9.3</li><li>9.3.1</li><li>9.3.2</li></ul>	Education       187         Socio-Cultural Infrastructures       191         Library       191         Community Halls       191
<ul> <li>9.2</li> <li>9.3</li> <li>9.3.1</li> <li>9.3.2</li> <li>9.4</li> </ul>	Education187Socio-Cultural Infrastructures191Library191Community Halls191Police, Safety Management Infrastructure191
<ul> <li>9.2</li> <li>9.3</li> <li>9.3.1</li> <li>9.3.2</li> <li>9.4</li> <li>9.5</li> </ul>	Education187Socio-Cultural Infrastructures191Library191Community Halls191Police, Safety Management Infrastructure191Open Spaces193
<ul> <li>9.2</li> <li>9.3.1</li> <li>9.3.2</li> <li>9.4</li> <li>9.5</li> <li>9.5.1</li> </ul>	Education187Socio-Cultural Infrastructures191Library191Community Halls191Police, Safety Management Infrastructure191Open Spaces193Parks194
<ul> <li>9.2</li> <li>9.3</li> <li>9.3.1</li> <li>9.3.2</li> <li>9.4</li> <li>9.5</li> <li>9.5.1</li> <li>9.5.2</li> </ul>	Education187Socio-Cultural Infrastructures191Library191Community Halls191Police, Safety Management Infrastructure191Open Spaces193Parks194Play grounds195
<ul> <li>9.2</li> <li>9.3</li> <li>9.3.1</li> <li>9.3.2</li> <li>9.4</li> <li>9.5</li> <li>9.5.1</li> <li>9.5.2</li> <li>9.5.3</li> </ul>	Education187Socio-Cultural Infrastructures191Library191Community Halls191Police, Safety Management Infrastructure191Open Spaces193Parks194Play grounds195OSR Spaces197
<ul> <li>9.2</li> <li>9.3</li> <li>9.3.1</li> <li>9.3.2</li> <li>9.4</li> <li>9.5</li> <li>9.5.1</li> <li>9.5.2</li> <li>9.5.3</li> <li>9.6</li> </ul>	Education.187Socio-Cultural Infrastructures191Library191Community Halls191Police, Safety Management Infrastructure191Open Spaces193Parks.194Play grounds195OSR Spaces197Gap Analysis198

9.6.4	Other civic amenities
10.	HOUSING
10.1	Number of households in the district216
10.2	Existing housing conditions217
10.2.1	Housing condition
10.2.2	Ownership status
10.2.3	Average household size
10.2.4	Percentage of households with household sizes219
10.3	Slums
10.3.1	Number of slums with households
10.3.2	Srirangam Zone
10.3.3	Ariyamangalam Zone227
10.3.4	Ponmalai Zone
10.3.5	Abhishekapuram Zone234
10.3.6	Population & Household projection 2041238
11.	ENVIRONMENT
11.1	Surface Water244
11.1.1	Existing Water Network: Topography244
11.1.2	Existing Water Network: River
11.1.3	Existing Water Network: Irrigation Canal248
11.1.4	Existing Water Network: Lakes and watersheds
11.1.5	Current Status - Surface Water Bodies in LPA249
11.2	Groundwater253
11.2.1	Ground Water Resource Estimate253
11.2.2	FIRKA in LPA262

11.2.3	Ground Water Quality	263
11.3	Forest and Biodiversity	265
11.3.1	Kariyamanickam and Kiliyanallur Reserve Forest	265
11.3.2	Butterfly Park	266
11.4	Disaster Management	266
11.4.1	Seismology	
11.4.2	Covid -19	
11.4.3	Cyclone and Floods	267
11.5	Pollution	284
11.5.1	Concetration of Enterprises based on Pollution Control Board Cate	rgory 284
11.5.2	Water Pollution	

12.5 L	and development trend	.324
12.4.1	Land Suitability analysis	323
12.4 L	and Use, Land Cover (Land use and Land cover) and Land suitability	.320
12.3 E	xisting Landuse (2021) of Proposed LPA 2041	.303
12.2	Evaluation of Implementation of Master Plan 2011 Proposals	.300
12.1	Evaluation of Existing Master Plan 2011	.293
1 <b>2</b> .	EXISTING LAND USE	.293

13.	POTENTIALS AND NEEDS	
13.1	Economy	332
	Potential	
13.1.2	Needs	
13.2	Tourism	
13.2.1	Potentials	
13.2.2	Needs	

13.3	Mobility
13.3.1	Potential
13.3.2	Needs
13.4	Environment
13.4.1	Potential
13.4.2	Needs
13.5	Physical Infrastructure
13.5.1	Potentials
13.5.2	Needs
13.6	Social Infrastructure
13.6.1	Potentials
13.6.2	Needs
14.	PLANNING PROPOSALS
1-11	
14.1	Vision/Ideation
14.1	
	Vision/Ideation340
14.1 14.2	Vision/Ideation
<b>14.1</b> <b>14.2</b> 14.2.1	Vision/Ideation
<ul> <li>14.1</li> <li>14.2</li> <li>14.2.1</li> <li>14.2.2</li> </ul>	Vision/Ideation       340         Guiding principles       341         Blue and Green Infrastructure       341         Heritage & Tourism       355
<ul> <li>14.1</li> <li>14.2</li> <li>14.2.1</li> <li>14.2.2</li> <li>14.2.3</li> </ul>	Vision/Ideation340Guiding principles341Blue and Green Infrastructure341Heritage & Tourism355Economic Planning365
<ul> <li>14.1</li> <li>14.2.1</li> <li>14.2.2</li> <li>14.2.3</li> <li>14.2.4</li> </ul>	Vision/Ideation340Guiding principles341Blue and Green Infrastructure341Heritage & Tourism355Economic Planning365Mobility Plan370
<ul> <li>14.1</li> <li>14.2.1</li> <li>14.2.2</li> <li>14.2.3</li> <li>14.2.4</li> <li>14.2.5</li> </ul>	Vision/Ideation340Guiding principles341Blue and Green Infrastructure341Heritage & Tourism355Economic Planning365Mobility Plan370Physical Infrastructure386
<ul> <li>14.1</li> <li>14.2.1</li> <li>14.2.2</li> <li>14.2.3</li> <li>14.2.5</li> <li>14.2.6</li> </ul>	Vision/Ideation340Guiding principles341Blue and Green Infrastructure341Heritage & Tourism355Economic Planning365Mobility Plan370Physical Infrastructure386Social Infrastructure391
<ul> <li>14.1</li> <li>14.2.1</li> <li>14.2.2</li> <li>14.2.3</li> <li>14.2.5</li> <li>14.2.6</li> <li>14.2.7</li> </ul>	Vision/Ideation340Guiding principles341Blue and Green Infrastructure341Heritage & Tourism355Economic Planning365Mobility Plan370Physical Infrastructure386Social Infrastructure391Housing374
<ul> <li>14.1</li> <li>14.2.1</li> <li>14.2.2</li> <li>14.2.3</li> <li>14.2.5</li> <li>14.2.6</li> <li>14.2.7</li> <li>14.2.8</li> </ul>	Vision/Ideation340Guiding principles341Blue and Green Infrastructure341Heritage & Tourism355Economic Planning365Mobility Plan370Physical Infrastructure386Social Infrastructure391Housing394Summary of Proposals396

14.3.3	Proposed land use of LPA excluding Corporation 2041
14.3.4	Proposed Landuse Total LPA
14.3.5	Land Use Zone Classification410
14.4	Land use Recommendations412
15.	PHASING & IMPLEMENTATION
15.1	Proposal Phasing416
15.2	Costing Components416
15.3	Proposals – Phasing & Block Costing417
15.3.1	Environment
15.3.2	Heritage & Tourism
15.3.3	Economy
15.3.4	Mobility
15.3.5	Physical Infrastructure
15.3.6	Social Infrastructure
15.4	Implementation Mechanisms423
	Annexures

References

### **LIST OF FIGURES**

Figure 1-1 Stake holder Meeting
Figure 2-1Time Line
Figure 2-2 (100AD) Kallanai Dam built by King Karikalan
Figure 2-3 Rockfort Temple
Figure 2-4 Srirangam Temple
Figure 2-5 'Mosque of Nuthur, Trichinopoly' from Illustrated London News (c1875)
Figure 2-6 Rani Mangammal Palace is now the Tiruchirappalli Government Museum 32
Figure 2-7 Map of the encampments of the French and British army near Trichinopoly,
1753-4. Second Carnatic War (1749-54)
Figure 2-8 Samayapuram in Kannur TPFigure 2-9 BHEL in Koothappar TP40
Figure 3-1 Sex Ratio (Census 2011)61
Figure 3-2 SC & ST Population
Figure 3-3 Population Projection – Tiruchirappalli Corporation
Figure 3-4 Population Projection – Thuvakudi Municipality
Figure 3-5 Population Projection – Lalgudi Municipality
Figure 3-6 Population Projection – Town Panchayat
Figure 3-7 Population Projection – Rest of LPA
Figure 4-1 Tiruchirappalli Temperature
Figure 4-2 Tiruchirappalli Average Temperature75
Figure 4-3 Tiruchirappalli Average Rainfall
Figure 5-1 Workforce Participation – Male and Female (Census 2011)

Figure 5-2 Worker's Distribution (Census 2011)	85
Figure 5-3 GDDP sectoral composition	
Figure 6-1 International tourist Trend of Trichy	
Figure 6-2 National tourist Trend of Trichy	107
Figure 6-3 Rock fort Temple	
Figure 6-4 Srirangam Ranganathaswamy Temple	110
Figure 6-5 Jambukeswara Temple, Thiruvanaikkaval	111
Figure 6-6 Lady of Lourdes Church, Main Guard Gate	112
Figure 6-7 St.Mary's Cathedral Church, Melapudur	112
Figure 6-8 Nadirshah Dargha	113
Figure 6-9 Aadi perukku festival celebrated at Amma Mandapam	116
Figure 6-10 Akkaraipatti Sai Baba Temple	118
Figure 6-11 Kudavarai Kovil	119
Figure 6-12 Shivan Temple, Azhagiyamanavalam	120
Figure 6-13 Agatheeswara Temple, Perungudi	121
Figure 6-14 Erumbeeswarar Temple, Tiruverumbur	123
Figure 6-15 Mukkombu (upper anaicut)	124
Figure 6-16 Butterfly Park	125
Figure 6-17 Anna Science Planetarium	125
Figure 6-18 Government Museum	126
Figure 6-19 Festival Visitors per Day	
Figure 6-20 Percentage of people can accommodate in hotel per day	
Figure 6-21 Hotel room capacity distribution – Tiruchirappalli Corporation	
Figure 7-1 Passenger foot fall with respect to Location in the LPA	139
Figure 7-2 Right of Way distribution of roads	149
Figure 7-3 Graph of vehicular count	149

Figure 7-4 Direction of cities and their freight movement factors	150
Figure 7-5 Modal split of vehicles passing through Samayapuram Toll gate	151
Figure 7-6 Air passenger flow annual figures.	151
Figure 7-7 International Cargo Movement (Metric Tonnes)	152
Figure 7-8 Accidental trends in the city	162
Figure 8-1 Composition of Solid waste in Tiruchirappalli Corporation	177
Figure 10-1 Existing Housing Conditions	217
Figure 10-2 Ownership status	218
Figure 10-3 Percentage of households with household sizes	220
Figure 10-4 Vannarapettai and Nagamangalam MGR nagar	221
Figure 11-1 Densely Populated and Encroachment	250
Figure 11-2 Densely Populated and Encroachment	250
Figure 11-3 Illegal Occupancy/ Encroachments	251
Figure 11-4Absence Of Access Between The Banks	251
Figure 11-5 Lack Of Designated Public Space	251
Figure 11-6 Lack Of Designated Public Space	252
Figure 11-7 Improper Sewage And Solid Waste Management	252
Figure 11-8 Improper Sewage And Solid Waste Management	252
Figure 11-9 Butterfly park Aerial view	266
Figure 11-10 Percentage of Pollution Category	285
Figure 12-1 Existing Landuse of LPA 2021 (Excluding Corporation)	306
Figure 12-2 Existing Landuse of Corporation 2021	306
Figure 12-3 - LULC percentage 2015-16 – District	321
Figure 13-1 Pie-chart showing Pollution Category Percentage	336
Figure 14-1: Reference Images of Riparian buffer, walking trails and interactive public	
spaces for the proposed riverfront development	342

Figure 14-2: Present condition of Uyyakondan canal
Figure 14-3: Reference Images for the Proposed interactive bridges along Uyyakondan
canal
Figure 14-4- Existing condition of the Odathurai Riverfront
Figure 14-5 - Proposed Promenade Design with walking tracks & bathing Ghat
Figure 14-6: Existing condition of waterbodies [Top] and reference images for the
proposed boating facilities & upgradation of water bodies [Bottom]
Figure 14-7 Image of the site prior [Left] and after clearance of weeds & Shrubs [Right]348
Figure 14-8 - Inception of Tree Plantation at Suriyoor
Figure 14-9: Reference images for the proposed Bioswales & Rain Gardens
Figure 14-10 - Srirangam Eagle's view [Left] and Prakaram Entries [Right]
Figure 14-11- Processions in Prakara Veethis during Utsavams
Figure 14-12 Elevation of existing buildings & suggested facade treatments conserving
Srirangam's heritage elements
Srirangam's heritage elements
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]
Figure 14-13 - Street view before [Top] and after facade control [Bottom]

igure 14-23: Reference image of OAT - Proposed in Kottapattu	394
igure 14-24 Existing Landuse 2021 Percentage of Corporation	402
igure 14-25 Proposed Landuse 2041 Percentage of Corporation	403
igure 14-26 Existing Landuse 2021 Percentage of Rest of LPA	405
igure 14-27 Proposed Landuse 2041 Percentage of Rest of LPA	406
igure 14-28 Existing Landuse 2021 Percentage of Total LPA	408
igure 14-29 Proposed Landuse 2041 Percentage of Total LPA	408

### LIST OF MAPS

Map 1-1 Tiruchirappalli Master Plan – Local Bodies	8
Map 2-1 Location and Regional setting	20
Map 2-2 Sphere of control & Sphere of influence of Tiruchirappalli LP	21
Map 2-3 LPA boundary	22
Map 2-4 Administrative Boundary - Taluks	23
Map 2-5 Administrative Boundary - Blocks	24
Map 2-6 Settlement Map - 1916	35
Map 2-7 Settlement Map - 2011	
Map 2-8 Settlement Map – 2021	
Map 2-9 Tiruchirappalli City Map with Zone & Ward boundaries	43
Map 2-10 Tiruchirappalli City Map with Zone & Ward boundaries	44
Map 3-1 Population – Tiruchirappalli Corporation	
Map 3-2 Population – Tiruchirappalli LPA	50
Map 3-3 Population Density – Tiruchirappalli Corporation	
Map 3-4 Population Density – Tiruchirappalli LPA	60
Map 4-1 LPA Digital Elevation Model	73
Map 4-2 LPA Geology Map	78
Map 4-3 LPA Geomorphology Map	80
Map 4-4 LPA Drainage Map	81
Map 5-1 Workforce Participation Rate	86
Map 5-2 Main Workers percentage	87
Map 5-3 Marginal Workers Percentage	
Map 5-4 Primary Agricultural Commodities	90

Map 5-5 Secondary Agricultural Commodities	91
Map 5-6 Tertiary Agricultural Commodities	92
Map 5-7 Agricultural Infrastructure	93
Map 5-8 Manufacturing Industries Density	98
Map 5-9 Service Industries Density	99
Map 5-10 Daily Markets Proximity	102
Map 5-11 Trade and Commerce	103
Map 6-1 Place of Heritage & Cultural significance	127
Map 6-2 Major Tourism locations	128
Map 6-3 ASI Monuments	129
Map 7-1 Building height restrictions by radius	144
Map 7-2 Existing transportation network and important hubs	145
Map 7-3 Existing Roads Hierarchy	146
Map 7-4 Right of way classification	148
Map 7-5 Outer Cordon survey points location	156
Map 7-6 Junction points locations	158
Map 7-7 Screen line points survey locations	161
Map 8-1CWSS – Tiruchirappalli LPA	166
Map 8-2 Water Sources and Storage	
Map 8-2 Water Sources and Storage Map 8-3 STPs and Sewage Pumping Stations	
	173
Map 8-3 STPs and Sewage Pumping Stations	173
Map 8-3 STPs and Sewage Pumping Stations Map 8-4 Solid waste Management – MCC & RRC	173 176 179
Map 8-3 STPs and Sewage Pumping Stations Map 8-4 Solid waste Management – MCC & RRC Map 8-5 Drainage	173 176 179 181
Map 8-3 STPs and Sewage Pumping Stations Map 8-4 Solid waste Management – MCC & RRC Map 8-5 Drainage Map 8-6 Electrical Infrastructure	173 176 179 181 185

Map 9-4 Fire station and Police station with boundary192	
Map 9-5 Primary School Analysis	
Map 9-6 High School Analysis	
Map 9-7 Higher Secondary Analysis	
Map 10-1 Slum Locations, Rehabilitation Camps And Housing Boards	
Map 10-2 Srirangam Zone - Number of slums with households	1
Map 11-1 LPA Geomorphology Map243	1
Map 11-2 Digital Elevation Map245	1
Map 11-3 LPA Drainage Map246	1
Map 11-4 Existing Water Network	
Map 11-5 Major Drains in Tiruchirappalli LPA250	ļ
Map 11-6 LPA Aquifer Type Map255	1
Map 11-7 LPA Groundwater Availability256	1
Map 11-8 Water yield zone along with recharge well	
Map 11-8 Water yield zone along with recharge well	
Map 11-9 LPA Recharge Zone258	)
Map 11-9 LPA Recharge Zone	)
Map 11-9 LPA Recharge Zone	
Map 11-9 LPA Recharge Zone	-
Map 11-9 LPA Recharge Zone258Map 11-10 LPA Pre Monsoon Water Level260Map 11-11 LPA Post Monsoon Water level261Map 11-12 LPA Ground Water Quality264Map 11-13 Trichy Kaveri Kollidam basin; Source: IWAI268	-
Map 11-9 LPA Recharge Zone258Map 11-10 LPA Pre Monsoon Water Level260Map 11-11 LPA Post Monsoon Water level261Map 11-12 LPA Ground Water Quality264Map 11-13 Trichy Kaveri Kollidam basin; Source: IWAI268Map 11-14Vulnerability Assessment Map276	-
Map 11-9 LPA Recharge Zone258Map 11-10 LPA Pre Monsoon Water Level260Map 11-11 LPA Post Monsoon Water level261Map 11-12 LPA Ground Water Quality264Map 11-13 Trichy Kaveri Kollidam basin; Source: IWAI268Map 11-14Vulnerability Assessment Map276Map 11-15 Pollution Heat Map White Category Enterprises287	- - -
Map 11-9 LPA Recharge Zone258Map 11-10 LPA Pre Monsoon Water Level260Map 11-11 LPA Post Monsoon Water level261Map 11-12 LPA Ground Water Quality264Map 11-13 Trichy Kaveri Kollidam basin; Source: IWAI268Map 11-14Vulnerability Assessment Map276Map 11-15 Pollution Heat Map White Category Enterprises287Map 11-16 Pollution Heat Map Green Catergory Enterprises288	; ; ;
Map 11-9 LPA Recharge Zone258Map 11-10 LPA Pre Monsoon Water Level260Map 11-11 LPA Post Monsoon Water level261Map 11-12 LPA Ground Water Quality264Map 11-13 Trichy Kaveri Kollidam basin; Source: IWAI268Map 11-14Vulnerability Assessment Map276Map 11-15 Pollution Heat Map White Category Enterprises287Map 11-16 Pollution Heat Map Green Catergory Enterprises288Map 11-17 Pollution Heat Map Orage Catergory Enterprises289	

Map 12-2 Existing Land use (2021) of Corporation Boundary of Previous Masterplan295
Map 12-3 Proposed Land use (2011) of LPA (Excluding Corporation) of Previous
Masterplan
Map 12-4 Existing Land use (2021) of LPA (Excluding Corporation) of Previous Masterplan
Map 12-5 Proposed landuse Map2021 Navalpattu (NTDA)
Map 12-6 Existing landuse Mp2021 Navalpattu (NTDA)
Map 12-7 Administrative Boundaries of the Local bodies forming the LPA 2041
Map 12-8 Existing Landuse of LPA 2021 (Excluding Corporation)
Map 12-9 Existing Landuse of Corporation 2021
Map 12-10 Existing Landuse of Thuvakudi Municipality
Map 12-11 Existing Landuse of Lalgudi Municipality
Map 12-12 Existing Landuse of Koothappar Town Panchayat
Map 12-13 Existing Landuse of Manachanallur Town Panchayat
Map 12-14 Existing Landuse of S.Kannanur Town Panchayat Map 12-15 Existing Landuse
of Puvalur Town Panchayat
Map 12-16 LULC 2005-06
Map 12-17 LULC 2011-12
Map 12-18 LULC 2015-16
Map 12-19 Land Suitability Analysis
Map 12-21Residential Building approval decadal trend 2011-2021
Map 12-22 Coomercial Building approval decadal trend 2011-2021
Map 12-23 Institutional Building approval decadal trend 2011-2021
Map 12-24 Industrial approval decadal trend 2011-2021
Map 14-1: Uyyakondan stream and proposed intervention location
Map 14-2 - Map showing proposed site for development along Odathurai Riverfront344

Map 14-3: Proposed Urban forestry along Uyyakondan - Koraiyaaru BG Corridor3	51
Map 14-4- Identified Inundation Hotspots	53
Map 14-5 Map depicting the proposed Blue-Green Developments in the LPA	55
Map 14-6- Map depicting surveyed confirming uses and precincts around the Saptha	
Prakarams and Tourist Trail	58
Map 14-7 Proposed SNZ at Srirangam and Heritage sites' location	59
Map 14-8 - Srirangam SNZ with proposed NMT Trails	61
Map 14-9: Proposed Rope car facility	62
Map 14-10: Proposed zip line facility	63
Map 14-11- Location of Quarries & Major Waterbodies	64
Map 14-12: Proposed Micro clusters and nodal growth centres	68
Map 14-13 Map showing the Proposed Ring Road links & flyovers	71
Map 14-14- Map depicting proposed Navalpattu SEZ link road [Left] & Palur to Perur Link	
road [Right]	72
Map 14-15 - Micro plan showing proposed Grid of Roads	75
Map 14-16: Map depicting proposed Grid of Roads	75
Map 14-17 Map showing proposed high demand mass transit corridors	78
Map 14-18 - Proposed Off Street Parking Locations	80
Map 14-19- Proposed corridors for high density development	85
Map 14-20 Physical Infrastructure proposal	90
Map 14-21 Proposed Landuse of Corporation 204140	04
Map 14-22 Proposed Landuse of LPA (Excluding Corporation) 2041	07
Map 14-23 Proposed Landuse of LPA 2041	09

### LIST OF TABLES

Table 1-1 Trichy Table : The boundary of the composite LPA with the corporation, villages
and the NTDA Area approved by the DTCP as mentioned in the G.O.(Ms).No.88 – 10(4) –
Housing and Urban Development Dated 30.06.2021 (Annexure J)7
Table 1-2 Tiruchirappalli LPA List of Information
Table 1-3 Data Classification for land resource inventories
Table 2-1 Major Road Network25
Table 2-2 New & Old ward Correlation of corporation census wards
Table 2-3 Administartive boundaries of LPA
Table 3-1 Exisitng Population (Census 2001 and 2011)47
Table 3-2 Area and Population of Tiruchirappalli LPA (Census)
Table 3-3 Growth Rate (Census)
Table 3-4 Type of Census Towns
Table 3-5 Villages Growth Rate Ranking – High Growth Rate (Census 2011)
Table 3-6 Villages Growth Rate Ranking – Medium Growth Rate (Census 2011)56
Table 3-7 Villages Growth Rate Ranking – Low Growth Rate (Census 2011)
Table 3-8 Villages Growth Rate Ranking – Negative Growth Rate (Census 2011)
Table 3-9 Urban Population Density – Census 2011
Table 3-10 Literacy Rate (Census 2011)
Table 3-11 Population Projection – Tiruchirappalli Corporation       65
Table 3-12 Population Projection – Thuvakkudi Municipality
Table 3-13 Population Projection – Lalgudi Municipality
Table 3-14 Population Projection – Town Panchayat       68
Table 3-15 Population Projection – Rest of LPA

Table 3-16 Population Projection of Tiruchirappalli LPA	70
Table 5-1 Distribution of Workface 2011	83
Table 5-2 SIDCO Industrial Estates in Tiruchirappalli District	94
Table 5-3 Investment in MSMEs in Tiruchirappalli District	95
Table 5-4 Average Investment and Employment in MSMEs	95
Table 5-5 Distribution of Manufacturing MSMEs with NIC 2- Digit Code	97
Table 5-6 Principal Commodities Exported from Air Cargo Tiruchirappalli	100
Table 5-7 Destinations of Exports from Air Cargo TiruchirappallI	100
Table 5-8 Employment Projection of 2041	104
Table 6-1 Accomodation Details	134
Table 7-1 Passengers Flow Annually - Passenger Footfall (Inward & Outward)	138
Table 7-2 Flight connectivity from Trichy International airport	142
Table 7-3 Height restrictions for building	143
Table 7-4 Recommended design service volume	153
Table 7-5 V/C in correlation to Level of Service	154
Table 7-6 OC points survey	157
Table 7-7 Junctions Point survey	159
Table 7-8 Screen line locations survey	160
Table 8-1 Old Sources of water	168
Table 8-2 Existing demand and supply	169
Table 8-3 Projected water requirement	170
Table 8-4 Sanitation	171
Table 8-5 Projected Requirement of Sewage Treatment Facilities	172
Table 8-6 Projected requirement of Sewage	174
Table 8-7 Existing Solid Waste Generation- Tiruchirappalli LPA	175
Table 8-8 Projected solid waste generation 2041 – Tiruchirappalli LPA	178

Table 8-9 Substation requirement 2041 – Tiruchirappalli LPA	
Table 9-1 Health Facilities along Tiruchirappalli - 2021	
Table 9-2 School facilities along Tiruchirappalli - 2021	
Table 9-3 College facilities along Tiruchirappalli – 2021	
Table 9-4 Other civic amenities along Tiruchirappalli – 2021	
Table 9-5 Park Details	194
Table 9-6 List of parks around Tiruchirappalli	
Table 9-7 Play ground and Sports field data	196
Table 9-8 Open Spaces, OSR spaces distribution along LPA boundary	197
Table 9-9 Gap Analysis of Hospital Facilities 2021	198
Table 9-10 Gap Analysis of Hospital Facilities 2031	199
Table 9-11 Gap Analysis of Hospital Facilities 2041	
Table 9-12 Gap Analysis of Schools 2021	201
Table 9-13 Gap Analysis of Schools 2031	
Table 9-14 Gap Analysis of Schools 2031	
Table 9-15 Gap Analysis of Colleges 2021	
Table 9-16 Gap Analysis of Colleges 2031	
Table 9-17 Gap Analysis of Colleges 2041	
Table 9-18 Gap Analysis of Colleges 2041	210
Table 9-19 Gap Analysis of Fire station and Police station 2031	211
Table 9-20 Gap Analysis of Fire station and Police station 2041	213
Table 9-21 2021 Open spaces and their areas around Trichy LPA	213
Table 9-22 Gap Analysis of Social Infrastructure Amenities	214
Table 10-1 Number of households in the district	216
Table 10-2 Existing housing conditions	217
Table 10-3 Ownership status	218

Table 10-4 Average household size (Census 2011)
Table 10-5 Percentage of households with household size
Table 10-6 Number of slums with households
Table 10-7 Ariyamangalam Zone - Number of slums with households
Table 10-8 Ponamalai Zone - Number of slums with households
Table 10-9 Abishekapuram Zone - Number of slums with households
Table 10-10 Classification of Tiruchirappalli LPA for housing projection
Table 10-11 Population & Household projection 2041239
Table 11-1 Aquifer Parameters253
Table 11-2 Stage of Groundwater Development of Trichy based on Firka LPA - 2018 Firka
Wise Summary (in ha.m)
Table 11-3 LPA Existing Dam and Anicut; Source: IWAI
Table 11-4 LPA Vulnerable Points
Table 11-5 Safe Shelters   283
Table 11-5 Safe Shelters283Table 11-6 Enterprises list based on Pollution Control Board Category284
Table 11-6 Enterprises list based on Pollution Control Board Category
Table 11-6 Enterprises list based on Pollution Control Board Category
Table 11-6 Enterprises list based on Pollution Control Board Category
Table 11-6 Enterprises list based on Pollution Control Board Category
Table 11-6 Enterprises list based on Pollution Control Board Category
Table 11-6 Enterprises list based on Pollution Control Board Category284Table 11-7 Category of Enterprises and their contribution in percentage286Table 12-1Existing Landuse 2003 and Proposed Landuse 2011 (Approved in 2009)293Table 12-2 Proposed Landuse 2011&Existing Landuse 2021Comparison296Table 12-3 Landuse Comparison300Table 12-4 Stages of proposal and Implementation of previous Master plan303
Table 11-6 Enterprises list based on Pollution Control Board Category284Table 11-7 Category of Enterprises and their contribution in percentage286Table 12-1Existing Landuse 2003 and Proposed Landuse 2011 (Approved in 2009)293Table 12-2 Proposed Landuse 2011&Existing Landuse 2021Comparison296Table 12-3 Landuse Comparison300Table 12-4 Stages of proposal and Implementation of previous Master plan303Table 12-5 Existing LU (2021) of Rest of LPA excluding Corporation & the Corporation305
Table 11-6 Enterprises list based on Pollution Control Board Category
Table 11-6 Enterprises list based on Pollution Control Board Category284Table 11-7 Category of Enterprises and their contribution in percentage286Table 12-1Existing Landuse 2003 and Proposed Landuse 2011 (Approved in 2009)293Table 12-2 Proposed Landuse 2011&Existing Landuse 2021Comparison296Table 12-3 Landuse Comparison300Table 12-4 Stages of proposal and Implementation of previous Master plan303Table 12-5 Existing LU (2021) of Rest of LPA excluding Corporation & the Corporation305Table 12-6 Existing LU (2021) of Thuvakudi Municipality315Table 12-7 Existing LU (2021) of Lalgudi Municipality316

Table 12-11 Table: Existing LU (2021) of Puvaliur Town Panchayat	8
Table 12-12 LULC area split up 2015-16 - District	21
Table 14-1 Location & Extent of Quarries	53
Table 14-2 Proposed Links & Road Networks	2
Table 14-3 Proposed Road Widening	΄3
Table 114-4-4: Grid of Roads - Proposed Hierarchy	6
Table 14-5 City wise Physical and financial progress, 2023	'5
Table 14-6 Summary of Proposals	9
Table 14-7 Existing Landuse 2021 and Proposed Landuse 2041 of Corporation	)2
Table 14-8 Existing Landuse 2021 and Proposed Landuse 2041 of LPA (excluding	
corporation)40	)5
Table 14-9 Existing Landuse 2021 and Proposed Landuse 2041 of Trichy LPA40	)6
Table 15-1 Environment proposals - Phasing & Block Costing	8
Table 15-2 Tourism Proposals – Phasing41	9
Table 15-3 Economy Proposals – Phasing	<u>2</u> 0
Table 15-4 Mobility Proposals - Phasing & Block costing	21
Table 15-5 Physical Infrastructure Proposals - Phasing & Block costing	22
Table 15-6 Social Infrastructure       Proposals - Phasing & Block costing	23

### LIST OF ABBREVIATIONS

- AICTE All India Council for Technical Education
- BGWSG Bhuvan Geo Portal & Web Services Group
- BHEL Bharat Heavy Electricals Limited
- CAGR Compound Annual Growth Rate
- CBD Central Business District
- CGWB Central Ground Water Board
- CHIRA Culture Heritage Industries River restoration and Agriculture
- CLPA Combined Local Planning Area
- CPCD Central Pollution Control Board
- CPCL Chennai Petroleum Corporation Limited
- CPHEEO Central Public Health and Environmental Engineering Organization
- **CPSE Central Public Sector Enterprise**
- Cr/Ha Crore per Hectare
- Cu.m Cubic Metre
- CWSS Combined Water Supply Scheme
- DEM Digital Elevation Model
- DEWATS Decentralized Waste Water Treatment Systems
- DGPS- Differential Global Positioning System
- DST Department Of Science And Technology
- DTCP Directorate of Town and Country Planning
- DTM Digital Terrain model
- ECS Equivalent Car Space
- ELCOT Electronics Corporation of Tamil Nadu
- ESA Ecologically Sensitive Area
- ESIS Employees' State Insurance Scheme
- FAR Floor Area Ratio
- FSI Floor Space Index
- FSI Floor Space Index
- FY Fiscal Year
- GCPs Ground Control Points
- GDP Gross Domestic Product

- GH Government Hospital
- GIS Geographic Information System
- GLV Guide Line Values
- GVA Gross value added
- HA Hectare
- HSC Health Sub Centre
- HTL High Tide Line
- ICAR Indian Council for Agricultural Research
- IIIT Indian Institute of Information Technology
- IRC Indian Road Congress
- ISWM Integrated Solid Waste Management
- ITI Industrial Training Institute
- JLG Joint Liability Group
- JNNURM Jawaharlal Nehru National Urban Renewal Mission
- KV Kilovolt
- LOS Level of Service
- LPA Local Planning Area
- LPCD Liters Per Capita per Day
- Lpm Litres Per Minute
- LST Land Surface Temperature
- LULC Land Use Land Cover
- M Metres
- M Municipality
- MCC Municipal Corporation
- MDR Major District Road
- MLD -Million Liters per Day
- MOEF Ministry of Environment and Forest
- MP Master planning
- MSME Micro, Small and Medium Enterprises
- MSW Municipal Solid Waste
- NBC National Building Code
- NDVI Normalized Difference Vegetation Index
- NDZ No Development Zone
- NEERI National Environmental Engineering Research Institute

- NGO Non-Governmental Organization
- NH National Highway
- NIC National Informatics Centre
- NMT Non-Motorized Transport
- NRCB National Research Centre for Banana
- NRSC National Remote Sensing Agency
- NSSO National Sample Survey Office
- NTDA New Town Development Authorities
- OAT Open Air Theatre
- ODR Other District Roads
- OHT Over Head Tank
- PCU Passenger Car Unit
- PCUs Passenger Car Units
- PHC Primary Health Centre
- PMAY Pradhan Mantri Awas Yojana
- PPH Persons Per Hectare
- PVC Polyvinyl Chloride
- PWD Public works department
- R&D Research and Development
- RADPFI Rural Area Development Plan Formulation and Implementation
- RCC Reinforced Cement Concrete
- RO Reverse Osmosis
- RoW Right of Way
- RTE Right to Education
- SC Scheduled Caste
- SETC State Express Transport Corporation
- SEZ Special Economic Zone
- SH State Highway
- SIDCO Small Industrial Development Corporation
- SIPCOT State Industries Promotion Corporation of Tamil Nadu Ltd.
- SNZ Srirangam Special Notified Zone
- SOI Survey of India
- ST Scheduled Tribes
- STEM Science, Technology, Engineering and Mathematics

STP - Sewage Treatment Plant

SuDS - Sustainable Drainage Systems

TANSIDCO - Tamil Nadu Small Industries Development Corporation Limited

TBCT - Tropical Butterfly Conservation Trichy

TLPA - Trichy Local Planning Area

TNCDBR - Tamil Nadu Combined Development Building Rules

TNSTC - Tamil Nadu State Transport Corporation

TNUIFSL - Tamil Nadu Urban Infrastructure Financial Services Limited

TP - Town Panchayat

TPD - Tonnes Per Day

TPD - Tonnes Per Day

TREC-STEP – Tiruchirappalli Regional Engineering College-Science and Technology Entrepreneurs Park

TRZ - Tiruchirappalli International Airport

TTDC - Tamil Nadu Tourism Development Corporation Limited

TWAD -Tamil Nadu Water Supply and Drainage Board

UGSS - Under Ground Sewerage Schemes

ULD - Urban Local Body

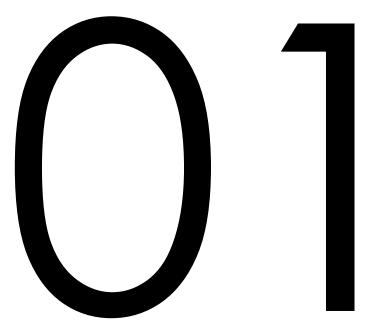
UNESCO- The United Nations Educational, Scientific and Cultural Organization

UPHC - Urban Primary Health Centre

URDPFI – Urban and Regional Development Plans Formulation and Implementation

WHO - World Health Organization

WRI - Welding Research Institute



# INTRODUCTION

## 1. INTRODUCTION

## 1.1 Purpose of Master Plan

The Tamil Nadu Town and Country Planning Act, 1971, an Act to provide for planning the development and use of rural and urban land in the State of Tamil Nadu, states the Master Plan may provide for any or all of the following matters:

- The manner in which the land in the planning area shall be used;
- The allotment or reservation of land for residential, commercial, industrial and agricultural purposes and for parks, play-fields and open spaces;
- The allotment and reservation of land for public buildings, institutions and for civic amenities;
- The making of provision for national highways, arterial roads, ring roads, major streets, lines of communication including railways, airports and canals;
- The traffic and transportation pattern and traffic circulation pattern;
- The major road and street improvements;
- The areas reserved for future development, expansion and for new housing;
- The provision for the improvement of areas of bad layout or obsolete development and slum areas and for relocation of population;
- The amenities, services and utilities;
- The provision for detailed development of specific areas for housing, shopping, industries and civic amenities and educational and cultural facilities;
- The control of architectural features, elevation and frontage of buildings and structures;
- The provision for regulating the zone, the location, height, number of storeys and size of buildings and other structures, the size of the yards and other open spaces and the use of buildings, structures and land;

• The stages by which the Master Plan shall be carried out; and such other matters as may be prescribed.

The URDPFI 2015 guideline describes Master Plan (Development Plan) in the following manner:

- The objective of the development plan is to provide further necessary details and intended actions in the form of strategies and physical proposals for various policies given in the perspective plan and regional plan depending upon the economic and social needs and aspiration of the people, available resources and priorities.
- Proposals of a development plan should be definite, supported by an implementation strategy and evaluation criteria.
- The time frames of these plans are generally valid over a period of 20-30 years and should be planned in phases of 5 years, for periodic reviews.

In addition to these, the Master Plan is also meant to identify areas required to be preserved, conserved and development of areas of ecological value, natural scenery and landscape together with preservation of features, structures or places of historical, architectural and scientific interest and environmental value.

## **1.2 Need for the Master Plan**

Trichy is one of the major Tier II cities of Tamil Nadu which is the third most urbanised state in the country of India, with 48.45 per cent of its population living in urban areas as per Census 2011. Trichy is the fourth largest city as well as the fourth largest urban agglomeration of the state with a population of 9,15, 569 (Census 2011) and has been experiencing rapid growth at the rate of 16.50% (2011-2021) after Chennai, Coimbatore and Hosur.

Trichy being approximately the geographical centre of Tamil Nadu had made it a major node of mobility across the state and for the very reason was the first Headquarters of the South Indian Railway Company in 1874 during the British rule in India. It was internationally known for its unique variety of cheroot, known as the Trichinopoly Cigar as well as unique vegetable tanned leather produced in its tanneries to cater to the British Army. The Cauvery Delta begins 16 kilometres (9.9 mi) West of the city where the Kaveri river splits into two, forming the island of Srirangam which is world famous for its Sri Ranganathaswamy temple which is one of the 50 sites of India in the UNESCO tentative list since 2014. With its recorded history dating back to 3rd Century, being a central node of mobility and mechanical engineering during the British Raj and a major centre for heavy industries since 1960s along with the existence of large acreage of water bodies in the form of rivers, streams and lakes makes it important to guide the development of this growing urban settlement to responsibly co-exist with the natural and cultural fabric.

The size and complexity of urban areas in India have been growing in the past decade at a rapid pace and are deeming them unmanageable. The need for a mechanism or a road map to plan inclusively, to regulate and control the growth and development of urban areas has become all the more necessary now, due to the impact of development on the environment and its cumulative impact on the earth. The Town and Country Planning Act, 1971, provides for preparation and implementation of Master Plans for urban areas, to ameliorate the situation in urban areas and make them a place for safe, healthy and sustainable development.

## 1.3 Master Plan for Tiruchirappalli LPA

In exercising of the power conferred under section 10 (I) of the Tamil Nadu Town and Country Planning Act 1971, the Government had published the intention of declaring Tiruchirappalli Local Planning Area in G.O. Ms. No 936 RD & LA dated 5.04.1974 (Annexure A) and the notification had been confirmed under section 10 (4) in G.O.Ms.No 1669 RD & LA dated 16.07.1974 (Annexure B) Taking into consideration of the urban development, the Government in G.O.Ms.No. 1414 Housing and Urban Development Dated 25.10.1980 (Annexure C) had published the intention to include additional area within Tiruchirappalli Local Planning Area. At the same time, the Government had decided to declare Navalpattu area as New Town Development Area and hence in G.O.Ms.No. 1415 Housing and Urban Development Area dated 25.10.1980 (Annexure D), the Government had published the intention to exclude a few areas from the already notified Tiruchirappalli Local Planning Areas. In exercising power conferred under the section 10 (I) (c) of the Act, in G.O.Ms.No.259 Housing and Urban Development Department dated 15.04.1981 (Annexure E) the Government had declared a few areas to be a site for the New Town Development Area which had been confirmed in G.O.Ms.No 1044 Housing and Urban Development Department dated 24.11.1982 (Annexure F).

## 1.4 GIS based Master Plan

According to the G.O. (Ms). No.23 dated 29.01.2013, Tiruchirapalli falls under the area of 6950 sqkm which was already covered by Planning Authorities but needed expansion due to rapid development. A need was identified for fresh field surveys for the preparation of existing land use map and subsequent master plan as case may be, using modern techniques like GIS, Remote Sensing and using external resources in order to reduce the time consumed. The task was entrusted to Bharathidasan University as mentioned in the Annexure L. An addition of 315.27 sq.km to the existing extent of planning area of 489.28 sq.km (including Tiruchy LPA & Navalpattu NTDA) was proposed, making the total area to be covered under the project to 804.55 sq.km.

Considering the list of villages notified under section 10 (1) (b) of the Act in G.O.(Ms).240 Housing and Urban Development Dated 24.09.2013 (Annexure I) and certain spelling corrections and rescinding of existing NTDA and notifying it under the Tiruchirappalli Local Planning Area in G.O.(Ms).No.88 - 10(6) - Housing and Urban Development Dated 30.06.2021 (Annexure J) which are necessary to have a contiguous planning area, the list of local bodies which constitute "Tiruchirappalli Local Planning Area" is given as follows:

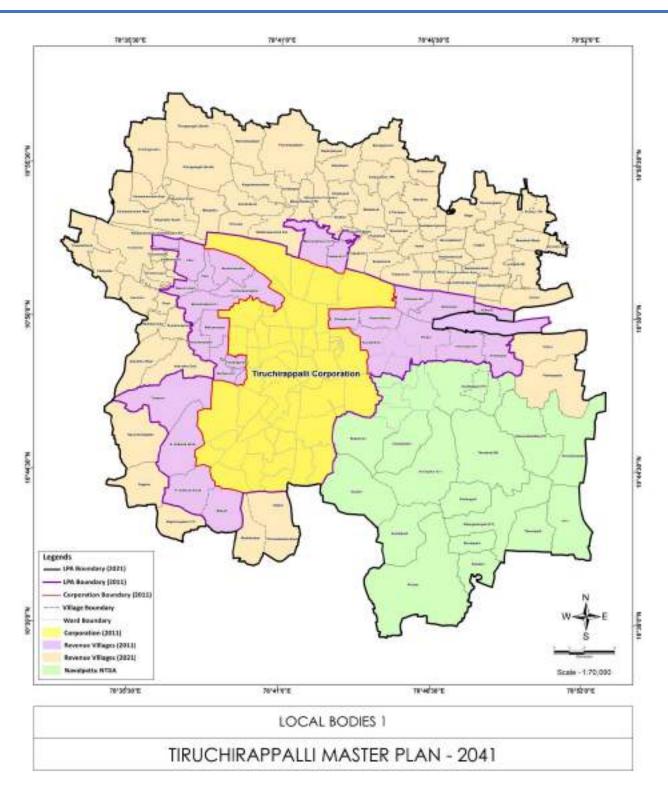
S. NO.	VILLAGE NAME		
	TIRUCHIRAPPALLI CORPORATION		
1	Tiruchirappalli Corporation Town Survey Wards Wards 'A' to 'Z' – 26 Nos Ward 'AA' to 'AW' – 23 Nos		
2	Pappakurichi		
3	Thiruverumbur		
4	Agaram		
5	Ellagudi		
6	Alathur		
7	Keelakalkandarkottai		
	MUNICIPALITY		
1	Thuvakudi Municipality		
2	Lalgudi (Formed by 3 villages)		
	Sirudaiyur		
	Abishekapuram Lalgudi		
	Mummudi Cholamangalam		
	TOWN PANCHAYATS		
	Thiruverumbur Taluk		
1	Koothappar Town Panchayat		
	1.Krishnasamudram (including, Semmankulam)		
	(including Semmankulam) 2. Koothappar		
	Lalgudi Taluk		
2	Puvalur Town Panchayat		
	1. Puvalur (West)		
	2. Puvalur (East)		
	Manachanallur Taluk		
3	Manachanallur Town Panchayat		
	1. Ulunthangudi		
	2. Manachanallur		
	3. Melaseedevimangalam		
4	S.Kannanoor Town Panchayat		
	1. S.Kannanoor (East)		
	2. S.Kannanoor (West)		

## MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

S.NO	VILLAGE NAME	S.NO	VILLAGE NAME	
	REVENUE VILLAGES		REVENUE VILLAGES	
	Srirangam Taluk	32	Mekkudi (Inaam)	
1	Thiruparaithurai	33	Olaiyur	
2	Kodiyalam	34	Thirumalaisamuthiram	
3	Anthanallur	35	Mudikandam	
4	Mekudi		Lalgudi Taluk	
5	Periyakarupoor	36	R.Valavanoor	
6	Thiruchendurai	37	Marudhur	
7	Kadiyakurichi	38	V.Thuraiyur	
8	Allur	39	Madagudi	
9	Palur	40	Keeramangalam	
10	Mutharasanallur	41	Thalagudi	
11	Panayapuram	42	Appadurai (including Therkuchatharam)	
12	Uthamaseri	43	Puthukudi	
13	Kilikkoodu	44	Sirumaruthoor	
14	Kambarasampettai	45	Keelaperungavur	
15	Maruthandakurichi	46	Nagar	
16	Perur	47	Thirumangalam	
17	Kulumani	48	Manakkal East	
18	Mullikarrupoor	49	Manakkal West	
19	Athavathur (West)	50	Aangarai	
20	Athavathur (East)	51	Nerujalakudi	
21	Kumaravayalur	52	Valadi	
22	Somarasampettai	53	Esanakorai	
23	Malliampathu	54	T.Valavanoor	
24	Solanganallur	55	Thirumanamedu (West)	
25	Nachikurichi	56	Thirumanamedu (East)	
26	Thayanoor	57	Pambaramsuthi	
27	Kallikudi (North)	58	Sevanthinathapuram	
28	Kallikudi (South)	59	Shesa samuthiram	
29	Navalur Kottapattu	60	Idaiyathumangalam	
30	Paganoor	61	Koohur	
31	Nagamangalam			

S.NO	VILLAGE NAME	S.NO	VILLAGE NAME
	REVENUE VILLAGES		REVENUE VILLAGES
	Thiruverambur Taluk		Manachanallur Taluk
62	Panayakurichi	84	Samayapuram
63	Keelamullagudi	85	Kalpalayam
64	Kuvalagudi	86	Rasampalayam
65	Vengur	87	Poonampalayam
66	Natarajapuram	88	Theerampalayam
67	Arasangudi	89	Thiruppanjeeli (North)
68	Kiliyur	90	Thiruppanjeeli (South)
69	Pathalapettai	91	cholanganallur
70	Kundoor	92	Kariyamanikam (West)
71	Keelakurichi	93	Kariyamanikam (East)
72	Choolamadevi	94	Killianallur (North)
73	Navalpattu	95	Killianallur (South)
74	Kumbakudi, Velayudankudi	96	Melpathu
75	Sooriyur	97	Thiruvasi
76	Kanthaloor	98	Kovathakudi
77	Elanthapatti	99	Alakiyamanavalam
78	Poolangudi	100	Mathavaperumal Koil
79	Valavanthankottai	101	Venkankudi
80	Thirunedunkulam	102	Koothur
81	Palanganankudi	103	Pitchandar Koil
82	Theneripatti		
83	Asoor		

Table 1-1 Trichy Table : The boundary of the composite LPA with the corporation, villages and the NTDA Area approved by the DTCP as mentioned in the G.O.(Ms).No.88 – 10(4) – Housing and Urban Development Dated 30.06.2021 (Annexure J)





## 1.5 Preparation of the Draft Master Plan 2021-2041

The Directorate of Town & Country Planning (DTCP), Government of Tamil Nadu (GoTN) had taken up the task of preparation of the GIS based Master Plan for Tiruchirappalli LPA along with other Cities in the State. The Supplementary Guidelines for "Scheme for Special Assistance to States for Capital Investment 2023-2024"- Part III (Urban Planning Reforms with 8 Reforms) (Annexure K) was received from the Ministry of Finance- Department of Expenditure- Government of India, dated 19.06.2023, with special focus on Reform 7: Strengthening natural ecosystems of urban areas through urban planning- Milestone (iii) Creation of Urban Forestry & Reform 8: Integrating essential components in Master Plans to be prepared by DTCP.

Based on the Reform 8, States needed to amend their Cities' Master plan/ development Plan through notifications and need to integrate the essential planning components of Transportation Network/ Mobility Plan, Blue and Green infrastructure, Economic Planning and Land use Plan. The DTCP, Trichy had appointed The Care School of Architecture, Tiruchirappalli as a Review committee to advice on the means to incorporate the said Reforms 7 & 8 in the Master Plan. CARE School of Architecture's Tiruchirappalli role was later changed to Consultant to make the necessary integrations in the Master Plan of Tiruchirapalli vide an Interim Order File No.246/ 2011/TD3 as shown in the Annexure M

## 1.6 Methodology

The following was the methodology followed for the preparation of the Master Plan of Tiruchirappalli. The methodology comprises preparing baseline information on population characteristics and its socio-economic attributes, revising, proposing land utilization details in order to cater to the requirement of the projected future population growth, density, migration and employment.

## 1.6.1 Exisitng Land use map

The Existing Land Use Map for Trichy LPA was prepared by the DTCP using high resolution satellite images acquired from National Remote Sensing Agency (NRSC). The village maps with survey numbers (from the Survey and Land Records department) were used for preparing the cadastral framework. Differential Global Positioning System (DGPS) surveys were carried out for collecting Ground Control Points (GCPs) for georeferencing of the scanned paper maps. The survey boundaries were digitized as polygon features in the GIS database, along with the name of the village and the survey number. High resolution satellite images were acquired from the National Remote Sensing Centre & DTCP had prepared a preliminary land use map from the satellite images. Verification of land use map by ground truth verification was later carried out by DTCP. Preparation of Base map – The Digital Terrain Model (DTM of SRTM) has been used to prepare the terrain and contours. The physical base map will show the topography, rivers, streams and tanks, in the LPA area. List of information available and data sources available with Tiruchirapalli Local Planning Area has been mentioned in Table 2.

Following features have been captured from the mosaic image.

- Administrative Features
- District, CD Blocks and Village Boundaries
- Village Codes & Names
- Inhibited and Un-inhabited Villages
- Physical Features
- Roads National Highway, State Highway, Other District Road
- Railways Broad Gauge, Meter Gauge
- Natural Features
- Water Bodies Rivers etc.
- Soil
- Forest
- Geology and Geomorphology

There are different sources that have been used for the identification of natural resources as listed below:

- Cadastral Maps
- Topographical sheets
- Other relevant department (like PWD, Disaster Management and Irrigation & Development)

Land Resource Inventories: Building land resource inventory entails a comprehensive collection of information and data related to land use and land cover. The enlisted information in the inventories is collated from different sources, and they are arranged in a systematic form.

The purpose of preparing land resource inventories is to formalize the method of land capability and land suitability classification for appropriate allocation of land uses in the region. The key features included in the inventories will be extracted as per the requirement of features in the land capability and land suitability classification.

## MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

No	Spatial Data	Sources	Features
1	Topo sheet s 1:50000	Survey of India (mention year)	Natural features like wetlands, rivers, water bodies
2	Tiruchirappalli Local Planning Area including 5 town panchayats	Maps and road details	Administrative boundaries of Municipal Corporation and villages,major road & railway obtained fromthe concerned authorities.
3	LANDSAT Image (2005)	GIS	Used for geo-referencing cadastralmaps
4	Cadastral Maps	Procured from Tamil NaduSurvey Department for entire villages and urban centers coming within delineated region by the local plan authority.	Village boundaries, survey boundaries with numbers. Spatialcoordinates, major roads & railways
5	Google earth images	Google earth	Used for geo-referencing cadastral maps in order to update the landuse and cadastral boundaries
6	Road Alignment and Section	Updating the map along with themap obtained from the highway department	Road ROW, Section, Alignment forregional connectivity and detailed Municipal roads
7	Water Supply Network	Administrative report fromTiruchirappalli corporation. And various details collected fromLocal administrative authorities.	The demand and supply of water has been analyzed with the help of existing and available sources
8	Solid waste management	Municipal corporation and localpanchayat union.	

## Table 1-2 Tiruchirappalli LPA List of Information

Sr. No.	Classification / Data inputs	Category	Туре	Data source
1	Geographical area	-	-	Census Atlas And GoogleMaps
2	Reporting Area for land utilization statistics (1 to 5)		-	-
	I. Reserve and protected forest	Land cover	Spatial	Department of Forest TamilNadu Government.
	II. Not available for cultivation	Land cover	Spatial	Revenue Records
	III. Other uncultivated land (excluding fallow land) (a+b+c)	Land cover	Spatial	Revenue records
	(a) Permanent Pastures and other grazing land	Sub-class	-	Revenue records
	(b) Land under Miscellaneous tree cropsand groves (not included in net area sown)	Sub-class	-	Revenue records
	(c) Culturable Wasteland	Sub-class	Quantitative	Revenue records
	IV. Fallow Land (a+b)	Land cover	Spatial	Revenue records
3	Irrigated area	Land use	Spatial	Revenue records

## Table 1-3 Data Classification for land resource inventories

## 1.6.2 Inception Report

The inception report stage involves preliminary analysis of the LPA as a whole based on available secondary data and preliminary stakeholder interactions. The Inception Report provides a contextual background, project need and scope, aims and objectives of the project, the approach and methodology to be undertaken and the project team and timeline; describes the LPA by providing a demographic profile of the LPA based largely on secondary data made available through the Census; presents the land profile of the LPA based on the Existing Land Use Map 2021, economic details at the municipal, block and taluk and district level as available; discusses road network, connectivity, physical and social infrastructure status; and a brief about other prevailing sectors linked to planning, such as housing, infrastructure, environment, etc. The stakeholders engagement has been carried out which involves public meetings/conference during draft development, highlighting the key issues and get stakeholder inputs which are to be addressed.



Figure 1-1 Stake holder Meeting

## 1.6.3 Vision Formulation

Based on the innate strengths and potentials of the region and after discussions with the Line Departments and keeping in view of the future development path of Trichy, the Vision Trichy 2041 was formulated by the DTCP. Further additions to the Vision statement were suggested by CARE SOA in line with the Supplementary Reforms 7 & 8 of "Scheme for Special Assistance to States for Capital Investment 2023-2024".

## 1.6.4 Data Collection

**Primary data collection:** A mapping exercise of various places of cultural, historical and architectural character in the Heritage town of Srirangam was undertaken.

**Secondary Data Collection:** Secondary data was requested and obtained from around 18 government departments with the support of Trichy DTCP, since many data sets were very old. Data from various other sources of secondary data were collected, for example, CMP, Disaster Management Plan of Trichy 2022, Vision Trichy 2022 etc.

## 1.6.5 Study of previous planning initiatives

It involves the review of the previous planning initiatives that has been undertaken by different authorities for the project area. It has been done to assess the constraints and shortcomings associated with the previous plans.

## 1.6.6 Issues, Potentials, Projected requirements & Draft Proposals

Based on the analyzed data, the various discussions with the local community, a set of issues and potentials were identified. The current requirements were cross verified with various standards like URDPFI, Service Level Benchmarks, Environmental Parameters, etc. and the proposals were prepared accordingly.

## 1.7 Vision Statement

The vision for Tiruchirappalli is "CHIRA – 2041". CHIRA stands for Culture Heritage Industries River restoration and Agriculture. Chira is taken since Tiruchirappalli is named after, "Thiru" means "Mr.", Palli means "City" and "Chira"/ "Chinna"/ "Ssila" means "rock" or "small".

Based on the studies of the existing conditions and considering the growth opportunities and potential of the site, the following vision statement was arrived at:

"The Trichy masterplan articulates the vision for the city's growth and development driven by its immense cultural & heritage value, lucrative industrial opportunities and sustainable agriculture, thereby strengthening the economy of the city without degrading river resources"

The Vision of this Master Plan is then translated in goals and their broad objectives. The goals and objectives are given as the following:

• Protect and preserve the natural and cultural assets

Improve the green and sustainable scores of the city

Enhance the experience of cultural assets

Encourage a more compact and form based future growth poles of Tiruchirappalli preventing land degradation, and pressure on services with proper regulation and framework development

• Farmers Friendly

Encourage value-add innovation in the primary sector

Improve the infrastructure network services of Tiruchirappalli

To protect water systems in the region

• Affordable Housing and Educational city

Provide for a variety of housing options for different income groups

Maximize the potential of Educational Institutes

Increase the Quality of Life for every resident

• Strengthen tourism and industries as a central economic focus

Improve regional and city mobility

Strengthen the non-motorized roads in heritage areas of Tiruchirappalli

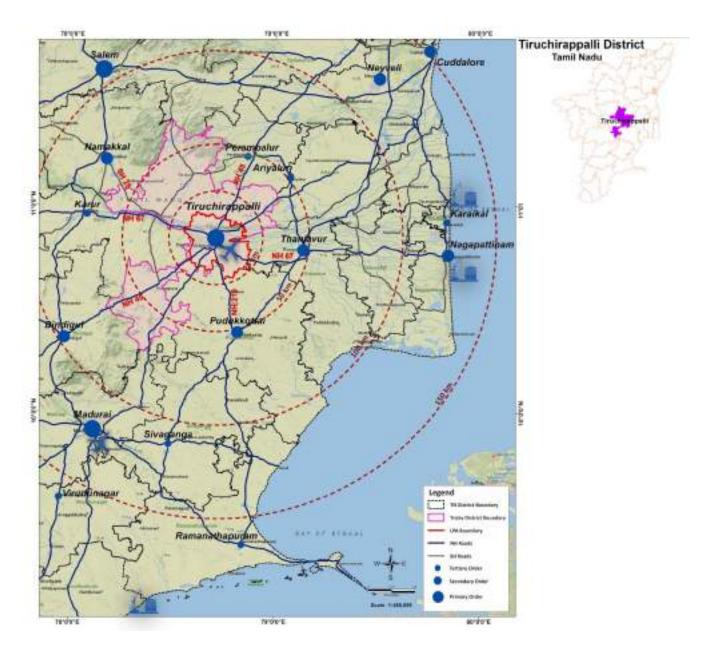
# PROFILE OF TIRUCHIRAPPALLI

## 2. PROFILE OF TIRUCHIRAPPALLI

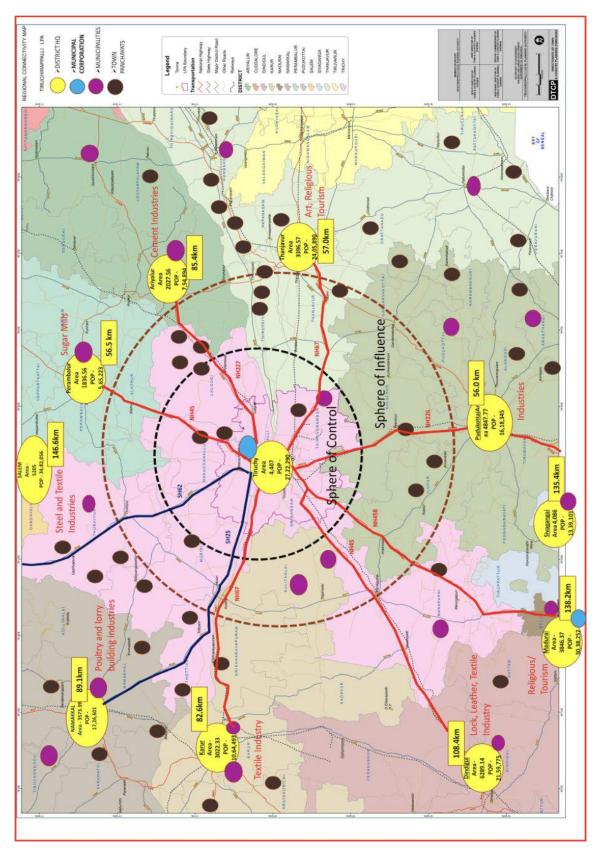
## 2.1 Location & Regional Setting

Tiruchirappalli City is the 4th largest City of Tamil Nadu State and the District Headquarters of Tiruchirappalli District comprising eleven Taluks and 14 Community Development Blocks. Trichy, Tiruchy, Trichinopoly are a few other names by which this City and district are known. The district has an area of 4,404 square kilometers and a population of 2,722,290 with 1,013 females for every 1,000 males as per census 2011. Geographically located between Latitude 10°00' & 11° 30' North and Longitude 77°45' & 78° 50' East, Trichy LPA is approximately at the geographical center of the district and the state and its strategic location makes it a major intra state transportation node. Trichy is located at an altitude of 78 m above sea level. It is bounded in the North by Salem district, in the Northwest by Namakkal district, in the Northeast by Perambalur district and Ariyalur district, in the East by Thanjavur District, in the Southeast by Pudukkottai district, in the South by Madurai district and Sivagangai district, in the Southwest by Dindigul district and, in the West by Karur district as shown in Fig:2.1. It is located within 150 km from the primary order Cities Madurai & Salem. GIS Mapping of Trichy LPA, based on ward/ block maps authenticated by the DTCP, GoTN estimates the area of the Corporation to be 166.58 sq.km in 2021.

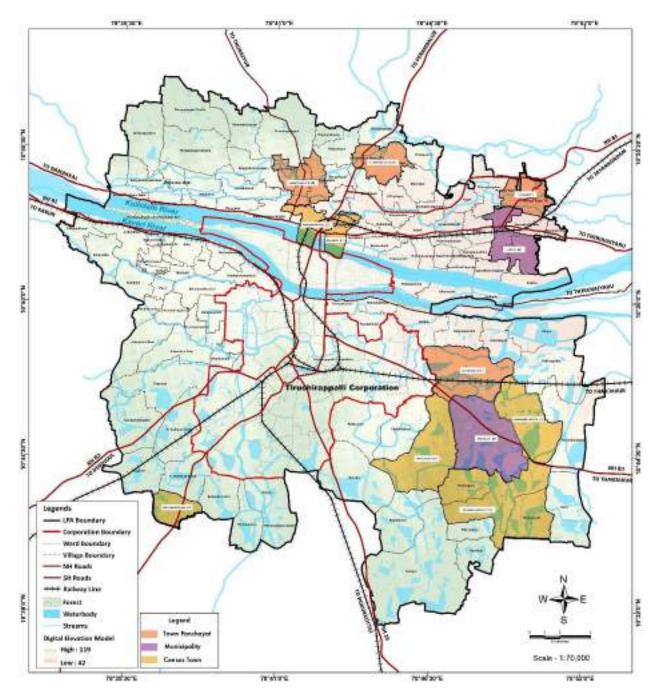
Trichy LPA, which includes Trichy Corporation, 2 Municipalities, 4 Town Panchayats and 103 revenue villages falling under 4 different Taluks Srirangam, Thiruverumbur, Lalgudi and Manachanallur, has a population of 14.3 lakhs as per Census 2011 and covers an estimated area of 804.55 sq.km based on GIS mapping and cross verified with the Survey and Land Revenue Records. There are 6 census towns among the 103 villages forming the LPA. The Municipalities, Town Panchayats, and revenue villages including the census towns are referred to as the 'Rest of LPA' in this document. Trichy LPA occupies just 18.3% of the District by area but houses 53% of the district's total population. The administrative boundary of the LPA showing the Tiruchirappalli Corporation, Municipalities, Town Panchayats, Census Towns and the remaining revenue villages and the 49 survey wards of Trichy Corporation is illustrated in Map 2.3.



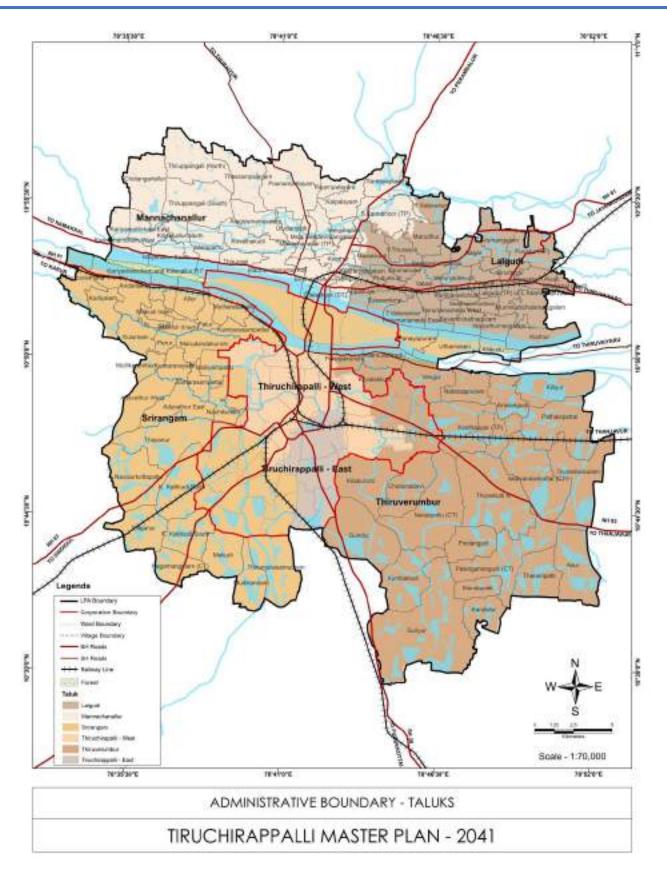
Map 2-1 Location and Regional setting



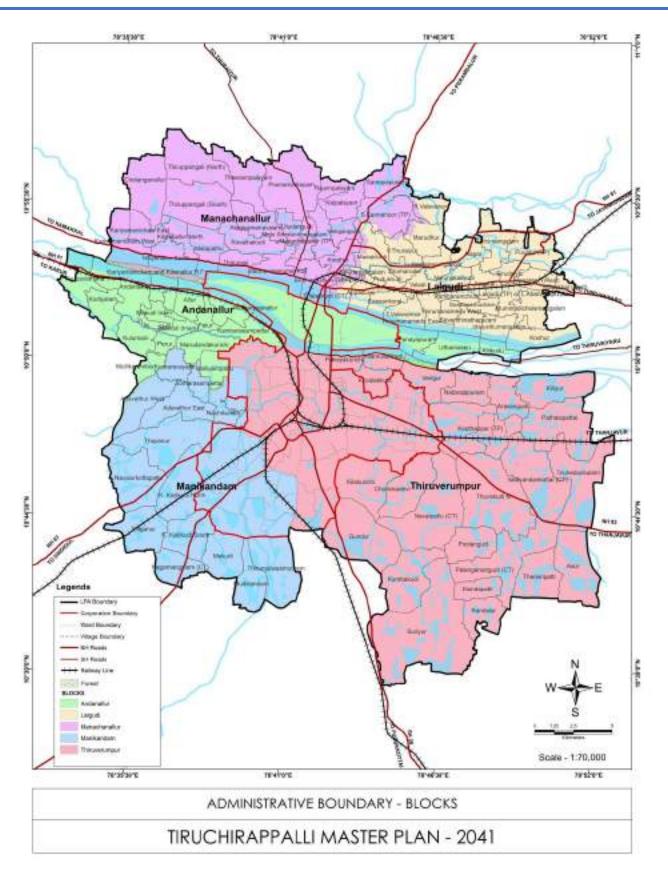
Map 2-2 Sphere of control & Sphere of influence of Tiruchirappalli LP



Map 2-3 LPA boundary



## Map 2-4 Administrative Boundary - Taluks



### Map 2-5 Administrative Boundary - Blocks

## 2.2 Transport Network and Connectivity

Trichy Corporation is situated at a distance of 140 km from Salem in the North, 56 km from Perambalur in the Northeast and 75 km from Ariyalur in the Northeast, 57 km from Thanjavur in the East, 56 km from Pudukottai in the Southeast, 131 km from Madurai and 136 km from Sivagangai district in the South, 105 km from Dindigul in the Southwest, 83km from Karur in the West and 88 km from Namakkal in the Northwest. River Kaveri runs across the LPA from West to East for approximately 34 km.

## 2.2.1 Road Connectivity

The LPA is situated at about 330 km South-west of Chennai and 131 km North of Madurai City along Madurai–Chennai (NH-38). The major road networks in this region are given in the Table 2.1

SI.No	Road	Connectivity
1	SH 62	North West-Towards Thuraiyur
2	NH 81	West- Towards Karur
3	NH 83	South West- Towards Dindigul
4	SH 26/ NH 336	South- Towards Pudukottai
5	NH 83	East- Towards Tanjore
6	NH 81	East- Towards Jayamkondan
7	Samayapuram toll NH-45/NH- 38	North West- Towards Chennai
8	NH 38	South West- Towards Madurai

Table 2-1 Major Road Network

The semi-ring road project proposed by the NHAI in 2006 linking the 5 National Highways passing through the City to decongest it is in the final leg of implementation after a few years of impasse with the work having begun in 2019 to link the Trichy- Karur NH at Jeeyapuram and Trichy- Madurai Highway at Panchappur.

## 2.2.2 Rail Connectivity

The City Railway Junction is located in the heart of the City. Tiruchirappalli junction is a major junction on the rail route connecting North and South of India for the trains passing towards Southeast, West, and North connecting major cities in Tamil Nadu and other states. There are frequent trains connecting the Headquarters Chennai and other major cities in Tamil Nadu passing through Trichy. Passenger trains also carry a significant number of passengers from nearby towns. There are 14 stations within Tiruchirapalli Local Planning Area.

Five rail lines branch separately from Trichy Junction:

- Towards north for Viluppuram Junction via Virudhachalam Junction
- Towards east for Viluppuram Junction via Thanjavur Junction
- o Towards south-east for Karaikkudi Junction
- o Towards south for Trivandrum Central via Dindigul Junction
- Towards west for Coimbatore Junction via Karur Junction

## 2.2.3 Air Connectivity

Tiruchirappalli International Airport (TRZ) spread over an area of 702.02 acres (284.10 ha), is located on National Highway 336, about 5 km (3.1 mi) South of the city centre. The airport handled by Airports Authority of India is served by two Indian and four foreign carriers providing direct connectivity to four domestic destinations, Bangalore, Chennai, Hyderabad, Vijayawada and ten international destinations, Kuala Lumpur, Singapore, Ho Chi Minh City, Colombo, Muscat,

Sharjah, Dubai, Abu Dabi, Doha & Kuwait. The airport is ISO 9001:2008 quality certified and was declared as an international airport in October 2012.

## 2.2.4 Sea Port

The nearest Port to Trichy is located at Karaikal an all-weather deep water port developed in an area of 611 acres and commissioned in April 2009. Since commencement of operations, the port has handled diverse cargo such as Coal, Iron-Ore, Limestone, Clinker, Sugar, Sand, Cement, Fertilizers, Project Cargo, Agro Commodities, Liquid Cargo and Containers. Karaikal Port caters to the northern hinterland of Tamil Nadu with multimodal connectivity. It is the only port located centrally between Chennai and Tuticorin at a distance of 300 km on either side. The port is capable of handling Dry Bulk, General Cargo (Break Bulk) and Liquid Cargo with overall cargo handling capacity of 21.5 MTPA.

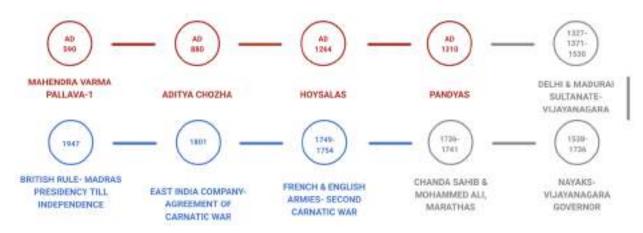
The nearest international seaport, the V.O.Chidambaranar (VOC) port is located at Thoothukudi. It is one of the 13 major ports in India and is the third largest container terminal in India with a cargo handling capacity of 38.04 MTPA (2022-2023). The port is strategically located at the south-eastern tip of India. It is located about 280 km from Trichy, providing access to the Indian Ocean shipping route. They have two, large container handling terminals with state-of-the-art technology. It is an artificial deep harbour. There is a huge potential for goods transport from Trichy to the southern Thoothukudi port.

## 2.2.5 Freight movement In and Around Trichy LPA

Trichy being a heavy industry capital and one of the nodes of the proposed defence corridor of India and with other very important industrial cities like Coimbatore, Erode, Karur, Tiruppur all situated to the West, it is envisaged that Trichy will see an increase in freight movement from West to its East towards Karaikal Port. The cargo handling profile of the port signifies that the agricultural base and the industrial base of the central region of Tamil Nadu is contributing to the imports and exports and with increase in its volume over time, it will be imperative to have the necessary infrastructure for cargo and logistics in tandem with appropriate road network in place for seamless connectivity in and out of the Trichy LPA.

## 2.3 History of the Region

Tiruchirappalli is believed to be of great antiquity and has been ruled by the Early Cholas, Early Pandyas, Pallavas, Medieval Cholas, Later Cholas, Later Pandyas, Delhi Sultanate, Malabar Sultanate, Vijayanagar Empire, Nayak Dynasty, the Carnatic state and the British at different times. The archaeologically important town of Uraiyur which served as the capital of the Early Cholas is a suburb of Tiruchirappalli. The timeline of the development of the Region is shown in the image below.



## Figure 2-1Time Line

The influence of each rule has left its imprint on the cultural fabric of Trichy and its surroundings making it a City of cosmopolitan nature.

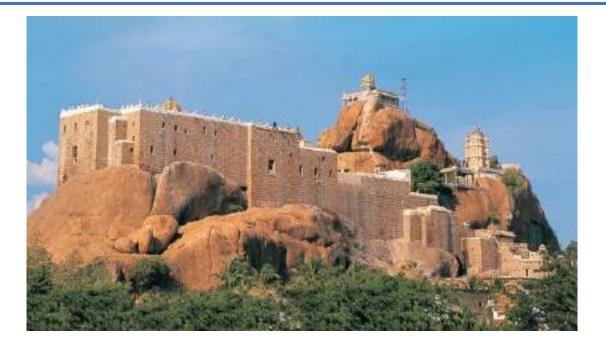
## 2.3.1 History of Tiruchirappalli Region

Tiruchirapalli is one of the oldest inhabited cities in Tamil Nadu. Situated on the banks of River Cauvery, Tiruchirappalli was the citadel of the Early Cholas. It is mentioned by Ptolemy in the 2nd century BC. Uraiyur, which served as the capital of the Early Cholas from the 3rd century BC to the 3rd century AD is a suburb of present-day Tiruchirapalli. The oldest human-built dam, Kallanai, was built by Karikala Cholan across the Kaveri River about 10 miles (16 km) from Uraiyur. Uraiyur was known as 'Kozhiyur' during the Sangam period during which it became a great business center. The excavations conducted here reveal the antiquity and cultural pride of this town. Excavations reveal the trade relationship between Woraiyur and Rome.



Figure 2-2 (100AD) Kallanai Dam built by King Karikalan.

The medieval history of Tiruchirapalli begins with the reign of the Pallava king Mahendravarman-I who ruled over South India in the 6th century AD. Mahendravarman laid the foundation of the Rockfort which is regarded as the cultural symbol of the city and is one of the oldest surviving monuments in Tamil Nadu. In the second half of the 9th century, Tiruchirappalli was reconquered by the Medieval Chola king Vijayalaya Chola who re-established Chola suzerainty over the region. Tiruchirappalli served as a regional stronghold and provincial capital of the Medieval Cholas under whom it reached the zenith of its glory. When the Chola Empire began to decline, Tiruchirapalli was conquered by the Pandyas who ruled from 1216 to 1311



## Figure 2-3 Rockfort Temple



Figure 2-4 Srirangam Temple

Srirangam was taken by Jatavarman Sundara Pandyan I in 1260 though there are Hoysala inscriptions in Tiruchirappalli district until the year 1296. In 1264 CE, Jatavarman Sundara Pandyan I fought and defeated the Hoysala King Vira Someshwara as attested by his inscription at the Sri Ranganatha Swamy Temple in Srirangam. There are also Pandya inscriptions from the reign of Maravarman Kulasekharal, Jatavarman Sundara Pandya II and Maravarman Kulasekhara II.

Malik Kafur defeated Vira Pandya at Kannanur and the victorious armies of the Sultanate are believed to have plundered and ravaged the kingdom and the temple of Srirangam was ransacked. The Delhi Sultanate managed to establish complete sovereignty over the Pandyan kingdom by 1327. The idol of Ranganathaswamy was moved to safety via Madurai, and through the Western Ghats to Travancore and finally moved to Tirupathi. The province of Ma'bar was created and ruled by viceroys appointed by Delhi. In 1335, the then viceroy, Jalaluddin Ahsan Khan declared his independence and founded the Madurai Sultanate. The early sultans had to deal with frequent incursions by Hoysala rulers. The attacks ended with the death of the Hoysala king Veera Ballala III at Tiruchirappalli in 1343.

The Muslim rule was later put to an end by the Vijayanagar prince Kampanna Udaiyar in 1371. Following the reconquest, the dilapidated Ranganathaswamy temple at Srirangam was restored to its former glory. The Vijayanagar Empire ruled the region from 1378 till the 1530s. Its rule was characterized by the revival of Hinduism and reconstruction of temples and monuments destroyed by the Muslim rulers. The province of Madurai was created and ruled by a viceroy or Nayak appointed by the Vijayanagar kings. When the Vijayanagar Empire began to decline in the early 1500s, the Nayaks began to assert their independence. The first independent Madura Nayak king was Viswanatha Nayak who ruled from 1538 to 1563. The Tiruchi range comprised five major paalayams: Udayarpalayam, Ariyalur, Marungapuri, Thuraiyur and Cuddalore. They constructed new mandapams at several temples, including the Srirangam Sri Ranganathaswamy Temple, and the Rock Fort. In 1616, Muttu Virappa Nayak moved the capital from Madurai to

Tiruchirappalli. In the 1623 civil war in the Vijayanagar Empire, Muttu Virappa Nayak supported Jagga Raya, a claimant to the throne against Yachama a rival claimant. In the battle fought at Toppur near Tiruchi, Jagga Raya was defeated and killed while Muttu Virappa Nayak was captured. In Muttu Virappa's absence, his son Thirumalai Nayak was crowned king. Thirumalai Nayak moved the seat of government back to Madurai in 1634. In 1665, his son Chokkanatha Nayak moved the capital once again to Tiruchirappalli. Chokkanatha Nayak partially dismantled the Thirumalai Nayak Mahal in Madurai in order to construct a new palace, now known as Rani Mangammal Mahal in Tiruchirappalli.



Figure 2-5 'Mosque of Nuthur, Trichinopoly' from Illustrated London News (c1875) (Source : Antique wood engraved print)



Figure 2-6 Rani Mangammal Palace is now the Tiruchirappalli Government Museum

Chokkanatha died in 1685 and was succeeded by his wife Rani Mangammal, who is considered to be the greatest of the Nayak rulers. Mangammal was succeeded by her grandson Vijaya Ranga Chokkanatha during whose reign the kingdom went into irreversible decline. Vijaya Ranga died in 1731 and was succeeded by his wife Meenakshi, the last of the Nayak rulers. The Carnatic general Chanda Sahib invaded Tiruchi for the first time in 1734 when Meenakshi was the Nayak ruler. In 1736, Chanda Sahib returned to Tiruchi and in violation of the 1734 treaty, proceeded to make himself master of the kingdom & was given the title "Nawab of Tiruchirappalli" and ruled the state from 1736 till 1741, when he was defeated and captured by the Marathas and taken prisoner who later escaped in 1749. The Maratha general Murari Rao ruled Tiruchirappalli from 1741 to 1743, when the Nizam of Hyderabad invaded Tiruchirappalli and bribed Murari Rao to hand over the city. In 1749, Anwaruddin Mohammed Khan, the Nawab of Carnatic died, and Chanda Sahib took over the government after driving out the principal claimant Muhammed Ali Khan Wallajah from Arcot. Muhammed Ali Khan Wallajah sought refuge in the fortress of Tiruchirappalli which Chanda Sahib besieged with the help of the French East India Company provoking the British East India Company to come to the rescue of the exiled Nawab. The British allied with the Marathas and sent three armies, which after some initial setbacks, successfully forced Chanda Sahib and the French to come to terms with them. This long standing conflict is considered the Carnatic War 2. Chanda Sahib surrendered to the Marathas but was treacherously beheaded. Muhammed Ali Khan Wallajah was enthroned with British assistance and he agreed to pay a regular tribute to them.

Suspecting the Carnatic ruler, Umdat UI-Umra of having given clandestine support to Tipu Sultan during the Anglo-Mysore Wars, the British East India Company took over the kingdom in 1801 and reduced the Nawab to the status of a titular ruler. The district of Trichinopoly was created and Tiruchi city was made its capital. A cantonment of the Madras Regiment was set up in Tiruchirappalli.

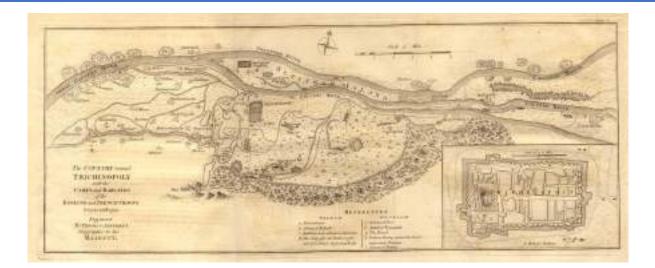
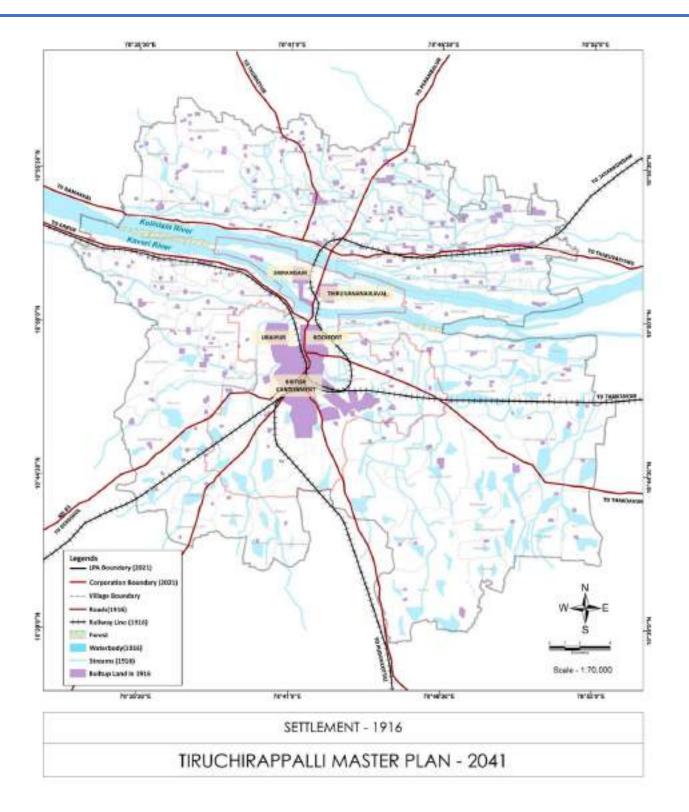
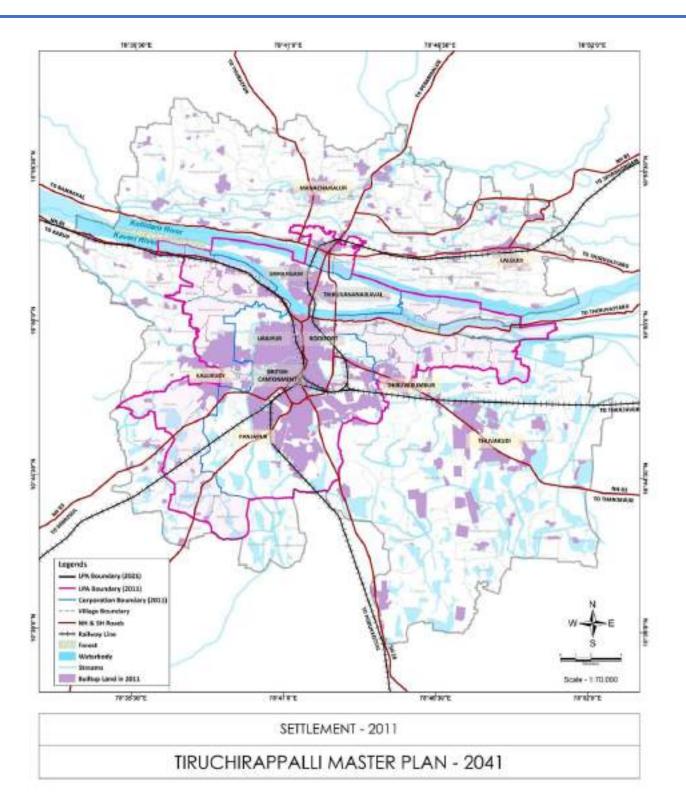


Figure 2-7 Map of the encampments of the French and British army near Trichinopoly, 1753-4. Second Carnatic War (1749-54).

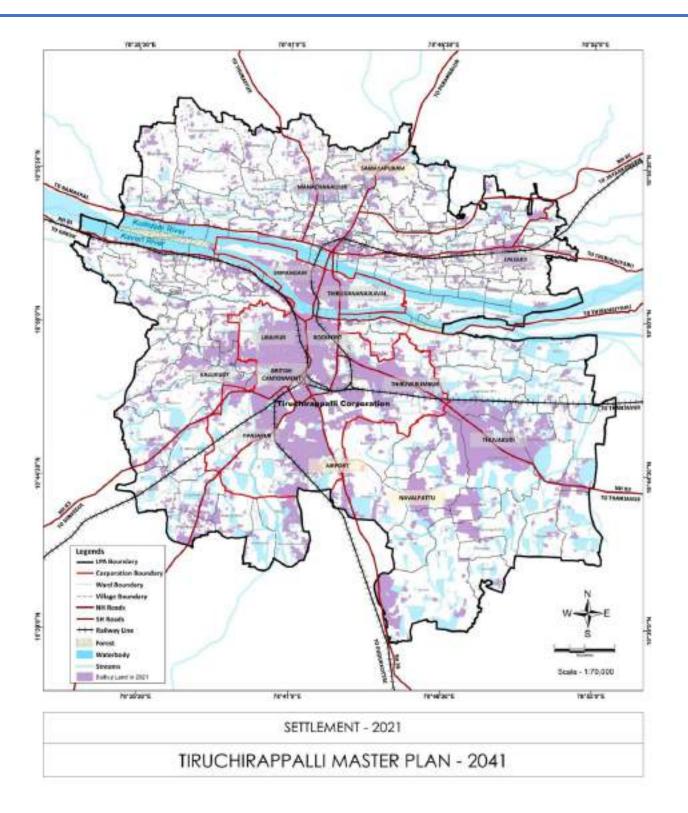
During the Company Raj and later the British Raj, Tiruchirappalli emerged as one of the most important cities in India. The first Indian census conducted in 1871 returned a population of 76,530 for Tiruchirappalli making it the second largest city in the Madras Presidency, next only to the capital city of Madras. During the 19th century, Tiruchirappalli was famous throughout the British Empire for its unique variety of cheroot, known as the Trichinopoly cigar. The Great Southern Railway Company was established in 1853 with its headquarters at Tiruchirappalli. In 1859, the company constructed its first railway line connecting Tiruchirappalli and Nagapattinam. The company was merged with the Carnatic Railway Company in 1874 to form the South Indian Railway Company. The South Indian Railway Company moved one of its principal workshops from Nagapattinam to Tiruchirappalli, establishing the Golden Rock Railway Workshop in 1928.



Map 2-6 Settlement Map - 1916



Map 2-7 Settlement Map - 2011



Map 2-8 Settlement Map – 2021

Tiruchirappalli played an important part in the Indian Independence Movement. Many of its leaders such as V. V. S. Aiyar, P. Rathinavelu Thevar and T. S. S. Rajan hailed from Tiruchi. Tiruchi played an active role in the 1928 South Indian Railway Strike which lasted over three months. There were also strikes and non-violent protests during the Quit India Movement.

Post independence, the City though was growing in population, fell behind other Cities like Salem & Coimbatore in terms of economic growth. The city underwent extensive economic development in the 1960s with the commissioning of Bharat Heavy Electricals Limited. In the late 1970s, the then Chief Minister of Tamil Nadu, M. G. Ramachandran planned to move the administrative headquarters of the state to Trichy but the move was later shelved by successive governments.

The history of the region can be referred to in detail from the works of F. R. Hemingway (1907) "Madras District Gazetteers: Trichinopoly" and Aiyangar, S. Krishnaswami (1921) "South India and her Muhammadan invaders", Oxford University Press.

#### 2.3.2 History of Tiruchirapalli LPA

The municipality of Trichinopoly was created in 1866 as per the Town Improvements Act of 1865 followed by the municipality of Srirangam in 1871 and Golden Rock in 1972. The three municipalities were merged in 1994 to form the Tiruchirappalli municipal corporation with 60 census wards according to census 2011. In 2011 6 more villages were added to the corporation namely Tiruverumbur, Ellakudi, Agaram, Alattur, Pappankurichi and Keelakalkanarkottai to form the present day corporation with 65 Census wards and an area of 166.58 sq.km. The Corporation Ward Map used for preparing the Master Plan 2041 is shown in Map 2.9. which shows the Census wards present in the Census 2011. As of 2023, the Trichy Corporation is divided into 5 zones namely Srirangam, Ariyamangalam, Thiruverumbur, Goldenrock and Abhishekapuram and the wards which fall in each zone is shown. The ward correlation for the Old and New Wards is shown in the Table 2.2. The other Urban administrative bodies forming the Trichy LPA and their details are provided in the following section.

Thuvakudi municipality was elevated from selected major Panchayat to 3rd grade Municipality from 10.7.2004 in accordance with the G.O M.S.No.277 MAWS dt: 5.7.2004 for up gradation . Now it is functioning as a 2nd grade Municipality from 9.8.2010 onwards. This municipality is functioning in two divisions as Thuvakudi and Thuvakudi Malai. Lalgudi Town located in Tiruchirappalli District functioning as Selection Grade Town Panchayat was upgraded to Second Grade Municipality as per G.O.No.117 Municipal Administration and Water Supply Department dated 17/12/2021. Sirudaiyur, Abishekapuram Lalgudi and Mummudi Cholamangalam are part of Lalgudi Municipality.

Koothappar is a First Grade Town Panchayat which is located in Trichirappalli Taluk, Tiruchirappalli District and Tamil Nadu. Koothappar town Panchayat is located on Trichy-Tanjore Main Road at a distance of 3 Km to the North. The Town Panchayat was upgraded as First Grade Town Panchayat in the year of 1984. Krishnasamudram including Semmankulam villages are part of Koothappar Town Panchayat. Eight wards are separated by BHEL Institution.

Mannachanallur Town Panchayat was established as Panchayat vide G.O.No.419, Dated : 15.02.1889 of Chennai Sthal Sthabanam and Municipal Administration, after that it was upgraded as Town Panchayat vide G.O.No.1258, Dated : 07.06.1944. Now, it is functioning as Selection Grade Town Panchayat vide upgrading vide Ni.Mu.No.167716/1979, Dated : 21.10.1970 of Chennai Municipal Administration and Panchayat Dept. The Town Panchayat is a Union of 3 villages Ulunthangudi, Manachanallur & Melaseedevimangalam. Puvalur Town Panchayat is a Union of Puvalur East & West villages and is located to the North East of Lalgudi Municipality.

S.Kannanur Town Panchayat is located in the Mannachanallur Taluk. The Extent of the Town is 4.5 Sq.Km. It consists of 9 hamlets and two Revenue villages S.Kannanur West & S.Kannanur East. It is a glorious Pillgrim centre with Samayapuram Arulmigu Mariamman Kovil, Ananthavalli Bojeeswarar Temple and Arulmigu Ujjaini Om Kaliamman temple located in this Town Panchayat. It is one of the important Pilgrim Centres in the State.



#### Figure 2-8 Samayapuram in Kannur TP Figure 2-9 BHEL in Koothappar TP

The river Cauvery flows in the middle of the city segregating Srirangam town as an island sandwiched between River Cauvery and Coleroon. Owing to the religious importance of Srirangam this part of the town recently experiences massive vertical development. Beyond Kollidam on the Northern side, Bikshandarkovil is developing as an urban node with hectic residential and commercial developments up to Samayapuram and beyond. On the eastern side of the City along Thanjavur Road, Bharat Heavy Electricals Limited is located and the developments from Bharat Heavy Electricals Limited area merge with the developments emanating from Tiruchirappalli Corporation. On the southern side, traverses Pudukottai road where Airport, Navalpattu, I.T Park area are located apart from the Housing colony developed under Tamil Nadu Urban Development Project. All these developments created land scarcity in this area and resulted in gloom in the land market. Taking advantage of this trend, a lot of unauthorized developments have sprung up in the area. On the western side Vayalur road became a crucial plank and experienced a lot of residential development mostly unauthorized up to Vayalur. Navalpattu New Town Development Area where major industrial and institutional developments such as Bharat Heavy Electricals Limited, Ordnance factory, HAPP, National Institute of Technology, SIDCO Industrial Estate etc., came up triggered a spurt of urban Development in and around this area. Considering the ongoing Developments in and around Tiruchirappalli Corporation, it is essential to revisit the delineation of the planning area and to establish an effective mechanism with specific powers to enforce, regulate and develop the city as envisaged in the development plans. In order to have comprehensive planning, it is necessary to delineate the development area afresh.

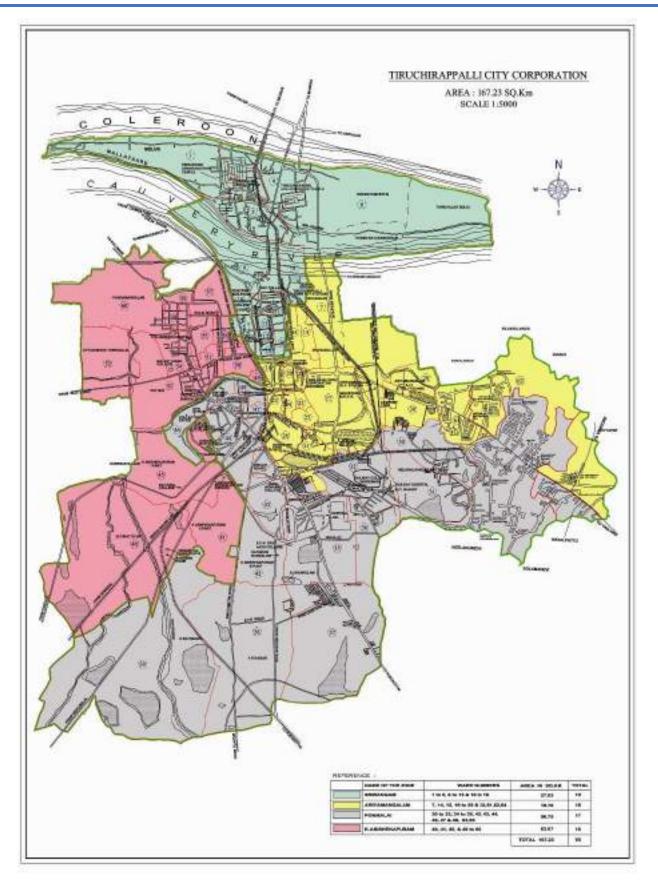
	Tiruchirapplaii City Corporation New & Old Wards DDetails- 2022												
	ZONE-I- SRIRANGAM												
New Ward	1	2	3	4	5	6	7	12	13	14	15	19	21
Old Ward	1	2	3	4	5	6	6A	9	10	11	8	17	12
				ZC	) NE-II- /	ARIYAN	1ANGA	LAM					
New Ward	17	18	20	30	31	32	33	34	47	48	49	50	59
Old Ward	15	14	18	19	20	22	24	25	34	33	26	23	43
				Z	ONE-III-	THIRU	VERUM	BUR					
New Ward	16	35	36	37	38	39	40	41	42	43	44	45	46
Old Ward	7	27	29	28	62	63A	64	65	63	61	30	31	36
				Z	ONE-IN	/- GOL	DENRO	CK					
New Ward	51	52	53	54	56	57	58	60	61	62	63	64	65
Old Ward	48	47	44	46	40A	40	41	42	35	39	38	38A	37
				ZO	NE-V- K	-ABHISI	HEKAPI	JRAM					
New Ward	8	9	10	11	22	23	24	25	26	27	28	29	55
Old Ward	60	59	58	57	56	55	54	53	52	51	50	49	45

Table 2-2 New & Old ward Correlation of corporation census wards

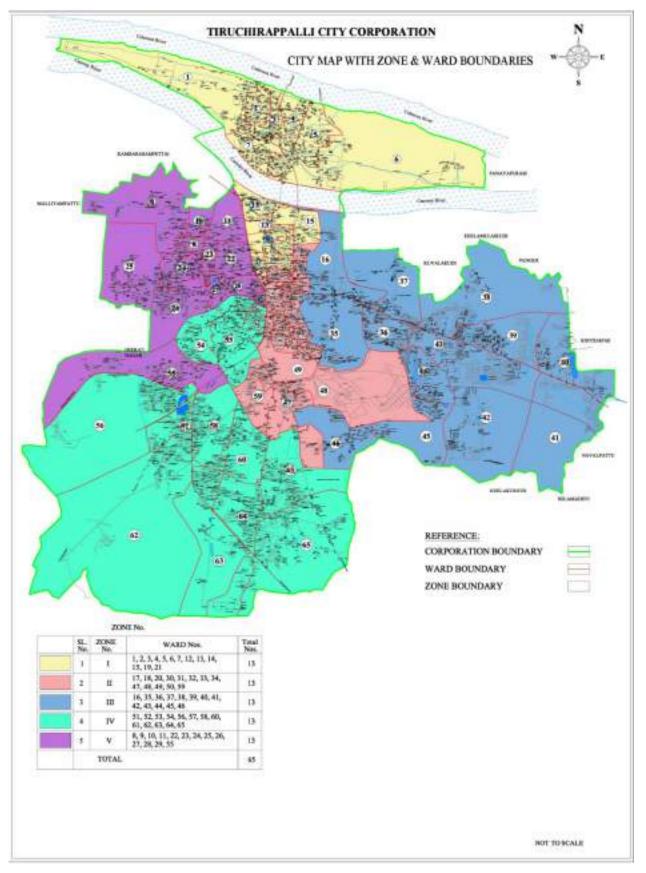
The table below shows the added administration boundaries to the LPA and the delineation of the LPA 2041

2021	2041
Tiruchirappalli Review approved MP 2011 - 281.14 sq.km • 1 Corporation • 27 villages Navalpattu NTDA - 208.14 sq.km • 3 Town Panchayats (Thuvakudi, Thiruverumbur and Koothappar) • 15 villages Additional 4 town panchayats and 61 villages for 2041 – 315.27 sq.km	2041 LPA – 804.55 sq.km • 1 Corporation • 2 Municipality • 4 Town Panchayat • 103 villages

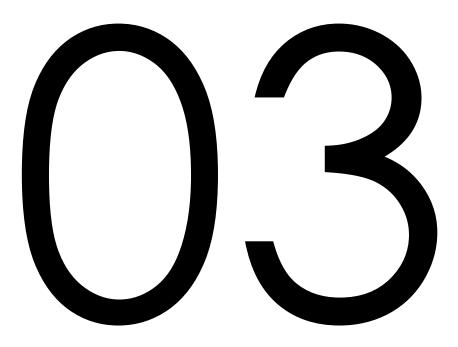
Table 2-3 Administartive boundaries of LPA



Map 2-9 Tiruchirappalli City Map with Zone & Ward boundaries



Map 2-10 Tiruchirappalli City Map with Zone & Ward boundaries



# DEMOGRAPHY

## 3. DEMOGRAPHY

#### 3.1 Population Distribution

Tiruchirappalli Local Planning Area has a total population of 14.33 lakhs as per 2011 census. Tiruchirappalli Urban area, which includes Corporation of Tiruchirappalli, Thuvakudi and Lalgudi Municipalities and 4 Town Panchayats contributes 73.56% of the total population in Tiruchirappalli Local Planning Area.

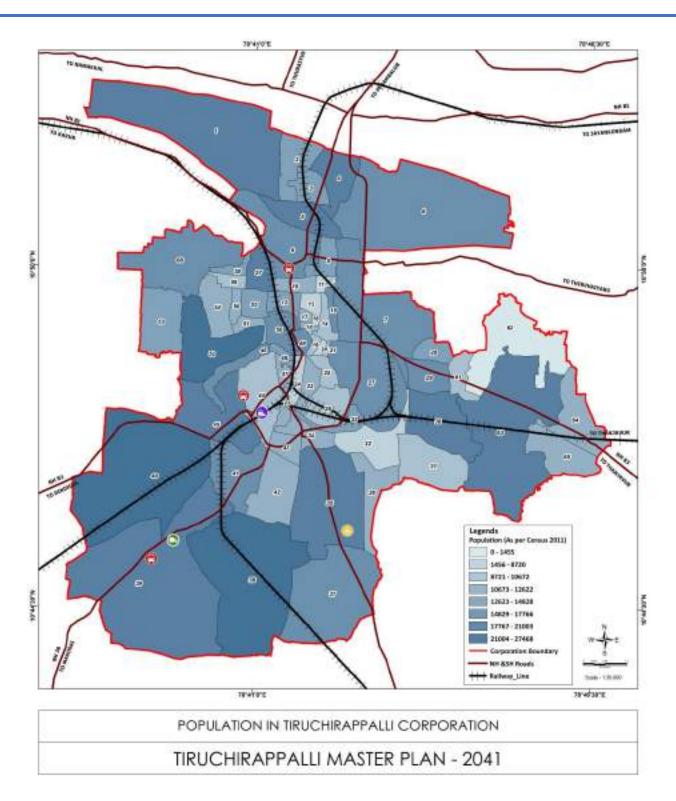
The population of Tiruchirappalli Local Planning area in 2001 was 12.38 lakhs, which has grown to 14.33 lakhs in 2011 at a decadal growth rate of 16.28%, with an area of 804.55 sq.km. The population of the Tiruchirappalli Corporation constitutes 63.88% of the population of the Tiruchirappalli Local Planning Area. The density of population of the Tiruchirappalli Corporation is 55 persons per hectare (pph). The areas with high growth rate, which varies from 48-73%, are Srirangam, Thiruverambur, Navalpattu, Manachannallur and Lalgudi. The extraordinary growth rate of Srirangam is due to spiritual importance of the area. The growth rates of the outgrowth areas exceed that of the other areas in Tiruchirappalli.

		Рори	lation			Populatic	on Density	,	Decada
				Area	2001 Area		20	)11	l Populati
Area		2001			Person s per Sq.km	Persons per Hectar e	Person s per Sq.km	Persons per Hectar e	on Growth Rate
	Total	123254 8	143316 7	804.55	1532	15	1781	18	16.28%
LPA	Urban	923947	105419 4	231.75	3987	40	4549	45	14.10%
	Rural	308601	378973	572.80	539	5	662	7	22.80%
	nirappal li poration	796644	915569	167.23	4764	48	5475	55	14.92%
Rest	of LPA	435904	517598	637.32	684	7	812	8	18.74%
	nirappal Pistrict	241836 6	272229 0	4403.8 3	549	5	618	6	12.56%

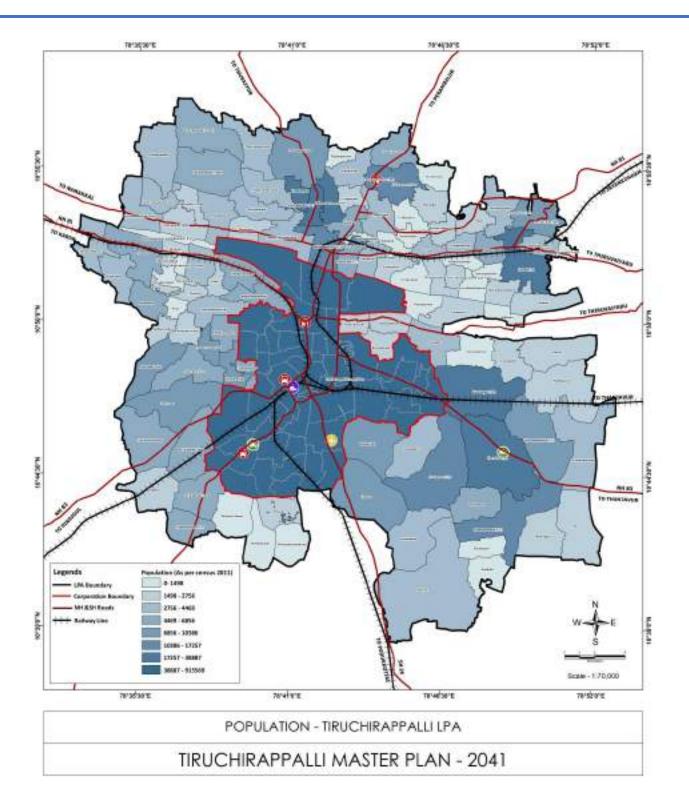
Table 3-1 Exisitng Population (Census 2001 and 2011)

SI. No	Local Bodies		Popu (Ce	Growth Rate 2001-	Area (Sq.km)	No.of House		
		1981	1991	2001	2011	11	(• •	holds
1	Tiruchirappalli Corporation	604124	708493	796644	915569	15%	166.58	2316 45
2	Thuvakudi Municipality	24720	33241	35428	38887	10%	19.43	9402
3	Lalgudi Municipality	17930	19917	23405	23740	1%	10.03	6129
4	Koothappar	10278	24319	26271	29089	11%	15.44	3403
5	Puvalur	7355	8109	8906	7905	-11%	6.48	6679
6	Manachanallur	15461	18615	21511	25931	21%	8.64	2083
7	S.Kannanoor	5369	8005	11782	13073	11%	4.5	4250
8	103 Villages	228409	279168	308601	378973	29%	572.8	9610 2
9	Total	913673	1099867	1232548	1433167	28%	804.55	3596 93

Table 3-2 Area and Population of Tiruchirappalli LPA (Census)



Map 3-1 Population – Tiruchirappalli Corporation



Map 3-2 Population – Tiruchirappalli LPA

#### 3.2 Growth Rate

The compound annual growth rate of Tiruchirappalli Local Planning Area 2001-2011 is 1.52%, 1.33% for urban area and 2.08% for rural area. The growth rate is higher in rural areas due to the increase in urbanization and new project developments. The Average Compound Annual Growth Rate (CAGR) for 1971 to 2011 is observed based on Census data. Also, the CAGR for the last decade (2001 – 2011) is also observed based on Census data.

<b>S</b> .	Year	Urbc	n	Rural		Total	Growth
No		Population	Growth	Population	Growth	Population	Rate of
			Rate %		Rate %		LPA %
1	1961	427208	-	172532	-	599740	-
2	1971	553342	30%	206424	20%	759766	27%
3	1981	685264	24%	228409	11%	913673	20%
4	1991	820699	20%	279168	22%	1099867	20%
5	2001	923947	13%	308601	11%	1232548	12%
6	2011	1054194	14%	378973	23%	1433167	16%

#### Table 3-3 Growth Rate (Census)

The table shows rural areas growth rate increasing more than the urban in the last decade. From the observations made from the previous years, the growth rates of the peri-urban areas are more than the urban areas. Development in LPA urban areas is saturating, and the development is decentralized.

This can be ascribed partly to the location of 6 census towns within the LPA. Census towns by definition, according to the Census 2001 of India are villages with i) more than 5000 population, ii) more than 75% of its population involved in non agricultural activities as their primary occupation and iii) a density of population of at least 400 persons per sq. km. The 2011 census featured a remarkable increase in the number of census towns, which nearly tripled between 2001 and 2011, from 1,362 to 3,894. This increase contributed to nearly a third (29.5 percent) of the total

increase in the urban population during this period. Only part of this evolution can be attributed to the gradual urbanization of settlements in the vicinity or larger towns. Instead, the majority of census towns appear as small "market towns," providing trade and other local services to a growing rural market (Mukhopadhyay, et.al., 2016). Some Census town developments seem to have been triggered due to investment in infrastructure in the vicinity.

Based on the above observations, the 6 census towns that are part of the Trichy LPA can be categorized as shown in the following table-

SI.No	Name	Type of Census Town
1	Navalpattu CT	Development induced (NTDA)
2	Vazhavanthankottai CT	Development induced (NTDA)
3	Palangangudi CT	Development induced (NTDA)
4	Pichandarkovil CT	Market Town
5	Thalakudi	Market Town
6	Nagamangalam	Development induced (Slum Housing Board)

#### Table 3-4 Type of Census Towns

The population of these towns and their population density can be found in Table-3-4. It is interesting to observe that 3 Census Towns are located in the old NTDA area and are in close proximity of the Town Panchayats Thuvakudi and Koothappar showing that they together form an urban agglomeration. The Census Towns Pichandar Kovil and Talakudi are located at the junction of NH 38 from Chennai to the North and SH 25 to the West and SHU to the East, thereby becoming an important Market town for the nearby villages. It is also worth observing that these towns are in close proximity to Manachanallur Town Panchayat. Nagamangalam Census Town has been seeing a lot of investment in infrastructure projects including housing in the past decade.

#### 3.2.1 Average Growth Rate Ranking of Villages

The rural areas growth rate and hence the ranking of villages with respect rate is important in order phase the development projects in hierarchy.

SI. No	Village Name	Population 2011	Growth Rate
1	Kumbakudi, Velayudankudi	3631	138%
2	cholanganallur	5623	91%
3	Nagamangalam (CT)	5785	84%
4	Navalpattu (CT)	16788	81%
5	Palanganankudi (CT)	13469	79%
6	Total Manakkal including East & West	5332	70%

#### Table 3-5 Villages Growth Rate Ranking – High Growth Rate (Census 2011)

SI. No	Village Name	Population 2011	Growth Rate
1	Solanganallur	3947	62%
2	Valavanthankottai (CT)	9202	48%
3	Kundoor/ Gundur	10386	42%
4	Nachikurichi	7545	42%
5	Keelakurichi	8782	39%
6	Pitchandar Koil	17257	38%
7	Thayanoor	9425	37%
8	Rasampalayam	630	37%
9	Olaiyur	1815	34%
10	Thirunedunkulam	2877	34%

SI. No	Village Name	Population	Growth
		2011	Rate
11	Vengur	3487	31%
12	Somarasampettai	8774	28%
13	Elanthapatti	754	27%
14	Cholamadevi	3348	27%
15	Aangarai	6856	26%
16	Samayapuram	5502	26%
17	Panayakurichi	2071	24%
18	Sirumaruthoor	1218	22%
19	Koothur	4692	22%
20	Total Kallikudi including North & South	11562	21%
21	Kiliyur	1720	21%
22	Poonampalayam	7945	20%
22	Poonampalayam	7945	20%
23	Mutharasanallur	6464	19%
24	Malliampathu	5145	19%
25	Mekudi	1643	19%
26	Anthanallur	4923	18%
27	Perur	1286	18%
28	Kambarasampettai	5248	18%
29	Total Thalagudi (CT) including	5740	18%
2/	Keeramangalam		10/0
30	Total Thiruppanjeeli including North &	11473	17%
	South		
31	Kuvalagudi	2174	17%

SI. No	Village Name	Population	Growth
		2011	Rate
32	Nagar	2756	17%
33	Kanthaloor	735	17%
34	Appadurai (including Therkuchatharam)	4019	16%
35	Kadiyakurichi	949	16%
36	Mathavaperumal Koil	4,132	16%
37	Total Athavathur including East & West	15913	16%
38	Sooriyur	3361	15%
39	Navalur Kottapattu	5310	15%
40	Kulumani	4887	15%
41	Theerampalayam	3786	15%
42	Thirumalaisamuthiram	958	14%
43	Alakiyamanavalam	3889	13%
44	Total Killianallur including North & South	3740	13%
45	Thiruchendurai	2418	13%
46	Uthamaseri	2134	13%
45	Thiruchendurai	2418	13%
46	Uthamaseri	2134	13%
45	Thiruchendurai	2418	13%
46	Uthamaseri	2134	13%
47	Kumaravayalur	2067	13%
48	Venkankudi	1635	13%
49	Asoor	1579	13%
50	Melpathu	3194	12%

51	Nerujalakudi	2858	12%
52	Maruthandakurichi	3421	12%
53	Keelamullagudi	1908	12%
54	Paganoor	2209	12%
55	Panayapuram	1389	11%
56	Esanakorai	2202	11%
57	Mullikarrupoor	1640	10%
58	Total Thirumanamedu including East & West	4226	10%
59	Shesa samuthiram	922	10%

Table 3-6 Villages Growth Rate Ranking – Medium Growth Rate (Census 2011)

SI. No	Village Name	Population 2011	Growth Rate
1	Madagudi	3632	9%
2	Pambaramsuthi	1417	9%
3	Pathalapettai	2734	9%
4	Kilikkoodu	1066	9%
5	Valadi	3679	9%
6	Sevanthinathapuram	1331	9%
7	Thiruvasi	1840	9%
8	Allur	3230	9%
9	Kalpalayam	386	8%
10	Kodiyalam	4323	8%
11	Periyakarupoor	1482	8%
12	Arasangudi	1745	8%
13	Kovathakudi	3054	7%
14	Palur	1603	7%

15	Natarajapuram	1294	7%
16	R. Valavanoor	1296	7%
17	Thirumangalam	4469	7%
18	Keelaperungavur	1952	5%
19	Koohur	2339	5%
20	Mekkudi (Inaam)	1376	5%
21	V.Thuraiyur	579	4%
22	Mudikandam	463	4%
23	Marudhur	2081	3%
24	Thiruparaithurai	3403	1%

Table 3-7 Villages Growth Rate Ranking – Low Growth Rate (Census 2011)

SI. No Village Name		Population	Growth	
3I. NO	Village Name	2011	Rate	
1	Total Kariyamanikam including East &	7465	-2%	
	West	7 100	270	
2	Idaiyathumangalam	1554	-3%	
3	T. Valavanoor	1498	-4%	
4	Puthukudi	1447	-10%	

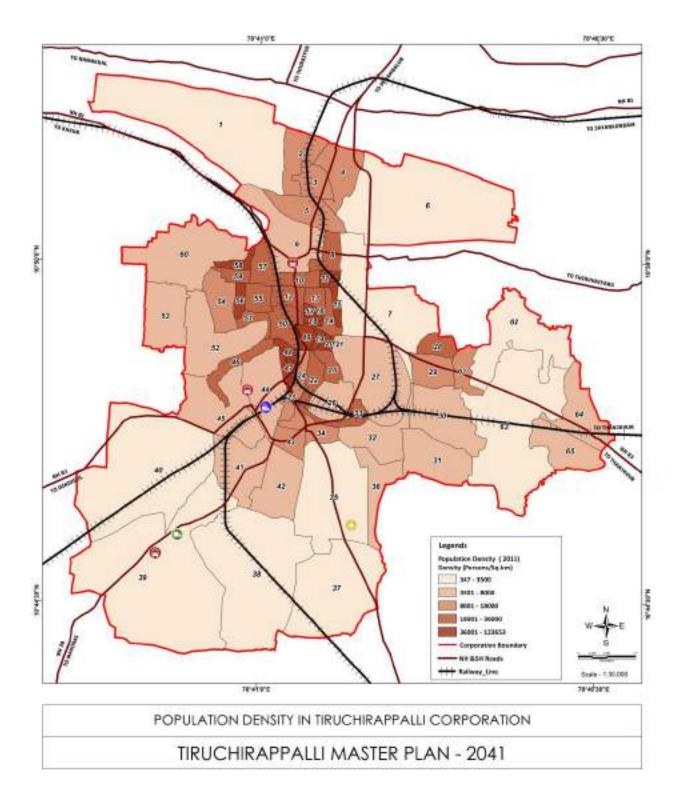
Table 3-8 Villages Growth Rate Ranking – Negative Growth Rate (Census 2011)

#### 3.3 Population Density

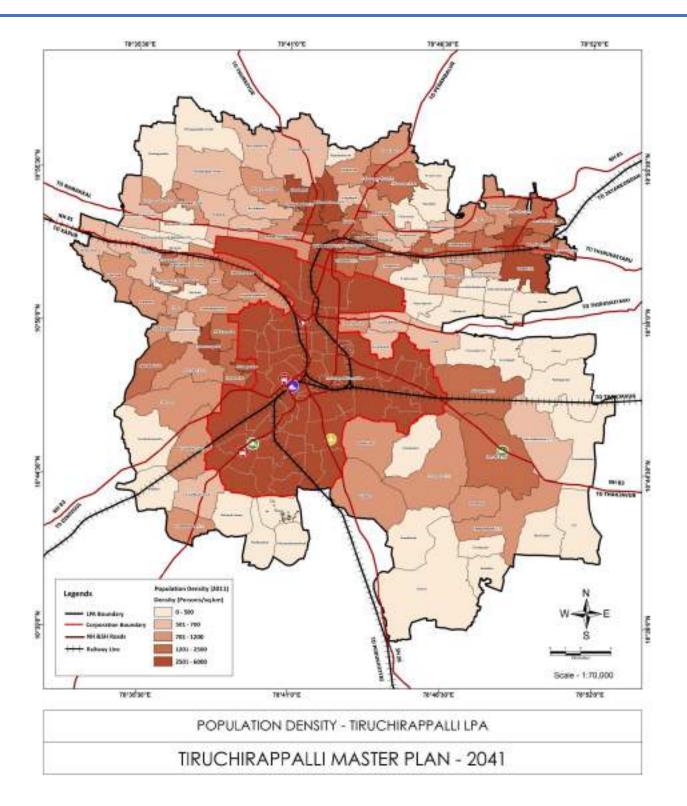
The population density of Tiruchirappalli Local Planning Area is 1,781 persons per sq.km, which is higher than the Tamil Nadu state average of 880 persons per sq.km, an important reason being the presence of Tiruchirappalli city as one of the highest urbanized cities of Tamil Nadu state offering employment and business opportunities.

SI. No	Administration	Population 2011	Area (Sq.km)	Density 2011 (persons per Sq.km)
1	Tiruchirappalli Corporation	9,15,569	167.23	5475
2	Thuvakudi Municipality	38887	19.43	2001
3	Lalgudi Municipality	23740	10.03	2367
4	Koothappar	29089	15.44	1884
5	Puvalur	7905	6.48	1220
6	Manachanallur	25931	8.64	3001
7	S. Kannanoor	13073	4.5	2905
8	Palanganankudi (CT)	13469	13.87	971
9	Thalagudi (CT)	5740	3.40	1688
10	Navalpattu (CT)	16788	17.35	968
11	Valavanthankottai (CT)	9202	13.49	682
12	Nagamangalam (CT)	5785	10.03	577
13	Pitchandar Koil (CT)	17257	6.16	2801

Table 3-9 Urban Population Density – Census 2011



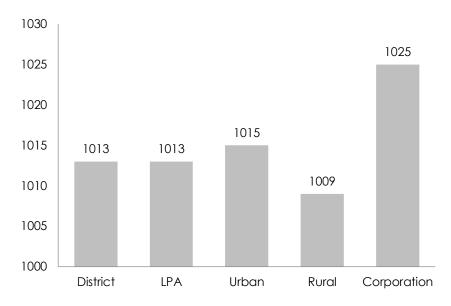
Map 3-3 Population Density – Tiruchirappalli Corporation



Map 3-4 Population Density – Tiruchirappalli LPA

#### 3.4 Sex Ratio

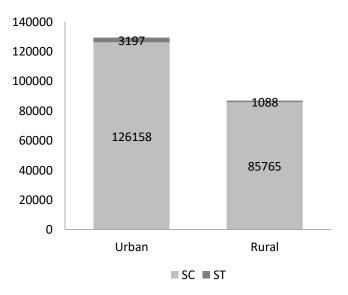
The sex ratio of the Tiruchirappalli Local Planning Area is 1013, which is higher than the average of Tamil Nadu state which is 996 as well as the other districts nearby the study region.



#### Figure 3-1 Sex Ratio (Census 2011)

#### 3.5 Schedule Caste and Schedule Tribes Population

Out of the total population of Tiruchirappalli Local Planning Area, nearly 14.71% belong to Scheduled Caste category while only 0.31% of population belongs to Schedule Tribe category.



#### Figure 3-2 SC & ST Population

#### 3.6 Literacy Rate

Development is a dynamic process, and it requires educated, skilled, and competent people. Literacy plays important role in providing skilled work force as well as literate consumer demands more for better lifestyle. Literacy rate refers to the number of literate populations to the total.

Area	Literacy				
	Total	Male	Female		
Tiruchirappalli Corporation	82.78%	85.63%	80.00%		
LPA	80.74%	84.47%	77.06%		
District	83.23%	89.772%	76.87%		

#### Table 3-10 Literacy Rate (Census 2011)

The literacy rate of Tiruchirappalli Local Planning Area is 80.74% which is nearly equal to the than the district rate of 83.23%. The female literacy rate of Tiruchirappalli Local Planning Area is 77.06% which is higher than the female literacy rate of the district.

Female literacy is lower than the male literacy both in Urban and Rural areas. Considering that females are more than males according to the sex ratio and comparing it with the literacy rate, it shows that women education has to be improved. Literacy rate is increasing at a good pace.

#### 3.7 Population Projection

Population projection is the future projection of past data. Using historical data, it helps predict a city's future expansion and offers a baseline for estimating the amount of land and infrastructure needed. Projections of the population's size aid in assessing the demand for services across various demographic groups.

#### 3.7.1 Population Projection Methods

There are several techniques for projecting population growth, including

geometrical increase, exponential, incremental increase, decreasing growth rate, graphic, and geometric progression methods. Depending on the purpose and characteristics of the region being projected, several techniques are employed. In the Tiruchirappalli LPA, the following techniques have been used to project the population through 2041:

- o Arithmetical Progression method
- o Incremental Increase method
- o Geometrical Increase method

For projecting future population, Tiruchirappalli LPA has been classified into four types based on the nature of Urban and Rural local bodies. They are as follows,

- o Tiruchirappalli Corporation
- o Municipality
- o Town Panchayat
- o Rest of LPA

#### 3.7.1.1 Arithmetic Progression Method

The underlying premise of this approach is that population growth is steady. Using historical census data, this method determines the average population growth per ten years. The population of the upcoming ten years is calculated by adding this increase to the current population.

dP/dt = C i.e., rate of change of population with respect to time is constant.

Population after nth decade will be Pn = P + n.C

Where, Pn is the population after n decade and P is present population.

#### 3.7.1.2 Incremental Increase Method

This approach is a variation on the arithmetical increase method, works well for average-sized towns in typical circumstances where the pace of growth is observed to be growing. When using this method, future population calculations take the rise in increment into account.

Population after nth decade is  $Pn = P + n.X + \{n (n+1)/2\}$ . Y

Where, Pn = Population after nth decade

X = Average increase and Y = Incremental increase

#### 3.7.1.3 Geometrical Increasse Method

This approach makes the assumption that population growth will not change over the next ten years. The projected population increase is calculated using the geometric mean increase. Given that this approach produces better results, it should only be used for newly developed industrial towns that will exist for a few decades.

Pn = P (1+ IG/100) n

Where, Pn = Population at the end of nth decade

IG = geometric mean (%)

P = Present population

n = No. of decades

#### 3.7.2 Population Projection using various methods

### 3.7.2.1 Tiruchirappalli Corporation

Description	1961	1971	1981	1991	2001	2011
Population	3,84,801	4,91,586	6,04,124	7,08,493	7,96,644	9,15,569
Arithmetic Method		4,58,136	5,31,472	6,04,807	6,78,142	7,51,478
Geometric Method		4,57,692	5,44,391	6,47,513	7,70,169	9,16,060
Incremental Method			5,98,371	7,19,539	8,15,182	8,93,393

#### Table 3-11 Population Projection – Tiruchirappalli Corporation

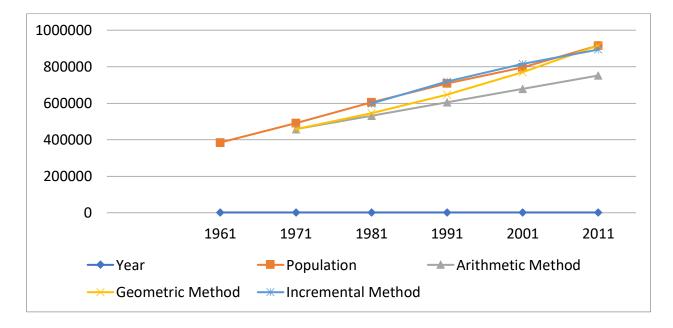


Figure 3-3 Population Projection – Tiruchirappalli Corporation

#### 3.7.2.2 Municipality

Description	1961	1971	1981	1991	2001	2011
Population	2,965	15,371	24,720	33,241	35,428	38,887
Arithmetic Method		6,108	9,251	12,395	15,538	18,681
Geometric Method		5,049	8,597	14,639	24,927	42,446
Incremental Method			27,777	32,541	41,391	40,137

#### Table 3-12 Population Projection – Thuvakkudi Municipality

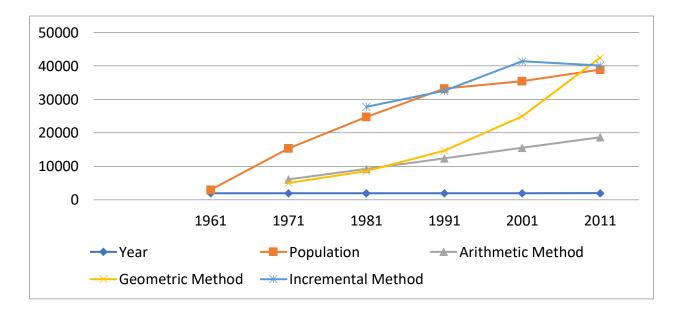


Figure 3-4 Population Projection – Thuvakudi Municipality

Lalgudi Municipality

Description	1961	1971	1981	1991	2001	2011
Population	15,824	16,122	17,930	19,917	23,405	23,740
Arithmetic Method		17,189	18,554	19,918	21,283	22,648
Geometric Method		17,164	18,617	20,194	21,904	23,759
Incremental Method			16,420	20,493	22,126	26,364

Table 3-13 Population Projection – Lalgudi Municipality

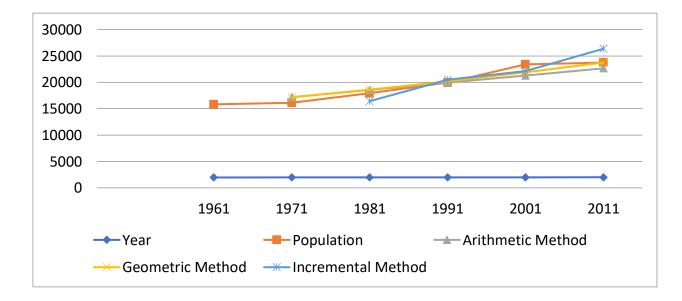


Figure 3-5 Population Projection – Lalgudi Municipality

#### 3.7.2.3 Town Panchayat

Description	1961	1971	1981	1991	2001	2011
Population	23,618	30,263	38,490	59,048	68,470	75,998
Arithmetic Method		30,027	36,436	42,845	49,254	55,664
Geometric Method		29,856	37,740	47,708	60,307	76,235
Incremental			36,908	47,508	77,815	80,609
Method						

#### Table 3-14 Population Projection – Town Panchayat

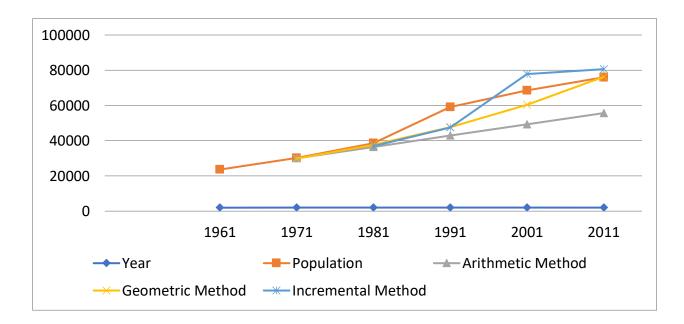


Figure 3-6 Population Projection – Town Panchayat

# 3.7.2.4 Rest of LPA

Description	1961	1971	1981	1991	2001	2011
Population	1,72,532	2,06,424	2,28,409	2,79,168	3,08,601	3,78,973
Arithmetic		2,02,161	2,31,789	2,61,418	2,91,046	3,20,675
Method						
Geometric		2,01,960	2,36,408	2,76,731	3,23,931	3,79,183
Method						
Incremental			2,40,316	2,44,441	3,23,147	3,41,132
Method						

Table 3-15 Population Projection – Rest of LPA

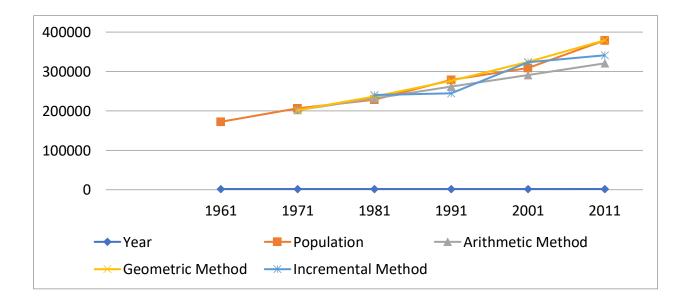


Figure 3-7 Population Projection – Rest of LPA

# 3.7.3 Population Projection of LPA

Population projection for the Tiruchirappalli Local Planning Area, carried out based on comparing three methods of projection namely Arithmatic, Geometrical and incremental methods. Then the values of the three methods are compared with the projected scenario for 2011 then the low margin method is taken into the consideration while projecting the population.

Geometric projection gives the values closest to the actual values. Therefore, Geometric projections are taken for future projections except Thuvakudi municipality. Since the growth rate of Thuvakudi is high, incremental increase method values closest to the actual value. Thus Thuvakudi Municipality population is projected by Incremental increase method and rest of LPA population is projected by Geometric method.

Description	2011	2021	2031	2041
Tiruchirappalli Corporation	915569	1089019	1295327	1540720
(Geometric Method)				
Thuvakudi Municipality	38887	43835	49155	54572
(Incremental Method)				
Lalgudi Municipality (Geometric	23740	27004	30717	34941
Method)				
Town panchayat	75998	91851	111054	134324
(Geometric Method)				
Rest of LPA	1433167	1688204	1989357	2344855
(Geometric Method)				

Table 3-16 Population Projection of Tiruchirappalli LPA



# **PHYSICAL FEATURES**

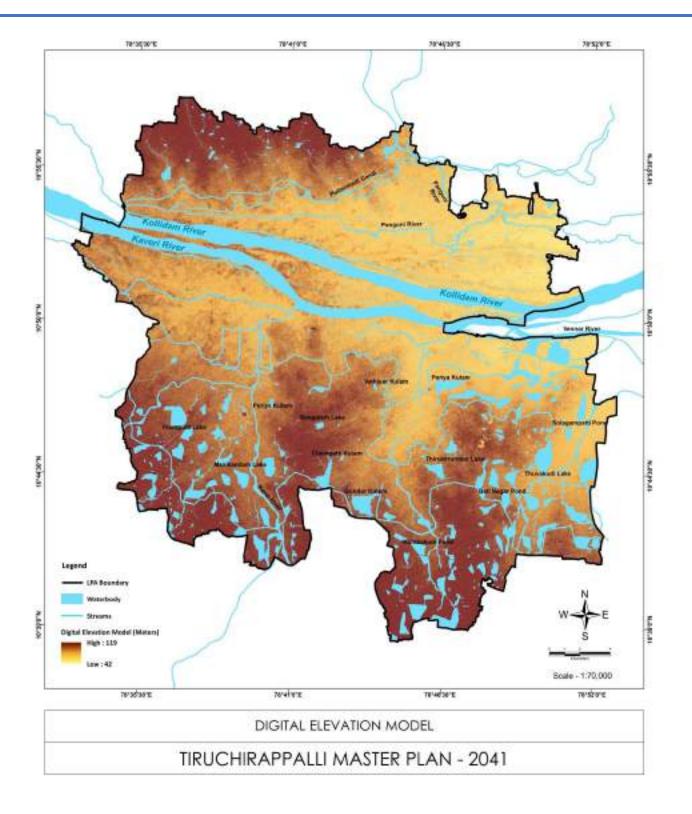
# 4. PHYSICAL FEATURES

# 4.1 Geography

The Geographical area of Tiruchirappalli district is 4, 40,383 hectares (4403.83 sq.km) accounting for 3.38 percent of geographical area of Tamil Nadu State. It is situated almost at the geographic central point of the state Tamil Nadu. For administrative purpose, this district has been bifurcated into 8 Taluks, 14 Blocks and 41 Firkas. The city is located at a latitude of 10.8050°N and longitude of 78.6856°E. Tiruchirappalli spread over an area of 146.7 square kilometres bordered on the north by Salem District, on the northeast by Perambalur District, on the east by Thanjavur District, on the southeast by Pudukkottai District, on the south by Sivaganga and Madurai districts, on the southwest by Dindigul District, on the west by Karur District, and on the northwest by Namakkal District.

# 4.2 Topography

The terrain of trichy is almost flat with few isolated hill rocks one of the highest of which is Rockfort. The average elevation of the district is indicated as 289 feet (88m) approx. and also poses a few stranded mounds mounting higher up to the surface. The city is situated at the head of the Cauvery Delta which commences 16kilometres (9.9 mi) west of Tiruchirappalli where the Cauvery River branches into two streams forming the island of Srirangam. A belt of cretaceous rock known as the Trichinopoly Group lies to the north of the city. It commences from the banks of the Kaveri River and extends northwards gradually thinning before joining another belt of cretaceous rock known as the Ariyalur Group. Both the northern and southern corners of the Trichinopoly Group rests on a layer of gneiss.

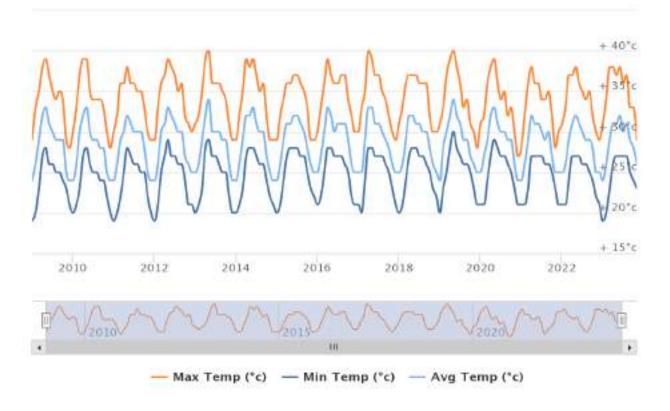


#### Map 4-1 LPA Digital Elevation Model

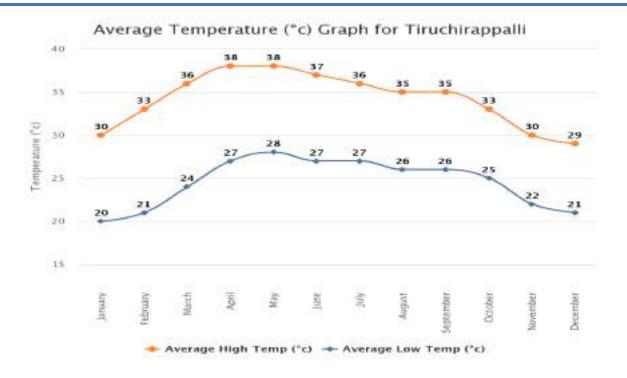
#### 4.3 Climate and Rainfall

The district experiences tropical savanna climate with no major change in temperature in summer and winter climates. It also experiences monsoon seasons. Thiruchirapalli is extremely hot during daytime in the summer months from March to May and is rendered by cold winds that blow in the evenings from south east. It is sultry during September and October but cool from November to February. Fog and mists are very rare occurrences and the district receives major share of its rainfall from North East monsoon. Northeastern monsoon occurs during November – December during which it receives intermittent rainfall of 722.6 mm. The maximum temperature goes up to 37.2°C and minimum temperature down to 20.6°C. Usually mornings are more humid than afternoons. The relative humidity varies between 50 and 85% in the mornings while in the afternoon it varies between 70 and 92%.

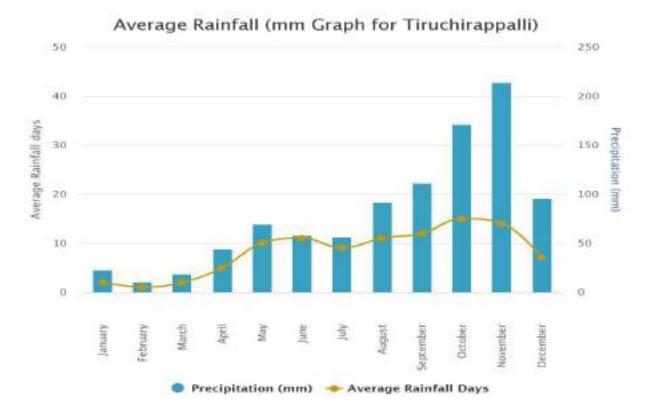
Tiruchirappalli Max, Min and Average Temperature (\*c)













# 4.4 Lineaments

The prominent lineaments trend in E-SW, NNE-SSW, NW-SE and E-W directions. Some of these fracture zones persist to depths and may form potential aquifers in the area. Productive joints have been encountered down to a depth of about 100 m bgl in the wells drilled for rural water supply by the Ground Water Department and Tamil Nadu water Supply and Drainage Board. The yield of these wells at the time of drilling and development ranged from less than 1 to 10 lps. The depth of drilling in the district through outsourcing for drought proofing work was in the range of 92 to 200 m bgl. The wells encountered three to five fracture zones with two fracture zones down to 50 m and two fracture zones in the depth range of 100 - 150 m and one fracture zone deeper than 150 m.The yield of these wells varied from <1 to 9 lps.

# 4.5 Geology

Tiruchirappalli district is broadly classified into hard rock and sedimentary formations. It exposes crystalline rocks of Archaean and Proterozoic age, Upper Gondwana Formations, sedimentary rocks of Mesozoic age, Miocene and Quaternary sediments. In the LPA the regions such as Trichy, Samayapuram, Thottiyam, Thuraiyur and parts of Lalgudi taluks are covered by hard rocks of granite, gneisses and charnockite, Whereas some parts of lalgudi taluks are covered by sedimentary formations such as Gondwana, Cretaceous and Quaternary. The Quaternary formation stretches mainly along the river courses of Cauvery and Coleroon. They are composed of fluvial deposits which are medium to coarse grained sediments and finer flood plain deposits. The alluvium overlies the Archaen formation which is mainly occurs in the tracts of Lalgudi taluks of LPA.

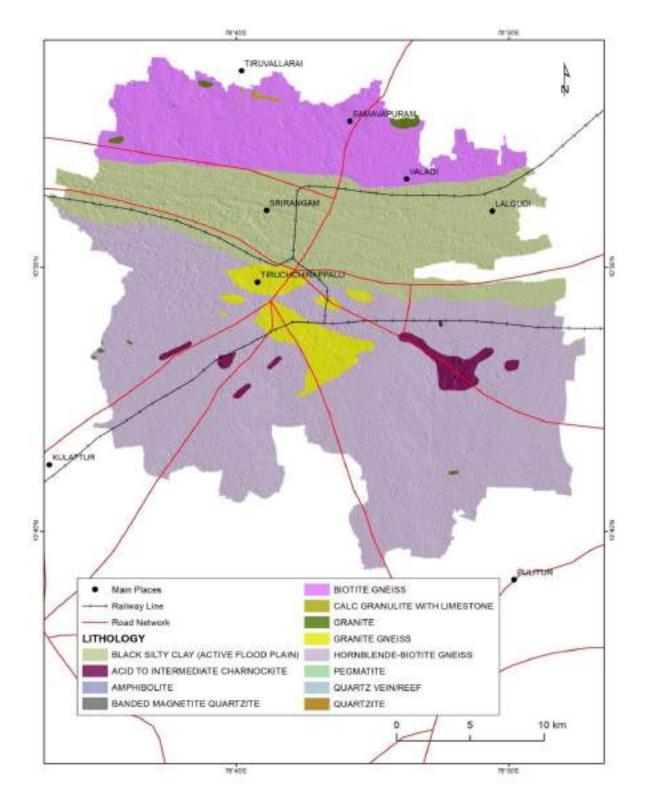
# 4.5.1 Geological Landforms

**Charkonite**: Ground water occurs under water table conditions. The intensity of weathering, joints or fractures is much less compared to gneiss formations. These are not good water yielding zones except in regions of fractures and joints. The occurrence of kankar materials hinders water yielding capacity.

**Gneiss**: Groundwater occurs under water table in weathered, joint and fractures formation. The pore space developed in the weathered mantle acts as shallow

granular aquifers and forms the potential water bearing and yielding zones. Water table is very shallow in river; canal and tank irrigated regions whereas it is somewhat deeper in other regions. Both the northern and southern corners of the Thiruchirappalli rest on a layer of gneiss.

**Sedimentary:** A belt of cretaceous rock lies to the north of the city. It commences from the banks of the Kaveri River and extends northwards gradually thinning before joining another belt of cretaceous rock. Only limited quantity of groundwater can be extracted from these formations through dug wells and bore wells. The alluvial formations are noticed on either side of the Cauvery and Coleroon river. They consist of mainly sand, gravels, clays and sandy clay. The maximum thickness of alluvium is 30.0 m and the average thickness of the aquifer is approximately 15.0 m. These formations are porous and permeable which are good water bearing zones. The sedimentary deposits like lime stone, gypsum, fire clay, steatite, kankar, soap stone and phosphatide nodules are occurring in Pullambadi Dalmiapuram and region in the LPA.



Map 4-2 LPA Geology Map

# 4.6 Geomorphology

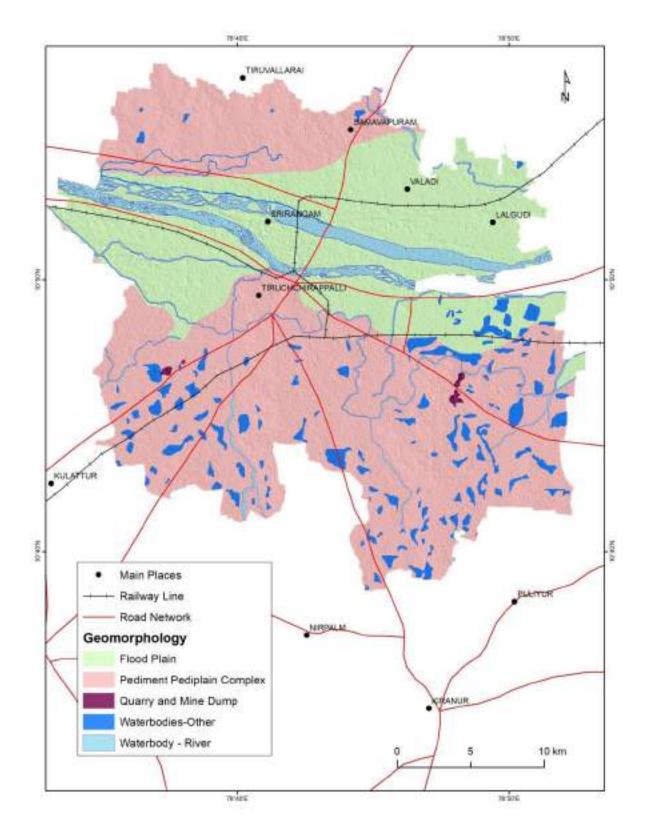
Most of the LPA region falls under the piedmont plain and the district constitutes the remnants of Eastern Ghats and rises to the height of 100 meter above MSL. From these hills, the land slopes gently toward east and forms a vast stretch of plain country. There are numerous small residual hillocks dotting the countryside, the most prominent one of which is the Rock Fort hill in Tiruchirappalli town. The alluvial plains are confined to the northern bank of Cauvery River and the Valley fill deposits are seen mainly in the northern part adjoining the hillocks in Uppiliapuram and Thuraiyur blocks. Buried Pediments have been identified in almost all blocks of LPA except Manikandam. Pediments, both shallow and deep, constitute the most prominent geomorphic unit in the region and are evenly distributed. Very small patches of Quarry and Mine Dump are found near Thiruverambur in the region.

### 4.6.1 Drainage

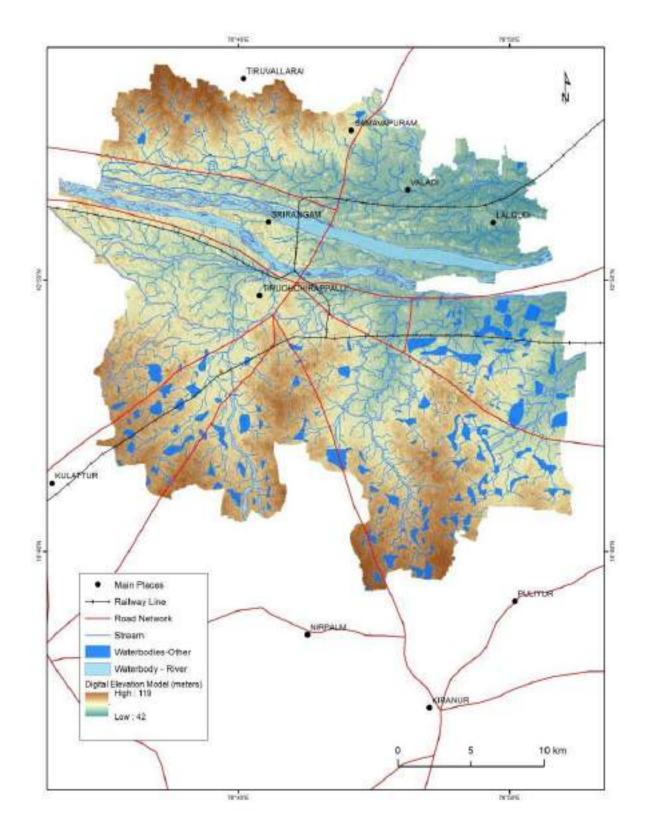
The upper and lower portions of the LPA have the highest elevation marking up to 119 meters and lowest elevations as 42 falling in the central regions of the LPA. The places such as Srirangam, Samayapuram, Valadi, lalgudi fall under mid elevated areas. The master slope of the region is towards the East. Kaveri is the major, and the only perennial river which is the southern branch and the northern branch of Cauvery, known as 'Coleroon' is mainly flood-carried. The prominent tributaries of the district are Ayyar and Uppar in the north and Koraiyar in the south. Most of the rivers are structurally controlled and forms the dendritic drainage pattern.

#### 4.6.2 Soil Type

The major soil types in the LPA consist of black cotton soils, red sandy to loamy soils and alluvial soils. Alluvial soils of considerable thickness occur in the central and eastern parts particularly in Tiruchchirappalli and Lalgudi taluk and Thuraiyur has red loamy soil.



Map 4-3 LPA Geomorphology Map



Map 4-4 LPA Drainage Map



# ECONOMY

# 5. ECONOMY

# 5.1 General Economic Profile

The total workers population of Tiruchirappalli Local Planning area is 38.44% of the total population, whereas the tertiary sector worker population is 4.46 lakhs and that of secondary is 0.14 lakhs based on the census 2011. Industries are spread over the Tiruchirappalli Local Planning area whereas services and institutions are concentrated in the Tiruchirappalli Corporation area.

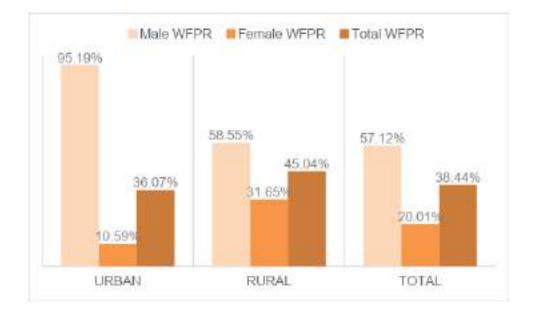
# 5.1.1 Work Participation Rate and Occupational Structure

DISTRIBUTION OF WORKFORCE FOR TIRUCHIRAPPALLI LPA				
TIRUCHIRAPPALLI	URBAN	TIRUCHIRAPPALLI RURAL		
Urban Population	10,54,194	Rural Population 3,78		
WFPR	36.07%	WFPR	45.04%	
Total Worker	3,80,278	Total Worker 1,70,693		
Distribution of V	Vorker	Distribution of Worker		
Primary Sector (%)	4.75%	Primary Sector (%)	42.84%	
Secondary Sector (%)	2.41%	Secondary Sector (%)	2.79%	
Tertiary Sector (%)	92.84%	Tertiary Sector (%)	54.46%	
Total Population of Primary Workers	18,058	Total Population of Primary Workers	72,978	
Total Population of Secondary workers	9,175	Total Population of Secondary workers	4,760	
Total Population of Tertiary workers	3,53,045	Total Population of Tertiary' workers	92,955	

Table 5-1 Distribution of Workface 2011

Ground truthing has to be done to find the present workforce participation, since conclusions made through analysis based on the data from Census 2011 may be misleading due to the huge time span between the data collection period and the present. The same applies for the data based on WFPR. Studies have to be conducted to identify the reason behind this phenomenon of low WFPR in the urban areas in addition to very less Female WFPR in 2011.

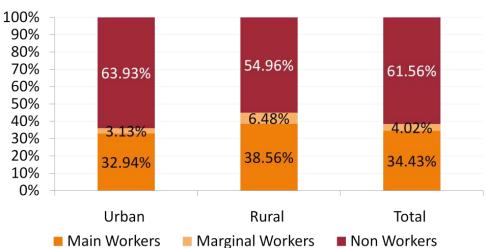
The workforce participation rate found in the Tiruchirappalli Local Planning Area-Rural area is around 45.04% whereas that of Tiruchirappalli Local Planning Area-Urban area is 36.07%. In the Tiruchirappalli Local Planning Area region, of the total main workers, about 17.32% are engaged in primary sector and related activities whereas the remaining 82.68% are engaged in secondary and tertiary sector (nonprimary sector).



#### Figure 5-1 Workforce Participation – Male and Female (Census 2011)

The workforce participation rates (WFPR) in the LPA region reveals a stark gender disparity, with the female WFPR at a concerning 20.01% compared to the notably higher 57.12% for males. Notably, urban areas exhibit a striking imbalance, with a significantly higher male WFPR of 95.19% compared to the lower 58.55% in rural areas. Only 10.59% of women are engaged in urban employment, indicating a substantial rural-urban divide in female workforce participation.

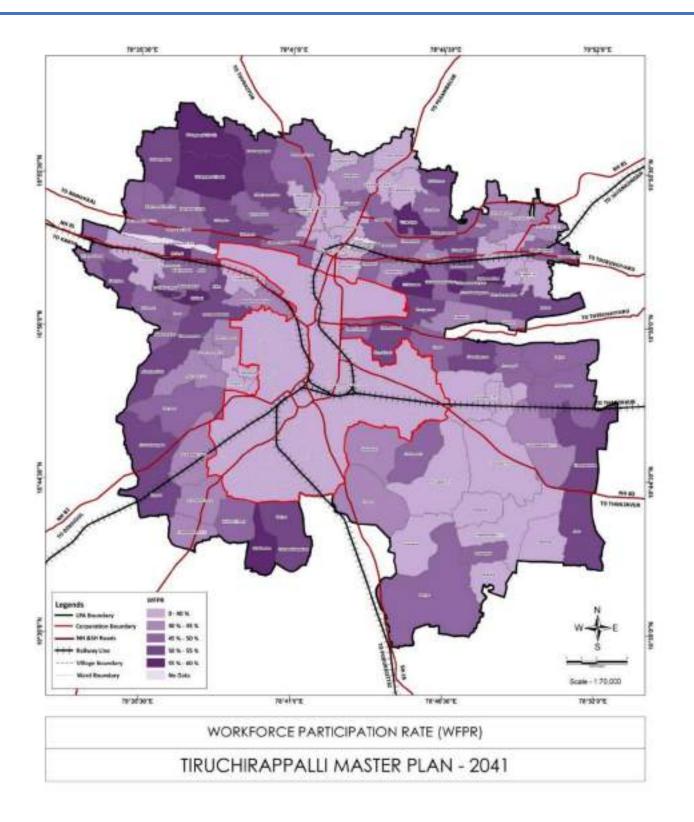
However, the Economic Survey of 2022-23 challenges the conventional narrative of low female labor force participation in India. It suggests that the actual participation rate may be underestimated due to measurement issues, such as broad categorizations that may misclassify productive work as domestic duties. The survey emphasizes the need for reforms in survey design and content to accurately capture the true extent of women's contribution to the economy. The potential role of Self-Help Groups (SHGs) in harnessing female labor force participation is highlighted, with SHGs comprising 88% of all women. The survey underscores three critical measurement issues: overly broad categories, reliance on a single question for categorization, and a narrow approach to defining productive work, all of which may contribute to the observed discrepancies in WFPR.



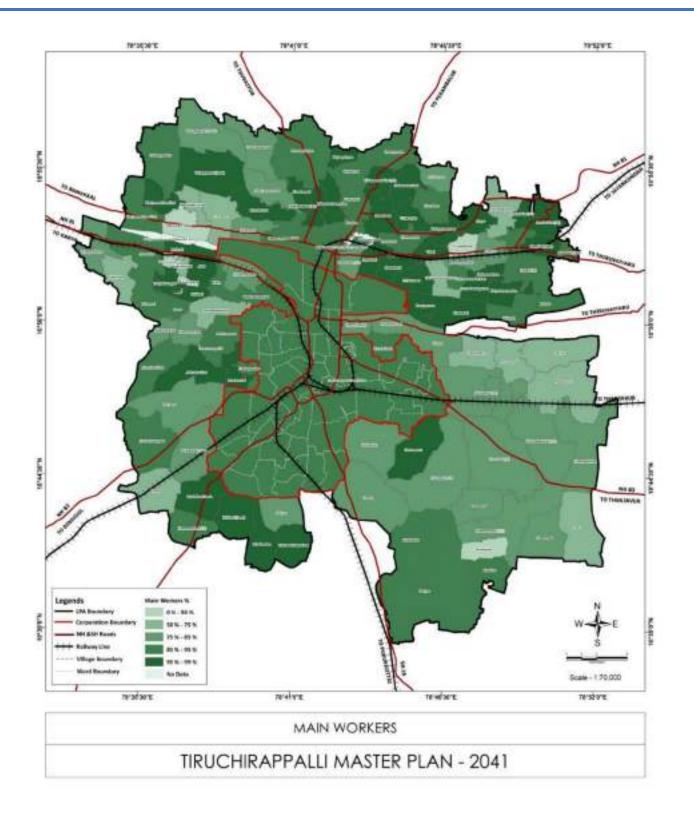
**Workers Distribution** 

# Figure 5-2 Worker's Distribution (Census 2011)

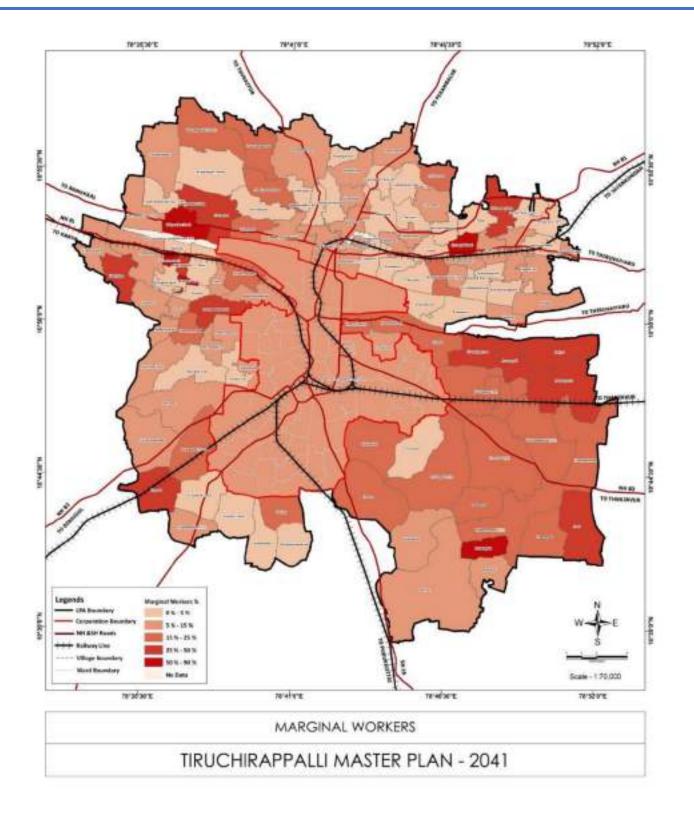
Non-workers are more than the workers. Main workers are the most among workers in both urban and rural areas. Urban areas have highest percentage of nonworkers. Occupational structure refers to the aggregate distribution of occupations according to skill level and economic function. It is adopted based on various factors like structure of economy (the relative weight of different industries), technology and administrative responsibility, labor market, etc.







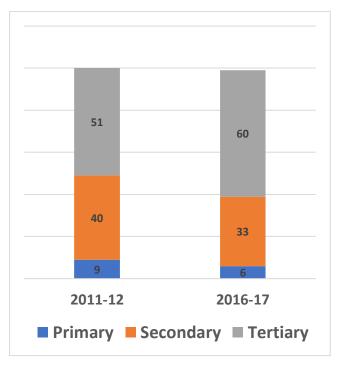
Map 5-2 Main Workers percentage





# 5.1.2 GDDP

Tiruchirappalli is one of the more industrialized districts of the state and contributes to 4.6% of the states GDP. The district has a flourishing boiler industry, with mineral products and beverage production contributing to the economy as well.



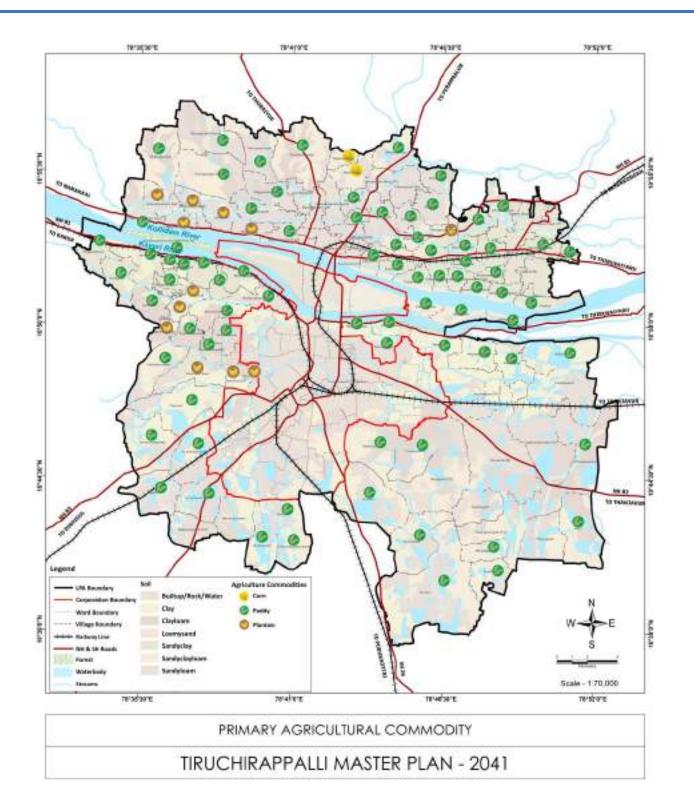
#### Figure 5-3 GDDP sectoral composition

(Source: District Skill Development Plan)

The economy of the district is dominated by the service and Industrial sectors, which accounted for about 93% of the district output in 2016-17. The district has grown at a compounded annual growth rate of 11% largely driven by the services sector, which grew at an average of 12% per annum across the same period of time. The share of the agriculture sector in the district output decreased by 3 percentage over the same period.

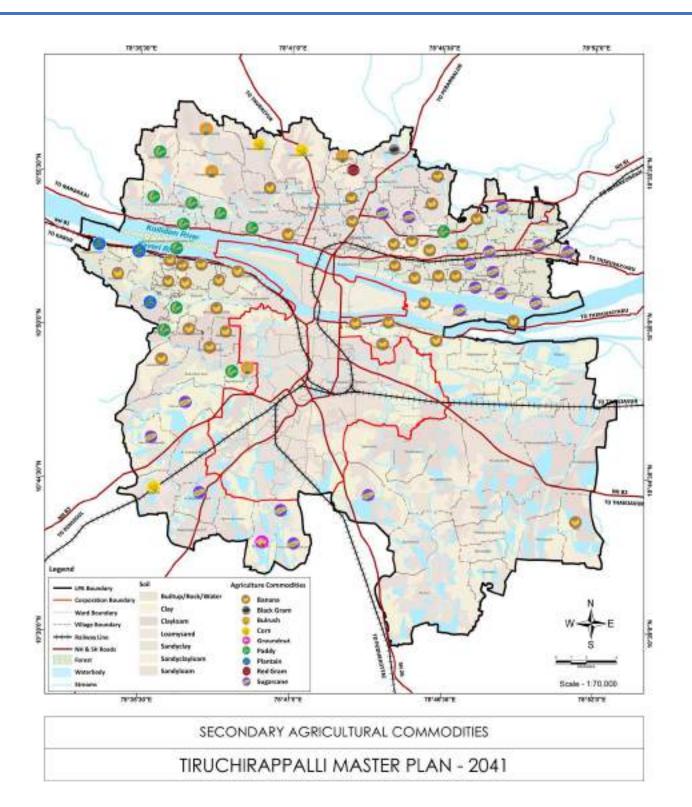
# 5.2 Agriculture and Allied Activities

The livestock sub-sector is a major contributor to agriculture GVA. Agriculture in the district is dominated by cultivation, livestock and fishing. Some of the major commodities cultivated include: Rice, Sugarcane, Banana, Groundnut, Cotton.



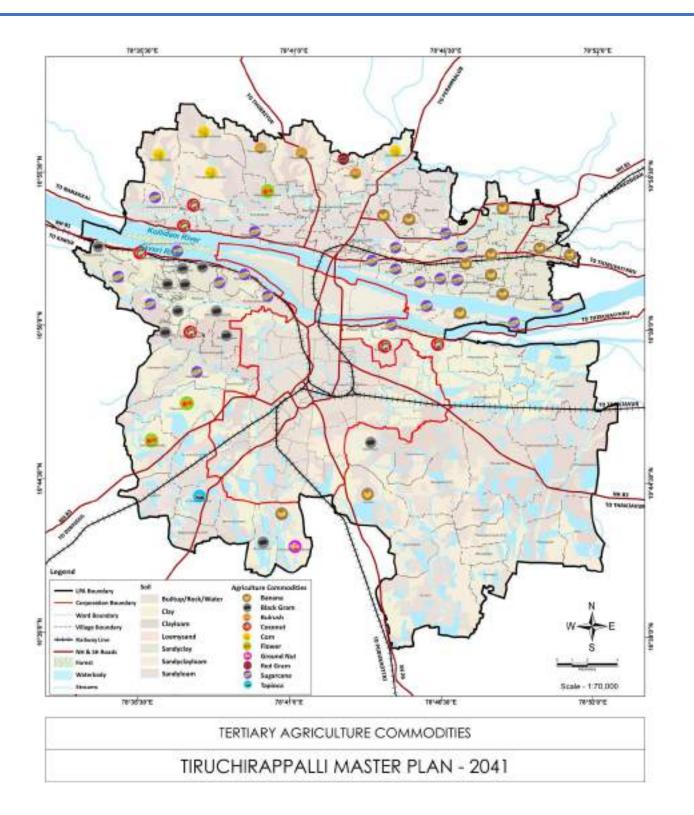


|90



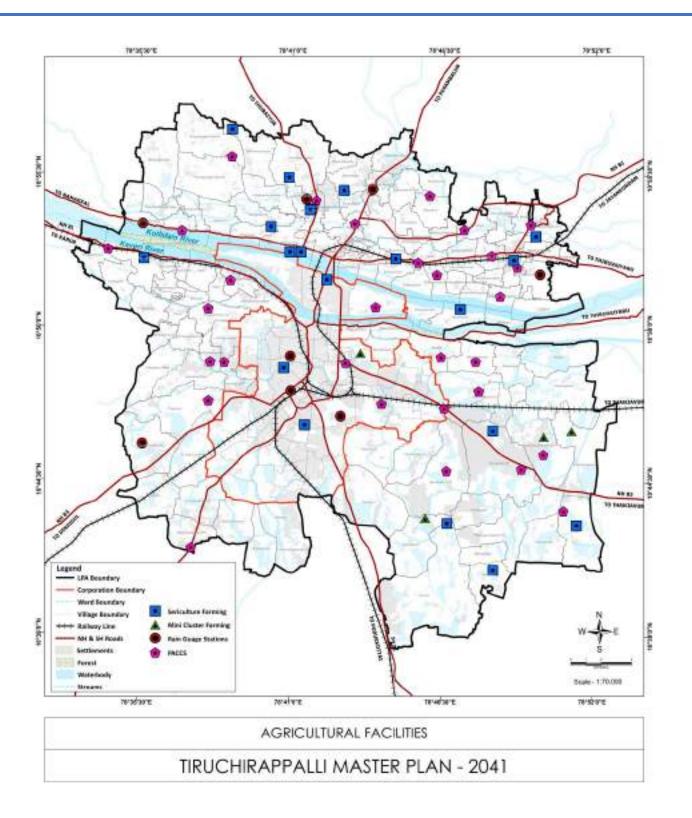
#### Map 5-5 Secondary Agricultural Commodities

|91



Map 5-6 Tertiary Agricultural Commodities

|92





# 5.3 Industries

Recent growth in the manufacturing sector (13% between 2011-12 and 2016-17) has enabled a growth of the Industrial sector at 11% per annum over the same period. The sector is dominated by the Manufacturing and Construction sectors - they account for almost 98% of the output. Metal processing, non-metallic mineral products, beverages and auto components are some of the key Industries in the district.

# 5.3.1 Existing Industrial Base

Tiruchirappalli is a major energy engineering manufacturing hub in the state. Industrialisation in the district received a boost with the establishment of a manufacturing unit in Tiruchirappalli in 1964 by Bharat Heavy Electricals Limited (BHEL), the largest engineering manufacturing company in the country and a maharatna central public sector enterprise (CPSE).

The major industries within the planning areas are Golden Rock Railway workshop, Bharat Heavy Electricals Limited (BHEL), Small Arms Project, Heavy Alloy Penetration Plant and Steel Rolling Mill are developed very near to the planning area which had been included in Navalpattu New Town Area. In addition to that, Industrial estates of Thuvakudi, Thiruverambur and Mathur are catalyst over the planning area. In addition to that, few major industries have also been developed within the planning area in different pockets. Further, Tanneries are developed in both Kottapattu and Thayanur villages.

PLACE	EXTENT (Acres)	SHEDS (Nos.)	PLOTS (Nos.)	FORMATION (Year)
Ariyamangalam	17.64	33	-	1974
Valavanthankottai (WIP)	51.70	-	-	2003

Table 5-2 SIDCO Industrial Estates in Tiruchirappalli District

# 5.3.2 MSME Profile

Out of total MSMEs in micro enterprises are (87.14%), small enterprises (12.55%) and medium enterprises (0.31%). The investment in micro enterprises is Rs 77779 Lakhs (32.12%), small enterprises Rs 131867 Lakhs (54.46%) and medium enterprises Rs 32488 Lakhs (13.42%).

MSME CATEGORY	MANUFACTURIN G (Rs Lakh)	SERVICE (Rs Lakhs)	TOTAL (Rs Lakhs)
Micro Enterprise	38816	38963	77779
Small Enterprise	75457	56410	131867
Medium Enterprise	17861	14627	32488
TOTAL	132134	110000	242134

#### Table 5-3 Investment in MSMEs in Tiruchirappalli District

The employment in micro enterprises is (66.97%), small (29.76%) and medium 3894 persons (3.27%). The average investment and employment per enterprise in MSMEs are Rs 12 Lakhs and 6 persons respectively. The average investment and employment per enterprise in manufacturing are Rs 18 Lakhs and 7 persons per enterprise (Table 5.5).

SL. CATEGORY NO OF MSME		MANUFACTURIN G		SERVICE		TOTAL	
NO	OF MSME	INV.	EMP	INV.	EMP	INV.	EMP
1	Micro	6	6	4	4	5	5
2	Small	95	20	34	12	54	15
3	Medium	812	87	385	52	542	65
	TOTAL	18	7	9	5	12	6

#### Table 5-4 Average Investment and Employment in MSMEs

#### **TREC-STEP**

Tiruchirappalli Regional Engineering College-Science and Technology Entrepreneurs Park (TREC-STEP) was promoted in 1986 by Government of India, Government of Tamil Nadu and Financial Institutions. It was established to promote knowledge-based technology and innovative ventures by nurturing the spirit of enterprise among the aspiring youth. It provides incubation services through its facilities and venture capital sourcing. It is recognized as a Scientific and Industrial Research Organization by the department of science and technology (DST), Government of India.

# 5.3.2.1 ELCOT – IT PARK (SEZ)

As part of promoting Information Technology Parks (IT Park) and Special Economic Zones (SEZ) in Tier II cities, Electronics Corporation of Tamil Nadu (ELCOT) had established in December 2000 an IT Park and SEZ at Navalpattu near the airport in Tiruchirappalli with an outlay of Rs 60 crore. It constitutes an SEZ. The IT Park consists of 147.61 acres out of which 123.23 acres of SEZ and 24.28 acres of Non SEZ.

# 5.3.2.2 Spatial Distribution

The Spatial distribution of MSMEs and key industries of the LPA are illustrated in Map 5-7 and 5-8. It is observed that the growth is along the major transport Corridors with more manufacturing industries emerging in the East along the route connecting to Tanjavur. Whereas Service Industries are observed to be equally distributed along major urban centres, more density is observed along West towards Dindigul. The following top activities at NIC 2-digit level constitute 45% of the manufacturing enterprises as given in Table 5-5.

S.NO	NIC	ACTIVITY	MSMEs
1	10	Manufacture of food products	2229
2	25	Manufacture of fabricated metal products, except machinery and equipment	1396
3	13	Manufacture of textiles	656
4	14	Manufacture of wearing apparel	678

Table 5-5 Distribution of Manufacturing MSMEs with NIC 2- Digit Code

#### 5.3.3 Service Sector

Major Research Institutes in the LPA that has significantly contributed to the economic development are as follows. These are often allied to the industrial or agricultural activity of the LPA.

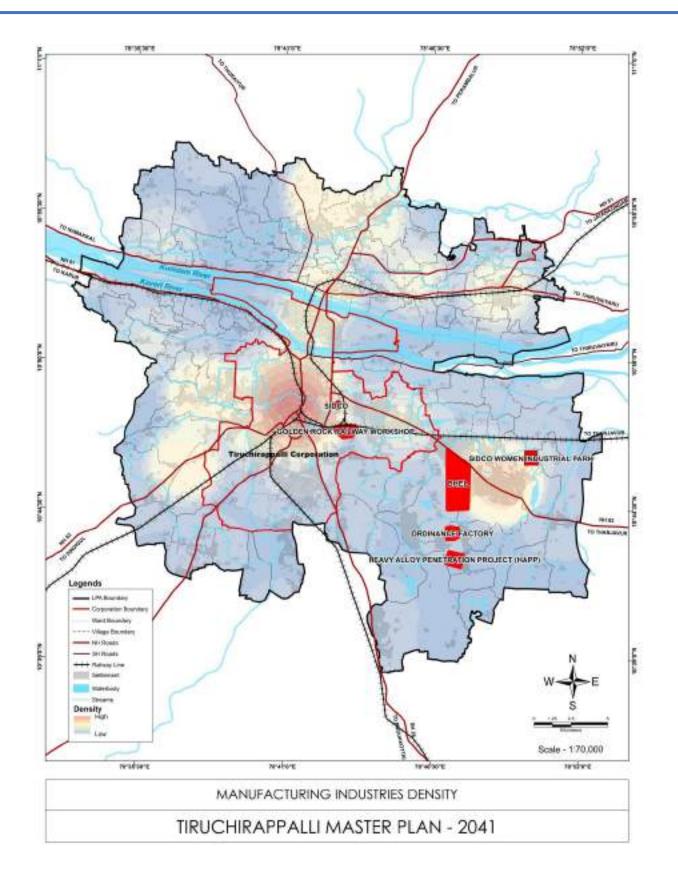
#### Welding Research Institute (WRI)

The WRI is well equipped with state-of-the-art facilities to serve the requirements of industries in the field of welding and allied areas. The major activities include research and development, training, testing, calibration, inspection, consultancy services and technology transfer. It is authorised by Indian Boiler Board (IBR) for training and certification of welders.

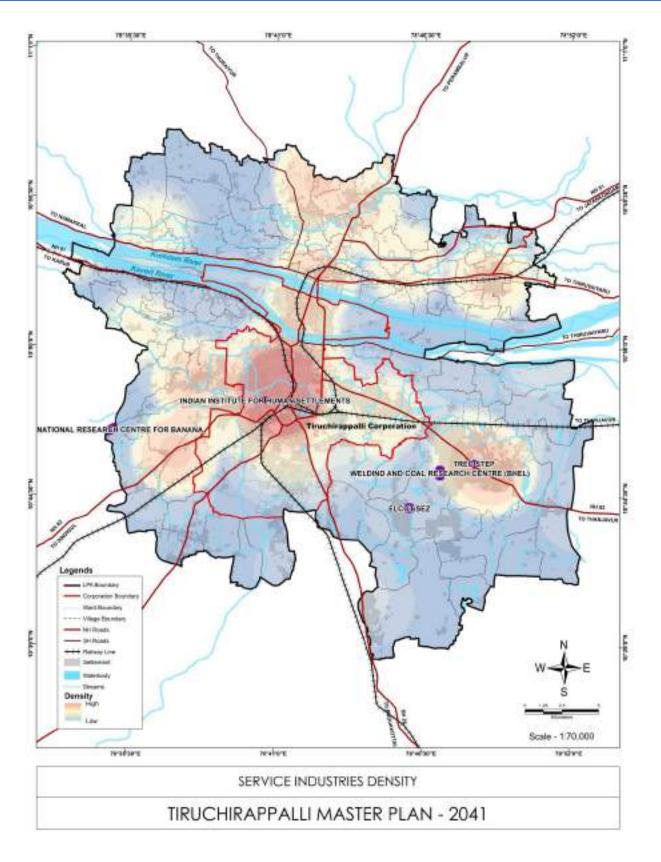
#### National Research Centre for Banana (NRCB)

The National Research Centre for Banana (NRCB) was established on 23-08-1993 by Indian Council for Agricultural Research (ICAR). Its main aim is to increase the production and productivity of banana and plantains through research. It has well equipped facilities for tissue culture, biotechnology, soil science, nutrient management and post harvest technology research.

|98



#### Map 5-8 Manufacturing Industries Density



Map 5-9 Service Industries Density

# 5.4 Trade and Commerce

# 5.4.1 Export Performance

Tiruchirappalli was a popular export hub throughout the British empire for its unique variety of cheroot known as the Trichinopoly Cigar. It was manufactured from tobacco grown near the present day Woraiyur in Tiruchirappalli. At its peak, over 12 million cigars were manufactured and exported annually during the Victorian era. Tanned hides and skins were also exported from Tiruchirappalli to the UK. The details of exports from Tiruchirappalli Air Cargo are given in Table 5-6.

SL	EXPORT COMMODITY	VALUE (RS CRORE)	VALUE (US \$ MILLION)
1	Petroleum Products	179.30	25.87
2	IC Engines & Parts	20.00	2.83
3	Fresh Vegetables	17.97	2.58
4	Floriculture Products	10.23	1.47
5	Fresh Fruits	4.30	0.62
6	Dairy Products	3.73	0.53
7	Others	5.45	0.78
	TOTAL	240.98	34.68

#### Table 5-6 Principal Commodities Exported from Air Cargo Tiruchirappalli

Major share of exports from Air Cargo Tiruchirappalli has gone to countries viz. Malaysia, Singapore, United Arab Emirates, New Zealand and Sri Lanka.

SL	COUNTRY	VALUE (RS CRORE)	VALUE (US \$ MILLION)
1	MALAYSIA	57.83	8.45
2	SINGAPORE	55.44	8.03
3	UAE	29.57	4.30
4	NEW ZEALAND	20.00	2.83
5	SRI LANKA	8.47	1.24
6	OTHERS	69.67	9.83
	TOTAL	240.98	34.68

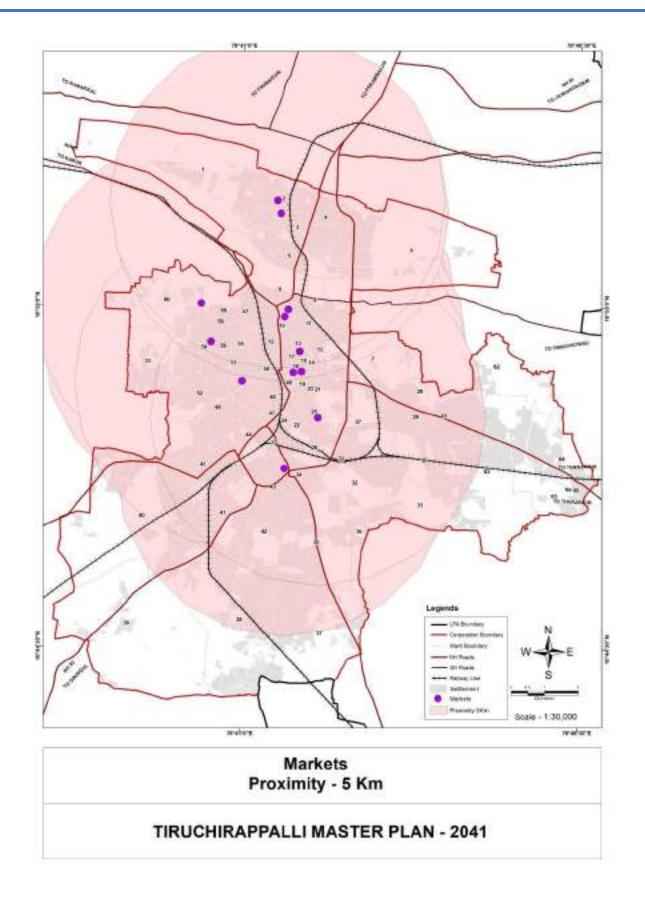
Table 5-7 Destinations of Exports from Air Cargo Tiruchirappall

#### Major Commercial Spaces

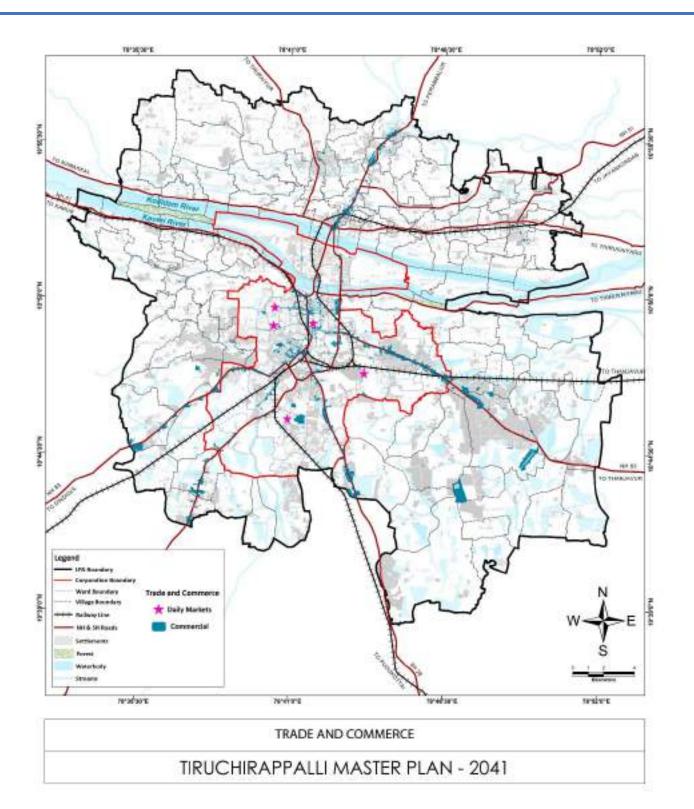
Some prominent commercial areas in Trichy included:

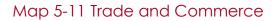
- o Chinthamani Supermarket Area
- o Teppakulam Area
- o Thillai Nagar
- o Main Guard Gate
- o Sankaran Pillai Street
- o M.G. Road (Malligai Ganthi Road)
- o Raja Colony
- o Rockfort Area

The above-mentioned spaces are known for its vibrant marketplaces and various shops catering to local needs. Thillai Nagar is one of the main commercial areas in Trichy, known for its numerous shops, restaurants, and business establishments. The vicinity around the Rockfort Temple also has commercial activities, with shops and markets catering to both tourists and locals. The Daily Markets withing the Corporation are illustrated in Map 5-9.



Map 5-10 Daily Markets Proximity



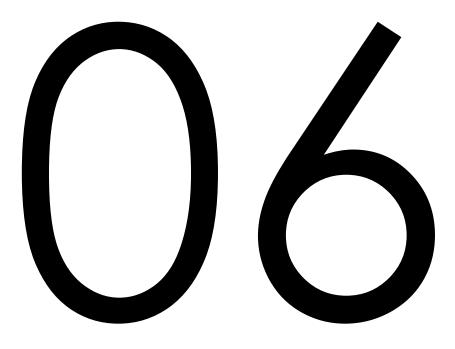


#### 5.5 Employment projection

S.No	Description	2011	2021	2031	2041
1	Total Population	1433167	1688204	1989357.01	2344855
2	Eligible Workers (65%)	931559	1097333	1293082	1524156
3	Total Male Population	711931	838622	988220	1164815
4	Total Female Population	721236	849583	1001137	1180040
5	Male willing to work (Percentage of total male workers eligible workers)	43.65%	43.65%	45.83%	48.01%
6	Total Male workers	406653	478986	592620	731747
7	Female willing to work (Percentage of total male workers eligible workers)	15.49%	15.49%	17.47%	19.46%
8	Total Female workers	144318	169977	225901	296601
9	Total workers	550971	648963	818521	1028348
10	WPR	59.15%	59.14%	63.30%	67.47%
12	Additional Jobs to be created	-	97992	267550	477377

#### Table 5-8 Employment Projection of 2041

The employment projection gives the total number of employment to be created for the year 2041. From the total population 65% of the population is considered as the eligible workers population. The employment projection is calculated based on the existing workers population and workforce participation rate. The difference in workforce participation rate of the years 2001, 2011 and the eligible workers population is considered to calculate the employment projection. The projected population is 2344855. The eligible workers are 1524156. With the workforce participation rate of 67.47%, the total employment to be generated is 477377.



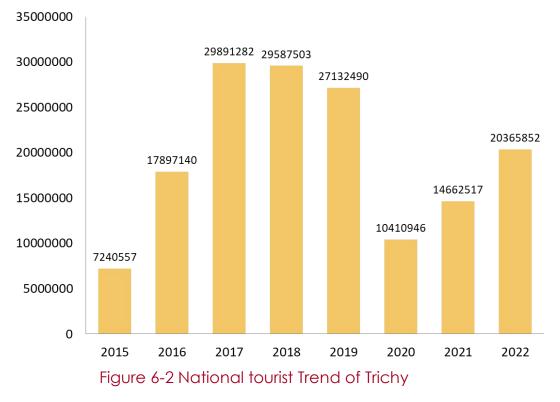
## **HERITAGE & TOURISM**

### 6. HERITAGE & TOURISM

Travel and tourism sector holds strategic importance in the Indian economy. It provides several socio-economic benefits such as employment, income and foreign exchange earnings and also plays a part in the development or expansion of other industries such as agriculture, construction, handicrafts, etc. Given the potential of tourism as a vehicle for job creation, growth and development, tourism has been recognized as an engine for economic growth.

Trichy as a Tourist destination has a wide variety of products and experiences to offer which has not been tapped to its full potential due to inadequate tourism infrastructure and services at many destinations and attractions. But the City has managed to pick up after the dip in tourism caused by the Pandemic since 2020.





Source: Tamil Nadu Tourism Development Corporation

Based on the revamped Swadesh Darshan Scheme 2022 of the Ministry of Tourism, the focus is to develop sustainable and responsible tourist destinations following a tourist & destination centric approach. The Scheme will encourage the development of benchmarks and standards for generic and theme-specific development of tourism destinations and the States will follow the benchmarks and standards while planning and developing the projects. From the list of major themes identified for tourism, provided in the scheme, Trichy has a great potential under Culture and Heritage, Eco-Tourism, Wellness Tourism and Rural Tourism.

Domestic tourism holds substantial promise for the growth of tourism in the country especially in the Tier II and Tier III cities, which can significantly contribute to the Indian economy. Trichy has a potential for educational tourism focusing especially on children from its hinterlands.

#### 6.1 Heritage & Cultural Tourism

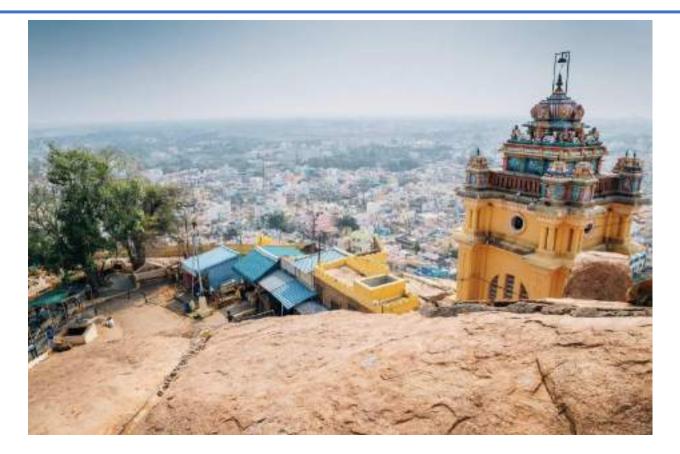
Heritage and culture serve as bridges that unite communities and societies, fostering mutual respect, empathy, and appreciation for differences. They encourage dialogue, collaboration, and the exchange of ideas, promoting cultural diversity and enriching societal fabric. Embracing and celebrating cultural diversity fosters tolerance and inclusivity, contributing to a more harmonious and interconnected global community. Moreover, heritage and cultural practices often carry profound wisdom and insights into sustainable living, ethical principles, and communal harmony, offering valuable lessons that can guide contemporary societies towards a more balanced and respectful coexistence with each other.

Trichy, is renowned for its rich heritage and vibrant cultural tapestry. The city's heritage is deeply rooted in history, boasting a diverse blend of architectural marvels, religious significance, and cultural traditions that span several centuries.

#### 6.1.1 Well known Spots

#### 6.1.1.1 Rockfort Temple

Trichy's most iconic landmark is the Rock Fort Temple, perched atop a massive 275 ft. tall rock formation, showcasing a fusion of Hindu and Jain architectural styles as well as providing a panorama of the whole City from its top. It is reached by a step flight of 437 steps cut into the rock. Halfway up is the Sri Thayumanaswamy Temple, dedicated to Lord Shiva. It has a 100 pillared hall, and a Vimana. There are inscriptions in these temples that date back to 3rd century B.C and it houses shrines dedicated to Lord Ganesha and Lord Shiva.



#### Figure 6-3 Rock fort Temple

A visitor's experience is a sum total of his experience during his travel, stay and return from the destination. The Scheme follows an integrated approach for development of destinations, which will not only provide core tourism products but also ancillary requirements such as connectivity, performing arts infrastructure, public health, hygiene and safety and other such requirements, which impact tourists.

#### 6.1.1.2 Srirangam Ranganathaswamy Temple

Sri Ranganathaswamy temple of the Srirangam island is the foremost of the eight self-manifested shrines (Swayam Vyakata Kshetras) of Lord Vishnu, established in 156 acres of land. It is also considered the first, foremost and the most important of the 108 main Vishnu temples. This temple is also known as Thiruvaranga Tirupati, Periyakoil, Bhoologa Vaikundam and Bhogamandabam. The enclosures are guarded by thick and huge rampart walls. There are 21 magnificent and huge Gopurams. This houses various and marvelous sculptures, Mandapams, Gopurams, vimanas, inscriptions, temple tanks, wells, granaries and chariot. The outer tiers of the Srirangam temple complex is where the settlements of traditional architecture are seen and many more temples, vedic schools, madams and mandapams are also found.



Figure 6-4 Srirangam Ranganathaswamy Temple

#### 6.1.1.3 Jambukeswara Temple, Thiruvanaikkaval

The Jambukeswarar Temple, also known as the Tiruvanaikoil or Tiruvanaikal, is a very old temple dedicated to Lord Siva on the Eastern side of the Srirangam island. The historic accounts are related to the early Chola ruler, Kochengannan, who is said to have ruled during the early centuries of the Common Era (CE). The Thiruvanaikkaval temple is one of the five Panchambootha temples in the country and represents water.



Figure 6-5 Jambukeswara Temple, Thiruvanaikkaval

#### 6.1.1.4 Samayapuram Temple

Samayapurathu Mariamman Temple is one of the most famous Amman temples in India. The Amman in this temple resembles the great Goddess Chamundeshwari at Mysore. The Main tower (Raja Kopuram) is adorned with gold plates. People from all over the world visit this temple in large numbers, especially Sri Lanka, Malaysia and Singapore. The temple is located in S. Kannanoor Town Panchayat. This temple holds the second place in earning high revenue for the department of HR&CE in Tamilnadu.

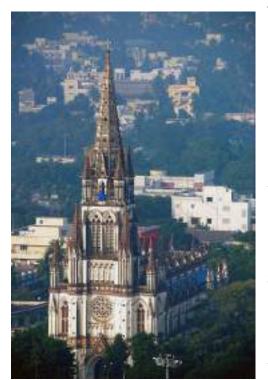
#### 6.1.1.5 Gneelivaneswarar Temple, Thiruppanjili

This temple is dedicated to lord shiva and he in this temple is called as Gneelivaneswarar.Shiva is in the form Suyambu linga (suyambu means it's not made by anyone). There is a separate Yama temple outside the main temple within the compound. Every year during the Tamil months of Purattasi (Kanya) and Panguni(meena) the rays of sun will directly fall on the Swayambu Shiva

|111

linga.

#### 6.1.1.6 Lady of Lourdes Church, Main Guard Gate



The Roman Catholic Basilica is devoted to Our Lady of Lourdes.The Church was constructed in the year 1895 in the Gallo-Catholic design. Massive walls, round pillars and topped arches are typical of the normal style of architecture. The church is a fine example of the blend of Europe and Indian sensibilities within the framework of Gothic architecture. Elements like the altar, spire, Rose windows, pinnacles, chimney bell, vaulted roofs and statues (5 statues of Great saints in the middle of the tower) are fascinating.

Figure 6-6 Lady of Lourdes Church, Main Guard Gate 6.1.1.7St.Mary's Cathedral Church, Melapudur



St. Mary's Cathedral, popularly known as "Mother of Good Health" in vernacular "Arogia Matha" which is around 170 years old and a very famous religious site. It is famous for its architectural style combining elements of the Gothic and Romanesque styles to create a visually striking building.

Figure 6-7 St.Mary's Cathedral Church, Melapudur



### 6.1.1.8 Nadirshah Dargha

The tomb of Muslim Sufi saint Babbayya Nadir Shah stands in the Nadir Shah Dargah mosque complex which dates back to the 14th century at Tharanallur.

Figure 6-8 Nadirshah Dargha

The dargah complex consists of various structures, including the main shrine, prayer hall, and tomb. The architecture of the Dargah is a blend of Islamic and Dravidian style, showcasing beautiful carvings and beautiful domes. Annual festival, which commemorates the death anniversary of Sultan Saiyad Babayya Nathar Shah.During this time, believers from all over Tamil Nadu gather at the dargah to participate in religious rituals, qawwalis (Sufi devotional music) and seek spiritual solace.

#### 6.1.2 Lesser-known Spots

#### 6.1.2.1 Kaattu Azhagiya Singaperumal Temple, Srirangam

The temple dates back to the period prior to Srirangam. Lord Narasimhar is Swayambu (Self Manifested) here and blessing in His Sitting Posture facing west towards Srirangam with Goddess Lakshmi Devi on His Left thigh.The Sri Ranganathaswamy comes to this Mandapam in a palanquin [Pallakku] on the day of Vijayadasami. Here 'Thiruvaaradhanam', 'Amudhupadigal' are offered to Namperumal. Following this, he goes for "Paar Vettai" in his golden horse chariot. After the 'Thiruvaaradhanam' is offered to the Vanni Tree in the temple, the 'Vettai Utsavam' begins. The mandapam, thus is of immense importance. This temple houses Mandapams, Tulsi maadams and paintings.

#### 6.1.2.2 Kamalavalli Nachiyar Temple, Uraiyur

This temple is dedicated to lord Azhagiya Manavala Perumal and Kamalavalli Thayar appear in the wedded standing posture who faces the direction of Ranganathar (Sri Rangam). This eighth century temple is built by the chola dynasty by the king Nandha cholan. This dravidian style temple houses statues of lord vishnu, lot of paintings (of Nammalvar) and inscriptions. Annual festivals like Navarathri, Karthigai- Thirupanazhvar Thiruvizha are celebrated. Kamalavalli nachiyar temple is also famous for its Mangalasasana by Thirumangaiyalwar. It is also the birthplace of Thirupaanalwar an important Vaishnavite seer.

#### 6.1.2.3 Vekkali Amman Temple, Uraiyur

Dedicated to godess vekkali amman (Form of godess Kali), this temple has a very important impact in the history of woraiyur settlement. The Cholas revered the Goddess Vekkali Amman before leaving for the battleground. The sanctum has no roof and the legend goes that the Goddess told her devotee not to build a roof until every people get one. The temple is at its best during the Chithirai festival, Navarathri and Thai Velli when the Goddess's idol is decorated with jewelry and a series of pujas are arranged.

#### 6.1.2.4 Subramaniya Swamy Temple, Kumaravayaloor

The temple dating back to the 9th century was built by a Chola King and is dedicated to Lord Muruga. Important festival celebrated here are Thai poosam, Karthigai festival & Panguni Uthiram.

#### 6.1.2.5 Uthamar Kovil, Bhikshandarkovil

Sri Purushothaman Perumal Temple also known as Uthamar, is dedicated to the Hindu god Vishnu, Shiva and Brahma. The temple is one of the few historical temples in India where the images of Hindu trinity, Vishnu, Shiva and Brahma are housed in the same premises and are collectively known as Mum

|114

murthigal. This stalam is also known as Kadamba (means mixture of things) kshetram. The renowned temple is considered to have been constructed by the Medieval Cholas (the greatest South Indian empire) of the late 8th century AD, with subsequent contributions from the rulers of Vijyanagara Empire and Nayaks from Madurai Nayak dynasty. The annual festival of the temple is celebrated during the Tamil month of Kartigai (November / December).

#### 6.1.2.6 Aanchaneya Swamy Temple, Kallukuzhi

The idol of Anjaneya Swamy is believed to be 100 years old. This temple was found during the British period while construction of railway junction.

#### 6.1.2.7 Melur Ayyanar Temple

Srirangam Melur Ayyanar Temple is a famous Hindu temple dedicated to Lord Ayyanar (kadaipillai Ayyanar), who is believed to be an incarnation of Lord Shiva. It is one of the most revered temples in the region and is visited by thousands of devotees every year. This temple has a huge effigy of elephants and horses' statues before Kadai pillai Ayyanar built by karikalan. One of the most popular festivals celebrated here is the Aadi Perukku, celebrated in July or August and shiva rathri (February - March). During this festival, devotees gather to offer prayers to the river Cauvery, considered sacred by the locals. The temple's intricate carvings and stunning architecture are a testament to the skill and craftsmanship of the local artisans and are a treat for history and art enthusiasts.



Figure 6-9 Aadi perukku festival celebrated at Amma Mandapam 6.1.2.8 Dharukavaneswara Temple, Thirupparaithurai

This temple is dedicated to lord Shiva and godess parvathy, built before 900 years during chola rule. In ancient times, this region was been densely covered with "Parai" trees and generally, the names of temples that are located on river banks end with "Thurai"; it gets the name paraithurai. There are 83 stone inscriptions in this temple which date back to the periods of Paranthaka Chola-I, Rajakesari Varman, Sundarapandiyan and Krishnadeva Maharayar. The famous festival is during tamil month of purattasi (August - September) on 18th day when the sunlight directly falls on the Shiva idol (lingam) in the sanctum which is called the surya pooja (Its the autumn equinox in India) and other festival is the Aippasi (September - October) on the 1st day when the Goddess parvathy goes on a Thiruveedhi Ula (procession) and takes a dip in river Cauvery.

#### 6.1.2.9 Ayyappan Temple, Melur, Srirangam

It's a temple dedicated to lord Ayappan which was built during 1970. It has a large meditation hall where devotees can sit for meditation and a vast greenery. Another unique feature of this temple is that numerous little stones have been collected from holy rivers and holy sites all over the world and have been placed on many small platforms with the names of the rivers and places.

#### 6.1.2.10 Maatrurai Varadeeswarar Temple, Thiruengoimalai

This temple is dedicated to lord Shiva. The temple is on the north banks of river Kollidam. During 6th to 7th Century this place was called as Pachilachiramam, latter as Thiruchiraman, which was corrupted to the present name of Thiruvasi. From the inscriptions in the temple, It is believed that the original temple existed before 7th Century. Later renovated by Hoysalas, Chozhas and Pandyas. This place was called as "Pachil Kootrathu Achiramam during period and the same changed as Pachilachiramam. Special poojas are conducted on 11 days brahmotsavam in the month Vaikasi (May – June), Thai Poosam in the month Thai (January – February) and Maha Shivaratri in the month Masi (February – March).

#### 6.1.2.11 Akkaraipatti Sai Baba Temple

Located in Samayapuram village, this temple, the temple complex has four sub-shrines of Lord Ganesha, a 5 foot tall Shiva Linga is located in the shrine's basement, which is mostly used for meditation and yoga; other deities and the walls of the temple are embellished with the mural paintings of the deities



Figure 6-10 Akkaraipatti Sai Baba Temple

#### 6.1.3 Temples under ASI

#### 6.1.3.1 Kudaivarai Kovil, Malaikottai, Trichy

The temple was built by Nayaks during their reign between 14th and 15th century. The Trichy hill fort is the only temple dedicated to the gods of Tamil Nadu, which has six religions (Saivism, Kanapathiyam, Kelamaram, Selaram, Saktam, Vaishnav) as deities. It is a double sanctum sanctorum temple. One belongs to Shiva and the other to Thirumal. There is currently no idol in the sanctum sanctorum of Lord Shiva. Pillaiyar can be seen here standing with four arms in Kudaivari. temples. Then Lord Muruga can be seen with two Vidyadharas above and two servants below and various other interesting sculptures and art works. Another sanctum sanctorum houses the idol of Thirumal. Sculptures and pillars all resemble Pallava art. It is surprising that there is not a single inscription of the Pallavas in the lower Kudaivari, while there are many inscriptions in upper Kudaivaria.

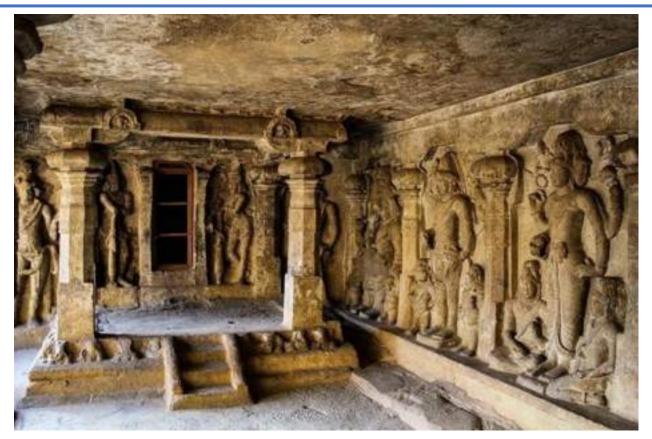


Figure 6-11 Kudavarai Kovil

#### 6.1.3.2 Shivan Temple, Azhagiyamanavalam

This temple is dedicated to lord shiva, around 1000 years old, which is built during the region of chola ruler Uttama Chola .In the sanctum sanctorum of the temple, there is a lingam with 16 bands, (Tharalingam) in the shape of a lotus flower and carving and followed by it there are Mandapams (Artha mandapa and maha mandapa ).This temple is known for its sculptures, carved pillars and inscriptions dating back to chola rule.. Also, the dancing mothers mentioned in the Tanjore Periyakoil cave as have been living in this.



Figure 6-12 Shivan Temple, Azhagiyamanavalam

#### 6.1.3.3 Mannayi Pidari Amman Temple, Mannachanallur

The foundation of this temple was laid 500 years back. The place where the temple exists now was garden of flowers (Poonthottam). Amman is praised as Poongaliamman. The Mahamandap is just after the passing the entrance. Lord Maha Ganapathy graces the devotees from the left of the sanctum sanctorum. Mother Poongali Amman appears majestically in a sitting posture. She is all merciful with a lotus on the right hand and placing the left on the lap. Special pujas are performed to Mother Poongali Amman on full moon days (Aadi) with Homas. Poochorial – raining flowers on the deity – is grandly celebrated on the Chithirai full moon day (Chitra poournami) in April-May. On the new moon day abishek is dedicated with 16 kinds of cosmetic items

#### 6.1.3.4 Agastheeswarar Temple, Perungudi

Agastheeshwarar Temple is a Hindu Temple dedicated to Lord Shiva located at Perungudi Village near Vayalur in Trichy District of Tamilnadu. This Temple was constructed in 969 CE during the reign of Sundara Chola and this temple used to be known as Thiruperumudi as per stone inscriptions. It was renovated during the time of the Hoysala King Vira Ramanatha. The shrine for the goddess was built by Vijayanagara King Viruppanan. Presiding Deity is called as Agastheeshwarar and Mother is called as Shivagama Sundari. This is an ancient east facing temple with entrance in the south-east corner. There is no Rajagopuram.



Figure 6-13 Agatheeswara Temple, Perungudi 6.1.3.5 Sri Kailayamudaiyar Temple, Cholamadevi

Temple dedicated to Lord Shiva located at Cholamadevi Village in Trichy District of Tamilnadu. It was built by Rajaraja Chola I, who also built the internationally famous Big Temple of Tanjore. It dates to the 11th century (1065 A.D) and is a treasure house of historic information. The Temple is located amidst the lush green paddy fields and on the northern banks of the Uyyakondan channel. This temple consist of Mandapams (Arthamandapam and Mahamandapam), sculptures (Lingam, Nandhi , Dhurga , Lord Vishnu and Brahma ) and inscription

#### 6.1.3.6 Shivan Temple, Pazhur

This temple dedicated to Lord Shiva (Vishwanathar ) located at Pazhur

Village . The temple is also called as Navagraha Temple or Navagraha Sthalam in this region. This temple was built by a Pandian Emperor. The fish sign in the wall denoting that the temple was built by Pandian Emperor. Another mystery in this temple is, the main god is Lord Shiva but the temple was built by Sri Vaishnavas who worship only lord Vishnu. And idols of Lord Ganesha, Dhakshinamoorthi, Surya,Bhairava and saneeshwara are found. Navagraha idols were installed in 1932 CE, as per the instructions from Kanchi Maha Swamigal.

#### 6.1.3.7 Temple, Tiruverumbur

Erumbeeswarar Temple in Thiruverumbur, Tamil Nadu, India, is a Hindu temple dedicated to the deity Shiva. Built on a 60-foot (18 m) tall hill, it is accessible via a flight of steps. The temple's main shrines and its two prakarams (outer courtyards) are on top of the hill, while a hall and the temple tank are located at the foothills. Shiva is believed to have transformed himself into an ant hill and tilted his head at this place to enable ants to climb up and worship him. Erumbeeswarar is revered in the canonical 7th-century Tamil Saiva work the Tevaram, written by Tamil saint poets known as nayanmars and classified as Paadal Petra Sthalam. The temple is one in a series built by Aditya Chola (871-907 CE) along the banks of river Cauvery, to commemorate his victory in the Tirupurambiyam Battle. It has several inscriptions from the Chola Empire dating back to the 10th century.[1] The temple has been declared a protected monument by the Archaeological Survey of India. The annual Brahmotsavam (prime festival) is attended by thousands of devotees from far and near.[3] Every full moon, tens of thousands of pilgrim's worship Erumbeeswarar by circumambulating the hill barefoot in a practice called girivalam.



Figure 6-14 Erumbeeswarar Temple, Tiruverumbur

#### 6.2 Eco-Tourism and Educational Tourism

Trichy being endowed with the river Kaveri and innumerable water bodies have a rich bio diversity and eco sensitive areas in the form of Klliayanallur and Keeramanickam forest area. Tapping on the strong educational base of the City, many facilities have been provided for the engagement of school children and elders alike.

#### 6.2.1 Mukkombu (upper anaicut)

The Upper Anaicut (alternatively Upper Anicut), also known as Mukkombu is a dam built on the Kaveri River. In Tamil, mukkombu means "three branches." This is the place where the river cauvery is bifurcated in to 2 separate tributaries by the island town of Srirangam. The regulator dam was constructed in 19th century by Sir Arthur Cotton, a British engineer who was inspired by the architectural of Grand Anaicut canal built by Karikala Chola in Kallanai of Thanjavur district in the second century.



Figure 6-15 Mukkombu (upper anaicut)

#### 6.2.2 Butterfly Park

Butterfly Park is butterfly conservatory located in Srirangam Town in Trichy District of Tamilnadu maintained by the Tamil Nadu Forest Department and located near the Kiliayanallur and Kariyamanickam forest situated near river bank of Cauvery near Melur, Srirangam. The park spreads over 35 acres. This Park is considered as one of the biggest butterfly parks in Asia. The Butterfly Park includes a boating area for children, a pond, an amphitheater, a garden, a fountain, an enormous butterfly glasshouse, and snack huts. The park contains an outdoor conservatory area that serves as a suitable breeding environment for butterflies in settings that are similar to natural ones. The Butterfly Park has the Nakshatra Vanam. It features 12 tree and plant species that correlate to each of the 12 Indian zodiac signs, as well as 27 tree and plant species that represent each of the 27 stars. It has a play area with playground equipment.



Figure 6-16 Butterfly Park

#### 6.2.3 Anna Science Planetarium

Anna Science Centre, Tiruchirappalli has been rendering excellent and yeomen service to cater to the needs of younger generation and the general public of the region in the cause of education, taking up the objectives of Tamilnadu Science and Technology Centre, eversince it was dedicated to the Nation on June 10, 1999. The Planetarium, which has been a source of information and inspiration in the region, receives students in groups visiting from Pudukkottai, Thanjavur, Perambalur, Dindigul, Karur, Madurai Districts apart from Tiruchirappalli.



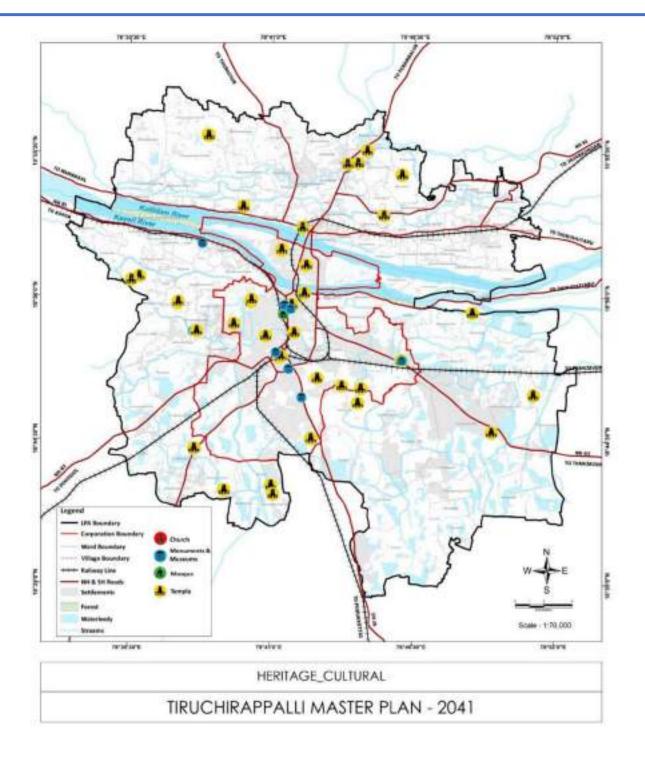
Figure 6-17 Anna Science Planetarium

#### 6.2.4 Government Museum

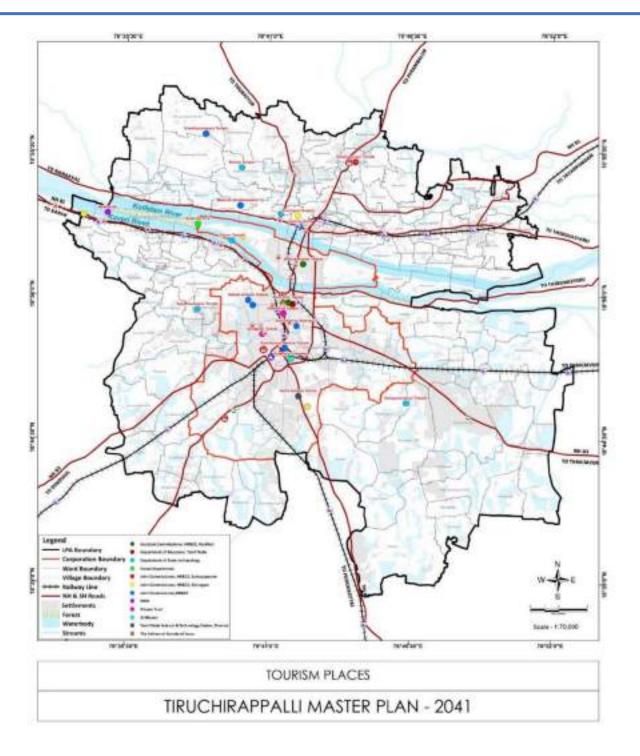
The Government Museum was established in 1983 by the State Department of Museums at Cantonment. Later in 1997, this museum was moved to Rani Mangammal Darbar Hall – A Monument that was built during the rule of the Chokkanatha Nayak- A ruler of Madurai, which is situated within the Town Hall Complex. The museum is currently maintained by the Public Works Department.



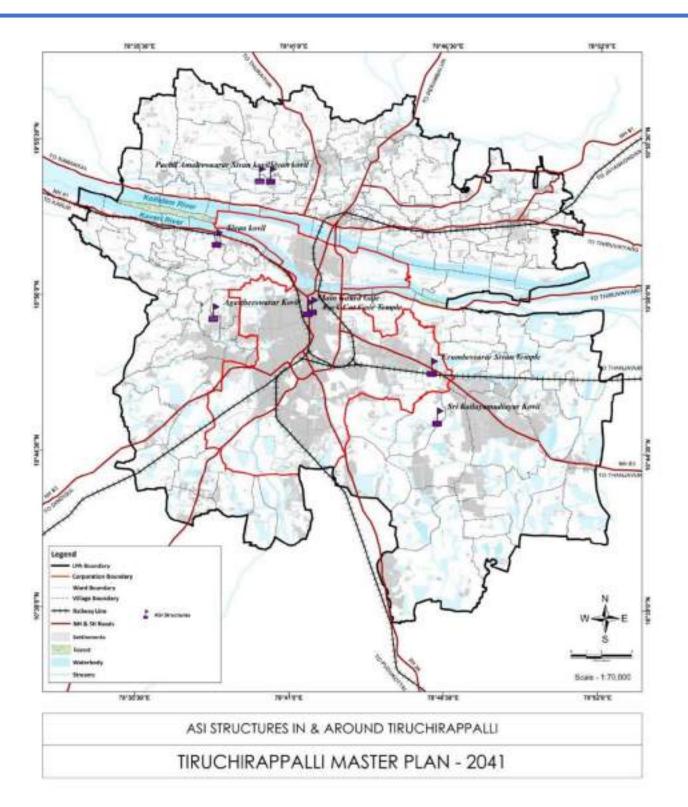
Figure 6-18 Government Museum



Map 6-1 Place of Heritage & Cultural significance



Map 6-2 Major Tourism locations





#### 6.3 Important Festivals

The important festivals pertaining to Srirangam temple are mentioned below:

Kodai Uthsavam - Vaikasi/Aani (10 days)

Vasantha Uthsavam - Vaikasi/Aani (7 days)

Navarathri Uthsavam - Purattasi (9 days)

Dolothsavam - Kaarthigai (7 days)

ThiruAdhyayana Uthsavam - Thai/Maasi (11 days)

Theppa Uthsavam - Maasi (7 days)

Sri Kamalavalli Naachiyar - Sri Azhagiya Manavalan Serthi Sevai - Panguni Aayilyam (1 day)

Thayar Purapaadu (every Friday)

Vasanthothsava Karthikai Tirupanazhwar Festival (10 days)

Vaikunta Ekadashi

Aadi perukku is a cultural festival of the Tamils where they take a dip in the river Kaveri on the 18th day of Aadi month. Amma mandapam and other bathing ghats see thhousands of people throng them during the ritual day.

#### 6.4 Tourism handling capacity

There has been an increase in the tourist trends to Tiruchirappalli from 2016 to 2019. Disregarding the COVID situation, the tourist flow would have rapidly increased double fold. International tourists are also increasing. This indicates that the provision of adequate tourism infrastructure will develop the city and evolve as a generator of economy. The present number of hotels in Tiruchirappalli is 151. There are 20 guides, out of which 11 are approved by the department of tourism, 3 by

ministry of tourism and 6 are unapproved guides.

In addition, the floating population who commute from the districts to the Tiruchirappalli Local Planning Area each day is expected to be 3.00 lakhs by 2041 against around 2.00 lakhs at present based on the Airport Authority of India by geometric projection, the additional infrastructure needs to be provided to meet the basic needs with respect to tourism.

The total number of visitors for all kinds of festivals throughout the year in Thiruchirapalli LPA is 38,03,000 (approx.) which is divided as 3721000 (approx.) visitors attending temple events and 82000 attending secular events. 98% percentage visitors attend temple events throughout the year. The number of one day visitors for both the events combined contributes to 439088 persons and their distribution towards the respective festival places in the LPA is shown in the pie chart below. The number of rated hotels with their rooms they can serve to tourists per day is around 16,974(approx.). The maximum average number of tourist that arrives per day during festivals throughout year is around 20,908 (approx.) out of which 3026(approx.) tourists could not be served which contributes to 20 percentage of average maximum tourists. The percentage people served in each category of rated hotels is also represented in pie charts with respective per day analysis and month-based analysis. Map 6-2 marks public toilets which count to 403 in Thiruchirapalli Corporation which could be increased in order to serve the peak crowds during festival seasons.

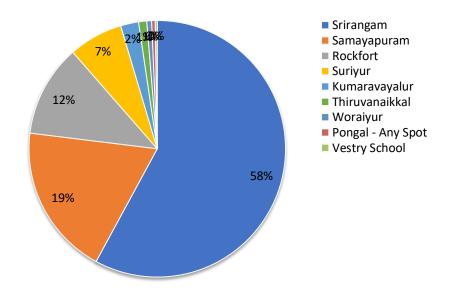
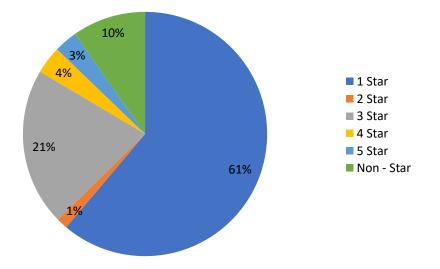


Figure 6-19 Festival Visitors per Day



#### Figure 6-20 Percentage of people can accommodate in hotel per day

The below mentioned table shows the distribution of hotels and the number of persons it can accommodate in particular location in Trichy corporation for the year 2017.

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

| TOURISM

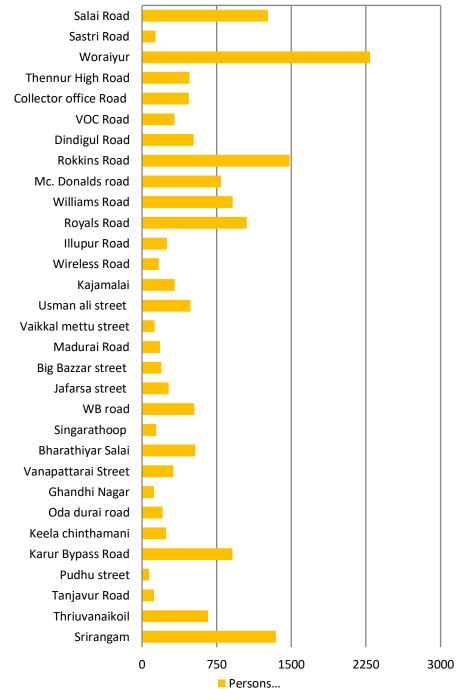
S.No	Location	No. of Rooms	Persons Accommodated
1	Srirangam	448	1344
2	Thriuvanaikoil	221	663
3	Tanjavur Road	40	120
4	Pudhu street	24	72
5	Karur Bypass Road	302	906
6	Keela chinthamani	81	243
7	Oda durai road	69	207
8	Ghandhi Nagar	40	120
9	Vanapattarai Street	105	315
10	Bharathiyar Salai	178	534
11	Singarathoop	47	141
12	WB road	175	525
13	Jafarsa street	89	267
14	Big Bazzar street	65	195
15	Madurai Road	60	180
16	Vaikkal mettu street	42	126
17	Usman ali street	162	486
18	Kajamalai	110	330
19	Wireless Road	56	168
20	Illupur Road	84	252
21	Royals Road	351	1053
22	Williams Road	304	912
23	Mc. Donalds road	265	795

DIRECTORATE OF TOWN AND COUNTRY PLANNING

24	Rokkins Road	494	1482
25	Dindigul Road	173	519
29	VOC Road	108	324
30	Collector office Road	157	471
31	Thennur High Road	159	477
33	Woraiyur	763	2289
34	Sastri Road	45	135
35	Salai Road	421	1263
	Total	5658	16974

#### Table 6-1 Accomodation Details

A visitor's experience is a sum total of their experience during their travel, stay and return from the destination. Hence an integrated approach for development of destinations is required, which will not only provide core tourism products but also ancillary requirements such as connectivity, performing arts infrastructure, public health, hygiene and safety and other such requirements, which impact tourists.



#### Location Wise Hotel Rooms Distribution





# MOBILITY

## 7. MOBILITY

#### 7.1 Access and connectivity

#### 7.1.1 Introduction

Trichy is located at convenient distance from significant cities in South India. An extensive and well-developed road network connects the Tiruchirappalli with other prominent cities like Bangalore (345 kms), Madurai (142 kms), Chennai (320 kms), Ooty (302 kms), Thanjavur (50 KM) and Rameshwaram (250 KM).

Trichy has daily non-stop flights from Chennai, Bengaluru and Hyderabad, all major hubs that is connected well with all other cities in India. It is also connected well internationally with daily non-stop flights to Singapore, Malaysia, UAE and Sri Lanka.

It has also very good train connectivity with trains to Chennai and other metro cities throughout the day.

#### 7.1.2 Railway Connectivity

The Great Southern of India Railway Company was established in 1853 with its headquarters in England. In 1859, the company constructed its first railway line connecting Tiruchirappalli and Nagapattinam. The company merged with the Carnatic Railway Company in 1874 to form the South railway company with Tiruchirappalli as its headquarters. The city retained the position until 1908 when the company's headquarters was transferred to Madras. Tiruchirappalli junction is a major junction on the rail route connecting North and South. The city Railway Junction located in the heart of city. It is the important junction point between the train passing towards southeast, west, and north connecting major cities in Tamil Nadu and Other states.

Passenger trains also carry a significant number of passengers from nearby towns. There are frequent trains connecting the Headquarters Chennai and other major cities in Tamil Nadu. There are 14 stations within Tiruchirapalli Local Planning Area.

### 7.1.2.1 Trains connectivity

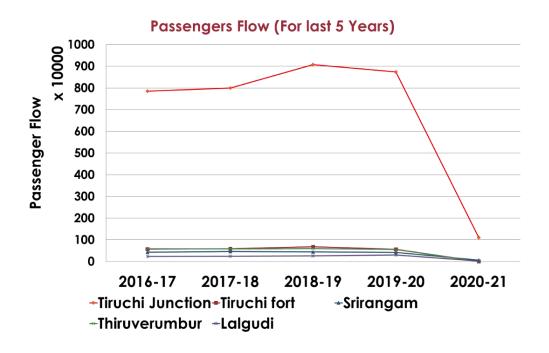
There are 20 railway stations in LPA. The direction of the railway lines is from Northeast to Ariyalur, Northwest to Karur, South East to Tanjore and South west to Madurai.

Tiruchirappalli Junction is the main station with the maximum footfall of 1,92,93,541 passenger annual (inwards and Outwards). The central region is getting more passengers than the outside regions due to the presence of Rockfort, Sri Rangam Temple.

S.No.	Station Name	2019-20
1	Tiruchchirappalli fort	7,43,420
2	Tiruchchirappalli Palakarai	1,51,247
3	Tiruchchirappalli Jn.	1,92,93,541
4	Ponmalai	1,59,485
5	Tiruchchirappalli town	2,77,778
6	Srirangam	7,95,144
7	Uthamarkovil	52,910
8	Pichchandarkovil	1,16,846
9	Valadi	32,129
10	Lalgudi	41,936
11	Manjattidal	3,70,864
12	Tiruverumbur	9,47,555
13	Tondamanpatti	36,574
14	Solagampatti	1,39,343

Table 7-1 Passengers Flow Annually - Passenger Footfall (Inward & Outward)

The passenger flow is seeming to be increasing other than the situation of COVID 2019. As of now 140 passenger trains run per day. Average number of people per train is 453. This increase in passengers should be exploited to extend for the benefit of the environment and reduce congestion.





### 7.1.2.2 Major trains routes and their frequency

The station of the city is named as TIRUCHCHIRAPALI and its station code is 'TPJ'. The station is well-connected to a number of Indian cities. Some of the major routes include to the places of Pune Junction, Bangalore Cy Junction, and Howrah Junction. There are 4 weekly trains connecting Pune Jn to Tiruchirappalli, 1 weekly trains connecting Bangalore City Junction to Tiruchirappalli, and 4 weekly trains connecting Howrah Junction to Tiruchirappalli.

Some of the popular trains traveling to Tiruchirappalli are Rockfort Express (16178) to Chennai operating 7 times a week, Bangalore Express (06572) to Bangalore operating 7 times a week, and Chennai Express (16854) to Chennai operating 7 times a week.

### 7.1.3 Bus Connectivity

LPA has well connected bus routes around Tiruchirappalli. For improved connection and frequency, there are both private and government bus services and also minibus services. The Bus Stands in LPA are:

- o Central Bus Stand
- o Chathiram Bus Stand
- o Lalgudi Bus Stand
- o Thuvakudi Bus Stand
- o Thiruverumbur Bus Stand

It was observed that while TNSTC caters to regional transit needs of the city as well as intra-city bus transport needs in Tiruchirappalli along with private bus operators. Within the city, transit needs are also provided through intermediate public transport like private auto rickshaws. There has been a steady increase of IPT registrations in Tiruchirappalli over the years, barring the recent downward trend, attributed largely to the Covid-19 pandemic. The presence of these vehicles has led to the chaotic situation on the roads. Also, in the absence of any stands, these vehicles are parked on the roads, reducing the effective carriageway available for the movement of traffic, especially at terminal ends and near activity centers like regional bus stands, railway stations, recreational centers, government offices and major cross junction.

The city currently has a fleet of 587 buses (147 private buses and 440 TNSTC city buses) for a population of 14,64,422; which as per the urban fleet specification of 50 buses per lakh population falls short by 145 buses.

Passenger count at both the Central Bus Stand and the Chatram Bus Stand shows that the Chatram Bus Stand (New Bus Stand) caters to about 1,01,846 passengers per day, which is nearly twice the number of passengers catered to by the Central Bus Stand. The most preferred access and egress modes at the both the terminals by walk with a share of 28 %. The next preferred mode is either local bus or by Integrated public transport with 25 % and 27 % share respectively.

(Source – CMF 2022).

### 7.1.3.1 Private Bus operations

Private bus operators serve an important role in fulfilling the upper echelon of the society which prefers luxury and a speedy journey, although SETC has airconditioned and sleeper bus fleets, they are no match to the imported and latest bus fleets offered by the private parties, which are used by people for overnight journeys to Chennai or other major city like Bengaluru or Kochi.

There are about 147 private buses in the LPA area, which are mainly single bus operators. The city buses are permitted to operate on maximum route lengths of 30 km and on an average the city buses run 200-250 km per day. The city buses report an average occupancy of 55% throughout the day. The minimum fare per km of city buses in Trichy city for the year 2022 is Rs. 5.00.

### 7.1.4 Air connectivity-

Located on the Pudukottai-Trichy National Highway 336 the airport is well connected with frequent City buses to the major bus and railway terminals of the city like Central Bus Stand, Chatram Bus Stand, Srirangam and Trichy Junction. In addition to these exclusive buses were introduced to originate inside the airport premise destined to Thanjavur, Central Bus Stand and Karur.

The airport handled by Airports Authority of India is served by two Indian and four foreign carriers providing direct connectivity to five domestic and nine international destinations.

Airline	Destinations		
Air India Express	Abu Dhabi, Bangalore, Doha, Dubai–International, Kuwait City, Muscat, Sharjah, Singapore		
Batik Air Malaysia	Kuala Lumpur–International		
IndiGo	Bangalore, Chennai, Hyderabad, Mumbai, Singapore		
Scoot	Singapore		
Sri Lankan Airlines	Colombo–Bandaranaike		
VietJet Air	Ho Chi Minh City		
AirAsia	Kuala Lumpur–International		

### Table 7-2 Flight connectivity from Trichy International airport

### 7.1.5 Air Funnel Zone

Height restriction details around Airport- Tiruchirappalli International Airport is located in Tiruchirappalli corporation and Keelakurichi village. The Government had issued regulations vide G.O.(MS)no-502 Local Administrative Department. Dated:10.03.1972. and Published in Tamil Nadu Government Gazette Part-V, Page-320, Dated:05.04.1972. The Height restriction Survey numbers are incorporated in the schedule of Master Plan as per the above Government order guideline.

Restriction: No building or structure shall be constructed or erected, or no tree shall be planted, on any land within the limits specified by the airport authorities.

Distance in km	Height restriction in meters
<2.4	Prior Concurrence
2.2 - 3.0	12
3.0 – 3.6	24
3.6 – 4.2	36
4.2 – 4.8	48
4.8 - 6.0	60
6.0 - 7.2	90
7.2 - 8.4	120
8.4 – 20 (nautical km)	150

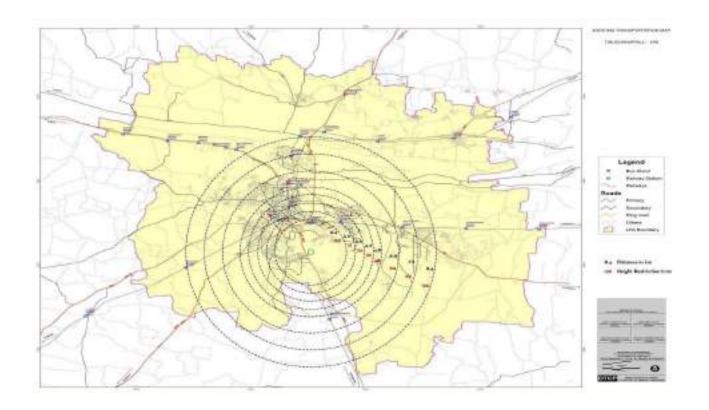
### Table 7-3 Height restrictions for building

### 7.2 Traffic & Roads Network

### 7.2.1 Existing Road Network

The Trichy Local Planning Area (TLPA) is well connected by railway, road, air, and waterways. The Planning area is served by several major road highways like NH-45, 45B, 67, 210 and the state highways No 24 & 25 connects Tiruchirappalli city with other important urban centers of the State. The arteries are the Dindugal road, Madurai Road, Karur-Thanjavur Road, Pudukottai road, Salem and Chidambaram Road. The other important road is the bye-pass connecting Chennai Road with Madurai Road and the Kumbakonam road along the southern bank of the river Cauvery.

### | MOBILITY

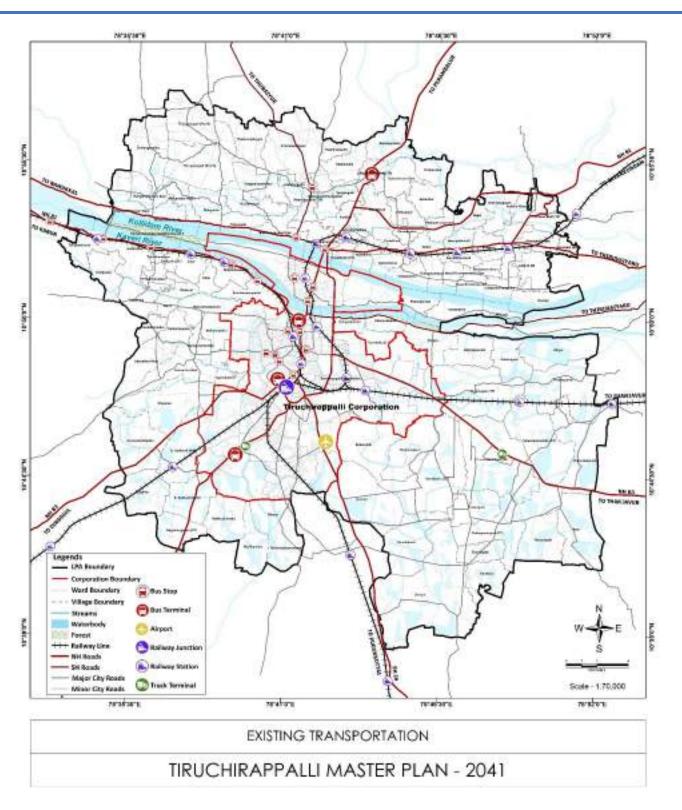


### Map 7-1 Building height restrictions by radius

The road network in the city is well established and connects major urban centers in the state. Regional roads comprise National Highways (NH), State Highways (SH), Major District Road (MDR) and Other District Roads (ODR). Five National Highways NH 45, NH 45B, NH 210, NH 67 and NH 226, State Highway roads connecting Tiruchirappalli with other towns like Thanjavur, Pudukkottai, Madurai, Chennai, Dindigul and Karur and Major District Roads connecting Thuraiyur, Ariyalur and Kumbakonam pass through Tiruchirappalli City.

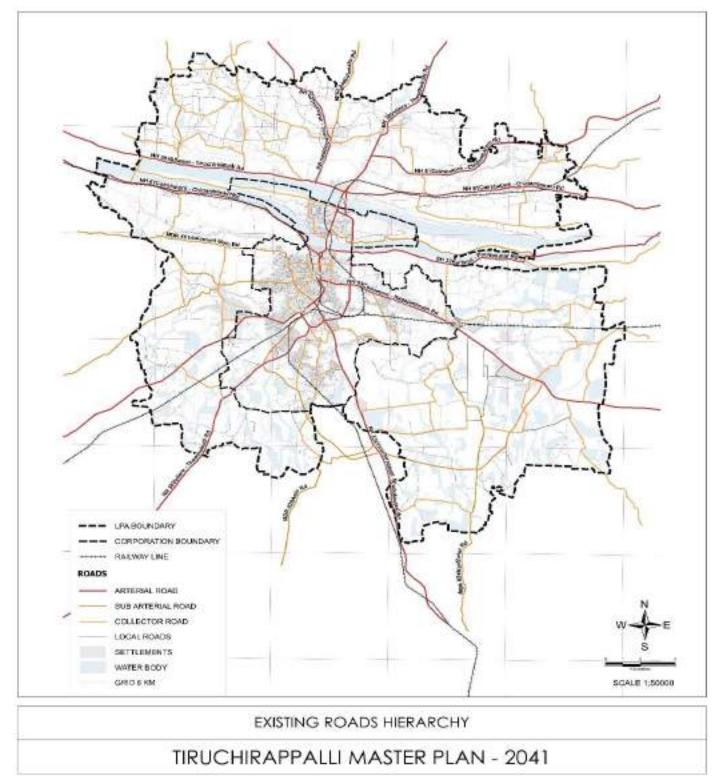
### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041





Map 7-2 Existing transportation network and important hubs.

### 7.2.1.1 Hierarchy of Roads



Map 7-3 Existing Roads Hierarchy

•

Arterial Roads- The primary roads which facilitate traffic movement to the external areas of the LPA

Sub Arterial Roads – The major roads that carry a large volume of traffic to important urban nodes within the planning area.

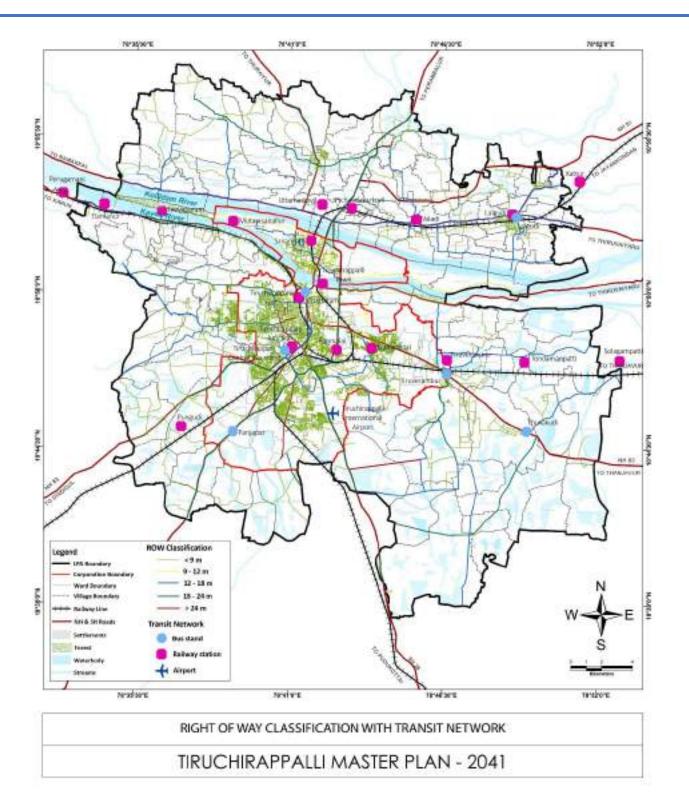
Collector Roads - The major collector roads which channel traffic from the local roads to the arterial roads. Local Roads - The local roads that provide direct access to the properties in Trichy LPA.

### 7.2.1.2 Right of Way (RoW)

The Right of Way of every surveyed road was measured and it is observed that 38% of the roads have Right of Way less than 9 m followed by 32% having Right of way of 15-20 m.

### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

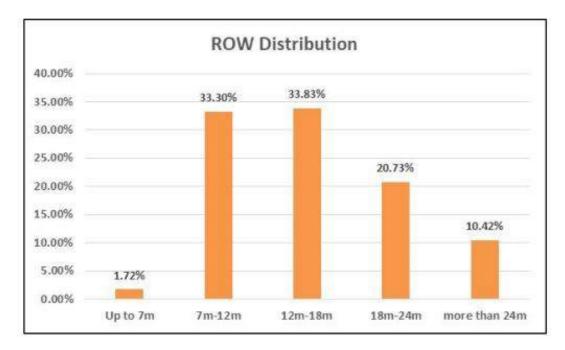
### | MOBILITY



### Map 7-4 Right of way classification

Road survey inventory- Roads about 76%, were two lane roads, while 58% of the roads fell under undivided category of roads.

Out of the surveyed network of roads, about 35% of the roads have RoW lesser than 12 m followed by 32% having RoW of 15-20 m. 31% of the city's road network



does not possess footpaths. Proper road marking was not seen in 85% of the roads.

Figure 7-2 Right of Way distribution of roads

### 7.2.2 Freight movement

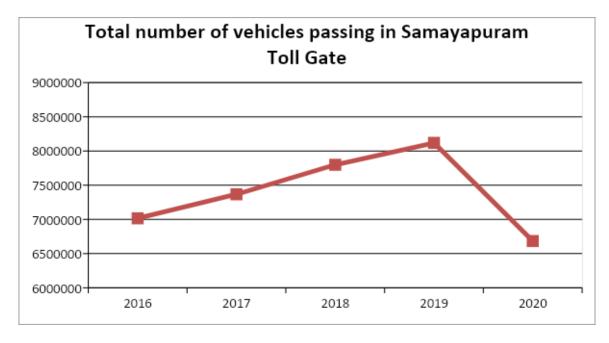
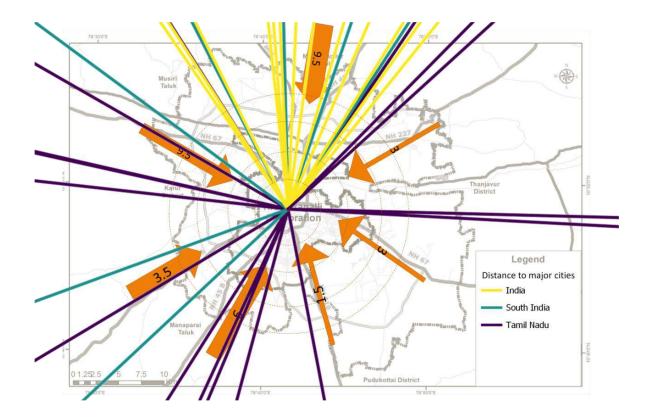


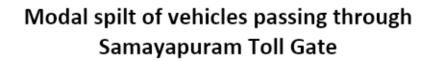
Figure 7-3 Graph of vehicular count

The movement of freight into and outside the city has been increasing day by day. On analyzing the traffic movement of Samayapuram Toll gate through the years, we can confirm that the vehicle movement has increased. The composition of the traffic is also studied and analyzed below.



### Figure 7-4 Direction of cities and their freight movement factors

The north (towards Chennai) and the west (towards Karur) directions have the highest number of links to Tiruchirappalli which we can assume to have the highest number of truck movement. With the help of those factors, the Samayapuram is extrapolated below.



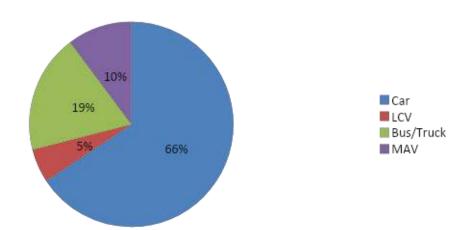


Figure 7-5 Modal split of vehicles passing through Samayapuram Toll gate

### 7.2.3 Air freight movement

The presence of Tiruchirappalli International Airport is a big advantage for the connectivity of passengers and freight, as Trichy can leverage its central geographical location with respect to the state, as a major connecting hub for central and southern parts of Tamil Nadu.

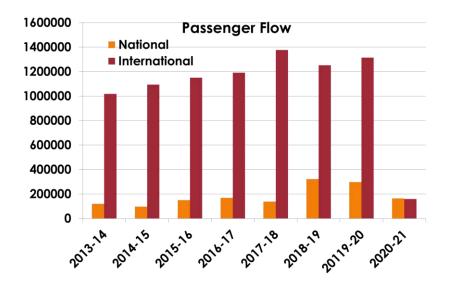
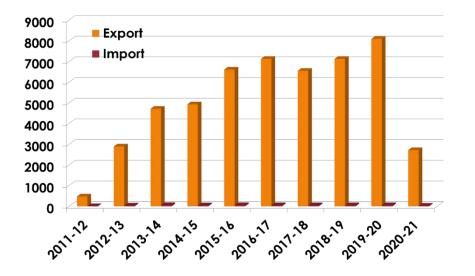


Figure 7-6 Air passenger flow annual figures.

The below two graphs indicate that both passenger and freight movement is observed to be increasing at an average of 0.7% growth rate (before Covid pandemic). International Passenger flow is more than the National Passenger flow.



### Figure 7-7 International Cargo Movement (Metric Tonnes)

Export is more than the import, which is a good indication for the city's GDP

### 7.2.4 Traffic analysis

To understand the existing traffic volumes within the city and to understand the vehicular volumes between the study area and outside, the surveys conducted and the analysis thereof has been presented in the following sections

The average daily traffic entering the city is 14,964. The average daily traffic leaving the city is 14,802. (As of 2022- CMF report)

### 7.2.5 Design Service volume

Considering the need for smooth traffic flow, it is not advisable to design the road cross-sections for traffic volumes equal to the maximum capacity, in which the speeds are rather low and freedom to maneuver within the traffic stream is very much restricted. Besides, even a small increase in traffic at that traffic volume

	Total design service volumes for different			
Type of carriageway	categories of urban roads (PCU Per hour)			
	Arterial	Sub-Arterial	Collector	
2 Lane (One way)	2400	1900	1400	
2 Lane (Two way)	1500	1200	900	
3 Lane (One way)	3600	2900	2200	
4 Lane Undivided (Two way)	3000	2400	1800	
4 Lane divided (Two way)	3600	2900		
6 Lane Undivided (Two way)	4800	3800		
6 Lane divided (Two way)	5400	4300		
8 Lane divided (Two way)	7200			

would lead to a forced flow situation and breakdowns within the traffic stream.

### Table 7-4 Recommended design service volume

The recommended volume of traffic by Indian Road Congress IRC is around 0.70 times the maximum capacity and this is taken as the "design services volume" for the purpose of adopting design values.

### 7.2.5.1 Volume count ratio

The V/C is one of the most used indices for the assessment of traffic conditions in urban areas. V is the total number of vehicles passing a given point in one hour and C is the maximum number of cars that can pass the same point at a reasonable traffic condition.

### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

| MOBILITY

DESCRIPTION	V/C	LOS
Free flow conditions with unimpeded maneuverability.	0.00 to 0.60	A
Reasonably unimpeded operations with slightly restricted maneuverability. Stopped delays are not bothersome.	0.61 to 0.70	В
Stable operations with somewhat more restrictions in making mid-block lane changes than LOS B.	0.71 to 0.80	С
Approaching unstable operations.	0.81 to 0.90	D
Operations with significant intersection approach delays and low average speeds.	0.91 to 1.00	E
Intersection congestion, high delay and adverse signal progressions.	Greater than 1.00	F

### Table 7-5 V/C in correlation to Level of Service

A v/c ratio less than 0.85 generally implies that adequate capacity is available and vehicles are not expected to experience significant queues and delays. As the v/c ratio approaches 1.0, traffic flow may become unstable, and delay & queuing conditions may occur. Once the demand exceeds the capacity v/c ratio greater than 1.0), traffic flow is unstable and excessive delay and queuing is expected.

### 7.2.6 Classified Volume Count

To understand the existing traffic volumes within the city and to understand the vehicular volumes between the study area and outside, the surveys conducted

and the analysis thereof has been presented in the following sections.

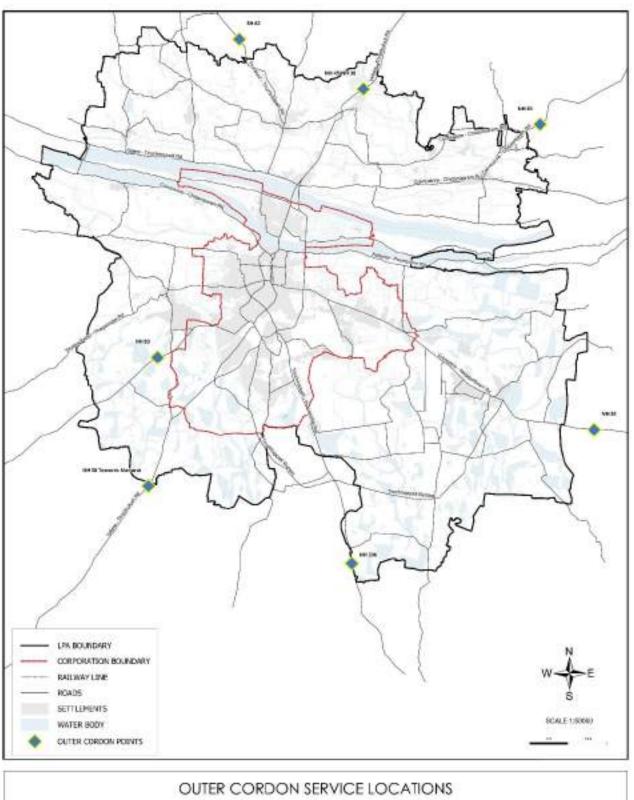
### 7.2.6.1 Outer Cordon

Outer Cordon volume counts were carried out at 8 cordon locations. The daily traffic (24hr) at the cordon locations ranges from 17000 vehicles to 50000 vehicles. As most of the traffic destined for Tiruchirappalli from Chennai enters the city from the Samayapuram via NH 38, wherein new developments are also coming up, almost 70127 PCUs were observed in a day and 5610 PCU traffic was observed during the peak hour.

Passenger vehicles have higher composition compared to goods and slowmoving vehicles at all the locations. Least Volume of traffic was observed in NH 81 (West) during peak hour with 1429 PCUs whereas a maximum number of goods vehicles, about of 51% of Good Vehicles are plying on NH 81 (East). Private vehicles account for 61% of the total traffic in all cordon locations.

Share of two wheelers is the highest in all locations, varying between 27% and 50%. Share of Goods vehicles is about 25%.

| MOBILITY



### Map 7-5 Outer Cordon survey points location.

TIRUCHIRAPPALLI MASTER PLAN - 2041

Location Id	Cordon locations	Design Capacity (Per hour/PCU) IRC- 106-1990	Traffic (Peak PCU)	V/C	LOS
OC1	SH 62 Towards Thuraiyur	1800	1869	1.03	F
OC2	NH 81 West to Karur	1800	1429	0.79	С
OC3	NH 83 West Towards Dindugul	3600	3198	0.88	D
OC4	NH 336 Towards Pudukottai	5400	4426	0.81	D
OC5	NH 83 East to Tanjore	3600	3324	0.92	E
0C6	NH 81 East to Jayamkondan	3600	2472	0.68	В
0C7	Samayapuram toll NH- 45/NH-38	5400	5610	1.03	F
OC8	NH 38 to Madurai	4500	3666	0.814	D

### Table 7-6 OC points survey

### 7.2.6.2Traffic Volume at major Junction's points/Intersections

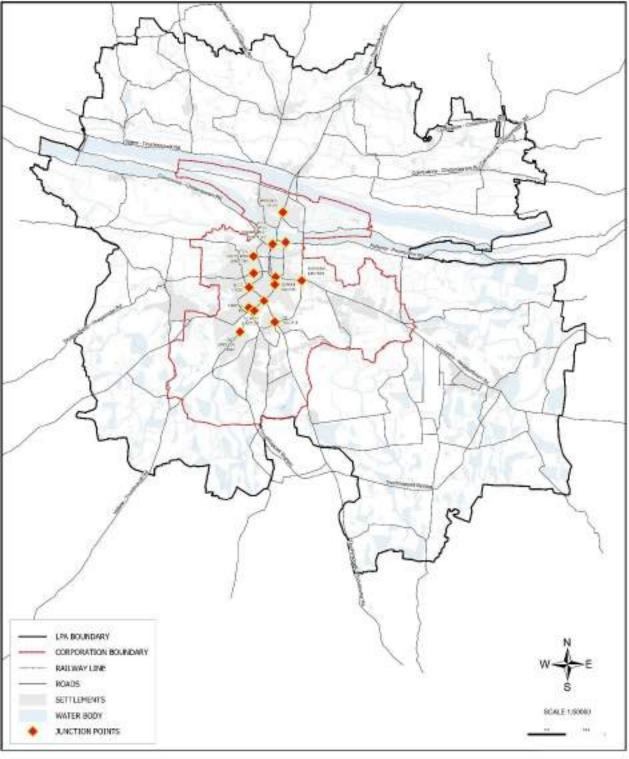
Intersection Turning/Traffic Volume Counts (TVC) were carried out at 14 critical locations as reported in the CMF 2022 report.

Palpannai Junction, Sanjeevi Nagar Junction, Sivaji Ganesan Statue and Salai Road & Thillai Nagar Junction serve more than 1,00,000 vehicles every day. On average, the composition of private vehicles on all these junctions ranges from 79% to 87%.

### Map 7-6 Junction points locations

DIRECTORATE OF TOWN AND COUNTRY PLANNING





| MOBILITY

### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

| MOBILITY

Locatio n Id	Junction locations	Design Capacity (Per hour/PCU)	Traffic (Pe ak PCU)	V/C	LOS
JN1	Central Bus stand (opposite to Hotel Anand)	5,400	4757	0.88	D
JN2	Anna Statue	7,800	9876	1.2	F
JN3	Head Post Office Roundabout	9,600	9585	0.99	E
JN4	Railway Junction	6,600	4718	0.71	С
JN5	TVS Toll Gate	11,100	9857	0.88	D
JN6	MGR Circle	1,44,400	11242	0.78	С
JN7	Salai Road & Thillai Nagar Junction	6,000	7496	1.24	F
JN8	Keela Chathiram Road Thennur High Road	4,200	7251	1.72	F
JN9	Old Madurai Road	5100	6199	1.22	F
JN10	Palpannai Junction	12600	10056	0.79	С
JN11	Gandhi Market at Thanjavur Road	3000	4423	1.47	F
JN12	Sivaji Ganesan Statue (Palakarai)	6500	7225	1.12	F
JN13	Sanjeevi Nagar Junction	6600	8940	1.35	F
JN14	Mambala Salai JN	5400	7794	1.44	F

Table 7-7 Junctions Point survey

### 7.2.6.3Screen Line

Screen line volume counts were carried out at four locations to estimate the classified vehicular volumes crossing screen lines, with the maximum traffic being observed on the Aristo Roundabout.

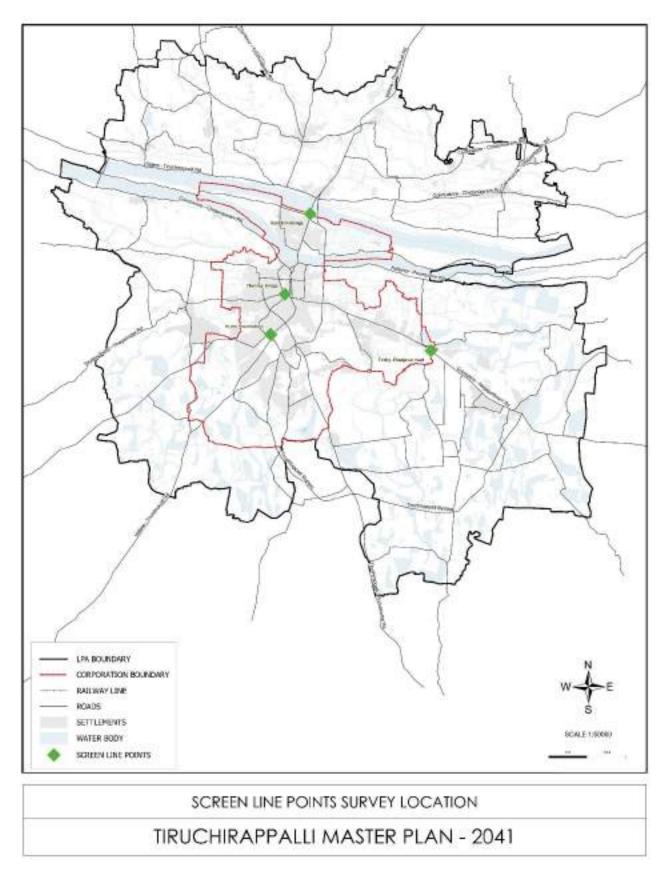
Location Id	Screen line locations		Traffic (Peak PCU)	V/C	LOS
Scr-CVC	Thennur Bridge	5,400	3783	0.70	В
Scr-CVC 2	Aristo Roundabout	7,200	5995	0.83	D
Scr-CVC 3	Trichy- Thanjavur road,Thiruverumbur	4,500	3741	0.83	D
Scr-CVC 4	Kollidam Bridge	3,600	5558	1.54	F

### Table 7-8 Screen line locations survey

(Source CMP 2021)

The maximum peak hour volume is observed between 09:00 am and 10:00 am. Peak hour factor ranges from 8% to 9%. Private and Intermediate public transport vehicles account for 58% and 9% while Goods vehicles in city is around 12% and Public Transport vehicles is 11%. The details of traffic volume observed are given in the table below.

| MOBILITY

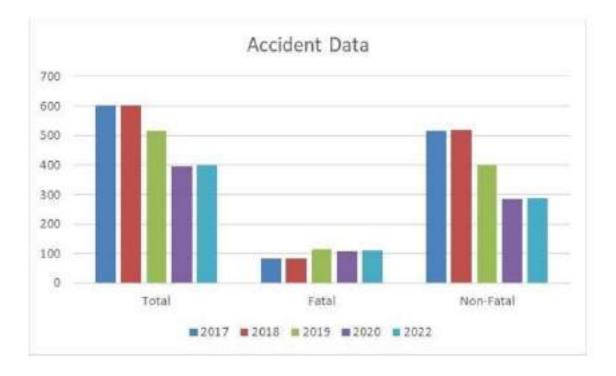


Map 7-7 Screen line points survey locations.

### 7.3 Road Safety

### 7.3.1 Accident Pattern

As per the data of road accidents collected for the past 5 years, total no of accidents in the city in the year 2015 is 399 of which fatal accidents constitute 111 (i.e., 27%). The accidents in Tiruchirappalli are seen to be on a decline considering the last 5-year data. The average annual growth rate is at -9.14% whereas fatal accidents are increasing at a rate of 8.78%. The trend of motor vehicle accidents in Tiruchirappalli LPA from 2017 onwards is presented in the table below.

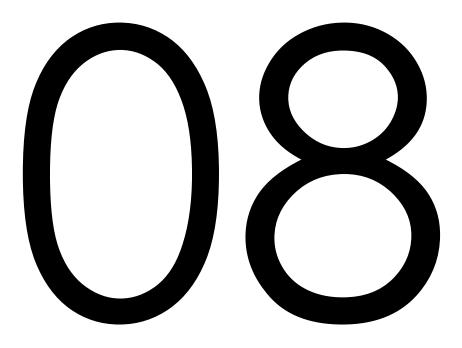


### Figure 7-8 Accidental trends in the city

### 7.4 SUMMARY

Trichy, like many growing cities, may experience traffic congestion, especially in central areas and key transportation hubs. The congestion can be attributed to factors such as population growth, increasing vehicle ownership, and limited road infrastructure. Addressing these challenges is crucial for creating a more efficient and sustainable urban transportation system. This could include the introduction of smart traffic management systems, the expansion of public transportation services, and infrastructure development projects to ease congestion. Future plans may focus on sustainable mobility solutions and improving the overall transportation ecosystem.

Public transportation is a crucial aspect of urban mobility, the availability, reliability, and accessibility of public transport play a significant role in addressing traffic congestion.



# PHYSICAL INFRASTRUCTURE

## 8. PHYSICAL INFRASTRUCTURE

The degree of physical infrastructure availability, accessibility, and quality greatly influences the quality of life in each region. The development of physical infrastructure is a key factor in economic growth. To maintain good urban health and lead productive lives, efficient solid waste collection and disposal, sewage, and water supply systems are necessary. The population's fast growth necessitates the expansion of physical infrastructure. Below is a summary of the current situation and future needs in Tiruchirappalli LPA.

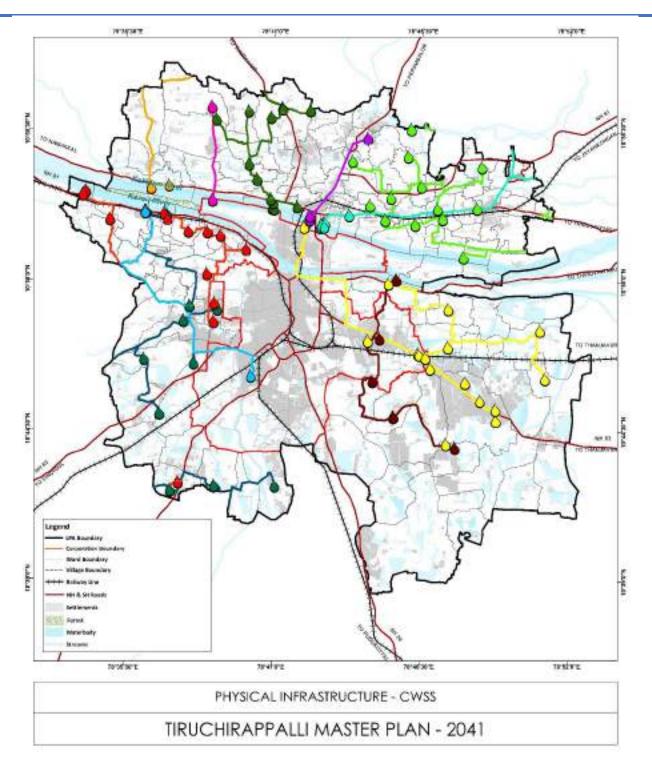
### 8.1 Water supply

### 8.1.1 Source and Quantity

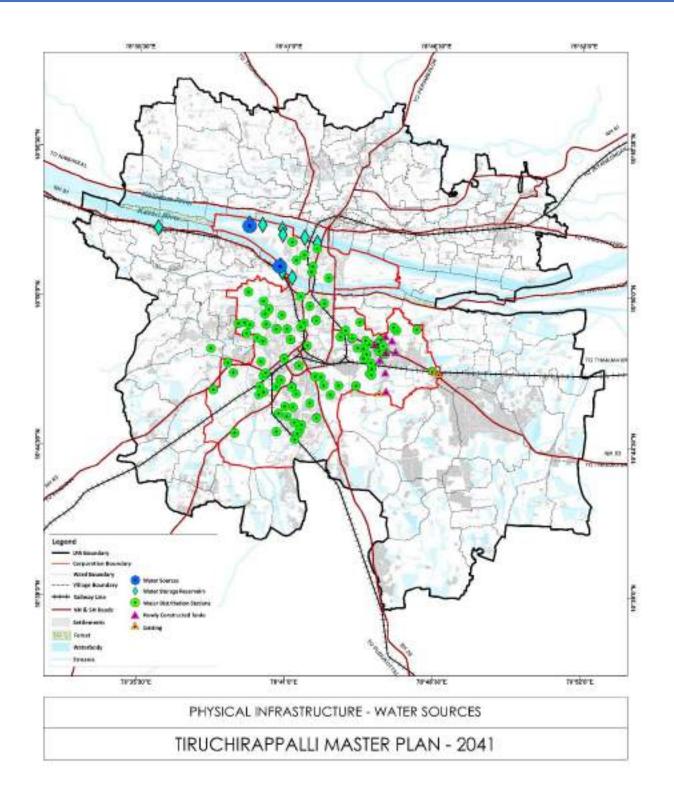
Tiruchirappalli's main source of water supply is from Cauvery and Kollidam rivers. Other sources are reservoirs, collector wells and bore wells. Water supply in LPA is provided by various bodies ranging from urban local bodies, panchayats and TWAD. CWSS network serves most of the area falling under LPA boundary

### 8.1.2 Infrastructure for Water Supply

Tiruchirappalli LPA is receiving water supply through a combined water supply scheme (CWSS). Tiruchirappalli corporation has 146 OHTs with storage capacity of 70.64 MLD and the Municipalities has about 11 OHTs with a storage capacity of 5.49 MLD, Town Panchayat has about 11 OHTs with a storage capacity of 7.75 MLD, and the rest of LPA has about 96 OHTs with storage capacity of 30 MLD The location of OHT facilities within the LPA is mapped. In the corporation area, the existing storage facilities with a total capacity of 70.6 MLD are inadequate at present.



Map 8-1CWSS – Tiruchirappalli LPA



### Map 8-2 Water Sources and Storage

LPA	Total	Urban	Rural
No:of households	363064	266962	96102
Tap water treated	74.84%	79.99%	60.54
Tap water untreated	10.83%	7.64%	19.71
Covered well	0.31%	0.28%	0.39%
Uncovered well	0.40%	0.37%	0.48%
Hand pump	3.52%	2.94%	5.11%
Tube well	8.87%	7.26%	13.36
Spinning	0.16%	0.20%	0.06%
River/canal	0.10%	0.12%	0.07%
Tank pond/lake	0.01%	0.00%	0.03%
Others	0.89%	1.11%	0.26%

### Table 8-1 Old Sources of water

### 8.1.2.1 Existing demand and Supply

The Tamil Nadu Drainage and Water Supply Board recommend a per capita water supply of 135 litres per capita per day for municipalities with an underground sewerage system, 90 litres per capita per day for Town Panchayat with an underground sewerage system, and 55 litres per capita per day for Villages.

The existing per capita supply in Tiruchirappalli Corporation is 135 lpcd. The existing per capita in municipalities, town panchayats and villages are 84, 82 and 54 lpcd respectively. As per the TWAD norms the per capita supply for Corporation, Municipality, Town Panchayat and Villages are 135 lpcd, 90 lpcd and 55 lpcd. As per this norm, the existing gap in water supply for Tiruchirappalli Corporation and Villages is found to be 8 MLD. The existing water sources need to be augmented and water bodies need to rejuvenate to fulfil the existing demand in the water supply.

|169

S.No	Description	Tiruchirappalli corporation	Municipality	Town Panchayat	Villages
1	Existing Population	1089019	70839	91851	436324
2	Coverage of water supply connections	53%	32%	57%	93%
3	Per capita supply (TWAD Board Norms)	135	90	70	55
4	Total quantity required in MLD	147	6	6	24
5	Existing per capita supply in LPCD	135	84	82	54
6	Total quantity supplied in MLD	142	5.49	6.23	21
7	Existing demand in MLD	5	-	-	3

### Table 8-2 Existing demand and supply

### 8.1.3 Projected Requirement

The estimated water supply demand for the projected Population of 2041 is shown in Table 5.7. As per TWAD Board norms, Tiruchirappalli LPA will require 264 MLD water by the year 2041 to support the 2344855 population without accounting for losses in transmission and distribution. Tiruchirappalli LPA has an available water quantity of about 115MLD, the remaining 149 MLD needs to be augmented. As per Table 8.4, Villages need 3 MLD of additional water supply in 2041.

Name of Village/Town	Projected Population 2041	Per capita Supply (TWAD Board norms)	Total quantity required in 2041 (MLD)	Quantity Available
Tiruchirappalli Corporation	1540720	135	208	71
Municipality	89513	135	12	6
Town Panchayat	134324	90	12	8
Rest of LPA	580298	55	32	30
Total	2344855	-	264	115

### Table 8-3 Projected water requirement

As per norms the Municipalities and Town Panchayats require 90 and 70 lpcd, but considering the population growth, 135 lpcd is taken for Municipalities and 90 lpcd is taken for Town Panchayats for the year 2041. The area required to meet the storage gap of 149 MLD is 2.8 Hectares.

### 8.2 Sewerage and sanitation

The Underground Sewage System covers the Tiruchirappalli Corporation and 2 Town Panchayats. The corporation is covered by UGSS through old schemes. The ongoing scheme is split into two phases. The first phase has an STP capacity of 37MLD.

### 8.2.1 Sewerage generation and Treatment

The total sewage generated from Tiruchirappalli Corporation, Municipalities, Town Panchayat and Villages is presently estimated at 118 MLD, 5 MLD, 5 MLD and 19 MLD. 71% of the Tiruchirappalli Corporation area is covered with sewer network. 54% of Manachanallur and S.Kannanoor Town Panchayat area is covered with sewer network.

### 8.2.2 Sanitation

		Households	Households not
	Total No.of	having Latrine	having Latrine
LPA	Households	facility within	facility within
		premises	premises
Total	3,63,064	69.28%	30.72%
Urban	2,66,962	79.33%	20.67%
Rural	96,102	41.36%	58.64%

### Table 8-4 Sanitation

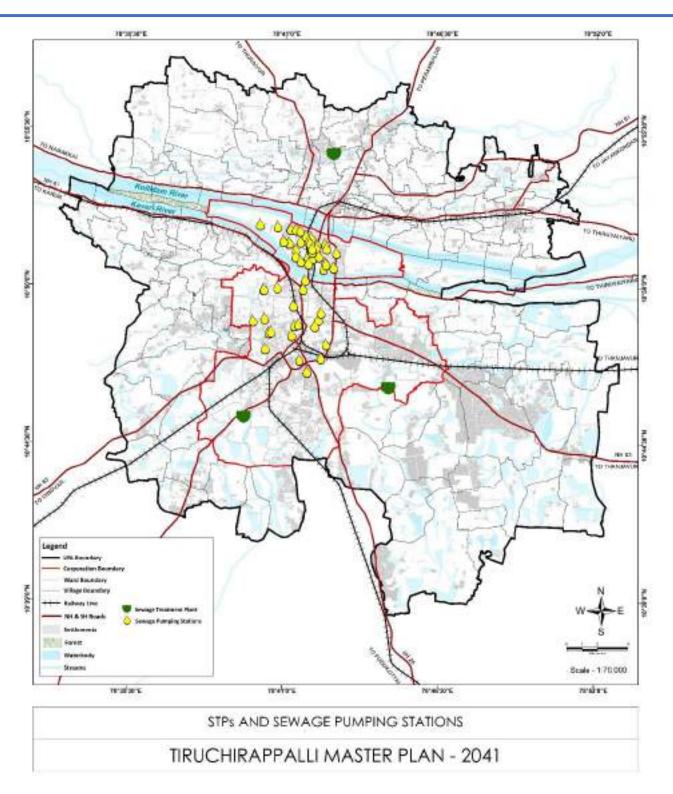
Rural areas are lacking houses with latrine facilities. 58.64% of the households live in houses with no latrine facility. Urban areas have 79.33% of households having latrine facility within premises. Rural and Urban areas can improve these lacking facilities with the help of Swachh Bharat Mission and other schemes.

### 8.2.3 Existing Gap in Sewage Treatment

Presently, Tiruchirappalli Corporation generates about 118 MLD of sewage (estimated at 80 % of the water supply). Tiruchirappalli Corporation area has Sewage Treatment Plants with a total capacity of 95.64MLD of which 58.64 MLD is running and 37MLD is on-going. The existing STP is inadequate to treat the present sewage in Tiruchirappalli Corporation. STP capacity of 22.4 MLD is required. Manachanallur and S.Kannanoor Town Panchayat has one STP of 6.4 MLD capacity which is adequate in the existing scenario. At the Village level, there are no treatment facilities so Decentralized Wastewater Treatment Systems can be proposed.

Description	Coverage of Sewage Network	Existing Sewage Generated (MLD)	No.of STPs	Total Installed Capacity of STPs (MLD)	Present Gap (MLD)
Tiruchirappalli Corporation	71%	118	2	95.64	22.4
Municipality	-	5	-	-	5
Town Panchayat	54%	5	1	6.4	1.5 (Excess)
Rest of LPA	-	19	-	-	-

Table 8-5 Projected Requirement of Sewage Treatment Facilities



Map 8-3 STPs and Sewage Pumping Stations

#### 8.2.4 Projected Requirement

	Projected Sewage	Existing Capacity	Additional capacity
Description	Generated	of STPs	required (MLD)
	(MLD)	(MLD)	
Tiruchirappalli Corporation	166	95.64	71
Municipality	6	-	6
Town Panchayat	7.5	6.41	1.1
Rest of LPA	25.5	No STP	DEWATS can be
Resi of LI A	20.0		proposed

#### Table 8-6 Projected requirement of Sewage

The Projected Sewage generation by 2041 is achieved from the projected water supply (80% of the total supply). By 2041 Tiruchirappalli Corporation will generate 166 MLD of sewage but the existing STP has only a capacity of 95.64 MLD. Additional STP is required to treat 71 MLD of excess sewage in 2041. Town Panchayat will generate an estimate of about 7.5 MLD of Sewage. The existing STP is not sufficient till 2041. Additional STP is required to treat 1.1 MLD of excess sewage in 2041. At the Village level, currently, there are no treatment plants. Decentralized Wastewater Treatment Systems (DEWATS) can be proposed in Villages. As per URDPFI, an average of 0.25 hectares is taken as the area required per MLD. To treat 71 MLD of additional sewage generated in 2041, 18 ha of land is required in Tiruchirappalli Corporation. For Manachanallur and S.Kannanoor Town Panchayat, the existing STP is inadequate for treating the sewage generated in 2041. Additional 1.1 MLD to be treated and it requires 0.3 ha area. As per the handbook on Decentralized Wastewater treatment module by the National Institute of Urban Affairs, Delhi the area required for treating 1 cubic.metre of wastewater is 60.5 sq.m.so to treat 25500 Cubic meters of wastewater collected in Villages 150 ha of land is required in the Villages.

#### 8.3 Solid waste management

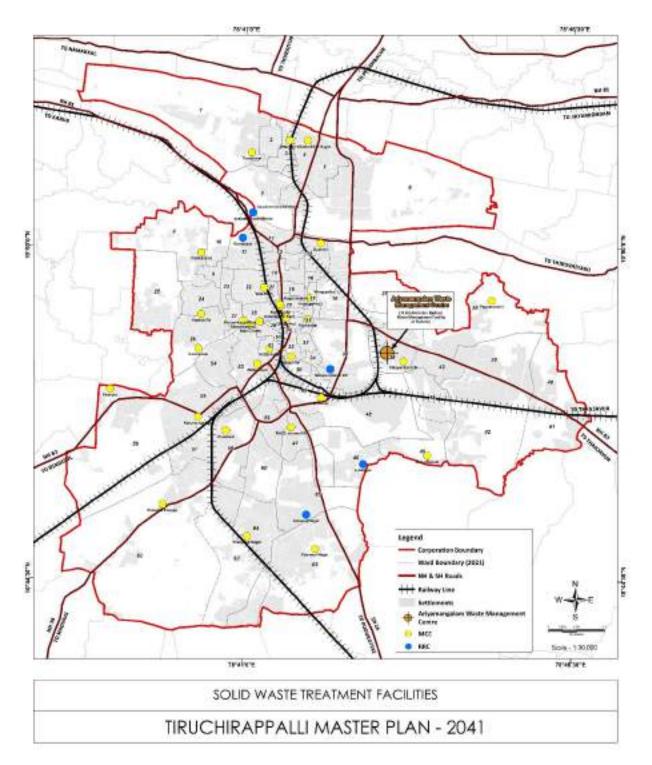
Solid Waste management is an essential service that relates directly to public health and the environment. ULB is responsible for creating, operating, and maintaining infrastructure for the collection, storage, segregation, transportation, processing, and disposal of municipal solid wastes. Poor solid waste management has direct implications on the environmental health of the region and has a significant bearing on the quality of life of citizens. Tiruchirappalli Corporation is looking after the waste management within its jurisdiction, while the rest of the area, Town Panchayat and different Gram Panchayat's local body is responsible for waste management in their respective jurisdictions.

# 8.3.1 Solid waste Generation

Tiruchirappalli LPA generates about 588 TPD of Solid waste. Currently, urban area of Tiruchirappalli LPA average garbage generated per person per day is 400g. So, the estimated quantity of Waste Generated per day in the Urban Area is 500TPD.

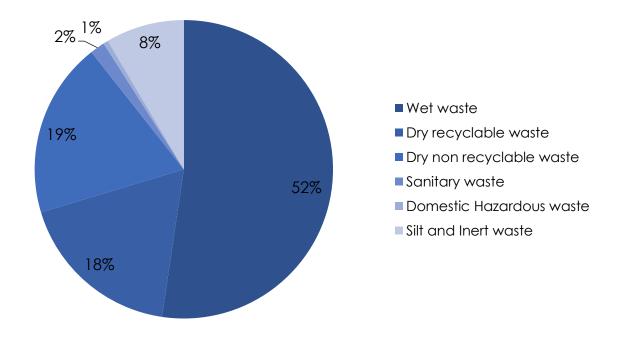
S. No.	Description	Population 2021	NEERI Standarsd (0.2-0.6kg per person)	Quantity of waste generated (TPD)
1	Tiruchirappalli Corporation	1089019	0.4	436
2	Municipality	70839	0.4	28
3	Town Panchayat	911851	0.4	37
4	Rest of LPA	436496	0.2	87

Table 8-7 Existing Solid Waste Generation-Tiruchirappalli LPA



Map 8-4 Solid waste Management – MCC & RRC

#### 8.3.2 Composition of Solid Waste



#### Figure 8-1 Composition of Solid waste in Tiruchirappalli Corporation

Solid Waste in Tiruchirappalli LPA comprises 52.34% Wet waste, 18% Dry Recyclable waste, 19.02% of Dry Non-recyclable waste, 1.6% of Sanitation waste, 0.53% of Domestic Hazardous waste and 8.51% of Silt & Inert waste.

# 8.3.3 Treatment Facilities

Tiruchirappalli Corporation and Thuvakudi Municipality are treating solid waste by composting. Tiruchirappalli has 175 TPD capacity MCC and 26 TPD capacity biomethane. Apart from this 5 RRC is installed. The remaining waste has been dumped in the ariyamangalam landfill site which is 47 acres. Now this landfill site is being cleared to accommodate solar panel installation. The thuvakudi Municipality has 7 TPD capacity MCC and the Lalgudi Municipality has landfill site. Town Panchayats have landfill site and the village has 4.5 TPD capacity of MCC and the remaining waste are dumped in landfill sites. Recycle and reuse concept needs to be implemented to minimize waste generation.

# 8.3.4 Projected Requirement

Description	Population 2041	NEERI Standards (0.2-0.6kg per person)	Projected Quantity of waste generated (TPD)	Existing Capacity of Compost yard (TPD)	Additional Capacity Required in 2041
Tiruchirappalli Corporation	1540720	0.4	616	201	415
Municipality	89513	0.4	36	7	29
Town Panchayat	134324	0.4	54	-	54
Rest of LPA	580298	0.2	116	4.4	112

#### Table 8-8 Projected solid waste generation 2041 – Tiruchirappalli LPA

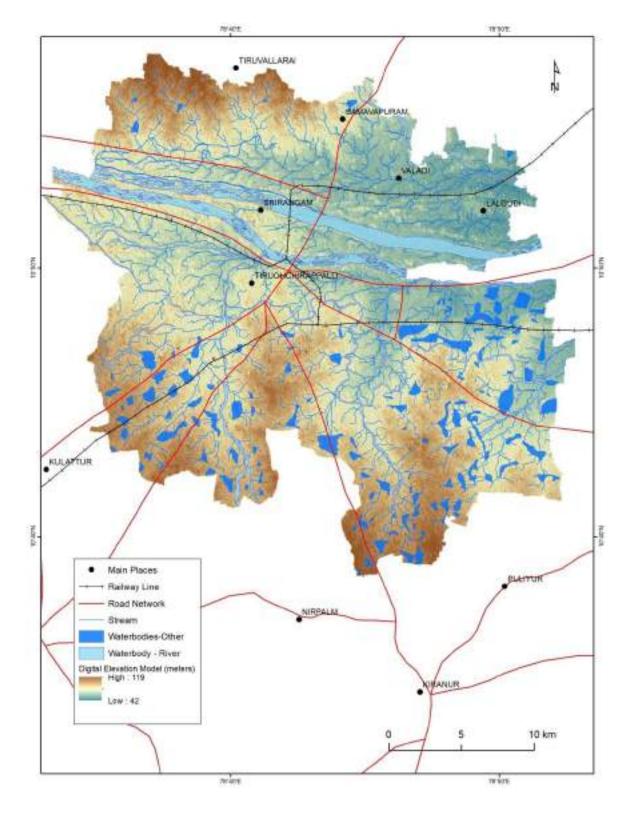
Based on the per capita generation of solid waste it is estimated that by 2041 about 822 TPD of solid waste will be generated in Tiruchirappalli LPA. As per NEERI Standards, the existing composting landfill site is not sufficient to store Solid Waste generated so there is need for additional Compost yards in the Corporation area. With respect to composition of solid waste, MCC and Bio methane centers for capacity of 218 TPD for Wet waste, Incinerator for capacity of 175 TPD for dry non-recyclable waste, sanitary waste and domestic hazardous waste.

# 8.4 Storm water drainage

# 8.4.1 Existing Situation

The existing drainage condition of Tiruchirappalli consists of the natural river and manmade drainage systems (stormwater drains). Tiruchirappali LPA has 2 rivers namely.River Cauvery and River Kollidam The Corporation area has a stormwater drain for a length of 747.13 km which is 52.24% of the total length of

the road. As Tiruchirappalli is prone to flooding the Storm Water drain needs to be implemented for the entire road length to protect the town from flooding. The uncovered areas need to be covered. Only 4.6% of the rest of LPA is covered with storm water drain.



Map 8-5 Drainage

# 8.5 Electricity

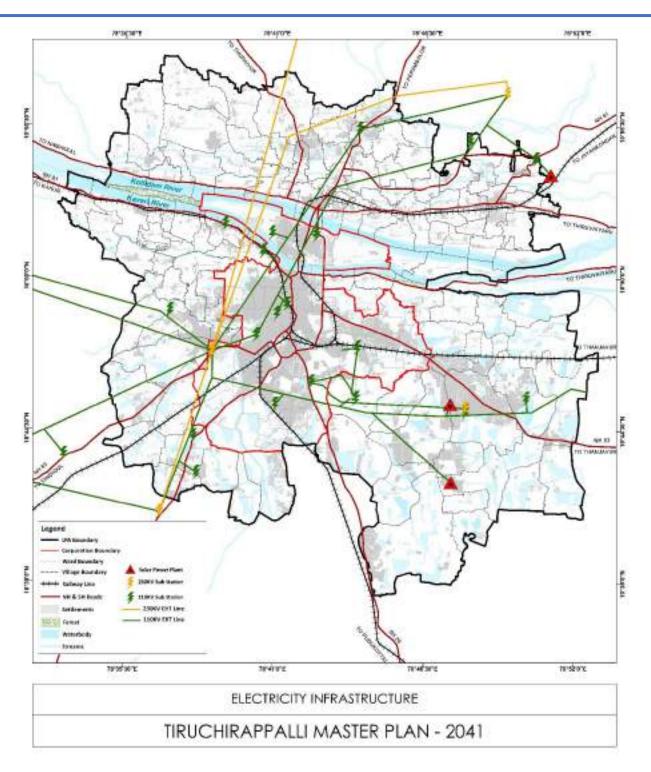
Based on the estimated requirements of power supply as per the National Electricity Policy published in 2005, the recommended consumption is 2.74 kWh per capita per day. The per capita demand for electricity includes domestic, commercial, industrial, and other requirements. Tiruchirappalli LPA has 24 substations, 2 with 230/33-11 KV capacity and remaining with 110/33-11 KV capacity.

# 8.5.1 Projected Requirement

S. No.	Description	
1	Population 2011	1433167
2	Projected Population 2041	2344855
3	Additional Population	911688
4	No.of Substations existing	24
5	Existing Capacity of substation	1061MV
6	Power supply requirement for	1759MV
	projected population 2041	17 07/1010
7	Gap	698MV
8	No.of Substation of capacity (110/33-	32
	11kv) required for 2041	52
9	Land area required for power	1.8
	infrastructure for 2041 in ha	1.0

#### Table 8-9 Substation requirement 2041 – Tiruchirappalli LPA

As per URDPI guidelines, for every 15000 Population, a substation of 11 KV is required.. In 2041 the population of LPA will be 2344855. To serve an additional population of 911688, 32 substations of 11-33 KV capacity each are proposed.



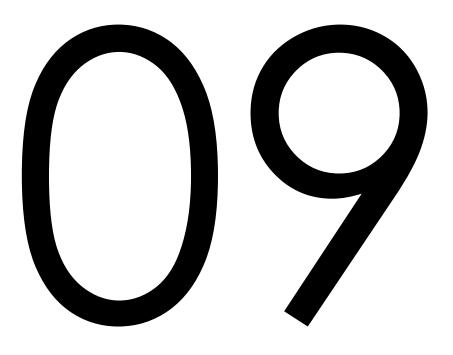


#### 8.6 SUMMARY

Tiruchirappalli's main source of water supply is from Cauvery and Kollidam rivers. Other sources are reservoirs, collector wells and bore wells. Water supply in LPA is provided by various bodies ranging from urban local bodies, panchayats and TWAD. CWSS network serves most of the area falling under LPA boundary.

By 2041, the additional water requirement will be 90 MLD. The additional requirement for water is to be met by augmenting the existing water resources.

Water supply and its storage capacity gap are high in corporation area compared to rest of the LPA. UGSS covers corporation and two Town panchayat but Municipalities and other TPs to be covered. The storm water drains cover only the corporation area whereas only 4.6% of the rest of LPA is covered. The natural drains can be utilised to meet the storm water drainage. In solid waste management - landfill is one of the means of disposal which will be cleared and hence MCC, Biomethane, incinerator process to be installed to meet the current and future requirement.



# SOCIAL INFRASTRUCTURE

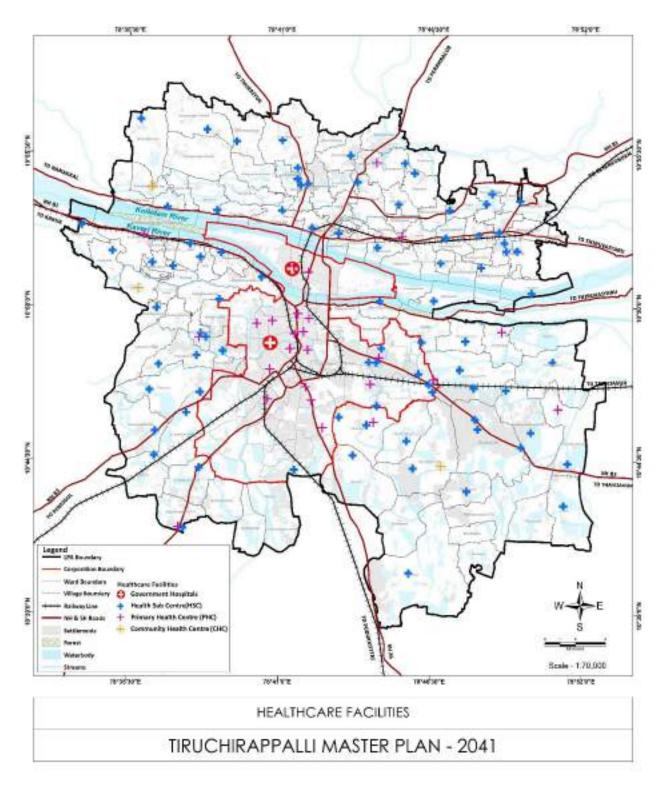
# 9. SOCIAL INFRASTRUCTURE

Social infrastructure in urban planning refers to the physical and organizational structures that support and enhance social interactions, community well-being, and overall quality of life within a city or urban area. Unlike traditional infrastructure, such as roads and utilities, social infrastructure focuses on urban life's human and social aspects. It encompasses facilities, spaces, and services that foster community engagement, social cohesion, and cultural development. Key components of social infrastructure in Trichy include:

# 9.1 Health

Year	Health Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	10,89019	70,839	91,851	4,36,496
	Health Sub Centre	91	14	10	67
	Primary Health care	3	0	1	11
	Urban primary	15	0	1	0
	Health care center	10	0	I	Ũ
2021	Sum of Hospitals				
	(HSC,PSC,UPSC –	109	14	12	78
	Primary )				
	Intermediate hospital	1	2	1	0
	Government Hospital	2	0	0	1
	Veterinary Hospital	3	0	0	17

Table 9-1 Health Facilities along Tiruchirappalli - 2021



Map 9-1 Healthcare Facilities

The number of health facilities present within the Tiruchirappalli Master plan area

are:

One Government Medical College.

One Government Hospital (Puthur)

- 91 Health Sub Centre (HSC).
- 15 Urban Primary Health Centre (UPHC).
- 3 Primary Health Centre (PHC) (6 beds average)

One ESI Hospital.

One Railway Hospital.

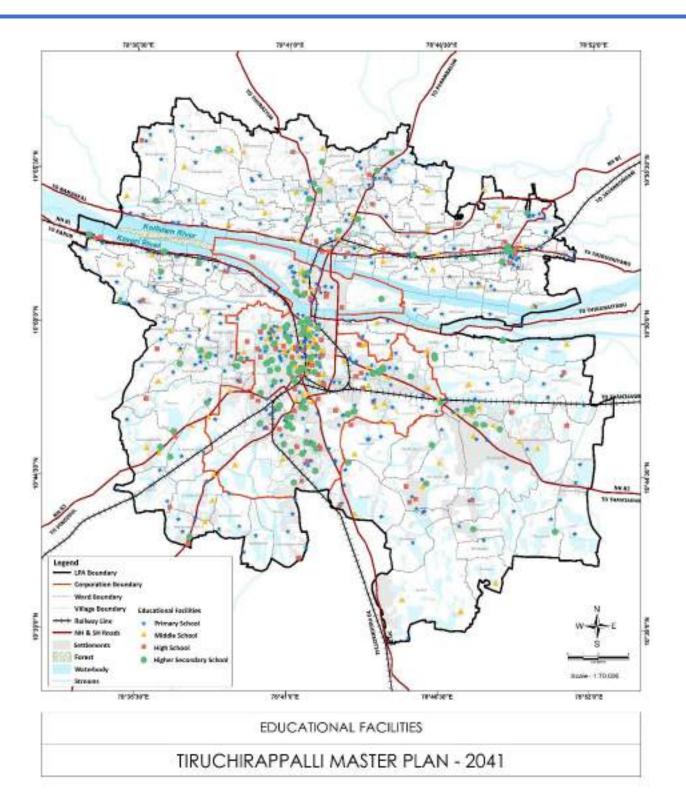
98 – Private Clinic, Nursing Home, Speciality Hospital and Multi-speciality Hospitals are available in addition and 24 small private dispensaries have been around the corporation zone

# 9.2 Education

Educational facilities that contribute to the intellectual and social development of residents. Schools serve as focal points for learning, community engagement, and cultural exchange The right to education is one of the essential liberties. Everyone should have access to education in order to enhance the area as a whole. The first step should be to establish the infrastructure needed for 100% education. The following lists the number of schools and colleges needed to serve the anticipated population in 2041.

Year	Educational Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	1089019	70839	91,851	4,36,496
	Nursery and Primary School	78	9	6	42
	Primary School	94	13	17	180
	Sum of Schools (Nursery &Primary )	172	22	23	222
	Middle School	73	4	6	55
2021	High School	47	4	3	39
	Higher Secondary School	96	9	9	54
	Sum of Schools (High School + Higher Secondary School	216	17	18	148
	Special School	1	0	0	0

Table 9-2 School facilities along Tiruchirappalli - 2021



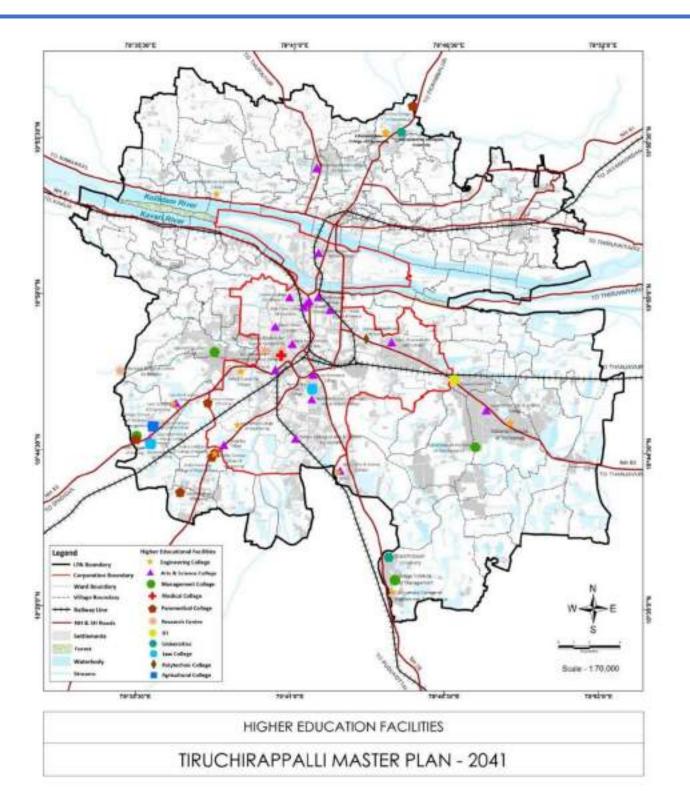
## Map 9-2 Educational Facilities

.

	Educational Facility - Colleges	Corporation	Municipality	Town Panchayat	Villages
	Population	10,89,019	70,839	91,851	4,36,496
	Polytechnic	1	0	0	0
	Arts and science	15	1	1	2
	Agriculture	0	0	0	2
0001	ITI	0	0	1	0
2021	Sum of colleges	16	1	2	4
	Management	0	1	0	3
	Law	1	0	0	1
	Sum of colleges	1	1	1	4
	Engineering	2	1	0	8
	Medical	1	0	0	5

Table 9-3 College facilities along Tiruchirappalli – 2021

The colleges are dense along the LPA boundary followed by schools. The arts andscience colleges are high in number along the corporation limit followed by theengineeringcollegesandmedicalcolleges.





# 9.3 Socio-Cultural Infrastructures

Socio-cultural infrastructure, therefore, encompasses a diverse array of elements that collectively define and shape the cultural identity and social dynamics of a community or society

#### 9.3.1 Library

Library: Institutions that offer access to information, educational resources, and community programs. Libraries play a crucial role in promoting literacy, lifelong learning, and cultural enrichment. This type of infrastructure must be present very often for a range of every 15000 people. (URDPFI Guidelines)

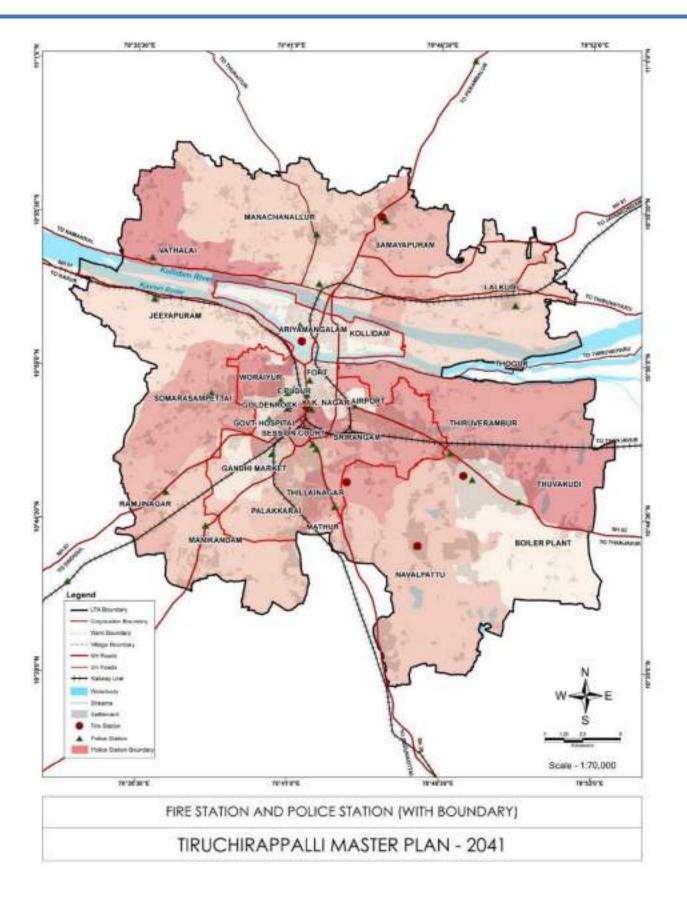
## 9.3.2 Community Halls

Community halls are essential components of social infrastructure in urban planning, serving as versatile spaces that foster community engagement and cohesion. These facilities are designed to accommodate a variety of activities and events that contribute to the overall well-being of residents. This type of infrastructure must be present very often for a range of every 15000 people. (URDPFI Guidelines)

# 9.4 Police, Safety Management Infrastructure

Fire Stations: By reacting to crises including fires, accidents, and other calamities, fire stations play a crucial role in guaranteeing the protection of populations. These stations' firefighters are prepared to tackle a wide range of scenarios and offer prompt aid in times of need. The fire stations should be present for every 2 lakh population as per URDPFI Guidelines.

Police Stations: Acting as centers of community safety and law enforcement, they manage crises, conduct investigations, maintain a visible presence that discourages crime, and interact with the community to foster confidence.



#### Map 9-4 Fire station and Police station with boundary

The range has to be along Tiruchirappalli Corporation, the presence of police stations is high due to the growth extension happening along east zone of LPA

	Other Amenities	Corporation	Municipality	Town Panchayat	Villages
	Fire Station	3	2	1	2
2021	Police Station	17	2	3	5
2021	Library	15	2	2	66
	Community halls	11	3	3	37
	Sports Complex	1	0	0	0

Table 9-4 Other civic amenities along Tiruchirappalli – 2021.

# 9.5 Open Spaces

**Recreational spaces** are designated areas or facilities designed to provide opportunities for leisure, physical activity, and social interaction. These spaces play a crucial role in enhancing the quality of life for individuals and communities by offering outlets for relaxation, exercise, and community engagement.

**Organized Green Spaces** refer to intentionally planned and structured green areas, such as parks, botanical gardens, sports facilities or landscaped public spaces. These areas are deliberately designed for recreational, aesthetic, and environmental purposes. They may include walking paths, seating areas, and wellmaintained greenery, providing a pleasant environment for relaxation and community engagement. Additional **common open spaces** include plain areas' tree cover, flood plains, and other undeveloped terrain.

# 9.5.1 Parks

Park type	Count	Extent in sq. m	Extent in sq.km	Percentage share
Developed as Miyawaki Forest	4	5222.86	0.01	1.20%
Developed as park and put into public use	57	178653.9	0.18	41.16%
Green Space with Gandhi Asthi Mandapam	1	520.9	0.00	0.12%
Open Gym	6	2462.3	0.00	0.57%
Public Gym Building Constructed	1	422.71	0.00	0.10%
Vacant Land	151	143908.62	0.14	33.16%
Vacant Land with fencing	85	102837.61	0.10	23.69%
Grand Total	305	434028.9	0.43	100.00%

Table 9-5 Park Details

Green spaces and recreational areas that offer opportunities for leisure, exercise, and social interactions. Well-designed parks contribute to physical and mental well-being and provide a venue for community events. The majority of the parks are constituted to be the vacant land often left open and empty without proper maintenance. There are 85 parks which properly fenced and are into functional but the people access parks are only 64 in number through playground parks and open gym.

# 9.5.2 Play grounds

Ownership	Play fields / Grounds	Extent in sq.km	Percentage share
Government	9	0.03	5.36 %
Private	77	0.44	79.55 %
ULB	65	0.08	15.09 %
Grand Total	151	0.55	100.00%

#### Table 9-6 List of parks around Tiruchirappalli

80 % of the total Play fields/ Grounds are owned by Private institutes (Schools and colleges). The parks owned by ULB can be classified into 4 sectors

- Developed as Parks and put into public use
- Open Auditorium
- Vacant Land
- Vacant land with fencing

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

#### | SOCIAL INFRASTRUCTURE

Type of Play fields/ Grounds	Count	Extent in Sq. M	Extent in Sq.Km	Percentage
Developed as park and put into public use	10	22101.46	0.02	4.01%
Ground	25	73148.14	0.07	13.28%
Indoor Badminton Court	1	4425.12	0.00	0.80%
Open Gym	1	994.05	0.00	0.18%
Partly Developed	1	1301.2	0.00	0.24%
Play Field	19	190860.56	0.19	34.66%
Play Ground	45	195561.86	0.20	35.51%
Vacant Land	28	46366.05	0.05	8.42%
Vacant Land with fencing	20	13331.64	0.01	2.42%
Vacant Land with International Badminton Court	1	2603.59	0.00	0.47%
Grand Total	151	550693.67	0.55	100.00%

Table 9-7 Play ground and Sports field data

DIRECTORATE OF TOWN AND COUNTRY PLANNING

The no of playgrounds available into use are around 90 out of total 151. The rest of the them are either under vacant land structure or empty grounds that aree ready to encroached if not preserved .

# 9.5.3 OSR Spaces

ТҮРЕ	Count	Extent in Sq. m	Extent in Sq.Km	Percentage
Private	3	4354.96	0.0	12.26 %
Green Space Development	1	176.77	0.0	4.97%
OSR Vacant Land	2	2589.19	0.03	7.29%
ULB	25	31160.81	0.00	87.74%
Developed as a Park and put into public use	1	481.74	0.01	1.36%
Open Auditorium	1	7096.16	0.02	19.98%
Vacant Land	21	22636.57	0.00	63.74%
Vacant land with Fencing	2	946.34	0.00	2.66%
Grand Total	28	35515.77	0.04	100.00%

#### Table 9-8 Open Spaces, OSR spaces distribution along LPA boundary

The urban local body holds a major share of Open spaces of 87.74% and the private sector of 12.26%. The available spaces can be put into use for social infrastructure proposals of recreational areas preserving them from declining with respect to the future growth.

# 9.6 Gap Analysis

# 9.6.1 Health care

# 9.6.1.1 Health care GAP analysis 2021

Year	Health Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	10,89019	70,839	91,851	4,36,496
	. Sum of Hospitals				
	(HSC,PSC,UPSC –	109	14	12	78
	Primary )				
	Surplus   Deficit   No Gap	109	0	6	9
2021	Intermediate hospital	1	2	1	0
Gap Analysis	Surplus   Deficit   No Gap	10	1	0	4
	Government Hospital	2	0	0	1
	Surplus   Deficit   No Gap	2	0	0	1
	Veterinary Hospital	3	0	0	17
	Surplus   Deficit   No Gap	1	0	0	16

#### Table 9-9 Gap Analysis of Hospital Facilities 2021

The method for calculating the surplus or deficit was to find out the projected population / URDPFI standards giving out the needed value of hospitals to be present. Now we have to analyze the present value to find whether they are surplus or deficient. From the projections are calculated the area of land required .as per the guidelines and are proposed in villages through buffer analysis where they are deficient

# 9.6.1.2Health care GAP analysis 2031

Year	Health Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	12,95,327	79,872	1,11,054	5,03,104
	Sum of Hospitals				
	(HSC,PSC,UPSC –	259	16	22	101
	Primary )				
	Surplus   Deficit	150	2	10	23
	No Gap	150	2	10	25
	Intermediate	13	1	1	5
2031	hospital				
Gap	Surplus   Deficit	12	1	0	5
Analysis	No Gap	12	•	•	
, and you	Government	5	0	0	2
	Hospital	0	0	0	Z
	Surplus   Deficit	3	0	0	1
	No Gap	3	U	0	
	Veterinary	3	0	0	1
	Hospital		0	0	'
	Surplus   Deficit   No Gap	0	0	0	16

#### Table 9-10 Gap Analysis of Hospital Facilities 2031

herefore, significant measures must be taken to allocate primary health care facilities and subcenters for low-income individuals. If this doesn't happen, their only remaining alternative will be private hospitals.

# 9.6.1.3Health care GAP analysis 2041

Year	Health Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	15,40,270	89,513	1,34,324	5,80,298
	Sum of Hospitals	308	18	27	116
	Surplus   Deficit	199	4	15	38
	No Gap				
	Area required	2 Ha	0.04Ha	0.15Ha	0.38ha
	Intermediate	15	1	1	6
	hospital				
2041	Surplus   Deficit   No Gap	14	1	0	6
Gap	Area required	14 Ha	_		6 Ha
Analysis		14 110	-		0110
	Government Hospital	6	0	1	2
	Surplus   Deficit				
	No Gap	4	0	1	1
	Area required	24Hg		6 Ha	6 Ha
		2400		опа	<u>о па</u>
	Veterinary	14 Ha       6	0	0	1
	Hospital				
	Surplus   Deficit   No Gap	0	0	0	16

#### Table 9-11 Gap Analysis of Hospital Facilities 2041

The gap analysis for the health sector has been analyzed through URDPFI GUIDELINES for the projected population of 2021. It is found about 109 hospitals were deficit along the corporation zone which was catered by 85 Private Hospital (Speciality and Multispeciality) with 13 other hospitals (nursing Home, Dispensaries).

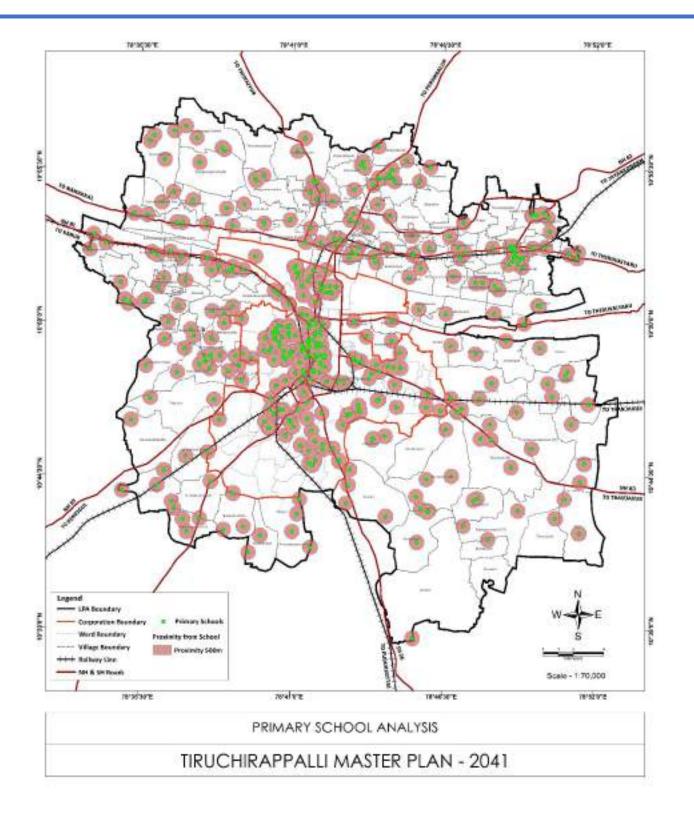
# 9.6.2 Education

# 9.6.2.1 Schools' GAP analysis 2021

Year	Educational Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	1089019	70839	91,851	4,36,496
	Sum of Schools (Nursery & Primary	172	22	23	222
2021	Surplus   Deficit   No Gap	46	8	5	135
Gap Analysis	Sum of Schools	216	17	18	148
	Surplus   Deficit   No Gap	205	16	17	144
	Special School	1	0	0	0
	Surplus   Deficit   No Gap	23	2	2	10

# Table 9-12 Gap Analysis of Schools 2021

The gap analysis from the school data sourced TN GIS and district data showcases the deficit of Nursery and primary schools. This is because a surplus of 205 higher secondary schools holds the primary school structure within them Also there is a huge deficit of special school along all zones of Tiruchirappalli LPA which is to be addressed for the projected population



Map 9-5 Primary School Analysis

# 9.6.2.2 Schools GAP analysis 2031

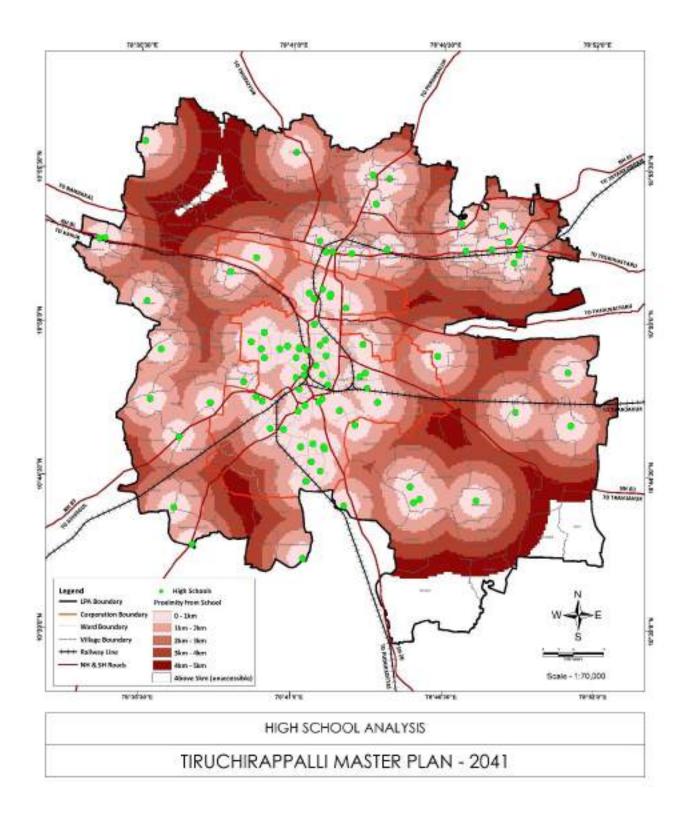
Year	Educational Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	12,95,327	79,872	1,11,054	5,03,104
	Sum of	259	16	22	101
	Schools	207	-0		101
	Surplus				
	Deficit   No	87	6	1	121
	Gap	07	Ŭ		
2031	Sum of	13	1	1	5
Gap	Schools	10	•		0
Analysis	Surplus				
,	Deficit   No	203	16	17	143
	Gap	200	10		140
	Special	29	2	2	11
	School	27	Z	Z	
	Surplus				
	Deficit   No	28	2	2	11
	Gap	20		-	

#### Table 9-13 Gap Analysis of Schools 2031

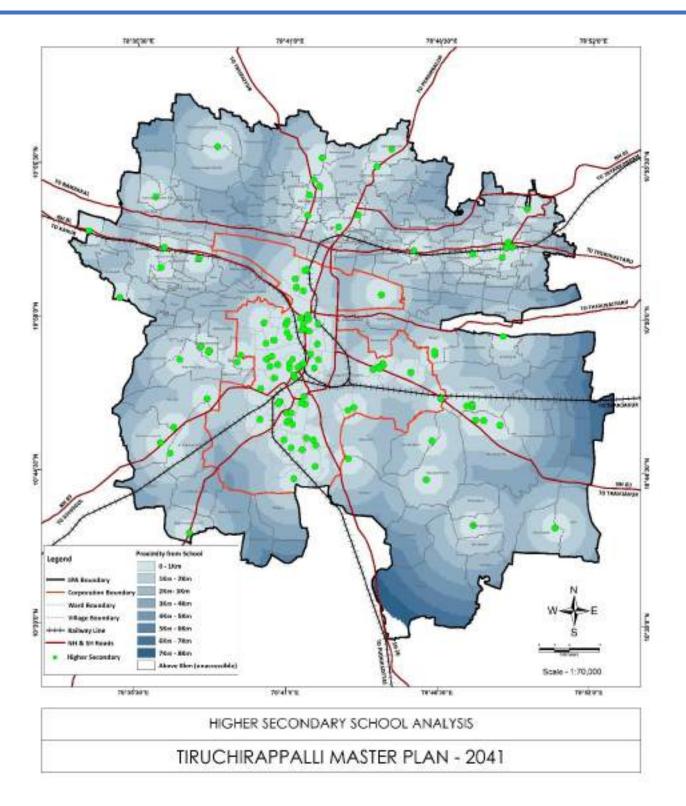
In 2031 the deficit of the schools for the corporation continues. The Specials school have a drastic deficit across all the categories of LPA

# 9.6.2.3 Schools' GAP analysis 2041

The area required for primary schools as per the deficit of 2041 along the corporation area is 54 Ha and 4 Ha along Town Panchayat. The overall deficit will be analyzed in the midterm proposal of this zone.



Map 9-6 High School Analysis





#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

Year	Educational Facility	Corporation	Municipality	Town Panchayat	Villages
	Population	15,40,270	89,513	1,34,324	5,80,298
	Sum of Schools	308	18	27	16
	Surplus   Deficit	136	4	4	104
	No Gap	100	-	-	104
	Area required	54 Ha	-	2 Ha	-
2041	Sum of Schools	15	1	1	6
Gap	Surplus   Deficit	201	16	17	142
Analysis	No Gap	201	10		172
	Area required		-		
	Special School	34	2	3	13
	Surplus   Deficit	33	2	3	13
	No Gap		<b>_</b>	Ū	10
	Area required	23 Ha	1.4Ha	2.10Ha	9Ha

Table 9-14 Gap Analysis of Schools 2031

# 9.6.3 Colleges

The colleges along the Tiruchirappalli are surplus in number, hence the focus should be is retaining the position with various other upgradation like development of skill centers ,research centers .

The Arts, Agriculture, Polytechnic and ITI are classified under colleges. The ITI doesn't have a research centre or technical lab and only teaching courses happen so they are classified under college category in Tiruchirappalli LPA.

# 9.6.3.1 Colleges GAP analysis 2031

	Educational Facility - Colleges	Corporation	Municipality	Town Panchayat	Villages
	Population	1089019	70839	91,851	4,36,496
	Sum of colleges	16	1	2	4
	Surplus   Deficit   No Gap	7	0	1	1
2021 Gap	Sum of colleges (Professional)	1	1	1	4
Analysis	Surplus   Deficit   No Gap	0	1	1	4
	Engineering	2	1	0	8
	Surplus   Deficit   No Gap	1	1	0	8
	Medical	1	0	0	5
	Surplus   Deficit   No Gap	0	0	0	5

Table 9-15 Gap Analysis of Colleges 2021

# 9.6.3.2Colleges GAP analysis 2031

Tiruchirappalli paves way for more colleges and are in good shape for many educational centre proposals could happen. The population of education is also not only from LPA boundary but from the substantial nearby cities and other districts of Trichy.

	Educational Facility - Colleges	Corporation	Municipality	Town Panchayat	Villages
	Population	12,95,327	79,872	1,11,054	5,03,104
	College	10	1	1	4
	Surplus   Deficit   No Gap	6	0	1	0
2031	Professional colleges	1	0	0	1
Gap Analysis	Surplus   Deficit   No Gap	0	1	1	3
	Engineering	1	0	0	1
	Surplus   Deficit   No Gap	1	1	0	7
	Medical	1	0	0	1
	Surplus   Deficit   No Gap	0	0	0	4

#### Table 9-16 Gap Analysis of Colleges 2031

The proposals include research centres, education community clubs along with upslilling centres for for workforce education. Along with these more women focused education centres should be encouraged along this region because of the striking growth rate of the college.

# 9.6.3.3 College GAP analysis 2041

Along the villages there is a deficit for college structure by 2041 as per the growing population. There is also a deficit of management and medical colleges along the Town Panchayat and rest of villages categories that needs to be addressed in the

#### mid term proposal with the area required.

	Educational Facility - Colleges	Corporation	Municipality	Town Panchayat	Villages	
	Population	15,40,270	89,513	1,34,324	5,80,298	
	College	12	1	1	5	
	Surplus   Deficit   No Gap	4	0	1	1	
	Area required		5 Ha			
	Professional colleges	2	0	0	1	
2041 Gap	Surplus   Deficit   No Gap	1	1	1	1	
Analysis	Area required	6 Ha				
	Engineering	2	0	0	1	
	Surplus   Deficit   No Gap	0	1	0	7	
	Area required		0			
	Medical	2	0	0	1	
	Surplus   Deficit   No Gap	1	0	0	4	
	Area required		15 Ha			

Table 9-17 Gap Analysis of Colleges 2041

# 9.6.4 Other civic amenities

# 9.6.4.1 Other Civic Amenities Gap Analysis 2021

DIRECTORATE OF TOWN AND COUNTRY PLANNING

#### | SOCIAL INFRASTRUCTURE

	Other Amenities	Corporation	Municipalit Y	Town Panchayat	Villages
	Population	10,89,019	70,839	91,851	4,36,496
	Fire Station	3	2	1	2
	Surplus   Deficit   No Gap	2	2	1	0
	Police station	17	2	3	5
2021	Surplus   Deficit   No Gap	5	1	2	0
Gap Analysis	Library	15	2	2	66
	Surplus   Deficit   No Gap	58	3	4	37
	Community Hall	11	3	3	37
	Surplus   Deficit   No Gap	62	2	3	8
	Sports Complex	1	0	0	0
	Surplus   Deficit   No Gap	10	1	1	4

Table 9-18 Gap Analysis of Colleges 2041

# 9.6.4.2 Gap Analysis of Other Civic Amenities 2021

There is a surplus of Police station for the year 2021 whereas concerning fire station there has been a deficit of 2 numbers with that of the URDPFI standards. This has to be addressed along the short-term proposal along the corporation belt

# 9.6.4.3 Socio – Cultural and Safety Management Infrastructure

## Amenities 2031

	Other Amenities	Corporation	Municipality	Town Panchayat	Villages
	Population	12,95,327	79,872	1,11,054	5,03,104
	Fire station	6	0	1	3
	Surplus   Deficit   No Gap	3	2	1	1
	Police station	14	1	1	6
2031 Gap	Surplus   Deficit   No Gap	3	1	2	1
Analysis	Library	86	5	7	34
	Surplus   Deficit   No Gap	71	3	5	32
	Community hall	86	5	7	34
	Surplus   Deficit   No Gap	75	2	4	3
	Sports Complex	13	1	1	5
	Surplus   Deficit   No Gap	12	1	1	5

Table 9-19 Gap Analysis of Fire station and Police station 2031

During 2031 the deficit still continues along the corporation of Tiruchirappalli whereas other parts are to be observed in surplus

# 9.6.4.4 Socio – Cultural and Safety Management Infrastructure

# Amenities 2031

	Educational Facility - Colleges	Corporation	Municipality	Town Panchayat	Villages
	Population	15, <b>4</b> 0,270	89,513	1,34,324	5,80,298
	Fire station	8	0	1	3
	Surplus				
	Deficit   No	3	2	1	1
	Gap				
	Area required		5 Ha		
2041	Police	17	1	1	6
Gap	station Surplus				
Analysis	Deficit   No Gap	3	1	2	1
	Area required		0		
	Library	103	6	9	39
	Surplus   Deficit   No Gap	88	4	7	27
	Area required	17.6 Ha	1 Ha	1 Ha	0

Community hall	103	6	9	39
Surplus   Deficit   No Gap	92	3	6	2
Area required	18 Ha	1 Ha	1.2 Ha	0
Sports Complex	15	1	1	6
Surplus   Deficit   No Gap	14	1	1	6
Area required	112 Ha	8 Ha	8 Ha	48 Ha

Table 9-20 Gap Analysis of Fire station and Police station 2041

## 9.6.4.5 Open spaces

	Other Amenities	Number	Area in Hectares	Area in Sq.Km	% of Land
2021	Parks	305	43.4	0.43	43%
	Play fields	151	55	0.55	54 %
	OSR	28	3.55	0.04	3 %

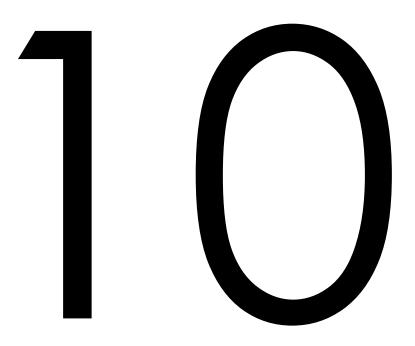
#### Table 9-21 2021 Open spaces and their areas around Trichy LPA

As per the analysis the total area of open spaces are observed to be 101.95 hectaresare available in 2021. As per the URDPFI guidelines the required open

space is found to be 10 – 12 sqm / .001 – 0.0012 hectares per person. The projected population of 2021 is estimated to be 16,88,204 which should have 16.82 sq.km in total around 2021. And for 2041 the estimated open spaces required is 23.44 sq.km from the projected population of 23,44,855

GAP AWALYSS FOR SOLIAL INTRASTRUCTURE		c	ORPORATIO	N	MU	NICIPAL	TY .	TOW	N PANCH	AYAT	oti	HER VILLA	965
HORAS		2021	2031	2041	2021	3031	2041	2021	2031	2041	2021	2031	2041
Versee or a second	644	109 Defice	150 Deficit	199 Deficit	8 No Gap	2 Deficit	4 Deficit	<b>GDeficit</b>	10 Deficit	15 Defail	9 Defut	23 Deficit	38 Deficit
Realth 9/8 centre	AREA REQUIRED		2.85			0.04 Ha			0.15 He			0.36 Hz	
G 2	EM <sup>a</sup>	10 Deficit	12 Defeit	14 Defeit	1.5urphrs	15vrphs	1 Surgius	0 No Gep	8 No Gap	D No Gap	4 Defuit	SDefell	6 Delicit
Intermediate Hospital	ANEA REQUIRED		14 Hz			0.00	0		0.00			6Ha	9 j
and a second second	EAP	2.Defet	3 Deficit	# Deficity	I No Gap	D No Gup	0 No Gap	0 No Gap	0 No Gap	LUeficit	1 Defet	LDafidt	1 Delice
Government hought	REQUISID		24 16a			o						4 Ha	
	GAP	1 Surplus	D No Gip	8 No Gap	G No Gap	0 No Gap	0 No Sap	0 No Gep	G No Gap	0 No Gap	16 Surplus	18 Surplus	16 Surplu
Vaterinary hospital	REGUMED		9.00			0			0			8.00	
COLLEGES		2021	2031	2041	2021	2091	2041	2021	2031	2041	2021	2031	2041
77 2017	GAP	7 Surplus	6 Surplus	4 Surplus	d No Gap	0 No Gop	D No Gap	5 Surplus	15.mphrs	1.Surplus	1.Surplas.	0 No Bap	1 Delick
College	AREA REQUIRED					0			8			5 Ha	
	6MP	D No Gap	D No Sep	1 Deficit	1 Surplus	15umpho	1 Surplus	1.Surplus	1 Surplus	1 Surplus	45urpho	3 Sugla	3 Surplus
Management	ASEA REQUIRED		6 Ha			0			0			9	
	GAP	1 Skepiko	1 Surplus	0 No Gap	1.Surplus	1.Surplus	1 Surgita	0 No Gep	0 No Gap	© No Gap	8 Surpha	7 Suglar	7 Surplus
Engineering	(KGL/IKD					0	100 - E		0			0	0
100000	EAP	D No Gep	8 No Gep	1 Deficit	d No Gap	D No Gup	0 No Gap	0 No Gap	8 No Lap	© No Gap	5.5arpika	4 Sutphis	4 Surplus
Medical	REQUISID		15 Ha			0			0				
SCHOOLS		2021	2031	2045	2021	2031	2041	2021	2031	2041	2021	2031	2041
	144	45 00501	870eficit	106 defini	8 Surplus	6 Surplus	4 Surptus	S Sarplus	1 Surphes	#Deficit	185 Sarphas	121 Septe	106 Sarpla
Renary & Primary School	ANSA REQUIRED		54 He			0			ZHa			0	1
	GAP	205 Skeptus	203 Surplus	201 Surplus	16 Surplus	28 Surplus	36 Serplan	17 Surphi	17 Surplus	17 Surphs	244 Surplus	148 Surpha	142 Surplas
figher Secondary School	ANEA REQUIRED					0			0			0	
	GAP	25 Deficit	280 vfick	11D efect	1Deficit	20encit	ZDeficit	20wfich	2Deficit	30effeit	IdDeficit	SEDeficit	13Deficit
Special School	REGURED		23 Hz			1.4.84			2.1 Ha			8 Ha	
SURVICES		2071	2031	2041	2021	2031	2041	2021	2031	2041	2031	2031	2041
No. of Concession	647	5 Surplus	8 Surplus	B No Gap	1 Sarpha	3.Surplus	1.Surplus	2 Surplus	2 Surphas	2 Surplus	d No Gap	1 Surphe	3 Deficit
Police Station	AREA REQUIRED	0						0				1.5 Ha	
	647	2 Deficit	3 Deficit	5 Deficit	2 Surplus	2.5urplus	2 Surgius	2 Surplus	1 Surgiup	0 No Gap	0 No Gap	1.5amplus	3 Deficit
Fire Station	ANIA NIQURID		SHa		1.	a			D			5 Ha	

Table 9-22 Gap Analysis of Social Infrastructure Amenities



# HOUSING

# **10. HOUSING**

# 10.1 Number of households in the district

Housing is the important sector for understanding the development scenario of the city .This chapter briefly discuss about the housing supply and demand , slums , housing shortage and housing projection

	Total number of houses	Vacant houses	Occupied
District Tiruchirappalli [Total]	8,75,727	64,890	8,10,837
District Tiruchirappalli [Rural]	4,52,707	40,501	4,12,206
District Tiruchirappalli [Urban]	4,23,020	24,389	3,98,631
District Tiruchirappalli M.corp[Urban]	2,59,301	11,414	2,47,887

#### Table 10-1 Number of households in the district

(Census 2011)

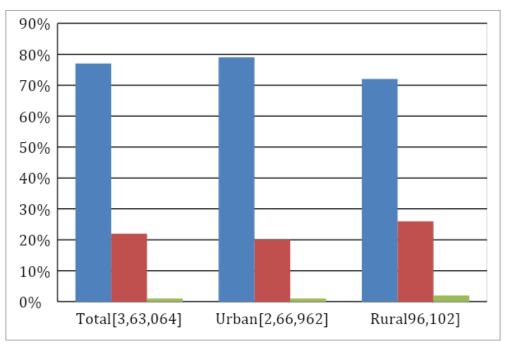
The total number of housing units in the district is 8,75,727 out of which only 8,10,837 is occupied . Vacant houses are more in rural areas than urban areas. 51.69% of the houses are in rural areas of the district.

# 10.2 Existing housing conditions

# 10.2.1 Housing condition

LPA	Total	Total	Good	Livable	Dilapidate
	number				d
	of				
	househol				
	ds				
Total	3,63,064	100%	77%	22%	1%
Urban	2,66,962	100%	79%	20%	1%
Rural	96,102	100%	72%	26%	2%

#### Table 10-2 Existing housing conditions



#### Figure 10-1 Existing Housing Conditions

#### (Census 2011)

Out of total households in the LPA region , 77% are in good condition , 22% are livable and 1% are dilapidated . Similarly in urban areas 1% and rural areas 2% are dilapidated . The condition of these dilapidated houses needs to be improved. These dilapidated houses are not considered in housing supply.

# 10.2.2 Ownership status

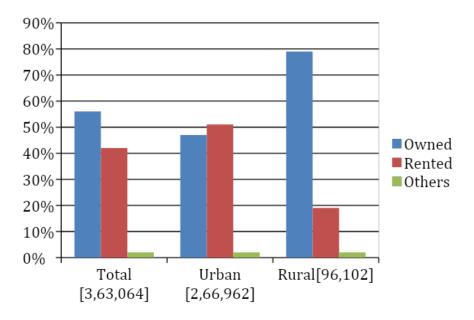
LPA	Total number of households	Owned	Rented	Anyothers
Total	3,63,064	56%	42%	2%
Urban	2,66,962	47%	51%	2%
Rural	96,102	79%	19%	2%

#### Table 10-3 Ownership status

#### (Census 2011)

The LPA region has a population with owned houses more than the rented houses by 14%. Rented houses are more in urban areas with 51%. Rural areas have 79% of owned houses.

Rented houses help induce compact working population housing and the peri urban areas are unaffordable to those populations due to high commute costs.



#### Figure 10-2 Ownership status

# 10.2.3 Average household size

LPA	Household	Population	Average Household size
Total	3,63,064	14,33,167	3.947
Urban	2,66,962	10,54,194	3.949
Rural	96,102	3,78,973	3.943

Table 10-4 Average household size (Census 2011)

# 10.2.4 Percentage of households with household sizes

LPA	Household	1	2	3	4	5	6-8	9+
Total	3,63,064	5%	13%	20%	32%	17%	12%	1%
Urban	2,66,962	4%	13%	21%	32%	17%	11%	1%
Rural	96,102	6%	13%	18%	29%	18%	13%	1%

Table 10-5 Percentage of households with household size

The average household size for Tiruchirapalli Tamil Nadu is 3.89, District is 3.85 and LPA is 3.95. The household size is higher in LPA than the district. The rural household size is 3.943 is slightly lower than the urban areas 3.949

The above table shows the number of households with size 4 are minimum . Households with size 3 are the second highest. In rural areas, the size varies more than the urban areas.

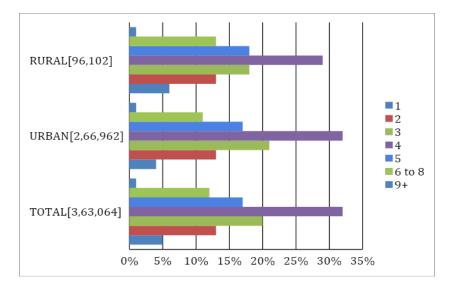


Figure 10-3 Percentage of households with household sizes

# 10.3 Slums

# 10.3.1 Number of slums with households

Housing conditions in slums are unpleasant and the services are absent or in the worst state. Therefore, merely providing or improving the house will not suffice. According to the data collected from Tiruchirappalli municipality there are 268 slums in which 197 are approved slums and 71 are unapproved slums with total households of 37192.

S.No	Region	No of slums	No of households	H.H Already completed	H.H under process	Housing needs for slums
1	Srirangam	65	9875	2555	348	4972
2	Ariyamanagala m	82	9425	1415	63	6947
3	K . Abishekapuram	60	9664	378	-	5466
4	Ponmalai	60	8228	84	-	7252
	Total	268	37192			

Table 10-6 Number of slums with households

Source: Tamil Nadu Urban Habitat Development Board 2023

The old master plan proposed accommodation for EWS people at Kallikudi south village. This proposal was implemented in Nagamangalam, Palakkarai, Srirangam and Vannarapettai. The following are the details of the proposals which are under progress based on Central Sanctioning and Monitoring Committee (CSMC) Meeting, 2017 (Under Pradhan Mantri Awas Yojana (PMAY-U), Slum clearance board):

Affordable Housing in Partnership (AHP) – 1056 House holds

Tenements having a plinth area of 400 sq. ft with basic and social infrastructures are constructed at an average unit cost of Rs.10.00 lakh both as insitu reconstruction and resettlement at alternate locations to provide houses for families living in dense slums and other objectionable locations.

- o Vannarapettai (Dobi Colony) 384 Households
- Nagamangalam MGR Nagar 512 Households
- o Jailpettai Phase II 64 Households

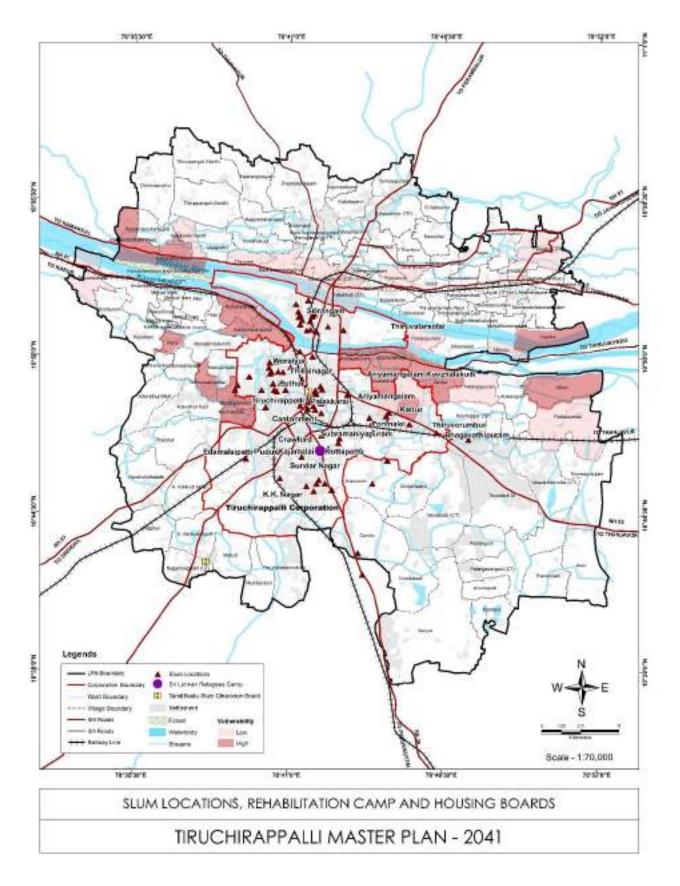


#### Figure 10-4 Vannarapettai and Nagamangalam MGR nagar

Beneficiary Led Construction (BLC) - 8123 Households

Under the Beneficiary Led Construction, financial assistance of Rs. 2.10 lakh is given to the eligible Economic Weaker Section urban households, to construct house on their own, with not less than 30 sq.m carpet area.

| HOUSING



#### Map 10-1 Slum Locations, Rehabilitation Camps And Housing Boards

# 10.3.2 Srirangam Zone

S.no	Ward Name	Ward No	No. of Notified Slums	Slum Population - Total
1	Mela Sembadavar Street	1	47	423
2	Chettiyar thoppu	1	17	467
3	Nedun street	1	126	540
4	Malaippa Nagar Salai Road	1	78	423
5	Night Soil depot road	1	126	590
6	Thiruvadi kuppam	1	74	323
7	Thiruvadi Cross street	1	54	334
8	Keela Adayavalanjan	2	261	545
9	VOC street	2	129	334
10	Varadhachari Street	2	112	473
11	New Indra Nagar	3	80	617
12	Singaperumal Koil	3	168	467
13	V R Ramasamy Street	3	44	328

14	SV chari street	3	47	384
15	Ganesapuram thoppu	3	18	567
16	Sathiyamoorthi street	3	37	362
17	Nariyan street	3	402	851
18	Nethaji street	3	98	350
19	Nelson Road	4	540	1035
20	Slaughter House Road	4	140	328
21	Sakthi Nagar	4	116	350
22	Kannimar thoppu	4	89	345
23	Kalanjiyam	4	113	323
24	Alagiripuram	4	213	234
25	Periyar Nagar	5	138	362
26	Kalmettu street	5	152	417
27	Ammamandapa m 5th street	5	80	323
28	Ammamandapa m MGR Nagar	5	162	649
29	Ammamandapa m Pudu street	5	87	250

30	Vellikizhamai salai	5	114	829
31	Mambala salai	5	84	462
32	Kumbakona karai	5	147	384
33	59B Ammamandapa m road	5	272	328
34	Thiruvalarsolai Saveriar Koil Street	6	177	1841
35	Thiruvalarsolai Keela Street	6	262	373
36	Thiruvalarsolai Mela Street	6	64	256
37	Thiruvalarsolai North Street	6	87	323
38	Keeladevadana m	8	276	362
39	Mela devadanam	8	201	467
40	Paduvai Nagar	8	213	1274
41	Anna Nagar Corporation Quarters	8	24	456
42	Bharathiyar street	8	569	606
43	poosari theru	8	99	551

| HOUSING

44	Rajiv Gandhi nagar	8	96	234
45	Gandhi Nagar	9	105	868
46	Kosamettu Harijan colony	9	32	356
47	Sanjay Gandhi Nagar	9	108	962
48	Mandaiyadi	9	45	362
49	Sanjay Gandhi Nagar	9	108	1257
50	Mandaiyadi	9	45	456
51	Oda theru	9	202	412
52	Throwpathiamm an koil street	9	78	334
53	Annai Sathiya Nagar	9	29	234
54	Nandhikoil store	10	31	339
55	Thiyagarajar Salai	10	14	473
56	College Road	10	87	495
57	Chinthamani Market	10	96	234

#### Map 10-2 Srirangam Zone - Number of slums with households

# 10.3.3 Ariyamangalam Zone

S.no	Ward Name	Ward No	No. Notified Slums	Slum Population - Total
1	Kallankuthu	7	39	384
2	Ammakulam Bharathiar street	7	185	439
3	Mem Palam North street	7	200	807
4	South Ukkadai Ariyamangalam	7	460	662
5	Kamala Nehru Nagar	14	178	2653
6	Karuvattupettai	14	185	968
7	Surencheri kamaraj nagar	15	651	1262
8	Pookollai	14	262	640
9	Sathiyamoorthi Nagar	15	450	1168
10	Bharathiyar Theru	14	52	401
11	Annanagar E.B.Road (15)	15	408	834
12	Daranallur North street	15	269	543
13	Uppiliyar street	15	130	673
14	Kalmanthai	15	155	579

15	Orukkattan street	20	161	451
16	Chinna Oda street	20	133	790
17	Periyapalayam	20	136	406
18	Kalpalayam	20	123	334
19	Thangavelu Chettiar street	21	0	1279
20	Periyakulumi	21	59	476
21	Dharmanathapuram sakkiliyar street	22	269	463
22	Sengulam Colony (Peechankulam)	23	855	356
23	Kemps town	23	141	434
24	South Yadavar sandu	24	50	734
25	Keela Krishnan Koil Street	25	200	690
26	Kajapettai sakkiliyar street	25	105	1669
27	Mudaliar Chathram Aaalam street	26	193	1257
28	Mudukkupatti	26	241	423
29	Railway colony	26	165	492
30	Pitchai Nagar (27)	27	64	458

31	Valluvar Nagar	27	186	372
32	Anna Nagar (27)	27	176	473
33	Muthaiah Samy Street (27)	27	4	484
34	Pudumani Srinivasa nagar	28	271	501
35	Kulathukkarai	28	181	605
36	Kamaraj nagar (28)	28	1948	360
37	Kamaraj nagar kulathumedu	28	0	378
38	Anna nagar (29)	29	350	399
39	Nehruji Nagar (29)	29	517	572
40	Pillaiyar koil street (33)	33	61	363
41	Anna Street (33)	33	81	679
42	Pandiyan street	33	289	1035
43	Thangeswari Nagar	30	140	2092
44	Ganesapuram	30	280	451
45	Ex. serviceman colony	31	520	567
46	Anna Nagar (29)	29	350	1229

| HOUSING

47	Anna Nagar (29)	29	350	378
48	Nehruji Nagar(28)	28	517	389
49	Pillaiyar koil street (33)	33	61	1007
50	Anna Street (33)	33	81	706
51	Pandiyan street	33	289	467

Table 10-7 Ariyamangalam Zone - Number of slums with households

# 10.3.4 Ponmalai Zone

S.no	Ward Name	Ward No	No. Notified Slums	Slum Population - Total
lc	Thangeswari Nagar	30	111	378
2	Ganesa Puram	30	280	366
3	Ex. serviceman colony	31	448	350
4	Samianathapuram pudu street	31	38	374
5	Paramasivam street	31	140	348
6	Ponneripuram	31	350	408
7	Gandhi nagar (31)	31	119	358

8	Pallivasal street	35	97	443
9	Pudukottai road Central jail	35	158	398
10	Pensioner colony	35	133	375
11	Dr. Ambedkar nagar	35	135	545
12	Gandhi Nagar (35)	35	250	651
13	Valluvar Nagar	35	79	1068
14	Kottapattu Indira Nagar	35	120	545
15	Kamraj Nagar	35	37	428
16	Santhosh Nagar	35	94	573
17	TRP Nagar	35	53	444
18	Alikan Kulam (Gandhi Nagar)	35	90	433
19	Kakkan Colony	35	58	374
20	Thilagar street	35	264	354
21	Anthoniar Koil street	35	174	363
22	Madurai veeran koil street	36	115	246
23	Arunthadiyar street	36	133	385

24	Sagayamatha koil street	36	324	373
25	Burma colony (37)	37	150	384
26	Karikalan nagar	37	23	434
27	MKY Rice mill	37	48	534
28	Pudu Street	37	230	1257
29	Pattathammal street	37	228	443
30	Star Nagar	37	82	373
31	Angalamman Koil street	37	59	347
32	Kudiyuna street	37	100	918
33	Korai nagar	39	45	478
34	Nather nagar	39	96	523
35	Chokkalingapuram mettu street	39	120	372
36	Dhobi Colony	39	63	640
37	Vinayagapuram	39	6	362
38	Lourdhusamy pillai colony	42	226	2428
39	Othakadai Pudu street	44	314	601

| HOUSING

40	Jumkana maidanam	44	55	590
41	Burma colony (46)	46	89	439
42	Gorimedu periyamilaguparai	46	136	490
43	Panchukidangu	46	158	404
44	Kotta Kolla Theru	47	177	362
45	Pokkollai street	47	17	356
46	St. George church compound	47	26	448
47	Butcher lane	47	27	396
48	Manickapuram street	47	72	746
49	Gorimedu saveriyar street	47	485	1124
50	Marsingpettai	47	350	345
51	Mela Pallar Street	47	25	695
52	Keelakosa street	48	155	456
53	Sedal mariyamman koil street	48	73	706

Table 10-8 Ponmalai Zone - Number of slums with households

# 10.3.5 Abhishekapuram Zone

S.no	Ward Name	War d No	No. Notified Slums	Slum Population - Total
1	Kothamanglam Palla street		49	323
2	Kothamangalm pudu street	40	30	217
3	Kothmangalam North Street	40	80	757
4	Kollangulam	40	282	1741
5	Edamalaipattipudur road	40	130	640
6	Anjalikkaran thoppu	40	54	1908
7	MGR nagar	40	189	1802
8	Pillaiyar koil street	40	25	668
9	Kuttimalai	40	63	356
10	Koraiyaru MGR Nagar	40	140	751
11	Muthumariamman Koil Street	40	168	1539
12	Crawford Muslim street	41	183	401
13	Bharathi nagar	41	140	443
14	Karumandapam karai	45	275	367

15	Anadakondan kaja thoppu	49	239	573
16	Andakondan KaidayMillath Nagar	49	707	751
17	Thiyagi chinnasamy nagar	50	431	584
18	Annai sathiya nagar	50	200	1007
19	Inamdhar thoppu	50	467	629
20	Karithottam(Kamaraj Nagar)	50	106	428
21	Pudumariammn koil street	50	179	929
22	Kuthbisha nagar	50	473	640
23	Annanagar	50	0	362
24	Balan Nagar	51	71	884
25	Vinayagapuram	50	22	3182
26	Malligaipuram	51	128	695
27	Rettai vaikkal	56	22	567
28	Moolaikollai street	51	225	619
29	Attumandai	51	179	617
30	Fathima street	51	87	396

31	Appakkara street	51	54	884
		51		
32	Sangeethapuram		170	345
33	Virupatchi puram saveriyar koil street	51	90	868
34	South Throwpathiamman koil street	55	128	506
35	Renganathapuram	52	175	595
36	Kallangadu	52	241	757
37	Vannarapettai	52	832	261
38	Srinivasa Nagar	52	14	1096
39	Aadhi Nagar	53	90	478
40	Kodappu	53	356	494
41	South Muthuraja street	54	386	456
42	Sevanthipillaiyar koil street	55	251	990
43	Palayam Bazzar	55	158	656
44	Gandhipuram	55	314	562
45	Vadavoor palla street	56	137	745
46	Ram nagar	56	75	690

| HOUSING

	[	1		
47	Thokkumedai	56	95	935
48	Salairoad	57	50	623
49	Indira nagar	57	287	654
50	Woriyur Housing Board	57	85	641
51	Chozhrajapuram	57	42	0
52	Kalayan street	58	95	0
53	Nawab thottam	58	168	0
54	Nachiyar palayam	59	182	0
55	Woriyur mettu street	59	161	0
56	Saveriyar koil street	59	75	0
57	Kalnayakkan street	60	495	0
58	Kallarai mettu street	60	179	0
59	Panickan street	60	166	0
60	Melapandamangalam	60	197	0
61	5/18, Melapandamangalam	60	110	0

# Table 10-9 Abishekapuram Zone - Number of slums with households

# 10.3.6 Population & Household projection 2041

The housing projection for the year 2041 is calculated based on the projected population. For projecting future housing requirement, Tiruchirappalli LPA has been classified into five types based on the nature of Urban and Rural local bodies as well as the proposals. They are as follows,

- o Tiruchirappalli Corporation
- o Census towns
- o Economic Growth poles
- High Demand Corridors
- o Rest of LPA

Classification of Census Towns, High Demand Corridors and Economic Growth Poles comprise of the following towns and Villages as shown in Table below.

Census Towns	High Demand Corridors	Economic Growth Poles	
Palanganankudi	Thalakudi(CT)	Thuvakudi(M)	
Navalpattu	Pichandarkovil(CT)	Kallikudi	
Valavanthankottai	Venganngudi	Manachanallur(TP)	
Nagamangalam	Madakkudi		
	S.Kannanur(TP)		
	Samayapuram		
	Malliyampattu		

Table 10-10 Classification of Tiruchirappalli LPA for housing projection

The category of high demand corridors are proposed along the mentioned census towns, town panchayat and villages. This increases the density in these regions and thus vertical development is encouraged.

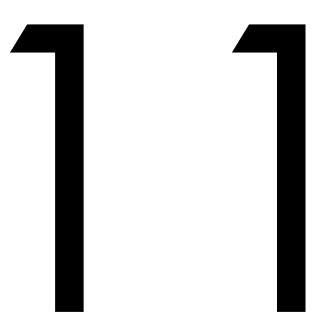
| HOUSING

Description	Tiruchirap alli Corporati on	Census Towns	Economic Growth poles	High Deman d Corridor s	Rest of LPA	Total
Population in 2011	915569	45244	76380	56676	339298	1433167
Projected Population 2041	1540720	81520	118312	95319	508984	2344855
Additional Population	625151	36276	41932	38643	169686	911688
Additional Households in 2041	156288	9069	10483	9661	42422	227922
Type of Town (in 2041) as per URDPFI	Metropolit an City	Small Town I*	Medium Town I*	Small Town I*	-	-
Density as per URDPFI (Hectares)	125-175	75-125	100-150	75-125	75-125	-
Slum Households	37192	-	-	-	-	37192
Dilapidated Houses	1563	91	105	97	424	2279
Total Additional Households in 2041	195043	9160	10588	9757	42846	267393
Optimal land area per house in sq.m	229	229	229	229	400	-
Area requirement in Sq.km	44.6	2.09	2.42	1.12	17.14	66

Table 10-11 Population & Household projection 2041

#### | HOUSING

The additional houses required for the year 2041 is calculated from the projected population of 2344855. For the projected population, the additional houses required are 227922 households. This is calculated from the population and household size. The average household size for the planning are is 4 persons per household. The total number of household required for the year 2041 is 267393 households. This includes the housing requirement of slums and dilapidated structures. The density guideline from URDPFI gives density for different classification of towns. The corporation in LPA falls under Metropolitan city classification, the census towns and High demand corridors fall under small town classification and Economic Growth Poles fall under medium town classification. Though these fall under different classification, considering the growth of the census towns, economic growth poles and high demand corridors the density is taken same as the corporation density which is 175 persons per hectare. Apart from this, the density and FSI of high demand corridors are considered high and thus the area required is less. For the rest of LPA the density considered is the average density of small town I classification which is 100 persons per hectare. The area per household is calculated based on the guideline. This gives the additional residential area required for the proposed Land use 2041. The additional residential area required is 66sq.km.



# **ENVIRONMENT**

# **11. ENVIRONMENT**

Tiruchirappalli is situated in central South-Eastern India, almost at the geographic centre of the state of Tamil Nadu. The Kaveri Delta begins to form 16 kilometres (9.9 mi) west of the city where the river divides into two streams—the Kaveri and the Kollidam—to form the island of Srirangam.

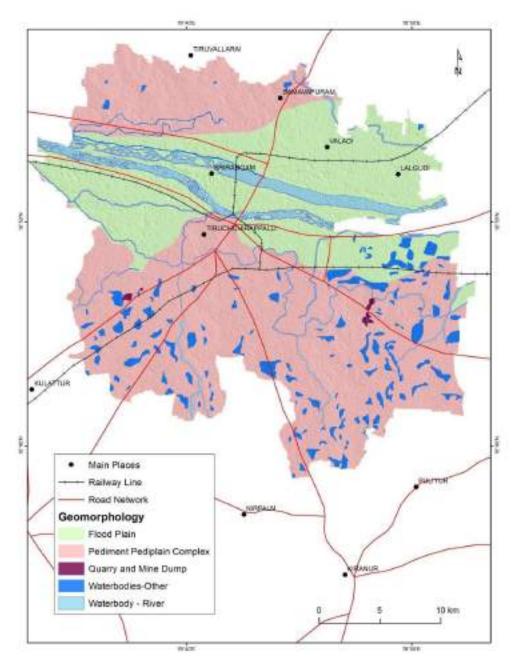
Tiruchirappalli's topography is nearly flat, with an average elevation of 289 feet (88 meters). A few Isolated hillocks rise above the surface, the highest of which is the Rockfort, one of the oldest rocks in the world with an estimated age of 3,800 million years. A few other notable hillocks are the Golden Rock, Khajamalai, and one each at Thiruverumbur and Uyyakondan Thirumalai.

Apart from Kavery and its tributary Kollidam, the city is also drained by the Uyyakondan Channel, Koraiyar and Kudamurutti river channels. The land immediately surrounding the Kaveri River—which crosses Tiruchirappalli from West to East—consists of deposits of fertile alluvial soil on which crops such as finger millet and maize are cultivated. Further South, the surface is covered by poor-quality black soil.

A belt of Cretaceous rock runs to the north-east of the city, and to the South-East there are layers of archaean rocks, granite and gneiss covered by a thin bed of conglomerate laterite. The region falls under Seismic Zone II, where the chances of an earthquake is very low. Buried Pediments have been identified in almost all blocks of LPA except Manikandam. Pediments, both shallow and deep, constitute the most prominent geomorphic unit in the region and are evenly distributed. Very small patches of Quarry and Mine Dump are found near Thiruverambur in the region.

The Kaveri River makes the area fertile, making it ideal for farming, fishing, leisure,

and water supply. The advantages to the environment are essential to the city's survival. Over exploitation and disaster are the negative parts of this resource. The Kaveri River, Kollidam River, ground water table, existing forest areas, and their ecosystem are significant environmental concerns in Tiruchirappalli. These places should be managed to maximize advantages while having no negative effects on the ecology—instead, it should be improved.



Map 11-1 LPA Geomorphology Map

## 11.1 Surface Water

# 11.1.1 Existing Water Network: Topography

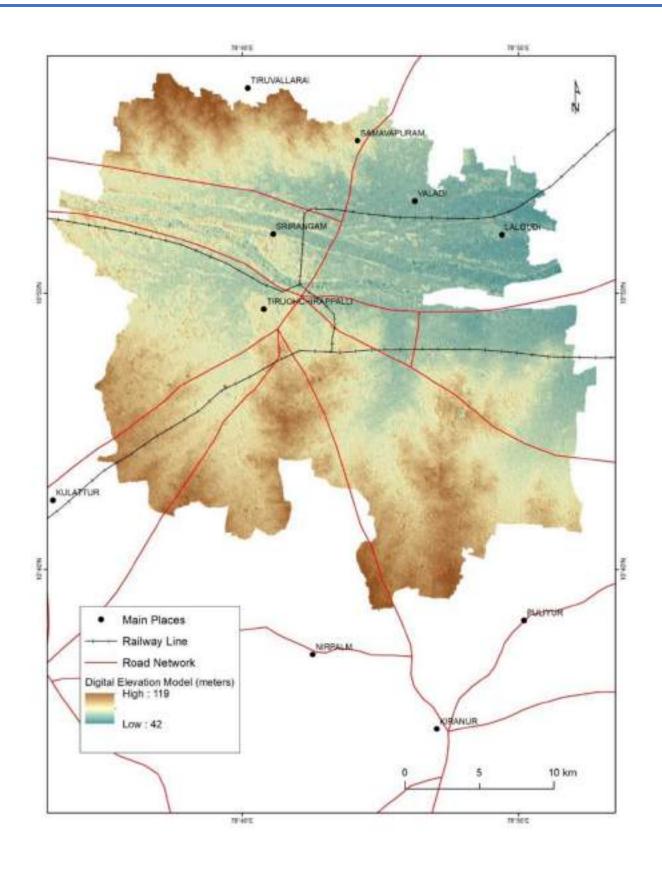
The River Kaveri which flows between Tiruchirappalli and Srirangam towns, forms the natural divider, conterminous with the boundaries erstwhile municipal administration of the two towns. The southern half of the LPA region is constituted by numerous lakes which then collect and flow down to the Kaveri river through streams, nallahs and channels. Koraiyar and Uyyakondan rivers are some of the major streams running through the city meeting the river.

The upper and lower portions of the LPA has the highest elevation marking up to 119 meters and lowest elevations as 42 falling in the central regions of the LPA. The places such as Srirangam, Samayapuram, Valadi, lalgudi fall under mid elevated areas.

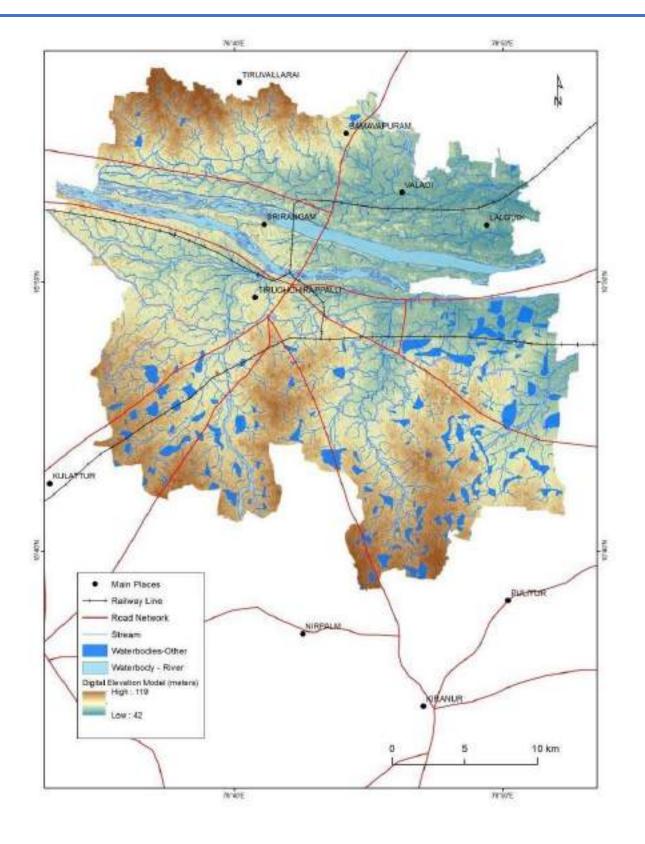
The master slope of the region is towards the east. The general topography of the region slopes from West to East, towards Cauvery from the South and Kollidam from the North.

River Cauvery and River Kollidam are the most prominent rivers of Trichy and flows from West to East. Kaveri is the major, and the only perennial river which is the southern branch and the northern branch of Kaveri, known as 'Coleroon' (Kollidam) is mainly flood-carried. The total length of the river in this district is about 125 Kms, and the area of the river basin extends about 17,200 hectares of land. Ponnaniar, Uppamodai and Siddhayalli reservoirs are mainly used for irrigation purposes. The prominent tributaries of the district are Ayyar and Uppar in the north and Koraiyar in the south. Most of the rivers are structurally controlled and form the dendritic drainage pattern.

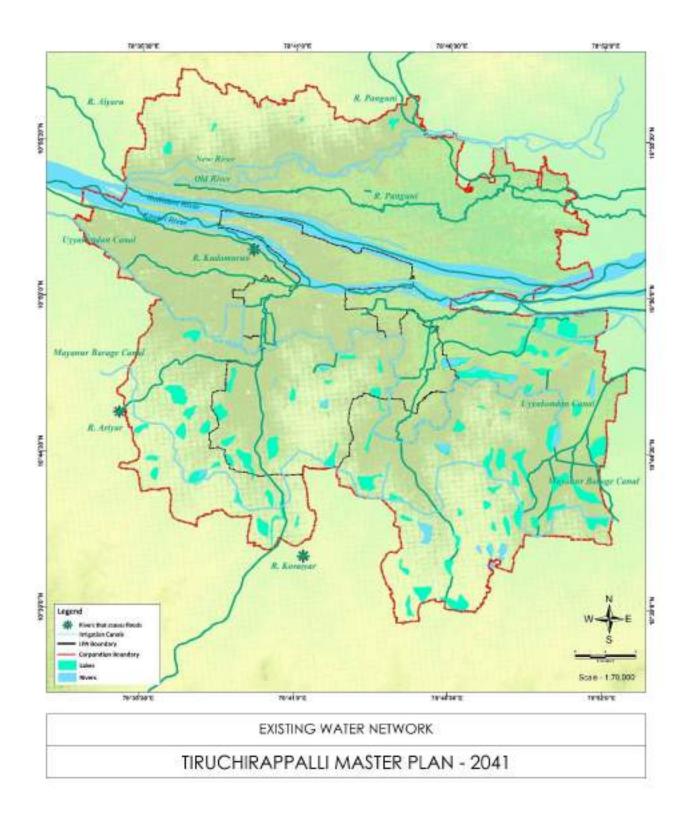
A dam known as upper Anicut was constructed in 1836 at a place where the Cauvery branches off into two at the west end of Srirangam, to regulate the flow of water in the Cauvery and Coleroon rivers. In its original form, the upper Anicut consisted of a simple masonry dam of 230 meters in length divided into three parts.



Map 11-2 Digital Elevation Map



Map 11-3 LPA Drainage Map



Map 11-4 Existing Water Network

Below the Grand Anicut, the Cauvery further splits into two, one being called the Cauvery and the other, the Vennar River. These channels are utilized as the main canals for irrigation.

KarikalaCholan, an early Chola King, constructed the grand Anicut. It is situated on the northern bank of Cauvery about 16 km east of Tiruchirappalli town and mainly used for irrigation purposes.

# 11.1.2 Existing Water Network: River

River Aiyaru and River Panguni flows from the North and drain into River Kollidam.

River Koraiyar and River Ariyar collects the water from the western and southern areas such as Manaparai and drain into River Kaveri.

Koraiyar River rises from KaruppurReddiyarpatti hill R.F at an elevation of about 500m. The river carries water from catchment areas of Puttanattam, Viralimalai, Malaikudippatti, Tennalur, Illupur, Kalluppatti, Arur, Kulakkattaigudi, Keeranur and Thuvarankurichi. The catchment area of the river is 632 sq.km and the length is 75 km. The entire catchment of the river is covered by a large number of tanks.

Ariyar River rises in Manapparai area from PallivelliMukku at an elevation of about 700m. The river carries water from Kadavur and Semmalai reserve forests, Vairampattai, Kulattur and Manapparai areas. The catchment area of the river is about 832 Sq.km.

River Kudamuruti, River Ariyar and River Koraiyaaru are the prime flood causing rivers. Floods occur where the rivers drain into River Kaveri.

# 11.1.3 Existing Water Network: Irrigation Canal

The Principal purpose of irrigation is to increase agricultural production by cropping more areas, the sources for irrigation includes canals branching from the river Cauvery, ordinary wells, tanks and tube wells. Man made canals like Uyyakondan and Mayanur barrage canals are overlaid. They run from West to East across the city.

They form the Irrigation basis of the region and connect several lakes and ponds along their direction of flow.

Together with the river and irrigation network, they give an indication of Trichy's water flow.

### 11.1.4 Existing Water Network: Lakes and watersheds

Natural Lakes and Existing watersheds highlight the large number of lakes present in the southern region of the city.

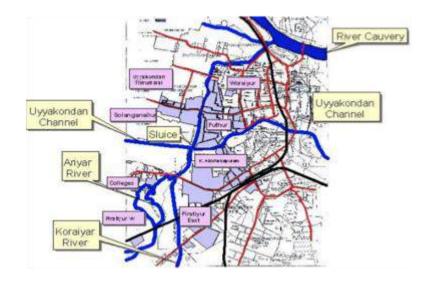
The existing rivers and canals are well connected to the catchments, ponds and lakes making it suitable for agriculture and water retention.

Collectively they form the network of waterbodies in the city.

The water network is revived as a connected system to strengthen the natural ecosystems.

### 11.1.5 Current Status - Surface Water Bodies in LPA

- Densely Populated
- Illegal Occupancy/ Encroachments
- Lack Of Positive Relationship With Water
- Absence Of Access Between The Banks
- Lack Of Designated Public Space
- Improper Sewage And Solid Waste Management



• Map 11-5 Major Drains in Tiruchirappalli LPA



Figure 11-1 Densely Populated and Encroachment

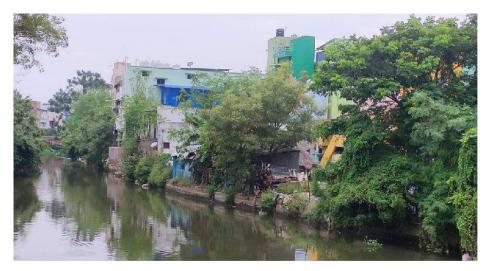


Figure 11-2 Densely Populated and Encroachment



Figure 11-3 Illegal Occupancy/ Encroachments



Figure 11-4Absence Of Access Between The Banks



Figure 11-5 Lack Of Designated Public Space



# Figure 11-6 Lack Of Designated Public Space



Figure 11-7 Improper Sewage And Solid Waste Management



Figure 11-8 Improper Sewage And Solid Waste Management

### 11.2 Groundwater

# 11.2.1 Ground Water Resource Estimate

### 11.2.1.1 Soil Type

The major soil types in the LPA consist of black cotton soils, red sandy to loamy soils and alluvial soils. Alluvial soils of considerable thickness occur in the central and eastern parts particularly in Tiruchchirappalli and Lalgudi taluk and Thuraiyur has red loamy soil.

## 11.2.1.2 Aquifers in LPA

Formation	Sp.Yield (%)	Transmissivity (m2/d)	Hy. Conductivity (m/d)	Yield of Wells (lps)	Storativity
Alluvium	7.2	49-216	2-5	10-20	_
Cretaceous	0.3 - 2.56	33-772	10-66	1.1-3.5	_
Gondwana	1.5 – 2.5	43-52	10-20	1-2	_
Crystallines	1.5	32-80	5-10	1-2	1.6 X 10 <sup>-4</sup> to 9.6 X 10 <sup>-4</sup>

#### Table 11-1 Aquifer Parameters

Source: CGWB

# 11.2.1.3 Unconsolidated Aquifer (Yield < 200 Cu.m/day)

The unconsolidated and semi consolidated formations in the district include shales, sandstones and clays of Jurassic age (Upper Gondwana), marine sediment of Cretaceous age, sandstones of Tertiary age and Recent alluvial formations.

As the Gondwana formations are well compacted and poorly joined, the movement of groundwater in these formations is mostly restricted to shallow levels.

Ground water occurs under phreatic to semi confined conditions in the intergranular pore spaces in sands and sandstones and the bedding planes and thin fractures in shales.

In the area underlain by Cretaceous sediments, ground water development is rather poor due to the rugged nature of the terrain and the poor quality of the formation water.

Quaternary formations comprising mainly sands, clays and gravels are confined to major drainage courses in the district.

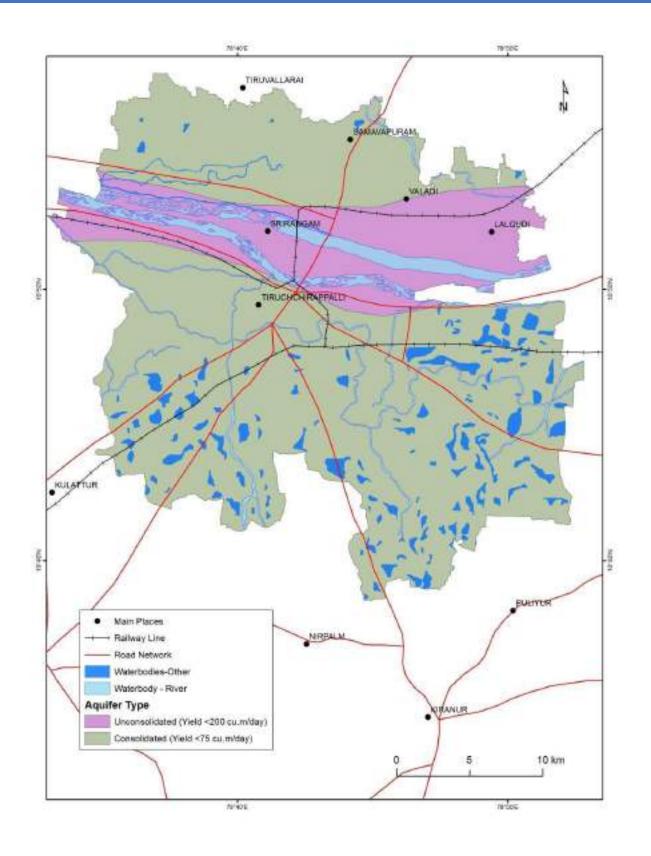
The maximum thickness of alluvium is 30 m whereas the average thickness is about 15 m. Ground water in these formations is being developed by means of dug wells and filter points.

# 11.2.1.4 Consolidated Aquifer (Yield < 70 Cu.m/day)

The water bearing properties of crystalline formations which lack primary porosity depend on the extent of development of secondary inter granular porosity either through weathered or fracturing.

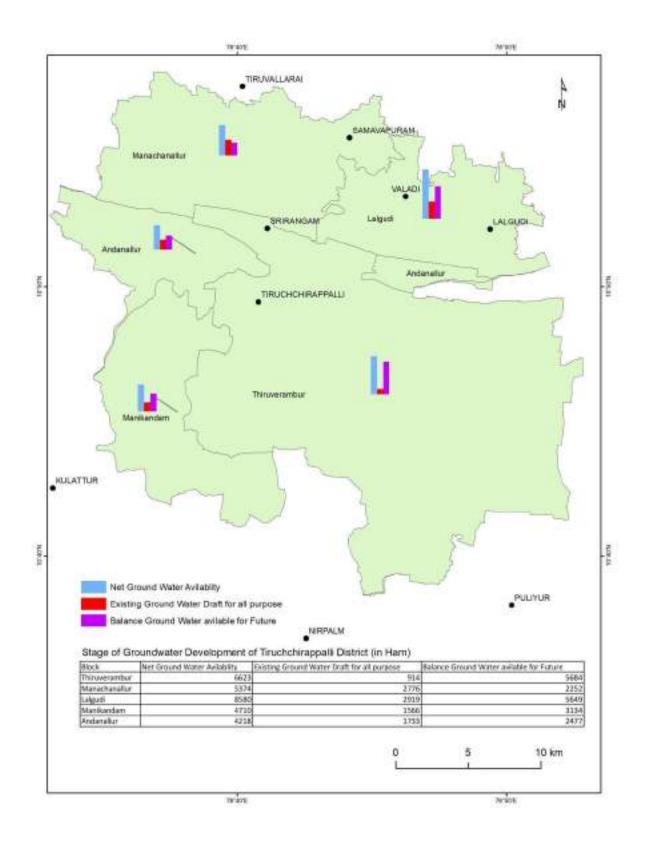
These aquifers are highly heterogeneous in nature due to variations in lithology, texture and structural features even within short distances.

Ground water generally occurs under phreatic conditions in the weathered mantle and under semi-confined conditions in the fissured and fractured zones at deeper levels. The thickness of the weathered zone in the district is in the range of 2 to 25 m.

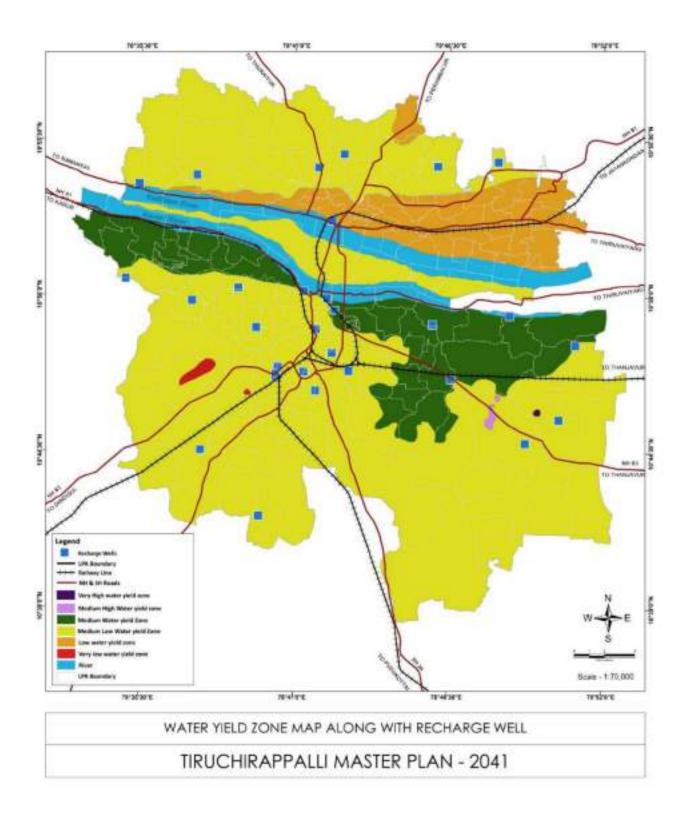


Map 11-6 LPA Aquifer Type Map

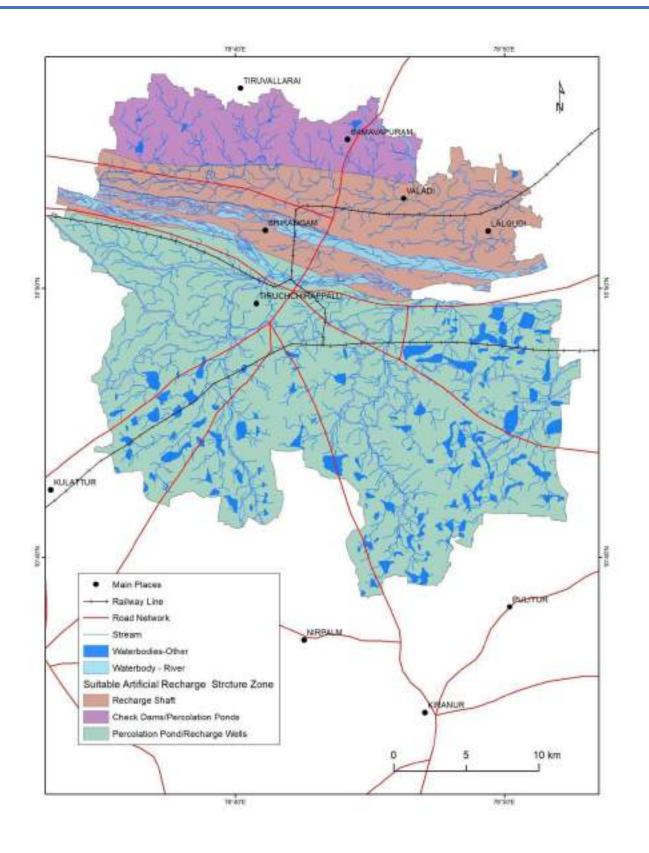
### 11.2.1.5 Ground Water Availability in LPA



Map 11-7 LPA Groundwater Availability



### Map 11-8 Water yield zone along with recharge well



Map 11-9 LPA Recharge Zone

# 11.2.1.7 Recharge Zones

Dug wells are used to extract groundwater from weathered formation while deeper fractures are tapped through bore wells and dug cum bore wells. The yield of large diameter wells in the district, tapping the weathered mantle of crystalline rocks or the unconsolidated formations ranges from 200 to 900 lpm for drawdowns ranging from 0.4 to 2.5 m. The wells tapping the deep-seated fracture system can yield about 1 - 5 lps and can sustain a pumping of 6-8 hrs a day.

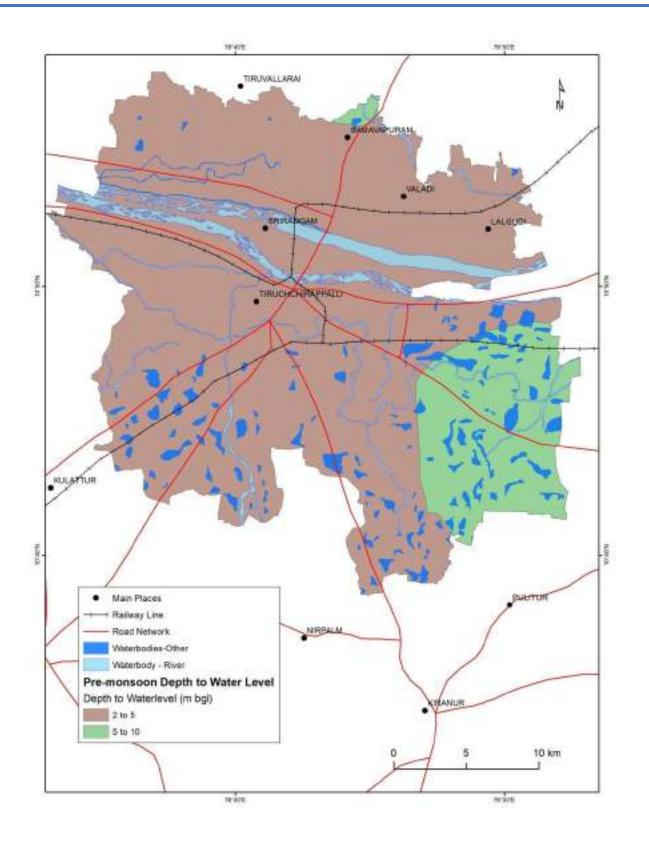
## 11.2.1.8 Water Level Pre-Monsoon/ Post Monsoon

In general Trichy District, during the pre-monsoon, the water level generally has a declining trend ranging from ground level to 15 m.

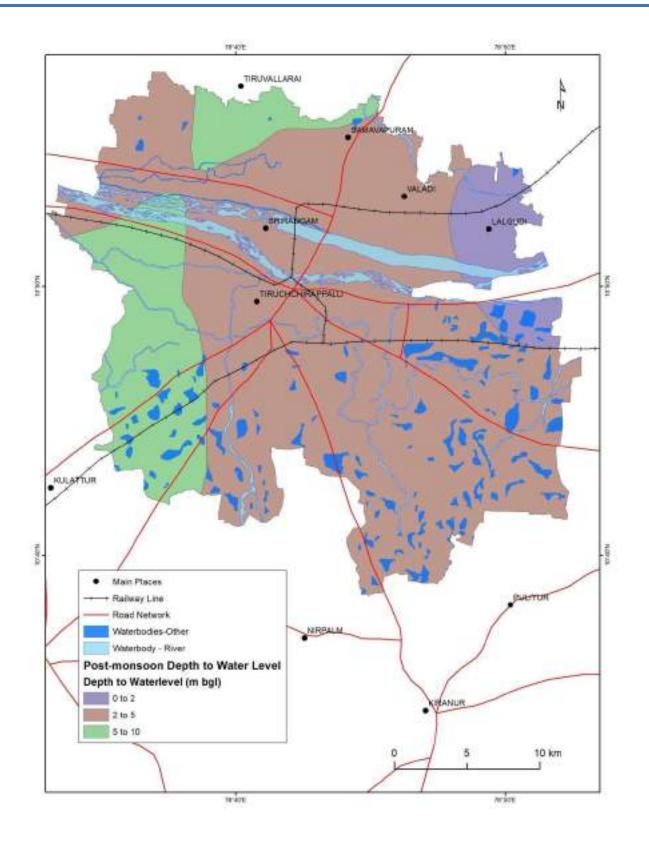
The depth of well below ground level 12.0m becomes dry during hot seasons like May, June, July. In the post monsoon, the water level generally has an upward trend due to rainfall and it reaches the ground level.

The depth to water level during pre-monsoon (May 2006) in the district varies from 1.95 to 9.49 m bgl. Out of 17 wells, 6% of wells had the depth to water level in the range of 0- 2 m bgl, 47% in the range of 2-5 m bgl and 10-20 m bgl.

The depth to water level during post monsoon (Jan 2007) varied from 1.6 to 15.15 m bgl and 5% of wells had depth to water level in the range of 0 - 2 m bgl and 58% of the wells in the range of 2 – 5 m bgl. 26% of the wells had depth to water level in the range of 5 - 10 m bgl and 10% of the wells had the depth to water level in the range of 10 - 20 m bgl.



Map 11-10 LPA Pre Monsoon Water Level



Map 11-11 LPA Post Monsoon Water level

# 11.2.2 FIRKA in LPA

SI. No.	ASSESSMENT UNIT (FIRKA)	NET ANNUAL GROUND WATER AVAILABILI TY	EXISTING GROSS GROUND WATER DRAFT FOR IRRIGATION	EXISTING GROSS GROUND WATER DRAFT FOR DOMESTI C AND INDUSTRI AL WATER SUPPLY	EXISTING GROSS GROUND WATER DRAFT FOR ALL USES (4+5)	STAGE OF GROUND WATER DEVELOPME NT IN %	CATEGOR Y OF FIRKA
1	ANDANALLUR	1,644.40	634	347.38	981.38	60	SAFE
2	KULUMANI	1,308.33	483	53.59	536.59	41	SAFE
3	LALGUDI	2,779.50	1,137.60	50.17	1,187.77	43	SAFE
4	MANIKANDAM	2,006.35	491.4	2,552.39	3,044.79	152	OVER EXPLOITED
5	MANNACHANALLUR	1,408.11	1,189.50	56.17	1,245.67	88	SEMI CRITICAL
6	NAVALPATTU	1904.53	31.5	425.3	456.8	24	SAFE
7	SIRUGAMBUR	1,687.22	1,191.20	82.84	1,272.04	76	SEMI CRITICAL
8	Somarasanpettai	2,014.16	533.15	419.31	952.46	47	SAFE
9	SRIRANGAM	1,114,29	480	25.06	505.06	45	SAFE
10	THIRUVERAMBUR	2,013.30	53.3	639.81	693.11	34	SAFE
11	TRICHY NORTH	523.21	33	119.52	152.52	29	SAFE
12	TRICHY SOUTH	515.79	7	132.92	139.92	27	SAFE
13	VALADI	3,091.17	1,805.50	72.62	1,878.12	61	SAFE
14	VENGUR	1871.22	49.05	179.82	228.97	12	SAFE
	Total	22,762.29	8,119.2	5156.9	13,275.2		

#### Table 11-2 Stage of Groundwater Development of Trichy based on Firka LPA - 2018 Firka Wise Summary (in ha.m)

Source: Groundwater Resources; CGWB

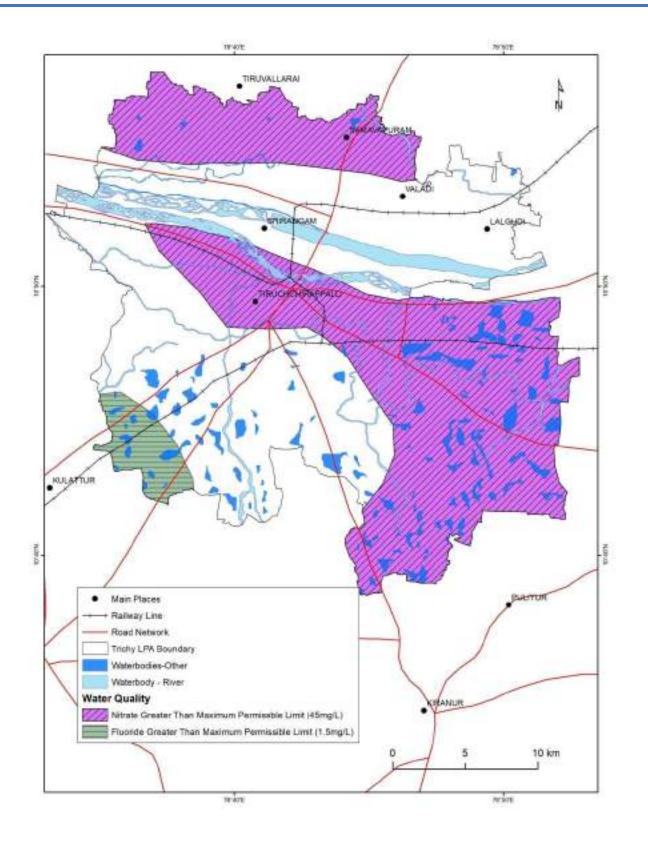
The entire Tiruchirappalli District is classified and assessed by 41 Firka, with 16 Firka falling in Tiruchirappalli LPA. CGWB has categorized Over-Exploited, Critical, Semi-Critical, Safe and Saline instead of Dark, Grey and White blocks. The Blocks with more than 100% extraction were categorized as "Over Exploited Blocks", the blocks with 90% to 100% extraction as "Critical Blocks", the blocks with 65% to 90% extraction as "Semi Critical Blocks", the blocks with less than 65% extraction as "Safe Blocks" and the bad quality blocks were categorized as "Saline Blocks".

# 11.2.3 Ground Water Quality

The rainfall is the main source for the availability of water both in surface and subsurface. The TDS value of less than or equal to 2000 mg/l have been demarcated as good quality and the value more than 2000 mg/l as bad quality areas.

Presence of fluoride <1.0 mg/l in drinking water reduces dental diseases whereas higher level > 1.50 mg/l will affect the health and cause dental fluorides. Nitrate is noted significantly in Ground Water due to use of chemical fertilizer for agriculture and other local pollution rocks and soils are also contributing nitrate to Groundwater. Arsenic is another poisonous heavy metal with allowable limits for drinking purposes are 0.05 mg/l.

In Tiruchirappalli District, the quality of Groundwater generally ranges from moderate to good quality both in the shallow dug well and bore wells except in & around the Kazhuveli tank, where the water quality is poor due to seawater intrusion in the lagoons during high tide seasons, and also due to the production of salt and Aquaculture farming.



Map 11-12 LPA Ground Water Quality

#### **11.3 Forest and Biodiversity**

As per Trichy Forest division, During 2015 Annual Wildlife Census conducted in Trichy forest, Manapparai, Thuvarankurichi and Thuraiyur (Over a spread of 45,272 hectares), total of 12 Species were recorded that includes Bonnet monkeys, Indian Gaurs, Hares, Deer, Wild boars, Red jungle fowl, Asiatic wildcat, Loris, Bengal fox, Indian palm squirrel, Indian palm squirrel, Indian gray mongoose and Porcupine.

As per in a Two-day Birds and Butterfly Joint survey conducted during January 2021 by the Tropical Butterfly Conservation, Trichy (TBCT), The Forest Department and Act for Butterflies, an NGO, 149 bird species and 105 butterfly species were recorded in Trichy district. Some of the birds spotted includes Greater Spotted Eagle, Osprey, Black Winged Kite, Oriental Honey Buzzard, Indian Spotted Eagle,Red Necked Falcon, Booted Eagle, Boneli's Eagle, White Eyed Buzzard, Eurasian Marsh Harrier,Pallid Harrier, Shikra, Black Kite and Brahminy Kite, Crested Serpent Eagle, Short Toed Snake Eagle, Indian Courser, Mottled Wood Owl, Rock Eagle Owl, and Jungle Owlet.

And According to the survey conducted in Pachamalai survey some of the butterfly species spotted includes White Banded Awl, Banded Blue Pierrot, Gladeye Bushbrown, Glassy Tiger, Dark Wanderer, Malabar Spotted Flat, Golden Angle, Double-banded Judy, Straight Swift, Indian Palm Bob, Blue Pansy, Peacock Pansy, Swallowtails, Pioneer, Tawny Coster, Monkey Puzzle, Peacock Royal, Slate Flash, Plains Cupid and Common Hedge Blue. Some rare species like Dark Pierrot, Peacock Royal, Redspot and Plumbeous Silverline were also sighted in the scenic hills. Most dominating species were Common Mormon, Common Banded Peacock, Blue Mormon, Common Grass Yellow, Common Emigrant and Indian Skipper. It is a serious responsibility to protect these species and facilitate in improving their living conditions.

### 11.3.1 Kariyamanickam and Kiliyanallur Reserve Forest

The Kariyamanickam and Kilianallur reserve forest is located on the banks of river Kaveri and Kollidam which is the only reserved area inside the local planning area. This forest consists of a considerable amount of flora and fauna due to its wet characteristics in those places.

# 11.3.2 Butterfly Park

Butterfly Park in Srirangam is one of the most beautiful tourist attractions. It is a tropical butterfly conservatory located in the Upper anaicut reserve forests in Srirangam with an extent of 25 acres. This park has 27 plant varieties corresponding to 27 stars (Nakshatras) and 12 plants corresponding to 12 rasi's.(Zodiac signs of Indian astrology) The gentle breeze carrying the smell of grass & mud the myriad of flowers and plants and the eye catching dance of the butterflies provides the cozy and restful environment.



Figure 11-9 Butterfly park Aerial view

# 11.4 Disaster Management

### 11.4.1 Seismology

The IS factor assigns a zone factor of 0.10 for Zone 2, Tiruchirapalli falls under this zone where the chances of earthquake is very low.

# 11.4.2 Covid -19

The recent pandemic Covid -19 is included in disasters and the number of people affected & reported were less than 15 per day during three consecutive waves in the year 2020-2021 in Tiruchirappalli district. The region fell in the orange zone based on TN Government's Covid -19 classifications. The district tops in Covid-19 vaccination drive with 11,07,2022 being vaccinated as per 2022 records with low risk.

## 11.4.3 Cyclone and Floods

## 11.4.3.1 Kaveri Kollidam River Course

Kaveri Kollidam River (310 km) rises at an elevation of 1,341 m at Talakaveri on the Brahmagiri range near Cherangala village of Kodagu district of Karnataka and drains into the Bay of Bengal and the total length being 765 km. The Kaveri basin extends over states of Tamil Nadu, Karnataka, Kerala and Union Territory of puducherry and drains a total area of 87,900 Sq.km. It falls in peninsular India and lies between 75°27'E to 79°54'E and 10°9'N to 13°30'N. It is bounded by the Western Ghats on the west, by the Eastern Ghats on the east and south and by the ridges separating it from Krishna basin and Pennar basin on the north. It Slopes gently towards east/southeast and the maximum elevation of about 2000-3000m is observed in the basin.

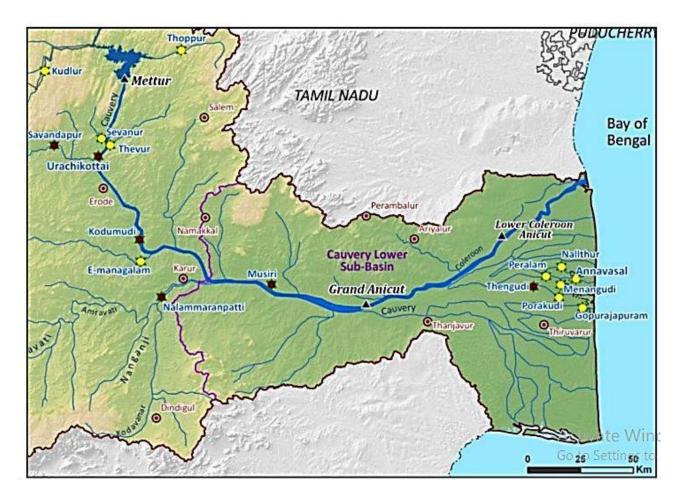
Agricultural land is dominant in this basin followed by forest area and Wastelands. The land use/land cover in the basin also include fallow land, scrub land, scrub forest, river/stream/canal, rural, urban mining, swamp/mangrove and coconut trees.

The principal soil types found in the basin are clay, loamy clay, sandy clay, silty clay, loamy sand, sand, loam, sill loam, silt, sandy loam and rocky. The soil in the basin is classified into moderate, slight and severe and the major soil slope classes are gently, steep, moderately and nearly leveled.

Lower Colleron Anicut and Grand Anicut are some of the important cross structures over Kaveri River in its entire stretch of 765km that falls under Thiruchirapalli LPA. Ayyan and Srirangam north vaikkal are the river channels that fall inside LPA.

SI	Structure Name	Chainage	Location	Po	sition
No		(km)		WGS8	4 Datum
				Latitude(N)	Longitude(E)
1	Kambarasampet tai Check Dam	161.5	Mambazhasalai	10 50 51.94	78 40 54.23
2	Mukombu Barrage (Upper Anicut SH 25)	173.6	Thirupparaithurai	10 52 57.40	78 34 41.53

#### Table 11-3 LPA Existing Dam and Anicut; Source: IWAI



Map 11-13 Trichy Kaveri Kollidam basin; Source: IWAI

### 11.4.3.2 Vulnerability Analysis

The district has experienced cyclone and flood havoc in the years 1924, 1952, 1954, 1965, 1977, 1979, 1983, 1998 and 1999, and ravaged floods in 2005. The rivers Cauvery, Coleroon and their tributaries, which form a network of irrigation system, naturally inundate larger areas during floods. The North East Monsoon has all along been the main reason for the cyclone, as well as floods in this district.

The low-lying areas are along the tributaries of Uyyakondan river, has faced flooding multiple times. Uyyakondan River is now being polluted with people's waste dumping and encroachments. Anjaneyar Waterfalls in-between Shanmugha Nagar and Ammayappa Nagar is a point of intersection of two rivers, namely, Uyyakondan canal and Korai River. It splits into two branches where one meets Cauvery and the other travels through the city. Based on the below mentioned table vulnerability map is generated.

S.No	Name of the Vulnerable area	Name of the Firka	Type of Vulnerability
	Ukkadai Ariyamangalam	Tiruchirappalli	High
	Veeramuthu Nagar	Tiruchirappalli	Very High
	Oodathurai, Cauvery Park, Mela Chinthamani	Tiruchirappalli	Very High
	Tharanallur Rettai Vaikkal	Tiruchirappalli	Very High
	Chettipatti Padugai	Tiruchirappalli	Medium
	Keela Panchapoor	Tiruchirappalli	Low
	Kuttimalai	Tiruchirappalli	Low

| ENVIRONMENT

Chettiyapatti, Thulasinga Nagar	Tiruchirappalli	Low
Edamalaipatti puthur, Rama - chandra Nagar, Nehru Nagar, Indira Nagar,	Tiruchirappalli	Medium
Healthy Colony,Anbu Nagar Kuduppa Pallam,Murugavel Nagar	Tiruchirappalli	Medium
Anbu Nagar	Tiruchirappalli	Medium
Karumandapam, Vinayakanagar, Alpha Nagar, Krishnanoorthy Nagar	Tiruchirappalli	Medium
Milaguparai Aadhi-Dravidar Street	Tiruchirappalli	Medium
AmmaiyappaNagar, Shantha Sheela Nagar, Vinobaji Nagar, Kumaran Nagar, SrinivasaNagar	Tiruchirappalli	Low
Ramalingam Nagar, Gnanam Colony, Ahamad Colony, Syndicate Bank Colony	Tiruchirappalli	Low
Uyyakondan Thirumalai,M.M.Nagar	Tiruchirappalli	Medium
Shanmuga Nagar, Ganapathi Nagar,Renga Nagar	Tiruchirappalli	Medium
Anna Nagar, ThillaiNagar	Tiruchirappalli	Low

Г <u> </u>		
Woraiyur, Fathima Nagar, Beschi Nagar,Thiyagaraja Nagar	Tiruchirappalli	Medium
A.U.T. Colony, Aravanoor, Melapandamangalam,Ling am Nagar	Tiruchirappalli	Low
Nochivayalputhur, Malaikovil,Indiranagar	Thiruverumbur	Low
Samiyar Street, Ganapathi Nagar,V.O.C .Nagar	Thiruverumbur	Low
Ravuthanmedu, ajivgandhinagar	Thiruverumbur	Low
Pathalapettai Keela mangavanam Chetiarpettai Kottarapatti	Thiruverumbur	Medium
Thirunedungulam, Madakoil Street, Harijan Street,Kuditheru	Thiruverumbur	Low
Ellakudi- Kokarasampettai	Vengur	High
Pappakurichi, Annanagar Vasanthanagar, Saraswathi nagar,Pandian Nagar	Vengur	Medium
Agaram,Shanthosh nagar, Prakash Nagar	Vengur	Low
Charkarpalayam MadakovilStreet, MariyammanKovil Street	Vengur	High
Keelamullakudi Ottakudi Putthapuram, Gandhipuram	Vengur	High

Kuvalakudi Pudumanai Mariyamman Kovil Street,Veethivadangam	Vengur	High
Vengur-Kalaingar Colony, Kalappu colony North Street, Keelamurukur	Vengur	High
Nadarajapuram	Vengur	Medium
Arasankudi Sivankoil Street Melaarasandkudi MathakovilStreet Mudukupatti Thondaimanpatti	Vengur	High
Kiliyur Mathakoil Street	Vengur	High
Perugamani	Anthanallur	Low
Sirugamani West	Anthanallur	Low
Kodiyalam	Anthanallur	Low
Sirugamani (East)	Anthanallur	Low
Tirupparaithurai	Anthanallur	Medium
Malliyampathu	Kulumani	Low
Mekudi	Kulumani	Low
Marudhandakuruchi	Kulumani	Low

| ENVIRONMENT

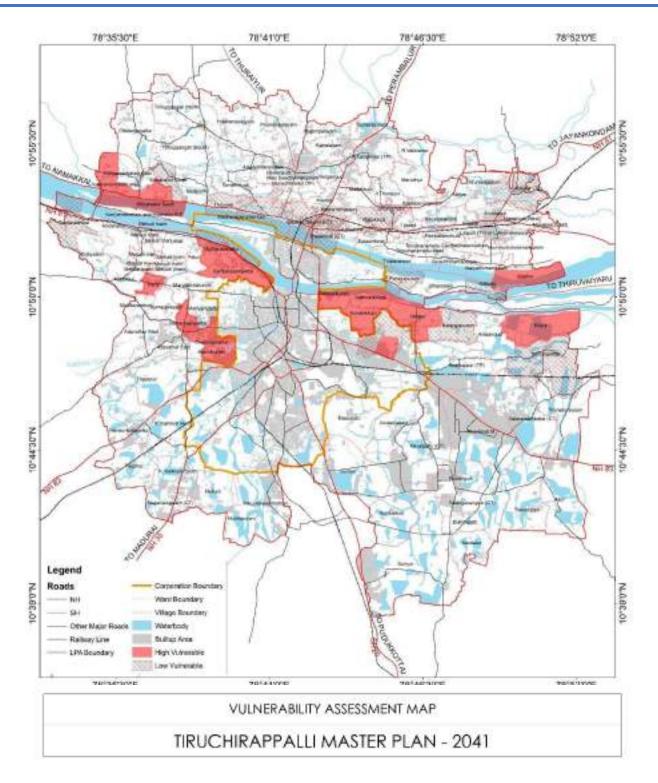
Koppu North	Kulumani	Low
Kulumani	Kulumani	Low
Perur	Kulumani	High
Panayapuram	Srirangam	Medium
Kilikudu	Srirangam	Medium
Mutharasanallur	Srirangam	High
Melur	Srirangam	High
Kambarasampettai	Srirangam	High
Somarasampettai	Somarasampettai	High
Adhavathur (West)	Somarasampettai	Low
Nachikuruchi	Somarasampettai	High
Cholanganallur	Somarasampettai	High
Kookur Keelavayalur, Hospital Street,Colony Street	Lalgudi	High
Poovalur (East) –Thenkal	Lalgudi	Medium

Lalgudi	Low
Valadi	Medium
Valadi	Low
Sirugambur	High
Sirugambur	Low
Sirugambur	Medium
Sirugambur	High
Sirugambur	Low
Sirugambur	Medium
Sirugambur	Low
Sirugambur	Low
	Valadi Valadi Sirugambur Sirugambur Sirugambur Sirugambur Sirugambur Sirugambur Sirugambur Sirugambur Sirugambur

Mannachanallur	Manacha nallur	Low
Koothur	Manacha nallur	Low
Vengangudi	Manacha nallur	Low
S.Kannanur (West)	Manacha nallur	Low
S.Kannanur (East)	Manacha nallur	Low

#### Table 11-4 LPA Vulnerable Points

Source: Trichy Disaster Management Plan 2022



Map 11-14Vulnerability Assessment Map

# 11.4.3.3 Safe Shelters

The list of safe shelters that can serve the respective vulnerab; e areas present in the LPA in the wake of any vulnerability are shown in the table below 11-5.

SI.N o	Details of the Vulnerable Location	Vulnerability (V.H/High//mediu m/ Low)	Safe Shelters				
TIRUC	TIRUCHIRAPPALLI (EAST) TALUK- URBAN						
1	Ukkadai Ariyamangalam	High Vulnerable	Corporation Middle School				
2	Veeramuthu Nagar	Very High Vulnerable	UDV Higher sec.school				
3	Oodathurai , Cauvery Park, Mela Chinthamani	Very High Vulnerable	ER High School				
4	Tharanallur Rettai Vaikkal	Very High Vulnerable	TSM High School				
5	Chettiapatti Padugai	Medium Vulnerable	Carmel Metric School				
6	Keela Panchapoor	Low Vulnerable	Saranathan Engg. College				
TIRUC	CHIRAPPALLI (WEST) TAL	uk - urban					
7	Kuttimalai	Low Vulnerability	Oxford engg.college				
8	Chettiapatti, Thulasinga Nagar	Low Vulnerability	Carmel High School				
9	Edamalaipatti puthur, Ramalinga Nagar,Natar nagar, Nehru Nagar,Indira Nagar, Healthy Colony, Anbu Nagar	Medium Vulnerability	Corporation middle school				
10	Kuduppa Pallam, Murugavel nagar	Medium Vulnerability	Seva Sangam Hr,Sec.School				
11	Anbu Nagar	Medium	Carmel High School				

		Vulnerability			
12	Karumandapam, Vinayaka Nagar, Alpha Nagar, Krishnanoorthy Nagar	Medium Vulnerability	National College		
13	Milagu Parai Aadhi Dravidar street	Medium Vulnerability	Vestri High Sec.School		
14	AmmaiyappaNagar, Shantha Sheela Nagar, Vinobaji Nagar, Kumaran Nagar, Srinivasa Nagar	Low Vulnerability	Cauvery Matriculation School		
15	Ramalingam Nagar, Gnanam Colony, Ahamad Colony, Syndicate Bank Colony	Low Vulnerability	Bishop Heber College		
16	Uyyakondan Thirumalai, M.M.Nagar	Medium Vulnerability	R.C. School		
17	Shanmuga Nagar, Ganapathi Nagar, Renga Nagar	Medium Vulnerability	Francis Matriculation School		
18	Anna Nagar, Thillai Nagar	Low Vulnerability	K.A.P.V. Higher Secondary School		
19	Woraiyur, Fathima Nagar, Beschi Nagar, Thiyagaraja Nagar	Medium Vulnerability	Aurobindo School		
20	A.U.T. Colony, Aravanoor, Melapandamangal am, Lingam Nagar	Low Vulnerability	Corporation Middle School		
	TIRUVERUMBUR TALUK				

21	Nochivayalputhur, Malaikovil Indranagar	Low Vulnerable	Panchayat Union Primary School
22	Samiyar Street, Ganapathi Nagar, V.O.C .Nagar	Low Vulnerable	BHEL Ramakrishna Primary School
23	Ravuthanmedu Rajivgandhinagar	Low Vulnerable	Govt. Hr.Sec.School Community Hall
24	Pathalapettai Keela mangavanam, Chetiarpettai Kottarapatti	Medium Vulnerable	Community Hall
25	Thirunedungulam, Madakoil Street Harijan Street, Kuditheru	Low Vulnerable	P.U. Primary School
26	Ellakudi- Kokarasampettai	High Vulnerable	Community Hall
27	Pappakurichi, Annanagar, Vasanthanagar, Saraswathi nagar, Pandian Nagar	Medium Vulnerable	Boys Hr.Sec.School, S.K. Kalyana Mahal
28	Agaram, Shanthosh nagar, Prakash Nagar	Low Vulnerable	Community Hall
29	Charkarpalayam, MadakovilStreet, Mariyamman Kovil Street	High Vulnerable	Panchayat Union Primary School
30	Keelamullakudi Ottakudi Putthapuram Gandhipuram	High Vulnerable	Panchayat Union Primary School, Keelamullaikudi
31	Kuvalakudi Pudumanai,	High Vulnerable	Panchayat Union Elementary School, Kuvalakudi

	Mariyamman Kovil Street, Veethivadangam				
32	Vengur-Kalaingar Colony, Kalappu colonyNorth Street, Keelamurukur	High Vulnerable	ARK Hr.Sec.School, Kallanai		
33	Nadarajapuram	Medium Vulnerable	Panchyat Union Primary School, Nadarajapuram		
34	Arasankudi Sivankoil Street, Melaarasandkudi MathakovilStreet, Mudukupatti Thondaimanpatti	High Vulnerable	P.U. Primary School, Community Hall, Chavadi Arasankudi, Pathalapettai Primary School		
35	Kiliyur Mathakoil Street	High Vulnerable	Community Hall		
SRIRA	SRIRANGAM TALUK				
36	Perugamani	Low vulnerable	Panchayat Union Middle School		
37	Sirugamani West	Low vulnerable	Panchayat Union Middle School		
38	Kodiyalam	Low vulnerable	Community Hall, Pulivalam		
39	Sirugamani (East)	Low vulnerable	Panchayat Union Middle School		
40	Thiruparaithurai	Medium Vulnerable	Akilandeswari Thirumana mandapam		
41	Malliyampathu	Low vulnerable	Community Hall		
42	Mekudi	Low vulnerable	Lakshmi Primay School		
43	Marudhandakuruchi	Low vulnerable	PU Middle School		
44	Koppu North	Low vulnerable	CSI Primary School		
45	Kulumani	Low vulnerable	Middle School		
46	Perur	High Vulnerable	PU Primary School		
47	Panayapuram	Medium vulnerable	PU Middle School, Panayapuram		

48	Kilikudu	Medium vulnerable	PU Primary School, Kilikudu
49	Mutharasanallur	High Vulnerable	PU Middle School, Mutharasanallur
50	Melur	High Vulnerable	Ayyanar Corporation Primary School, Melur
51	Kambarasampettai	High Vulnerable	PU Middle School, Kambarasampettai
52	Somarasampettai	High Vulnerable	PU Middle School
53	Adhavathur (West)	Low vulnerable	Panayadi Kovil
54	Natchikuruchi	High Vulnerable	Community Hall
55	Cholanganallur	High Vulnerable	Matha Amirtha Vidyalaya School
	LALGUDI TALUK		
56	Kookur, Keelavayalur, Hospital Street, Colony Street	High Vulnerable	Panchayat Union Middle School,
57	Poovalur (East) - Thenkal	Medium Vulnerable	Govt Higher Sec School
58	Thirumangalam - Agalanganallur, Keelmarimangalam	Low vulnerable	Panchayat union Elementary school
59	Nathamangudi - Mangudi, TELC Mission Street, Kallar Street	High Vulnerable	Panchayat Union Middle School
60	Alangudi Mahajanam - Kollumedu	High Vulnerable	Panchayat Union Elementary School
61	Alangudi Mahajanam - Kalathil ventrar Pettai	High Vulnerable	Adi dravidar Elementary School, K.V. Pettai.
62	Mettuppatti - Kurichi	High Vulnerable	Anbil Higher Secondary School ,

			Mangamalpuram
63	Keelanbil - Baruthikal	Medium Vulnerable	Adi dravidar Welfare High School, Keelanbil
64	Jengamarajapuram - Anna Low Vulnerable Nagar	Low vulnerable	Panchayat Union elementary School, Anbil St.Antony Church
65	Sirumaruthur - Keela Street	Medium Vulnerable	Panchayat Union Elementary School, Sirumaruthur
66	Nagar - Mariyamman Kovil Street, Pudhu Street	Low vulnerable	Govt High School, Nagar
67	Alambadi - Thangasalai,	High Vulnerable	Thanraj Thirumanamandapam
68	Virahalur – Upagaramatha Kovil Street, Susaiyappar Kovil Street, Keela Street,	High Vulnerable	St. Peter's Higher Secondary School, Virahalur.
69	Vellanur - Anandhapuram	Medium Vulnerable	Panchayat Union Middle School, Vellanur
70	Vellanoor - Iruthayapuram	Medium Vulnerable	Govt. Middle School
71	Virahalur - Thinnakulam,	High Vulnerable	St. Peter's Higher Secondary School
72	Pullambadi - Thailagulam, Thergu theru,	Medium Vulnerable	Arul Migu Karuppannasami Thirumanamandapam,
73	Reddimangudi - Keela Street, Gandhi Nagar	Medium Vulnerable	Reddiyar Thirumanamandapam, Reddima ngudi Panchayat Primary School
MAN	NACHANALLUR TALUK		
74	Kariyamanickam (West)	High Vulnerable	P.U.E.School
75	Kariyamanickam (East)	High Vulnerable	Samuthayakudam

_ ,			
76	Kiliyanallur (North)	Medium Vulnerable	P.U.E.School
77	Kiliyanallur (South)	High Vulnerable	P.U.E.School
78	Melpathu	Low vulnerable	P.U.M.School
79	Thiruvasi	Medium Vulnerable	Samudhaya Koodam
80	Madhava Perumal Kovil	Medium Vulnerable	P.U.E.School
81	Pitchandar Kovil – Keelathuru	Medium Vulnerable	Alangar Annai Mandapam
82	Pitchandar Kovil - valavanthapuram	Medium Vulnerable	Srinivasa Mandapam
83	Thiruppanjeeli (North)	Low vulnerable	P.U.E.School Sivan Temple
84	Thiruppanjeeli (South)	Low vulnerable	Government High School, Thirupanjeeli
85	Mannachanallur	Low vulnerable	Govt.Boys Hr.Sec.School
86	Koothur	Low vulnerable	P.U.E.School
87	Melaseedevimangal am	Low vulnerable	Govt. Girls Hr.Sec.School
88	Vengangudi	Low vulnerable	Govt. Girls Hr.Sec.School
89	S.Kannanur (West)	Low vulnerable	Mariyamman High School, P.U.E.School
90	S.Kannanur (East)	Low vulnerable	Government Hr.S.School
91	Thiruvellarai – udayvar kulam	Low vulnerable	Sri Pangajanadhan Thirumanamandapam, J.P. Mahal
92	Thiruvellarai – kuselar kulam	Low vulnerable	P.U.E.School

#### Table 11-5 Safe Shelters

#### 11.5 Pollution

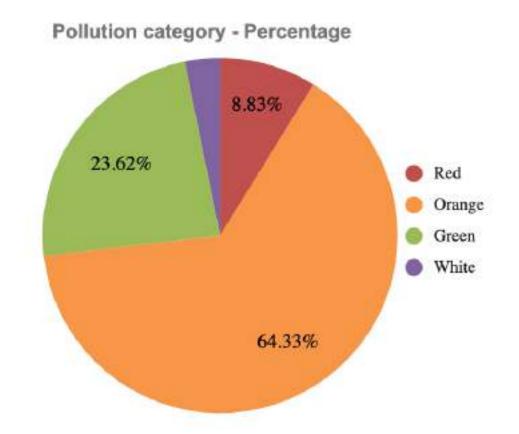
### 11.5.1 Concetration of Enterprises based on Pollution Control Board Catergory

The Health Industry is producing major pollution, which demands the need for more Biomedical waste management other than Ariyamangalam Dump Yard. The Pollution control board categorizes enterprises based on the level of pollution caused by them and their size. Out of the 872 enterprises registered with the PCB the category of the enterprises are given in the table 11-6.

Total No of Enterprises	872
Category	No of Enterprises
Red- Large	23
Red- Medium	3
Red- Small	51
Total	77
Orange- Large	41
Orange- Medium	16
Orange- Small	504
Total	561
Green- Large	8
Green- Medium	5
Green- Small	193
Total	206
White- Large	0
White- Medium	0
White- Small	28
Total	28

Table 11-6 Enterprises list based on Pollution Control Board Category

DIRECTORATE OF TOWN AND COUNTRY PLANNING



S.No	No.of Industries	Industry Categorization	Percentage of Enterprises
1	89	Chemical industry	10.21%
2	16	Company	1.83%
3	37	Construction Industry	4.24%
4	7	Crematory	0.80%
5	16	Educational Institute	1.83%
6	6	Electrical Industry	0.69%
7	114	Food Industry	13.07%
8	7	Gold Industry 0.80%	
9	308	Health Care 35.32%	
10	21	Heavy Engineering Industry	2.41%
11	6	Housing	0.69%
12	17	Oil and Gas 1.95%	

DIRECTORATE OF TOWN AND COUNTRY PLANNING

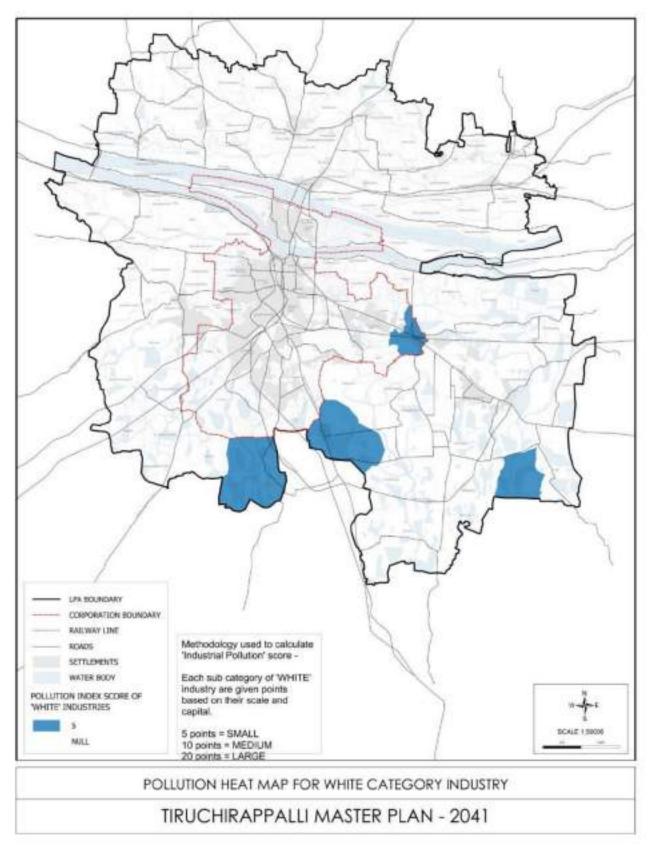
13	31	Quarry	3.56%
14	63	Steel Industry	7.22%
15	52	Transport/Automobiles	5.96%
16	72	Recreation	8.26%
17	4	Waste Treatment	0.46%
18	6	Miscellaneous	0.69%

#### Table 11-7 Category of Enterprises and their contribution in percentage

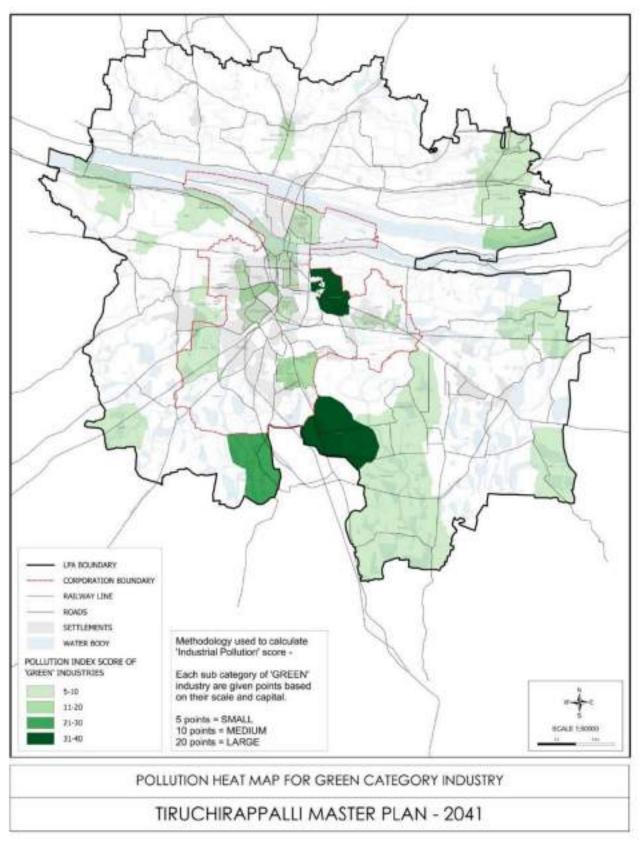
Medical facilities, petrol pumps, slaughter houses, quarries, crushers etc are categorized majorly under orange or red category. Food industries like rice mills are categorized as green industries. The maps showing the concentration of enterprises based on their pollution categorisation is shown below in the Maps 11-15, 11-16, 11-17 & 11-18.

#### 11.5.2 Water Pollution

The disposal ofuUntreated sewage disposal into natural canals leads to pollution of water bodies. Around 30 location of untreated sewage disposal is falling within the LPA boundary. The major Nallah Outfall carrying untreated sewage (Uyyakondan Canal) is mapped.

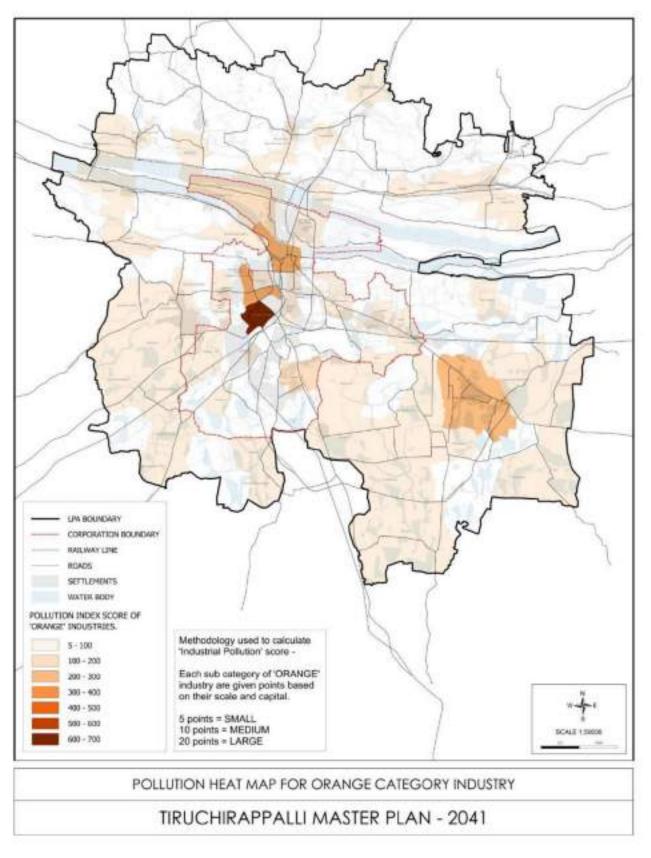


Map 11-15 Pollution Heat Map White Category Enterprises

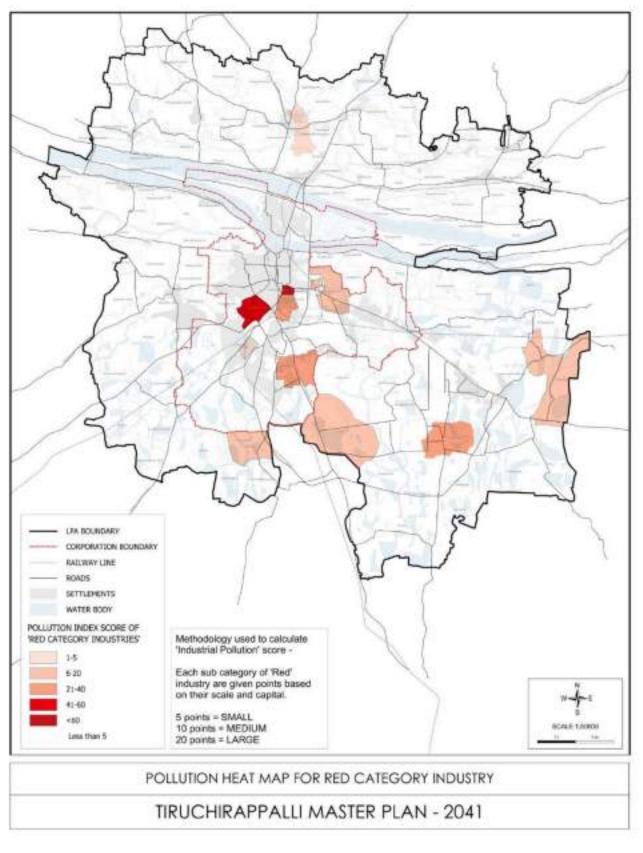


Map 11-16 Pollution Heat Map Green Catergory Enterprises

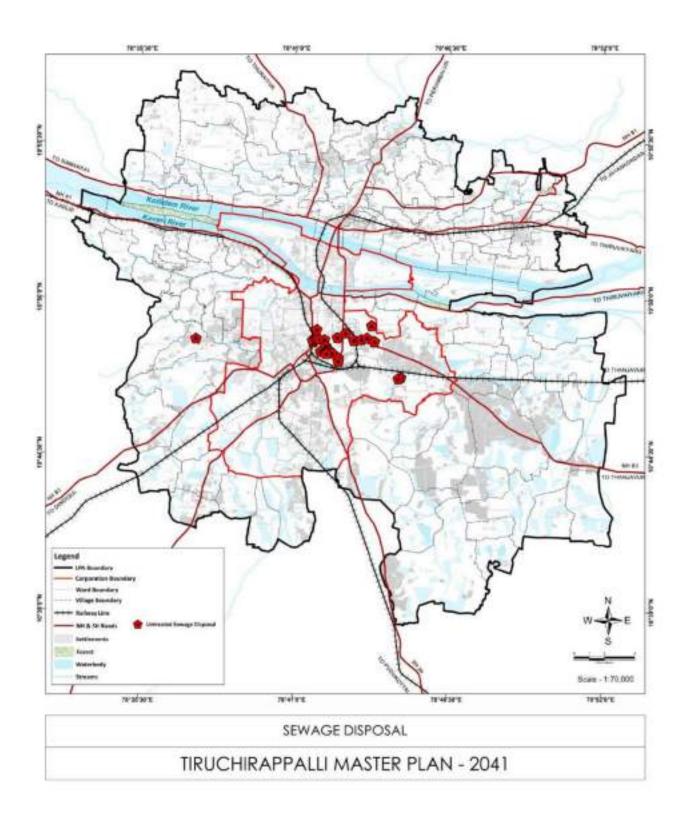
| ENVIRONMENT



#### Map 11-17 Pollution Heat Map Orage Catergory Enterprises



#### Map 11-18 Pollution Heat Map Red Catergory







# **EXISTING LANDUSE**

## **12. EXISTING LAND USE**

#### 12.1 Evaluation of Existing Master Plan 2011

The first Master Plan of Tiruchirappalli for the year 2011 was approved in the year 1996 and subsequent review was approved in the year 2009 in reality.

The Existing Land use area in 2003 in sq.km and the proposed Land use area for the year 2011 in sq.km is given in the Table 12.1

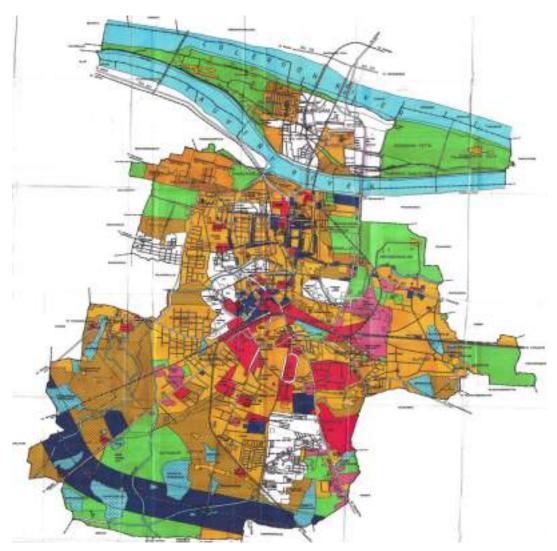
SI No	Land use Classification	Existing LU (2003) in Sq.km	% of Total Area 2003	Proposed LU (2011) in Sq.km	% of Proposed Area 2011
1	Residential	62.93	22.4%	104.13	37%
2	Commercial	2.28	0.8%	5.89	21%
3	Industrial	6.24	2.2%	6.07	2.2%
4	Public & Semi Public	9.96	3.5%	21.53	7.7%
5	Institutional	4.83	1.7%	3.53	1.3%
6	Transport	9.91	3.5%	12.91	46%
7	Recreational	-	-	-	-
8	Water Bodies	4449	15.8%	44.49	15.8%
9	Agriculture	140.47	50.0%	82.59	29.4%
	Total	281.14	100%	281.14	100%

Table 12-1Existing Landuse 2003 and Proposed Landuse 2011 (Approved in 2009)

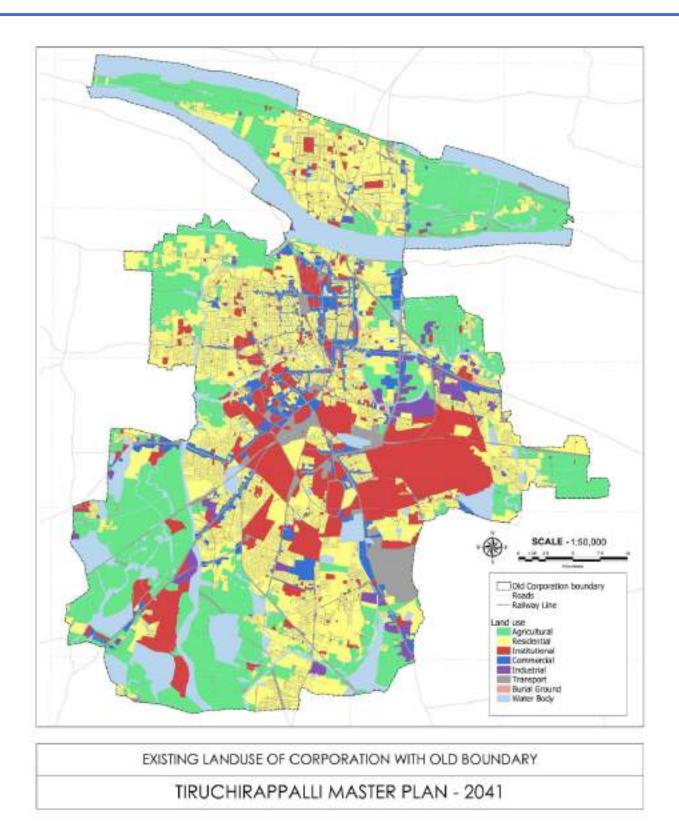
This evaluation is a very important step in understanding the demand projection and by analyzing the existing landuse, we can understand if the City has developed as proposed. In the previous Masterplan, the landuse category for Institutional was segregated as Educational and Public and semi public.

The comparison of the Proposed Landuse 2011 and the Existing Landuse of the

geographical extent of the Previous Master plan was conducted to understand the level of success for each landuse. The Following Maps 12.1, 12.2 shows the Landuse comparison of Proposed Landuse 2011 and Existing Landuse 2021 for the Previous master plan boundary for the Corporation, LPA excluding corporation. Map 12.3 shows the Proposed Landuse 2021 and Existing Landuse 2021.



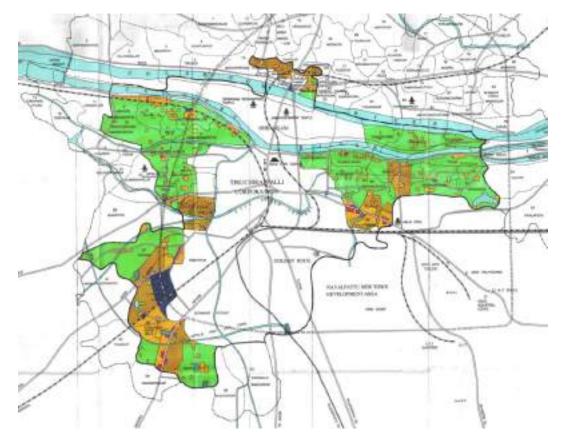
Map 12-1 Proposed Land use (2011) of Corporation Boundary of Previous Masterplan



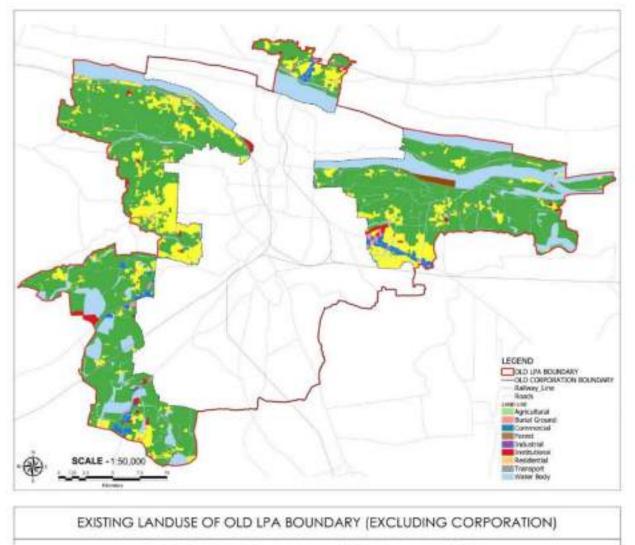
Map 12-2 Existing Land use (2021) of Corporation Boundary of Previous Masterplan

Land use	LPA Proposed Land Use 2011		LPA Existing Land Use (2021)		Comparison
	% Land use	Area in sq km	Land use %	Area in sq km	
Residential	37%	104.13	22.33%	62.78	41.35
Commercial	2.1%	5.89	2.75%	7.73	-1.84
Industrial	2.2%	6.07	1.26%	3.53	2.54
Institutional	8.9%	25.06	7.09%	19.92	5.14
Transport	4.6%	12.91	6.42%	18.04	-5.13
Agricultural	29.4%	82.59	44.34%	124.65	-42.06
Water Body	15.8%	4449	15.82%	44.49	0
Total	100%	281.14	100%	281.14	

Table 12-2 Proposed Landuse 2011 & Existing Landuse 2021 Comparison

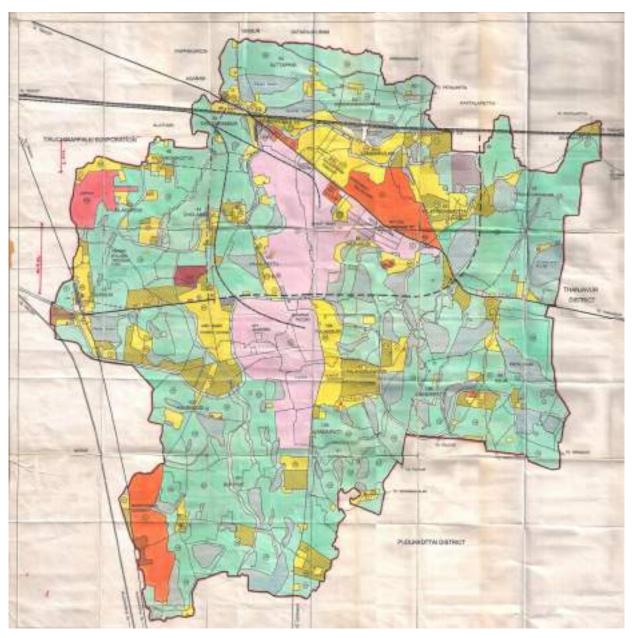


Map 12-3 Proposed Land use (2011) of LPA (Excluding Corporation) of Previous Masterplan



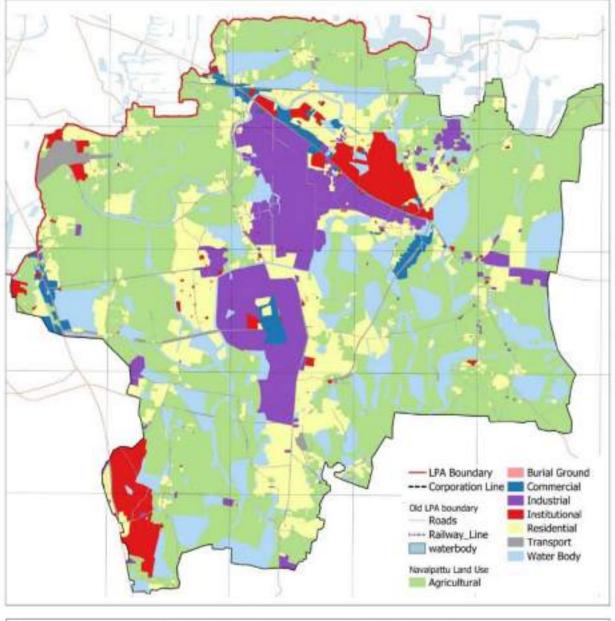
#### TIRUCHIRAPPALLI MASTER PLAN - 2041

Map 12-4 Existing Land use (2021) of LPA (Excluding Corporation) of Previous Masterplan



Map 12-5 Proposed landuse Map2021 Navalpattu (NTDA)

This comparison shows that the Corporation along with the 2003 LPA has not undergone Landuse change as envisaged in the previous Master plan even after 10 years past the proposed period. The comparison of the existing land use of the Navalpattu NTDA shows that the demand on this land was very heavy and has undergone land use change beyond what was envisaged. It will be pertinent to note that the NTDA Masterplan proposal was prepared for the year 2021. This proves that there is rapid urbanization happening in the South East of Trichy corporation.



EXISTING LANDUSE OF NAVALPATTU (NRDA)	
TIRUCHIRAPPALLI MASTER PLAN - 2041	

Map 12-6 Existing landuse Mp2021 Navalpattu (NTDA)

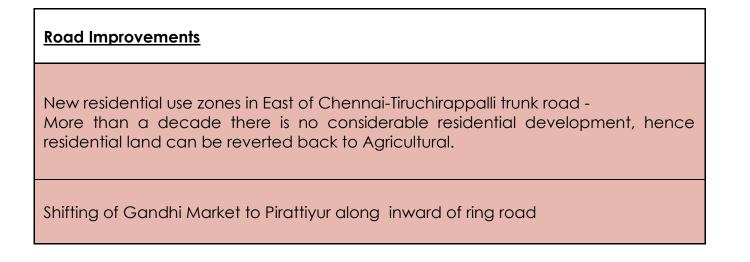
#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

	Navalpattu Old Master Plan Proposed Land Use for 2021		Navalpattu Existing Land Use (as per 2021)		Comparison
Land use	% of total area	Area in sq km	% of total area	Area in sq km	
Residential	9.78%	20.36	17.1%	35.51	-15.15
Commercial	0.19%	0.40	1.7%	3.53	-3.14
Industrial	7.44%	15.47	10.5%	21.95	-6.48
Institutional	5.97%	12.44	7.6%	15.88	-3.44
Agricultural	76.62%	159.47	63.1%	131.261	28.21
Total	100%	208.141	100%	208.141	

#### Table 12-3 Landuse Comparison

#### 12.2 Evaluation of Implementation of Master Plan 2011 Proposals

An evaluation of the success rate of previous Masterplan proposals will provide guidance for future proposal drafting after understanding the practicalities of the region. Below is the list of proposals made in the previous master plan and their current status based on completion.



Shifting of Onion market and Vellamandi to varaganeri village along chennai byepass road

A 40 feet wide link road connecting Dindigul road and karur road along Korairar river bund

A 80 feet wide link road connecting east Boulevard road to chennai bye pass road

A 100 feet wide link road connecting Madurai road and Dindigul road at Pirattiyur village.

A 60 feet wide link road connecting the above 100 feet road and the existing 60 feet road in the approved society layout

Formation of 120 feet wide ring road around the Tiruchirappalli Town about 80km

HEIGHT project

Junction Improvements

Mannarpuram junction

No.1 Tollgate junction

Palakarai Bazaar road and Heber road junction

Mainguard Gate junction

Junction of Thanjavur road Madurai road near Gandhi market

Puthur Four road junction

#### Road over bridges and underpasses

Bridge over Uyyakondan channel near Palakarai police station

River bridge on EVR road near court

River bridge on Kulumani road on Kudamurutti river

Over Bridges at level crossing (4 lane)

Level crossing in Heber road at Beemanagar

Road over bridge across Trichy-Chennai railway line near Thiruvanaikovil

Road over bridge on Salai road near fort station

New bus stands

Devadanam

Panjapur

Kottappattu

#### **Truck terminals**

Truck terminals suggested in HEIGHT project along Dindigul road

#### Pedestrian ways

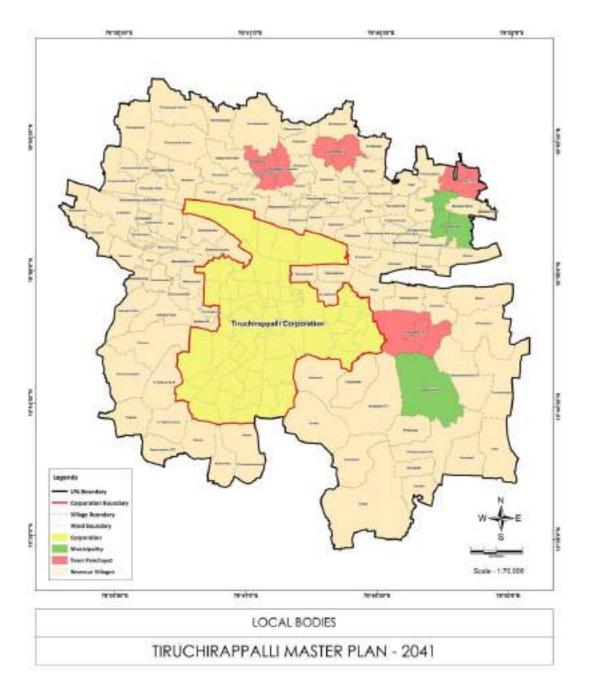
Subway opposite to main guard gate

Subway at singarathope junction
Improvement of Anna Stadium
Walkers track inside the Anna stadium
Accommodation to be provided for EWS people at Kallikudi south village - Instead of this accomodation provided in Nagamangalam, Palakkarai, Srirangam and vannarapettai
Trichy - Srirangam UGS scheme under National River Conservation Project

Table 12-4 Stages of proposal and Implementation of previous Master plan

#### 12.3 Existing Landuse (2021) of Proposed LPA 2041

The existing Landuse of the Proposed LPA 2041 of the Corporation and rest of LPA excluding corporation was studied. In addition the existing Landuse of Urban Local Bodies namely Thuvakudi Municipality, Lalgudi Municipality, Koothappar Town Panchayat, Manachanallur Town Panchayat, S.Kannanoor Town Panchayat & Puvalur Town Panchayat were also studied and the developable land area was calculated which excludes agriculture and water bodies since they are undevelopable. The breakup of percentage of each landuse to the developable area is compared with the URPFI Guidelines. The location of the local bodies of the Proposed LPA is shown in the Map: 12-7 below. The Corporation falls under the category of a Large Town and the existing Landuse structure of developable area was evaluated against the same category in the URPFI Guidelines. Thuvakkudi with a very high Industrial Landuse can be considered as an Industrial Town and the existing Landuse structure of an industrial Town. The remaining urban local bodies are of the category of a small town based on their population based on the URPFI Guidelines and hence



evaluated against the proposed landuse structure of a small town.

Map 12-7 Administrative Boundaries of the Local bodies forming the LPA 2041

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

	Rest of LPA		Corporation		URDPFI
LANDUSE	Area in Sqkm	% of Landuse	Area in Sqkm	% of Landuse	(% of Landuse)
Residential	86.85	13.6%	43.34	50.5%	36-39
Commercial	6.49	1.01%	6.839	8%	5-6
Industrial	23.63	3.7%	3.19	3.7%	7-8
Institutional	13.96	2.18%	15.34	17.9%	10-12
Burial Ground	0.76	0.12%	1.27	1.4%	
Recreational	0.25	0.04%	0.29	0.34%	14-16
Transport	19.29	3.02%	15.12	17.6%	12-14
Agricultural	376.95	59.08%	55.16		
Forest/ Hill	2.72	0.43%	1.02		
Water Body	107.08	16.78%	24.52		
	637.97	100%	166.58	100%	100%

Table 12-5 Existing LU (2021) of Rest of LPA excluding Corporation & the Corporation

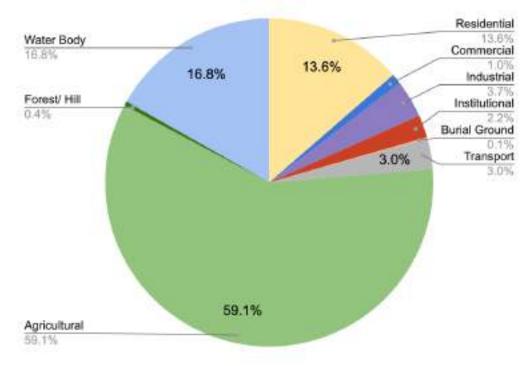
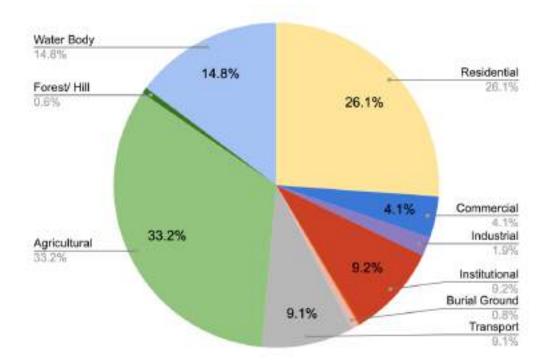
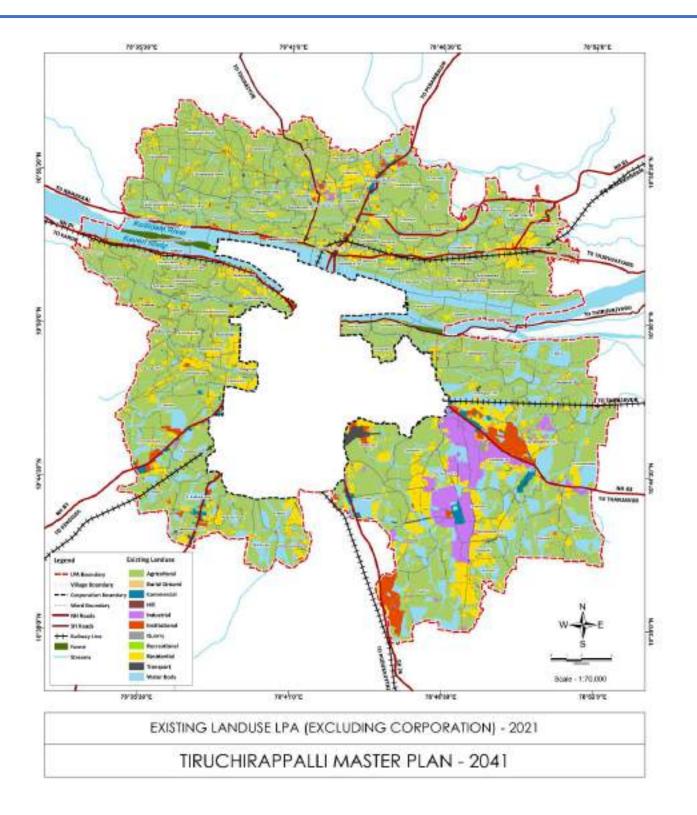


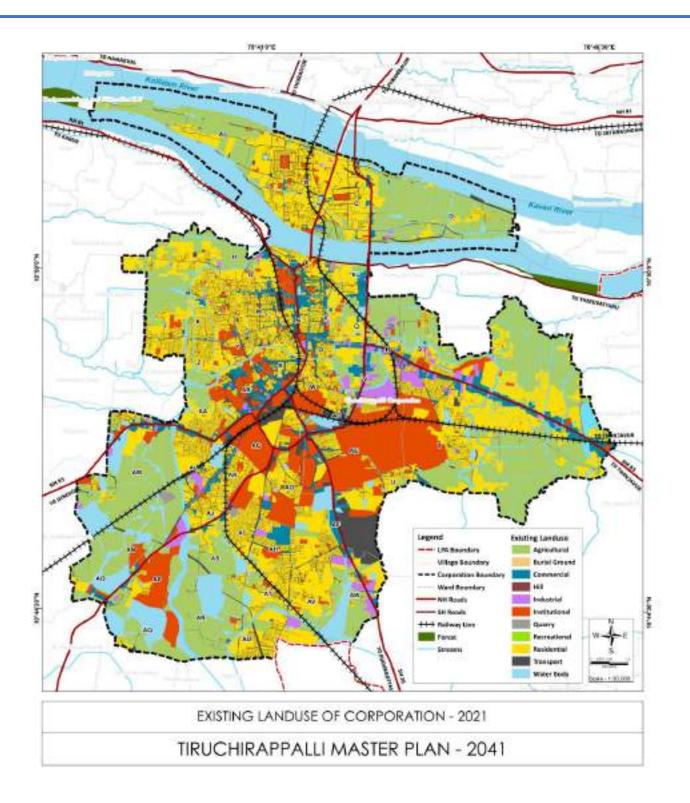
Figure 12-1 Existing Landuse of LPA 2021 (Excluding Corporation)



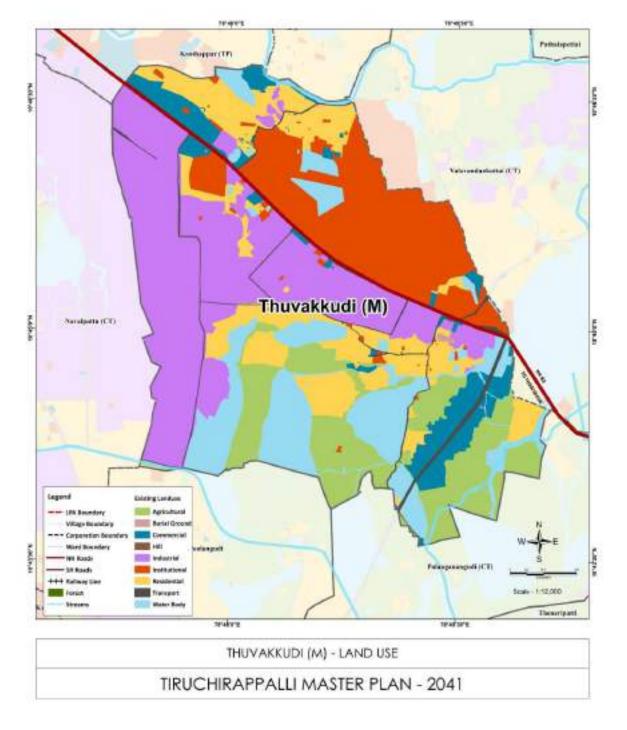




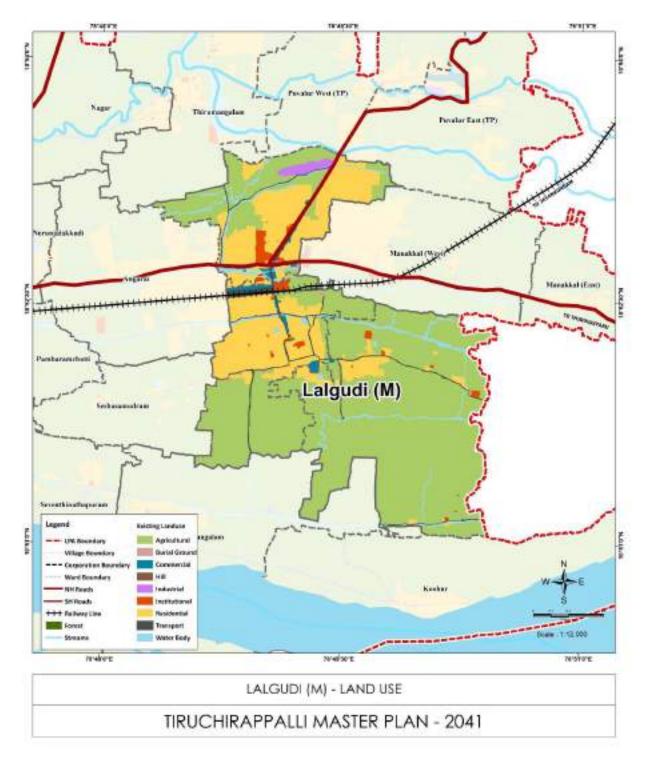
Map 12-8 Existing Landuse of LPA 2021 (Excluding Corporation)



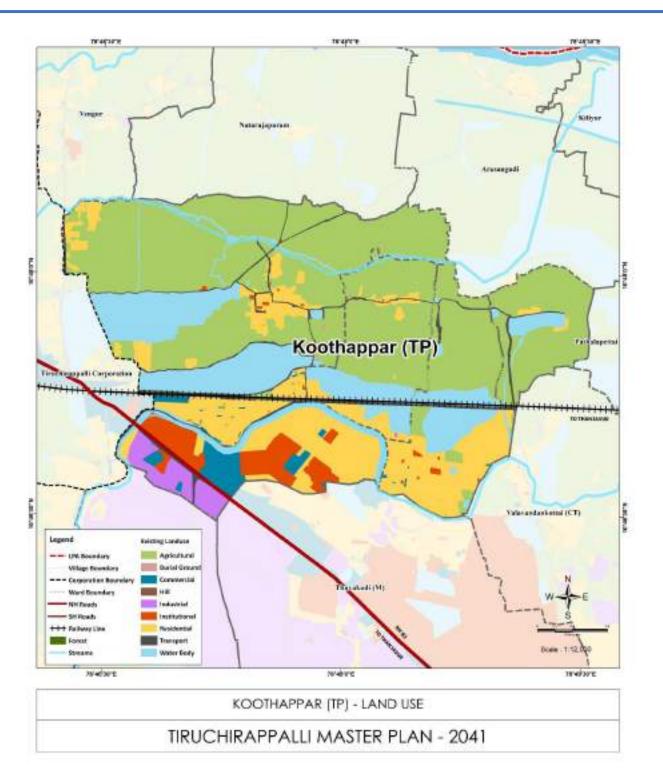
Map 12-9 Existing Landuse of Corporation 2021



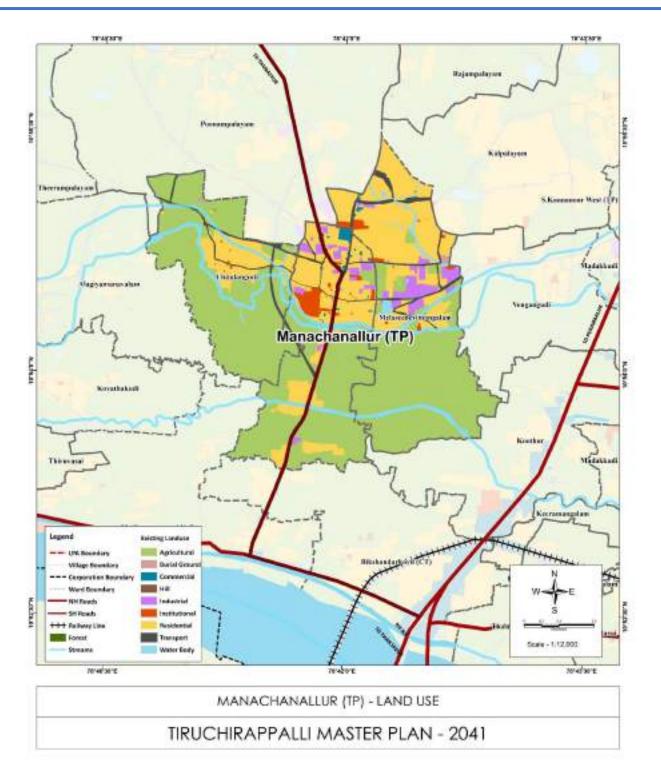
Map 12-10 Existing Landuse of Thuvakudi Municipality



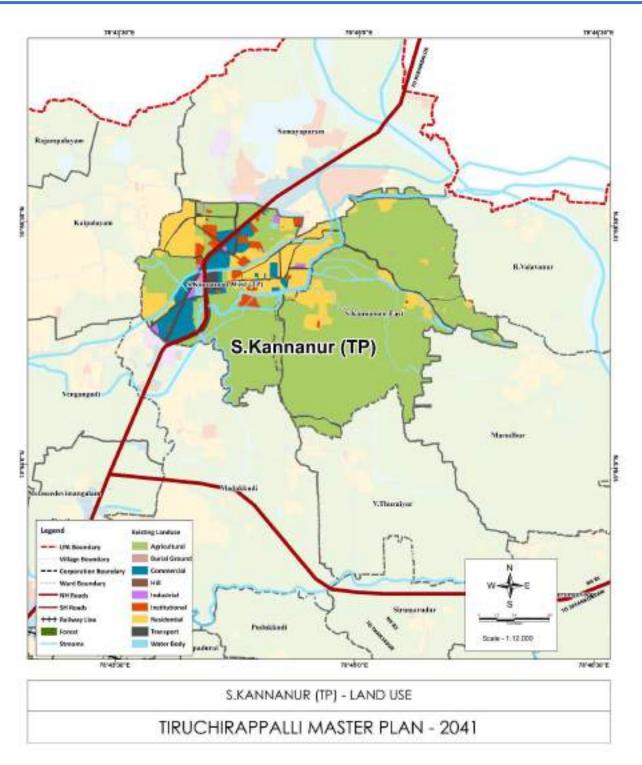
Map 12-11 Existing Landuse of Lalgudi Municipality



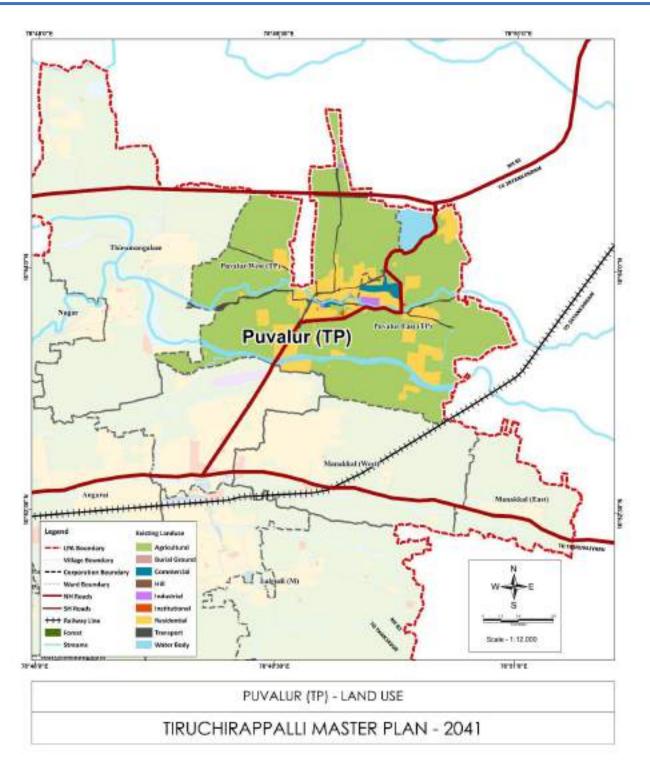
Map 12-12 Existing Landuse of Koothappar Town Panchayat



Map 12-13 Existing Landuse of Manachanallur Town Panchayat



Map 12-14 Existing Landuse of S.Kannanur Town Panchayat



Map 12-15 Existing Landuse of Puvalur Town Panchayat

THUVAKKUDI MUNICIPALITY- Existing LU (2021)- Industrial Town						
LANDUSE	Area in sqkm	Landuse % to developable area	URDPFI Norm			
Residential	2.96	21.2	20-25 %			
Commercial	1.29	9.2	3-4 %			
Industrial	5.48	39.3	30-35 %			
Quarry	0.35	2.5				
Institutional	3.4	24.4	6 -8 %			
Burial Ground	0.02	0.1				
Recreational	0.00	0	12-15 %			
Transport	0.45	3.2	10-12 %			
Agricultural	2.66					
Water Body	2.98					
Total	19.59	100	100 %			

Table 12-6 Existing LU (2021) of Thuvakudi Municipality

LALGUDI MUNICIPALITY- Existing Landuse (2021)- Small Town							
LANDUSE	Area in sqkm	Landuse %	URDPFI Norm				
Residential	2.15	81.1	45-50 %				
Commercial	0.07	2.6	2-3 %				
Industrial	0.07	2.6	8-10 %				
Quarry	0.00	0					
Institutional	0.13	4.9	6-8 %				

Burial Ground	0.01	0.3	
Recreational	0.00	0	12-14 %
Transport	0.22	8.3	10-12 %
Agricultural	6.03		
Water Body	0.31		
Total	8.99	100	100 %

Table 12-7 Existing LU (2021) of Lalgudi Municipality

KOOTHAPPAR TP- Existing Landuse (2021)- Small Town			
LANDUSE	Area in sqkm	Landuse %	URDPFI Norm
Residential	2.97	62.9	45-50
Commercial	0.32	6.8	2-3
Industrial	0.35	7.4	8-10
Institutional	0.60	12.8	6-8
Burial Ground	0.004	0.02	
Recreational	0.01	0.2	12-14
Transport	0.48	10.2	10-12
Agricultural	8.00		
Water Body	2.85		
Total	15.57	100	100

Table 12-8 Existing LU (2021) of Koothappar Town Panchayat

MANACHANALLUR TP- Existing Landuse (2021)- Small Town			
LANDUSE	Area in sqkm	Landuse %	URDPFI Norm
Residential	2.36	74.2	45-50
Commercial	0.05	1.6	2-3
Industrial	0.28	8.8	8-10
Institutional	0.14	4.4	6-8
Burial Ground	0.02	0.6	
Recreational	0.00	0	12-14
Transport	0.33	10.4	10-12
Agricultural	5.11		
Water Body	0.42		
Total	8.71	100	100

Table 12-9 Existing LU (2021) of Manachanallur Town Panchayat

S.KANNANUR TP- Existing Landuse (2021)- Small Town			
LANDUSE	Area in sqkm	Landuse %	URDPFI Norm
Residential	1.02	54	45-50
Commercial	0.31	16.4	2-3
Industrial	0.04	2.1	8-10
Institutional	0.16	8.5	6-8
Burial Ground	0.01	0.5	
Recreational	0.00	0.0	12-14

Transport	0.35	18.5	10-12
Agricultural	5.00		
Water Body	0.42		
Total	7.31	100	100

Table 12-10 Existing LU (2021) of S.Kannanoor Town Panchayat

PUVALUR TP- Existing Landuse (2021)- Small Town			
LANDUSE	Area in sqkm	Landuse %	URDPFI Norm
Residential	0.93	75.6	45-50
Commercial	0.06	4.9	2-3
Industrial	0.03	2.4	8-10
Institutional	0.01	0.8	6-8
Burial Ground	0.01	0.8	
Recreational	0.00	0.0	12-14
Transport	0.21	17.1	10-12
Agricultural	4.85		
Water Body	0.44		
Total	6.52	100	100

#### Table 12-11 Table: Existing LU (2021) of Puvaliur Town Panchayat

The developable area of the corporation is 85.88 sq.km out of which the major land use component is going to the institutional landuse after residential with 19.64%. It is important to observe that the landuse classification under recreation is not delineated separately but incorporated within the institutional landuse. Hence it can be assumed that a large town should have a percentage of 24-28% of institutional landuse. The developable area for Thuvakudi Municipality is 13.95 sq.km, Lalgudi Municipality is 2.65 sq.km, Koothappar Town Panchayat is 4.72 sq.km, Manachanallur Town Panchayat is 3.18 sq.km, S.Kannanur Town Panchayat is 1.89 sq.km and Puvalur Town Panchayat is 1.23 sq.km. It is interesting to note that the developable area of the corporation is only 51.55% with 14.72% land under water bodies and 33% under agriculture. The fact that the river Kaveri bifurcates the corporation and it occupies a considerable amount of land area must be acknowledged for this phenomenon. Thuvakudi Municipality has a developable area of 71.21%, while Lalgudi Municipality has a developable area of 30%. Koothappar, Manachanallur, S.Kannanur & Puvalur Town Panchayat have developable land of 30.3%, 36.51%, 25.85% & 18.9% respectively, showing that there is strong agricultural base in the region as well as the geographical constraint of the presence of waterbodies which are an integral part of an agricultural economy. Thuvakudi is the most urbanised in terms of landuse. Koothappar Town Panchayat has 18.3% of its land under waterbodies and 51.4% of land under agriculture. It also has a good amount of industrial landuse which can be furthered. Its commercial landuse is more than double the stipulated commercial land use for a small town, which can be ascribed to it geographical location along the Trichy Tanjore NH and concentration of service sector industries, whose landuse fall under commercial. Manachhanallur Town Panchayat will do well with more land allocated under commercial and institutional landuse. There is further scope for tapping its agro based industrial capability. S.Kannanur has high concentration of commercial laduse of 16.4%, institutional land use of 8.5% an transportation land use of 18.5% owing to it being a Pilgrim centre with the famous Samayapuram temple located here. It can be observed that there is lack of recreational facilities across all urban areas based on land use. Hence conscious effort needs to be made to decentralise recreational landuse across the settlement area to promote quality of life. This can be easily achieved by promoting water front developments with focus on the water bodies in close proximity to settlements and by a careful mix of landuse constraints using mechanisms like controlled FSI in the buffer zones of rives, lakes, streams and

canals.

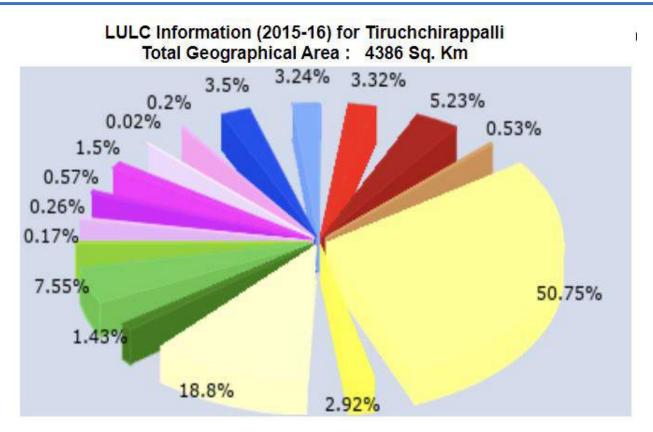
Focus also has to be given to providing the required physical infrastructure facilities for the maintenance of health and well being of the population in the form of solid waste management facilities, sewage treatment, storm water drainage, water supply and electricity. Solid waste management should be major focus on pilgrim towns where there is a lot of floating population and with it the generation of waste. Norms like plastic free zones, as pracitised in temple towns like Tirupathi and other eco sensitive areas can be beneficial.

### 12.4 Land Use, Land Cover (Land use and Land cover) and Land suitability

Inculcating the knowledge from the previous section, the structure plan for Tiruchirappalli 2041 is to be conceptualized for detailed project proposals later. To identify the structure plan, land suitability analysis should be carried out to identify the spots of development.

Land Use and Land Cover analysis done by Bhuvan Geo Portal & Web Services Group (BGWSG), National Remote Sensing Centre is used for inference of the region. The statistics which is available at the district level is shown below in the Figure: 12.4.1

Tiruchirappalli is an agriculture dominating district with 72.5% of the district is in agriculture area. 9.08% is built-up in the district. LPA region is 18.27% of area of total district. 6.74% of the area is under waterbodies. 9.15% of the district area is forest area. The LULC map for the LPA region is given as follows.



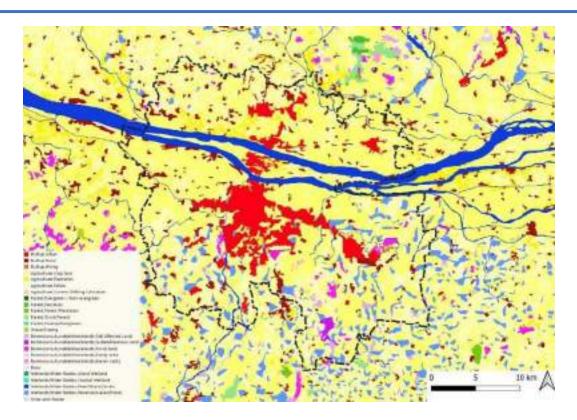
#### Figure 12-3 - LULC percentage 2015-16 - District

#### Source: Bhuvan - NRSC

ULC Class	Area (Sq.Km)	LULC Class	Area (Sq.Km)
Builtup, Urban	145.71	Builtup,Rural	229.22
Builtup, Mining	23.41	Agriculture, Crop land	2225.8
Agriculture, Plantation	128.26	Agriculture,Fallow	824.36
Forest,Evergreen/ Semi evergreen	62.89	Forest,Deciduous	331.36
Forest, Forest Plantation	7.62	Barren/unculturable/ Wastelands, Salt Affected land	11.6
Barren/unculturable/ Wastelands, Gullied/Ravinous Land	24.8	Barren/unculturable/ Wastelands, Scrub land	65.88
Barren/unculturable/ Wastelands, Sandy area	0.88	Barren/unculturable/ Wastelands, Barren rocky	8.64
Wetlands/Water Bodies, River/Stream/canals	153.32	Wetlands/Water Bodies, Reservoir/Lakes/Ponds	142.28

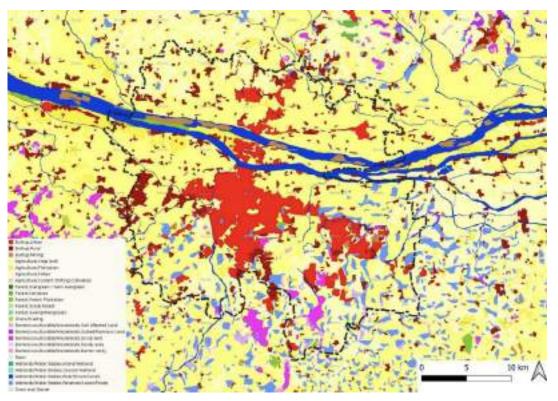
#### Table 12-12 LULC area split up 2015-16 - District

Source: Bhuvan - NRSC



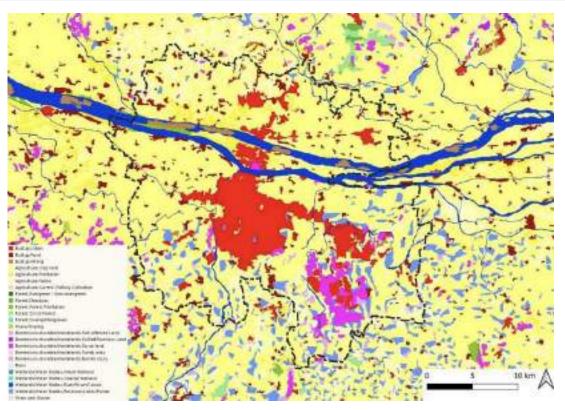
Map 12-16 LULC 2005-06

Source: Bhuvan – NRSC



Map 12-17 LULC 2011-12

Source: Bhuvan - NRSC

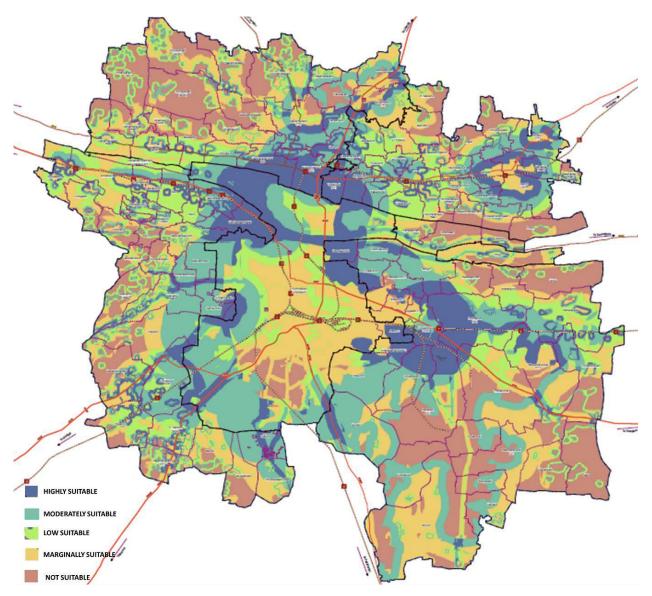


Map 12-18 LULC 2015-16 Source: Bhuvan - NRSC

The LULC analysis of the LPA region shows that the built-up is increasing on all the transport corridors. Industrial areas are seeming to be increasing in the southeast region. 2015 has more rural areas indicating that the commuting options have gone higher, and people are willing to stay away from the urban core. Built-Up is growing rapidly and in a dispersed manner which might be an issue for other uses and against the vision of the masterplan which is a compact city.

#### 12.4.1 Land Suitability analysis

The land suitability analysis is done for the LPA region considering the development facilitator and constraints for development. Parameters like slope, built-up, buffer, water bodies, restricted areas and transport corridors are considered for the analysis. Each of these parameters are given weights and a weighted overlay method of land suitability analysis is done using ArcGIS. The land suitability analysis is given below.



#### Map 12-19 Land Suitability Analysis

The areas which built-up already exist have low levels of development suitability. The areas around these built-up areas are highly suitable for development. The agriculture areas are far from transport corridors which makes those areas not suitable for development. There is huge potential for development along the transport corridors avoiding the water bodies.

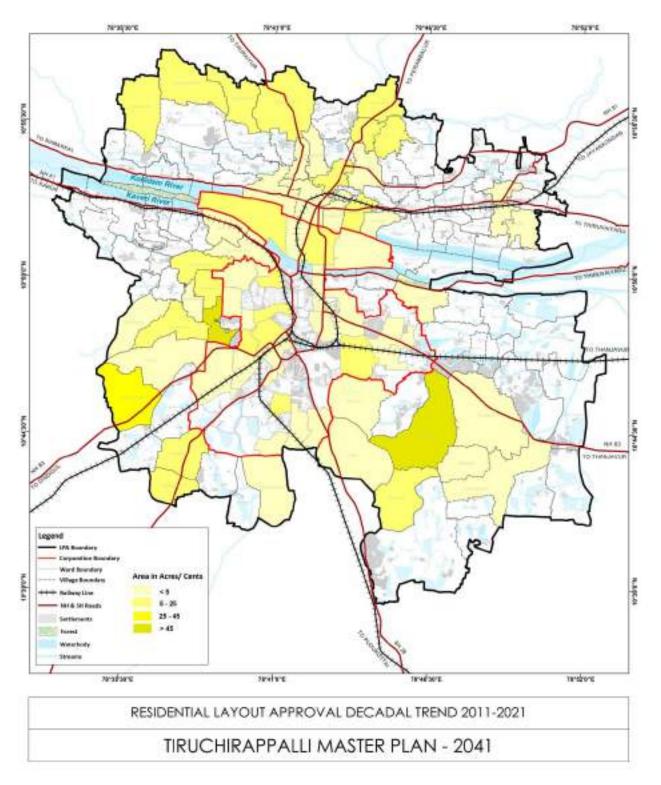
#### 12.5 Land development trend

A study of the trend of landuse in the past decade from 2011 to 2023 was undertaken by analysing the area in square meters of residential buildings,

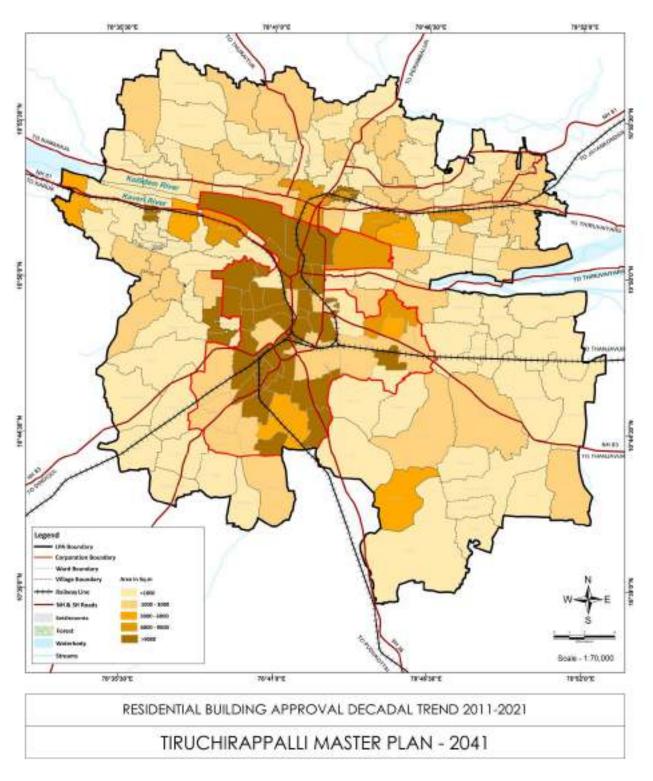
#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

commercial buildings, institutional buildings and industrial buildings which were submitted for approval of construction and the approval provided by the Local Planning Authority and other Local bodies. Residential layouts which were approved by the Local Planning Authority in acres and one industrial layout approved was also studied. This study helped in identifying the direction in which the development was happening in the form of commercial buildings, institutional buildings and industrial buildings. It also helped to identify the direction of development undertaken by the residential market forces in the form of residential layouts. It can also be used as a reflection of lower land prices or market speculation of future growth since ownership of residential land is considered as an investment. The disadvantage of making decisions of future landuse based on the trend is that the trend might be based on a flawed projection of growth by the market just based on land value, which will lead to uncontrolled sprawl.

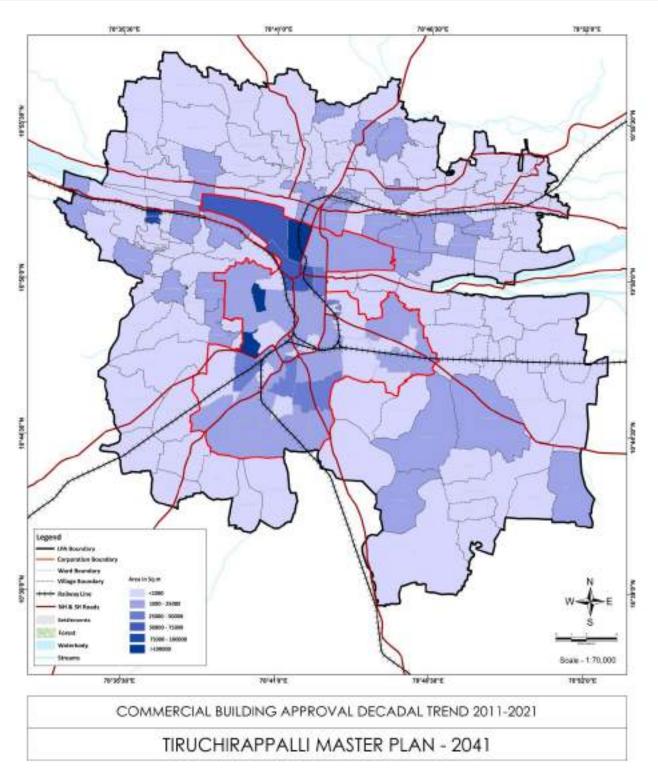
The study of residential layout approval trend shows that the maximum area approved falls in the Navalpattu census town and Nachikurichi which falls between Vayalur road and Dindigul road. Navalurkuttappattu, Nagamangalam



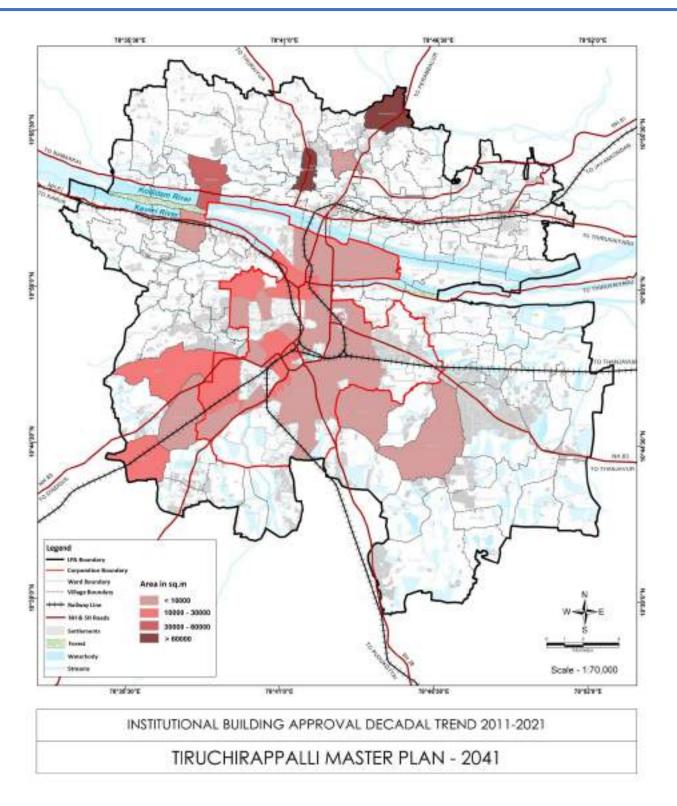




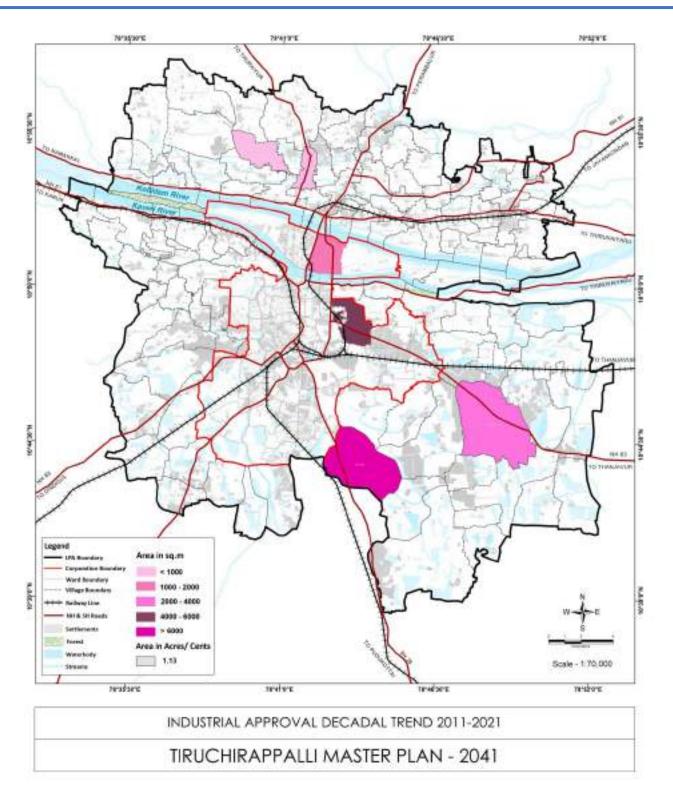
Map 12-21Residential Building approval decadal trend 2011-2021



Map 12-22 Coomercial Building approval decadal trend 2011-2021



Map 12-23 Institutional Building approval decadal trend 2011-2021







# **ISSUES AND POTENTIALS**

## **13. POTENTIALS AND NEEDS**

Based on the analysis of existing conditions of the sectors that were taken up for detailed study in the previous chapters, the strengths of Trichy were identified and measures to be taken to build on this strength and convert them to potential for propelling the development of the City, LPA and the region were charted out. At the same time prevailing issues were studied for understanding the ground realities and a way forward was charted out in the form of needs, to mitigate their immediate impacts in the short run and to rectify them completely by the planning horizon period of 2041.

#### 13.1 Economy

#### 13.1.1 Potential

- o Industrial growth through the promotion of SEZs and industrial parks
- Technological innovation and growth in IT and startup sectors
- Becoming a Research and development hub by strengthening higher education/ Research institutions
- The defense corridor is based on existing defense production facilities and will set up new industry clusters to create a supply chain of MSMEs, manufacturers with testing facilities and export facilitation centers.
- Strong agricultural base in the form of land and water and technological capabilities in the LPA can collaborate for value addition in agriculture.

#### 13.1.2 Needs

- Infrastructure development, especially along roads and major transportation networks for seamless trade.
- Need for diversification of industries to enhance employment opportunities.

- Emphasis on education and skill development, especially women, and the need to encourage their increased participation in the workforce.
- Need for a detailed survey in the study area to decode the existing scenario of workforce participation rate.
- Promotion of more Agro-industries to add value to agricultural products.
- Sustainable resource management as Agriculture is reducing due to the boom in the real estate market, which needs to be controlled to prevent misuse of land.

#### 13.2 Tourism

#### 13.2.1 Potentials

- Trichy boasts a rich cultural and historical heritage with its iconic landmarks such as the Rock Fort Temple, Srirangam Ranganathaswamy Temple, and the Jambukeswarar Temple holding significant religious and architectural importance.
- Trichy is endowed with natural landscapes with the river Kaveri flowing across the LPA with a great potential for eco tourism and river front development.
- Vast lands under agriculture and a rich agriculture base can also present as a potential for rural tourism.

#### 13.2.2 Needs

- There is an immediate need for detailed cataloging of all heritage precincts within the LPA before they lose their identity in the present trend of architectural modernisation.
- Despite its tourism appeal, Trichy faces challenges related to infrastructure and accessibility. The city needs improved transportation facilities, better

roads, and enhanced connectivity to key tourist sites.

- Preservation of heritage sites and monuments is crucial for maintaining Trichy's cultural identity. Efforts are needed to ensure the proper conservation and restoration of these historical landmarks.
- Legal framework to promote conservation of heritage precincts to enhance the experience of the tourist at the same time not impacting commercial development by formulating guidelines to control the ambience of the entire locality.
- There is a need to enhance tourism promotion efforts for Trichy, including marketing campaigns, improved tourist facilities, and the development of guided tours to showcase the city's heritage and cultural offerings.
- Balancing tourism growth with environmental sustainability and the preservation of heritage sites is essential. Sustainable tourism practices and responsible visitor management are important considerations for the longterm preservation of Trichy's heritage.
- An integrated approach for development of destinations providing not only core tourism products but also ancillary requirements such as connectivity, performing arts infrastructure, public health, hygiene and safety and other such requirements, which impact tourists.

#### 13.3 Mobility

#### 13.3.1 Potential

- Geographical central location of Trichy and its excellent intra state road and rail connectivity increases its potential to become a major transportation hub for intrastate mobility.
- Trichy with its radial growth pattern with a radial road network has a potential to develop nodes of transit oriented development.

• MRTS proposals are already in place considering city growth.

#### 13.3.2 Needs

- Densification of the city center is observed which creates congestion due to increased use of private mode of transportation. Hence there is a need to formulate measures to encourage people to change their mode preference from private modes to public mode by improving last mile connectivity to important urban centers and improving the public transport system from the perspective of comfort and reliability.
- Facilities to support freight movement to be planned out.

Road widening required in bottleneck roads to improve their Level of Service

#### 13.4 Environment

#### 13.4.1 Potential

Presence of natural waterways throughout the LPA and availability of large pockets of undeveloped land in close proximity to them, have a potential to be developed as urban forests or resilient landscapes to transform the LPA into a sponge city.

#### 13.4.2 Needs

- With a strong presence of the Healthcare Industry which is a major source of producing hazardous biomedical waste, demands the need for dedicated Biomedical waste management facility in the City
- With the ongoing reclamation of land efforts at Ariyamangalam Dump Yard site, there is an urgent need for identifying alternative land for solid waste management at a large scale.
- More than 70% enterprises in Trichy LPA registered with the Pollution Control
   Board are categorized as Orange and red, which recognises the need for

an efficient waste management system.

 The distribution of enterprises which are categorized as orange and red, and falling within the vicinity of surface water bodies, need to be evaluated to identify their impact on the water system.

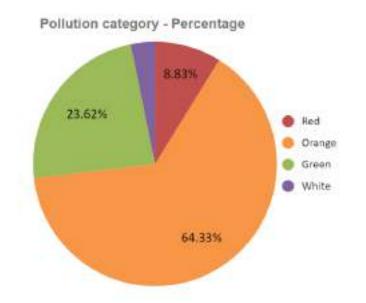


Figure 13-1 Pie-chart showing Pollution Category Percentage

#### 13.5 Physical Infrastructure

#### 13.5.1 Potentials

- Presence of natural water bodies as sources of potable water. Natural topography aiding in relatively easier drainage system planning.
- o Availability of land for treatment plant proposals.
- Strong intention towards improvement in solid waste management strategies has been already expressed from the government side.

#### 13.5.2 Needs

• Water supply and its storage capacity gap is high in the corporation area compared to the rest of the LPA and there is a need for identifying new

modes and mechanisms to increase storage capacity in a more efficient manner.

- UGSS covers Corporation and two Town Panchayats but Municipalities and other TPs need to be covered. Need to control disposal of untreated effluents into the natural waterways especially the Uyyakondan Canal.
- Storm water drains cover only the corporation area whereas only 4.6% of the rest of LPA is covered. The natural drains can be utilized to meet the storm water drainage but they need frequent maintenance to prevent choking due to landfills and encroachments
- Solid waste management Landfill is one of the means of disposal which will be cleared and MCC, Biomethane process to be installed to meet the current and future requirement.

#### 13.6 Social Infrastructure

#### 13.6.1 Potentials

- o Growing healthcare facilities.
- Educational institutes are on a High growth rate
- Parks in central city business districts.
- Utilizing all the notified parks can decentralize recreation.
- Green blue corridor has a potential to double up to fill in the gaps of recreational open spaces in Trichy.

#### 13.6.2 Needs

 Primary Health Care units are in deficit along the region. (Private hospitals subside only the current deficit) and hence there is need for formulation of mechanisms to encourage public private partnerships to improve the healthcare facilities in the rural areas as well as to cater to the marginalized population by measures of subsidization.

- Fire Station deficit needs to be prioritized as a Short Term requirement.
- The Primary school deficit needs to be subsided by Higher Secondary Schools.

## PLANNING PROPOSALS



## **14. PLANNING PROPOSALS**

#### 14.1 Vision/Ideation

As envisioned, the LPA is focused on the development of key sectors viz., Culture, Heritage, Industries, River Restoration and Agriculture, CHIRA 2041 wherein the ideation is economic development by boosting agriculture and related industries simultaneously conserving the indigenous values of the city and its resources.

Based on detailed analysis of ground conditions and considering the potentials of the LPA and the forecasted requirements, the following statement has been arrived:

"The Trichy Masterplan articulates the vision for the city's growth and development driven by its immense cultural & heritage value, lucrative industrial opportunities and sustainable agriculture, thereby strengthening the economy of the city without degrading river resources"

To ensure a sustainable and well-planned future growth of Tiruchirappalli, it is crucial to encourage a more compact and form-based approach. This entails preventing land degradation and mitigating the pressure on services through proper regulation and framework development. By promoting compact growth, the city can optimize land use and reduce sprawl, which in turn conserves natural resources and protects valuable ecosystems. Implementing regulations that prioritize smart urban design and limit urban sprawl will help create vibrant, liveable neighborhoods while minimizing strain on infrastructure and public services.

A comprehensive framework for development will enable the city to anticipate future needs, plan for infrastructure expansion, and ensure the efficient provision of essential services to support the growing population. By adopting these strategies, Tiruchirappalli can achieve sustainable growth while preserving its natural environment and improving the quality of life for its residents. Proposals for each sector has been arrived keeping in mind Trichy's sustainable and eco-friendly development.

#### 14.2 Guiding principles

Taking into account Trichy's strategic location and the hoard of natural resources it holds, the Masterplan is proposed keeping in mind the following aspects,

A. Conservation of Natural & Cultural Assets: Trichy's prime strength lies in its natural and cultural heritage. It has an immense network of water system with rivers, streams, canals, tanks and ponds which not only act as major source of water supply and irrigation, but also houses sensitive wildlife that has to be conserved. The Masterplan aims at conserving the natural eco-system of Trichy in addition to making it climate resilient so it is inherently transformed as Sponge city. Additionally, Trichy's rich history and culture plays a pivotal role in the LPA's development.

**B.** State of the art Infrastructure: Improvement in the living standards through provision of better infrastructure facilities and better connectivity.

**C.** Agriculture Oriented: Trichy is bestowed with excellent water system and soil conditions. Improvement in infrastructure network services and value-added innovations will aid in development of economy through agriculture and upliftment of farmers' life standards.

**D.** Tourism & Industries - Drivers of Economy: Owing to its rich heritage, improvement in regional and city mobility and strengthening the non-motorized roads in heritage areas will prove efficient in improving tourism.

#### 14.2.1 Blue and Green Infrastructure

#### 14.2.1.1 River/Canal Front Development

The river Cauvery, which flows between Tiruchirappalli and Srirangam towns, is a major source for water supply and irrigation. Koraiyar and Uyyakondan are major streams that gets connected to Cauvery. These major waterways are often considered as backyards of activities, in time get neglected.

Proposal focusses on activating the riverfronts and conceive them as front yards of

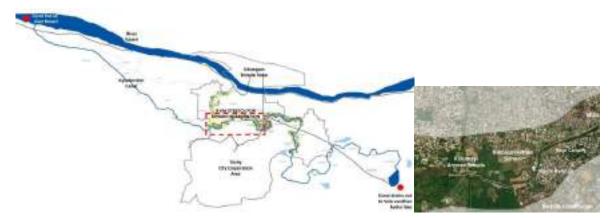
interactions that connect the neighbourhood with the waterways, which in turn aids in conserving the river's history & heritage. Over time, this shall ensure that the river is in pristine shape through the "Eyes on the Waterbodies" approach, wherein it is in the constant view of the public.

- A. Cauvery Riverfront Development: In addition to the existing guidelines on 15m buffer on either side of the river, it is proposed to transform these buffer zones into interactive spaces with the following features:
  - *Riparian Buffers*: Continuous stretch of vegetation along the riverbanks that protect them from adjacent landuse and improve water quality.
  - Connecting the rivers seamlessly with the neighbourhood through recreational spaces where the community can engage with the water.
  - Walking trails along the buffer with seasonal fairs and vending zones to enliven the connection.



Figure 14-1: Reference Images of Riparian buffer, walking trails and interactive public spaces for the proposed riverfront development

B. Uyyiakondan – Koraiyaaru Canalfront Development: Koraiyar and Uyyakondan are the two major streams running through the city S-N and E-W connected with the Cauvery River.



Map 14-1: Uyyakondan stream and proposed intervention location

This proposal conceived by CARE, SoA is to redevelop the Uyyakondan canal with riparian buffers and side-walks and interactive public spaces more focused towards wards 36,38 and 39.



Figure 14-2: Present condition of Uyyakondan canal

Additionally, bridges along the Uyyakondan canal can be treated as leisure zones and interactive spaces that can enhance the experience of the pedestrian footfall, keeping the waterbody on the front yard.



Figure 14-3: Reference Images for the Proposed interactive bridges along Uyyakondan canal

C. Odathurai Riverfront Development: It is proposed to develop a part of the Cauvery riverfront spanning a approx. length of 300mts [Development Area – 5460 Sqm] within the city limits [Ward No.15] along Cauvery South Bank Road, wherein amenities are designed for the community to engage with the waterfront. As the southern part of the site is predominantly residential and commercial, recreational space such as this can be highly functional which will also indirectly prevent pollution and non-confirming activities.



Map 14-2 - Map showing proposed site for development along Odathurai Riverfront



#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041



Figure 14-4- Existing condition of the Odathurai Riverfront

The riverfront is envisaged to be developed with walking tracks along the entire site length giving a picturesque view of the river giving a sensory experience to the users. Community engagement with the water is brought out through provision of bathing ghats, kids play area and amphitheaters. Sundial and watch towers are also designed to enhance the experience along with other public amenities.



Figure 14-5 - Proposed Promenade Design with walking tracks & bathing Ghat

#### 14.2.1.2 Rejuvenation of WaterBodies

The southern half of the LPA region is constituted by numerous lakes which then collect and flow down to the Cauvery River through streams, nallahs and channels. These water bodies need to be maintained and rejuvenated for efficient functioning of the natural drainage & catchments. As a value addition, the waterbodies can also act as tourist attractions with parks, boating facilities, walk ways created around them. In order to reinforce the water bodies, the following proposals are submitted:

- Rejuvenation of Kollangulam tank with boating facilities
- Rejuvenation of 6 ponds in corpn zone 3
- Green buffer of 15m with SuDS for Koothappar, Gundur, Vazhavandankottai and Thayanur Lakes
- Boating facility in Kollangulam, Thiruverumbur Vazhavandankottai Aeri & Manachanallur Water Bodies
- Upgradation of 47 water bodies in the corporation limits





Figure 14-6: Existing condition of waterbodies [Top] and reference images for the proposed boating facilities & upgradation of water bodies [Bottom]

#### 14.2.1.3 Urban Forestry

Urban forestry advocates the role of trees as a critical part of the urban infrastructure. It is a process of planting, maintaining and conserving the tree population in urban setting thereby significantly improving the tree canopy. It plays a major role in the creation of inclusive cities and communities.

As we seek solutions for the coming climate crisis, urban forestry will be a significant component in micro-climate management and the many benefits it will provide.

**Better Environment:** Urban forestry aids in maintaining ecological balance by restoring degraded lands and promoting bio-diversity conservation. These trees become home to numerous species of birds in an urban setting, effectively safeguarding natural resources and enhancing overall environmental health. Additionally, this creation of green lungs amidst concrete jungles improves the community's mental health.

**Pollution & Climate Control:** With urban centres facing high levels of air pollution, concentrated tree canopies help in absorbing harmful gases and releasing oxygen leading to improved air quality. Also, trees act as carbon sinks, absorbing CO2 which in turn reduces the overall temperature setting in micro-climatic changes that not only benefits the environment, but also reduces energy consumption.

**Storm Water Management:** Studies show that runoff from an area covered in impervious surface is five times that of a forested watershed of the same size.

Urban forests mitigate the risk of flooding and promotes recharge of ground water tables. This reduces the pressure on the storm water management system. Strategic tree plantation near water bodies and in arid regions can significantly contribute to water conservation efforts.

Urban forests have been proposed in the following locations in the LPA,

#### • Urban Forestry at Suriyoor [2.2 Acre]

2 acres of government land at Suriyoor village falling under agriculture land use was identified and the land was cleared off weeds and shrubs. Fifty trees of 8 different native species that are highly adaptive to Trichy's climatic conditions were planted in the site, which is to be further developed and maintained by the Forest Department.



Figure 14-7 Image of the site prior [Left] and after clearance of weeds & Shrubs [Right]

Tree saplings were selected based on careful consideration of Suriyoor's soil condition, climate and water table. Selected typology are indigenous species that thrive in the given climate and soil conditions.



Figure 14-8 - Inception of Tree Plantation at Suriyoor

The following native species have been selected for Urban Forestation.

Arasamaram [Peepal Tree]: Ficus religiosa or sacred fig is native to the Indian subcontinent that belongs to Moraceae, the fig or mulberry family. The sacred fig is considered to have a religious significance in three major religions that originated on the Indian subcontinent, Hinduism, Buddhism and Jainism. The tree provides shade and is an excellent habitat for birds and other animals. It also produces a significant quantity of oxygen during the day, making it an essential component of urban landscapes for reducing pollution and fostering healthier ecosystems.

**Naaval Maram [jamun Tree]:** Syzygium cumini, native to India, is an evergreen tropical tree in the flowering plant family Myrtaceae, and favored for its fruit, timber, and ornamental value. It can reach heights of up to 30 metres (98 ft) and can live more than 100 years. The tree is also known for its medicinal properties and is used in traditional medicine to treat various ailments.

**Pungai Maram:** Millettia pinnata belonging to the pea family, Babyaceae is native to the tropical regions of Asia. It has varying levels of tolerance to drought, salinity, and heavy metals in the soil. It has potential to mitigate climate change through CO2 sequestration. By restoring degraded land, it can bring socio-economic benefits to communities.

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

Athi Maram: Ficus carica, a species of small tree in the flowering plant family Moraceae, is native to Southern Asia. It has been cultivated since ancient times and they bear fruits year long. This becomes a massive food source for a variety of bird and animal species. Keeping surrounding wildlife alive and thriving directly benefits urban ecosystems' health and diversity. Milling around a bountiful fig tree, frugivores deposit the seeds – either in their droppings or by shedding those attached to their bodies, thus introducing a complex and diverse range of plant species back into the system resulting in healthy and dynamic regrowth of deforested landscapes.

**Neem Tree:** Azadirachta indica, native to India, belongs to the mahogany family Meliaceae. It is widely known to purify air by reducing GHG through photosynthesis absorbing large quantities of CO2 and producing oxygen. Besides, neem has remarkable ability to withstand air and water pollution, as well as heat. It also restores and maintains soil fertility.

**Magizham Tree:** Mimusops elengi is a medium-sized evergreen tree found in tropical forests. Its timber is valuable, the fruit is edible, and it is used in traditional medicine. As the trees give thick shade and flowers emit fragrance, it is an excellent addition to urban settings giving out a positive social impact on the community.

**Ichchi Tree:** Ficus amplissima, also known as the Indian Bat tree belongs to Moraceae, the fig or mulberry family. It is most commonly planted to provide shade due to its dense and wide foliage.

**Iluppai Tree:** Madhuca longifolia is an Indian tropical tree belonging to the family Sapotaceae. It is adaptable to arid environments, being a prominent tree in tropical mixed deciduous forests in Tamil Nadu.

Some of the other proposals are,

- Eco-forests connecting butterfly park and Mukkombu
- 7.1 acres of urban forestry along Uyyakondan Koraiyaaru BG Corridor



Map 14-3: Proposed Urban forestry along Uyyakondan - Koraiyaaru BG Corridor 14.2.1.4 Sustainable Urban Drainage System [SuDS]

Sustainable Urban Drainage System (SuDS) is a design approach that manages surface water runoff in a way that imitates natural processes, slowing down the runoff rate while providing wider benefits, such as public realm improvements and ecological restoration of the area. An overall area level SuDS approach can be supplemented with small cost-effective landscape features.

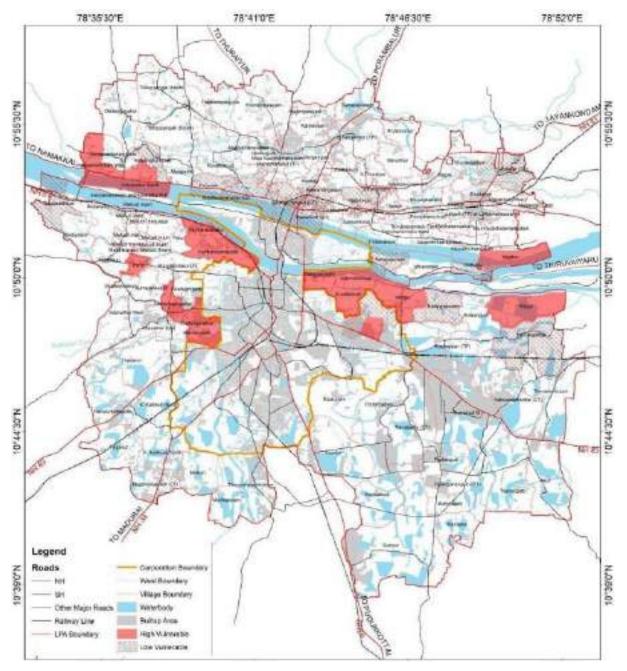
Major benefits of SuDS include, reduced pressure on the Storm Water Drainage System during intensive rainfall events, water conservation, flood control, improved biodiversity, green and natural environment, improvement in microclimate through evapotranspiration and diffusion of pollutants.



Figure 14-9: Reference images for the proposed Bioswales & Rain Gardens

The rivers Cauvery, Coleroon and their tributaries naturally inundate larger areas during floods. DEM analysis also indicates that the topography naturally slopes towards the river and tributaries making them flood prone. The low-lying areas along the tributaries of Uyyakondan river, has faced flooding multiple times. The identified hotspots are mostly along the river banks and hence treating these flood prone areas with SuDS elements will prove to be highly effective.

As formulated by CARE SoA, riverfronts along these areas can be proposed to created with Rain Gardens which are depressed landscaped areas that can take up storm water runoff temporarily to manage or prevent flooding along the transit networks and residences. At other times, they are beautified lawns and pavilions that add up to the beauty of the riverfront. Bio-swales are similar landscaped open drain that aid in channelizing rain water run-off towards the waterbodies preventing inundation and reducing pressure on the storm water drainage system.



Map 14-4- Identified Inundation Hotspots

# 14.2.1.5 Recreational Spaces

The prominent recreational activities are Butterfly Park, Ibrahim Park, Science Park, Anna planetarium and Anna sports stadium. Hence, to provide an urban zone with sustaining local Eco-Habitat, the following are proposed:

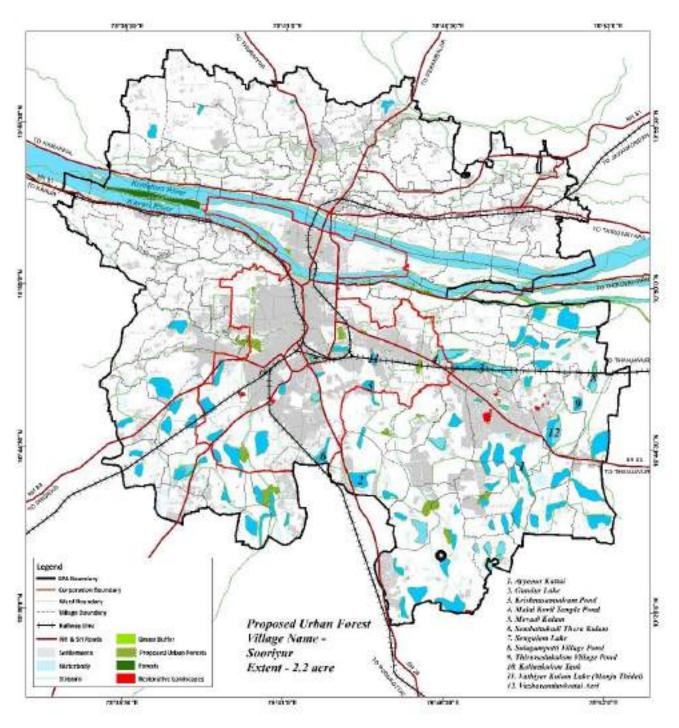
- Parks & Walking Tracks Lalgudi & Thuvakudi
- Upgradation and creation of additional parks & open spaces

• Children's park in South Thiruverumbur – Kattur Kaveri nagar

# 14.2.1.6 Policy Level Strategies

The above proposed river/canal front developments and rejuvenation of waterbodies all are focused towards conservation of waterbodies through effective transformation as "Front yard of Activities" which will put the waterbody on the forefront, preventing it from pollution and unauthorized developments bring in an "Eyes on the water" approach. Proposals like these combined with efficient policies and regulations will keep these lifelines thriving for decades to come. The River Centric Urban Planning [RUCP] Guidelines proposed by Town & Country Planning Organization [TCPO], Ministry of Housing & Urban Affairs, shines light on a holistic approach towards Urban River Management & Planning. As Trichy LPA is predominantly a river oriented settlement with its economy and culture relying mostly on the water bodies, some key indices of the RUCP guidelines that can be included in the DCR are discussed below,

- Establishment of No Development Zone and No Construction Zone in the active flood plains.
- River Regulation Zones [RRZ] and River Conservation Zones [RCZ] that will establish permitted uses and activities along the riverfront.
- Categorization of river stretches in the urban and peri-urban zones.
- Creation of zones along the riverfront as Eco-sensitive, Active and Passive recreational zones to limit and regulate activites.
- Devising an exclusive urban river management plan including action plans for flooding and draught scenarios.





## 14.2.2 Heritage & Tourism

Being a historical city, Tiruchirappalli has various architectural marvels & various temples in and around the city which creates a huge tourism potential for the city. Various sites such as the Amma Mandapam, Rock Fort temple etc., add to the important spots to attract the tourism.

# 14.2.2.1 Cultural/Heritage Tourism

According to Urban Reform 8: Supplementary Guidelines, Ministry of Finance, DoE, GoI, dt 19.6.2023, identification of economic activities and resources is the most important factor that leads to economic development of any city. Trichy has numerous spots enriched with heritage and cultural aspects which attracts heavy tourist population that has a potential to contribute to the economic growth of the city. Presence of ASI structures and religious places, architectural and engineering marvels help to boost the Cultural/Heritage Tourism. The notified ASI sites are Pallava Upper Cave, Pallava Lower Cave, Mainguard gate & Erumbeeswarar Temple.

## A. Srirangam Special Notified Zone [SNZ]

The region around major historical sites such as Srirangam, Thiruvanaikoil [1.5 km radius around both the temples] are retained to maintain their cultural value and is strengthened through "Special Notified Zones [SNZ]" as proposed by CARE SoA. These zones provide a more personalized and convenient experience for tourists, as well as better preservation of the heritage sites. SNZs allow for better coordination between tourism officials and local residents, as well as for the development of tourism-related businesses simultaneously preserving and emphasizing the heritage character of the sites and its surroundings

The Srirangam Ranganathaswamy temple site is on a large islet bounded by the Cauvery river and Kollidam river. As per UNESCO, Srirangam is considered the biggest functioning Hindu temple in the world covering an area of about 631,000 sq.m with a perimeter of 4 km. In 2017, the temple won the UNESCO Asia Pacific Award of Merit 2017 for cultural heritage conservation, making it the first temple in Tamil Nadu to receive the award from the UNESCO.

It is a vast and planned as a temple town with *Sapta-Prakaram* [Seven Enclosures] design where the sanctum, gopuram, services and living area are co-located in seven concentric enclosures formed by thick and huge rampart walls that run round the sanctum sanctorum in which the deity presides. The temple monuments

are located inside the inner five enclosures of the complex, surrounded by living area and infrastructure in outer two enclosures. Numerous gopurams [Numbered 21] connect the *Sapta-Prakaram* enclosures allowing the pilgrims and visitors to reach the sanctum from many directions with the Raja Gopuram, ranking the tallest in Asia, is 240 feet tall.



Figure 14-10 - Srirangam Eagle's view [Left] and Prakaram Entries [Right]

Active interchange of human values is happening between the public and tourists of the temple complex. Part of the temple is dedicated to its regular sevas, festivals and activities of Vaishnav Cult. The other part is vibrant with regular human settlement with all its daily routines and events. The temple is the nucleus and the life of people is centred around it. Unlike Madurai and Chidambaram, which are examples of settlements around a temple, Srirangam is a settlement within the temple. The urban form of Srirangam is followed by Sarvatobhatra of Manasara – Ancient Vedic Planning System.

On survey of the Saptha Prakarams, the usage and predominant activities of the veedhis were recorded and mapped. Map 14-5 depicts the list of cultural landuses that have been identified in the notified zone.

The four enclosures inside the complex are processional pathways for the deity and the fifth and sixth enclosures viz., Uthira and Chithirai Veedhis, house thirumazhigais, mutts and vedha patashalas, upanyasam mandapas and ashrams. The seventh enclosure, adayavalanjan veethi, houses chathirams amongst residential accommodations and the sathara street is filled with commercial activities and markets.



Map 14-6- Map depicting surveyed confirming uses and precincts around the Saptha Prakarams and Tourist Trail

There are two major festivals, one the Sethi festival, during which the deity is taken procession to Woraiyur Nachiyar Temple through the *Sapta-Prakarams* and Amma Mandapam. During this trail, mantras are chanted, with music accompanying thousands of devotees. Another festival, is a 10-day Thai Utsavam wherein the deity's procession happens in the four Uthirai veethis finally commemorating with Thiruvizha. Around this time of the year, pilgrimage tourists are found to be much higher.



Figure 14-11- Processions in Prakara Veethis during Utsavams

A heritage loop is identified, which effectively connects the tourist and transit facilities in Srirangam island [Map 14-4]. This is an initiative for ensuring that the religious and heritage sites of the city are visited by all who visit the island.

For a heritage precinct with such cultural importance, in addition to the existing height restriction [Height to restricted to 9mts] norms for the 1km radius influence area the following considerations are proposed,

# Adaptive Reuse of heritage buildings - agraharams around Srirangam temple precinct as,



Map 14-7 Proposed SNZ at Srirangam and Heritage sites' location

- Heritage Centres/ Performing arts Centre to promote traditional arts
- Tourist accommodation & Guest houses
- Kalakendras

Model villages exhibiting cultural practices, food & work of the ancient tamils

- Changes/Reuse of non-confirming landuse in the zone
- Architectural control in terms of facade, frames and modules to conserve the heritage values and avoid heterogeneity.



Figure 14-12 Elevation of existing buildings & suggested facade treatments conserving Srirangam's heritage elements





Figure 14-13 - Street view before [Top] and after facade control [Bottom]

- Grading of heritage buildings for adaptive reuse
- NMT priority in streets with heavy pedestrian footfalls

NMT trails are proposed in alignment with the heritage loop to enhance visitors'

experience. Based on the survey, the following streets have been identified as NMT Trails with pedestrian friendly facilities and street elements. The vehicular traffic can be diverted to the roads branching out from this main road towards east and west thus converting the thoroughfare with Extra Wide Sidewalks, Neighbourhood Streets and Pedestrian only zones.



Map 14-8 - Srirangam SNZ with proposed NMT Trails

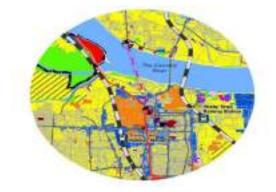


Figure 14-14- Existing condition of Prakara veethis [Left] & reference image of the suggested Transformation [Right]

Heritage sites are important to the city and should be treated with the same reverence as other cultural treasures. The greatest approach to guarantee that historical sites in the city are maintained and preserved is through heritage policies and a specially crafted DCR. In order to maintain artifacts, structures and precincts of historic, architectural, aesthetic, cultural or environmental and heritage value, a special provision in the DCR is proposed for Special Notified Zones, addressing architectural elements, height restrictions, landuse control, grading of heritage buildings and their grain sizes etc.,

In order to further attract more tourists, the following are proposed:

Rope Car from Rockfort temple to Amma Mandapam



Map 14-9: Proposed Rope car facility

• Tourist Infrastructure facilities at Amma Mandapam

# 14.2.2.2 Eco-Tourism

To promote adventure tourism aside religious tourism, the city has the potential to explore & implement various Eco- tourism places to further add value to the tourism potential of the landscape. Some of the Eco-tourism sites already in existence or under progress are the Butterfly Park, Anna Science Planetarium, Sir C.V Raman STEM Park, Jallikattu at Suriyur, Aadi Perukku at Amma Mandapam & Deer Park.

In addition, the proposals are submitted to further enhance the tourism potential,

• Establishment of Zipline from the Butterfly Park to Mekkudi railway station across Cauvery River is proposed.



Map 14-10: Proposed zip line facility

• Walking & Cycling Tracks along Uyyakondan Canal

- Geo-scaping of Defunct Quarries

Six abandoned quarries falling inside LPA region encompassing an area of 276.8 hectares have been identified [Table 14-1].

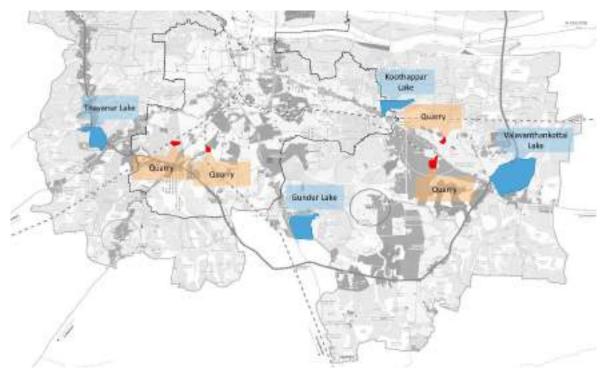
Quarry Type	Location	Extent [Hec]
		86.5
		49.5
Rough stone quarry		72
Total area: 276.8 hectares		20
	Kulathur, Srirangam	41
	Tiruchi (West), K.O Abhisekapuram	7.8

Table 14-1 Location & Extent of Quarries

Since the quarries expose the ground water table, it is viable to convert them into

reservoirs which will act as a man-made lake, storing run-off and recharging ground water. Other than rainwater catchments, these sites can also be redesigned as recreational spots and get-aways with public amenities that provide regional level social engagement.

Quarries away from the major roads can be considered as rainwater catchments and those which are closer to major roads are proposed to be developed as recreational stops for increased leisure and tourism activities. It would invite an adequate number of users improving the city's imageability.



Map 14-11- Location of Quarries & Major Waterbodies

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041



Figure 14-15: Present condition of Quarry at Abishekapuram [Top] & Reference images for the proposed restoration of defunct quarry sites [Bottom]

While restoring the mined-out lands, it is proposed to create diverse forest area with plant species that facilitates the local species of birds, insects, small animals & reptiles to thrive, transforming this area in the future to be a fully functioning ecosystem. While acting as rainwater catchments and recharging ground water tables, these sites will gradually emulate a natural self-sustaining eco system that supports local bio diversity, as well as establishing experience centres that are not only recreational but also educational.

## 14.2.3 Economic Planning

One of the fundamental aspects of urban planning is its economic component, which examines how urban objectives work economically and how urban development has an impact on their economies which makes it a significant feature for formal delineation of sub region. Tiruchirappalli is an important commercial center, and the major commercial establishments are located along the major roads. The study analysis shows that the concentration of non-primary activities [secondary & tertiary] in and around Tiruchirappalli and other emerging urban areas is more.

Identification of economic activities, resources and their integration with the transport network results in the hierarchy of growth districts [First, Second & Third Order].

## 14.2.3.1 Micro Clusters

Apart from being the Boiler capital of India & Defence Corridor Node, the presence of Central Government educational institutes and industries makes it a hub for heavy and metal industries. Also, the study area has excellent road and air connectivity. This can be explored for additional employment generation through ancillary industries and micro clusters. In this view, the following are proposed,

#### A. Micro-clusters for Agro based firms in Manachanallur

Manachanallur is equipped with two Primary Processing Centres [PPC], one for onion and other for banana. Onion PPC is well connected to SH62 by Edumalai road, giving it an easy access to the road transport. This location is a major Onion growing and trading cluster. It caters the trading, processing, and export community of production group around Mannachanallur. The crop grown around a radius of 30km can be processed in here.

Banana PPC is well equipped with a packhouse and additional handling area to handle about 24 MT of banana on a daily basis. This PPC is established to focus on handling bananas. Other basic amenities such as admin block, power station and sanitary blocks are also provided inside the premises. A quality control lab is provided in the facility for the assessment of the quality of produce before and after processing. This is to ensure the quality standards of the produce delivered from the processing centre. With such infrastructure and connectivity, development of agro based micro clusters that encompass agri and agri-oriented firms which can be developed under Pradhan Mantri Formalization of Microfood Processing Enterprises (PMFME) scheme will significantly improve the economy generation.

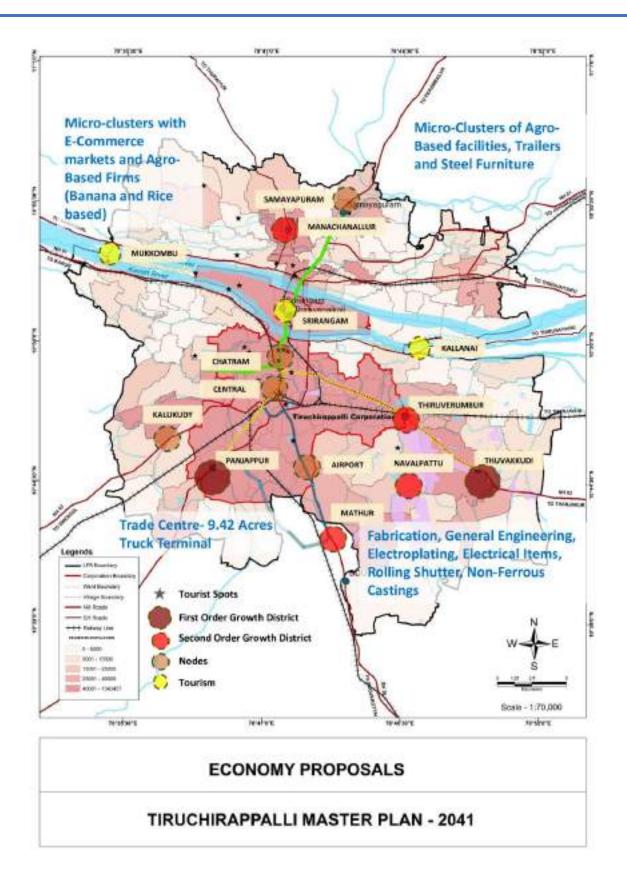
#### B. Establishment of Trade Centre – Panjappur

Establishment of Trade centres will serve as a catalyst for Micro, Small & Medium Enterprises [MSME]. Based on preliminary studies, TIDITSSIA [Trichy District Tiny & Small Scale Industries Association] in co-ordination with district administration have identified site for trade centre development at Panjappur [9.42 acres] which has been confirmed by SIDCO. Trade centre can be used as a platform for marketing various production and conducting conventions and fairs. This would help diversify small scale industries and provide opportunities for them to flourish in the central region.

Some of the other proposals are,

- Identification of nodes for Low Volume High Margin investments
- Medium and small units in fabricated metal products offering 50k+ jobs

Below map [14.9] depicts the proposed growth districts superimposed over the projected population map to compare and contrast the influence of population along the growth districts. The projected population in major nodes implies that growth potential is identified around the strategic locations.



#### Map 14-12: Proposed Micro clusters and nodal growth centres

# 14.2.3.2 Technological Advancements

Being an Educational hub with the presence of central and state educational institutes like National Institute of Technology (NIT), National Law University (NLU), and Indian Institute of Information Technology (IIIT) Scope for linked enterprises and employment generation. The advantage of R&D and technological innovation centres will be easy for access, with which the following proposed are submitted:

- Establishment of E-Farm Markets & Upgradation of Farmer's markets

- Analyzing strategic places for setting up terminal facilities (like near Gandhi market, Panjapur etc)

# 14.2.3.3 Knowledge Dissemination

In addition to the identification of growth districts and introducing IOT in the economy sector, it is imperative to preserve arts and crafts native to the region and identify strategies for income generation so the craft stays alive and adds to the heritage and economy of the region.

One such craft is East India [EI] Leather. It is an Indian vegetabletanned leather produced exclusively by the tanneries in Trichy & Dindugal. El leather craft has been there in the region since 1856, under the British Raj. The tannery unit based on the El technique, after the East India Company, popularized the technique in this region to cater to the British Army.

Today, El Leather has been approved and registered as an exclusive geographical product under the Geographical Indications of Goods (Registration and Protection Act), 1999. This gives the product an exclusive brand image indicating the special quality or characteristic/reputation unique to the geographical location. The unique process and craftsmanship of producing El leather (East India denoting its colonial legacy) has been adopted by the small-scale tanners in Trichy areas in Tamil Nadu for over a century. Many units have been functioning here since 1850

has dominated Indian leather exports till 1970 before the advent of chromeprocessed finished leather. Due to this, number of El leather operational units has now come down to eight from around 25 units.

Expert tanners confirm that there is good scope for manufacturing niche products from El leather and export of these products are highly viable as there is a good demand for El leather in foreign countries, especially Europe [possibly in Mathur cluster as most of the tannery units in Trichy are located here]

Trichy being an educational hub, it is highly feasible to create knowledge dissemination centres for to revive native and age-old crafts from expert craftsmen and passing down to the next generation. Additionally, special sanctions from government can aid in setting up tanneries in the identified growth nodes for the production and export of El Leather.

14.2.4 Mobility Plan

## 14.2.4.1 Road Network Plan

Tiruchirappalli has a radial network with roads emerging from this city center and connecting various places in the city. The core city is the center for commercial and market activities for the district and the region, resulting in very high travel demand in the city. Due to the floating population, certain extent of congestion on the road to absence straight roads / by pattern to carry the traffic that are more between points beyond Tiruchirappalli, there is a need to strengthen regional connectivity through improved transportation strategies. In order to keep the interdependence between Trichy LPA and its hinterlands intact, improved transportation modes with better frequency as well as intermodal transit are required. Also, the connecting the growth Urban area in the LPA need to be improved. In this regard, to improve the Road Network the following are proposed:

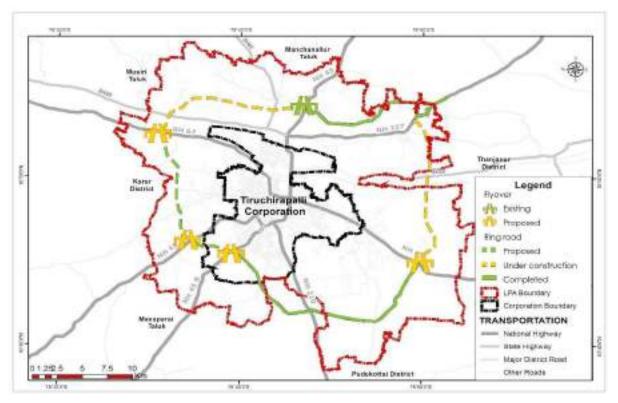
#### A. Improvement of Ring Roads

The outer ring road is proposed is on southern side based on NHAI project. The total length of the road is 43.51km and passes through Tanjore road, Pudukkottai Road,

and Dindigal road and it ends in Karur road. The ring road is further proposed to connect Thuraiyur Road, Chennai Road, Ariyalur Road and back to Tanjore Road and length of the road is 36.27km. Presently, ring road is 50% completed with Chennai NH45 to Ariyalur NH227 and Tanjore NH67 to Madurai NH45B. Ring Road is under construction from Madurai NH45B to Karur NH67. The remaining portion of the road is proposed for development.

#### B. Additional Flyovers & River Bridges at strategic locations

Tiruchirappalli gets traffic through these main National Highways from all direction. Creation of a ring road might hinder this movement and signalized junction might cost valuable time. Therefore, the places of intersections are proposed with flyovers. The locations of the flyovers are given in the map below.





#### C. Improving the SEZ link Roads

Navalpattu SEZ has a 18m road connecting Pudukkottai Road NH210 through Gundur village ending abruptly. Therefore, a link road of 18m from the proposed ring road to this road would create a continuous flow. Another link road from NH67 at Palur village that connects the proposed outer ring road at Perur village is proposed.



Map 14-14- Map depicting proposed Navalpattu SEZ link road [Left] & Palur to Perur Link road [Right]

Road Network	Node	Length [Kms]
Ring Road (incomplete stretch on the eastern side)	Kallikudy-Thayanur-Adavathur- Jeeyapuram- Melapathu- Madakudi- Sirumayamkudi- Thuvakudi	33
Missing Links	Trichy IT Park Road and Trichy By Pass	6.7
Missing Links	Butterfly Park Road	6.7
Fly over	Chatram Bus Stand	2 nos
River Bridge	Amma Mandapam to Karur main Road	1 nos

Table 14-2 Proposed Links & Road Networks

A total of 46 km of the additional road network is proposed for the city which includes, the ring road and link road proposed. Attributing to the industrial character and the heavy flow of freight traffic in the city, the outer ring road is proposed which will further enhance the connectivity of the study area in the coming decades and would ensure a smooth flow of passing through freight traffic.

#### D. Widening of Roads

E. Road Network	Existing ROW [m]	Length	Proposed ROW [m]
Salai Road (from Kohinoor Signal to Puthur Agraharam Road)	12	2.46	18
Big Bazaar Street (from NSB Road till Trichy Market Arch)	10	1.13	15
Palakarai Street (From Trichy Market Arch to Sivaji Ganeshan Junction)	12	0.60	18
Widening of Koothapar to Pathalapatti village road	7	6.27	18
Widening of Ponmalaipatty road	7	2.28	18
Widening of Thiruverumbur to Sooriyur road	7	4.15	18

Table 14-3 Proposed Road Widening

A total of 17 km roads has been proposed for widening/upgrading. The list of roads and the proposed ROW is provided below,

#### B. Grid of Roads

The site selected for the demonstration plan is between Thiruverumbur & Vengur. The slope and lay of the land are identified to be in line with existing water bodies and the direction of natural water flow. Major roads are oriented along the natural flow of water which also assists in developing efficient stormwater and drainage infrastructure. The existing Vengur Road is widened to have at least 18m Right of Way and a new parallel road of 18m wide on the West is proposed along the natural slope of land. These two parallel arterial roads are connected by a grid of collector roads spanning 250- 450 meters to encourage

walkability. It is planned to retain the road hierarchies subject to contextual conditions for effective connectivity. Any new developments to be in line with the grid of roads thus maintaining it as a connected system. A well-connected grid of roads along with features such as continuous green buffer of 3m on either banks of the canals, 15m wide urban forest corridors around the Periyakulam lake and public space around the Thiru Erumbeeshwarar heritage site, add to walkable and well-connected neighborhood, which has a potential to support appreciable quality of life.

This proposal conceived by CARE, SoA is to be manifested to be manifested at neighborhood level across the city by taking the respective local context into consideration without disrupting the natural ecology, especially the water bodies and the adjacent green corridors. Proposed roads should respect the natural slope of the land and aid in the efficient storm water drainage and thereby minimizing foreseeable damages in case of floods. Apart from the arterial roads, the sub-arterial, collector and sub-collector roads to be developed so as to create urban blocks of 250m-450m grid which will encourage walkability.



Map 14-15 - Micro plan showing proposed Grid of Roads



Map 14-16: Map depicting proposed Grid of Roads

Proposed Road Network [Total Length: 145.83 Kms]	
Proposed Arterial Road A1: Madakudi -Panjappur	
Proposed Arterial Road A3: Muthurasanallur-Panjappur	
Proposed Arterial Road A8: Nerujalakudi (Thirumangalam) - Thuvakudi	
Proposed Arterial Road A9: Purathkudi (Irungalur) - Vengur (MDR306)	12.46
Proposed Sub-Arterial Road A4: Kilamullakudy - Kuvalakuddy (Kattur)	4.91
Proposed Sub-Arterial Road A5: Navalpattu - Gundur	6.93
Proposed Sub-Arterial Road A7: Arasangudi - Navalpattu (Poolankudi)	
Proposed Sub-Arterial Road A10: Keelakalkandarkottai - Gundur (Kilakurichi)	
Proposed collector Road A2: Thudaiyur(Thiruvasi) - Sirathoppu	
Proposed collector Road A6: Thogur(Arasangudi) - Krishnasamudram	

## Table 114-4-4: Grid of Roads - Proposed Hierarchy

To alleviate all the existing and possible future transport problems and to facilitate safe and efficient movement of people, a Comprehensive Mobility Plan [CMP] that provides a long-term vision and mobility solutions for the citizens

DIRECTORATE OF TOWN AND COUNTRY PLANNING

of Tiruchirappalli was prepared. The study develops a perspective plan for sustainable urban transport over a 20-year horizon period.

The Vision of Comprehensive Mobility plan is "To ensure that mobility solutions for Tiruchirappalli are integrated to be people centric and are in conformity with sustainable mobility, targeted for the horizon year 2042".

CMP has envisaged a multi-pronged approach with various mobility and policy strategies to achieve the vision as below,



Figure 14-16 - Mobility proposals under CMP 2041

# 14.2.4.2 Public Transport Strategies

#### A. Panchappur Bus Stand

The city has 2 major bus termini, Chathiram Bus stand near the historical core and Central Bus Stand near the center of the Corporation. An Integrated Bus terminus is under construction at Panchappur along the Trichy Madurai Highway NH38, with an aim to decongest the City Centre. For easy access and better traffic flow, a new bus stand is being built in Panchappur. This will stop traffic flow towards the center of the city and clear congestion. Due to the presence of

several educational institutes in and around Panchappur, this bus stand would serve the student population. The presence of proposed stadium adjacent to it will help create a node that gets busy during special events.

DIRECTORATE OF TOWN AND COUNTRY PLANNING TIRUCHIRAPALLI LPA | 377

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

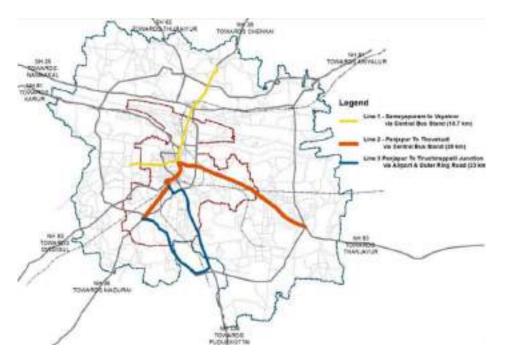
#### | PLANNING PROPOSALS



Figure 14-17: Location and Reference images for the Proposed bus shelter at Panchappur

#### B. Proposed High Demand Corridors

It is envisaged that buses shall continue to be one of the major modes of public transport in Tiruchirappalli, and keeping in mind the increase in population and future growth of the city, 'High Demand Public Transit' corridors have been identified for the study area along the North-South and East-West corridors of the city, covering a span of 68 km.



Map 14-17 Map showing proposed high demand mass transit corridors

## 14.2.4.3 Traffic Planning & Parking Management

Strengthening the transportation will allow for population concentration to support TOD. The basic need for a strong transportation system to support the economic development is the traffic planning of the location. In order to strengthen over the existing signalling & to accommodate free flow of future traffic growth the following aspects are proposed:

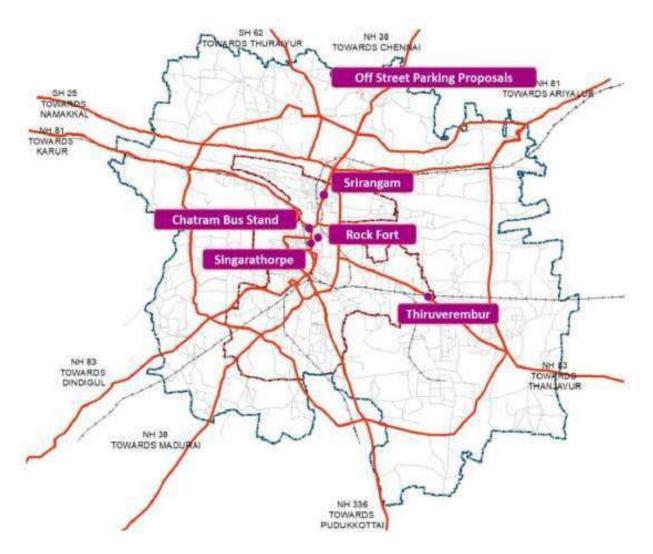
- Junction & Corridor Improvements
- Smart signals & Signages
- Improved Road Pavement Markings for all roads
- Providing smart parking facilities (like multi-storey parkings), parking tolls/tag.

#### A. On-street & Off-street Parking Proposals

- To ensure that all on-street parking areas and parking lots in off-streets are clearly marked and easily identified, the following standards should be followed-
- On-street parking spaces shall be designed as per IRC: SP: 12:2015.
- Boundaries of all on-street parking spaces will be marked by white line as indicated in IRC: 35- 1997.
- Signage marking parking and no-parking areas shall be marked as per IRC: 67-2012.
- Certain following guidelines need to be observed while defining noparking areas:
- Prohibition of parking for at least 50 m from all junctions.
- Prohibition of parking at least 10 m from all zebra crossings.
- No private vehicle parking beneath multi-modal transit stations.
- Street parking, if necessary, should only be provided at a distance of 50 m from the metro station.
- For enforcing parking near schools, hospitals, educational institutes, and

other facilities, authorities can facilitate and encourage them to involve volunteers, traffic wardens, or others to manage to park.

As a Part of the Comprehensive Mobility Plan 2041, 5 multi-level car parking (MLCPs) have been proposed in Srirangam, Chatram Bus Stand, Rockfort area, Thiruverumbur and Singarathoppu. Rock Fort Off Street parking will be implemented in Phase 1, and rest four will be implemented in Phase 2 and 3.



Map 14-18 - Proposed Off Street Parking Locations

## 14.2.4.4 Non-Motorized Transport

Some areas like the Sri Ranganatha Swamy Temple and its heritage precincts

have accumulated traffic and congestion. A solution for it is to make few parts of the road pedestrian friendly and make it non-motorized road for free flow of people. The traffic can be diverted to the roads branching out from this main road towards east and west. Converting the thoroughfare with:

- Wide sidewalk NMT Footpath Proposal
- Neighborhood Streets
- Extra Wide Sidewalks
- Limited Vehicular Access with Pedestrian Crossing Infrastructure
- Pedestrian Only Zone
- Bicycle Tracks



Figure 14-18: Reference image for the Proposed NMT Infrastructure

# 14.2.4.5 Freight Management

Freight management is the process of efficiently and strategically moving freight across a network from its point of origin to its desired destination using various modes of transportation, intermediaries, and technologies. This will enable the economic growth of the region. The growth of freight movements has seen to be increasing at Tiruchchirappalli through Rail, Air & Roads. It has been observed that, due to the presence of high amounts of freight transport along the NHs, a requirement for truck terminal is required that prevents heavy trucks entering the city.

Additional freight terminals and freight consolidation centres will alleviate all the existing and possible future transport problems and will facilitate safe and efficient movement.



Figure 14-19: Reference image for the Proposed Freight terminals

## 14.2.4.6 Transit Oriented Development [TOD]

TOD is an approach to Urban Development designed to bring people, services, and activities together with quality public transport supported by walking and cycling conditions to facilitate shorter trips, better lifestyles, and more efficient use of city resources.

TOD promotes compact city growth by integrating land development and transport network combating urban sprawls and pollution through reduced use of private vehicles. It also helps in creating vibrant built environments with safe walking and NMT facilities, besides ensuring integration among various modes. Accessibility and connectivity will get a boost since resilient neighborhoods will provide the needs of daily living, within walking distance [0.5 to 1 km radius]The major components of the TOD approach are as below,

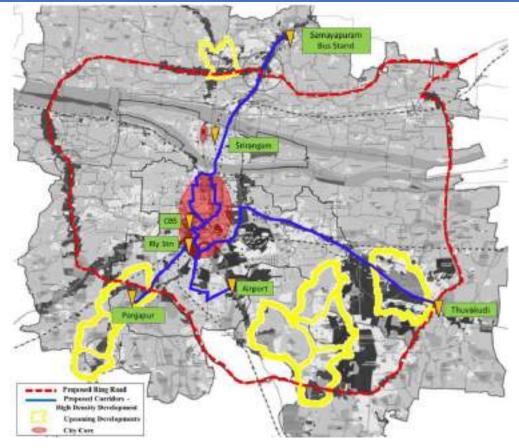
- NMT Network & Complete Street Design: Walking and cycling are the two major forms of NMT which are the fundamental features of TOD resulting from a human centric approach of street design activating neighbourhoods.
- Mixed Landuse & Optimised Densities: Concentrated and diverse activities enable flexible journeys and detours that not only reduces the dependence on vehicular transport but additionally increases the value of spaces proximal to the transport network so they are used and more spaces can be allocated for community engagement and other activities. This integrates transit and activities in a space efficient way.
- Interconnected Street Network & Housing Diversities: This allows the mix of people from all income classes so as the neighbourhood is developed more inclusive. A densely connected locality promotes walking and cycling in addition to being self-sufficient.
- Multi-Modal Integration First & Last Mile connectivity: Success of TOD zones, depends on how well these neighbourhoods are connected with other modes. This helps to increase transit riderships by serving the missing connections.

 Traffic Calming & Managed Parking: TOD aims at reducing the impact of private vehicular traffic and reclaim the spaces for human interaction and reduce pollution. To enable this, existing road infrastructure needs to be prioritized accordingly and introduce additional parking spaces in proximity to the TOD zone.

In the LPA, future developments are expected towards the North, South and Eastern regions of the study area. While planning new neighborhoods in these areas, it provides the opportunity for bringing all aspects of TOD in a holistic manner. New neighborhoods can be planned with mixed uses, walking, and public transport to maximize development potential and ensure short and convenient trips and healthier environments.

As per CMP 2041, the proposed TOD zones that will aid in the improvement of accessibility of the region are as follows:

- Along Madurai Main Road from Panjapur Proposed Bus Terminal Sivaji Ganeshan Statue Junction.
- Along Quaide Millet Road, West Boulevard Road, College Road, Nandhi Koil Street and Trichy Chennai Trunk Road.
- Vellore Thoothukudi Highway on to Grand Southern Trunk Road towards Thanjavur Road to Thuvakudi.
- From Simco Road to Trichy Airport via Rajaram Road and Wireless Road



Map 14-19- Proposed corridors for high density development

Maximum permitted FSI in urban bodies of Tamil Nadu is 2 [without considering premium FSI]. For the purpose of encouraging Transit Oriented Development, CMP recommends an increase in FSI up to 3 in all the influence areas of the high mass transit corridors. Additionally, to facilitate the implementation of the TOD strategy, CMP proposes a TOD Policy be undertaken along with a detailed TOD study for Tiruchirappalli Local Planning Area.

# 14.2.4.7 Air Transport

Trichy City is located almost at the geographical center of Tamil Nadu. Its strategic location with respect to its neighboring Cities and suburban towns of the State, testifies its potential to become a significant economic center with inter and intra-regional dependance. Trichy International Airport located on the NH210- Trichy Pudukkottai Highway, connects Trichy domestically with Chennai, Bangalore, Hyderabad & internationally with Colombo, Malaysia, Singapore and the Gulf countries. Air cargo from Trichy mainly consists of petroleum and flower. Due to its strategic location, there is a huge necessity for expanding air cargo to 6000 MT [as per vision TN \$1 Trillion] and to support the forecasted expansion, passenger capacity augmentation is also proposed.

## 14.2.5 Physical Infrastructure

Physical infrastructure refers to the basic physical structures required for an economy to function and survive, such as transportation networks, a power grid and sewerage and waste disposal systems. A city's provision of these basic necessities will reflect how well the city is developed and effort made to achieve this level of Level of Service (LOS).

# 14.2.5.1 Water Supply

The availability of natural water sourced through Considering the continual improvement in the standard of living and population growth (projected at 27,80,491 by 2041), the water demand is envisaged to increase to 264 MLD, which can not be met with the existing Water supply and its storage capacity. It may also be noted that, the gap is high in corporation area compared to rest of the LPA. In order to address the rising demand in water supply & storage the following proposals are submitted:

- Over Head Tanks (OHTs) shall be provided in required locations to meet the gap in demand
- Water source augmentation possibilities such as rain water harvests, improvement of catchments, recharge pits/zones etc shall be identified & implemented at strategic locations.
- Sustainable use of water & distribution shall be implemented.

## 14.2.5.2 Sewerage

The objective of a public wastewater collection and disposal system is to ensure that sewage or excreta and sullage discharged from communities is properly collected, transported, treated to the required degree and finally disposed off without causing any health or environmental problems. The projected Capacity for Sewage treatment by 2041 should be 206 MLD whereas the existing capacity is 102 MLD. In order to meet the demand for treatment facilities the following STPs are proposed:

- FSTP in Lalgudi Municipality
- STP in Panjapur near koraiyar river bank.

At present the UGSS covers only Corporation & 2 Town Panchayats, however, it is proposed to cover the Municipalities & other Town Panchayats along with additional STPs as per requirements. Further, DEWATS system is proposed in Town Panchayats & villages where low population is observed. Implementation of systems for re-cycle & re-use of wastewater is also proposed to reduce the stress on the demand for fresh water.

# 14.2.5.3 Storm Water Management

The purpose of providing storm water drains is to carry the rainfall (storm) runoff from the terraces, paved courtyards, footpaths, roads etc. in the developed area so that flooding does not occur. There is need for an integrated drainage plan for Tiruchirappalli Local Planning Area. The estimation of runoff reaching the storm water drains is dependent on the intensity and duration of rainfall, characteristics of the drainage area and time required for such flow to reach the storm water drains. At present the storm water drains cover only the corporation area whereas only 4.6% of the rest of LPA is covered. To ensure proper functioning of storm water drains to avoid frequent flooding, it is proposed to

- Provide 100% storm water drain coverage in corporation
- Utilize the natural drains to meet the storm water drainage wherever possible
- Cleaning & maintaining the natural drains to channelize the water flow.
- Extend Full coverage of storm water drains in ULBs and villages

#### 14.2.5.4 Solid Waste Management

Tiruchirappalli city has been divided into 4 zones having total number of 65 wards with approximately 750 nos. of wheelbarrows, 85 numbers of tractor-trailers and tippers available with the Municipal Corporation.

Solid waste management forms an obligatory function of Urban Local Bodies (ULBs) and hence, it calls for proper disposal of waste with appropriate strategy. At present there is no scientific waste collection, disposal/treatment being adopted which is leading to foil smell, unhygienic conditions and mosquito breeding. There is one existing land fill site is located in Ariyamangalam village covering an area of 40 Acres (12 Lakh metric tonnes), where no scientific process is being adopted.

Solid waste management forms an obligatory function of Urban Local Bodies (ULBs) and hence, it calls for proper disposal of waste with appropriate strategy. In order to scientifically address the issue, the following are proposed:

• Removal of Ariyamangalam Dump Yard



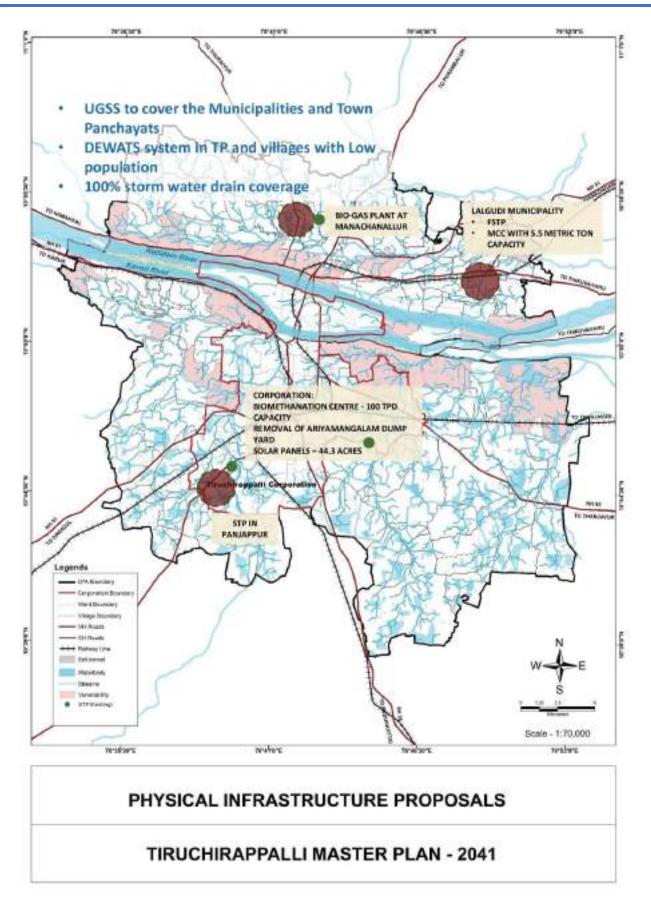
Figure 14-20: Existing situation of Ariyamangalam Dump Yard

- Additional MCC/ Biomethane/ Incineration centre to meet the gap due to removal of landfill site.
- New Bio-Gas plant at Manachanallur TP MCC with 5.5 Metric ton capacity - Lalgudi Municipality
- Biomethanation centre 100 TPD capacity within corporation area

# 14.2.5.5 Electricity

The increase in population will create a up-surge in Electricity demand. With the current trends sustainable approach to meet the future needs is envisaged and the following are proposed:

- Installation of sub stations to meet the future demand
- 100% supply of electricity with adequate substations and transmission lines.
- Use of renewable energy resources.



#### Map 14-20 Physical Infrastructure proposal

#### 14.2.6 Social Infrastructure

Social infrastructure are essential resources, and services that ensure people can participate in productive social and economic activities. This deals with the health, education, recreation, sports, safe and security, socio-cultural facilities and distribution services.

# 14.2.6.1 Health

Trichy corporation has been provided with various health care facilities such as Primary Health Centres, Private & Government Hospitals, Maternity & child health care centres, speciality hospitals, veterinary hospitals etc. However, with the expanding demography, the existing Health Care Infrastructure will be deficit with the growing population. It is also observed that the Primary Health Care

units are in deficit along the region. (Private hospitals subside only the current deficit). Hence, the following proposals are submitted to improve over the existing Health Care systems:

- Primary Medical Centre Health Sub center needs to be provided in Thuvakudi.
- Even though the private health care eases the primary health care centers, the 24x7 dedicated accident centre hospitals along NH45 Highway are needed.
- The Government Hospitals & Sub district Hospital deficit must be addressed along rest of LPA.
- Temporary Accommodation facilities to cater to the increasing inflow of medical visitors from neighbouring districts for treatment periods
- Upgradation of Siddha Hospital in Somarasanpettai

#### 14.2.6.2 Education

Facilities and Infrastructure providing Educational Services to the population like

schools and Colleges are provided to improve social integration and bring social equality in the communities. The infrastructure is provided based on the URDPFI guidelines with the estimated population demand in the LPA. It is noted that the Primary schools deficit are subsided by Higher Secondary Schools. The proposals of various category of educational facility are discussed below within the Tiruchirappalli Local Planning Authority.Corporation Primary Schools are required along the corporation zone and rest of LPA for the marginal population. As per the geometric projection, an additional 122 for urban primary schools & 16 for urban Secondary schools have to be provided within the year 2041.

- The Anganwadis & Special schools Corporation zone and rest of LPA
- Agricultural Research /Training Institutes are needed along the zones.
- More women-based education training through Learning centres or skill programs colleges
- More research-based colleges are required.
- The future demands for the community clubs / career interest clubs (Eg: Youth Clubs, Knowledge Centre, Libraries & Community Halls etc)
- Sports Campus in Panjapur

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

#### | PLANNING PROPOSALS



Figure 14-22: Reference Image of sports complex - Proposal at Panjapur

#### 14.2.6.3 Open Spaces & Recreation

Recreational facilities in LPA region are numerous yet small neighborhood level parks. The prominent recreational activities are Butterfly Park, Ibrahim Park, Science Park, Anna planetarium and Anna sports stadium. Therefore, the major proposal for recreational activities is the stadium proposed in the Panchappur region and the theme park provided on the east of Sri Rangam. In addition the Parks in central city business districts and all the notified parks can utilized for recreation.

The following are proposed to improve the recreational centres in the area and to use tourism potential in Tiruchirappalli and facilitate the growth:

- Children's park in South Thiruverumbur Kattur Kaveri nagar
- Open Air Theatre [OAT] in Kottapattu Kamanmedu



Figure 14-23: Reference image of OAT - Proposed in Kottapattu

# 14.2.6.4 Others

- Fire Station has to be established along the Corporation Zone -Thiruverumbur due to its deficit.
- The extension of Fire Station must also be there along the entire regions to meet the growing population.
- Police station along Panjapur is required to meet the growing demands.
- Police station along Uyyakondan is needed for the growing population along the Corporation.
- Identification of potential developments in co-ordination with municipal corporation based on feasibility studies in the cleaned out Ariyamangalam dumpyard.

# 14.2.7 Housing

#### 14.2.7.1 Slums

The PMAY – U Mission addresses urban housing shortage among the EWS/LIG and MIG categories including the slum dwellers by ensuring a pucca house to all eligible urban households. The following table consists of the current projects and its status falling in the LPA boundary.

DIRECTORATE OF TOWN AND COUNTRY PLANNING

#### MASTER PLAN FOR TIRUCHIRAPPALLI LPA 2041

SI. no	Village Name	Sanctions HHs	In progress HHs	Completed HHs	To be Completed
1.	Tiruchirappalli	15317	14810	12501	507
2.	S. Kannanur	148	148	141	-
3.	Manachanallur	997	997	965	-
4.	Kallakudi	163	163	152	-
5.	Puvalur	224	219	170	5
6.	Lalgudi	356	274	187	82
7.	Koothappar	128	128	122	-
8.	Thiruverumbur	192	192	192	-
9.	Thuvakudi	422	392	229	30

Table 14-5 City wise Physical and financial progress, 2023

(Source : PMAY – U)

# 14.2.7.2 New Proposal

Apart from the projects mentioned in the table the Tamil Nadu slum clearance board (TNSCB) has identified two potential locations to construct housing units for accommodating around 4000 families in Tiruchirappalli.

The families located near water bodies and objectionable lands are to be relocated to the two identified sites in Panjappur and Kottapattu.

# 14.2.7 Summary of Proposals

PROPOSALS	NODAL AGENCY	STATUS
BLUE-GREEN CORRIDOR/ ENVIRONMENT	ſ	
Cauvery Riverfront Development: Walking Tracks & parks Riparian Buffers, SuDS Elements	Municipal Administration & Water Supply Department [MAWS] PWD	Proposal submitted Vision Trichy 2041
Uyyakondan Canalfront Development [36,38 & 39] & BG Corridor with Urban Forestry Costing: 158 Cr	MAWS Tamil Nadu Forest Department	Proposal submitted Vision Trichy 2041 Proposal submitted
Rejuvenation of waterbodies [47] Costing: 370 Lakhs	Municipal Administration & Water Supply Department [MAWS]	Project Sanctioned
Upgradation of Kollangulam Tank with boating facilities Costing: 26.4 Cr	Municipal Administration & Water Supply Department [MAWS] / Tourism Department	Project Sanctioned

Odathurai Riverfront Development [Ward 15] Costing: 14 Cr	Trichy Municipal Corporation [TMC]	Proposal submitted
ECOLOGICAL & CULTURAL TOURISM		
Srirangam Special Notified Zone	SNUD & Tourism Department	Proposal submitted
Zipline Facility [Butterfly Park] Rope Car Facility [Rockfort Temple]	Corporation [TMC] HR&CE	Proposal submitted
Restoration of Defunct Quarries	NAWS, Tourism Department, Mining Department, PWD.	Proposal submitted
ECONOMY		
Trade Centre in Panjappur Costing: 11 Crore	SIDCO	Sanctioned and in progress
Micro-clusters: Agro based firms in Manachanallur	Department of Agricultural marketing & Agri Business.	Proposal submitted
MOBILITY		
Road Network Plans	DTCP /National	Proposal

Additional Road Network [46kms]	Highways/ State Highways	submitted
Grid of Roads	Corporation	Proposal submitted
Off-street Parking at 5 Locations	MAWS, Traffic Police, Highways	Proposal submitted
NMT - Footpath /Cycle Track Development & Pedestrian Infrastructure	Trichy Municipal Corporation [TMC], PWD	Proposal submitted
Public Transport – Bus Terminals at Panjappur, Thiruverumbur & Srirangam and TPs High Demand Corridors	Trichy Municipal Corporation [TMC] CMRL/Smart City/TMC	Proposal submitted
Freight Management - Truck terminal	ТМС	Proposal submitted
INFRASTRUCTURE		
Identification of potential development in the cleaned out Ariyamangalam dumpyard.	TMC Vision Trichy 2041	In progress Proposal submitted
New Bio-Gas plant at Manachanallur TP Costing: 10 Lakhs	MAWS	Proposal submitted
STP in Panjappur – 100 MLD Capacity [Costing: 200 Cr] FSTP in Lalgudi [Costing: 2 Cr]	TMC/ Tamil Nadu Water Investment Company TMC/Melinda Gates	Proposal submitted

	Foundation/IIHS	
Manachanallur Resource Recovery Park land with 10748 cu.m of legacy trash - Reclamation through Bio- Mining	MAWS	Proposal submitted
Sports Campus in Panjappur	TMC/Sports Development Authority, TWD	Proposal submitted & Site Identified
Markets in TPs [Costing:625 Lakhs]	MAWS	Proposal submitted

Table 14-6 Summary of Proposals

#### 14.3 Land use Plan

To regulate the growth of the local Planning in an orderly manner and also to ensure its economic viability, social stability, and sound management for the present and the foreseeable future, the Master Plan with zoning and development regulation is necessary. The idea of zoning is that the segregation of certain uses from others reduces the effect of negative externalities that some uses have on others.

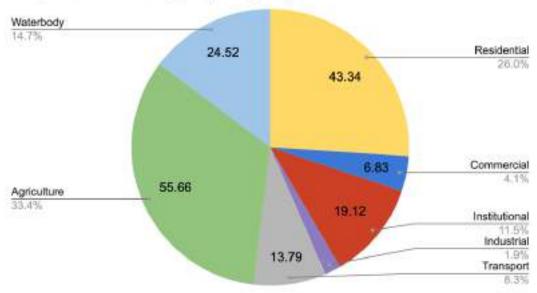
The Tiruchirappalli Local Planning Authority has a total area of 804.55 Sq. Km, out of which, around 70.46% (566.92 sq.km) is non-developable area coming under agriculture use and water bodies. Only the remaining 29.53% (237.63 sq.km) is available for development. Based on the Project Proposals formulated in the previous sections, the proposed land use plan for Tiruchirappalli LPA for the horizon year 2041 is prepared. Table 14.9 shows the Proposed Land structure for Tiruchirappalli LPA. The tables 14.7 and 14.8 shows the land use breakup of the existing land use of 2021 and proposed land use of 2041 for the Tiruchirappalli Corporation and Tiruchirappalli LPA excluding the Corporation.

In the proposed land use, land falling under dry agriculture and wastelands have been considered for development and thus the total developable land for proposed land use 2041 was increased to 378.36 sq.km which is an addition of 140.73 sq.km, which is 17.5% of total land available for development. The airport complex was represented under transportation in the existing land use 2021, it has been brought under the land use category of institutional land use as per Tamil Nadu Combined Development Rules, 2019. Hence the existing land use percentage under transportation to the developable area is 14.48% which is higher than the recommended land use share of 12-14% for transportation for a Large City according to the URDPFI guidelines. Though an addition of 1.23 sq.km of land has been proposed to be brought under transportation. The airport being shown as institutional land use in the proposed land use category has hidden the actual allocation of land under transport facilities. The same goes with the Integrated bus stands under construction at Panjappur and the ones proposed at Srirangam and Thiruverumbur etc. The URDPFI guidelines are compared with the proposed percentage of the land use for total developable land. The existing landuse and proposed land use gives the perspective of the respective land use changes from the above given table. Due to the increase in the developable land, all the land uses have increased. The percentages are now more evenly distributed in consideration of the URDPFI guidelines.

The overall objective of this proposed land use is to improve the economy of Trichy and to cater to the future population of the LPA with its potential identified through the analysis of ground realities and based on the vision statement drawn at the project inception stage. Proposed land use zoning for Tiruchirappalli LPA has been prepared based on the TNCDBR, 2019. In the proposed land use 2041 of Tiruchirappalli LPA, land use zones are classified as residential, commercial, institutional (Public and semi-public, service and utilities, transportation and communication), Industrial, Agricultural uses and water bodies. Roas have also been demarcated.

The proposed land use of Tiruchirappalli LPA 2041 has residential land use of 24.19% of the total land area of the LPA (804.55 sq.km). This is based on the projected requirement for the projected population of 2041 and based on the decadal trend analysis of residential layouts and residential building approvals in the LPA. Residential land use has been proposed majorly towards the West and South West as an envisaged expansion of the Corporation in this direction. Residential land use has been proposed major transport corridors. Commercial land use has been proposed along the 5 major transport corridors and nodes of the proposed ring roads. There is a higher percentage of commercial land use proposed which is justifiable based on the fact that the major economic sector of Tiruchirappalli is the Service sector. Industrial land use has been proposed in the three projected growth centers namely Thuvakudi region, Panjappur and Manachanallur.

# 14.3.1 Proposed Land use – Corporation 2041



Corporation- Existing LU(in Sq.km)

#### Figure 14-24 Existing Landuse 2021 Percentage of Corporation

#### 14.3.2 Proposed Land use – Corporation 2041

	Corporation				
Land use type	Existing (in Sq.km)	Percent (%)	Proposed (in Sq.km)	Percent (%)	comparison (in Sq.km)
Residential	43.34	26.02	60.97	36.60	17.64
Commercial	8.35	5.01	13.88	8.33	5.53
Institutional	17.6	10.57	17.63	10.58	0.03
Industrial	3.19	1.92	3.66	2.20	0.47
Open Spaces and Recreation	0.13	0.08	0.13	0.08	0
Transport	12.59	7.56	12.94	7.77	0.35
Agriculture	56.86	34.13	32.85	19.72	-24.01
Waterbody	24.52	14.72	24.52	14.72	0.00
Reserve Forest	0.00	0.00	0.00	0.00	0.00
Total Area	166.58	100.00	166.58	100.00	0.00

Table 14-7 Existing Landuse 2021 and Proposed Landuse 2041 of Corporation

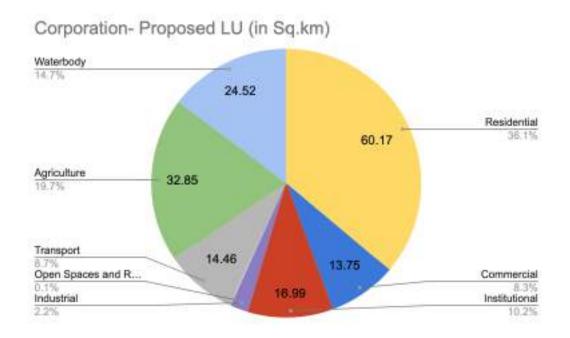
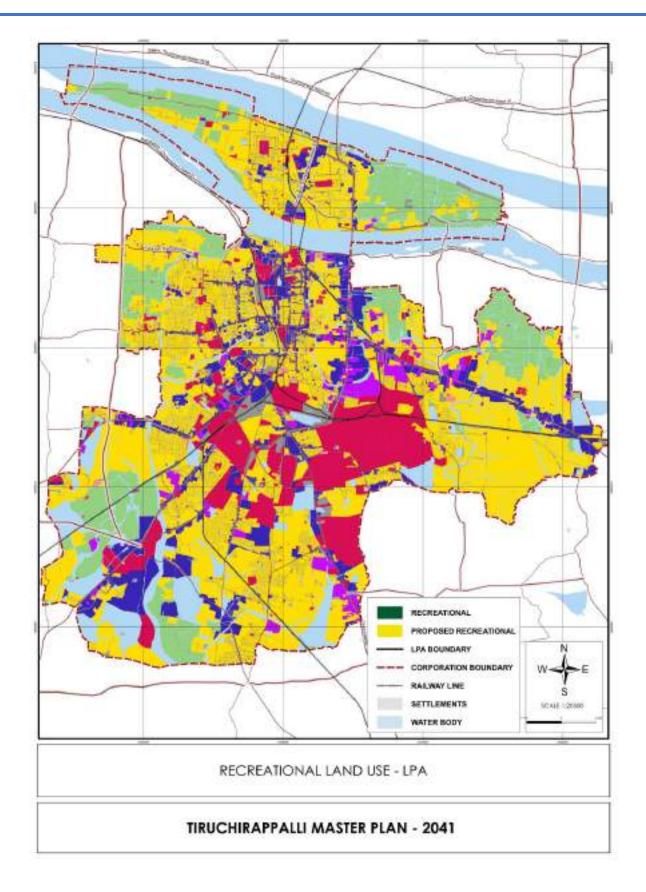


Figure 14-25 Proposed Landuse 2041 Percentage of Corporation



#### Map 14-21 Proposed Landuse of Corporation 2041

	Rest of LPA					
Land use type	Existing (in Sq.km)	Percent (%)	Proposed (in Sq.km)	Percent (%)	Comparison (in Sq.km)	
Residential	86.85	13.61	134.60	21.10	47.76	
Commercial	6.49	1.02	15.49	2.43	9.00	
Institutional	16.59	2.60	20.38	3.19	3.79	
Industrial	23.63	3.70	35.75	5.60	12.12	
Open Spaces and Recreation	0.24	0.04	0.43	0.07	0.19	
Transport	18.14	2.84	28.77	4.51	10.63	
Agriculture	378.47	59.32	294.98	46.24	-83.49	
Waterbody	105.20	16.49	105.20	16.49	0.00	
Reserve Forest	2.37	0.37	2.37	0.37	0.00	
Total Area	637.97	100.00	637.97	100.00	0.00	

#### 14.3.3 Proposed land use of LPA excluding Corporation 2041

Table 14-8 Existing Landuse 2021 and Proposed Landuse 2041 of LPA (excluding corporation)

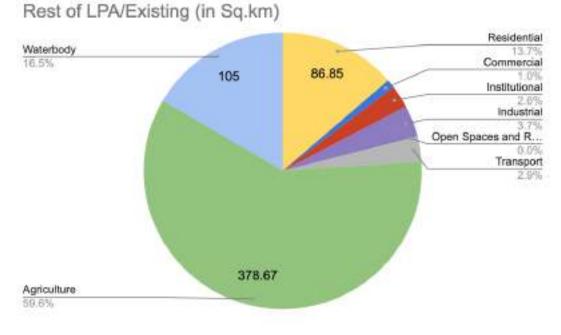


Figure 14-26 Existing Landuse 2021 Percentage of Rest of LPA

Rest of LPA/Proposed (in Sq.km) Waterbody Residential 16.5% 105 21.2% 134.48 Commercial 2.4% Institutional 20.323.2% Industrial 35.75 Open Spaces and R ... 0.1% Transport 295 4.6% Agriculture 46.4%

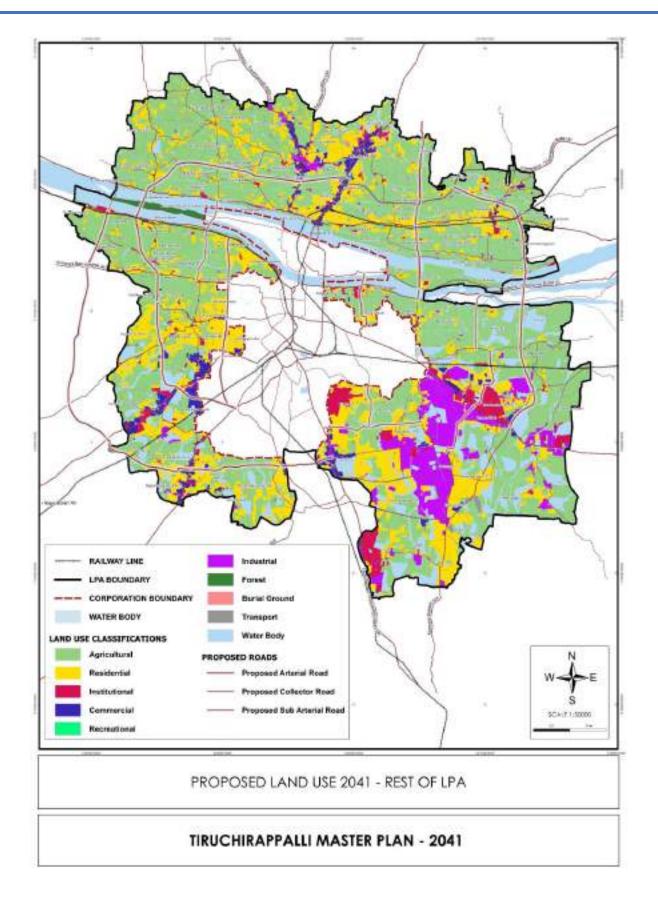
#### Figure 14-27 Proposed Landuse 2041 Percentage of Rest of LPA

#### 14.3.4 Proposed Landuse Total LPA

	Trichy LPA - Total					
Land use type	Existing LU 2021 (in Sq.km)	Existing (%)	Proposed (in Sq.km)	Proposed(%)	comparison (in Sq.km)	
Residential	130.19	16.18%	195.58	24.31	65.39	
Commercial	14.84	1.84%	29.36	3.65	14.53	
Institutional	34.19	4.25%	38.01	4.72	3.82	
Industrial	26.82	3.33%	39.41	4.90	12.59	
Open Spaces and Recreation	0.37	0.05%	0.56	0.07	0.19	
Transport	30.73	3.82%	41.71	5.18	10.99	
Agriculture	435.33	54.11%	327.82	40.75	-107.51	
Waterbody	129.72	16.12%	129.72	16.12	0.00	
Reserve Forest	2.37	0.29%	2.37	0.29	0.00	
Total Area	804.55	100.0%0	804.55	100.0	0.00	

#### Table 14-9 Existing Landuse 2021 and Proposed Landuse 2041 of Trichy LPA

DIRECTORATE OF TOWN AND COUNTRY PLANNING



Map 14-22 Proposed Landuse of LPA (Excluding Corporation) 2041

| 407

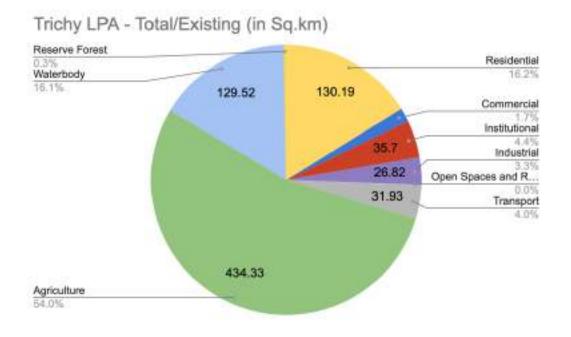


Figure 14-28 Existing Landuse 2021 Percentage of Total LPA

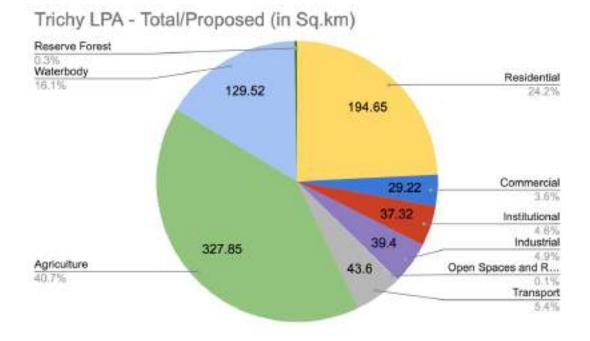
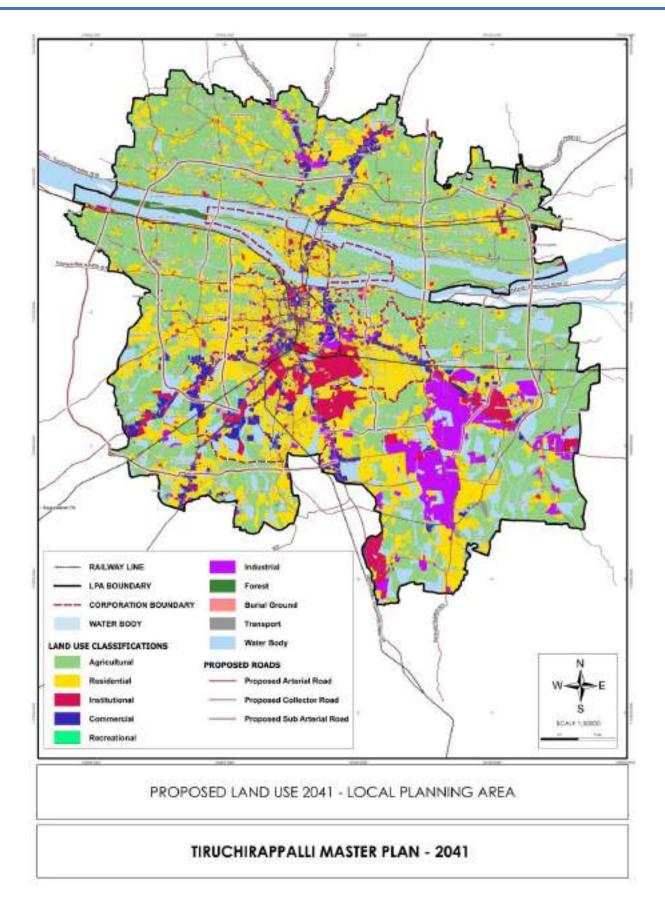


Figure 14-29 Proposed Landuse 2041 Percentage of Total LPA

| 408



Map 14-23 Proposed Landuse of LPA 2041

## 14.3.5 Land Use Zone Classification

The various land use classification shall be in the following zones:

## 14.3.5.1 Residential Zone

Residential Zone is further classified into four micro zones viz, R1, R2. The parameters applied for the sub-classification are as under:

# 14.3.5.2 Residential Zone - 1 (R1) (Contiguous Planning Core Area):

Residential Zone falling within the proposed contiguous Planning core area, i.e. the contiguous area in north and south of River Cauvery, and wherein the detailed planning of roads and various urban use zones are proposed.

# 14.3.5.3 Residential Zone - 2 (R2) (Planning Growth Nodes):

Residential Zone falling within the proposed non-contiguous Planning growth nodes, i.e. the non-contiguous area that is separated from the Planning core by Urban Agriculture zone in between, and wherein the detailed planning of roads and various urban use zones are proposed.

# 14.3.5.4 Commercial Zone

Commercial Zone is further classified into two micro zones viz. C1, C2. The parameters applied for the sub-classification are as under:

# 14.3.5.5 Commercial Zone-1 (C1) (Contiguous Planning Core Area):

Commercial Zone falling within the proposed contiguous Planning core area, i.e. the contiguous area in North and South of River Kaveri and wherein the detailed planning of roads and various urban use zones are proposed.

# 14.3.5.6 Commercial Zone- 2 (C2) (Planning Growth Nodes):

Commercial Zone falling within the proposed non-contiguous Planning growth

nodes, i.e. the non-contiguous area that is separated from the Planning core by Urban Agriculture Zone in between, and wherein the detailed planning of roads and various urban use zones are proposed.

#### 14.3.5.7 Industrial Zone

Areas earmarked as Industrial Use Zone in the proposed Land Use Plan only.

#### 14.3.5.8 Institutional Zone

Areas earmarked as Institutional or Educational use or Public and Semi-public use, Public, Semi-public Amenities and Utilities Zone in the proposed Land Use Plan, and the sites specifically earmarked for any such public/semi-public use including recreational, open space recreational.

#### 14.3.5.9 Transportation and Communication Zone

All the roads as earmarked in the proposed Land Use Plan, and the sites specifically earmarked for related facilities.

#### 14.3.5.10 Agriculture Zone

Areas earmarked as Agriculture Zone, around the identified 'Contiguous Planning Core Area' and 'Planning Growth Nodes' in the proposed Land Use Plan. This zone includes dry agriculture and wet agriculture lands

#### 14.3.5.11 Waterbodies Zone

Water Bodies Zone indicates all existing water bodies, i.e., Rivers, Streams, Lakes, Tanks, as indicated in the topographical sheets published by the Survey of India, the State Irrigation Department or Revenue Department or other competent authorities. The boundary of the water bodies relate to the Full Tank Level as indicated in relevant maps, covering both perennial and non-perennial parts when such distinction exists.

#### 14.3.5.12 Open Spaces and Recreation

Open space and recreational areas are the breathing spaces for the environment. Making sure these areas are provided adequately will ensure various benefits. Ground water recharge, reduce carbon footprint, protect eco-system to an extent and increases the quality of life of the residents. The open spaces can include the following three categories, namely:

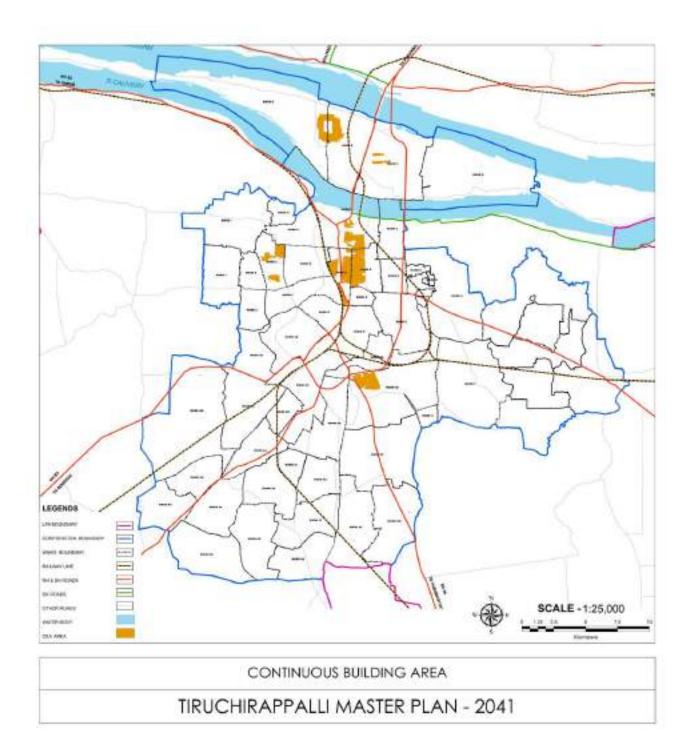
- o Recreational space
- o Organized green
- Other common open spaces (such as vacant lands/ open spaces including flood plains, forest cover etc. in plain areas.)

Considering open spaces, including all the above-mentioned categories, provision of 10-12 sqm per person may be desirable. In the built-up area (excluding recreational space, vacant land, flood plain, forest) the NBC suggests 3 sqm/ person as minimum norm.

#### 14.4Land use Recommendations

To develop Tiruchirappalli as envisioned for 2041, the proposals in the previous sections along with few further recommendations must be considered.

They are: (1) ensuring sustainability in every strategy, (2) aiming for holistic development and (3) preserving indigenous culture and local heritage. The recommendations are discussed below: It has been identified that there are industrial land uses near existing water bodies that, unless precautionary measures are considered, will disrupt the natural ecology. Reforms 7 and 8 of the Supplementary Guidelines, Ministry of Finance, DoE, Gol, Dated:19.6.2023, specifically mention the importance of preserving urban ecosystems through urban planning and hence, only green industries that support environmental development and those which are non polluting should be permitted in industrial areas near waterways.



# Map 14-24 Continuous Building Area

In line with the same, there is a need to sub-classify the industrial land use into special and hazardous industrial use and green-industrial use as in CMA, thus helping in preserving the existing natural ecosystem.

The vulnerability analysis of the LPA based on flooding implies that proper land use and flood management system is required to be evolved cohesively. Along the banks of the River Cauvery and River Kollidam, high to medium vulnerability regions have been discovered. It is recommended for retaining the lands as agricultural zones, public open spaces, and recreational uses in the high vulnerability areas. High sensitive locations must be taken into account when creating detailed development plans, and measures must be taken to limit damage from calamities. Maintenance of the existing water bodies and reinstating existing drainage networks and their reclamation from landfills and diligent solid waste management which would help prevent choking of waterways will help tap into the centuries old irrigation system for both flood prevention and development of agriculture in the region. Care needs to be taken to prevent bifurcation of water bodies while delineating transport networks. In unavoiidable circumstances, mechanisms need to be devised to prevent disrupting the natural drainage.

Tiruchirappalli being endowed with enormous cultural and heritage wealth, needs to take the necessary measures for the preservation of the characteristics of heritage sites. This will ensure that the tourists and pilgrims experience the City in its true beauty and sanctity instead of being overwhelmed by the crassness of unregulated and unrefined commercial architecture and graphic design in the vicinity, which cause visual pollution.

Since Trichy experiences a serious dearth of open spaces for recreation and parks, residential layouts should be encouraged to provide more open spaces for the same. Developing the existing water bodies for recreation can help maintain them as well as provide the City dwellers with much needed respite for relaxation thereby improving the quality of life in the LPA.



# PHASING & IMPLEMENTATION

# **15. PHASING & IMPLEMENTATION**

# 15.1 Proposal Phasing

This section details out the project phasing viz., short term, medium term and long term of the proposals discussed in the previous chapters. Short terms proposals are conceived to be implemented during the first five years of the plan implementation period whereas medium term proposals are to be implemented in the next five years. Long term proposals are those projects that are to be implemented in the final phase of the horizon period that is the final ten years.

Additionally, certain proposals such as urban forestry and upgradation of natural systems in the entire LPA require the entire time period for materialization. These proposals will be under implementation throughout the horizon period so as to get maximum benefits.

# **15.2 Costing Components**

Block costing of the proposals is carried out with the following baseline data,

- A. Guide Line Values [GLV]: Land costs are extracted from Commercial Taxes and Registration Department for the locations where the identified proposals are to be implemented.
- **B.** Construction Costs: An overall average cost of construction of a particular facility is calculated based on the ground conditions such as,
  - Rejuvenation of Water Bodies 0.217 Cr/ha
  - Upgradation of Streams 0.22 Cr/ha
  - Development of Parks & Green Spaces 7 Cr/ha
  - Waterbodies as recreational spaces 33.45 Cr/ha

|417

- OHT Construction 1.8 Cr/MLD
- STP 1.75 Cr/MLD
- Medical facilities 35,000/ m2
- Institutional buildings 20,000/ m2
- Other buildings 18,000/ m2
- Environmental centre 25,000/ m

# 15.3 Proposals – Phasing & Block Costing

15.3.1 Environment

Phasing -	River/Canal Front	Lakes & Water	Urban Forestry &
Proposals	Development	Bodies	Recreational Spaces
Short Term	Redevelopment of Uyyakondan canal within city [Wards 36, 38 & 39] (Rs. 158 Cr) Odathurai Riverfront Development (Rs.14 Cr)	Rejuvenation of Kollangulam tank with boating facilities (Rs. 26.4 Cr)	Eco-forests connecting butterfly park and Mukkombu Open Air Theatre [OAT] in Kottapattu Kamanmedu Children's park in South Thiruverumbur – Kattur Kaveri nagar Urban Forestry at Sooriyur [2.2 Acre]

Medium Term	Green buffer along the Uyyakondan canal and Koraiaaru – BG Corridor	Rejuvenation of 6 ponds in corpn zone 3 Green buffer of 15m with SuDS for Koothappar, Gundur, Vazhavandankottai and Thayanur Lakes	7.1 acres of urban forestry along Uyyakondan – Koraiyaaru BG Corridor Parks & Walking Tracks - Lalgudi & Thuvakudi
Long Term		Boating facility in Thiruverumbur, Vazhavandankottai Aeri & Manachanallur Water Bodies	
Throughout Horizon Period	Kauvery Riverfront Development & Establishment of SuDS	Upgradation of 47 water bodies (Rs. 3.7 Cr)	Upgradation and creation of additional parks & urban forests

Table 15-1 Environment proposals - Phasing & Block Costing

# 15.3.2 Heritage & Tourism

Phasing - Proposals	Eco-Tourism	Heritage/Cultral Tourism
Short Term	Zipline from the Butterfly park to Mekkudi railway station Rope Car from Rockfort temple to Amma Mandabam	Tourist Infrastructure facilities at Amma Mandapam
Medium Term	NMT Infrastructure – Walking & Cycling Tracks along Uyyakondan Canal	
Long Term	Restoring defunct quarries [6 Nos with area of 276.8 hectares] as recreational stops and rainwater catchments	
Throughout Horizon Period		Srirangam Special Notified Zone

Table 15-2 Tourism Proposals - Phasing

# 15.3.3 Economy

Phasing - Proposals	Economy	
Short Term E-farm Markets & upgradation of farmer's markets		
Medium Term         Micro-clusters in Manachanallur - Agro based firms		
Long Term	Panchappur Trade Centre [Costing: 11cr]	

#### Table 15-3 Economy Proposals – Phasing

# 15.3.4 Mobility

Phasing - Proposals	Mobility	Block Costing (in Crores Rs)
Short Term	NMT - Footpath Proposal NMT - Pedestrian Crossing Infrastructure NMT - Bicycle Tracks Road Network Plan - Missing Links & Widening Public Transport Plan - Bus Shelters & Bus Terminals Traffic Management - Junction & Corridor Improvements, Smart	480
	signals & Signages and Road Pavement Markings Parking Management Strategy -	

	Off Street Parking Locations	
Medium Term	NMT - Pedestrian Priority Streets/ All-weather walkway Freight Management - Freight Terminals Road Network Plan - Ring Road Public Transport Plan - Fleet Replacement & Bus Terminals	2815
Long Term	Freight Management - Freight Consolidation Center Road Network Plan - River Bridge & Flyover Public Transport Plan - Mass Transit System	2008
	Total Cost	5304

#### Table 15-4 Mobility Proposals - Phasing & Block costing

# 15.3.5 Physical Infrastructure

Phasing - Proposals	Physical Infrastructure
Short Term	Over Head Tanks – 149 MLD gap (Rs. 268.2 Cr) Removal of Ariyamangalam Dump Yard

	FSTP in Lalgudi	
	STP in Panjapur near koraiyar river bank	
Medium Term	Solar Panels in cleaned out Ariyamangalam Dumpyard - 44.3 Acres	
	New Bio-Gas plant at Manachanallur TP (Rs. 0.1 Cr)	
	MCC with 5.5 Metric ton capacity – Lalgudi	
	Ward 45 – New Sanitary workers office	
Long Term	Manachanallur Resource Recovery Park land with 10748 cu.m of legacy trash - Reclamation through Bio-Mining	
	Biomethanation centre 100 TPD capacity - within corporation area	

Table 15-5 Physical Infrastructure Proposals - Phasing & Block costing

# 15.3.6 Social Infrastructure

Phasing - Proposals	Social Infrastructure
	Unified school in Ukkadai & Rail Nagar
	Primary Medical Centre – Thuvakudi
	Bus Stands in Lalgudi & Thuvakudi
Short Term	Children's park in South Thiruverumbur – Kattur Kaveri nagar
	Open Air Theatre [OAT] in Kottapattu Kamanmedu
	Weekly Markets in Thuvakudi
	Upgradation of Mahathma Gandhi GH

	Central Bus Stand in Thiruverumbur & Srirangam
	Additional anganwaadis
Medium Term	Library [Ward 46]
	Knowledge Centre & Community Hall – Lalgudi
	Commercial Complex – Thuvakudi
	Govt Siddha hospital at Somarasanpettai
	Commercial complex, marriage hall & vehicle parking facilities in Ponmalaipatti
Long Term	Community Halls in TP [12 Nos]
	Libraries in TP [2 Nos]
	Sports Campus in Panjapur

Table 15-6 Social Infrastructure Proposals - Phasing & Block costing

#### **15.4 Implementation Mechanisms**

For successful implementation of Master Plan, a fool-proof mechanism has to be derived wherein for each proposal specified, there is a nodal agency allotted that will carry out all the required ground work and other related agencies assist in overall co-ordination and guidance.

Strategies can be developed in detailing out various stages of a particular proposal implementation and those stages can be effectively planned to reap maximum benefits.

# ANNEXURE

#### ANNEXURE 'A'

#### GOVERNMENT OF TAMIL NADU

ABSTRACT

LOCAL PLANNING AREA – Tiruchirappalli – Declaration of Local Planning Area under section 10(1) of the Town and Country Planning Act 1971 – Preliminary Notification – issued.

#### RURAL DEVELOPMENT AND LOCAL ADMINISTRATION DEPARTMENT

G. O. Ms. No. 936 April 1974 Dated: 5th

Read:

- G. O. Ms. No. 1988 RDLA dated 20.09.73
- From the Commissioner, Tiruchirapalli Municipality Letter No. F12/26662/73 dt. 18.10.93
- From the Joint Director of Town and Country Planning Letter No. 37958/73 SM dt. 07.01.74

#### ORDER:

In super session of the orders issued in the G. O. first read above, it is proposed to declare the local areas specified in Column (3) of the table in the notification appended to this order forming a local planning area mentioned in the corresponding entry in Column (2) thereof to be a local planning area and to constitute for such local planning area a local planning authority. The appended notification will be republished in English and in Tamil in the Tiruchirappalli District Gazette.

The Collector of Tiruchirappalli is requested to republish the notification is the District Gazette.

The Director of Translation, Madras is requested to arrange to have the notification translated into Tamil and forward the translation urgently to the Collector.

The Collector of Tiruchirappalli is requested to report to Government the date of republication of the notification in the District Gazette.

#### (BY ORDER OF THE GOVERNOR)

#### M. M. RAJENDRAN Secretary to Government

#### APPENDIX

#### NOTIFICATION

In exercise of the powers conferred by sub-section (i) of section 10 of the Tamil Nadu Town and Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) and in super session of the Notification II-1 No. 4800 of 1973 published at pp. 514-515 of part II Section 1 of the Tamil Nadu Government Gazette, dated 17.10.73, the Governor of Tamil Nadu hereby declares his intention to specify the local planning area specified in Column (3) of the table below to be a Local Planning Area with the name specified corresponding entry in Column (2) thereof.

Notice is hereby given that this notification will be taken into consideration again under sub-section (4) of the said section 10 on or after the expiry of 2 months from the date of the publication of this notification in the Tamil Nadu Government Gazette and that any objection or suggestion which may be received from any inhabitant or any local authority or institution in the said local area with respect there to before expiry of the period aforesaid will be dully considered by the Government of Tamil Nadu. Objection and suggestion writing, if any should be addressed to the secretary to Government, Rural Development and Local Administration Department, Fort St. George, Chennai – 09.

# THE TABLE

S. No.	Name of Local Planning Area	Area forming the Local Planning Area
		No. & Name of Revenue Village
1.	Tiruchirappalli 1	Tiruchirappalli Taluk
		1. Killikkudi
		2. Uttamaseri
		3. Panayapuram
		4. Tiruvalarsolai
	142	5. Kondayampatti
		6. Vellittirumuttam
		7. Thimmarayasamudram
		8. Melur
		9. Kambarasampettai
		10. Muttarasampettai
		11. Palur
		12. Allur
		13. Mekkudi
		21. Marudandakurichi
		22. Somarasampettai
	5	27. Tayanur
		28. Kalligudi
		31. Sattanurputtur
		32. Pirattiyur
		33. Nachchikkurichi
		34. Cholanganallur
		35. Uyyakkondantirumalai
		36. Malliyampattu
	-	37. Pandamangalam
		38. Damalayarabhayam
		39. Chinthamani
		40. Puthur, Tennur,
		Nattarasanpallivasal, Peria Vadavur
		41/1
		2 & 3 Abisekapuram
		42. Kottapattu
		43. Gundur
		44. Cholamadevi
		45. Kilkurichi
		<ol> <li>Kilkalkandarkottai</li> </ol>
		47. Alattur
		48. Varaganeri
		49. Daranallur
		50. Devadanam, Chinnavadavu
		51. Panaiyakurichi

5. No.	Name of Local Planning Area	Area forming the Local Planning Area
		No. & Name of Revenue Village
		52. Ariyamangalam
		53. Kuvalakudi
		54. Kilamullakkudi
		55. Vengur
		56. Papakurichi
		57. Ellakudi
		2323 A 40 C 0 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C 2 C
		58. Agram
		59. Tiruverambur
		60. Kuttappar
		61. Arasangudi
		64. Turnedungulam
		65. Valavandankottai
	43	66. Asur
		67. Palangavangudi
		83. Natajapuram
		84. Tuvagudi
		86. Tiruchirappalli town proper
		87. Tiruchendurai
		<ol><li>90. Ukkadai Ariyamangalam</li></ol>
		(Inam)
		91. Kandalur (Inam)
	2	92. Kumbagudi (Inam)
		93. Navalpattu (Inam)
		94. Suriyur (Inam)
		95. Ilandaipatti (Inam)
		96. Velayudangudi (Inam)
		97. Tenripatti (Inam)
		98. Ulunduni (Inam)
		99. Pulangudi (Inam)
		100. Krishnasamudram (Inam)
		I & II bit
		101. Sengulam
		107. Mekkudi (Inam)
		116. Panjappur (Inam)
		LALGUDI TALUK
		16. Bikshandarkoil
		22. Talakudi
		THANJAVUR TALUK
		1. Tohur

#### ANNEXURE 'B'

#### GOVERNMENT OF TAMIL NADU

#### ABSTRACT

LOCAL PLANNING AREA - Tiruchirappalli Declaration - Notification under section 10 (4) of the Town and Country Planning Act 1971 - issued.

# RURAL DEVELOPMENT AND LOCAL ADMINISTRATION DEPARTMENT

G. O. Ms. No. 1669 July 1974

Dated: 16th

Read:

#### G. O. Ms. No. 936 RD&LA dated 05.04.1974

#### ORDER:

A proposal notifying the intention of the Government to declare certain local areas forming a local planning authority, was published at page 241 of part II section 2 of the Tamil Nadu Government Gazette, dated 01.05.74 for general information as required under sub-section (3) of section 10 of the Tamil Nadu Town & Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) No objection and suggestion having been received, the Government declare the local areas specified in column (3) of the Table in the Notification appended to this order to be a local planning area by the name specified in the corresponding entry in column (2) thereof.

The appended notification will be published in the Tamil Nadu Government Gazette.

> M. M. RAJENDRAN Secretary to Government

/ True Copy /

#### NOTIFICATION

In exercise of the powers conferred by sub-section (4) of section 10 of the Tamil Nadu Town & Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) and after previous publication of the declaration under sub-section (1) thereof, the Governor of Tamil Nadu hereby declares the area comprising the revenue villages specified in column (3) of the Table below to be a local planning area under the name specified in the corresponding in column (2) thereof.

# THE TABLE

S. No.	Name of Local Planning Area	Area forming the Local Planning Area
		No. & Name of Revenue village
1.	Tiruchirappalli I	Tiruchirappalli Taluk
		14. Killikkudi
		15. Uttamaseri
		<ol> <li>Panayapuram</li> <li>Tiruvalarsolai</li> </ol>
		18. Kondayampatti
		19. Vellittirumuttam
		20. Thimmarayasamudram
		21. Melur
		22. Kambarasampettai
		23. Muttarasampettai
		24. Palur 25. Allur
		26. Mekkudi
		21. Marudandakurichi
		22. Somarasampettai
		27. Tayanur
		28. Kalligudi
		31. Sattanurputtur
		32. Pirattiyur
		33. Nachchikkurichi
		34. Cholanganallur
		35. Uyyakkondantirumalai
		36. Malliyampattu
		37. Pandamangalam
		38. Damalayarabhayam
		39. Chinthamani
		40. Puthur, Tennur,
		Nattarasanpallivasal, Peria Vadavur
		41/1
		2 & 3 Abisekapuram
		42. Kottapattu
		43. Gundur
		44. Cholamadevi
		45. Kilkurichi
		46. Kilkalkandarkottai
		47. Alattur
		48. Varaganeri
		49. Daranallur
		50. Devadanam, Chinnavadavur
		51. Panaiyakurichi

S. No.	Name of Local Planning Area	Area forming the Local Planning Area
		No. & Name of Revenue Village
		52. Ariyamangalam
		53. Kuvalakudi
		54. Kilamullakkudi
		55. Vengur
		56. Papakurichi
		57. Ellakudi
		58. Agram
		59. Tiruverambur
		60. Kuttappar
		61. Arasangudi
	1.53	64. Turnedungulam
		65. Valavandankottai
		66. Asur
		67. Palangavangudi
		83. Natajapuram
		84. Tuvagudi
		<ol> <li>86. Tiruchirappalli town prope</li> <li>87. Tiruchendurai</li> </ol>
		90. Ukkadai Ariyamangalam
		(Inam)
		91. Kandalur (Inam)
		92. Kumbagudi (Inam)
		93. Navalpattu (Inam)
		94. Suriyur (Inam)
		95. Ilandaipatti (Inam)
		96. Velayudangudi (Inam)
		97. Tenripatti (Inam)
	52.	98. Ulunduni (Inam)
		99. Pulangudi (Inam)
		100. Krishnasamudram (Inam)
		l & II bit
		101. Sengulam
		107. Mekkudi (Inam)
		116. Panjappur (Inam)
		LALGUDI TALUK
		16. Bikshandarkoil
		22. Talakudi
		THANJAVUR TALUK
		1. Tohur
	/ True Copy	1
	/ True Copy	, Sd
		Section Officer.

#### ANNEXURE 'C'

#### GOVERNMENT OF TAMIL NADU

#### ABSTRACT

Local Planning Area – Trichy declared under section 10 (L) act – inclusion of additional villages in the Trichy Local Planning area – Notification under section 10 (1) of the act – issued.

# HOUSING AND URBAN DEVELOPMENT DEPARTMENT

G. O. Ms. No. 1414

Dated: 25<sup>th</sup> Oct' 1974 Read:

1. G. O. Ms. No. 1669 RD&LA dated 16.07.74

 From the Director of Town and Country Planning Letters Roc. No. 16505/77 MP dt. 18.06.77 & 19.11.77

#### ORDER:

It is proposed to declare the intension of the Government to include local areas specified in Column (3) of the table in the notification appended to this order, in the Tiruchirappalli local planning area already declared in the G. O. first read above. The appended notification will be published in English the Tamil Nadu Government Gazette and republished in English and Tamil in the Tiruchirappalli District Gazette.

The Collector of Tiruchirappalli is requested to republish the notification is the District Gazette.

The Director of Translation, Madras is requested to arrange to have the notification translated into Tamil and forward the translation urgently to the Collector.

The Collector of Tiruchirappalli is requested to report to Government the date of republication of the notification in the District Gazette.

(By order of the Governor)

P. KANDASAMY Commissioner and Secretary to Government

To

The Deputy Director of Town & Country Planning, Tiruchirappalli.

#### APPENDIX - NOTIFICATION

In exercise of the powers conferred by sub-section (1) of section 10 of the Tamil Nadu Town & Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) the Governor of Tamil Nadu hereby declares his intension to specify the local areas specified below in the Tiruchirappalli Local planning area and takes the following amendment to the Rural Development and Local Administration Department Notification No. 11 (2) Rul/3746/74 dated the 16<sup>th</sup> July 1974 published at pp.438-439 in part II section 2 of the Tamil Nadu Government Gazette dated 21<sup>st</sup> August 1974.

Notice is hereby given that this notification will be taken into consideration under sub-section (4) of the said section 10 of the said act on or after the expiry of two months from the date of the publication of this Notification in the Tamil Nadu Government Gazette and that any objection or suggestion which may be received from any inhabitant or any local authority or institution in the said local area with respect thereto before the expiry of the period aforesaid will be duly considered by the Government of Tamil Nadu. Objections and suggestions in writing, if any, should be addressed to the Secretary to Government, Housing and Urban Development Department, Fort St. George, Madras-09.

#### DRAFT AMENDMENT

In the said notification in column (3) of the table against the entry 'Tiruchirappalli' in column (2) the following entry shall be added namely.

- a. Tiruchirappalli Taluk
  - 14. Andanllur
  - 15. Tirupiraitturai
  - 18. Kodivalam
  - 19. Kulumani
  - 20. Perur
  - 23. Kumaravayalur
  - 24. Mullikkarumbur
  - 26. Adavattur
  - 30. Thirumalisamudram
  - 62. Killayur
  - 63. Pattalapettai
  - 91. Navalur Kottapattu
  - 92. Paganur
  - 96. Nagamangalam
  - 98. Mudikondan

#### b. Lalgudi Taluk

1. Cholanganallur

Kariyuamanikkam

3. Killiyanallur

4. Malpattu

Tiruvasai

6. Kovathakudi

8. Theerampalayam

119. Thirupangili

112. Poonampalayam

13. Ulandagudi

14. Manachanallur

15. Madavapperumal kovil

17. Koothur

18. Melasidevimmangalam

19. Vengangudi

20. Medakudi

21. Pudukudi

23. Appadurai

125. Keeramangalam

126. Therkuchattiram

24. Esanakorai

25. T.Valavanur

26. Valadi

27. Sirumarudur

28. V.Turaiyur

29. Kannanur

30. Marudur

31. Valavanur

64. Puvalur

65. Manakkal

68. Kukur

69. Mummudi cholamangalam

70. Lalgudi

71. Sirudayur

72. Thirumangalam

75. Kilperungavur

76. Nerinjalakudi

77. Nagar Kilamrimangalam (Inam)

78. Angari

79. Pambaramsetti

80. Seshasamudram

82. Javathinathapuram

83. Thirumanamedu

81. Edayathimangalam

120. Rajampalayam

121. Samayapuram

122. Kalpalayam

## d. Thanjavur Taluk

1. Tohur

2. Padirikudi

3. Koviladi

#### P. KANDASAMY Commissioner and Secretary to Government

#### ANNEXURE 'D'

#### GOVERNMENT OF TAMIL NADU

#### ABSTRACT

Local Planning Area – Trichy declared under section 10 (b) act – Exclusion of villages in the Trichy Local Planning area – Notification under section 10 (1) of the act – issued.

#### HOUSING AND URBAN DEVELOPMENT DEPARTMENT

G. O. Ms. No. 1415

Dated: 25<sup>th</sup> Oct' 1980 Read:

- 3. G. O. Ms. No. 1669 RD&LA dated 16.07.74
- From the Director of Town and Country Planning Letter No. 9477/80 D4 dt. 10.07.80

#### ORDER:

It is proposed to declare the intension of the Government to include local areas specified in Column (3) of the table in the notification appended to this order, in the Tiruchirappalli local planning area already declared in the G. O. first read above. The appended notification will be published in English the Tamilnadu Government Gazette and republished in English and Tamil in the Tiruchirappalli District Gazette.

The Collector of Tiruchirappalli is requested to republish the notification is the District Gazette.

The Director of Translation, Madras is requested to arrange to have the notification translated into Tamil and forward the translation urgently to the Collector.

The Collector of Tiruchirappalli is requested to report to Government the date of republication of the notification in the District Gazette.

(By order of the Governor)

#### P. KANDASAMY Commissioner and Secretary to Government

#### APPENDIX – NOTIFICATION

In exercise of the powers conferred by sub-section (1) of section 10 of the Tamil Nadu Town & Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) the Governor of Tamil Nadu hereby declares his intension to exclude areas specified below in the Tiruchirappalli Local planning area and makes the following amendment to the Rural Development and Local Administration Department Notification No. 11 (2) Rul/3746/74 dated the 16<sup>th</sup> July 1974 published at pages 438-439 in part II section 2 of the Tamil Nadu Government Gazette dated 21<sup>st</sup> August 1974.

Notice is hereby given that this notification will be taken into consideration under sub-section (4) of the said section 10 of the said act on or after the expiry of two months from the date of the publication of this Notification in the Tamil Nadu Government Gazette and that any objection or suggestion which may be received from any inhabitant or any local authority or institution in the said local area with respect thereto before the expiry of the period aforesaid will be duly considered by the Government of Tamil Nadu. Objections and suggestions in writing, if any, should be addressed to the Secretary to Government, Housing and Urban Development Department, Fort St. George, Madras-09.

#### DRAFT AMENDMENT

In the said notification in the table, in column (3) under the heading "Tiruchirappalli Taluk" against the entry 'Tiruchirappalli' in column (2) the following entry shall be omitted namely.

"43. Gundur

44. Cholamadevi

45. Kilkurichi

46. Kilakalkandarkottai

59. Tiruverambur

60. Kuttapar

64. Tirunedungulam

65. Vlavandankottai

66. Asur

67. Palangavangudi

84. Tuvagudi

92. Kumbagudi (Inam)

93. Navalpattu (Inam)

94. Suriyur (Inam)

95. Ilandaipatti (Inam)

97. Tenerippatti (Inam)

99. Pulangudi (Inam)"

P. KANDASAMY Commissioner and Secretary to Government

#### ANNEXURE 'E'

#### GOVERNMENT OF TAMIL NADU

#### ABSTRACT

New Town Development Authority – Navalpattu – Declaration of Site for New Town under section 10 (1) (c) of Tamil Nadu Town & Country Planning Act 1971 – Preliminary Notification act – issued.

## HOUSING AND URBAN DEVELOPMENT DEPARTMENT

G. O. Ms. No. 259

Dated: 15<sup>th</sup> April 1981 Chitharai 4, Thunmathi Thiruvalluvar Aandu 2012

Read: From the Director of Town and Country Planning letter Roc. No. 9477/80 D4 dated 10.07.80

#### ORDER:

It is proposed to declare the local areas specified in Column (3) of the table in the notification appended to this order, forming site for New Town mentioned in the corresponding entry in column (2) thereof, to be a site for the New Town Development Authority.

The appended notification will be published in English in the Tamil Nadu Government Gazette and republished in English and in Tamil, in the Tiruchirappalli District Gazette. The Collector of Tiruchirappalli is requested to republish the notification is the District Gazette.

The Director of Translation, Madras is requested to arrange to have the notification translated into Tamil and forward the translation urgently to the Collector.

The Collector of Tiruchirappalli is requested to report to Government, the date of republication of the notification in the District Gazette.

(By order of the Governor)

P. KANDASAMY Commissioner and Secretary to Government

#### APPENDIX - NOTIFICATION

In exercise of the powers conferred by clause (c) of sub-section (1) of section 10 of the Tamil Nadu Town & Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) the Governor of Tamil Nadu hereby declares his intension to specify the areas specified in column (30) of the Table below as the site for a new town with the name specified in the corresponding entry in column (2) thereof.

Notice is hereby given that this notification will be taken into consideration under sub-section (4) of the said section 10 of the said act, on or after the expiry of the period of two months from the date of the publication of this Notification in the Tamil Nadu Government Gazette and that any objection or suggestion, which may be received from any inhabitant or any local authority or institution in the said local area with respect thereto before the expiry of the period aforesaid will be duly considered by the Government of Tamil Nadu. Objections and suggestions in writing, if any, should be addressed to the Secretary to Government, Housing and Urban Development Department, Fort St. George, Madras-09.

5. No.	Name of New Town	Area forming of the site for New Town
		No. & Name of Revenue Village
L.	Navalpattu	Tiruchirappalli Taluk
		43. Gundur
		44. Sholamadevi
		45. Kila kurichi
		46. Kilakalkandarkottai
		59. Thiruverambur
		60. Kuttapar
		64. Tirunedungulam
		65. Valavandankottai
		66. Asur
		67. Palanganangudi
		84. Thuvakudi
- 1		101. Suriyur
		102. Kumbakudi
- 1		103. Navalpattu
		104. Pulangudi
		105. Ilandipatti
		106. Thenripatti
	24	Kulathur Taluk
		48. Mandaiyur
		50. Singathakuruchi
		51. Kumaramangalam
		52. Mattur

THE TABLE

P. KANDASAMY

Commissioner and Secretary to Government

#### ANNEXURE 'F'

#### GOVERNMENT OF TAMIL NADU

#### ABSTRACT

New Town Development Authority – Navalpattu – Declaration of Site for New Town under section 10 (1) of Tamil Nadu Town & Country Planning Act 1971 – Preliminary Notification act issued – confirmation under section 10 (4) of the Act - ordered.

#### HOUSING AND URBAN DEVELOPMENT DEPARTMENT

G. O. Ms. No. 1044

#### 1982

Dated: 24th April

Read:

G. O. Ms. 259 Housing and urban Development dated 16.04.1981

 From the Director of Town & Country Planning, Letter Roc. No. 9477/80 dated 11.01.82, 18.06.82 & 12.08.82

ORDER:

A proposal notifying the intention of the Government to declare certain local areas forming a New Town Area and to constitute for such New Town Development Authority was published at page 343 of part II section 2 of the Tamil Nadu Government Gazette dated the 27<sup>th</sup> May 1981 for general information as required under sub-section (3) of section 10 of the Tamil Nadu Town and Country Planning Act 1971 (Tamil Nadu Act 35 of 1972). No objection or suggestion having been received, the Government declare the local areas specified in column (3) of the Table in the notification appended to this order to be a New Town Area by name specified in the corresponding entry in column (2) thereof.

The appended notification will be published in English in the Tamil Nadu Government Gazette.

(By order of the Governor)

C. RAMACHANDRAN Commissioner and Secretary to Government

/ Forwarded by order /

(Sd.)..... Section Officer

#### APPENDIX - NOTIFICATION

In exercise of the powers conferred by sub-section (1) of section 10 of the Tamil Nadu Town & Country Planning Act 1971 (Tamil Nadu Act 35 of 1972) and after previous publication of the declaration under sub-section (1) thereof the Governor of Tamil Nadu hereby declared the areas specified in column (3) of the Table below be as the site for a New Town with the name specified in the corresponding entry in column (2) thereof.

S. No.	Name of New Town	Area forming of the site for New Town
1.	21	No. & Name of Revenue Village
	Navalpattu	Tiruchirappalli Taluk
		43. Gundur
		44. Sholamadevi
		45. Kila kurichi
		<ol> <li>Kilakalkandarkottai</li> </ol>
		59. Thiruverambur
		60. Kuttapar
		64. Tirunedungulam
		65. Valavandankottai
		66. Asur
		67. Palanganangudi
		84. Thuvakudi
		101. Suriyur
		102. Kumbakudi
		103. Navalpattu
		104. Pulangudi
		105. Ilandipatti
		106. Thenripatti
3		Kulathur Taluk
		48. Mandaiyur
		50. Singathakuruchi
	<u> </u>	51. Kumaramangalam
		52. Mattur

#### THE TABLE

#### C. RAMACHANDRAN Commissioner and Secretary to Government

#### ANNEXURE 'G'

#### GOVERNMENT OF TAMIL NADU

#### ABSTRACT

ACT – Madras Parks, playfields and open spaces (Preservation and Regulation) act 1959 Municipal council, Tiruchirapalli – list of parks playfields and open spaces – approved.

#### EDUCATION DEPARTMENT

G. O. Ms. No. 562 Education 17.04.67

Dated:

Read:

G. O. Ms. 879, Educated dated 01.06.66 from the District Revenue Officer, Tiruchirappalli letter No. J3 – 42838/66 dated 18.08.66 and dated 17.10.66 from the Commissioner, Tiruchirappalli letter No. F7/17297/66 dated 29.08.66

#### Order:

In exercise of the powers conferred by sub-section (2) of section 3 of the Madras parks, Playfields and open spaces (Preservation and Regulation) act 1959 (Madras Act 26 of 1959) the Government in G.O.(Ms).No. 879 Education dated 01.06.66 ordered the publication in the Fort St. George Gazette and in the Tiruchirappalli District Gazette a draft notification containing the list of parks, playfields and open spaces in the area within the jurisdiction of the Tiruchirappalli Municipal Council and invited "Objections or Suggestions in respect of anything contained in or relating to the list within three months from the date of publication of the notification. The notification was published in English and Tamil of the Tiruchirappalli District Gazette. No objections or suggestions having been received within the time specified in the draft notification, the draft notification is hereby approved. The appended notification will be published in Fort St. George Gazette.

The Joint Director of Translations Public (TD) dept. is requested to arrange to have the notification translated into Tamil and forward the translation urgently to the Collector of Tiruchirappalli and the Commissioner, Tiruchirappalli Municipality, Tiruchirappalli.

The Collector of Tiruchirappalli is requested to republish the notification in English and Tamil in the District Gazette and inform the Government of the date of such publication.

The Commissioner, Tiruchirappalli Municipality is requested to republish the notification in the manner prescribed in rule 3 (4) (b) and (c) of the Madras Parks, Playfields and open spaces (Preservation and Regulation) rules 1964 and intimate the fact immediately to Government.

The attention of the Commissioner is invited to section of the Madras Parks, Playfields and open spaces (Preservation and Regulation) act 1959. He is informed that the parks and playfields specified in the list published with the notification would not expect with the previous sanction of the Govt. be used for any purpose other than the purpose for which they are now

(By order of the Governor)

J.Anjani Layanand Deputy Secretary to Govt. The Director of Stationery and Printing, Madras (For publication of the notification in the Fort St. George Gazette)

The Joint Director of Translations (Public TD) Department, Madras - 9

The Collector of Tiruchirappalli, Tiruchirappalli

The Commissioner, Tiruchirappalli Municipality (Through the Chairman)

The Director of Town Planning, Madras - 1

#### Appendix

#### NOTIFICATION

In exercise of the powers conferred by sub-section (2) of section 4 of the Madras Parks, Playfields and open spaces (preservation and Regulation) act 1959 (Madras act 26 of 1959) the Governor Madras hereby approves the list of all the parks and playfields act out in the schedule below in the area within the jurisdiction of the Tiruchirappalli Municipal Council the same having been previously published as required by sub-section (2) of section 3 of the said act.

The maps, plans and documents relating to the said list will be available to the public for inspection at the Municipal Office, Tiruchirappalli between 10.30 a.m. and 5.30 p.m. on all working days.

#### The Schedule

To

List of all the parks and playfields in the areas with the jurisdiction of the Tiruchirappalli Municipal Council. Copy of G. O. Ms. No. 1222, dated the 4th June 1964 of Rural Development and Local Administration department

Sub: PARKS AND PLAYFIELDS – Srirangam Municipality list of parks, playfields and open spaces – publication under section 3 (2) of the Madras Parks, playfields and open spaces (preservation and regulation) act 1959 – ordered.

#### ORDER:

The appended notification will be published in the Fort St. George Gazette. The Director of information and publicity is requested to arrange to have the notification translated into Tamil and forward the t

translated into Tamil and forward the translation urgently to the Collector of Tiruchirappalli. The Collector of Tiruchirappalli is requested to republish the notification in English and Tamil in the District Gazette and inform the Government the date of such publication.

The commissioner, Srirangam municipality is requested to publication. manner prescribed in rule 3 (b) of the Rules issued under section 3 of the said act and intimate the fact immediately to Government.

/ By order of the Governor /

D.Philip Devaprasad Deputy Secretary to Government

#### APPENDIX

#### **NOTIFICATION**

In exercise of the powers conferred by sub section (2) of section 3 of the Madras parks, playfields and open spaces (Preservation and regulation) act 1959 (Madras act 26 of 1959) the Governor of Madras hereby publishes the list of all the parks, playfields and open spaces in the area within the jurisdiction of the Srirangam Municipal council.

The maps, plans and documents relating to the said parks, playfields and open spaces will be available to the public for inspection at the Municipal office, Srirangam between 10.30 a.m. and 5.30 p.m. on all working days.

Any person interested may submit his objections or suggestions in writing in respect of anything contained in or relating to the list aforesaid to the Government within three months from the date of publication of this notification in the Tiruchirappalli District Gazette.

Objections and suggestions should be addressed to the Secretary to Government, Rural Development and local Administration department, Fort St. George, Madras – 09.

Sd.....

Superintendent

/ True Copy /

livisi			Ownership	Existing usage & condition	y Controller	Suitability	Upkeep and maintenance
Ward No. 5 Block 28 T.S.No. 1846/3		- 40409	Govt.H.S. Woraiyur Municipal park named as P.T.Rajan park	Using as park	Centrally situated & easily accessible	Health & sanitary surrounding s for the purpose	Rs. 4308/-
Ward No.2 Block 25 T.S.No. 1229	2 0	0 - 2700	Govt. Poramboke Bishkl, road	- op -	- op -	- op -	Rs. 1036/-
Ward No. 2 Block 18 T.S.No.977/ 5	0 /	- 5766	Govt. Poramboke	- op -	- op -	- op -	Rs. 100/-
Ward No. 2 Block 21 T.S.No. 827/1 & 75	0	- 1144	Govt. Poramboke Promenade road	- op -	- op -	- op -	Rs. 136/-
Ward No. 1 Block 21 T.S.No.88	0	- 40310	Govt. Dry Trichy Municipality	- op -	- op -	- op -	Rs. 1036/-
Ward No. 1 Block 21 T.S.No.78	0	- 10124	Govt. Poramboke Municipal park, Trichy Municipality	- op -	- op -	- op -	Rs. 936/-

ty Suitability Upkeep and maintenance	Health & Rs. 1036/- sanitary surroundings for the purpose	- do -	-do -	- do -	- do -	- do -
Accessibility	Centrally situated & easily accessible	- op -	- op -	- op -	- op -	- op -
Existing usage & condition	Using as park	- op -	- op -	- op -	- op -	- op -
Ownership	Govt. Poramboke Williams road	Govt. Poramboke promenade road	Road Poramboke road	Govt. Poramboke Govt. road	Govt. Poramboke tank aliented in favour of Trichy municipality for a park	Govt. Poramboke kuriviyan
Extent in Acres	0 - 5200	0 - 7143	0 - 4000	0 - 3900	0 - 19160	0 - 25470
Location Ward No. division & T. S. No.	Ward No. 1 Block T.S.No. 395/1	Ward No. Block 43 T.S.No. 343/1	Ward No.1 Block 28, 29 & 30 T.S.No. 176/1, 172 & 170	Ward No. 8 Block 22 T.S No. 2279/1	Ward No. 6 Block 31 T.S.No. 3788/1	Ward No. 4 Block 11 T.S.No. 560
Name of the parks and playfields	Othakadai(road Margin) (viz) Plaza talkies	Rountana park opposite to simpson	Dindigul park road side margin (near National College)	Rengasamy Naidu park	Rathinavelu thevar park (Daranallur)	Servai park
S. No.		∞i	.6	10.	н	12.

Upkeep and maintenance							
Suitability	Health & sanitary surrounding for the purpose	- op -	- op -	- op -	- op -	- op -	- op -
Accessibility	Centrally situated & easily accessible	- op -	- op -	- op -	- op -	- op -	- op -
Existing usage & condition	Using as park	- op -	- op -	- op -	Being used as park & nursery school in one corner	Being used as park & child - ren play field	Being used as park
Ownership	Govt. Poramboke municipal Municipal garden	Govt. Poramboke municipal pookulam park	Govt. Poramboke municipal Park	Govt. Poramboke Saniyankula	Govt. Poramboke Municipal public garden	Govt. municipal land Devad -anam tank	Govt. Por, road poramboke
Extent in Acres	0 - 12879	0 - 2642	0 - 15206	0 - 13505	0 - 26561 0 - 27973	0-5138	0-2830
Location Ward No. division & T. S. No.	Ward 4 Block 19 T.S No. 1583/part	Ward 4 Block 21 T.S No. 1920	Ward 6 Block 10 T.S No. 1160	Ward 6 Block 10 T.S No. 399	Ward 5 Block 33 T.S No. 1986/1 1986/2	Ward 5 Block 31 T.S No. 1927	Ward I Block 32 T.S No. 190/1
Name of the parks and playfields	Ibrahim park (near thevar hall)	Pookulam park L.K.S Big Bazaar	Thiruviam py parkkalla st.	Ramasamy tever park (Saniyankulam)	Gandhi park (near Savithri Vidyasala High School)	Lourdusamypill ai park (town station road)	Roundana park (outside of junction mainta -ined bv LKS)
S. No.	13.	14.	15.	16.	17.	8	19.

Upkeep and mainten ance						
Suitability	Health & sanitary surroundin- g for the purpose	- op -	- op -	- op -	- op -	Private
Accessibility	Centrally situated & easily accessible	- op -	- op -	- op -	- op -	- op -
Existing usage & condition	Using as park	- op -	- op -	- op -		- op -
Ownership	Govt. Por. Municipal play ground	Govt. land	Govt. Dry Turaiyur zaminda -r prasanna venka -tachala reddiar	Wet manager Savithri Vidyasala	S.P.G. College Society High School&playfield	Govt. wet G.Chinnaiya used as college now in possession of National College 0 - 19743 0 - 14674 0 - 15658 0 - 15720 0 - 15720 0 - 15658 0 - 15720 0 - 1777 0 - 1777 0 - 1777
Extent in Acres	1 - 11399	2 - 37877	0-21250	0 - 45000	7-21668	Govt. wet G.Chir college now in po National College 0 - 19743 0 - 14674 0 - 14674 0 - 15658 - do - 0 - 29206 (Now i Nation Majid
Location Ward No. division & T. S. No.	Ward 2 Block 23 T.S.No. 2232/1	Ward 6 Block 22 T.S.No. 3278	Ward 5 Block 20 T.S.No. 1144	Ward 5 Block 21 T.S.No. 1257/part	Ward 4 Block 2 T.S.No. 2566/AA	Block o.
Name of the parks and playfields	Lourusamy Pillai Gro -und (puthur Chinna maidan)	Mathuram playfield	ER High School playfield	Savithri Vidyadala High School plavfield	Bishop Heber H.S. plavfield	National College playfield
S. No.	20.	21.	22.	23.	24.	25.

Upkeep and maintenance					
Suitability		Private	- op -	- op -	- op -
Accessibility		Health & sanitary surrounding for the purpose	- op -	- op -	- op -
Existing usage & condition	Using as park	Centrally situated & easily accessible	Used as school & playfield	Used as school & playfield	Whole inam dry field convent & playfied
Ownership	Govt.Por. channel Md. Majid Wet Govt.Por. channel Got.wet.G. Chinnaipillai Md. Majid Wet Govt.Dry National College Md. Majid Wet Govt.Por. channel Railway land	Govt.Porschool & St. John school & orphanage & playfield	Got. Dry Sevesangam	Govt. Bishop of Trichy	Govt. St. Josephs European Girls H.S. (holy cross convent
Extent in Acres	0 - 1407 0.1775 0.98 0.1886 0.1886 0.1886 0.3822 0.3822 0.3339	12 - 9361	3 - 19212	36.25178	1.18991
Location Ward No. division & T.S. No.	1302/1 1292/1 1292/2 1303/1 1314/2 1306 1306 1308 1309 1309 1309	Ward 1 Block 23 T.S. 117/1	Ward I Block 47 T.S. 379	Ward I Block 40 T.S. 211	Ward I Block 69 T.S. 1404/1
Name of the parks and playfields		St. John Westry school playfield	Sevasangam playfield	R.C. High school playfield	St. Joseph Anglo Indian School playfield
S. No.	25.	26.	27.	28.	29.

- op -	- op -	- op -	Iraming School & playfield	Govt. The secretary & Dravida self respect propaganda organization & other	4.8469	Ward 2 Block 22	Periyar training school playfield	34.
- op -	- op -	- op -	School & Playfield	Govt. Wet. Urumu Seshachalam Chettiar	1.1271	Ward 5 Block 27 T.S.1615/1	UDV High School playfield	33.
- op -	- op -	- op -	Playfields Garden	Catheral Catholic mission Trichy	2.32274 0.33534 1.3127 0.10136	Ward 7 Block 10 T.S.No. 2070 2071 2073 2073	Holy Reedemers H.S & playfields	32.
- op -	- op -	- op -	Ponniah school & playfield	Govt. Dry acquired for school purpose Govt. wet Ponniah H.S	1.8370 0.42151	Ward 8 Block 25 T.S.2334/1 2334/2, 2333	Ponniah's H.S. playfield	<b>31.</b>
Private	Health & sanitary surroundin g for the purpose	Centrally situated & easily accessible	School & playfield	Whole Inam dry convents buildings St. Josephs European school	13.11924	Ward I Block 43 T.S. 338	St. Anni's H.S. playfield	30.
Upkeep and maintenance	Suitability	Accessibility	Existing usage & condition	Ownership	Extent in Acres	Location Ward No. division & T. S. No.	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	S. No.

Upkeep and maintenance	Private	- op -
Suitability	Health & sanitary surrounding for the purpose	· op ·
Accessibility	Centrally situated & easily accessible	- op
Existing usage & condition	College buildings & playfield - do - - do -	College & Girls H.S. playfield - do - Jalanpakkiri Dharvasallis a mosque
Ownership		Govt. wet TD Principal Holy cross college TD 762, 763 - do - TD 887 TD 887 TD 1175 TD 1175 TD 1181
Extent in Acres	3.10029 0.14623 0.18349 0.14271	0.6839 0.14432 0.10506 0.11167 0.11167 0.13342 0.13342 0.13342 2.105
Location Ward No. division & T. S. No.	Ward 5 Block 5 T.S. 241 T.S. 263/2 T.S. 263/3 T.S. 263/3	Ward 4 Block 30 T.S. 2626 2629 2630 2631 2633 2633 2633 2633
Name of the parks and playfields	National H.S. playfield	Holy Cross College playfield
S. No.	35.	36.

Location Ward No. division & T. S. No.		Extent in Acres	Ownership	Existing usage & condition	Accessibility	Suitablity	Upkeep and mainten ance
Ward 5 Block 6 T.S. 276 277 278/1 279/1 279/2 280/2B 280/2B 282 283 299/2 299/2B 299/2C 299/3 299/3	ock	0.8036 0.38128 0.1827 0.7759 0.4374 0.4626 1.2688 1.2688 0.4374 0.28334 0.28334 0.28334 0.28334 0.2882 0.17348 0.2882 0.17348 0.2882 0.13868 0.2882 0.13868 0.2882 0.2892 0.2892 0.2882 0.2892 0.2882 0.2892 0.2992	Govt. for channel Govt. wet St. Joseph college - do - - do -	St. Joesph's playfield	Centrally situated & easily accessible	Health & sanitary surroundin g for the purpose	Private
Ward 5 Block 3 T.S. 57	-	0.8594	St. Joseph's college	- op -	- do -	- op -	- op -
Ward 2 Block 28 T.S. 1442 T.S. 1444 1445	×	4.26573 3.38890 12.6196	SPG school manager, SPG college, Principal SPG Girls school SPG Industries school	Girls & Boys school playfield	- op -	- op -	- op -

Govt. Dry The Principal Campion H.S		Exten		s No. division & T. S. No.
				Ward 1 Block 2.12176 49 T.S. 392/1
Govt. Por. Govt. land National College managing committee for construction of branch school		0.19803		0.19803
Govt. Dry, St. Joseph college procurator Govt. Wet Govt. Wet Govt. Wet Govt. Wet - do - - do - - do - - do - - do - - do -	0544 0000111111		Ward 5 Block 6         0.2525         0           T.S. 302         0.2525         9           303/1         2.29462         9           303/2B         0.2501         9           303/2C         0.2501         9           303/2A         0.2901         9           303/2B         0.4607         9           303/2B         0.100         9           303/3A         0.16224         9           303/3B         0.100         968           303/3B         0.100         3881           306         0.13325         9           307         0.3438         0.3438           306         0.3188         9           307         0.8879         9           307         0.13325         1489           310         0.5597         131489           314         0.12960         1	5 Block 6 02 0.2525 A 0.29462 C 0.2901 C 0.16224 A 0.100 B 0.100 0.3438 0.13325 0.13325 0.13325 0.13325 0.13325 0.13325 0.13325 0.13325 0.13325 0.12960 0.12960

42.     317     0.11936     Govt. Wet       328     0.7950     - do -       329     0.24658     - do -       334     0.14506     - do -       335     0.8778     - do -       336     0.24924     - do -       0.24924     - do -   Sd. Xxxxx Sd. Xxxx Sd. Xxx Sd. Xxxx Sd. Xxx Sd. Xxxx Sd. Xxx Sd. Xxxx Sd. Xxx Sd. Xx Sd. Xxx Sd. Xx Sd. Xxx Sd. Xx Sd. Xx Sd. Xxx Sd. XX Sd.	No.	Name of the parks and playfields	Location Ward No. division & T. S. No.	Extent in Acres	Ownership	Existing usage & condition	Accessibility	Suitability	Upkeep and maintenance
	4		317 328 329 331 334 335 336	0.11936 0.7950 0.24698 0.15886 0.14506 0.14506 0.8778 0.24924	Govt. Wet - do - - do - - do - - do - - do -				
Sd. Xxxxx C.R.SIVARAMAKRISHNAN Superintendent								Sd. Xxxxx R.VAIRASA Comissioner	WAMI
								Sd. Xxxxx C.R.SIVARA Superintender	MAKRISHNAN

#### **ANNEXURE 'H'**



#### ABSTRACT

Local Planning Area - Trichy - Addition of villages covered under Navalpattu New Town Development Area and certain Villages in Non Plan Area to Trichy Local Planning Area - Notification under Section 10 (1) of the Tamil Nadu Town and Country Planning Act, 1971(Tamil Nadu Act 35 of 1972) - Orders Issued. 

# Housing and Urban Development [UD 4(2)] Department

#### G.O.(Ms).No.240

Dated:24.09.2013 விஜய வகுடம், புரட்டாசி திங்கள் 00, திருவர்ளுவர் ஆண்டு 2044

Commissioner

F : S DCT 2013

Reso again

- 1. G.O.Ms.No.936, Rural Development and Local Administration Department, dated 05.04.1974.
- 2. G.O.Ms.No.1669, Rural Development and Local Administration Department, dated 16.07.1974.
- 3. G.O.Ms.No.1414, Housing and Urban Development Department, dated 25.10.1980.
- 4. G.O.Ms.No.1415, Housing and Urban Development Department, dated 25.10.1980.
- 5. G.O.Ms.No.259, Housing and Urban Development Department, dated 15.04.1981,
- 6. G.O.Ms.No.1044, Housing and Urban Development Department, dated 24.11.1982.
- 7. G.O.Ms.No.465, Housing and Urban Development Department, dated 02.06.1989.

Read also:

8. From the Commissioner of Town and Country Planning, letter No.30302/ 2005/ MP3,dated 22.06.2012, and 04.02.2013.

#### ORDER:-

In his letter eighth read above, the Commissioner of Town and Country Planning has stated that, Tiruchirappalli Corporation is the fourth largest city in the State of Tamil Nadu experiencing multi pronged development. The river Cauvery flows in the middle of the city

segregating Srirangam Town as an Island sandwiched between River Cauvery and Coleroon. Owing to the religious Importance of Srirangam, this part of the Town recently experience massive vertical development. Beyond coleroon on the Northern side, Tollgate is developing as an urban mode with hectic residential and commercial developments upto Samayapuram and beyond. On the eastern side of the town along Thanjavur road, Bharat Heavy Electricals Limited, is located and the developments from Bharat Heavy Electricals Limited area merge with the development emanated from Tiruchirappalli Town. On the sourthern side, traverses Pudukkottal road where Airport, Navalpattu, I.T. Park area located a part from the Housing colony developed under Tamil Nadu Urban Development Project. All these developments created land scares In this area and resulted in groom in the land market. Taking advantage of this trend, lot of unauthorised development spring up in the area. On the western side Vayalur road became crucial plank and experiences lot of residential development upto Vayalur mostly being unauthorised. Navalapattu New Town Development Area is within 15kms from Tiruchirappalli city and major industrial and institutional developments such as Bharat Heavy Electricals Limited, Ordnance Factory, Regional Engineering College, Industrial Estate etc., came up which triggers spurt of Urban Development In and around this area. Considering the on going Development in and around Tiruchirappalli Corporation, it is essential to revisit the delineation of the planning area and to establish an effective mechanism with specific powers to enforce, regulate and develop the city as envisaged in the development plans. In order to have comprehensive planning, it is necessary to delineate the development area afresh. Therefore he had suggested to amalgamate the existing Tiruchirappalli Local Planning Area and Navalpattu New Town Development Area and add certain areas which experiences fast growth in northern direction in the proposed development area.

2. The Government, after careful consideration of the proposal of Commissioner of Town and Country Planning in para 1 above, hereby declare their intention to add the villages covered under Navalpattu New Town Development Area and certain other villages in Non Plan Areas as detailed in the Appended Notification to Trichirappalli Local Planning area under clause (b) of sub-section 1 of section 10 of the said Act.

 The appended Notification shall be published in the next issue of Tamil Nadu Government Gazette.

The Collector of Trichirappalli District Is requested to republish the Notification both In English and Tamil In the District Gazette.

 The Director of Tamil Translation is requested to arrange to have the Notification translated into Tamil and forward the translation urgently to the Collector of Trichirappalli District.

-1-

#### APPENDIX,

6 -22.

#### NOTIFICATION.

In exercise of powers conferred by clause (b) of sub-section (1) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972) and in supersession of the earlier Notifications issued in Housing and Urban Development Department Notification No.II(2)/HOU/.5307/80, published at pages 860 and 861 of Part II-Section 2 of the Tamil Nadu Government Gazette, dated the 3rd December 1980, Housing and Urban Development Department Notification No.11(2)/HOU/5227/80, published at page 844 of part II - Section 2 of the Tamil Nadu Government Gazette, dated the 26th November 1980 and Housing and Urban Development Department Notification No.II(2)/ HOU/3469/89, published at page 521 of part II - Section 2 of the Tamil Nadu Government Gazette, dated the 28th June 1989, the Governor of Tamil Nadu hereby declares his Intention to include additional areas in the Trichlreppalli local planning area and to make the following amenoment to the Rural Development and Local Administration Department Notification No.II(2)/RUL/3746/74, published at pages 438-439 of Part II-Section 2 of the Tamil Nadu Government Gazette, dated the 21st August 1974.

2. Notice is hereby given that the draft amendment will be taken into consideration under sub-section (4) of the said section 10 of the said Act, on or after the expiry of two months from the date of publication of this Notification in the <u>Tamil Nadu Government Gazette</u> and that any objection or suggestion, whichever may be received from any inhabitant or any local authority or institution in the local areas with respect thereto before the expiry of the period aforesaid will be duly considered by the Government of Tamil Nadu. Objection or suggestion, if any, should be addressed to the Secretary to Government, Housing and Urban Development Department, Fort St. George, Secretariat, Chennai – 600 009, in writing.

#### DRAFT AMENDMENT.

In the said Notification, for "THE TABLE", the following "TABLE" shall be substituted, namely:-

# Serial Number Name of the Local Planning Area (2) Number and name of Revenue Villages (1) (2) (3) Trichirappalli Corporation 6. Tiruchirappalli Town proper

The Collector of Trichirappalli District is requested to report to the Government, the republication of the Notification in the District Gazette.

-3-

## (By Order of the Governor)

#### Thanga Kaliyaperumal, Secretary to Government.

 The Works Manager, Government Central Press, Chennai - 600 079. (For publication of notification in the Tamil Nadu Government Gazette).

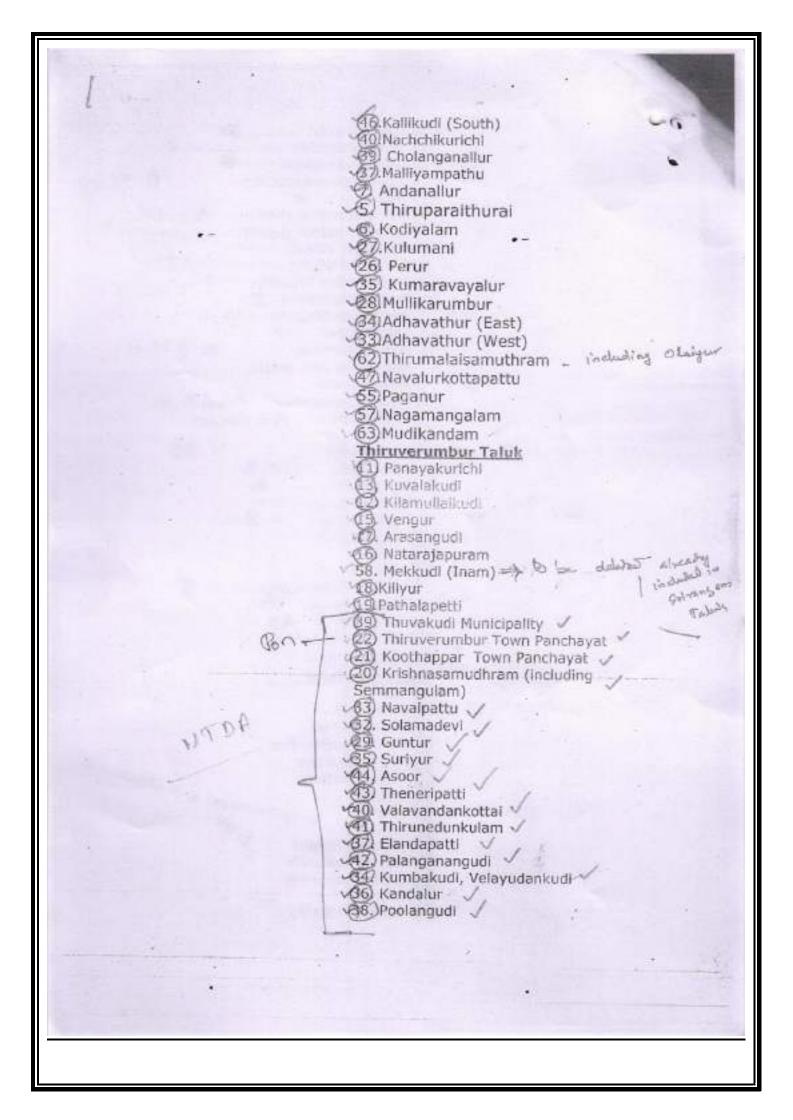
- (2) The Commissioner of Town and Country Planning, Chennai - 600 002.
   3) The District Collector (2)
- The District Collector of Trichirappalli, Trichirappalli.
- The Member Secretary, Trichirappalli Local Planning Authority. (Through Commissioner of Town and Country Planning, Chennal-2).
- The Member Secretary, Navalpattu New Town Development Authority. (Through Commissioner of Town and Country Planning, Chennai-2).
  - Copy to:-

To

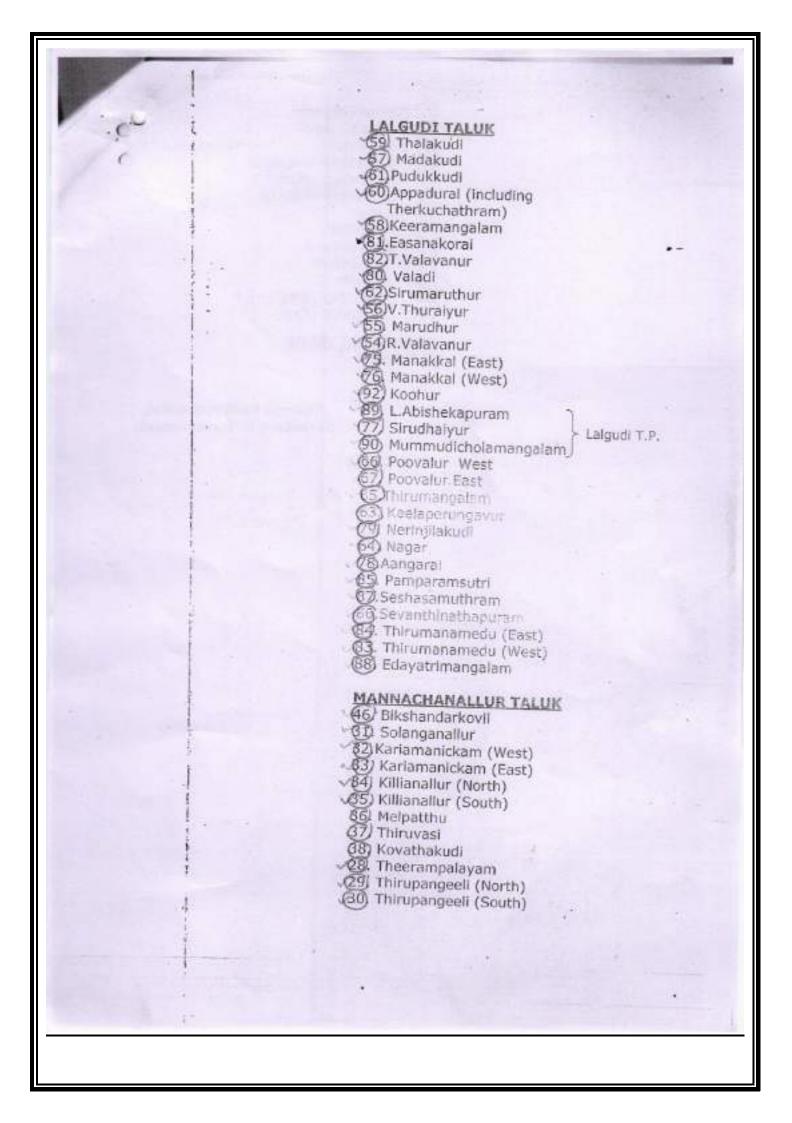
- The Senior Personal Assistant to Minister(Hg&UD), Chennal-600 009.
- The Private Secretary to Secretary to Government, Housing and Urban Development Department, Chennal-600 009.
- The Law Department, Chennai -600 009. Sf/Sc.

//Forwarded / By Order//

Section Officer.



- C 16. Vellithirumutham ----- B p, c 23. Thimmarayasamudram 15. Melur A S=2 Sathanurputhur (North) - AS, AP S=2 Sathanurputhur (South) - AU, AT, AP KA42. Pirattiyur (West) - AP 43. Pirattiyur (East) - AP S=2 AJ S=2 AJ S=2 AJ 1. Pandamangalam — 🎞 KAO 2. Damalavarubhayam - HJN ZYMN 4. Puthur, Thennur, Nattarasha palli vassal, Periavadavur KA 5. K.Abishekapuram AAAK, AL P 28. Kottapattu — A V. AW, AF P 25. Alattur  $\begin{cases} 26. Varaganeri \\ 8. Dharanallur \\ 7. Devathanam, - = \end{cases}$ VIAS Son: Arri Mr. 9. Arlyamangalam - \$ Pm (14) Pappakurichi 24) Ellakudi 23) Agaram 10. Ukkadai Ariyamangalam — 5 27. Sengulam — AD per 44. Panjappur — AO, AN Randarkottal 30. Kilakurichi Srirangam Taluk (22) Kilikoodu **2**DUttamaseri (20) Panayapuram 24 Kambarasampettai -(14)Mutharasanallur K and Buttern th (10) Thiruchendurai 13) Palur (8) Mekkudi - periyulan (58) Mekkudi (Inam) 25 Marudandakurichi (36) Somarasampettal 11. Tayanur (45) Kallikudi (North)



(27) Poonampalayam (42) Mannachanallur Monnachanallur T.P. (41) Ulundangudi (43) Melaseedevimangalam (39) Alagiyamanavalam (10) Madhavaperumal koil 45 Koothur Vengangudi Vengangudi Rajampalayam 20)Samayapuram 23 Kalpalayam v(2) S. Kannanur (West) -T.P 21) S. Kannanur (East) THANJAVUR TALUK Public Prime (1) Thogur",

Thanga Kaliyaperumal, Secretary to Government.

Section Officer.

(Malaha

/ True Copy/

Crape (ik m) . 3775 ) 2018 - 2 dr 9-11-19

## ANNEXURE 'I'



#### ABSTRACT

Local Planning Area – Tiruchirappalli – Declaration under sub-section (4) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972) – Existing rules and regulations made under the said Act applicable to Tiruchirappalli Local Planning Area – Applicable to areas now included in Tiruchirappalli Local Planning Area – Notification under sub-section (6) of section 10 of the Act – Direction to Tiruchirappalli Local Planning Authority under section 92 of the Act – Orders Issued.

#### Housing and Urban Development [UD4(2)] Department

#### G.O.(Ms.)No.88

Dated: 30.06.2021 பிலவ, ஆளி 16, திருவள்ளுவர் ஆண்டு 2052 Read:

G.O.Ms.No.936, Rural Development and Local Administration Department, dated 05.04.1974.

2. G.O.Ms. No. 1669,	Rural	Development	and	Local
Administration Dep	artment,	dated 16.07.1974.		

 G.O.Ms.No.1414, Housing and Urban Development Department, dated 25.10.1980.

- G.O.Ms.No.1415, Housing and Urban Development Department, dated 25.10.1980.
- G.O.Ms.No.259, Housing and Urban Development Department, dated 15.04.1981.
- G.O.Ms.No.1044, Housing and Urban Development Department, dated 24.11.1982.
- G.O.Ms.No.465, Housing and Urban Development Department, dated 02.06.1989.

Read also:

2

- G.O.Ms.No.240, Housing and Urban Development Department, dated 24.09.2013.
- From the Commissioner of Town and Country Planning(i/c) Letter No.30302/2005/Mp3, dated 30.03.2015, 16.10.2015, 04.11.2016, 13.04.2017 and 14.09.2017.
- From the Director of Town and Country Planning, Letter Roc.No.30302/2005/MP2, dated 09.01.2020 and 16.11.2020.

----

#### ORDER:

In the Government order eighth read above, the Government declared the intention to add the villages covered under Navalpattu New Town Development Area and certain other villages in Non Plan Areas to 0029,1

Tiruchirappalli Local Planning area under clause (b) of sub-section (1) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972).

2. In the letter 9<sup>th</sup> read above, the Commissioner of Town and Country Planning has stated that no new villages are added with the Local Planning Area of Tiruchirappalli declared under the said section 10(1)(b) and only the number and spelling mistakes in the village names are corrected. Therefore, the Commissioner of Town and Country Planning has requested the Government to issue Notification under sub-section (4) of section 10 of the said Act for confirmation of areas included in the Tiruchirappalli Local Planning Area.

 On consideration of the above proposal, it is decided that the object can be achieved by the following:-

- (1) Notifying Tiruchirappalli Local Planning Area under sub-section (4) of section 10 of the Act for confirmation of areas included in Tiruchirappalli Local Planning Area which comprises of Navalpattu New Town Development Area and other villages and rescinding existing Navalpattu New Town Development Area, under the said sub- section (4) of section 10 of the Act.
- (2) Directing that existing rules and order made regulations and directions issued under the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972) and hitherto in force in the erstwhile Tiruchirappalli Local Planning Area shall apply to Tiruchirappalli Local Planning Area now declared under sub-section (4) of section 10 of the said Act.
- (3) Directing the Tiruchirappalli Local Planning Authority to implement Navalpattu New Town Development Plan for the areas covered under erstwhile Navalpattu New Town Development Area and take over the assets and liabilities of Navalpattu New Town Development Authority under section 92 of the Act.

4. The Government after careful consideration of the proposal of the Commissioner of Town and Country Planning, hereby supersede the Housing and Urban Development Department Notification No.II(2)/HOU/ 7095/82, published at page 812 of Part II- Section 2 of the Tamil Nadu Government Gazette, No.48, dated 15<sup>th</sup> December 1982, declaring the Navalpattu New Town Development Area under sub section (4) of section 10 of the said Act and declare the area specified in the Notification appended to this order, to be the Tiruchirappalli Local Planning Area under sub-section (4) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972).

5. The Government also direct the Member Secretary, Tiruchirappalli Local Planning Authority to implement the Navalpattu New Town Development Plan for the areas covered by erstwhile Navalapattu New Town Development Area until modified Master Plan is prepared for

...3...

Tiruchirappalli Local Planning Area alongwith the newly added villages under section 92 of the said Act. Further, the Government direct that existing rules and regulations made under the Tamil Nadu Town and Country Planning Act, 1971 to Tiruchirappalli Local Planning Area shall be applicable to the newly declared Tiruchirappalli Local Planning Area under sub-section (6) of the said section 10 of the Act. It is also directed that all properties, funds and dues which are vested in, or realisable by, the Navalapattu New Town Development Authority shall vest in Tiruchirappalli Local Planning Authority and all the liabilities which are enforceable against Navalpattu New Town Development Authority shall be enforceable against Tiruchirappalli Local Planning Authority, under section 92 of the sald Act.

 Accordingly, the appended Notifications shall be published in the next issue of <u>Tamil Nadu Government Gazette</u>.

The Collector of Trichirappalli District is requested to republish the Notification both in English and Tamil in the District Gazette.

 The Director of Tamil Translation is requested to arrange to have the Notification translated into Tamil and forward the translation urgently to the Collector of Trichirapalli District.

The Collector of Trichirappalli District is requested to report to the Government, the republication of the Notification in the District Gazette.

#### (BY ORDER OF THE GOVERNOR)

#### HITESH KUMAR S MAKWANA, PRINCIPAL SECRETARY TO GOVERNMENT.

To

The Works Manager, Government Central Press, Chennai – 79. (for Publication of Notification in the Tamil Nadu Government Gazette). The Director of Town and Country Planning, Chennai–600107. The District Collector, Trichirappalli.

The Member Secretary,

Trichirappalli Local Planning Authority,

(Through Director of Town and Country Planning, Chennai-600107).

The Member Secretary,

Navalpattu New Town Development Authority.

(Through Director of Town and Country Planning,

Chennai-600107).

The Director of Translations, Chennai-600009.

#### Copy to:-

The Special Persoani Assistant to Hon'ble Minister for Housing and Urban Development Department, Chennai-600009.

The Private Secretary to Principal Secretary to Government, Housing and Urban Development Department, Chennai-600009.

4

The Law Department, Secretariat, Chennai-600009. The Housing and Urban Development (OP1) Department. Chennai-600009.

Stock File/Spare Copy.

#### //FORWARDED BY ORDER//

3-14. ON OFF

### APPENDIX.

#### NOTIFICATION -I.

In exercise of the powers conferred by sub-section (4) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972), and in supersession of the Housing and Urban Development Department Notification No.II(2)/HOU/7095/82, published at page 812 of Part II - Section 2 of the Tamil Nadu Government Gazette, dated the 15th December 1982, the Governor of Tamil Nadu hereby makes the following amendment to the Rural Development and Local Administration Department Notification No.II(2)/RUL/3746/74, published at pages 438-439 of Part II - Section 2 of the Tamil Nadu Government Gazette, dated the 21st August 1974 so as to include additional areas in the Tiruchirappalli local planning area, the intention to do so has been previously published in Housing and Urban Development Notification No.II (2)/HOU/792/2013 at pages 707-709 of Part II - Section 2 of the Tamil Nadu Government Gazette, dated 23rd October 2013 and Tiruchirappalli District Gazette dated 13th November 2014, as required by clause (5) of sub-section (1) of the said section 10 of the Act.

#### AMENDMENT.

In the said Notification, for "THE TABLE", the following "TABLE" shall be substituted, namely:-

#### "THE TABLE.

Serial Number.	Name of the Local Planning	Number and name of Revenue Villages.
(1)	<u>Area.</u> (2)	(3)
3.00	Tiruchirappalli	Tiruchirappalli Corporation
		<ol><li>Tiruchirappalli Town proper</li></ol>
		19. Tiruvalarsolai
		18. Kondayampettal
		16. Vellithirumutham
		23. Thimmarayasamudram
		15. Melur
		59. Sathanur puthur (North)
		60. Sathanur puthur (South)
		42. Pirattiyur (West)
		43. Pirattiyur (East)
		38. Uyyakondan Tirumalai
		1. Pandamangalam
		2. Damalavarubhayam
		3. Chinthamani
		o, crimolandin

- 4. Puthur, Thennur, Nattarasha palli vassal, Periavadavur
- K.Abishekapuram
- 28. Kottapattu 25. Alattur
- 26. Varaganeri 8. Dharanallur
- 7. Devathanam Chinnavaduvur
- 9. Ariyamangalam
- 14. Pappakurichi
- 24. Ellakudi
- 23. Agaram
- 10. Ukkadai Ariyamangalam
  - 27. Sengulam
  - 44. Panjappur
  - 31. Kilakalkandarkottai
  - 22. Thiruverumbur

#### Srirangam Taluk

- 22. Kilikkoodu
- 21. Uthamaseri
- 20. Panayapuram
- 24. Kambarasampettal
- 14. Mutharasanallur
- 10. Thiruchendurai
- 13. Palur
- 12. Allur
- 8. Mekudi
- 9. Periakaruppur
- 11. Kadayakurichi
- 58. Mekkudi (Inam)
- 25. Marudhandakurichi
- Somarasampettai
- 41. Thayanoor
- 45. Kallikudi (North)
- 46. Kallikudi (South)
- 40. Nachikurichi
- 39. Solanganallur
- 37. Malliampathu
- 7. Anthanallur
- 5. Thiruparaithurai
- 6. Kodiyalam
- 27. Kulumani
- 26. Perur
- 35. Kumaravayalur

. 3.

- .3.
- 28. Mullikarrupoor
- 34. Athavathur (East)
- 33. Athavathur (West)
- 62. Thirumalaisamuthiram
- 47. Navalur Kottapattu
- 55. Paganoor
- 57. Nagamangalam
- 63. Mudikandam

#### 39. Thuvakudi Municipality

#### Thiruverumbur Taluk

- Panayakurichi
   Kuvalagudi
- 13. Kuvalaguur
- 12. Keelamullagudi
- 15. Vengur
- 17. Arasangudi
- 16. Natarajapuram
- 18. Kiliyur
- 19. Pathalapettai
- 21. Koothappar Town Panchayat
- Krishnasamudram (including Semmankulam)
- 33. Navalpattu
- 32. Choolamadevi
- 29. Kundoor
- 35. Sooriyur
- 44. Asoor
- 43. Theneripatti
- 40. Valavanthankottai
- 41. Thirunedunkulam
- 37. Elanthapatti
- 42. Palanganankudi
- 34. Kumbakudi, Velayudankudi
- 36. Kanthaloor
- 38. Poolangudi
- 30. Keelakurichi

#### LALGUDI TALUK

- 59. Thalagudi
- 57. Madagudi
- 61. Puthukudi
- 60. Appadural (including
- Therkuchatharam)
- 58. Keeramangalam
- 81. Esanakorai

A.,

82. T.Valavanoor

80. Valadi 62. Sirumaruthur

56. V.Thuraiyur

55. Marudhur

54. R.Valavanoor

75. Manakkal (East)

76. Manakkal (West)

92. Koohur

89. L. Abishekapuram

77. Sirudaiyur

90. Mummudi Cholamangalam,

66. Puvalur (West)

67. Puvalur (East) ∫ Puvalur T.P.

65.Thirumangalam

63. Keelaperungavur

79. Nerunjalakudi

64. Nagar

78. Aangarai

85. Pambaramsuthi

87. Sesha samuthiram

86. Sevanthinathapuram

84. Thirumanamedu (East)

83. Thirumanamedu (West)

88. Idayathumangalam

#### MANNACHANALLUR TALUK

46. Pitchandar Koll

31. Cholanganallur

32. Kariyamanikam (West)

Kariyamanikam (East)

34. Killianallur (North)

Killianallur (South)

36. Melpathu

37. Thiruvasi

38. Kovathakudi

28. Theerampalayam

29. Thiruppanjeeli (North)

30. Thiruppanjeeli (South)

27. Poonampalayam

42. Mannachanallur

41. Ulunthangudi

Melaseedevimangalam

39. Alakiyamanavalam

40. Mathavaperumal koll

45. Koothur

Mannachanaliur T.P.

Lalgudi T.P.

..5.,

- 44. Venkankudi
- 24. Rasampalayam
- 20. Samayapuram
- 23. Kalpalayam
- 22. S. Kannanoor (West) T.P
- 21. S. Kannanoor (East)

#### THANJAVUR DISTRICT. BUDALUR TALUK

1. Thogur".

#### HITESH KUMAR S MAKWANA, PRINCIPAL SECRETARY TO GOVERNMENT.

//True Copy//

14 SECTION OFFICER. Just

#### NOTIFICATION - II.

In exercise of the powers conferred by sub-section (6) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972), the Governor of Tamil Nadu hereby directs that the rules and orders made, regulations and directionsissued and powers conferred under the said Act and hitherto in force in the erstwhile Tiruchirappalli Local Planning Area shall apply to the Tiruchirappalli Local Planning Area declared now.

#### HITESH KUMAR S MAKWANA, PRINCIPAL SECRETARY TO GOVERNMENT.

//True Copy//

SECTION OFFICER 5TR/14

#### **ANNEXURE J**



Urban Development – Declaration of Tiruchirappalli Urban Planning Area under clause (48) of section 2 of the Tamil Nadu Town and Country Planning Act, 1971, (Tamil Nadu Act 35 of 1972) – Orders – Issued.

#### Housing and Urban Development [UD4(2)] Department

#### G.O.(Ms).No.207

Dated: 23.11.2022. சபலிருது வருடம். எரத்தினை 7. திருவள்ளுவர் ஆண்டு 2053. Read:

- G.O.(Ms).No.240, Housing and Urban Development Department, dated: 24.09.2013.
- G.O.(Ms).No.88, Housing and Urban Development. Department, dated: 30.06.2021.
- From the Director of Town and Country Planning, Letter Roc. No.13676/2022/TCP2, dated 29.07.2022.

#### ORDER:

In the Government Order first read above, In the Government Order first read above, among others, orders have been issued declaring the intention of the Government to add certain additional areas to the Tiruchirappalli Local Planning Area under clause (b) of sub-section (1) of section 10 of the Tamil Nadu Town and Country Planning Act, 1971(Tamil Nadu Act 35 of 1972).

 In the Government Order second read above, Tiruchirappall: Local Planning area was declared under sub-section (4) of section 10 of the said Act.

3. Subsequently, the Government have made amendment to the said Tamii Nadu Town and Country Planning Act, 1971 (Tamii Nadu Act 35 of 1972) vide the Tamii Nadu Town and Country Planning (Second Amendment) Act, 2022 (Tamii Nadu Act 38 of 2022), among others, to specify Urban Planning Area and to constitute Urban Development Authority. The said Amendment Act, 2022 has come into force with effect on the 14.09.2022.

...2...

Copy to:

The Special Personal Assistant to Hon'ble Minister for Housing and Urban Development, Chennai-600009.
The Private Secretary to Principal Secretary to Government, Housing and Urban Development Department, Chennai-600009.
The Law (Hg&UD)Department, Chennai-600009.
The Housing and Urban Development (OP-1) Department, Chennai-600 009.
Stock File/Spare Copy.

#### //FORWARDED BY ORDER//

3 W STAR SECTION OFFICER. 3

...3...

#### APPENDIX. NOTIFICATION.

In exercise of the powers conferred by clause (48) of section 2 of the Tamil Nadu Town and Country Planning Act, 1971 (Tamil Nadu Act 35 of 1972), the Governor of Tamil Nadu hereby specifies the following revenue villages as Tiruchirappalli Urban Planning Area:-

Serial No.	Name of the Taluk.	Village No.	Revenue Village Name.
1	Lalgudi	54	R.Valavanoor
2	Laigudi	55	Marudhur
3	Lalgudi	56	V.Thuraiyur
4	Lalgudi	57	Madagudi
5	Lalgudi	58	Keeramangalam
6	Lalgudi	59	Thalagudi
7	Laigudi		Appadurai (including
į	··· - ····-	60	Therkuchathram)
8	Lalgudi	61	Puthukudi
9	Lalgudi	62	Sirumaruthur
10	Lalgudi	63	Keelaperungavur
11	Lalgudi	64	Nagar
12	Lalgudi	65 Thirumangalam	
13	Lalgudi	66	Puvalur (West)
14	Lalgudi	67 Puvalur (East)	
15	Lalgudi	75	Manakkal (East)
16	Lalgudi	76	Manakkal (West)
17	Lalgudi	77 Sirudaiyur	
' 18	Lalgudi	78	Aangarai
19	Lalgudi	79	Nerujalakudi
20	Lalgudi	80	Valadi
<u></u> 21	Lalgudi	81	Esanakoral
22	Lalgudi	82 T.Valavanoor	
23	Lalgudi	83 Thirumanamedu (West)	
24	Lalgudi	84 Thirumanamedu (East)	
25	Lalgudi	85 Pambaramsuthi	
26	Lalgudi	86 Sevanthinathapuram	

....Z...

...3...

62	<sup>†</sup> Srirangam	10	Thiruchendurai
63	Sriraлgam	11	Kadayakurichi
64	Shirangam	12	Allur
65	Sifrangam	13	Palur
66	Siirangam	14	Mutharasanallur
67	Srirangam	15	Melur
68	Srirangam	16	Vellithirumutham
69	Srlrangam	18	Kondayampettai
70	Srlrangam	19	Tiruvalarsolai
21	Srlrangam	20	Panayapuram
72	Srirangam	21	Uthamaserl
73	Srirangam	22	Kilikkoodu
74	Srirangam	, 23	Thimmarayasamudram
' 75	<sup>!</sup> Shirangam	24	Kambarasampettai
76	Srurangam	25	Marudhandakurichi
77	Shrangam	26	Perur
78	Shrangam	27	Kulumani
79	Shrangam	28	Mullikarrupoor
<u> 80</u>	Srirangam	33	Athavathur (West)
81	Srirangam	34	Athavathur (East)
82	Srirangam	35	Kumaravayalur
83	Srirangam	36	i Somarasampettai
84	Srirangam	37	Mallampathu
85	Srirangam	39	Solanganallur
86	Srirangam	40	Nachikurichi
87	Srirangam	41	Thayanoor
66	Srirangam	45	<sub>i</sub> Kallikudi (North)
- 89	Srirangam	46	Kallikudi (South)
90	Srirangam	47	NavalurKottapattu
91	Srirangam	55	Paganoor
92	Srirangam	57	Nagamangalam
93	Srirangam	58	Mekkudi (Inam)
94	Srirangam	61	Olaiyur
95	Srirangam	62	Thirumalaisamuthiram
96	Srirangam	63	Mudikandam
97	Thiruverumbur	11	Panayakurichi

...4...

....5....

.

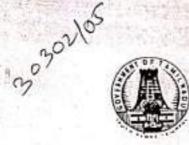
130	 Tiruchlrappalli East	8	Tharanallur
! 131	Trruchirappalli East	9	Ariyamangalam
132	Tiruchirappalli East	10	Ukadal Ariyamangalam
133	Tiruchirappalli East	25	Alathur
134	Tiruchirappalli East	26	Varaganeri
135	Tiruchirappaih East	27	Sengulam
136	Tiruchirappalli East	28	Kottapattu
137	Tiruchirappalli East	· 59	Sathanoorputhur North
138	Tiruchirappalli East	60	Sathanoorputhur South
139	Tiruchirappalli West	I	Pandamangalam
140	Turuchirappalli West	2	Thamalavarupayam
141	Tiruchirappalli West	4	Puthur
142	Tiruchirappalll West	4/1	Thennur
143	Tiruchirappalli West	5	K Abhishekapuram
144	Tiruchirappalli West	7	Periyavadavur 1
145	Tiruchirappalli West	38	Uyyakondari Thirumalai
146	Tiruchirappalli West	42	Pirattiyur West
147	Tiruchirappalli West	43	Pirattiyur East
148	Tiruchirappalli West	44	Panchapur

#### HITESH KUMAR S. MAKWANA PRINCIPAL SECRETARY TO GOVERNMENT

//True Copy//

SECTION OFFICER.

#### **ANNEXURE K**



Housing and Urban Development Department Secretariat, Chennai-9.

### Letter No.4791974/UD4(2)/2023-1, dated 15.06.2023

#### From

Selvi. Apoorva, I.A.S., Principal Secretary to Government.

#### To

Sir,

The Director of Town and Country Planning, Chennai-600 107.



Sub: Urban Development – Tiruchirappalli Local Planning Area – to include one additional area Olaiyur and delete the area Thogur situated in Budalur Taluk in Thanjavur District to the Tiruchirappalli Local Planning Area under section 10(1) of Tamil Nadu Town and Country Planning Act, 1971– Regarding.

Ref:

- G.O.(MS).No.207, Housing and Urban Development Department, dated 23.11.2022.
- Received from Director of Town and Country Planning, Na.Ka.No.30302/2005/TCP2, dated 17.05.2023

1 am to invite your attention to the references cited wherein you have requested the Government to include one additional area Olaiyur in Srirangam Taluk and delete one area Thogur situated in Budalur Taluk in Thanjavur District to the said Tiruchirappalli Local Planning Area under section 10(1) of Tamil Nadu Town and Country Planning Act, 1971.

2. In this regard, I am to inform that there is no need to add Olaiyur village or to delete Thogur village in Tiruchirappalli Local Planning Area under section 10(1) of TamilNadu Town and Country Planning Act, 1971 since the Tiruchirappalli Urban Planning Area has already been declared <u>vide</u> G.O.(MS).No.207, Housing and Urban Development (UD4(2)) Department, dated 23.11.2022.

Yours faithfully,

#### **ANNEXURE L**



#### Abstract

Urban Development – Preparation of Master Plan for areas other than Chennai Metropolitan Area – Preparation of existing land use map using modern techniques in three phases at a total cost of Rs.41 crores – Implementation of first phase at a cost of Rs.4,91,46,400/- Work entrusted to M/s. Bharatidasan University and Exemption u/s 16(f) of TNTIT Act - Orders Issued.

Housing and Urban Development [UD4(2)]Department

G.O.(Ms).No.23

Dated 29.01.2013

-573-

Read:

From the Commissioner of Town and Country Planning letter No.19990/11/MP1, dated 12.6.2012 and 4.9.2012

#### ORDER:

While moving Demand No.26, for the year 2012-2013, the Minister (Housing and Urban Development) made the following announcement in the floor of assembly.

"To cover all the left out areas of Tamil Nadu under planned development it is proposed to prepare Regional Plan / Master Plan in three phases. In the first phase, 8000 sq.km. comprising of expanded area of existing 27 Composite Local Planning areas, 8 New Town Development areas and newly formed Composite Local Planning areas viz., Dharmapuri, Gobichettipalayam, Rajapalayam, Kovilpatti etc., will be taken up".

The Commissioner of Town and Country Planning has stated the following with reference to the above announcement.

- Preparation of development plan first involves preparation of existing land use map and then working out the proposed Master Plan report.
- It has been stated in the announcement that the work of preparation of such plans will be taken up in 3 phases in which 8000 sq.km will be covered in the first phase.

The details of area of extent for which plan has to be prepared is tabulated as follows:

Total geographical area of Tamil Nadu	1,30,058 sq.km.
Area of Chennai Metropolitan Area (CMA)	1,189 sq.km.
Area under the Jurisdiction of Town and Country Planning Department (T&CP Dept.) (Area excluding CMA)	1,28,869 sq.km.
Agricultural area	58,243 sq.km.
Forest area	21,431 sq.km.
Area to be planned by T&CP Dept.	49,195 sq.km.
Area already covered by Planning authorities (27 Composite Local Planning Authorities + 88 Single Local Planning Authorities + 8 New Town Development Authorities)	6,950 sq.km.
Remaining area to be brought under planning area	42,245 sq.km.

- 4. Even though, Master Plan for areas which have been covered already under planning area are at various stages of preparation, expansion of each of the planning areas is necessitated in the present day context of rapid development. Therefore, fresh survey of all the planning areas is also felt necessary. Therefore, the remaining area of 42,245 sq.km. and part of 6950 sq.km of existing master plan areas require fresh field survey for preparation of existing land use map and subsequent master plan / regional plan as the case may be.
- It is assessed that to complete the master planning exercise for the entire area by engaging the staff of the department will be time consuming and is assessed to be about 20 years.
- 6. At the same time, use of modern techniques like GIS, Remote sensing and using external resources i.e., private consultants including Universities in preparation of plans, would greatly reduce the time and would enable to achieve the announcement early. Therefore, it is felt that it would be appropriate to outsource the work of preparation of existing land use maps and registers, using modern techniques like GIS and Remote sensing by prescribing the Terms of reference for such outsourcing. Once the existing land use map and register is prepared, the proposed

land use map and schedules shall be done by utilizing the department staff.

Employing such modern techniques is a new nature of work for the department and therefore it is difficult to work out the actual cost for calling of tenders due to new methods involved as stated above.

The Commissioner of Town and Country Planning has further stated that,

- Based on the finalised terms of reference (TOR), expression of interest was received from three institutions and they have quoted the amount mentioned against each of them along with break up details for various components of the projects.
  - (I) Bharathidasan Rs.5440/- per Sq.km University
  - (ii) Institute of Remote Sensing, Anna University

Rs.8125/- per Sq.Km

- (iii) School of Architecture and Planning, Anna University
- As this is a special kind of work and first of its kind tried by the Department of Town and Country Planning, the Commissioner of Town and Country Planning has requested to consider giving exemption from going for tenders and to entrust the work to Bharathidasan University at the rate of Rs.5440/- per sq.km under section 16 of TNTIT Act, 1998, as they have quoted lowest among the three. It is proposed to take up 8447 sq.km of the area as of now, which has been detailed as below:

S. No.	Name of the composite local planning area	Existing extent of planning area (sq.km)	Proposed additional area (Sq.km)	Total area to be covered under the project (Sq.km)
1.	Coimbatore	1276	2331	3607
2.	Madurai	Madurai LPA * 721 Palkalai Nagar NTDA** 38 Tiruppuvanam LPA * 26 785	409	1194

3.	Tiruchirappalli	Tiruchy LPA * 281 Navalpattu NTDA** 208 489	315	804
4.	Thoothukudi	355	113	468
4. 5.	Tiruppur	219.90 say 220	827.91	1048
6.	Erode	Erode LPA* 80 Chithode NTDA** 25.4 Perunthurai NTDA** 425	201	731
	Sum Ha	530.4		
7.	Hosur	say 530	202	FOF
1.	Hosur	292	303	595
	Total	3947	4500	8447

Local Planning Authority

\*\* New Town Development Authority

 Total cost for the work in first phase would be Rs.4,91,46,440/-.

4. The Commissioner of Town and Country Planning has proposed to meet the above expenditure from Town and Country Planning fund. He has stated that, the balance in this fund as an 31.3.2012 is Rs.71.00 crore and as per section 64(3) of the Tamil Nadu Town and Country Planning Act 1971, money from Town and Country Planning fund could be utilized by planning authorities for preparation of development plan. He has also stated that it would take 9 months to prepare present land use map and land use register as per the Terms of Reference. The penalty of 5% has been proposed to ensure timely completion. After the experience, the rest of the area of the State would be covered within a span of 2 years engaging more number of universities / consultants.

5. The Government after careful consideration has decided to accept the proposal of Commissioner of Town and Country Planning as detailed above. Accordingly, the Government direct the Commissioner of Town and Country Planning to take up the work of preparation of base map for the preparation of Master Plan covering 8447 sq.km as detailed in para 3 above at a total cost of Rs.4,91,46,440/- and entrust the work to M/s. Bharathidasan University at the rate of Rs.5440/- sq.km under section 16 of TNTIT Act, 1998, as they have quoted the lowest among the three Universities who expressed interest for the above project. The above expenditure shall be met from funds available in Town and Country Planning fund. The Government also exempt the above project from notification under 16(f) of the TNTIT ACT 1998.  This order issues with the concurrence of Finance vide its U.O.No.1459/Hg/2013, dated 17.01.2013.

(By Order of the Governor)

K. Phanindra Reddy, Secretary to Government.

To The Commissioner of Town and Country Planning, Chennai-600 002. Copy to: The Member Secretary, Chennai Metropolitan Development Authority, Chennal-600 008. The Finance Department, Chennai-600 009. The Private Secretary to Secretary to Government, Housing and Urban Development Department, Chennai-600 009. The Senior Personal Assistant to Minister (Hg&UD), Chennai-600 009. The Chief Minister's Office. Chennai-600 009.

// Forwarded / By Order //

Section Officer.

#### ANNEXURE M

#### Urban Forest - Note order from the Chairman/Collector, Tiruchirappalli LPA/ District

#### தலைவர்/திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழுமம்/மாவட்ட ஆட்சித்தலைவர், அவர்களுக்கு குறிப்பு பணிந்து சமர்ப்பிக்கப்படுகிறது

#### கோப்பு எண்.4377/2023/திமா–3

பார்வை :

#### Блол:13.12.2023

- பொருள்: நகர்ப்புற காடுகள் (Urban Forestry) மாலட்ட நகர் ஊரமைப்பு அனுவலகம் – திருச்சிராப்பள்ளி மாலட்டம் – தமிழ்நாட்டில் திருச்சிராப்பள்ளி உட்பட 8 நகரங்களில் நகர்ப்புற காடுகள் உருவாக்கி இந்திய அரசிடமிருந்து ரூபாப் 40 கோடி ஊக்கத்தொகை பெற வழிகாட்டுதல் – Schemes for Special Assistance to states for Capital Investment 2023–2024–Part–II (Urban Planning Reform) – தொடர்பாக.
  - நகர் ஊரமைப்பு இயக்குநர். சென்னை அவர்களின் நேர்முக கடிதம் எண்.27237/2023/TCP3 நான் 23.11.2023
    - Supplementary Guidelines on the "Scheme for Special Assistance to states for Capital Investment 2023–24"–Part–II (Urban Planning Reform)
    - Email from Secretary to Government, Housing and Urban Development Department dated 14.09.2023
    - Review meeting for "Scheme for Special for Special Assistance to states for Capital Investment 2023–2024" – Part–III (Urban Planning Reform) chaired by the Principal Secretary to Government, Finance Department, dated 06.11.2023
    - 5) D.O.Letter No.5063023/Bud-1/2023 dated 07.11.2023

பார்வை 1–இல் கண்டுள்ள நகர் ஊரமைப்பு இயக்குநர். சென்னை அவர்களின் நேரமுக கடிதத்தில் பார்வை 2–இல் கண்டுள்ள Supplementary Guidelines on the "Scheme for Special Assistance to states for Capital Investment 2023–24\*–Part–II (Urban Planning Reform) திட்டம் மூலம் தமிழ்நாட்டில் 8 நகரங்களில் நகர்ப்புற காடுகள் உருவாக்கி இந்திய அரசிடமிருந்து ரூபாப் 40 கோடி ஊக்கத்தொகை பெற்று வழிகாட்டுதல்களின்படி நடைமுறைப்படுத்த தெரிவிக்கப்பட்டுள்ளது.

மேற்படி பார்வை 2–இல் கண்டுள்ள வழிகாட்டுதலில் ஒருபகுதி நகர்ப்புற வனத்தை உருவாக்குதல் ஆகும். இந்த திட்டத்தின் கீழ் தமிழ்நாட்டில் கீழ்கண்ட 8 நகரங்களை தேர்வு செய்யப்பட்டுள்ளது.

- கோபம்புத்தூர்
- 2. மதுரை
- திருச்சிறாப்பள்ளி
- Своий
- 5. **#@m**6
- 6. திருப்பூர்
- 7. திருநெல்வேலி
- 8. வேலூர்

இத்திட்டத்தின் வழிகாட்டுதலின்படி, ரூபாப் 5 கோடி ஊக்கத்தொகை பெற குறைந்த பட்சம் ஒரு ஏக்கர் நிலத்தில் வனங்கள் ஏற்படுத்த வேண்டும். நகர்ப்புற காடுகளை உருவாக்குவதற்காக இடம் கண்டறியப்பட்டு அவற்றினை முழுமைத் திட்டத்தில் நகர்ப்புற வனமாக ஒருங்கிணைத்தும். அவற்றினை சுத்தம் செய்து வனத்துறையால் பணிகள் துவக்கப்பட வேண்டும் என தெரிவிக்கப்பட்டுள்ளது.

பார்வை 4-இல் கண்டுள்ள ஆய்வு கூட்டமானது Principal Secretary to Government, Finance Department அவர்களின் தலைமையில் நடைபெற்றதில் இத்திட்டத்தின் சிறப்புகள் குறித்து தெரிவித்து இத்திட்டத்தினை குறிப்பிட்ட காலத்திற்குள் முடித்திட தெரிவிக்கப்பட்டுள்ளதால் அரசு செயலர், வீட்டு வசதி மற்றும் நகர்ப்புற வளர்ச்சித்துறை அவர்களால் நகர்ப்புற காடுகளை உருவாக்குதற்காக 15.01.2024–க்குள் பணிகள் முடித்திடுமாறு உத்திரவிடப்பட்டுள்ளது.

மாவட்ட நகர் ஊரமைப்பு அலுவலகத்தால் 1 ஏக்கருக்கு குறையாமல் அரசு புறம்போக்கு நிலம் கண்டறியப்பட வேண்டும். மேலும் மேற்படி இடம் முழுமை திட்டத்தில் விவசாய உபயோக பகுதியாக இருத்தல் வேண்டும் எனவும். தமிழ்நாடு ஒருங்கிணைந்த கட்டிட விதிகள் 2019-ன்படி நகர்ப்புற காடுகள் உருவாக்கிட விவசாய உபயோக பகுதியில் வழிவகை உள்ளதால் அறிவிப்பு செய்யப்படும் அரசு புறம்போக்கு நிலமானது திருச்சிராப்பள்ளி உள்ளூர் திட்டப் பகுதிக்குள் விவசாய உபயோக பகுதியில் அமையுமாறு தேர்வு செய்யப்பட வேண்டும் என தெரிவிக்கப்பட்டுள்ளது.

நகர்ப்புற காடுகள் உருவாக்கிட இடம் மாவட்ட நகர் ஊரமைப்பு அலுவலரால் தேர்வு செய்து மாவட்ட ஆட்சித்தலைவரின் ஒப்புதல் பெறப்பட்ட பின்னர் மாவட்ட ஆட்சித்தலைவர் மற்றும் மாவட்ட வன அலுவலருடன் கூட்டம் நடத்தப்பட வேண்டும். அடையாளம் காணப்பட்ட இடத்தில் நகர்ப்புற காடுகள் உருவாக்கிட வன அலுவலரால் அரசு விகித கட்டண அடிப்படையில் மதிப்பீடு வழங்க கோரப்படலாம். மேலும் அடையாளம் காணப்பட்ட கடமானது வனத்துறையால் நகர்ப்புற காடுகள் ஒருவாக்கி அதனை பராமரிக்க தெரிவிக்கப்பட்டுள்ளது. மேலும் நில உரிமை வனத்துறைக்கு மாற்றி அமைத்திட தேவையில்லை எனவும் குறிப்பிடப்பட்டுள்ளது.

நகர்ப்புற காடுகள் உருவாக்கிட வன அலுவலரால் அரசு விகித கட்டண அடிப்படையில் மதிப்பே வழங்கப்பட்ட பின்னர் அதனை எதிர்வரும் உள்ளூர் திட்டக் குழும கூட்டத்தில் பொருள் வைத்து தீர்மாணம் நிறைவேற்றி தீர்மான விபரத்துடன் உத்தேசம் நகர் ஊரமைப்பு இயக்குநருக்கு அனுப்பிவைத்திட கேட்டுக்கொள்ளப்பட்டுள்ளது.

திருச்சிராப்பள்ளி மாவட்டத்தில் நகர்ப்புற காடுகள் உருவாக்கும் பொருட்டு இடம் தேர்வு செய்திட வருவாய் ஆவணங்களில் அரசு புறம்போக்கு நிலங்கள் கண்டறிந்து அவற்றின் தற்போதைய நிலை குறித்து இடம் நேராய்வு செய்யப்பட்டு காடுகள் அமைத்திட ஏற்ற இடமாக திருவெறும்பூர் வட்டம், சூரியூர் கிராமம், சர்வே எ.ண்.400/1 (மொத்தப் பரப்பு– 5.03.00 ஹெக்டேர்)–ல் 1 ஏக்கர் பரப்பளவிற்கு குறையாத இடத்தினை தேர்வு செய்து நகர் ஊரமைப்பு இயக்குநருக்கு சமர்ப்பிக்கப்பட்டது. முழுமை திட்ட விதிகள் மற்றும் தமிழ்நாடு ஒருங்கிணைந்த கட்டிட விதிகள் 2019–ன்படி விவசாய உபயோக பகுதியில் காடுகள் அமைத்திட வழிவகை உள்ளதால் திருச்சிராப்பள்ளி மாவட்டம், திருவெறும்பூர் வட்டம், சூரியூர் கிராமம், சர்வே எ.ண்.400/1 (மொத்தப் பரப்பு–5.03.00 ஹெக்டேர்)–ல் 1 ஏக்கர் பரப்பளவிற்கு குறையாத வண்ணம் நகர்ப்புற காடுகள் அமைத்திட இடத்தினை ஒதுக்கீடு செய்ய ஒப்புதலும், மாவட்ட வன அலுவலர் அவர்களை மேற்கண்ட சூரியூர் கிராமம், சர்வே எண்.400/1–ல் ஒதுக்கீடு செய்யப்பட்ட இடத்தில் நகர்ப்புற காடுகள் உருவாக்கிட மதிப்பே வழங்க கோரப்பட்டு. மேலும், அத்தொகையினை திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழும நிதியிலிருந்து பயன்படுத்தவும் அனுமதி வேண்டி சூறிப்பு பணிந்து சமர்ப்பிக்கப்படுகிறது.

மேற்படி இப்பொருள் குறித்து எதிர்வரும் உள்ளூர் திட்டக் குழும கூட்டத்தில் பின்னேற்பாக பொருள் சேர்க்கப்படலாம் என்ற குறிப்பும் ஒப்புதலுக்காக பணிந்து சமர்ப்பிக்கப்படுகிறது.

47 mb.m

இணை இயக்குநர் (மு.கூ.பொ)/ திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழுமம் / மாவட்ட நகர் ஊரமைப்பு அனுவலகம் திருச்சிராப்பள்ளி மாவட்டம்

, ம்மலுக திருச்சிராப்பள்ளி உலனூர் திட்டக் குழுமல் மாவட்ட ஆட்சியித், திருச்சிராடி பிளிட்டீ

#### ANNEXURE N

#### CBA - Note order from the Commissioner, Tiruchirappalli Corporation

## மாமன்றப் பொருள்

முழுமைத் திட்டத்தில் Existing Land Use Map ஐ அடிப்படையாகக் கொண்டு Continuous Build Up Area நிர்ணயம் செய்து. அரசிற்கு அறிக்கை சமர்ப்பிக்கும் பொருட்டு, சான்றொப்பத்துடன் கூடிய தீர்மான நகல், தொடர் கட்டுமானப் பகுதிகள் குறிப்பிடப்பட்ட வரைபடம் மற்றும் அட்டவணை ஆகியவற்றினை அனுப்பி வைக்குமாறு, இணை இயக்குநர், மாவட்ட நகர் ஊரமைப்பு அலுவலகம், திருச்சிராப்பள்ளி அவர்களின் கடிதம் ந.க.எண் 5032/2021/திமா–3, நால் 04.09.2023ல் கேட்டுக் கொள்ளப்பட்டுள்ளது.

எனவே, அரசாணை எண் 18, நகராட்சி நிர்வாகம் (ம) குடிநீர் வழங்கல் துறை, நாள் 04.02.2019ம் தேதிய உத்தரவின்படி வெளியிடப்பட்ட "தமிழ்நாடு ஒருங்கிணைந்த அபிலிருத்தி மற்றும் கட்டட விதிகள் 2019", விதி எண் 30 (1). (2)ன் படி. மாநகராட்சி தொடர் கட்டுமானப் பகுதிகள் (Continuous Built Up Area) மற்றும் பொருளாதாரத்தில் நலிவடைந்தோர் பகுதி.(Economical Weaker Section) ஆகியவை அடங்கிய பட்டியல் மற்றும் வரைபடங்களை, இணை இயக்குநர், மாவட்ட நகர் ஊரமைப்பு அலுவலகம், திருச்சிராப்பள்ளி அவர்களுக்கு அனுப்பி வைக்கவும், அவசர அவசியம் கருதியும் நிர்வாக நலன் கருதியும் மாண்டியிகு மேயர் அவர்களின் முன் அனுமதி பெற்று உரிய வரைவுக் கடி தத்துடன் மேற்படி விபரங்களை இணைத்து அனுப்பி வைக்கவும் மாமன்றத்தின் அனுமதிக்குப் பொருள் வைக்கப்படுகிறது.

அலுவலகக் குறிப்பு :

1. தொடர் கட்டுமாணப் பகுதிகள் (Continuous Built Up Area) மற்றும் பொருளாதாரத்தில் தலிவடைந்தோர் பகுதி (Economical Weaker Section) ஆகியவை அடங்கிய பட்டியல் மற்றும் வரைபடங்களை, இணை இயக்குதர், மாலட்ட நகர் ஊரமைப்பு அலுவலகம், திருச்சிராப்பள்ளி அவர்களுக்கு அனுப்பி வைக்க ஒப்புதல் வழங்கலாம்.

 அவசர அவசியம் கருதி மாண்புமிகு மேயர் அவர்களின் முன் அனுமதி பெற்று, கடிதம் அனுப்பியதற்கு ஒப்புதல் அளிக்கலாம்.

(61ບໍ1/6004/2015/ໝາມແມ່)

த பொ (தி)

செ.பொ (தி) & ந.பொறியாளர் (பொ)

3560000TU

மாண்புமிகு மேயர்

CBA - Note order from the Chairman/Collector, Tiruchirappalli LPA/ District

கோப்பு எண்.5032/2023 திமா– 3

<u>தலைவர்/மாவட்ட ஆட்சித்தலைவர், திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழுமம்</u> அவர்களுக்கு குறிப்பு பணிந்து சமர்ப்பிக்கப்படுகிறது

- பொருள்: Continuous Bult மு Area மாவட்ட நகர் ஊரமைப்பு அனுவலகம் திருச்சிராப்பள்ளி மாவட்டம் – திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழும் பகுதிக்கு உட்பட்ட மாநகராட்சி பகுதியில் தொடர் கட்டுமானங்களாக வளர்ச்சியடைந்த பகுதியிணை Continuous Bult மு Area – ஆக அறிவிப்பு செய்ய நகர் ஊரமைப்பு இயக்குநர் அவர்களின் வாயிலாக அரசிற்கு சமர்ப்பிக்க பரிந்துரை செய்தல் – தொடர்பாக.
- பார்வை 1) அரசாணை எண்.18. வீட்டு வசதி மற்றும் நகர்ப்புற வசார்ச்சி துறை நாள் 04.02.2019

2) ஆணையர். திருச்சிராப்பள்ளி மாநகராட்சி, அவர்களின் கடிதம் ந.க.எண்.எப்1/6004/2015/மையம் நாள் 17.10.2023

திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழும் பகுதிக்கு உட்பட்ட மாநகராட்சி பகுதியில் தொடர் கட்டுமாணங்களாக வளர்ச்சியடைந்த பகுதியினை Continuous Built up Area – ஆக அறிவிப்பு செய்ய பார்வை 2–ல் காணும் கடிதத்துடன் பெறப்பட்ட ஆணையர். திருச்சிராப்பள்ளி மாநகராட்சி மற்றும் மேயர் அவர்களின் சான்றொப்பத்துடன் கூடிய மாமன்ற தீர்மானம் நகல் மற்றும் அட்டவணை ஆகியவை பெறப்பட்டதனை தொடர்ந்து நகர் ஊரமைப்பு இயக்குநர். சென்னை அவர்களின் மூலம் அரசிற்கு சமர்ப்பிக்கலாம் என்ற குறிப்பு தலைவர்/மாவட்ட ஆட்சித்தலைவர் அவர்களுக்கு பணிந்து சமர்ப்பிக்கப்படுகிறது.

இப்பொருள் குறித்து எதிர்வரும் உள்ளூர் திட்டக் குழும கூட்டத்தில் பின்னேற்கில் பொருள் வைக்கப்படலாம் என்ற குறிப்பு பணிந்து சமர்ப்பிக்கப்படுகிறது.

இணைப்பு

பார்வை 2–இல் காணும் கடிதம் மற்றும் இணைப்புகள்

A. mb. mg 25/10/23

இணை இயக்குநர் (மு.கூ.பொ) திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழுமம் திருச்சிராப்பள்ளி (リ) தலைவர்/மாவ்பி ஆட்சித்தலைவர் திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழுமம் திருச்சிராப்பள்ளி





#### ANNEXURE P

#### CBA - Resolution from the Chairman/Collector, Tiruchirappalli LPA/ District

கூட்டப் பொருள் எண். 14

கோப்பு எண்.2052/2021/திமா-3

பொருள்: Continuous Built up Area – மாவட்ட நகர் ஊரமைப்பு அலுவலகம் – திருச்சிராப்பள்ளி மாவட்டம் – திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழும பகுதிக்கு உட்பட்ட மாநகராட்சி பகுதியில் தொடர் கட்டுமாணங்களாக வளர்ச்சியடைந்த பகுதியினை Continuous Built up Area – ஆக அறிவிப்பு செய்ய நகர் ஊரமைப்பு இயக்குநர் அவர்களின் வாயிலாக அரசிற்கு சமர்ப்பிக்க பரிந்துரை செய்வது குறித்து – மாவட்ட ஆட்சியர் அவர்களின் குறிப்பு ஒப்புதல் பெறப்பட்டது – பின்னேற்பு அனுமதி வேண்டி சமர்ப்பித்தல் – தொடர்பாக.

പ്പ്പൂയത്വ:

- அரசாணை எண்.18, வீட்டு வசதி மற்றும் நகர்ப்புற வளர்ச்சி துறை நாள் 04.02.2019
- 2) ஆணையர், திருச்சிராப்பள்ளி மாநகராட்சி, அவர்களின் கடிதம் ந.க.எண்.எப்1/6004/2015/மையம் நாள் 17.10.2023
- 3) தலைவர்/மாவட்ட ஆட்சித்தலைவர், திருச்சிராப்பள்ளி அவர்களின் குறிப்பு ஒப்புதல் பெறப்பட்ட நாள் 03.11.2023

திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழும பகுதிக்கு உட்பட்ட மாநகராட்சி பகுதியில் தொடர் கட்டுமானங்களாக வளர்ச்சியடைந்த பகுதியினை Continuous Built up Area – ஆக அறிவிப்பு செய்ய பார்வை 2–ல் காணும் கடிதத்துடன் பெறப்பட்ட ஆணையர். திருச்சிராப்பள்ளி மாநகராட்சி மற்றும் மேயர் அவர்களின் சான்றொப்பத்துடன் கூடிய மாமன்ற தீர்மாணம் நகல் மற்றும் அட்டவணை ஆகியவை பெறப்பட்டதனை தொடர்ந்து நகர் ஊரமைப்பு இயக்குநர். சென்னை அவர்களின் மூலம் அரசிற்கு சமர்ப்பிக்கப்பட்டது.

அலுவலக குறிப்பு

தலைவர்/மாவட்ட ஆட்சித்தலைவர், திருச்சி அவர்களின் .11.2023 அன்று ஒப்புதல் பெறப்பட்டதனை தொடர்ந்து திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழும பகுதிக்கு உட்பட்ட மாநகராட்சி பகுதியில் தொடர் கட்டுமானங்களாக வளர்ச்சியடைந்த பகுதியினை Continuous Built up Area – ஆக அறிவிப்பு செய்ய பார்வை 2–ல் காணும் கடிதத்துடன் பெறப்பட்ட ஆணையர், திருச்சிராப்பள்ளி மாநகராட்சி மற்றும் மேயர் அவர்களின் சான்றொப்பத்துடன் கூடிய மாமன்ற தீர்மானம் நகல் மற்றும் அட்டவணை ஆகியவை பெறப்பட்டதனை தொடர்ந்து நகர் ஊரமைப்பு இயக்குநர், சென்னை அவர்களின் மூலம் அரசிற்கு சமர்ப்பிக்க அணுமதி பெறப்பட்டமைக்கு பின் ஏற்பு வேண்டி உள்ளூர் திட்டக் குழுமத்தின் பார்வைக்கும் ஒப்புதலுக்கும் சமர்ப்பிக்கப்படுகிறது.

தீர்மாணம் எண்.14

நான்:29.11.2023

"அலுவலக பின்னேற்பு குறிப்பு ஏற்கப்பட்டது"

கு ஸ் ஸ் ஆ 29 (1)|23 . இணை இயக்குநர்/உறுப்பினர் செயலர் (மு.கூ.பொ), மாவட்ட நகர் ஊரமைப்பு அலுவலகம் / திருச்சிராப்பள்ளி உள்ளூர் திட்டக் குழுமம் திருச்சிராப்பள்ளி

ത്രതായത്വ്/ഗ്രദർപ്പ് ட்சியர்.

திருச்சிராப்பள்ளி உள்ளூர் நிட்டக் குழுமம் திருச்சிராப்பள்ளி மாஷட்டம்

# REFERENCES

#### **REFERENCES-**

- 1. Modified Master Plan for Tiruchirappalli Local Planning Area (G.O.Ms.No. 143, H&UD Department, Dt:11.08.2009).
- 2. Approved New Town Development Plan for Navalpattu New Town Development Area. (G.O. Ms.No.180, H&UD Department, Dt: 19.07.2006).
- 3. Comprehensive Mobility Plan for Tiruchirappalli Local Planning Area. (2022). TNUIFSL.
- 4. Tiruchirappalli District Disaster Management Plan. (2022). Tamil Nadu State Disaster Management Authority Government of Tamil Nadu
- 5. Second Master Plan for Chennai Metropolitan Area, 2026. (2010). Chennai Metropolitan Development Authority (CMDA).
- 6. SFD Promotion Initiative Tiruchirappalli, India. (2016). Centre for Science and Environment (CSE).
- 7. City Development Plan for Tiruchirappalli Local Planning Area. (2015). Infrastructure Management and Advisory Services Private Limited.
- 8. Tiruchirappalli Smart City Proposal. City wide Concept Plan. (2015). JLL In association with Townland Consultants P Ltd and Tata Consulting Engineers Ltd.
- **9. CENSUS OF INDIA 2011, Population Projections for India and States. (2011 2036).** National Commission on Population Ministry of Health & Family Welfare.
- 10. CENSUS OF INDIA 1961. DISTRICT CENSUS HANDBOOK, TIRUCHIRAPALLI, VOLUME I. Ministry of Home Affairs, Government of India.
- 11. AISHE (2019-20). Ministry of Education, Govt. of India.
- 12. TIRUCHIRAPPALI DISTRICT HUMAN DEVELOPMENT REPORT (2017). State Planning Commission, Tamil Nadu.
- **13. Economic Survey (2022-23).** Ministry of Finance, Department of Economic Affairs, Government of India.
- 14. Village And Town Wise Primary Census Abstract (PCA). (2011). District Census Handbook Tiruchirappalli. Directorate Of Census Operations Tamil Nadu.
- **15.** *IRC* 106-1990. **Indian Roads Congress**. https://www.irc.nic.in/

 URBAN AND REGIONAL DEVELOPMENT PLANS FORMULATION AND IMPLEMENTATION. URDPFI Guidelines Vol I (2) (2016). Ministry of housing and urban affairs. https://mohua.gov.in/upload/uploadfiles/files/URDPFI%20Guidelines%20Vol%20I(

https://mohua.gov.in/upload/uploadtiles/tiles/URDPFI%20Guidelines%20Vol%20I( 2).pdf

 URBAN AND REGIONAL DEVELOPMENT PLANS FORMULATION AND IMPLEMENTATION. URDPFI Guidelines IIA-IIB (1). Ministry of housing and urban affairs. https://mohua.gov.in/upload/uploadfiles/files/URDPFI%20Guidelines%20IIA-

IIB(1).pdf

#### **PUBLICATIONS-**

- Subham Kharell, Mohammed Jaffer Shariff 1, Sudha Ravindranath1, Vidya A1, K. Ganesha Raj1. (2008). A STUDY ON THE DEVELOPMENT AND SANITATION PROFILE OF SMART CITIES – A CASE STUDY OF TIRUCHIRAPALLI CITY. Regional Remote Sensing Centre-South, Indian Space Research Organization, Bengaluru, India.
- Nithesh Nirmal S., Abdul Rahaman S., Balasundareshwaran A. (2017). URBAN CHANGE DETECTION AND SITE SUITABILITY ANALYSIS IN THIRUVERUMBUR TALUK, TIRUCHIRAPPALLI DISTRICT – A GEOSPATIAL APPROACH. Department of Geography, Bharathidasan University, Tiruchirappalli.
- EIA & SIA study for formation of flood carrier canal from Cauvery (kattalai) to south Vellar river to divert the flood water for sustaining drinking water needs and recharging ground water in the drought prone areas of Karur, Trichy and Pudukkottai districts. (2021). WAPCOS LIMITED (A Government of India Undertaking). Ministry Of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation.
- 4. F. R. Hemingway 1907. Madras District Gazetteers: Trichinopoly.
- 5. Aiyangar, S. Krishnaswami (1921). South India and her Muhammadan invaders. Oxford University Press.
- 6. J. RAMANAN & VRINDA RAMANAN (2017). SRIRANGAM BHOOLOKA VAIKUNTAM. J RAMANAN AND VRINDA RAMANAN.
- 7. Studio Context. SOUTH INDIA. Aarhus School of Architecture.
- **8**. Edited by George Michell Photographed by Bharath Ramamrutham. TEMPLE TOWNS OF TAMILNADU. **MARQ PUBLICATIONS**.
- 9. Aiyangar, S. Krishnaswami (1921). South India and her Muhammadan invaders. Oxford University Press.
- **10.** C.A.R.E School of Architecture URBAN DESIGN STUDIO (BATCH 2012 2017). REVITALISATION OF UYYAKONDAN.
- **11.** Satyajit Ghosh Manu Jaiswal (2017). ARCHITECTURE OF ANCIENT TAMILNADU THE KALLANAI DAM STORY. **ANE BOOKS PVT. LTD.**

#### **NEWS PAPERS AND ONLINE SOURCES-**

- 1. Tiruchirappalli City Municipal Corporation. https://www.trichycorporation.gov.in/cityinfo.php#menu
- 2. Trichy vision document. (2022). Tamil Nadu Government. https://www.tn.gov.in/

Tiruchirappalli City Municipal Corporation. https://www.smarttrichy.com/

- New vision document envisages boost to Trichy district's infrastructure. https://timesofindia.indiatimes.com/city/trichy/new-vision-document-envisagesboost-to-trichy-districts-infrastructure/articleshow/95041045.cms
- Corporation notifies new property tax slab rates. https://timesofindia.indiatimes.com/city/trichy/corpn-notifies-new-property-taxslab-rates/articleshow/65906749.cms
- 5. Lake & River Restoration. Tamil Nadu Water Investment Company Limited. https://www.twic.co.in/lake-river-restoration/
- 6. Tamil Nadu government urged to launch river water management scheme to rejuvenate water bodies. https://timesofindia.indiatimes.com/city/trichy/govt-urged-to-launch-riverwater-mgmnt-scheme-to-rejuvenate-water-bodies/articleshow/74274568.cms
- Eco-warriors set to restore Gundur lake in Tiruchy. https://www.thehindu.com/news/cities/Tiruchirapalli/eco-warriors-set-to-restoreguntur-lake-in-tiruchi/article67333841.ece
- 8. https://en.wikipedia.org/wiki/Tiruchirappalli\_district
- TNUIFSL to fund rejuvenation of seven waterbodies in Tiruchy. https://www.thehindu.com/news/cities/Tiruchirapalli/tnuifsl-to-fundrejuvenation-of-seven-waterbodies-in-tiruchi/article67687028.ece
- 10. https://en.wikipedia.org/wiki/Tiruchirappalli