

## Resource Infrastructure Facilities and its Management in Thiruvarur District – 2014

Kalyani .V<sup>1</sup>, Vasanthi.R<sup>2</sup>

<sup>1</sup>Department Of Geography, Government women's. College (Autonomous), Kumbakonam – 612001. Tamil Nadu, India.

<sup>2</sup>Department of Industries & Earth Sciences, Tamil University, Thanjavur- 613 010, Tamil Nadu, India.

### ABSTRACT

The present study on “Effective Resources, Infrastructure facilities” and its management in Tiruvarur district”, Tiruvarur district a first grade municipal town in TamilNadu, is located 60 km east of Thanjavur, and it is a district headquarter town. The strategic location of this district to nearby urban centers Well connected by national highway, state highway and major district road and Railway junction too. Tiruvarur district forms part of eastern coastal plain of TamilNadu. It is surrounded on north and east by newly carved out district of Nagapattinam, on the south by pack-starit and on the west by its parent ie. Thanjavur. The infrastructure facilities available in Tiruvarur district. In the year 2014, urbanization pattern, transportation, urban services, like water supply, medical facilities, industrial development, education wise analyzed. In this study mainly for infrastructural facilities and other important places are discussed in this study.

**Keywords:** infrastructure facilities, domestic tourists, Foreign tourists, GIS, Tiruvarur , Tamil Nadu.

### I. INTRODUCTION

The word ‘resource’ may be defined as “means of attaining given ends” These ends may be satisfaction of individual wants or the attainment of social objectives. Thus, anything, useful or anything having the attribute of utility may be termed as a resource. Food, clothing, property or capital are, therefore, resources only because they are useful and satisfy some human wants, But, resources include many more things. They include not only material things like land, forests, coal, machinery, etc., but also intangible things like good health, knowledge, freedom, social harmony, etc., because all these things have the attributes of utility. Similarly, water, air, sunshine, etc., are all resources.

Resource is something functional. According to Zimmermann. “The word resource does not refer to a thing nor a substance, but to a function which a thing or substance may perform of operation of attaining a given end. Such as satisfying a want.” Thus, a factor is a resource, when it ceases to be used for the satisfaction of human wants. For example, on iron ore mine is a resource because it's ore resource serves as useful materials for iron and steel industry. But suppose, if with the expansion of iron and steel industry, this small iron ore mine yielding small quantities or iron- ore is abandoned, then it ceases to be a resource and become “natural stuff” we mean something which affects man neither favorably nor unfavorably.

### II. REVIEW LITERATURE

Rodriguez, Rodrik (1992) Studied impact of trade liberation on growth could be positive or negative which depends on the grows due to trade liberalization and what short term and long term impact it has on the economy. Depends on what kind of good get a Boost due to trade liberalization.

Rajan et. al., (2002) Studied opening of service sector in a premature environment could lead to several negative consequences. The effective regulation in the case of Telecommunications sectors prefers to pro-competitive regulation while in financial sectors it refers to prudential regulation.

Banga&Goldar (2004) whose study concentrated on lower tariff and lower non-tariff barriers led to an increase in the usage of services in manufacturing.

### III. PROBLEM OF THE STUDY

Expanding human population resulted into expanding of human with scientific progress and technological development man started utilizing natural resources at a much larger scale, continuous increase in population caused in increasing demand for resources. This created a situation when the non renewable resources may come to an end after sometime in order to have maximum production. We have started even talking loans from the resources meant for future, that can not be paid back As a result we would be using all those resources which are infect the property of future generation it is a mehar growth and the utilization natural resources particularly in Tiruvarur District.

#### IV. AIMS AND OBJECTIVES

Continuous increase in population caused an increasing demand for resource. The present generation while maintaining its potential to meet the needs and aspiration of the future generation. Living resources conservation has three specific objectives. 1. To study the availability of resources in Tiruvarur District, 2. To evaluate the infrastructure facilities in Tiruvarur District, 3. Suggest the management of resources in Tiruvarur District.

#### V. METHODOLOGY

To identify the climate and population of the district have been analyzed by the using simple bar diagram. In the present study, bar diagram, pie charts have been drawn to show the required information. To show the infrastructure facilities, with the located maps are used.

#### VI. LOCATION OF THE STUDY

##### AREA:

Tiruvarur a first grade municipal town in TamilNadu, is located 60km east of Thanjavur, and it is a district headquarter town. The strategic location

of this district to nearby urban centers. Well connected by national highway, state highway and major district road and Railway junction too. Location map show in figure 1.1. Tiruvarur district forms part of eastern coastal plain of TamilNadu. It is surrounded on north and east by newly carved out district of Nagapattinam, on the south by pack-strait and on the west by its parent i.e. Thanjavur.

#### ADMINISTRATIVE ARRANGEMENT IN TIRUVARU DISTRICT

The administrative headquarters of this district is located at Tiruvarur. The furcation of this district was done in the year 1997; main language spoken in the district is Tamil. Tiruvarur is situated at 10°47' North Latitude and 79°38'' East Longitude. Tiruvarur district is made up the 6 taluks of Tiruvarur, Nannilam, Kodavasal, Mannargudi , Needamangalam and Tiruthuraipoondi. The total geographical area of the district is about 2811 sq.km. Tiruvarur district comprises 6 taluks, 9 Blocks and 513 Villages. As regards the hierarchy of administrative arrangement, there are 4 municipalities, 6 town panchayats and 379 villages Panchayats. Table 1.1 and Figure 1.2.

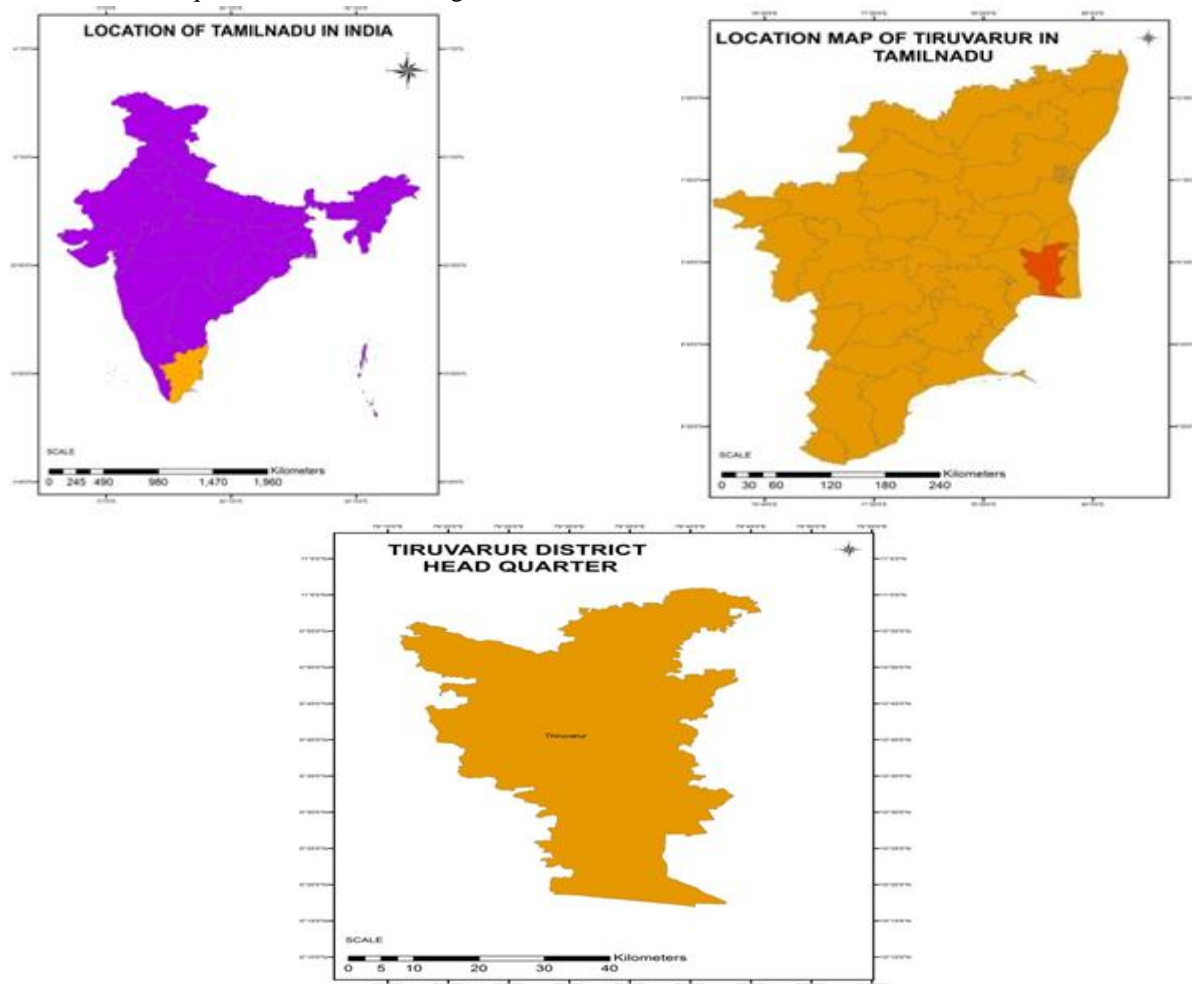
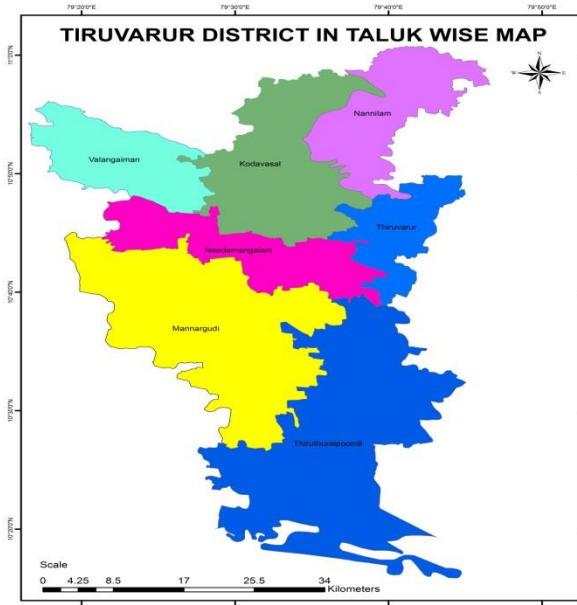


Figure 1.1

**Table 1.1**  
**THIRUVARUR DISTRICT TALUKWISE (AREA IN SQ.KM)**

S.NO	Name of the Taluk	Area in sq.km
1	Tiruvarur	192.35
2	Nannilam	244.91
3	Kodavasal	480.00
4	Mannargudi	784.92
5	Needamangalam	344.98
6	Tiruthuraiipoondi	764.20



**Figure 1.2**

**VII. RESOURCES –  
 TIRUVARUR DISTRICT**

**RESOURCES:** The word resources may be defined as means of attaining given ends. These ends may be satisfaction of individual wants or the attainment of social objectives. Thus anything useful creating having the attribute of utility may be termed as resource, food, clothing property or capital are therefore, resource only because they are useful and satisfy some human wants. Land resources, water resources, heritage resources and energy resources, are available in this Tiruvarur district.

**LAND RESOURCES AGRICULTURE AND HORTICULTURE:** Tiruvarur district about in green paddy fields, tall coconut groves, vast gardens of mango and plantain tree and other verdant vegetation. Paddy is the main crop of this district and it is grown three times in year the first crop is known as Kuruvai ( the short-term crop) with is duration of three and half to four months from June-July to October-November to crop called the Thaladi has duration of five to six months from October-November to

February-March. Third is the samba-the long tem crop and has duration of almost six months from Agust to January other cerel crops of the district are Kambu, ragi,maize,korra,and varagu. The pulses grown in the district are red gram, green gram and black gram. Other food crops and species are cane fruits and vegetables. Among non-crops castor, miger seeds, though is very small are the important ones.

**Table 1.2**  
**LAND UTILIZATION TIRUVARUR DISTRICT -2014**

S.NO	PARTICULARS	%
1	Forest land	1
2	Non available for cultivation	12
3	Other uncultivated	3
4	Fallow lands	3
5	Cropped Area	81

The total geographical area of the district was 2811.56 sq.km in 2012 cropped area accounts for 80.50% of the total area of the forest cover is very

minimum accounting. For only about 0.87% of the total area. A significant portion of the land falls under the category of non available fore cultivation and fallow land the land utilization pattern in Tiruvarur District is given Table1.2

**CEREALS:** Pules and oil seeds are the three important crops produced in the district, the production of cereals, pulses and oil seeds fluctuate for the past live years. The reason for the fluctuation could be using rotation of crops seasonally. The details on the area. The trend in consumption of fertilizer and of pesticides was high but the production trend fluctuated for the past few years.

Fruits and vegetables cultivated in the district, during the 2013-2014 period. Total area of fruits and vegetables, cultivated in the district were 3143 hec, plantation crops were cropped in the district to an extent of 1392 ha. Nurseries and vegetables forms are available it is feasible to have vegetable forms for brinjal, tomato, ladies finger, snake guard, bitter guards, beans, cluster beans, etc and nursery for seeding of coconut bamboo's etc.,

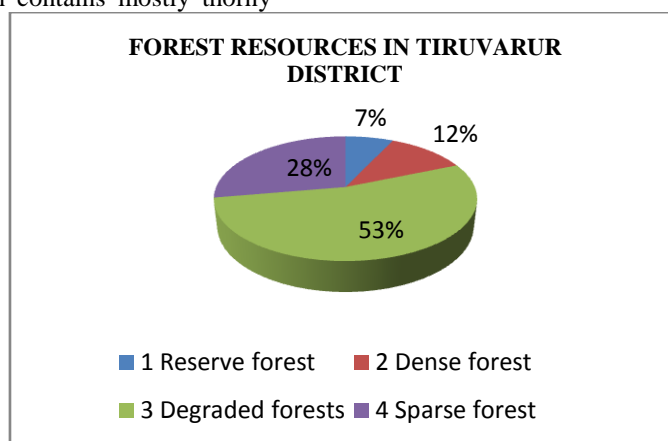
**SOIL TYPES:** Since the district is represented by Cauvery deltaic Zone sandy coastal alluvium is the predominant soil type in this district accounting for 56.787 and other types of soil cover 43.22%. The total area economically exploitable mineral resources are not found in this district. The soil of the region are generally classified as clay, sandy clay are mostly suitable for paddy crop.

**FOREST RESOURCES:** The forest in the Thanjavur forest division which comprises Tiruvarur also can be divided into three regions from the topography and flora point of view. They are 1. The Alluvial regions or river in land area. The are on the banks of river and canal in the form of narrow strips, Teak plantation mostly cover these areas and wherever the soil is unsuitable for Teak, siso Arjun and Eucalyptus have been planted in such area. **The lateritic region:** The region contains mostly thorny

scrub jungles, tropical thorn forest and tropical dry evergreen forest. **The coastal region:** This zone contains the causturina plantation. The mangrove scrub. Mangrove forest and the southern, thorn scrub jungle, the entire stretch of coastal mangroves with lagoons and back water lying along the coast falls in the category. The Thanjavur forest division is spread over the entire undivided Thanjavur district now trifurcated Thanjavur. Tiruvarur and Nagappattinam district likewise management of the Vedaraniyam swamp forest constituting the point calimere sanctuary and the Muthupet mangrove area sore vated with wild life. Warden Nagappattinam 12556.78 hec area under the resources forest category. 2079 hec area under dense forest area of the district degraded forest area is 9567 hec. 4947 hec area come under sparse forest area. The man made forest plantation have been extended to the irrigated canals and Pudugai lands forest besides the existing forest area in Tiruvarur district. About 12,074.40 ha of mao made forest area is available in the district which is predominantly teak plantation covering 10,231 ha and followed by fuel wood soft, wood, neem, tamarind,tropical deciduous mangrove forest is distributed in Thiruthuraipoondi Taluk Table 1.3 and Figure 1.3

**TABLE 1.3  
 FOREST RESOURCE IN THIRUVARUR  
 DISTRICT**

S.NO	FOREST	AREA IN HEC
1	Reserve forest	1256.78
2	Dense forest	2079
3	Degraded forests	9567
4	Sparse forest	4947
5	Total forest area of the district	28039.78



**Figure 1.3**

**BIOLOGICAL RESOURCES:** There is a sanctuary including bird sanctuary at Tiruthuraipoondi Taluk in Tiruvarur district over a extent of 46 ha. Of water spread area, wild life census in Tiruvarur district (composite districts of Tiruvarur and Nagappattinam ) indicates that 2043 animals are in the point calimee sanctuary. There has been a conscious effort by the district administration to conserve rarely species of flora and fauna. Point calimere sanctuary natures, Interallia, a variety of rare and endangered animals in abundance mammals available in the district are black buck, bionnet mccague, and black happed hare, fruit bats, spotted deer, clivet cat mangrove, dolphins wild boar, jackal and semi wild ponies.

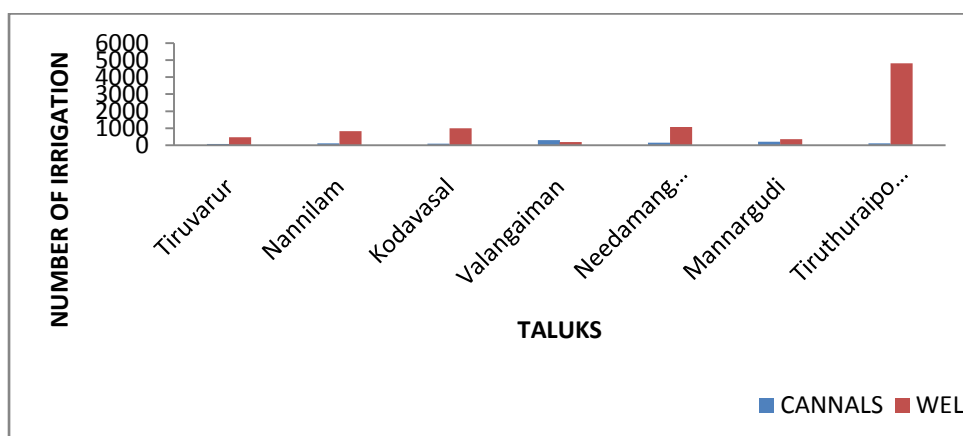
**WATER RESOURCES DRAINAGE:** This region is mainly facilitated by the rivers Cauvery. The other rivers namely Vennar and Vettar. Vennar which flows on the southern side of the study area.The bounteous Cauvery is considered to be the best of the rivers that drain in southern peninsula Cauvery is considered to be the best of the rivers that drain in southern peninsula of India it flows through Mysore Dharmapuri, Salem, Erode, Tiruchirappalli and Thanjavur district covering a distance of about 770km draining distance of about 770 km draining an area of about 72.800 sq.km in all. Table 1.4 and Figure 1.4.

**IRRIGATION BY DIFFERENT SOURCES:** The main sources of irrigation in Tiruvarur district are canals, tanks and wells. Tanks and wells are not used in some blacks for irrigation in the district. In 2014 period, Tiruvarur taluk has 79 canals and 465 wells.The Nannilam Taluk has 129 tanks and 820 wells. There are no tanks in Valangaiman, wells are found more in Needamangalam Taluk. The Mannargudi has 3 tanks in this district 23 tanks are fund under Tiruthuraipoondi Taluk in Tiruvarur district Table 1.4.

**HARITAGE RESOURCES PLACES OF TOURIST ATTRACTION:** Sri Thyagarajaswamy temple at Tiruvarur, dedicated to Lord Siva date backs prre-historic days. It is the second biggest shrine , as sri Sambandai and Appa have sung about the deity, the temple can be presumed to be in existence even in the 7<sup>th</sup> century AD. This is one of the pancbmusic namely Boothe, (five elements) Sthalam, and is famous as the seal of the Prithvi estab Ligam.The three giants of carnatic music namely Sri Thiyagaraja, Sri Syama Sastry and Sri. Muthusawmy Deekhsitar were all born at Tiruvarur. This is one of the wel-known shrines of south India and covers an area of 30 ores. The main structure conspet of a pagoda, three

**TABLE 1.4**  
**TIRUVARUR DISTRICT SOURCES OF IRRIGATION – 2014**

S.NO	TALUKS	CANNALS	WELL	TANKS
1	Tiruvarur	79	465	-
2	Nannilam	109	820	-
3	Kodavasal	102	1005	-
4	Valangaiman	292	194	-
5	Needamangalam	145	1063	20
6	Mannargudi	201	350	3
7	Tiruthuraipoondi	104	4,810	23



**FIGURE 1.4**

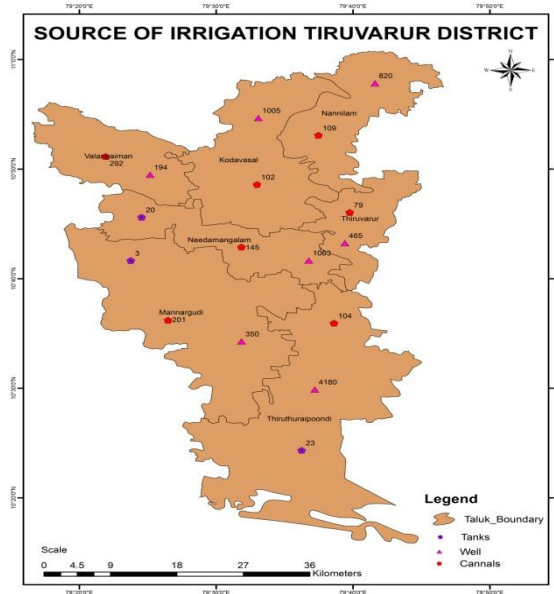


FIGURE 1.5

TABLE 1.5  
 TOURIST ATTRACTION – TIRUVARUR DISTRICT 2011-2014

S.NO	YEARS	TOURIST ARRIVALS IN TALUKS
1	2011	2.88
2	2012	2.9
3	2013	3.28
4	2014	3.54

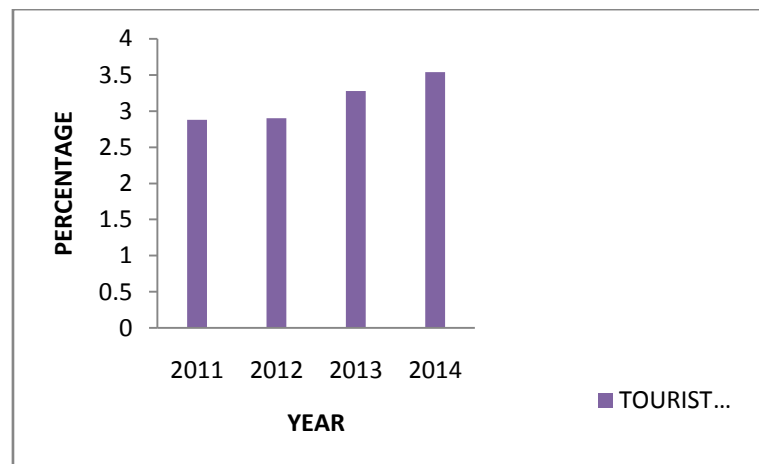


FIGURE 1.6

Tiruvarur is a place for the musical Trinity and most of the south Indian musicians are connected with it in one way or other. The wooden car of Tiruvarur is the biggest of all the temple cars in the state. Historical importance of Tiruvarur lies in the legend of Manu Chola's just judgment of death of his only son for killing a calf by driving his chariot over the half. In 2014, 3.54% of Tourist visit Tiruvarur District. Muthupet and Udayamarathandapuram are

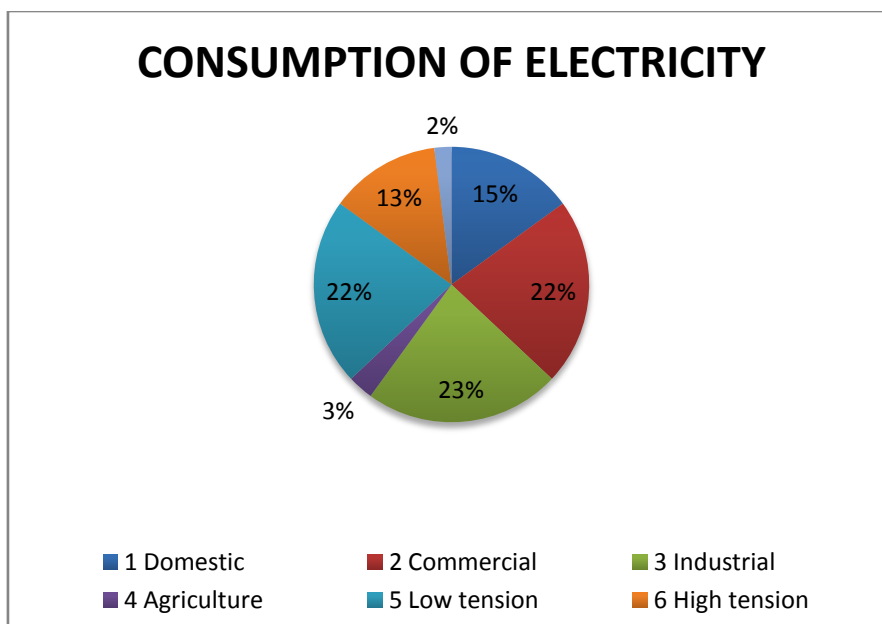
the other main tourist spots in Tiruvarur district. The special significance of area is lagoon and bird sanctuary. The two tourist spots are visited from August to March. Tourist arrivals of domestic and foreign visitors have been steadily increasing. These two tourist spots are also included in the tourist circuits identified by the Tourism Development Table 1.5 and Figure 1.5, 1.6.

**ENERGY RESOURCES:** 30mm gas based Kovil Kalappal Thermal power project is coming up through TNEB in this district.

**CONSUMPTION OF ELECTRICITY :** There were 44.769 electrical connections with a total consumption of 3,92,81,410 kwh as on 2014 commercial and industrial types have the maximum consumers accounting for nearly 45% , 22.22% and 22.8% respectively, the total consumption, followed by low tension (LT) types (21.7%).The category wise consumption of electricity is given in Table 1.6 and Figure 1.7.

**TABLE 1.6 CONSUMPTION OF ELECTRICITY – CATEGORY WISE – 2014**

S.NO		Consumption Of Electricity
1	Domestic	15%
2	Commercial	22%
3	Industrial	23%
4	Agriculture	3%
5	Low tension	22%
6	High tension	13%
7	Other consumers	2%



**FIGURE 1.7**

**ELECTRIFICATION OF VILLAGES:** In Tiruvarur district has achieved 100% electrification prior to all 513 villages in the district are electrified. The number of pump connection has increased in 4 Taluk and decreased in two Taluk over the past 15 years. The status on electrification of the energized pumps.

**NON CONVENTIONAL & RENEWABLE ENERGY SOURCES UTILIZATION:** Bio-gas is the only method of non-conventional energy utilized in the district. The bio-gas plants are however able to generate 86.65% of there installed capacity of power.

**INFRASTRUCTURE FACILITIES IN TIRUVARUR DISTRICT URBANIZATION PATTERN:** The proportion of urban population of total population has increased during 2001-2011 from 14.79% to 17.22% and is estimated at about 17.39% during 2014. Among the urban areas, municipalities account for a greater share of urban population, when compared to other urban areas. The proportion of rural population to total population has decreased from 85.21% to 82.61% during the years In Tiruvarur district, urban areas has lot of facilities etc. so peoples in rural areas, to migrate the centre or urban places. In urban places, the building are vertically developed in Thiruvarur district Table 1.7 and Figure1.8.

**TABLE 1.7 URBANIZATION PATTERNS OF THIRUVARUR DISTRICT**

YEAR	URBAN	RURAL
2005	14.79	85.21
2010	17.22	81.12
2014	17.39	82.61

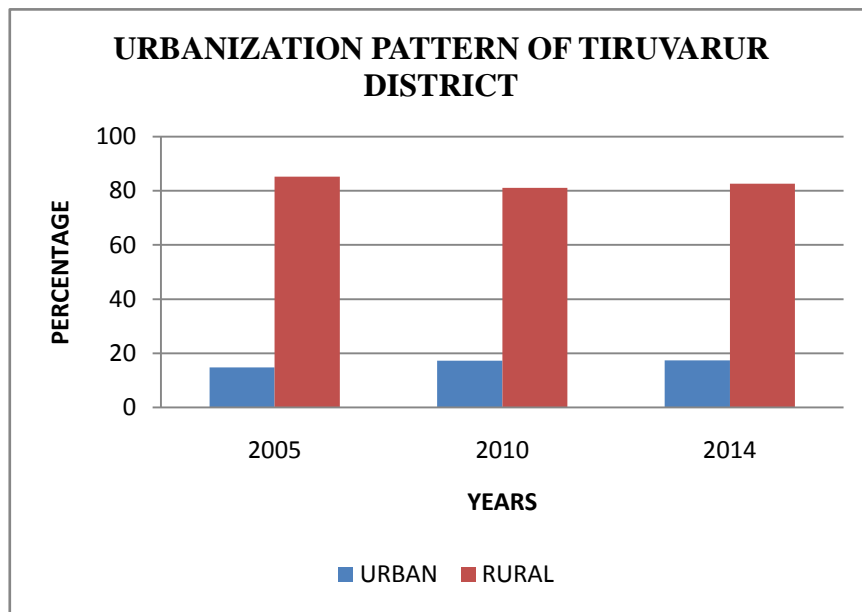


FIGURE 1.8

**DENSITY OF POPULATION:** In Tiruvarur district the over all density has increased from 439 persons/sq.km in 1991. 485 persons/sq.km in 2011. The density in urban areas has increased from 1991 to 2011. But, the year 2001 has decreased density rate. The various geographical factors that affect the density of population. The decadal growth rate indicates that there is considerable growth in both urban and rural areas of the district. Table 1.8 and Figure 1.9.

**URBAN SLUM POPULATION:** In Thiruvarur the slum are which possessed the Odambokkiyar river bank and the railway line near Thiruvarur junction, the Town bus stand and daily, weekly markets and other commercial activities area. Thiruvarur town has the minimum number of slum population 19,324 persons and Koothanallur has the minimum number of slum population 7,328 persons in 2011.

TABLE 1.8  
 DENSITY OF POPULATION IN TIRUVARUR DISTRICT

YEAR	PERSONS/SQ.KM
1991	439
2001	410
2011	485

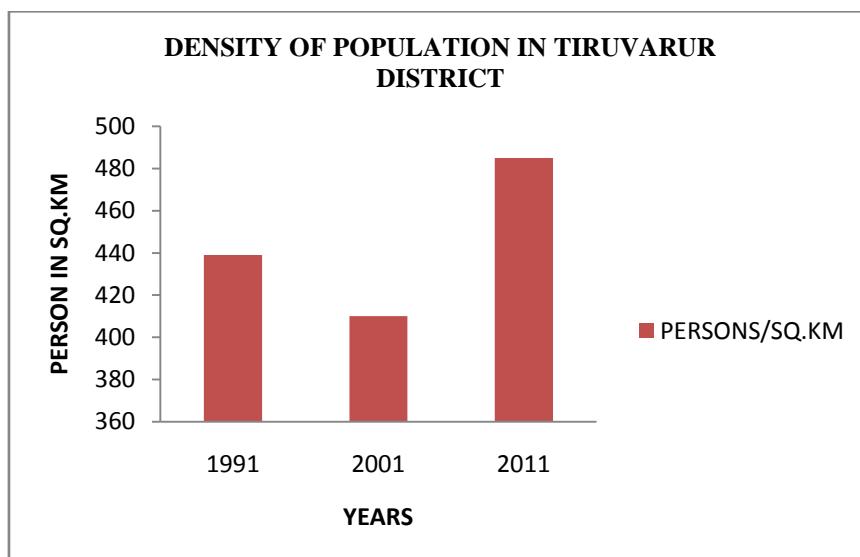


FIGURE 1.9



**TRANSPORTATION:** A Transport facility plays a vital role in economic development. Tiruvarur district is well served by roads and it is on the Thanjavur-Nagapattinam state highway. The neighboring towns are very well connected by state highways and by other district road. The composite of Nagapattinam district has 43 km length of state highways, 39 km. of major district roads and 783 km of other district roads as on 2000. There are 46 major bridges and 6,740 minor bridges in the district. There has been significant increase of two, three and four wheeler vehicles in the district over the past 5 years

Tiruvarur is a railway junction of Thanjavur, Nagapattinam railway line and Chidambaram-Pattukottai railway line. There is no airport in this district.

**URBAN SERVICES:** Tiruvarur district has a protected water supply by river Odamboiyar. The quantum of 121.25 Fig 1.10 Lakhs liters of protected water supply is made in the district. The municipalities of Tiruvarur, Mannargudi and Koothanallur have the highest per-capita consumption of 55 LPCD, each.

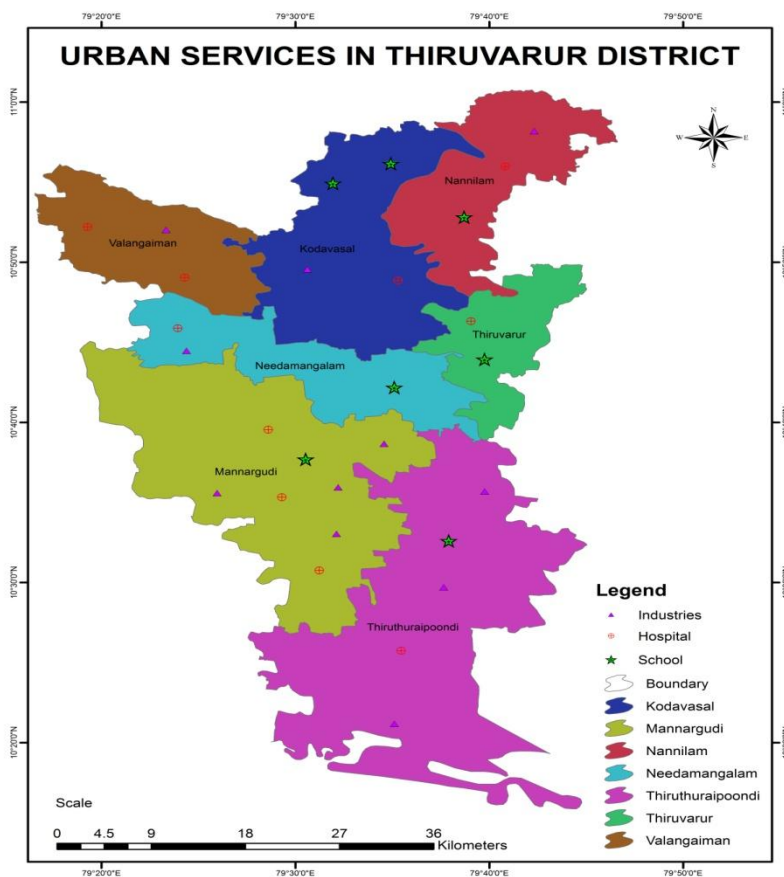


FIGURE 1.10

The district does not have any treatment plant and hence there is no organized disposal of sewage water. Nature of disposal through river water. The district also has lakhs of underground drainage systems.

**MEDICAL FACILITIES:** Allopathy is the most commonly practiced form of medicine in the district and one for medical education is also available. In addition, there are a few Siddha, and one Homeopathy hospital available in the district. Tiruthuraiipoondi has 2 hospitals. There are many private hospitals also served in Tiruvarur district.

**INDUSTRIAL DEVELOPEMNT:** There are 490 industrial units situated in the composite Thanjavur district, of which 4 sugar units, 1 petroleum refinery, 1 distillery, 1 thermal power plant are coming under highly polluting industries. The district has been a flourishing center of cottage industries. Mats made of Kori, Pine, Palm and coconut leaves are much in demand. The district is also famous for safety matches. Tiruvarur is known for the manufacturing of musical instruments of Jackwood like the Veena, Tambura, Violin, Mirudangam and Kanjeera. Major air pollution sources in the district are located

in two Villages, Vadapathimangal in Tiruvarur taluk and Keeranur in Nannilam taluk.

**EDUCATION:** The present educational institutions will continue to have its function, however for its expansion a few open lands available near these schools. In Tiruvarur district has Arts Science

College, Higher Secondary Schools and Private Colleges, Matriculation schools. These institutions are located near the transportation line Table 1.9

The central university in Tiruvarur district is also constructing work done in the year of 2011-2012. It is very useful to Tiruvarur District.

**TABLE 1.9**  
**EDUCATIONAL INSTITUTIONS-TIRUVARUR DISTRICT**

Name of the town	Educational Institution	PL/RR
Koothanallur	Higher Secondary / Intermediate school (1) Secondary/ Matriculation School (2) Junior secondary and Middle Schools	PL:1
Mannargudi	Arts and Science College (1) Higher Secondary/Intermediate Schools ( 3 ) Secondary/Matriculation Schools ( 3) Junior Secondary School and Middle Schools ( 5) Primary Schools (18)	PL:2
Muthupet	Higher Secondary school / International Schools ( 2), Secondary School/ Matriculation Schools ( 2) , Junior Secondary and Middle Schools (2),Primary Schools ( 4)	PL:1 RR:1
Needamangalam	Higher Secondary School (1), Secondary/Matriculation Schools ( 1), Primary Schools ( 3)	PL:1
Tiruvarur	Arts and Science College ( 1), Higher Secondary/ Intermediate Schools ( 2), Secondary/Matriculation Schools ( 5), Middle Schools ( 10). Primary Schools ( 18)	PL:1
Tiruthuraipoondi	Higher Secondary / International Schools ( 2) , Secondary / Matriculation Schools ( 2) , Primary Schools ( 7)	PL:1

**VIII. SUMMARY AND CONCLUSION**

The world ‘resource’ may be defined as means of attaining given ends. These ends may be satisfaction of individual wants or the attainment of social objectives. Resources is not something static, it is dynamic. Resources are the basis I of the economic prosperity of various nations. Wherever man has become conscious of resources and has begun to exploit them in planned and national manner. Expanding human population resulted in to expanding of human scientific progress and technological development. Man started utilizing natural resources at a much larger scale, continuous increase in population caused in increasing demand for resource. This created a situation, when non-renewable resources may come to an end. As a result, we would be using all those resources, which are in fact the property of future generation; it is a mehar growth and the utilization land resources, particularly in Tiruvarur District.

Continuous increase in population caused an increasing demand for resources. The present generation, while maintaining its potential to meet the needs and aspiration of the future generation, Living resources conservation has three specific objectives. To Study the availability of resources in the Tiruvarur District. To evaluate the infrastructure facilities in Tiruvarur District. Suggest the management of resources in Tiruvarur District. During the decade 2014, there has been an increase of about 13.71 % annum in the growth of population.

The literacy rate in Tiruvarur has marginally increased. Especially the percentage of female literacy has significantly increased for the past 15 years. The use of chemical fertilizers and pesticides has increased and use of Bio fertilizers and pesticides had fluctuation. Sandy coastal alluvium ( 56.8%) is the predominant the soil types of Tiruvarur district. No new construction of well and check dam done in the district for irrigation purpose. The forest area in Tiruvarur district is only 0.87% the area. Littoral swamp mangrove scrubs are forest types. The per-capita forest area has shown a steady decreasing trend. The man made forest plantations have been raised along the canal. Banks besides the existing forest area in the district. Conservation of biological resource like, botanical garden, Zoological park and bird sanctuary is to be strengthened by the district administration as there are few measures of action. Canals are the main sources for irrigation in the district and about 66.90% of the total cropped areas are irrigation from these sources a few blocks do not have Tanks and wells as sources of irrigation. The district has good fishing potential in the coastal line of 40 km. The fish production has increased in value and has fluctuations in quantity over the years. Urbanization processes in Tiruvarur district has been taking place at a higher rate, but the infrastructure development particularly drinking water, Electricity, Public convenience, Drainage approach roads and health are not increased at the pace of urbanization. There is an increase in urban slum population in

Tiruvarur district for the past five years. There has been no much improvement of urban services particularly sewerage and solid Waste management in the district. Gastro-enteritis and dysentery are the most commonly reported water bore disease. There has been a significant growth of two. There and four Wheeled vehicles in the district over the ten years. Thus resulting in an increased quantity of the emission of suspended air particles and other gaseous pollutants in urban area. Every individual can make a small tough significant effort in the race to save our planet and conserved biodiversity man is only yet another of natural creatures and not an alien to the other being we should treat all animals and plans with compassion. We should curb our greed for products made out of animals parts like skin far ivory bone's nails etc. to discouraged wild life traders and poachers and space the remaining animals. Adopt regetationism which could require fewer animals to be fattened for slaughter and more plants to be growth for food. Plans, trees wherever possible as the are beneficial in supporting diversity cleaning the atmosphere, imp racing the soil and in so many more always. Avoid using insecticides pesticides and inorganic fertilizers and try to use natural plant base substitutes whereas possible paper and cloth should replaces plastic and polyester which are not bio degraded and damage the ecosystem. Use the effluent of one industry as the raw material or another Ash from power plants can be used to makes cement while waste from trout forms and pharmaceutical plants can be used as fertilizers. We should strive to plan our activities and minimize our needs in order to generate less waste. Waste like paper glass and plastic should be recycled and used to conserve our rapidly diminishing natural resources. About 75% of gals is recycled and used to conserve our rapidly diminishing natural resources about 75% of glass is recycled and used in Holland and Germany. Make children aware of their surrounding and the need for biodiversity. We should follow traditional agricultural practices. Exotic and hybrid verities of plant and chemicals used as insecticides only exhaust the land as against natural fanning practices which are in accordance with nature. Make use of sustainable technologies like smokesiess chulhar, Ground water recharging unit, wind energy, solar power etc.

## REFERENCE

- [1] Rodriguez, Rodrik (1992)., Resort, Hotel's planning and management p.2
- [2] Asheworth (1992) believes that the study of urban is required to a tourism development of a coherent body of theories, concepts, techniques and methods of analysis.
- [3] Britton.C 1991 they build upon seminar work, which argue