STUDY ON TRACKING PROPERTY TAX POTENTIAL IN URBAN LOCAL BODIES OF TAMIL NADU WITH SPECIAL FOCUS ON TOWN PANCHAYATS

FINAL REPORT SUBMITTED TO SIXTH STATE FINANCE COMMISSION, TAMIL NADU

BY

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MADRAS SCHOOL OF ECONOMICS

(Institute of Special Importance)

Behind Anna Centenary Library
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INTRODUCTION

1.1 Introduction

The Indian Constitution considered that "Local Bodies" are the Third Tier of governance and they work under the purview of the State Governments/UTs and operate within the laws framed by the State/UT Governments. Nevertheless, the Constitution made separate/specific provisions to ensure that these bodies access adequate resources to provide local public goods and services at acceptable standards in their respective jurisdictions across the States.

The 73rd Amendment of The Constitution Act, 1992 and the 74th Amendment of the Constitution Act, 1992, (came into effect in June 1993), brought important improvements to local governance in the country for rural and urban communities, focusing not only on the provision of local public goods and services, but also on the development and social justice.

The Constitution has entrusted both the Central and State Finance Commissions with the task of ensuring adequate overall resources to the local bodies. These may be provisioned through (a) assigned resources, and tax and non-tax resources to the local bodies under the relevant State legislation, (b) sharing of State resources by way of sharing State tax revenues and grants, and (c) grants from the Central Government as per the recommendations of the Central Finance Commission.

Article 243G of the Constitution states that the Legislature of a State may, by law, endow the Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government and such law may contain provisions for the devolution of powers and responsibilities upon Panchayats at the appropriate level, with respect to the following specified conditions:

- The preparation of plans for economic development and social justice; and
- The implementation of schemes for economic development and social justice as may be entrusted to them including those in relation to the matters listed in the Eleventh Schedule. Article 243H of the Constitution states that the legislature of a State may, by law:
- Authorise a Panchayat to levy, collect and appropriate such taxes, duties, tolls and fees in accordance with such procedure and subject to such limits;

- Assign to a Panchayat such taxes, duties, tolls and fees levied and collected by the State Government for such purposes and subject to such conditions and limits;
- Provide for making such grants-in-aid to the Panchayats from the Consolidated Fund of the State; and
- Provide for Constitution of such Funds for crediting all moneys received, respectively, by or on behalf of the Panchayats and also for the withdrawal of such moneys.

As per Article 243Q, every State should constitute three types of municipalities in urban areas, that is, urban local bodies (ULBs) as under:

- Nagar Panchayat: A Nagar Panchayat (or 'Town Panchayat') is constituted for an area in transition from a rural to urban;
- Municipal Council (Nagar Palika Parishad): A Municipal Council is constituted for a smaller urban area; and
- Municipal Corporation (Nagar Nigam): A Municipal Corporation is constituted for a larger urban area.

Articles 243W and 243X of the Constitution describe the powers, authority and responsibilities of Municipalities along with their taxation powers. These are similar to articles 243G and 243H for rural local bodies. Specifically, the Constitution suggests that the State Governments should assign to Municipal Governments, a set of 18 legitimate municipal functions such as urban planning including town planning, regulations of land use and construction of buildings, roads and bridges, provision of water, sanitation, and solid waste management, public health, slum up-gradation and urban poverty alleviation. The 12th Schedule lists these functions (Isher et al., 2019)

While the Constitutional Amendments envisage local bodies to be the institutions of self-government, in reality, the situation is somewhat different. Many States have not devolved functions, funds and functionaries to local bodies. Even where the functions are notionally transferred to local bodies, the staff remains accountable to State Governments, thereby adversely impacting the efficacy of carrying out the functions. Local governments have struggled to generate revenue on their own, and often rely on higher levels of Government for resources, acting as agents for the implementation of projects of higher-level Governments.

The main reason for this situation is that while the 74th Amendment defined various expenditure assignments to Municipal Governments, there was no comparable

recommendation by it on the finances of these Governments. Article 243X entrusts to the concerned State Government to assign revenues from specific taxes to urban local Governments. Article 243Y leaves to State Finance Commission the tasks of reviewing and recommending devolution of tax revenues and grants-in-aid to urban Governments. However, the actual effective devolution has been very limited.

Further, the Municipal finances would have been affected due to the implementation of the Goods and Services Tax (GST) in 2017. The Centre and States Governments agreed to levy a dual GST on a common base by subsuming most of the consumption taxes levied earlier by the Centre, States and Local Governments. The GST has subsumed local taxes such as octroi, entry tax, and advertisement tax. As a result, no State Government has been able to assign such taxes to their urban local Governments.

Another important issue is that while property tax is an important urban local tax in India, the productivity and performance of property taxes in India as a source of revenues have been poor and the ULBs have not optimally utilized these taxes as the main instrument of financing municipal services (Mathur et al., 2009). As the property tax enters as Entry 49 in the State List of Seventh Schedule of the Constitution, the responsibility of designing the property tax system in India rests with the State Governments. The State Governments lay down in the statutes governing the Constitution and functioning of Municipal Governments, the tax bases for property tax procedures for valuation, exemption, and rebate policies, rate structures and measures for dealing with delays, tax evasion and the like. The autonomy of Municipal Governments in formulating property tax policy or designing the system is severely restricted.

Further, it is projected that India will be about 38 percent urbanized by 2025. This would give more pressure on municipal services and urban infrastructure. Tamil Nadu is the most urbanized State in the country, with 48.45 per cent of its population living in urban areas in 2011. The Office of Census, Government of India in its recent report, "Population projections 2011-36, Census of India, 2019", has estimated that Tamil Nadu's urban population could be 4 crore or 53 percent of total population in 2019 and would increase to 4.7 crore or 60 percent of total population by 2036. In Tamil Nadu, there are currently 15 municipal corporations (MCs), 121 municipalities (MPs) and 528 town panchayats (TPs). It will be a real challenge for these ULBs to serve this much vast population at a satisfactory level. Specifically, they need more resources. Evidences indicate that the property tax has the

potential to improve the Municipal finances. Therefore, tracking property tax potential in ULBs is essential to make them self-Government.

1.2 Track Record of the Tamil Nadu State Finance Commission

Tamil Nadu is one of the States in the country that constituted Six State Finance Commissions (SFCs) so far as required. The track record of the five SFCs briefly is given below:

First State Finance Commission

The 1st SFC divided the whole devolution from the State Government into two pools viz., pool A and pool B. The first one comprised taxes such as surcharge on stamp duty, local cess and local cess surcharge and entertainment tax which belonged to local bodies but are collected by the State Government and to be shared with the local bodies. The second one consisted of the rest of State's own tax revenue, to be distributed to local bodies in increasing proportion growing from 8 percent to 12 percent over the five years (1997-98 to 2001-02).

The SFC recommended a ratio of 60:40 distributions between PRIs and ULBs. For horizontal distribution, the commission considered criteria such as total population, SC & ST population, financial viability, per capita house tax collection, core civic services, infrastructure maintenance deficiency, per capita receipts under own resources and existing per capita expenses on core services.

It also recommended for the introduction of equalization and incentive funds, property tax reforms with quinquennial revision, fixing of water supply norms, creation of a capital fund by allocating 10-15 percent from the revenue of ULBs, and switching over from house tax to property tax in Town Panchayats and 90 percent of the total realization of revenue from Entertainment Tax to be given to the concerned Local Bodies. The Government of Tamil Nadu accepted 115 of the 413 recommendations made by the First SFC.

Second State Finance Commission

The Second SFC recommended the increase in the percentage of devolution per annum from 8 percent to 10 percent (during 2002-03 to 2006-07). It recommended an increased share of 42 percent for ULBs. and 58 percent share for PRIs. For Horizontal distribution, it retained both the population parameters and per capita own income, but introduced five new parameters, viz., area, population of agricultural labourers, asset maintenance resource gap, inverse of per capita land revenue, and salary and pension

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expenses. It also recommended re-classification of Local Bodies based on 1991 census, incentivization of taxation efforts, equalization funds onwards self-financing projects on sewerage, drainage and over bridges, strengthening of Gram Sabhas, debt relief package to ULBs and a time frame for audit and placement of Local Body accounts before the Legislative Assembly. The Commission recommended that 10 percent of the SFC devolution may be used for capital works in Municipalities and Corporations, 15 percent by Town Panchayats and 20 percent by Village Panchayats. The Government of Tamil Nadu accepted 283 of the 386 recommendations of Second SFC.

Third State Finance Commission

The Third SFC also recommended a 10 percent share of tax revenue for the entire award period (2007-08 to 2011-12). It retained Pool A and Pool B and introduced a new Pool C. This was to facilitate specific purpose grants for local bodies with 0.5 – 1.0 percent of States Own Tax Revenue share. It retained 42 percent share for urban bodies. For horizontal distribution, the Commission retained total population, SC/ST population and area as criteria and added two new parameters viz., women population and debt burden of local bodies. It recommended the horizontal sharing among the PRIs as: 8 percent for District Panchayats, 32 percent for Panchayat Unions and 60 percent for Village Panchayats. For ULBs, it recommended the sharing as: 30 percent for Municipal Corporations, 41 percent for Municipalities and 29 percent for Town Panchayats. It also recommended incentivization of Solid Waste Management activities, tax mapping by GIS, incentivization for debt repayment as per schedule and re-classification of Local Bodies on revenue basis. The State Government accepted 91 of the 308 recommendations of Third SFC.

Fourth State Finance Commission

The Fourth SFC again recommended a uniform 10 percent share of State's own tax revenues for devolution (2012-13 to 2016-17). It recommended 44 percent share to urban bodies. For horizontal distribution, the Commission retained the same criteria as used in Third SFC, except the women population. Among other major recommendations, it earmarked a special grant of Rs.200 crore for Local Bodies out of the devolution for Solid Waste Management activities, continuation of the Infrastructure Gap Filling Fund and the Operations and Maintenance Fund with some increase and incentives for best practices. The State Government accepted 112 of the 130 recommendations made by the Fourth SFC.

Fifth State Finance Commission

The Fifth SFC retained 10 percent of the net State's Own Tax Revenue (SOTR) for devolution and 44 percent share to urban bodies (2017-18 to 2021-22). It recommended that the State should share 10 percent of GST compensation, if it receives from the Centre. It also recommended bifurcation of large panchayats based on the population, ceiling on Profession Tax, quinquennial revision of House Tax, revision of fees, computerization of the Property Tax, reiteration of unit measurement, introduction of GPS, GIS techniques for tax assessment, and identifying, renovating and renting out the vacant/unused land. It recommended that the Central Government buildings should be liable for property tax. It recommended that the horizontal distribution of the SFC devolution to Rural Local Bodies might be done on the basis of 2011 census population (60 percent), area (15 percent), scheduled caste/tribe population (15 percent), per capita consumption expenditure, distance (10 percent) and to urban local bodies, on the basis of 2011 census population (65 percent), area (15 percent), per capita consumption expenditure, distance (10 percent), proportion of slum population (10 percent). It totally made 125 new recommendations.

1.3 Sixth State Finance Commission

Recently, the Tamil Nadu Government has constituted the Sixth State Finance Commission to mediate on the issues concerning resource transfer to the rural and urban local bodies of Tamil Nadu. Its recommendations will cover the period from 2022-23 to 2026-27. This period further coincides with the Fifteenth (Central) Finance Commission (applicable only up to 2025-26). The need for better services at the local level, particularly in urban and rural areas, is a larger context in which the Sixth SFC might discourse on the issue. In this context, the views of the 15th Central Finance Commission and the approach and methodology they had adopted, and assumptions used by the Fifth SFC, the Memorandum submitted by the Tamil Nadu Government to the Fifteenth Finance Commission along with the projections, the projections currently being made by the Tamil Nadu Government under its Fiscal Responsibility and Budget Management Act (FRBMA) are useful reference point.

As regards the recommendations of the SFCs are concerned, the State Government has accepted most of the recommendations, especially those relating to devolution of resources to local bodies. There has been a gradual increase in per capita devolution since the recommendations of the first SFC. The per capita devolution increased by more than 3.72 times (in real terms) from Rs. 136.76 in 1997-98 to Rs. 508.99 in 2020-21.

1.4 Significance of Property Tax of Town Panchayats

Tamil Nadu was the first State to introduce the town panchayat as an intermediate step between rural villages and ULBs. Till 1981, the Town Panchayats were under the administrative control of Directorate of Rural Development. In 1981, the Government constituted a separate Directorate for the Town Panchayats. However, the administrative control of the Directorate of Town Panchayats continued with the Rural Development Department. Due to the 73rd and the 74th Amendments to the Constitution of India, all the Town Panchayats were reconstituted under the Tamil Nadu District Municipalities Act, 1920 and the administrative control of the Directorate of Town Panchayats was brought under the Municipal Administration and Water Supply Department.

The property tax is the major own tax revenue source for Town Panchayats (TPs) in Tamil Nadu. The total property tax revenues of all 528 TPs amounted to Rs. 126.46 crore in 2015-16 and increased to Rs. 223.45 crore in 2018-19. But in the next two years, they declined to Rs. 186.90 crore and Rs. 183.16 crore due to the impact of covid-19 pandemic. The property tax share in total own tax revenues is around 40 percent. As indicated above, the property tax system of TPs also suffer from various issues: many properties are exempted from property tax; TPs do not have any direct power of taxation and they do not have the power to fix the tax rate; the property tax rate revision has not taken place in the last 13 years; property records are not maintained properly; and the collection efficiency is low.

Given these issues, obviously the performance and productivity of property taxes of TPs are poor. They have huge untapped potentials which need to be estimated and essential reforms to be done based on the findings.

Against these backgrounds, the Sixth State Finance Commission entrusted this "Study on Tracking Property Tax Potential in Urban Local Bodies of Tamil Nadu with Special Focus on Town Panchayats" to Madras School of Economics (MSE) with the following terms of reference.

1.5 Terms of Reference of the Study

(i) to track the property tax rate and different valuation methods with time series data and to examine the trends of property tax demand and revenue collection in all Town Panchayats

from the year 2015-16 up to 31.03.2020 and projection for the award period (2022-23 to 2026-27) of the Sixth State Finance commission;

(ii) to estimate the gap and trace TPs wise efficiency of property tax collection and tax base;

(iii) to suggest ways to tap untapped property tax potential of TPs in Tamil Nadu taking into recommendation of Fifteenth Central Finance Commission including the use of Land Based Instruments;

(iv) to recommend policy suggestions and to give a complete solution and operating plan for all TPs to increase property tax potential;

(v) to arrive at projection of property tax for the award period on the basis of existing norms and projection for award period with normative suggestion for Tapping Tax Potential;

(vi) to ensure that the findings should have direct bearing on the ToR of the Commission with special features on TPs;

(vii) to examine the trends in urbanization and to identify fastest growing urban centres in Tamil Nadu with special focus on TPs;

(viii) to examine key driving forces of urbanization in Tamil Nadu and the problems faced by Faster Growing Urban Centers (FGUC);

(ix) to examine the income and expenditure pattern of TPs in relation to urbanization process and with focus on FGUC;

(x) to analyze the patterns of financial devolution across ULBs and its impact on urban development with special focus on TPs;

(xi) to study any other issues referred by the Commission during the study; and

(xii) Based on the detailed questionnaire obtained from TPs, credibility of the raw data furnished for the study may be verified or with available secondary source or sample field study if necessary. A complete data analysis, evaluation, and observation on issues of study given with reference to SFC data shall also reported to the commission.

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1.6 Objectives of the Study

Based on the above ToR and the data file given by Sixth Finance Commission covering details on all individual town panchayat's population, area, income and expenditure, tax revenues, components of property tax revenues, tax rate, demand and collection details, exempted properties etc during 2015-16 to 2020-21, and other secondary data available in public domain and past reports of SFCs and CFCs, this study specifically reviews and analyze the following:

(i)   the overall trends in income, expenditures and fiscal balances of TPs in Tamil Nadu during 2015-16 to 2020-21 ;

(ii)   the trends in the level and components of property tax revenues of TPs in Tamil Nadu during 2015-16 to 2020-21;

(iii)   the trends in the demand and collection of property revenues of TPs in Tamil Nadu during 2015-16 to 2020-21;

(iv)   the reasons for low property tax revenues of TPs in Tamil Nadu;

(v)   the different valuation methods of property tax of TPs;

(vi)   the untapped property tax potentials of TPs in Tamil Nadu based on rate revision, improved collection efficiency, taxing exempted properties, etc

(vii)   the property tax potentials of TPs using the frontier approach and identify TPs with low efficiency in raising property tax revenues;

(viii) the trends in population growth of TPs in Tamil Nadu;

(ix)   the trends in the pattern of financial devolution to TPs; and

(x)   the recommendations of Central Finance Commission including the Land Based Instruments.

In making the above analysis, this study provides the projection of population, property tax revenues etc till 2026-27 and provides suggestions for improving the property tax revenues of TPs in Tamil Nadu.

1.7 Chapter Plan

The rest of this study proceeds as follows:

- Chapter 2 provides a brief note on economy and Government Finances of Tamil Nadu
- Chapter 3 explains the status of local bodies in Tamil Nadu

- Chapter 4 discusses the financial status of Town Panchayats in Tamil Nadu

- Chapter 5 reviews the performance of property tax of Town Panchayats

- Chapter 6 highlights the details on untapped property tax potential

- Chapter 7 provides the estimates of untapped property tax potentials of Town Panchayats

- Chapter 8 analyzes the Union Finance Commission's suggestions including land based instruments to augment property tax revenues, and

- Chapter 9 provides summary of findings and policy suggestions of the study

Chapter 2

AN OVERVIEW ON TAMIL NADU ECONOMY AND STATE GOVERNMENT FINANCES

2.1 Introduction

Tamil Nadu, with 6 percent of the total and 10.6 percent of the urban population of the country, is economically and socially more progressive State in the country. It is the second largest economy in India, next only to Maharashtra. Its GSDP share in India's GDP was 9.7 percent (in 2019-20). Tamil Nadu (TN) is one of the highly industrialized States, contributing 10.9 percent of industry GDP of the country. TN ranks first in credit-deposit ratio and number of factories. TN has also done well in terms of many social development indicators. It ranks first in urbanization, second in low IMR, and low birth rate; third in literacy and female literacy and fourth in life expectancy. This Chapter assesses the growth performance of Tamil Nadu and the sectoral growth and compares the performance of Tamil Nadu economy with that of other major Indian States. It also provides an overview on State Government Finances of Tamil Nadu.

2.2 Growth of Tamil Nadu Economy

Tamil Nadu has maintained a strong growth performance after reforms in 1991. During 2005-06 to 2019-20, Tamil Nadu's medium term (i.e., 15 years' average real) growth of 8.7 percent was higher than the all India average growth of 7.4 percent (not shown). During 2015-16 to 2020-21, Tamil Nadu's (6-year) average real growth (2011-12 base) declined to 6.42 percent as against all India growth of 4.52 percent. (Figure 2.1). Excluding the last year 2020-21 which was the pandemic affected year, the average GSDP growth of Tamil Nadu was 7.42 percent as against all India GDP growth of 6.88 percent. However, in the last five years, Tamil Nadu's average growth declined to 6.06 percent as against all India growth of 3.66 percent.

Figure 2.1: Economic Growth: Tamil Nadu and India (percent)
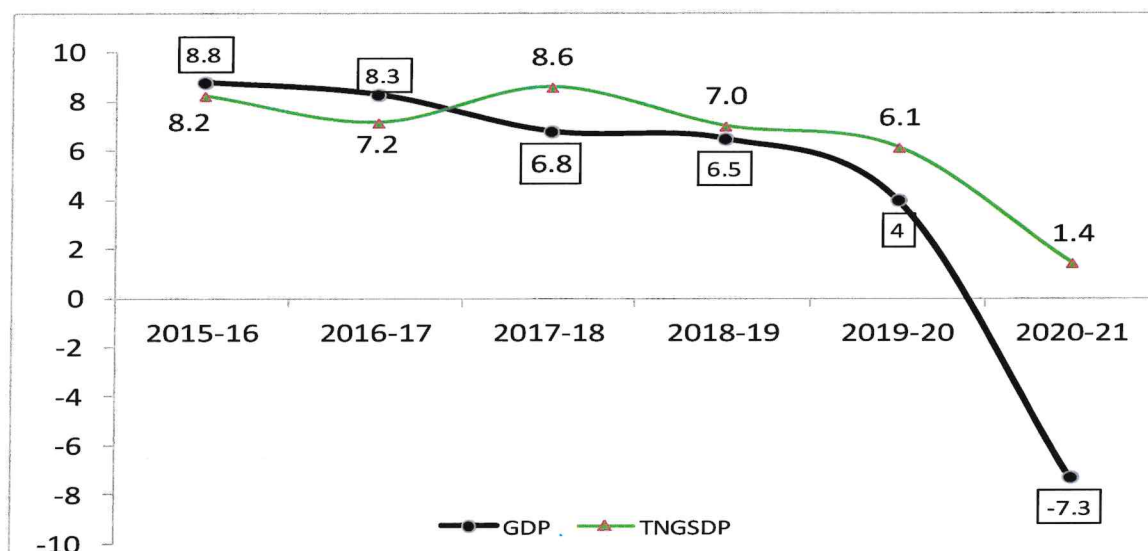
An inter-State comparison reveals that Tamil Nadu ranked 17th among States and Union territories (UTs.) in (5 years) average growth during 2015-16 to 2019-20 (Figure 2.2). Mizoram had the highest growth of 9.88 percent followed by Gujarat (9.36 percent) and Telangana (9.29 percent). However, Tamil Nadu (7.42 percent) ranked 11th among the major Indian States.

Figure 2.2: 5-years Average GSDP (real) Growth (2015-16 to 2019-20) in Percent

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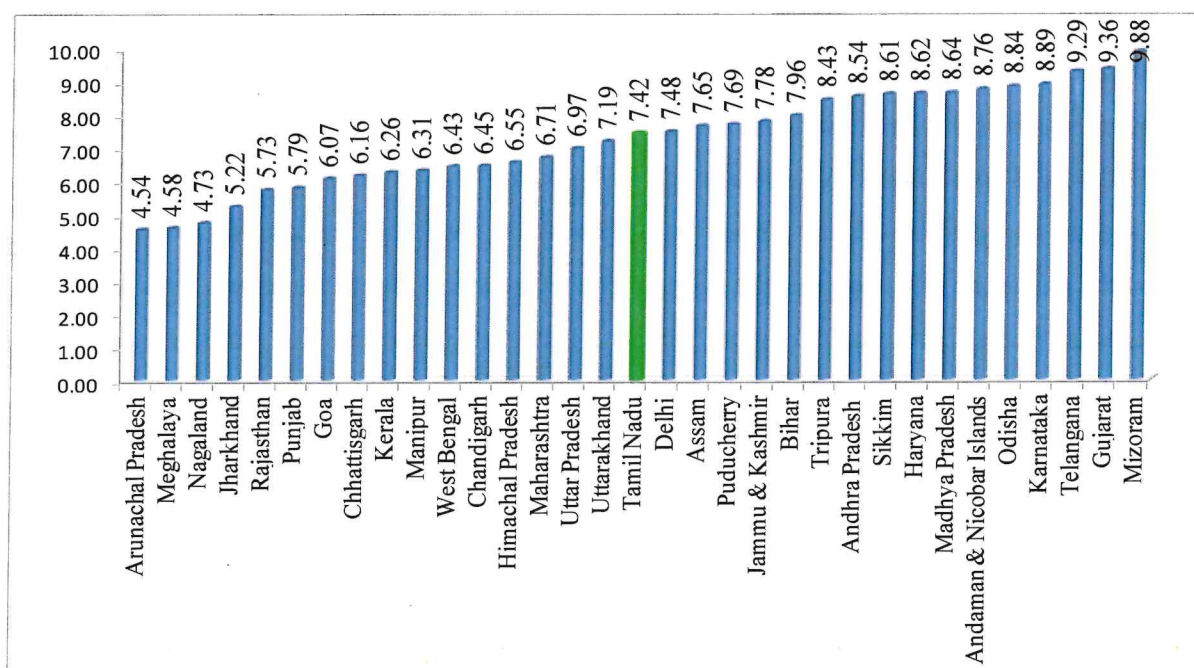
2.3 Sectoral Growth

Tamil Nadu's sectoral growth pattern shown in Figure 2.3 reveals that during 2015-16 to 2020-21, secondary sector (comprising manufacturing, electricity, gas, and water supply and construction) in 2011-12 prices grew at 8.15 percent, primary sector (comprising agriculture, forestry and fishing and mining and quarrying) grew at 5.38 percent and tertiary sector grew only at 4.85 percent.

Figure 2.3: Sectoral Growth in Tamil Nadu
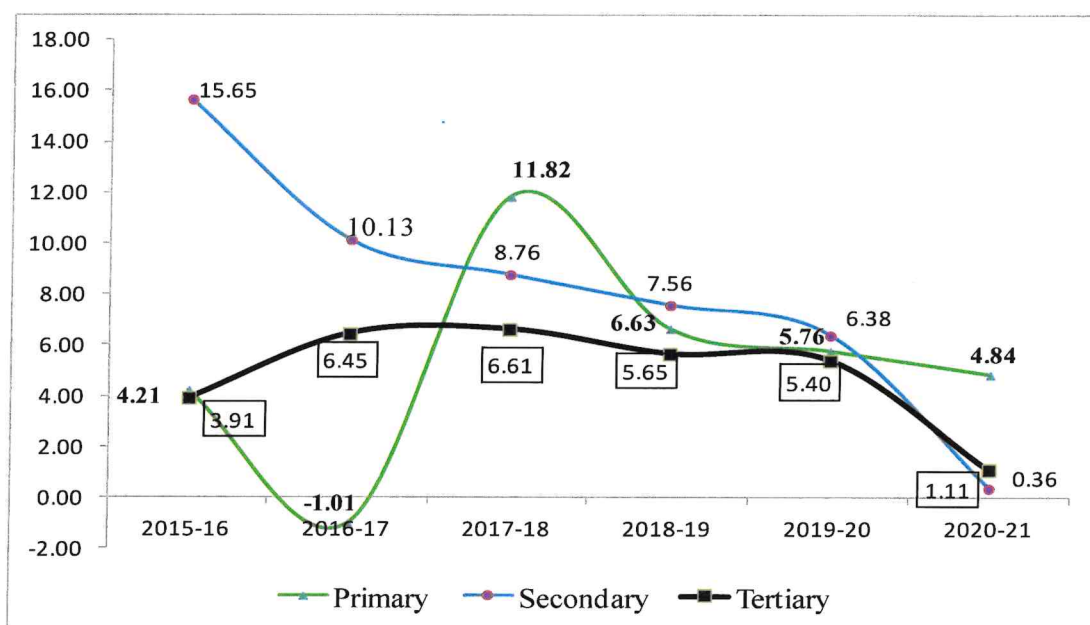
Further, the growth pattern of primary sector is more volatile than that of secondary and services. The main reason is that agriculture production depends heavily on monsoon, which frequently fails in the State. This high volatile growth of agriculture indicates that the risk-adjusted return from this sector is low which makes it difficult to attract private investments. Further the share of agriculture sector has been continuously declining and currently its share is less than 10 percent. Growth of this sector is vital for food security in the State. As per 2011 Census, 42 percent of the workers are still in agriculture (as cultivators and agriculture labours). While Tamil Nadu has larger number of MSMEs, its industry growth pattern is also volatile. Slowdown in the performance of industry and services in recent years is the major concern that invites urgent attention of policy makers.

2.4 Trends in Other Economic Parameters

Per Capita Income

Among major Indian States, Tamil Nadu ranked 6th in per capita (NSDP) income (current prices) in 2019-20 (Figure 2.4). Its per capita income was Rs. 2.13 lakh in 2019-20. Haryana ranked first with Rs. 2.48 lakh followed by Telangana (Rs.2.33 lakh), and Karnataka (Rs. 2.23 lakh).

Figure 2.4: Per Capita NSDP for Indian States and India (2019-20) at Current Prices
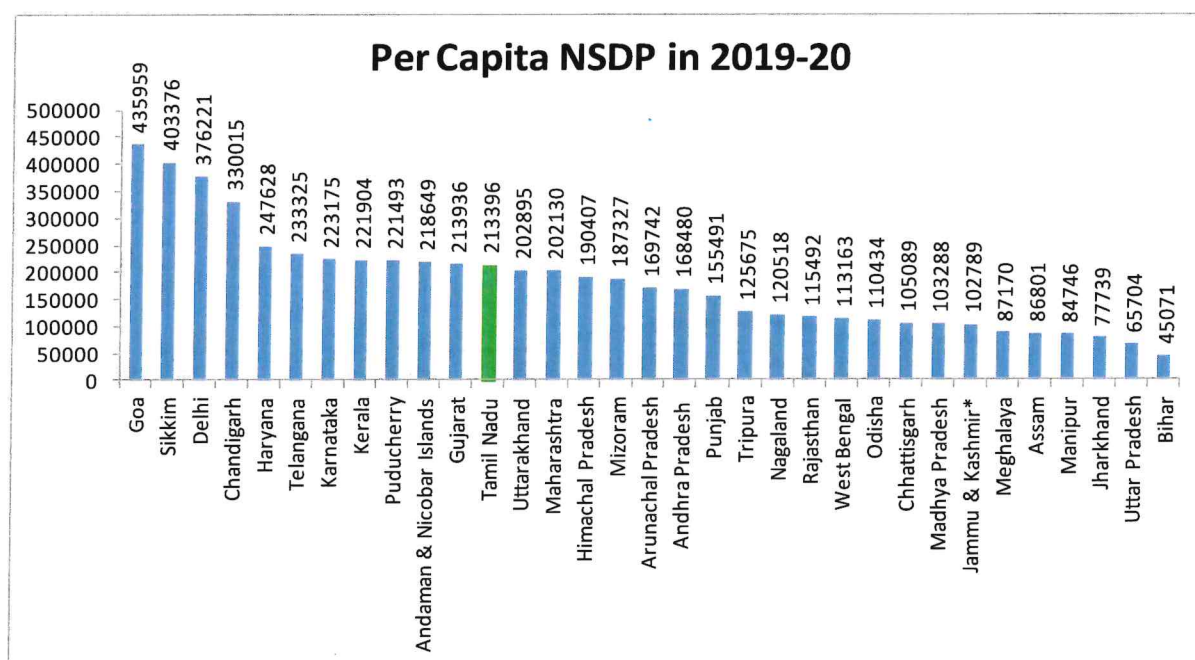
District Wise Per Capita Income

Tamil Nadu has 32 districts in 2017-18 (currently it has 37 districts). There exists wide per capita income (Per Capita Gross District Domestic Product) inequality among the districts. Thiruvallur and Erode ranked first and second in per capita income with Rs. 2.96 lakh and Rs. 2.72 lakh respectively in 2017-18 (latest year for which district income data available). Thiruvarur was the poorest district with per capita income of Rs. 94290, followed by Perambalaur (Rs. 97393), and Villupuram (Rs. 106783) districts. Thus, per capita income of Thiruvallur was 3.14 times the per capita income of Thiruvarur. Further, in 19 districts (out of 32), the per capita income was below the per capita income of the State (Figure 2.5). It appears that the poorest districts: Ariyalur, Perambalur and Thiruvarur are adjacent to the richer district Thiruchirappalli and the other poorest districts Thiruvannamalai and

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Villupuram are adjacent to the two richer districts (Thiruvallur and Kancheepuram). However, it seems that prosperity did not spread to the neighboring poorer districts from richer districts. In general, coastal districts and districts with high share of agriculture are basically the poorest districts.

Figure 2.5: District Wise Per Capita Income in 2017-18 at Current Prices
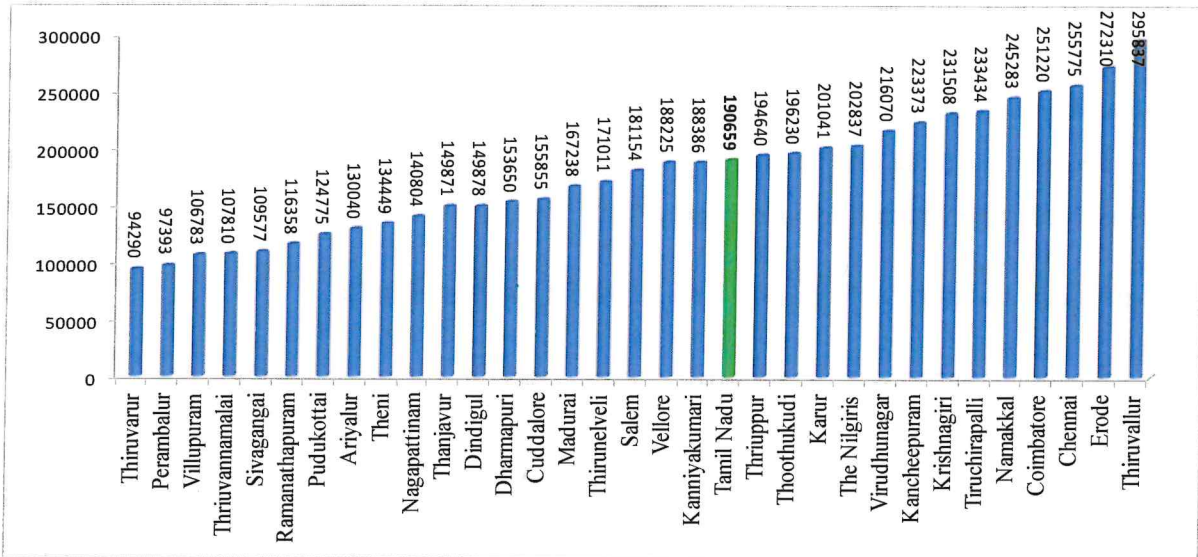
Nominal GSDP Growth

Table 2.1 provides the nominal GSDP growth in Tamil Nadu since 2015-16. It is observed that the last 5-year average growth was 10.12 percent.

Table 2.1: Nominal GSDP Growth in Tamil Nadu

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	5-Year Avg.
GSDP Nominal	9.68	10.72	12.47	11.27	10.25	5.87	10.12

Employment

The CMIE monthly data series shows that the labour participation rate in Tamil Nadu was 61.13 percent in September 2016 as against all India rate of 47.94 percent (not shown). After that it steadily declined and reached 49.8 percent in January 2018 and further to 44.1 percent in January 2019 (Figure 2.6). The long term decline in labour participation rate could be attributed to general economic shocks such as demonetization and introduction of GST, on the one hand and a combination of industry specific issues

such as changing tastes, tightening regulatory environment and growing international competition, on the other.

It is observed that the lockdown due to Covid-19 affected the labour participation rate severely in Tamil Nadu. It declined from 43.9 percent in March 2020 to 29.6 percent in April and further to 26.2 percent in May 2020. After that it recovered and increased to 42.2 percent in August 2020. Then it started declining and reached 36 percent in January 2021. Although the all India rate has been lower than the Tamil Nadu rate till March 2020, it has been higher than the Tamil Nadu rate after that except for the month of August 2021. It seems that all India rate has quickly recovered and then steadily moving as compared to Tamil Nadu rate which fluctuates highly.

Figure 2.6: Labour Participation Rate in Tamil Nadu and India
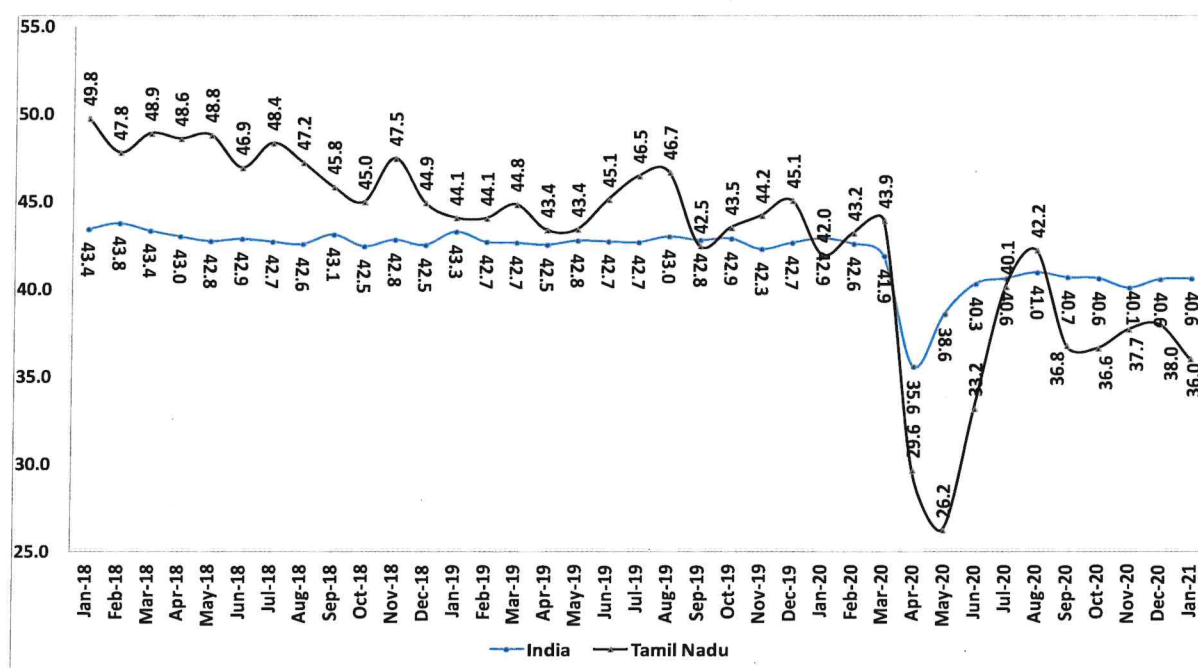
The labour participation rates in both urban and rural Tamil Nadu have been declining since January 2018 (Figure 2.7). The rural participation rate is always higher than urban rate. After March 2020, the pandemic affected both severely. The rural rate declined from 51.6 percent in March 2020 to 33.1 percent in April 2020 and further to 28.7 percent in May 2020. The urban rate declined from 36.2 percent in March 2020 to 26.2 percent in April 2020 and to 23.8 percent in May 2020. After that both started increasing. The rural rate was 45 percent in July 2020 and then it started declining and reached 39.3 percent in January 2021. The urban

rate was 39.9 percent in August 2020 and then it started declining and reached 32.7 percent in January 2021.

Figure 2.7: Labour Participation Rate in Rural and Urban Tamil Nadu
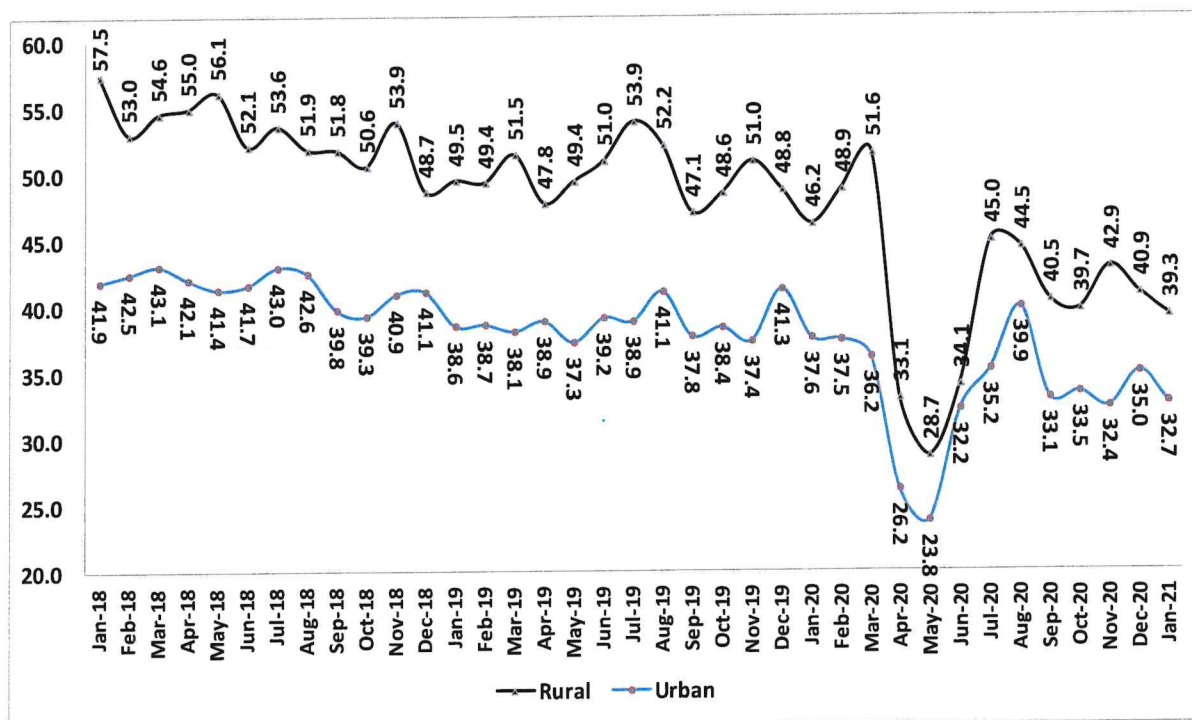
Source: CMIE

(v) Poverty Reduction:

Since 1994, Tamil Nadu witnessed a steady decline in poverty. Tamil Nadu's commendable progress in poverty reduction in the recent years is evident by the poverty scorecard in the SDG (Sustainable Development Goal) Index 2020-21 released by the NITI Aayog. The index aimed at measuring performance vis-à-vis the United Nations' mandated SDGs. The latest edition shows that India's overall score of 60 (out of 100) in this respect was, in fact, higher than 50 in the last year. However, Tamil Nadu, with a score of 86, topped the States in India (Figure 2.8). Rapid economic growth over the past several decades played a major role in the State's poverty reduction.

Figure 2.8: Poverty Scorecard in the SDG Index
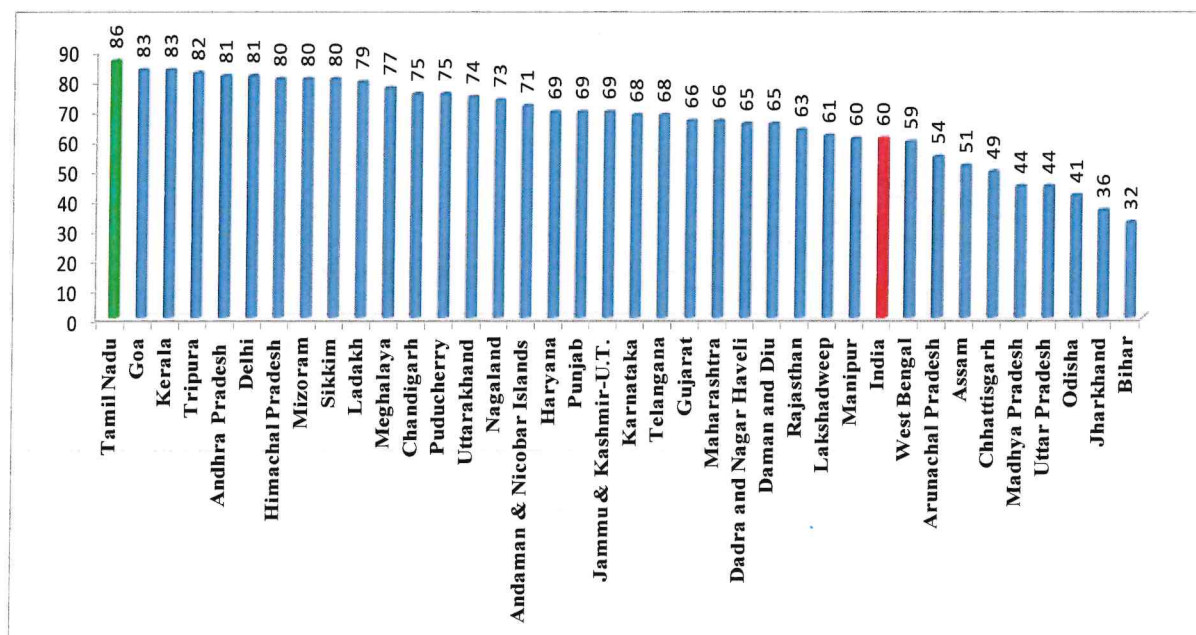
Source: SDG India Index & Dashboard 2020-21, NITI Aayog.

2.5 Review of State Government Finances

Tamil Nadu has traditionally been a financially well-administered State. It enacted the Fiscal Responsibility and Budget Management Act (FRBMA) in 2003 and brought its revenue account to show surplus in 2005-06. This trend more or less continued till 2013-14. From that year onwards, the State showed revenue deficit every year. From Table 2.2, it is observed that in 2015-16, the revenue deficit of the State was Rs. 11,985 crore (i.e., 1.02 percent of GSDP) and it increased to Rs. 35,909 crore in 2019-20 (2 percent of GSDP). Due to the fiscal shock of COVID-19, it increased to Rs. 65,994 crore (3.47 percent of GSDP) in 2020-21. The fiscal deficit relative to GSDP was kept below 3 percent norm till 2018-19, except in 2016-17 due to some adjustment made in connection with the power sector. This means that the borrowed amount was fully used for meeting capital expenditure. The capital expenditure in that year was 3.59 percent of GSDP. But the fiscal deficit GSDP ratio increased to 3.35 percent in 2019-20 and further to 5.09 percent in 2020-21. The outstanding liabilities (stock of public debt) relative GSDP was 16.92 percent in 2011-12 (not shown). Then, it started increasing and was slated to be 22.12 percent in 2019-20. This is still an acceptable level and well below the norms prescribed by the Thirteen Finance Commission and Fourteenth Finance Commission as well as the State's FRBM Act, 2003.

Table 2.2: Tamil Nadu State Finances: Selected Fiscal Aggregates

Fiscal Indicators	2015-16	2016-17	2017- 18	2018- 19	2019-20	2020-21 (RE)
Rs. Crore						
Own Tax Revenues	80476	85941	93737	105534	107462	109969
Own Non Tax Revenues	8918	9914	10764	14200	12888	12683
State's Own Revenue	89394	95855	104501	119734	120350	122652
Total Central Transfers	39614	44376	41779	54007	54175	58048
Share in Central Taxes	20354	24538	27100	30639	26392	23039
Grants	19260	19838	14679	23368	27783	35009
Total Revenue Receipts	129008	140231	146280	173741	174526	180701
Total Revenue Expenditure	140993	153195	167874	197201	210435	246695
Capital Expenditure of which	21326	46756	26,720	30,676	29654	43868
Capital Outlay	18995	20709	20203	24311	25632	37734
Loans & Advances (Gross)	2,331	26047	6,517	6,365	4,022	6,134
Recoveries of Loans & Advances	684	3548	8472	6913	5384	5364
Revenue Deficit	11985	12964	21594	23459	35909	65994
Fiscal Deficit	32,628	56,171	39,840	44,426	60,179	96,890
Outstanding liabilities	235259	271364	311882	355845	397496	485503
GSDP at Current Prices	1176500	1302639	1465051	1630208	1797229	1902689
As Percent of GSDP						
Own Tax Revenues	6.84	6.60	6.40	6.47	5.98	5.78
Own Non Tax Revenues	0.76	0.76	0.73	0.87	0.72	0.67
State's Own Revenue	7.60	7.36	7.13	7.34	6.70	6.45
Total Central Transfers	3.37	3.41	2.85	3.31	3.01	3.05
Share in Central Taxes	1.73	1.88	1.85	1.88	1.47	1.21
Grants	1.64	1.52	1.00	1.43	1.55	1.84
Total Revenue Receipts	10.97	10.77	9.98	10.66	9.71	9.50
Total Revenue Expenditure	11.98	11.76	11.46	12.10	11.71	12.97
Capital Expenditure of which	1.81	3.59	1.82	1.88	1.65	2.31
Capital Outlay	1.61	1.59	1.38	1.49	1.43	1.98
Loans & Advances (Gross)	0.20	2.00	0.44	0.39	0.22	0.32
Recoveries of Loans & Advances	0.06	0.27	0.58	0.42	0.30	0.28
Revenue Deficit	1.02	1.00	1.47	1.44	2.00	3.47
Fiscal Deficit	2.77	4.31	2.72	2.73	3.35	5.09
Outstanding liabilities	20.00	20.83	21.29	21.83	22.12	25.52
GSDP at Current Prices	100	100	100	100	100	100

Budget expenditure (revenue plus capital expenditure) as a ratio of its GSDP stood around 13.28 percent (in 2017-18)-15.45 percent (in 2016-17) during 2015-16 to 2020-21 (Table 2.2). The revenue expenditure relative to GSDP stood around 11-13 percent. The

revenue receipts on the other hand stood around 9.5-11 percent. Already we have seen that during 2015-16 to 2020-21, the 5-year average annual growth of (nominal) GSDP was 10.12 percent. But the revenue receipts in current prices grew only at about 7.16 percent and the State's own revenue grew only at 6.65 percent. Thus, the own revenue buoyancy was less than 1. The own tax revenue also grew only at 6.52 percent. This is the major concern. Further, the revenue expenditure grew at 11.93 percent which is significantly higher than the growth of revenue receipts.

2.6 Composition of Own Tax Revenue

Among the State taxes, sales tax (predominantly State VAT and recently GST) is by far the most important own tax revenue source. Table 2.3 shows the composition of tax revenue of Tamil Nadu from 2015-16 to 2020-21 (revised estimate).

Table 2.3: Composition of Own Tax Revenue

Taxes	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21RE
Rs. Crore						
Sales Tax+GST	57522	63234	70945	81234	82892	85034
State Excise	5836	6248	5815	6863	7206	7815
Stamps Duties	8721	7237	9195	11066	10856	10781
Motor Vehicle tax	4233	4854	5363	5573	5675	4566
Goods&Pass. Tax	2153	2551	900	3	11	3
Others	2010	1817	1519	795	823	1770
Own Tax Revenue	80476	85941	93737	105534	107462	109969
Annual Growth Percent						
	2016-17	2017-18	2018-19	2019-20	2020-21RE	Avg. Gr.
Sales Tax+GST	9.93	12.19	14.50	2.04	2.58	8.25
State Excise	7.06	-6.93	18.02	5.00	8.45	6.32
Stamps Duties	-17.02	27.06	20.35	-1.90	-0.69	5.56
Motor Vehicle tax	14.67	10.49	3.92	1.83	-19.54	2.27
Goods&Pass. Tax	18.49	-64.72	-99.67	266.67	-72.73	9.61
Others	-9.60	-16.40	-47.66	3.52	115.07	8.98
Own Tax Revenue	6.79	9.07	12.59	1.83	2.33	6.52

During 2015-16 to 2020-21, the major taxes grew at a lower rate than the GSDP growth. This is a major concern as average tax buoyancy of all these taxes is less than one.

2.7 Central Transfers to Tamil Nadu

This section reviews the recommendations of the 15th Finance commission (FC) and its revenue implications for Tamil Nadu. A comparative analysis of the recommended

transfers by the 13th FC, 14th FC and 15th FC is also undertaken. It may be recalled that the first report of the 15th FC (1) was submitted with recommendations for 2020-21 (i.e., FY21) and the 15th FC (2)'s recommendations cover the period from FY22 to FY26. Thus, with these two reports, the recommendations of the 15th FC apply for six year.

Fiscal transfers from the Centre to the States take place through two broad channels namely, sharing of the sharable pool of Central taxes with the States, and Grants. In relative terms, a larger volume of transfers is given through the sharing of Centre's taxes. This volume is determined by the overall share of States in the divisible pool (called vertical devolution). As noted in Table 2.4, the 15th FC has kept the share of the States considered together at 41 percent in the sharable pool of the Central taxes in both their first and the second reports. This percentage share is broadly comparable with the share of 42 percent as recommended by the 14th FC. This is so because the number of States for which the recommendations of the 15th FC apply has been reduced to 28 with the exclusion of Jammu and Kashmir (J&K) from 29 States, which were the total number of States considered by the 14th FC. The difference of 1 percent point is quite close to the share that would have gone to J&K had it continued to be a State. It is notable that there was a sharp jump in the vertical share of the States from 32 percent to 42 percent from 13th FC to 14th FC, mainly because of the abolition of the distinction between plan and non-plan expenditures and growing share of cess and surcharges which are not shared to States.

Table 2.4: States' Share in Central Taxes: Recommended and Effective

Commission	Recommended Share in Divisible pool (%)	Effective Share in Gross Central Taxes (%)	Shortfall in Effective Share Relative to Recommended (% points)	Share of Cesses and Surcharges[#] in Center's Gross Tax Revenues (%)
FC 12	30.5	25.9	-4.6	
FC 13	32.0	27.9	-4.1	9.6
FC 14	42.0	34.9	-7.1	12.8
FC 15 (1)	41.0	28.9	-12.1	23.8
FC 15 (2)	41.0	30.0*	-11.0*	20.5*

Source: Union Budget Documents, Reports of 12th-15th FCs; *pertains to data for one year namely, FY22 (BE); #excludes GST compensation cess.

Since the recommendations of the 14th FC, there has been a noticeable trend on behalf of the Central Government towards reducing the volume of the sharable pool by increasing the ambit of Central cesses and surcharges that are not sharable with the States. This can be seen by examining the share of States in Central gross taxes (often called effective share) as compared to the share of States in the divisible pool (called recommended share). This is

detailed in Table 2.4. Thus, in terms of the effective share, the highest vertical devolution through the sharing of taxes was for the 14th FC period at 34.9 percent. It has now been reduced to 28.9 percent in 15th FC (1) period, quite close to 27.9 percent during the 13th FC period.

In reviewing the *inter se* distribution of the aggregate share of States in Central tax revenues, the approach of FCs has evolved significantly over time. With the 80th Constitutional amendment, the generalized sharing arrangement was brought into place. 10th FC and all subsequent FCs followed this framework of tax sharing. In the devolution formula, FCs have often given considerable weightage to the distance criterion for achieving horizontal equity, i.e., providing higher per capita transfers to lower per capita fiscal capacity States. Other criteria used by recent FCs include population, demographic change, area and forest cover. The 15th FC has re-introduced the tax effort criterion that was dropped by 13th and 14th FCs.

Table 2.5 compares the *inter-se* shares of States in tax devolution over 14th FC, 15th FC (1) and 15th FC (2). With the change in the status of Jammu and Kashmir (J&K), the number of States has now been reduced to 28 from 29 earlier. In this section, for comparability of transfers between FCs, J&K is excluded from the set of States in 14th FC period and re-calculated the inter se share of States in tax devolution.

Comparing the inter-se shares of States between 15th FC (2) and 14th FC, there has been an erosion in the shares of 8 out of 28 States. These States are: Karnataka facing the largest reduction, followed by Kerala, Telangana, Andhra Pradesh, Uttar Pradesh, Assam, Odisha, and Tamil Nadu. All of these States are in the category of medium and large (ML) States. On the other hand, the gaining States include Maharashtra, Rajasthan, Arunachal Pradesh, Gujarat and Bihar. This change in the profile of inter-se shares in the 15th FC (2) period can largely be attributed to the use of 2011 population as compared to 1971 population that was used by 14th FC.

Table 2.5: Commission wise *inter-se* Share of States in Tax Devolution

Sl. No	State	14 FC [$]	15 FC (1)	15 FC (2)	15 FC (2) minus 14 FC	15 FC (2) minus 15 FC(1)
		%	%	%	% points	
1	Andhra Pradesh	4.398	4.111	4.047	-0.351	-0.064
2	Arunachal Pradesh	1.431	1.760	1.757	0.326	-0.003
3	Assam	3.371	3.131	3.128	-0.243	-0.003
4	Bihar	9.787	10.061	10.058	0.271	-0.003
5	Chhattisgarh	3.166	3.418	3.407	0.241	-0.011
6	Goa	0.379	0.386	0.386	0.007	0.000
7	Gujarat	3.172	3.398	3.478	0.306	0.080
8	Haryana	1.091	1.082	1.093	0.002	0.011
9	Himachal Pradesh	0.722	0.799	0.830	0.108	0.031
10	Jharkhand	3.198	3.313	3.307	0.109	-0.006
11	Karnataka	4.822	3.646	3.647	-1.175	0.001
12	Kerala	2.526	1.943	1.925	-0.601	-0.018
13	Madhya Pradesh	7.727	7.886	7.850	0.123	-0.036
14	Maharashtra	5.674	6.135	6.317	0.643	0.182
15	Manipur	0.623	0.718	0.716	0.093	-0.002
16	Meghalaya	0.650	0.765	0.767	0.117	0.002
17	Mizoram	0.464	0.506	0.500	0.036	-0.006
18	Nagaland	0.503	0.573	0.569	0.066	-0.004
19	Odisha	4.744	4.629	4.528	-0.216	-0.101
20	Punjab	1.589	1.788	1.807	0.218	0.019
21	Rajasthan	5.647	5.979	6.026	0.379	0.047
22	Sikkim	0.369	0.388	0.388	0.019	0.000
23	**Tamil Nadu**	**4.104**	**4.189**	**4.079**	**-0.025**	**-0.110**
24	Telangana	2.499	2.133	2.102	-0.397	-0.031
25	Tripura	0.648	0.709	0.708	0.060	-0.001
26	Uttar Pradesh	18.205	17.931	17.939	-0.266	0.008
27	Uttarakhand	1.068	1.104	1.118	0.050	0.014
28	West Bengal	7.423	7.519	7.523	0.100	0.004
	Total	**100.000**	**100.000**	**100.000**	**0.000**	**0.000**

Source (Basic data): Reports of 14th FC, 15th FC (1) and 15th FC (2).
[$]In the case of 14th FC, we have re-calculated the inter *se* share of States, criteria wise and by applying the weighting structure used by 14th FC, after excluding J&K so that these shares are comparable with that of 15th FC. As per the 14th FC report the share of Tamil Nadu was 4.023 percent, but the comparable share is estimated at 4.104 percent.

Grants to Local Bodies

Both the Central and State FCs have been entrusted with the task of ensuring adequate overall resources for the local bodies which may be provided by (a) assigned resources, tax and non-tax, to the local Governments under the relevant State legislation, (b) sharing of State resources by way of sharing state tax revenues and grants, and (c) grants from the Central Government under the recommendations of the Central FCs. Tenth FC was the first to recommend central grants for local bodies. The subsequent Central FCs have been asked in their ToR to make recommendations on the measures needed to augment the Consolidated

Fund of a State to supplement the resources of the Panchayats and Municipalities in the State on the basis of recommendations made by State FC.

With respect to local body grants, the 15th FC (1) and (2) have made some significant departures as compared to the approach of 14th FC. First, 15th FC has recommended grants for all tiers of local bodies whereas 14th FC had given grants only to gram panchayats leaving district and block level panchayats. Second, 15th FC has recommended grants for fixed scheduled areas as well as cantonment areas. Other innovations that 15th FC has introduced include recommendations relating to tied grants for sanitation and drinking water. Further, in order to emphasis urbanization and related needs for municipal services, 15th FC has recommended earmarked grants for million plus cities in India. Tamil Nadu has many cities.

Different FCs have been allocating progressively increasing volume of grants earmarked for the local bodies. The 15th FC has recommended Rs. 4,27,911 crore for duly constituted local bodies for the period 2021-26 (Table 2.6). Local body grants relative to all-State GSDP increased from 0.93 percent in 13th FC to 1.74 percent in 14th FC and remained close to that level in 15th FC (2) period. In deriving these ratios, the mid-year nominal GSDP for each of the Commission-periods are used. For 13th FC, 2012-13 nominal GSDP is used. Similarly, 2017-18 nominal GSDP is used for 14th FC and 15th FC (2)'s projection of nominal GSDP for 2023-24 has been used for this period. The State-wise distribution of local body grants is determined by State wise share in population and area, with 90 percent weight assigned to population and 10 percent to area. As a result, across Commissions, States like Bihar, Jharkhand and Uttar Pradesh have received much higher local body grants. Their local body grants relative to GSDP in 15th FC (2) period range from 3.25 percent to 5.33 percent. Tamil Nadu's local body grants relative to GSDP during 15th FC (2) period stand at 1.03 percent (1.16 percent under 14th FC), broadly similar relative to comparable States such as Karnataka, Kerala and Andhra Pradesh.

Table 2.6: Recommended Local Body Grants Relative to GSDP

States	Rs. Crore			% to GSDP		
	FC 13	FC 14	FC 15	FC 13	FC 14	FC 15 (2)
Andhra Pradesh	7195	12290	18063	0.89%	1.52%	1.35%
Assam	1893	6387	10934	1.21%	2.21%	2.69%
Bihar	5682	23694	35577	2.01%	4.89%	5.33%
Chhattisgarh	2267	6832	10368	1.28%	2.40%	2.44%
Gujarat	3758	15042	22163	0.52%	1.14%	1.25%
Haryana	1521	5963	9066	0.44%	0.95%	0.83%
Jharkhand	2240	7961	12322	1.28%	2.88%	3.28%
Karnataka	6497	15146	21877	0.93%	1.12%	1.04%
Kerala	2676	7682	12554	0.65%	1.10%	1.02%
Madhya Pradesh	5834	18733	28367	1.53%	2.57%	2.67%
Maharashtra	8744	27449	41391	0.60%	1.14%	1.25%
Orissa	3271	10623	15752	1.25%	2.43%	2.43%
Punjab	1754	6544	10305	0.59%	1.37%	1.45%
Rajasthan	5164	18147	27172	1.05%	2.17%	2.17%
Tamil Nadu	5456	17010	25526	0.64%	1.16%	1.03%
Telangana	--	8764	13111	--	1.16%	1.02%
Uttar Pradesh	12741	46026	67160	1.55%	3.34%	3.25%
West Bengal	5773	20832	30393	0.98%	2.08%	2.10%
ML	**82464**	**275124**	**412101**	**0.92%**	**1.76%**	**1.74%**
Arunachal Pradesh	306	1064	1618	2.44%	4.83%	4.28%
Goa	172	354	609	0.45%	0.50%	0.53%
Himachal Pradesh	642	2012	3049	0.77%	1.43%	1.27%
Manipur	316	379	1277	2.30%	1.58%	3.22%
Meghalaya	432	32	1385	1.98%	0.10%	3.24%
Mizoram	311	120	713	3.72%	0.62%	2.01%
Nagaland	416	127	1038	2.94%	0.53%	2.35%
Sikkim	187	198	360	1.52%	0.84%	0.79%
Tripura	370	559	1580	1.71%	1.21%	2.16%
Uttarakhand	781	2699	4181	0.59%	1.21%	1.37%
SH	**3932**	**7543**	**15810**	**1.10%**	**1.21%**	**1.62%**
All States	**86396**	**282667**	**427911**	**0.93%**	**1.74%**	**1.73%**

Source (Basic data): Reports of FC 12 to 15, MoSPI.
Note: For deriving grants as proportion of GSDP we have used the mid-year GSDP under respective commission. Therefore, in the case of FC 13, we have used nominal GSDP pertaining to 2012-13, for FC 14 we have used nominal GSDP pertaining to 2017-18 and for FC 15 (2) we have used the nominal GSDP of 2023-24 as projected by the FC 15 (2).

Total Transfers

Table 2.7 shows the changes in State-wise shares in total recommended transfers including tax devolution and grants from 14th FC 14 to 15th FC (2). The number of gaining States is equal to the number of States that have lost. Among the gaining States, maximum increases in shares have accrued to Punjab, Uttarakhand, Maharashtra, Rajasthan and West Bengal. The losing States include Karnataka, Uttar Pradesh, Telangana, Andhra Pradesh and Odisha. Tamil Nadu is also one of the losing States although the magnitude of reduction in its

share in total transfers is modest at (-)0.07 percentage points. This is attributable to a fall of (-)0.025 percent points in tax devolution and a larger fall of (-)0.37 percent points in grants.

Table 2.7: Share of States in Total Recommended Transfers (Devolution + Grants)

Sl. No	States	14th FC	15th FC (1)	15th FC (2)	15th FC (2) - 14th FC
		%	%	%	% points
1	Andhra Pradesh	4.76	4.41	4.45	-0.31
2	Arunachal Pradesh	1.31	1.49	1.52	0.22
3	Assam	3.28	3.60	3.19	-0.10
4	Bihar	9.32	9.11	9.24	-0.09
5	Chhattisgarh	3.01	3.05	3.09	0.08
6	Goa	0.35	0.33	0.33	-0.01
7	Gujarat	3.25	3.38	3.48	0.22
8	Haryana	1.15	1.12	1.15	0.00
9	Himachal Pradesh	1.65	1.84	1.53	-0.12
10	Jharkhand	3.08	3.02	3.06	-0.02
11	Karnataka	4.68	3.54	3.59	-1.09
12	Kerala	2.67	3.31	2.65	-0.02
13	Madhya Pradesh	7.42	7.23	7.30	-0.12
14	Maharashtra	5.86	6.18	6.43	0.57
15	Manipur	0.80	0.89	0.82	0.02
16	Meghalaya	0.62	0.71	0.74	0.11
17	Mizoram	0.70	0.57	0.56	-0.13
18	Nagaland	0.88	0.86	0.92	0.04
19	Odisha	4.56	4.28	4.26	-0.30
20	Punjab	1.61	2.44	2.27	0.66
21	Rajasthan	5.58	5.59	6.01	0.43
22	Sikkim	0.34	0.37	0.36	0.02
23	**Tamil Nadu**	**4.13**	**4.43**	**4.06**	**-0.07**
24	Telangana	2.46	2.06	2.06	-0.40
25	Tripura	0.71	0.92	1.02	0.31
26	Uttar Pradesh	17.37	16.31	16.48	-0.88
27	Uttarakhand	1.04	1.56	1.67	0.63
28	West Bengal	7.43	7.39	7.77	0.34
	Total	**100.00**	**100.00**	**100.00**	**0.00**

2.8 Expenditure Patterns

Table 2.8 shows that during 2015-16 to 2020-21, the share of development services ranged between 55 percent and 60 percent of Tamil Nadu's total revenue expenditures. The proportion of outlay on social services decreased slightly from 38.9 percent to 37.2 percent. It is noted that the grants to local bodies marginally declined from 7.6 percent to 7.4 percent.

Table 2.8: Revenue Expenditures: Development and Non-Development Expenditures

Year	General Services	Grants to LBs	Non-Development	Social Services	Economic Services	Development	Revenue Exp.
Rs.Crore							
201 5-16	45512	10732	56244	54807	29943	84750	140993
201 6-17	51453	12466	63919	55297	33980	89277	153195
2017- 18	60451	11470	71921	59790	36162	95952	167874
2018- 19	72450	14880	87330	70202	39669	109871	197201
2019-20	78137	15688	93825	73999	42610	116609	210435
2020-21 RE	80942	18165	99107	91870	55718	147588	246695
As % of Revenue Expenditures							
2015-16	32.3	7.6	39.9	38.9	21.2	60.1	100
2016-17	33.6	8.1	41.7	36.1	22.2	58.3	100
2017-18	36.0	6.8	42.8	35.6	21.5	57.2	100
2018-19	36.7	7.5	44.3	35.6	20.1	55.7	100
2019-20	37.1	7.5	44.6	35.2	20.2	55.4	100
2020-21 RE	32.8	7.4	40.2	37.2	22.6	59.8	100

Source (Basic Data): State Budget Documents of Tamil Nadu (Various Years)

2.9 Urbanization

Table 2.9 provides the trends in urban population in Tamil Nadu and India from 1971 to 2011. During 1971 to 2011, the urban population in India increased from 10.91 crore to 37.71 crore while the urban population in Tamil Nadu increased from 1.27 crore to 3.49 crore.

Table 2.9: Trends in Urban Population in Tamil Nadu and India

Details	Units	1971	1981	1991	2001	2011
India	Crore	10.91	15.97	21.76	28.61	37.71
	Decadal Growth %		46.38	36.26	31.48	31.81
TN	Crore	1.27	1.60	1.91	2.75	3.49
	Decadal Growth %		25.98	19.38	43.98	26.91
	TN Share %	11.64	10.02	8.78	9.61	9.25

Source: Census of India (various issues).

It is observed that the decadal growth of urban population in Tamil Nadu was 43.98 percent between 1991 and 2001 as against all India decadal growth of 31.48 percent. However, the decadal growth of urban population of Tamil Nadu declined between 2001 and 2011 to 26.91 percent whereas all India growth increased marginally to 31.81 percent.

Figure 2.9 shows the degree of urbanization in Tamil Nadu and all India from 1971. The percentage of urban population in Tamil Nadu was 30.8 percent in 1971 and increased to

48.4 percent in 2011. At the same time, India's urbanization increased from 19.9 percent to 31.1 percent.

Figure 2.9: Trends in the Degree of Urbanization in Tamil Nadu and India
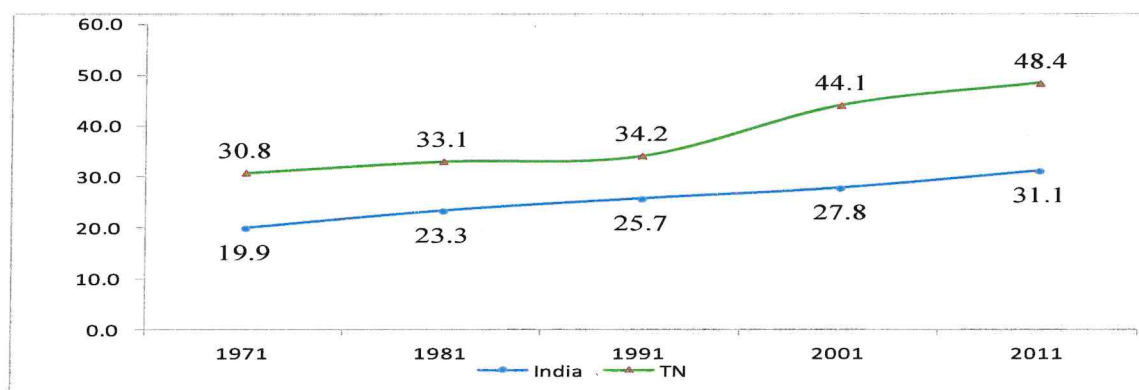
Figure 2.10 highlights that among the major Indian States, Tamil Nadu was the most urbanized State in the country in 2011.

Figure 2.10: State wise Urbanization (percent) in 2011
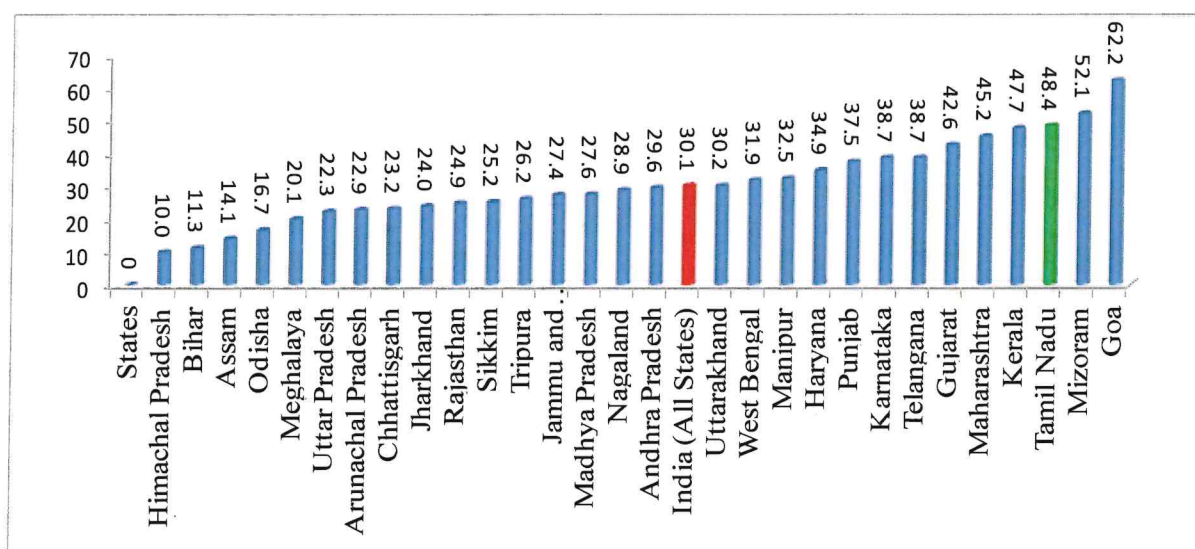
2.10 Concluding Remarks

This chapter has provided an overview of Tamil Nadu economy and Tamil Nadu State Government finances during 2015-16 to 2020-21. Tamil Nadu's average growth rate (6.42 percent) was higher than all India growth rate (4.52 percent).The COVID-19 pandemic affected its growth in last two years. Its secondary sector grew at 8.15 percent while the primary and tertiary sectors grew at 5.38 percent and 4.85 percent respectively. Slowdown in the growth performances of industry and services in recent years is the major concern. Tamil Nadu ranked 6th in per capita income (Rs. 2.13 lakh) among the major Indian States in 2019-

20. Wide per capita income inequality exists among the districts in Tamil Nadu. The top district Thiruvallur's per capita income of Rs. 2.96 lakh was about 3.14 times higher than the per capita income of the poorest district Thiruvarur of Rs. 94290 in 2017-18.

Tamil Nadu has seen a steady reduction in its poverty. It ranks first in the SDG index-Goal 1 (No poverty) released by the NITI Aayog. Evidences indicate that during January 2016 to March 2020, the labour participation rate in Tamil Nadu has been higher than all India rate. However, its rate has been steadily declining from 61.1 percent in September 2016 to 43.9 percent in March 2020 due to various reasons including the demonetization, introduction of GST, tightening regulatory environment and growing international competition. Tamil Nadu is the most urbanized State in the country (48.4 percent in 2011 as against all India figure of 31.1 percent).

Tamil Nadu has traditionally been a financially well administered State. Its key fiscal parameters-revenue deficit, fiscal deficit and public debt relative to GSDP have been kept as per the norms of FRBM legislation. However, in 2017-18 and 2018-19, its revenue deficit exceeded 1 percent of GSDP. Due to pandemic, the revenue deficit-GSDP ratio increased to 1.94 percent in 2019-20 and further to 3.4 percent in 2020-21RE. This is the concern as part of net borrowed amounts is used for meeting the revenue expenses of the State. Due to pandemic, the fiscal deficit-GSDP ratio also increased to 3.24 percent in 2019-20 and 4.99 percent in 2020-21RE. The outstanding liabilities of the State would be about Rs.485503 crore (25 percent of GSDP) in 2020-21 RE. While this is within the debt path set by the 15th Finance Commission. But it seems to be unsustainable as the New FRBM committee suggested only 20 percent level for Indian States.

Revenue receipts in current prices grew only at about 7.16 percent during 2015-16 to 2020-21. At the same time the revenue expenditure grew at 11.93 percent. State's own tax revenue grew only at 6.52 percent and almost all major taxes also grew at a lower rate than the GSDP growth. Therefore, own tax buoyancy is less than one. This is a major concern. The 15th FC also has reduced the Tamil Nadu's share in Central transfers. Dring 2015-16 to 2020-21, the proportion of outlay on social services decreased slightly from 38.9 percent to 37.2 percent and the grants to local bodies marginally declined from 7.6 percent to 7.4 percent.

Chapter 3
STATUS OF URBAN LOCAL BODIES IN TAMIL NADU

3.1 Introduction

As per the requirements of 73rd and 74th Constitutional Amendments, the Tamil Nadu State legislature enacted the Tamil Nadu Panchayats Act 1994. Accordingly, a three-tier system of Panchayati Raj Institutions (PRIs) *viz.*, District Panchayats (DPs) at the district level, Panchayat Unions or Block Panchayats (BPs) at the intermediary level and Village Panchayats (VPs) at the village level was established. Currently there are 36 DPs, 388 BPs and 12525 VPs in Tamil Nadu. The State legislature also amended the Tamil Nadu District Municipalities Act, 1920, in order to transfer the powers and responsibilities to Urban Local Bodies (ULBs). Currently, the Municipal Administration and Water Supply Department is administering 15 Corporations, 121 Municipalities and 528 Town Panchayats in the State. Given the fact that Tamil Nadu's urban population could increase from 4 crore or 53 per cent of total population in 2019 to 4.7 crore or 60 per cent of total population by 2036, it will be a real challenge for urban local bodies to serve this vast population at a satisfactory level. This Chapter briefly discusses the overall financial status of ULBs in Tamil Nadu and compares their financial performances with performances of UBLs in other major Indian States based on limited availability of data in public domain.

3.2. Financial Status of PRIs and ULBs in Tamil Nadu

Among the PRIs, the village panchayats alone have the power to levy taxes. The other sources of funds for the village panchayats and block panchayats are non-tax revenues, assigned revenues from the State Government and grants given by the State Government and Central and State Finance Commission grants. The details of receipts and expenditures of the PRIs during 2011-12 to 2016-17 are shown in Table 3.1. Own revenues accounted for about 7-14 percent of total receipts of PRIs during 2011-12 to 2016-17 while grants accounted for 74-83 percent. It is also noted that the total expenditures was only 33 percent of total receipts in 2011-12. But they increased to 73 percent in 2016-17.

Table 3.1: Receipts and Expenditures of PRIs and ULBs in Tamil Nadu

(Rs. Crore)

Receipts and Expenditures of PRIs						
Revenue/Expenditures	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Own Revenue	528	631	766	422	929	797
Assigned Revenue	564	705	975	866	713	333
Grants	3685	4,484	4,375	4,358	4,758	5,711
Total Revenue	4777	5,820	6,116	5,646	6,400	6,841
Revenue Expenditure	623	1,294	1,025	3,154	1,711	1,941
Capital Expenditure	940	1,308	1,813	2,385	1,985	3,019
Total Expenditure	1563	2602	2838	5539	3696	4960
Total Expenditure as Percent of Revenues	33	45	46	98	58	73
Receipts and Expenditures of ULBs						
Own Revenue	2148	2,467	2,957	2,875	3,364	3,776
Assigned Revenue	780	1,084	1,211	1,047	1,717	1,469
Grants	3220	4,020	4,391	4,073	5,033	5,468
Loans	225	323	903	772	724	1,964
Total Revenue	6373	7,894	9,462	8,767	10,838	12,677
Revenue Expenditure	2559	3,461	4,985	5,331	6,704	6,895
Capital Expenditure	2221	3,117	5,107	4,954	6,750	6,406
Total Expenditure	4780	6578	10092	10285	13454	13301
Total Expenditure as Percent of Revenues	75	83	107	117	124	105

Source: CAG *Audit Report (Local Bodies) for Tamil Nadu, various years*

Table 3.1 also provides details of receipts and expenditures of all ULBs during 2011-12 to 2016-17. All ULBs are empowered to levy taxes. They receive revenues from (i) own taxes, (ii) own non taxes, and (iii) transfers from both State Government and Central Government. Own revenues (own tax + own non tax revenues) of all ULBs in Tamil Nadu was Rs. 2148 crore in 2011-12 and it increased to Rs. 3776 crore in 2016-17. During the same period, the transfers (assigned revenues and grants) increased from Rs. 4000 crore to Rs. 6937 crore. Total revenue increased from Rs. 6373 crore to Rs. 12677 crore and the total

expenditure increased from Rs. 4780 crore to Rs. 13301 crore. Thus, the total expenditure as percent of revenues increased from 75 percent in 2011-12 to 105 percent in 2016-17.

3.3. Shares of Own Revenues and Transfers to ULBs in Tamil Nadu

Figure 3.1 shows that the share of transfers in total revenues of all ULBs in Tamil Nadu was 62.76 percent in 2011-12 and it increased to 64.66 percent in 2012-13. After that it started declining to 58.4 per cent in 2014-15 and increased to 62.28 percent in 2015-18, but again declined to 54.72 percent in 2016-17. The share own tax revenues accounted for about 30-34 percent of total receipts during this period. In 2016-17, it declined by 3.81 percentage points from its share in 2011-12. The share of loans was 3.53 percent in 2011-12 and it increased to 15.49 percent in 2016-17. The fall in the share of own tax and the rise in the share of loans are the concerns.

Figure 3.1: Shares of Own Revenues, Transfers and Loans for all ULBs in Tamil Nadu
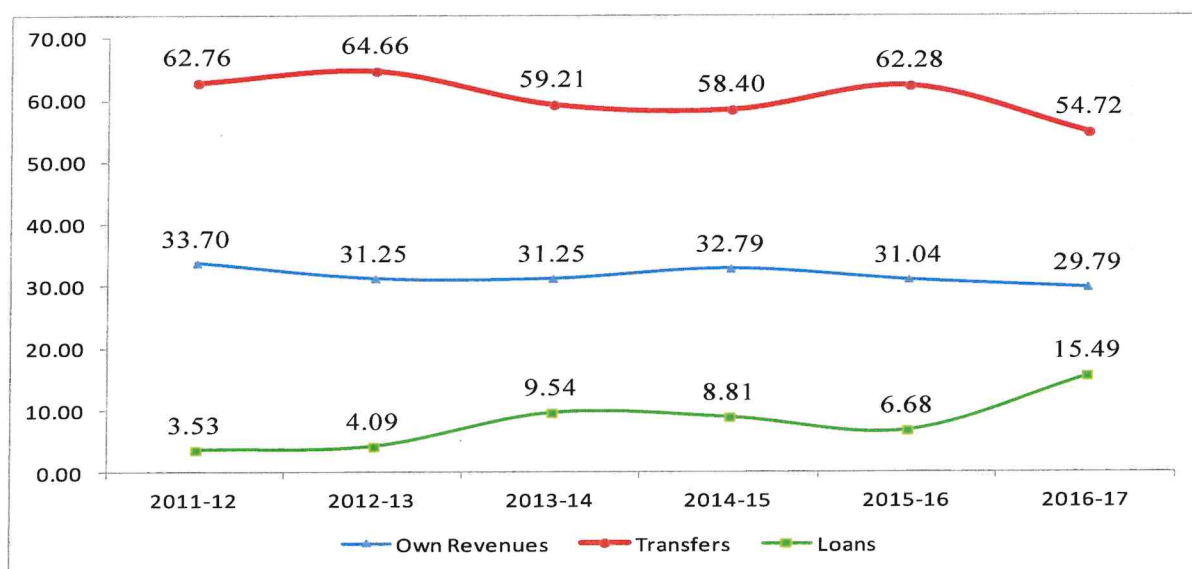
3.4 Property Tax Structure in Tamil Nadu

Property tax, vacant land tax, profession tax, pilgrim tax, tax on animals, and carriages, tax on agricultural land, tax on carts and advertisement tax are own taxes of urban local bodies in Tamil Nadu. Among them the property tax is the major own tax source. The property taxes can be designated as "Taxes on lands and buildings" (VIIth Schedule of the Constitution). It represents an ideal tax base for local bodies as it is not mobile and can be objectively verified and subjected to tax in a fair and equitable manner. It is the major source of fund to the municipal finance in the State. Similar to other tax impositions, 3 stages are

attendant on the imposition of property tax. They are (i) levy or declaration of liability (ii) assessment and (iii) Collection. The first one is a legislative function, the second one is quasi-judicial and the last one an executive function. The State legislature enacted (2013) the Tamil Nadu State Property Tax Board Act, 2013 and accordingly Government of Tamil Nadu framed (October 2014) the Tamil Nadu State Property Tax Board Rules in 2014.

In Tamil Nadu, before 1993, the Property Tax was assessed by the annual rental value method and by the capital value method. However, with effect from 1.10.1998, the Government of Tamil Nadu introduced a common method of calculation for arriving at the property tax in ULBs. While assessing the Property Tax in this method, the following details are taken into account to arrive the basic value of the property.

- Area of the building
- Age of the building
- Type of the building (i.e. RCC Roof, Tiled Roof and Thatched and AC Sheet)
- Usage of the building (i.e. Residential, Commercial and Industrial)
- Zonal value of the concerned ULB.

There are many steps in determining the annual value. The basic value is the rental yield per square feet of residential properties per month which is applicable in all the municipalities and township committees of different zones for taxation of the annual rental value of the buildings and lands. Further in order to determine the basic value, instructions have been given pertaining to the newly constructed residential (Reinforced Cement Concrete-RCC) buildings measuring 1000 square feet to be converted into a rental value per square feet.

Based on the age of buildings, three types of reduction in the annual value is applicable. They are: (i) no depreciation for buildings that are up to 5 years old, (ii) 15 percent depreciation is applicable for buildings that are of 5-15 years old and (iii) 20 percent depreciation is applicable for building that has been existence for more than 20 years. For the taxation purposes, buildings are categorized into (a) thatched roof buildings with a discount of 50 percent (b) tiled and AC/ GA sheet building with a discount of 25 percent and (iii) RCC buildings with no discounts. Also, a discount of 30 percent is accorded to buildings occupied by the owners.

According to Rule 8(1) of Schedule IV of the Tamil Nadu District Municipalities Act 1920, the assessment books shall be updated by the executive authority once in 5 years. This forms the basis for quinquennial tax revisions, which are the backbone of the fiscal health of ULBs. The Government should ensure the periodical revision of property tax which will improve the financial position of the ULBs. The last revision of property tax in most ULBs except Chennai Corporation[1] and the four Municipalities viz., Kallakurichi, Villupuram, Periakulam and Paramakudi was carried out in 2008.[2]

Depreciation has been allowed for age of the building and discount is allowed for the type of the building. As per established practices and procedures to carryout quinquennial revision of property tax, the ULB authorities have to conduct revision with the assistance of Special Revision Officers who inspect each and every house / building / vacant land in the jurisdiction of the entire town, thereby preventing escaped assessments and under-assessments. The Fifth State Finance Commission has recommended that: (i) an area based assessment of property tax need to be introduced; (ii) the property value needs to be determined based on the guideline value of land, value of building, the built-up area, type and quality of construction, number of floors and its usage; (iii) as the revision of property tax has not done since 2008, it needs to be done immediately; and (iv) the target for property tax collection for ULBs should be fixed to reach 0.60 percent of GSDP by the last year of award period i.e., 2021-22.

Table 3.2 presents the property tax revenues of municipal corporations, municipalities and town panchayats in Tamil Nadu during 2011-12 to 2017-18. The property tax revenues of all municipal corporations increased from Rs. 606.5 crore in 2011-12 to Rs. 1222.2 crore in 2017-18. During the same period, the property tax revenues of municipalities and town panchayats increased from Rs. 261.5 crore and Rs. 103.7 crore to Rs. 444.2 crore and Rs. 161.1 crore respectively. The average rate of annual growth of property tax revenues was 12.51 percent in municipal corporations, 9.36 percent in municipalities and only 7.65 percent in town panchayats.

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[1] The last revision of Property Tax in Chennai Corporation took effect from 01.04.1998.

[2] On the previous occasion that a General Revision of Property Tax was carried out, ceilings were placed on the enhancement of Property Tax as indicated below: For Residential Building (Whether Owner occupied or rented) 25 percent; For Industrial Building 100 percent; and For Commercial Building 150 percent

Table 3.2: Property Tax Revenues for all ULBs in Tamil Nadu (2011-12 to 2017-18)

| Year | Property Tax Revenues (PT) | | | | GSDP | PT as % of GSDP |
	Municipal Corporations	Municipalities	Town Panchayats	All ULBs		
2011-12	606.5	261.5	103.7	971.7	751486	0.129
2012-13	735.4	287.5	115.9	1138.8	854825	0.133
2013-14	826.4	301.9	125.4	1253.7	968530	0.129
2014-15	938.8	312.8	131	1382.6	1072678	0.129
2015-16	967.3	341.8	141.5	1450.6	1176500	0.123
2016-17	1105	369.1	153.6	1627.7	1302639	0.125
2017-18	1222.2	444.2	161.1	1827.5	1465051	0.125
Avg. Growth	12.51	9.36	7.65	11.16	11.78	

Source: Isher et al., 2019.

As the GSDP (nominal) growth rate was 11.78 percent, property tax (average) buoyancy was 1.06 for municipal corporations, 0.79 for municipalities and only 0.65 for town panchayats. It is observed from Table 3.2 that the property tax revenues of all ULBs in Tamil Nadu relative to its GSDP ranged between 0.123 percent and 0.133 percent. As the target is to reach 0.6 percent in 2021-22, immediate task is to make a complete reform of the property tax structure such that the target is met. Figure 3.2 presents the details of property tax collection efficiency for all ULBs in Tamil Nadu from 2012-13 to 2016-17. The collection seems to be poor, ranged between 31.71 percent to 35.77 percent.

Figure 3.2: Property Tax Collection Efficiency for all ULBs in Tamil Nadu (percent)
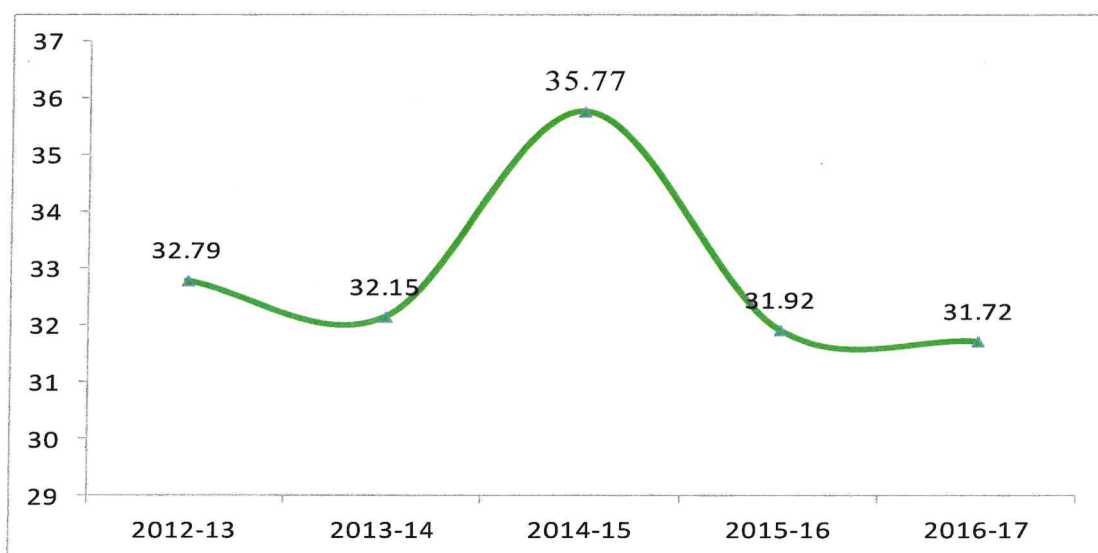
Source: CAG *Audit Report (Local Bodies) for Tamil Nadu, various years*

3.5 Interstate Comparison of Financial Performances of ULBs

This section compares the performance of ULBs in Tamil Nadu with other Indian States using the data given in Isher et al., (2019)' report: "State of Municipal Finances in India: A Study Prepared for the Fifteenth Finance Commission". There are 4259 ULBs in the country (Figure 3.3). Tamil Nadu has the highest number of ULBs (664) in the country followed by Uttar Pradesh (652) and Maharashtra (391).

Figure 3.3: State wise Number of Urban Local Bodies
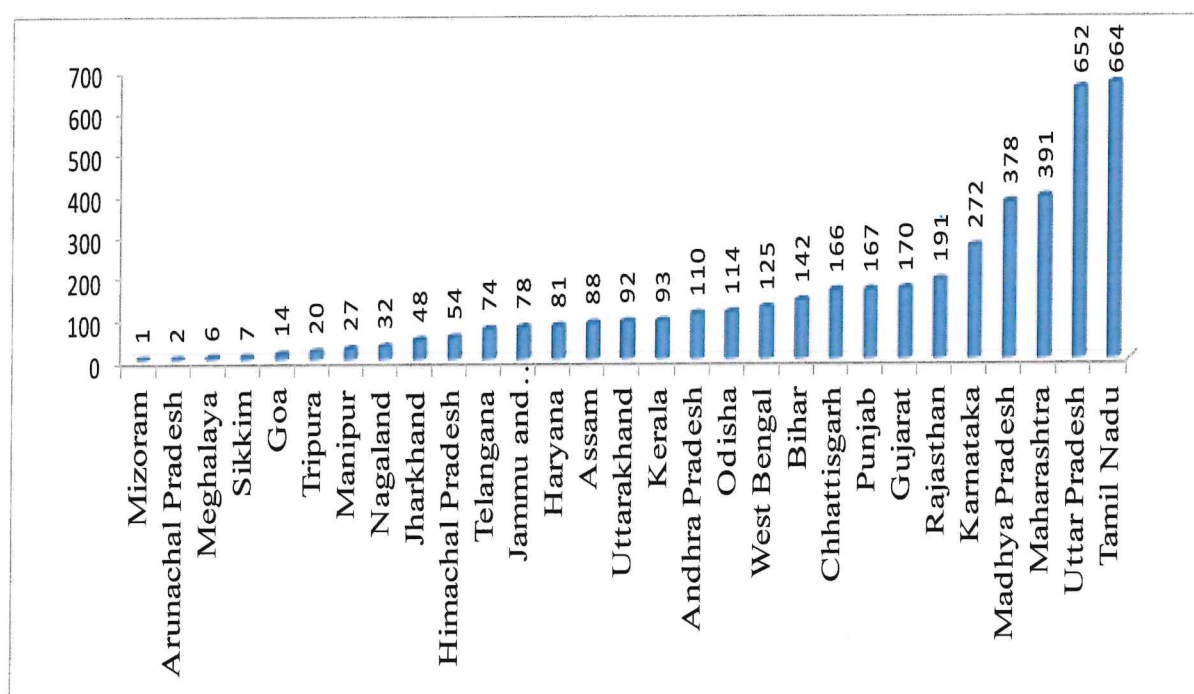
Table 3.3 shows the state wise details of total revenues and expenditures of ULBs in 2017-18. The total revenue for all ULBs in Tamil Nadu was Rs. 14892.7 crore, which was about 1.03 percent of its GSDP. The figure for Maharashtra was Rs. 48484.6 crore (2.06 percent of GSDP), which was the highest among all Indian States. Other than these two states, revenues exceeded 1 percent of GSDP in Gujarat, Madhya Pradesh, Karnataka, and West Bengal. In all other States, it was below 1 percent of GSDP. The ULBs in Maharashtra together spent the highest amount of Rs.43410 crore followed by Gujarat (Rs.13299 crore) and Tamil Nadu (Rs. 12956 crore). All ULBs in the country registered an aggregate surplus of Rs. 39145 crore in 2017-18. The ULBs in Tamil Nadu also showed a surplus of Rs. 1937 crore. The ULBs in only in three States (out of 29)-Assam, Himachal Pradesh and Mizoram showed a deficit

Table 3.3: State-wise Total Revenues and Expenditures for all Urban Local Bodies in 2017-18

States	Total Revenue		Expenditures		Balance	
	Rs. Crore	as % of GSDP	Rs.Crore	as % of GSDP	Rs.Crore	as % of GSDP
Andhra Pradesh	3886.7	0.49	3884.7	0.49	2.0	0.00
Arunachal Pradesh	25.2	0.11	1.3	0.01	23.9	0.11
Assam	222.8	0.08	349.4	0.12	-126.6	-0.04
Bihar	2149.8	0.46	1076.2	0.23	1073.6	0.23
Chhattisgarh	2330.5	0.83	1855.3	0.66	475.2	0.17
Goa	174	0.25	157.7	0.23	16.3	0.02
Gujarat	20818.1	1.57	13299	1.00	7519.1	0.57
Haryana	3883.8	0.60	Na	Na	Na	na
Himachal Pradesh	361.6	0.26	432.5	0.31	-70.9	-0.05
Jammu and Kashmir	716	0.51	591.5	0.42	124.5	0.09
Jharkhand	1679.1	0.62	468.3	0.17	1210.8	0.45
Karnataka	14855.1	1.11	9115.8	0.68	5739.3	0.43
Kerala	3625.2	0.52	2450.8	0.35	1174.4	0.17
Madhya Pradesh	12324.5	1.70	8933.1	1.23	3391.4	0.47
Maharashtra	48484.6	2.06	43410	1.85	5074.6	0.22
Manipur	83.7	0.32	58.9	0.23	24.8	0.10
Meghalaya	20.2	0.07	20.6	0.07	-0.4	0.00
Mizoram	40	0.21	62	0.32	-22.0	-0.11
Nagaland	19.1	0.08	15.4	0.06	3.7	0.02
Odisha	1759.1	0.40	1391.8	0.32	367.3	0.08
Punjab	3394.6	0.72	3222.1	0.68	172.5	0.04
Rajasthan	5397.2	0.65	4289	0.52	1108.2	0.13
Sikkim	20.6	0.08	16.5	0.06	4.1	0.02
Tamil Nadu	14892.7	1.02	12955.8	0.88	1936.9	0.13
Telangana	4502.1	0.60	4465.3	0.60	36.8	0.00
Tripura	355.9	0.81	168.9	0.39	187.0	0.43
Uttar Pradesh	12238.2	0.86	10699.5	0.76	1538.7	0.11
Uttarakhand	1021.9	0.46	718.2	0.33	303.7	0.14
West Bengal	12415	1.27	8442.9	0.87	3972.1	0.41
India (All States)	171697.3	1.05	132552.5	0.81	39144.8	0.24

Source: Isher et al., (2019).

The total own revenue of all ULBs in Tamil Nadu was Rs. 4441.1 crore in 2017-18 (Table 3.4). It as percent of total revenue was 29.8 percent. Nagaland had the highest own revenue relative to total revenue of 91.62 percent, followed by Punjab (82.02 percent) and Maharashtra (65.32 percent). The total Transfers to all ULBs in Tamil Nadu amounted to Rs. 6002.2 crore, accounting for 40.3 percent of total revenues of all ULBs in the State.

Arunachal Pradesh had the highest transfer-revenue ratio of 94.44 percent followed by Manipur (94.03 percent) and Bihar (93.76 percent).

Table 3.4: State wise Own Revenues and Transfers for all Urban Local Bodies in 2017-18

States	Own Revenue			Central and State Transfers		
	Rs. Crore	as % of Total Revenue	as % of GSDP	Rs.Crore	as % of Total Revenue	as % of GSDP
Andhra Pradesh	2439.5	62.77	0.31	1221.8	31.44	0.16
Arunachal Pradesh	1.4	5.56	0.01	23.8	94.44	0.11
Assam	138.2	62.03	0.05	84.6	37.97	0.03
Bihar	134.3	6.25	0.03	2015.6	93.76	0.43
Chhattisgarh	1223.1	52.48	0.43	684.6	29.38	0.24
Goa	81.7	46.95	0.12	67.4	38.74	0.10
Gujarat	9819	47.17	0.74	8997.1	43.22	0.68
Haryana	976.4	25.14	0.15	2907.3	74.86	Na
Himachal Pradesh	111.7	30.89	0.08	249.9	69.11	0.18
Jammu and Kashmir	64.1	8.95	0.05	628.1	87.72	0.45
Jharkhand	146.2	8.71	0.05	1524.6	90.80	0.57
Karnataka	3971.5	26.73	0.30	10612.8	71.44	0.79
Kerala	840.1	23.17	0.12	2785.1	76.83	0.40
Madhya Pradesh	5265.8	42.73	0.72	6053.2	49.12	0.83
Maharashtra	31671.5	65.32	1.35	5541.3	11.43	0.24
Manipur	3.7	4.42	0.01	78.7	94.03	0.31
Meghalaya	12.1	59.90	0.04	4.5	22.28	0.02
Mizoram	4.3	10.75	0.02	35.7	89.25	0.18
Nagaland	17.5	91.62	0.07	1.6	8.38	0.01
Odisha	179.6	10.21	0.04	1486.4	84.50	0.34
Punjab	2784.1	82.02	0.59	514.1	15.14	0.11
Rajasthan	1754.9	32.52	0.21	3362.1	62.29	0.41
Sikkim	8.6	41.75	0.03	12	58.25	0.05
Tamil Nadu	4441.1	29.82	0.30	6006.2	40.33	0.41
Telangana	2963.4	65.82	0.40	1538.7	34.18	0.21
Tripura	19.2	5.39	0.04	201.9	56.73	0.46
Uttar Pradesh	1672.5	13.67	0.12	9152.8	74.79	0.65
Uttarakhand	113.5	11.11	0.05	908.5	88.90	0.41
West Bengal	2472.4	19.91	0.25	9443.1	76.06	0.97
India (All States)	73331.4	42.71	0.45	76143.5	44.35	0.47

Table 3.5 shows that the total own tax revenues of all ULBs in Tamil Nadu was Rs. 2448.2 crore and the total own non tax revenues was Rs. 1992.9 crore. As percent of total

revenues, the own tax was 16.44 percent and the non-tax was 13.38 percent. Nagaland had the highest own tax share of 69.11 percent followed by Punjab (66.63 percent) and Meghalaya (50.99 percent). Sikkim had the highest non tax ratio of 36.89 percent followed by Maharashtra (32.17 percent) and Telangana (30.01 percent).

Table 3.5: State wise Own Tax and Non-Tax Revenues for all ULBs in 2017-18

States	Tax Revenue			Non Tax Revenue		
	Rs. Crore	as % of Total Revenue	as % of GSDP	Rs.Crore	as % of Total Revenue	as % of GSDP
Andhra Pradesh	1374.7	35.37	0.17	1064.8	27.40	0.14
Arunachal Pradesh	na	na	Na	Na	Na	Na
Assam	80.7	36.22	0.03	57.5	25.81	0.02
Bihar	108.6	5.05	0.02	25.7	1.20	0.01
Chhattisgarh	792.9	34.02	0.28	430.2	18.46	0.15
Goa	37.3	21.44	0.05	44.4	25.52	0.06
Gujarat	6878.5	33.04	0.52	2940.5	14.12	0.22
Haryana	494.4	12.73	0.08	482	12.41	0.07
Himachal Pradesh	41	11.34	0.03	70.7	19.55	0.05
Jammu and Kashmir	33.1	4.62	0.02	31	4.33	0.02
Jharkhand	81.5	4.85	0.03	64.7	3.85	0.02
Karnataka	2929.6	19.72	0.22	1041.9	7.01	0.08
Kerala	529.3	14.60	0.08	310.8	8.57	0.04
Madhya Pradesh	3981.7	32.31	0.55	1284.1	10.42	0.18
Maharashtra	16073.2	33.15	0.68	15598.3	32.17	0.66
Manipur	1.5	1.79	0.01	2.2	2.63	0.01
Meghalaya	10.3	50.99	0.03	1.8	8.91	0.01
Mizoram	2.5	6.25	0.01	1.8	4.50	0.01
Nagaland	13.2	69.11	0.05	4.3	22.51	0.02
Odisha	82.7	4.70	0.02	96.9	5.51	0.02
Punjab	2261.8	66.63	0.48	522.3	15.39	0.11
Rajasthan	808.6	14.98	0.10	946.3	17.53	0.11
Sikkim	1	4.85	0.00	7.6	36.89	0.03
Tamil Nadu	2448.2	16.44	0.17	1992.9	13.38	0.14
Telangana	1612.2	35.81	0.21	1351.2	30.01	0.18
Tripura	9.4	2.64	0.02	9.8	2.75	0.02
Uttar Pradesh	921.4	7.53	0.07	751.1	6.14	0.05
Uttarakhand	66.1	6.47	0.03	47.4	4.64	0.02
West Bengal	1279.1	10.30	0.13	1193.3	9.61	0.12
India (All States)	42954.5	25.02	0.26	30375.5	17.69	0.19

Table 3.6 shows the State wise details of property tax revenues and other tax revenues for all ULBs in 2017-18. The property tax revenue for all ULBs in Tamil Nadu was Rs. 1827.5 crore, accounting for about 12.3 percent of total revenues. Telangana had the highest

property tax share of 35.63 percent, followed by Assam (31.78 percent), Meghalaya (25.74 percent) and Gujarat (25.52 percent). In fact, the property tax revenue of ULBs in Maharashtra was Rs. 8358 crore and that in Gujarat was Rs. 5312 crore.

Table 3.6: State wise Property Tax and Other Tax Revenues for all ULBs in 2017-18

States	Property Tax Revenue			Other Tax Revenue		
	Rs. Crore	as % of Total Revenue	as % of GSDP	Rs.Crore	as % of Total Revenue	as % of GSDP
Andhra Pradesh	945.1	24.32	0.12	429.6	11.05	0.05
Arunachal Pradesh	na	na	Na	Na	Na	na
Assam	70.8	31.78	0.03	9.9	4.44	0.00
Bihar	60.7	2.82	0.01	47.9	2.23	0.01
Chhattisgarh	471.4	20.23	0.17	321.5	13.80	0.11
Goa	26.7	15.34	0.04	10.6	6.09	0.02
Gujarat	5312.2	25.52	0.40	1566.3	7.52	0.12
Haryana	89.6	2.31	0.01	404.8	10.42	0.06
Himachal Pradesh	34.3	9.49	0.02	6.7	1.85	0.00
Jammu and Kashmir	na	na	na	Na	Na	na
Jharkhand	80	4.76	0.03	1.5	0.09	0.00
Karnataka	2705	18.21	0.20	224.6	1.51	0.02
Kerala	294.9	8.13	0.04	234.4	6.47	0.03
Madhya Pradesh	1079.9	8.76	0.15	2901.8	23.54	0.40
Maharashtra	8357.7	17.24	0.36	7715.5	15.91	0.33
Manipur	0.3	0.36	0.00	1.2	1.43	0.00
Meghalaya	5.2	25.74	0.02	5.1	25.25	0.02
Mizoram	2.5	6.25	0.01	0	0.00	0.00
Nagaland	na	na	na	Na	Na	na
Odisha	67.2	3.82	0.02	15.5	0.88	0.00
Punjab	251.8	7.42	0.05	2010	59.21	0.43
Rajasthan	187.8	3.48	0.02	620.8	11.50	0.07
Sikkim	na	na	na	Na	Na	na
Tamil Nadu	1827.5	12.27	0.12	620.7	4.17	0.04
Telangana	1604.1	35.63	0.21	8.1	0.18	0.00
Tripura	4.6	1.29	0.01	4.8	1.35	0.01
Uttar Pradesh	810.8	6.63	0.06	110.6	0.90	0.01
Uttarakhand	55.1	5.39	0.03	11	1.08	0.01
West Bengal	1206.8	9.72	0.12	72.3	0.58	0.01
India (All States)	25552	14.88	0.16	17355.2	10.11	0.11

Figure 3.4 also highlights that the per capita property tax revenue for all ULBs in Tamil Nadu was Rs. 487 as against the Gujarat figure of Rs. 1942 and Maharashtra's figure of Rs. 1512. It is also observed that Tamil Nadu figure was lower than all India average

figure of Rs. 688. It seems that Property tax has the potential to bring more revenues to ULBs in Tamil Nadu.

Figure 3.4: State wise Per Capita Property Tax Revenue in Rs. for all ULBs in 2017-18
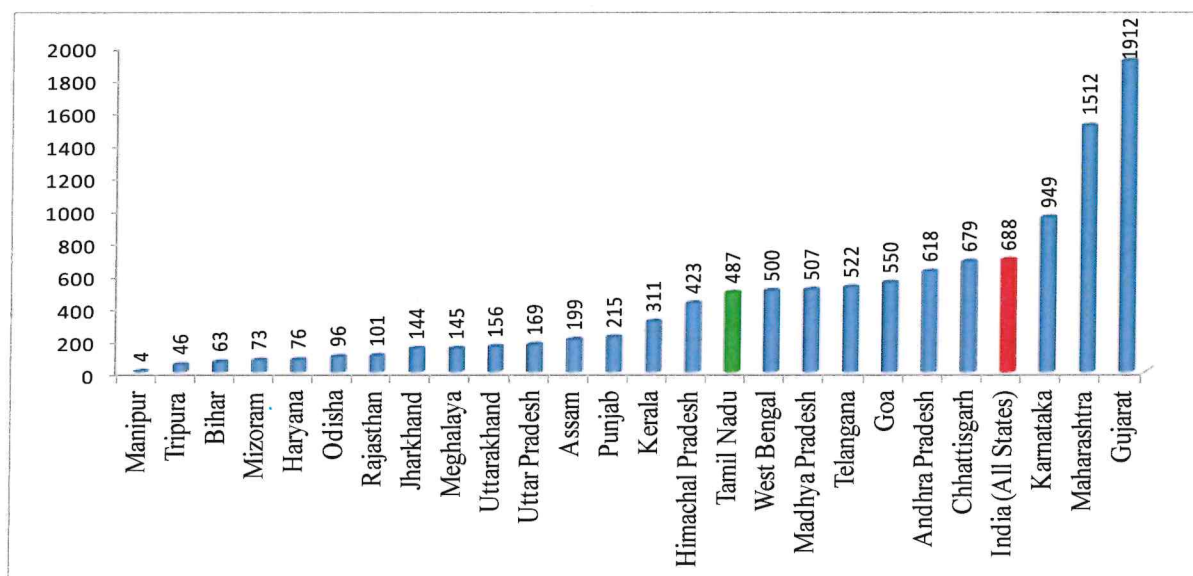
3.6 Inter Country Comparison of Property Tax Revenues

Figure 3.5 shows the details of property tax revenue relative to GDP of India and other OECD countries in 2016. India performs poorly in term of generating revenues of urban property tax. Its property tax-GDP was only 0.2 percent as against OECD group's average of 1.1 percent. That is, India's is just one-sixth of OECD. For some OECD countries like Canada, U.K. and USA, the property tax collections (of about 3 percent) form the bedrock of local government revenues.

Figure 3.5: Property Tax Revenues Relative to GDP in India and OECD Countries in 2016
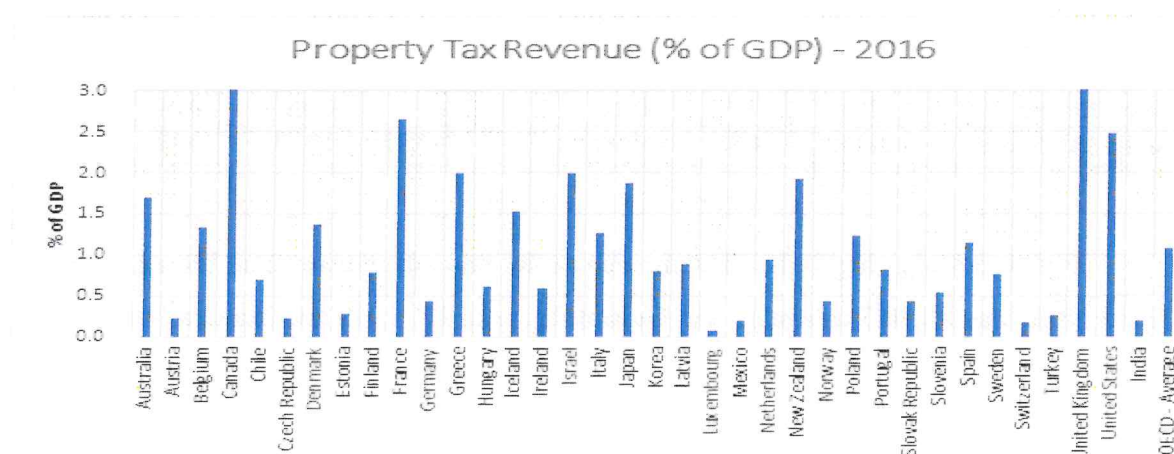
3.7 Assessment Process of Property Tax in Select States in India

Using available details in the public domain, we have found that:

- ULBs in Indian States follow either value-based assessment or area-based assessment. Area-based system is based on covered area of building, and unit area value or tax for the category in which the property is located. The value based system uses rental or capital value approaches. The rental approach assesses the property based on rental value or net rent while the capital value approach assesses based on the market value of property;

- States like Himachal Pradesh, Jammu & Kashmir, Delhi, Odisha use area based approach while Karnataka (except for Bengaluru), Maharashtra etc use the capital value method. Cities like Bangalore, Chennai, Hyderabad, Indore, Kolkata, Patna, and Pune have introduced Self-Assessment System (SAS) in which the rental value is determined based on owners' information;

- Regarding the rate of property tax, most ULBs use a progressive rate structure, except some cities like Bangalore and Ludhiana using a flat tax rate;

- Except for a few States like Kerala and Maharashtra, the final authority on enumeration and assessment of properties lies with the State Government or with the committees/boards appointed by the State Government;

- The State legislation assigns the tax rate limit for most States. In West Bengal, for example, a fixed tax rate formula has been prescribed by the State legislation. The power to increase tax rates also resides with the State Government in most states. Maharashtra is the only exception where tax rates are prescribed by the municipal corporations;

- All States except Jharkhand, Karnataka, and Kerala do not have a provision in their municipal acts for regular revision of property tax rates;

- Exemptions are a common feature of the property tax system, resulting in revenue loss. In India, under Article 285, properties of the Central Government are exempted from all taxes imposed by either a State or any authority within a State. The Thirteenth Finance Commission had urged that the Central Government and the State Governments issue executive instructions that all their respective departments pay appropriate service charges to the local bodies.

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Delhi

- The unit-based system was implemented from April 2004 and continues to date. The unit area value is fixed for eight categories of zones (A to H) of the city per square metre covered space for calculation of property tax.

- The tax is calculated based on the annual value of the property by multiplying the unit area value assigned to the particular colony or locality in which the property is located by the covered area and some multiplicative factors for occupancy, age, structure, and use.

Maharashtra

- Town and Country Planning Department conducts property valuation based on a quasi-hedonic model approach. Valuers apparently use information on sales, future developments, infrastructure quality and local amenities/dis-amenities to estimate the market values for various zones in the city.

Meghalaya

- As per the new rule which was implemented in 2004, the unit area method and new assessment methods are used. The parameters considered for arriving at the ARV on location are usage, type of construction of the building within the holding

- Tax is presently levied only in Shillong and Tura Municipality. The rate on tax levied in Shillong varies from 6 percent to 10 percent for all private holdings and 40 percent of capital cost for State Government holdings;

- The Tura tax is also levied at the rate of 2 percent to 2.5 percent of the annual value for private buildings and for Government buildings the rate is 40 percent.

Andhra Pradesh

- An Ordinance was promulgated in 2020 to change from the rental value system to the capital value system with effect from April 2021;

- Capital value of lands and buildings fixed by the Stamps and Registration Department for the purpose of Registration will be the guideline value for fixation of property tax for which, zones and localities together with their boundaries, type, age, plinth area of the building are considered in determining the capital value.

- The property tax is fixed as a percentages of the capital value of lands or buildings, or both, but it should not be less than 0.10 percent and not more than 0.50 percent of the

capital value for residential buildings and not be less than 0.20 percent and not more than 2 percent of the capital value for non-residential buildings;

- Vacant Land Tax is levied at 0.20 percent of the guideline value of the lands in municipalities and 0.50 percent in municipal corporations

Gujarat

- Since 2014-15, the following property tax formula has been used: Property tax=R x M x A where, R-annual rate; M-product of various sub factors, i.e., M=location x construction duration x type of property x usage; and A – carpet area of property with factor values 1.6, 1.3, 1.1 and 0.9 respectively.

Rajasthan

- Annual letting value has been defined under clause (1) of section 3 of the Act as annual rent of Building or Land;

- In case of Cinema/Theatre Buildings, Restaurants, Hotels, Mills, Factories etc, documents such as rent deed and receipts for rent paid, are used as annual rent;

- For others, the cost of the building may be assessed, and the annual rent is calculated as: (i) Towns (with population below 50,000): 2 ½ percent of assessed value; (ii) Towns (with population between 50,000 and one lakh): 3 ½ percent of assessed value and (iii) Towns (with population above one lakh): 5 percent of assessed value.

West Bengal

- On December 15, 2016, the Kolkata Municipal Corporation (Amendment) Bill 2016 was passed, to simplify the assessment and collection of property tax and make the entire process more transparent;

- Under the Unit Area Assessment scheme, the city has been divided into 293 blocks and seven categories based on market value of the properties, facilities and infrastructure;

- Each category has been assigned an annual value per sq ft, also known as the Base Unit Area Value (BUAV); The BUAV per square feet for these seven categories are fixed at Rs. 74, Rs. 56, Rs. 42, Rs. 32, Rs. 24, Rs. 18 and Rs. 13 respectively;

- In slum areas, tax liability is low for economically weaker classes;

- The property tax calculation also utilizes the concept of multiplicative factors (MFs), to account for the many critical differences in houses (location, type and age of property, and nature of occupancy) within the same block.

Kerala

- In 1980s, the rental value approach was introduced. In 2011 a new method was introduced to calculate the property tax based on plinth area. But many local bodies in the State are yet to fully shift to the system.

- Now Urban Affairs Department has fixed the basic tax rates for different categories of buildings including residential, commercial, educational, industrial, hospitals, amusement, mobile towers, and theatres.

- The rate of property tax is based on fair value for each category of building in accordance with the use of buildings. The annual upward revision in the rate of tax is 5 percent or hike in Consumer Index Price, whichever is lower, from the second year onwards.

3.8 Concluding Remarks

This Chapter has reviewed the overall financial performance of ULBs in Tamil Nadu and compared with performances of ULBs in other major Indian States. Results indicate that:

(i) Own revenues of all ULBs in Tamil Nadu increased from Rs. 2148 crore in 2011-12 to Rs. 3776 crore in 2016-17 and transfers from Rs.4000 crore to Rs. 6937 crore. The share of transfers in total revenues declined from 62.76 percent in 2011-12 to 54.72 percent in 2016-17. Total expenditures increased from Rs. 4780 crore against total income of Rs. 6373 crore to Rs. 13301 crore as against the total income of Rs. 12677 crore

(ii) During 2011-12 to 2017-18, the property tax revenues increased from Rs. 606.5 crore in all municipal corporations, from Rs. 261.5 crore to Rs. 444.2 crore in municipalities and from Rs. 103.7 crore to Rs. 161.1 crore in town panchayats. The average rate of annual growth of property tax revenues was 12.51 percent in municipal corporations, 9.36 percent in municipalities and only 7.65 percent in town panchayats.

(iii) Average property tax buoyancy during 2011-12 to 2017-18 was 1.06 for municipal corporations, 0.79 for municipalities and only 0.65 for town panchayats.

(iv) Property tax revenues relative to GSDP of all ULBs in Tamil Nadu ranged between 0.123 and 0.133 as against the target of 0.6 percent in 2021-22. Further property tax collection efficiency of all ULBs in Tami Nadu ranged between 31.7 percent to 35.7 percent. Therefore, a complete reform of the property tax structure is needed to achieve the target.

(v) Tamil Nadu has the highest number of ULBs (664) in the country followed by Uttar Pradesh (652) and Maharashtra (391).

(vi) All ULBs in the country registered an aggregate surplus of Rs. 39145 crore in 2017-18. The ULBs in Tamil Nadu also showed a surplus of Rs. 1937 crore.

(vii) The share of own tax revenues in total revenues of all ULBS in Tamil Nadu was 16.44 percent in 2017-18 while it was 66.6 percent in Punjab. The share of non-tax was 13.38 percent in Tamil Nadu while it was 32.17 percent in Maharashtra.

(viii) Per capita property tax revenue for all ULBs in Tamil Nadu was only Rs. 487 and it was Rs. 1942 in Gujarat and Rs. 1512 in Maharashtra. It seems that Property tax has the potential to bring more revenues to ULBs in Tamil Nadu.

Chapter 4
FINANCIAL STATUS OF TOWN PANCHAYATS IN TAMIL NADU

4.1 Introduction

Tamil Nadu was the first State to introduce the town panchayat as an intermediate step between rural villages and Urban Local Bodies (ULB). Till 1981, the Town Panchayats were under the administrative control of Directorate of Rural Development. In 1981, the Government constituted a separate Directorate for the Town Panchayats (G.O. Ms. 828, dated 7.5.1981) with the nomenclature of 'Directorate of Town Panchayats'. However, the administrative control of the Directorate of Town Panchayats continued to be with the Rural Development Department as they were governed under the Tamil Nadu Panchayats Act 1958. Due to the 73rd and the 74th Amendments to the Constitution of India, all the Town Panchayats were reconstituted under the Tamil Nadu District Municipalities Act, 1920 and treated as transitional areas from rural areas to urban areas. Consequently, the administrative control of the Directorate of Town Panchayats was brought under the Municipal Administration and Water Supply Department. This Chapter discusses about the financial status of Town Panchayats in Tamil Nadu based on the data provided by the Sixth State Finance Commission during 2015-16 to 2020-21.

4.2 Classification of Town Panchayats in Tamil Nadu

Table 4.1 shows the classification of 528 town panchayats (TPs) into 4 grades based on income and population of the town panchayats. These 528 TPs comprise of 8,288 wards.

Table 4.1: Grade wise Number of Town Panchayats in Tamil Nadu

Grades	Average Annual Income	Minimum Population	No. of Town Panchayats
Special Grade	Exceeding Rs.200 lakh	5000 to 30000	65
Selection Grade	Exceeding Rs.100 lakhs but not exceeding Rs.200 lakh		201
Grade 1	Exceeding Rs.50 lakhs but not exceeding Rs.100 lakh		200
Grade 2	Not exceeding Rs.50 lakh.		62
Total			528

Table 4.2 (and Map 4.1) shows the details of number of TPs in various districts of Tamil Nadu. Kanniyakumari (55) has the largest number of TPs, followed by Erode (42) and Coimbatore (37). Ariyalar has only 2 TPs and Chennai has no town panchayat.

Table 4.2: District Wise Distribution of Town Panchayats in Tamil Nadu

District	Selection	Special	Grade 1	Grade 2	Total	District	Selection	Special	Grade 1	Grade 2	Total
Ariyalur			1	1	2	Ranipet	1	4	4		9
Chengalpet	8	1	2	1	12	Salem	5	11	13	4	33
Coimbatore	12	11	12	2	37	Sivaganga		5	6	1	12
Cuddalore	1	10	4	1	16	Tenkasi	2	4	9	3	18
Dharmapuri		8	2		10	Thanjavur		11	7	4	22
Dindigul	2	12	8	1	23	The Nilgiris	1	8	2		11
Erode	1	14	19	8	42	Theni		12	7	3	22
Kallakkurichi	2	4	1		7	Thiruvarur		4	3		7
Kancheepuram	4	1			5	Thoothukkudi	2	10	4	3	19
Kanniyakumari	1	10	31	13	55	Tiruchirappalli	1	7	8		16
Karur	2	3	4	2	11	Tirunelveli	9	6	3		18
Krishnagiri		5		1	6	Tirupathur	1	1	1		3
Madurai		4	5		9	Tiruppur	2	6	5	3	16
Mayiladuthurai		2	2		4	Tiruvallur	1	6	3		10
Nagapattinam	1		3		4	Tiruvannamalai	2	2	3	3	10
Namakkal	1	9	8	1	19	Vellore		1	3		4
Perambalur			1	3	4	Viluppuram	2	2	3	1	8
Pudukkottai		5	3		8	Virudhunagar		2	5	2	9
Ramanathapuram	1		5	1	7	**Grand Total**	**65**	**201**	**200**	**62**	**528**

The followings are listed in the Government circular as the main functions of town panchayats in Tamil Nadu:

(i) Providing Basic Amenities	(ii) Levying Taxes and Non-Tax
Roads	Property Tax
Street Lights	Vacant Land Tax
Water Supply	Profession Tax
Public Health	Water Charges
Drainage	Non-taxes
Granting of Building Licenses	
(iii) Issuing Birth and Death Certificates	(iv) Issuing Dangerous &Offensive Trade Licenses
(v) Implementation of State/Central Schemes	

Map 4.1: District Wise Distribution of Town Panchayats in Tamil Nadu

Tamil Nadu
Districtwise Number of Town Panchayats

4.3 Geographical Area and Population

The 528 TPs spread over about 7125 Sq. km area in 2020-21 (Table 4.3) and the area of TPs is expected to increase to 7616 sq. km in 2026-26.

Table 4.3: Grade Wise Total Areas of Town Panchayats in Tamil Nadu

Grades	No. of TPs	2010-11	2015-16	2020-21*	2026-27*	AGR
Special Grade	65	918.24	947.67	993.46	1082.98	0.01
Selection Grade	201	2650.4	2655.83	2709.37	2844.53	0.001
Grade 1	200	2421.2	2454.83	2527.17	2683.01	0.01
Grade 2	62	795.67	835.88	895.12	1005.9	0.01
Total	528	6785.51	6894.22	7125.12	7616.41	0.01

*-projected based on past trend

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Table 4.4 shows the grade wise total population and average population per TP of town panchayat since 2000-01 based on population data for 528 TPs compiled from District Census Handbooks for 2001 and 2011 and the average annual (compound) growth rate for each TP during this period. The total urban population in all TPs grew at 1.2 percent per annum and the aggregate population in Selection grade TPs grew at 2.2 percent. The total population of all TPs is expected to reach about 104.68 lakhs in 2026-27. The average population per TP in special grade category was 31353 in 2020-21. That is, the population limit of many TPs exceeded the maximum limit of 30000, Further, this average figure is expected to reach 37605 in 2026-27.

Table 4.4: Grade Wise Population and Projected Population of Town Panchayats

Grade	2000-01	2010-11	Annual Growth*	2020-21	2026-27
Special Grade	1230641	1554683	0.022	2037930	2444338
Selection Grade	3020601	3408041	0.011	3907504	4282298
Grade 1	2246333	2508630	0.011	2828006	3053945
Grade 2	567284	606275	0.006	654019	687131
Total	**7064859**	**8077629**	**0.012**	**9427459**	**10467711**
Grade wise Average Population per TP					
Special Grade	18933	23918	-	31353	37605
Selection Grade	15028	16955	-	19440	21305
Grade 1	11232	12543	-	14140	15270
Grade 2	9150	9779	-	10549	11083
Total	**13380**	**15299**	-	**17855**	**19825**

* Average growth of all TPs in the grade type.

In 2000-01 itself, in one TP (in the Grade 1 category, the population exceeded the 30000 mark (Table 4.5). In 2020-21, in 60 TPs, the population exceeded the 30,000 mark and in 2026-27, it is expected that in 79 TPs, the population will exceed the limit of 30,000. This is the concern. These TPs need to be either upgraded as Municipalities based on population norms or population norm need to be modified.

Table 4.5: Number of TPs with More than 30,000 Populations

Grade	2000-01	2010-11	2015-16	2020-21	2026-27
Special	0	15	25	29	37
Selection	0	10	15	26	35
Grade 1	1	2	2	4	6
Grade 2	0	0	0	1	1
Total	1	27	42	60	79

4.4 Overall Financial Status of Town Panchayats in Tamil Nadu

The total income of town panchayat consists of revenue income, capital income, deposits and loans. Aggregate income of all 528 TPs in Tamil Nadu increased from Rs. 2886 crore in 2015-16 to Rs. 4278 crore in 2018-19 (Table 4.6). It declined to Rs. 3927 crore in 2019-20 and further to Rs. 3865 crore due to the impact of COVID-19 pandemic. It is noted that own tax revenues, own non tax revenues and transfers (grants plus assigned revenues) also declined in the last two years due to the same reason. At the same time, the total expenditures continuously increased from Rs. 3033 crore in 2015-16 to Rs. 3920 crore in 2020-21. As a result, although there was an aggregate surplus of Rs. 567 crore in 2018-19, there was an aggregate deficit of Rs. 54 crore in 2020-21.

Table 4.6: Income and Expenditures of all Town Panchayats in Tamil Nadu*

(Rs. Crore)

Fiscal Indicators	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Tax Revenue	208	224	230	326	290	295
Non-Tax Revenue	478	597	559	870	834	876
Own Revenue	686	821	789	1197	1125	1171
Transfers	878	911	1160	1135	920	859
Total Revenue	1565	1732	1949	2332	2045	2030
Capital Income	1093	1215	1174	1678	1584	1516
Total Income	2886	3159	3364	4278	3927	3865
Salary	349	362	394	468	496	494
Operation & Maintenance	1278	1291	1348	1614	1671	1724
Revenue Expenditures	1627	1653	1741	2082	2167	2218
Capital Expenditures	1208	1197	1068	1343	1433	1472
Total Expenditures	3033	3064	3043	3711	3844	3920
Overall Surplus/Deficit	-147	95	321	567	83	-54

*(based on data shred by Sixth State Finance Commission).

The aggregate income of 65 special grade TPs increased from Rs. 579.78 crore in 2015-15 to Rs. 883.03 crore and declined it declined to Rs. 884.45 crore in 2020-21 (Table 4.7). The total income of selection grade TPs also increased from Rs. 1238.4 crore in 2015-16 to Rs. 1823.21 crore in 2018-19 and then it declined to Rs. 1571.43 crore. The same trend also happened in other grade TPs. During 2015-26 to 2020-21, the 5 year average growth rate of income was about 9.95 percent in special grade TPs and 5.65 percent in selection grade TPs, 6.18 percent in grade 1 TPs and 6.79 percent in grade 2 TPs in Tamil Nadu. Since the

total income of all TPs grew at only 6.67 percent against the GSDP (nominal) growth of 10.12 percent, the income buoyancy was only 0. 659. This is the major concern.

Table 4.7: Grade-wise Total Income of TPs (Rs. Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	579.78	624.13	671.36	883.03	746.95	884.45
Selection	1238.40	1331.52	1419.08	1823.21	1688.38	1571.43
Grade 1	851.81	963.59	997.59	1249.69	1182.47	1115.70
Grade 2	215.82	239.56	276.06	322.12	309.66	293.86
All	2885.80	3158.80	3364.09	4278.05	3927.47	3865.43

The total revenues, which comprises own revenues and transfers, of all 528 TPs in Tamil Nadu increased from Rs. 1564 crore in 2015-16 to Rs. 2332.35 crore in 2018-19 and then it declined to Rs. 2030.31 crore in 2020-21 (Table 4.8). The revenues of selection grade, grade 1 and grade 2 TPs followed the same trend. But the total revenues of special grade TPs increased from Rs. 342.67 crore in 2015-16 to Rs. 526.85 crore in 2018-19. Then it declined to Rs. 471.52 crore in 2019-20. But in 2020-21 it increased to Rs. 530.48 crore. During 2015-16 to 2020-21, the revenue buoyancy for all TPs was 0.59. It was 0.97 for special grade TPs, 0.51 for selection grade TPs, 0.44 for grade 1 TPs and 0.38 for grade 2 TPs.

Table 4.8: Grade-wise Total Revenue of TPs (Rs. Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	342.67	398.73	420.54	526.85	471.52	530.48
Selection	670.37	724.86	825.75	981.55	865.79	836.87
Grade 1	444.16	487.12	559.68	662.49	567.87	538.36
Grade 2	107.64	120.91	143.32	161.46	139.52	124.60
All	1564.85	1731.62	1949.28	2332.35	2044.71	2030.31

During 2015-16 to 2020-21, the total expenditure of all TPs grew at 5.57 percent per annum as against income growth of 6.67 percent (Table 4.9). The total expenditures grew at 6.19 percent in selection grade TPs grew (as against its income growth of 9.94 percent), at 4.82 percent in selection grade TPs (as against its income growth of 5.65 percent), at 5.79 percent in grade 1 TPs (as against its income growth of 6.17 percent) and at 8.27 percent in grade 1 TPs (as against its income growth of 6.67 percent).

Table 4.9: Grade-wise Total Expenditures of TPs (Rs. Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	633.19	641.22	619.76	759.55	729.42	834.60
Selection	1310.04	1277.18	1305.50	1568.42	1666.18	1633.41
Grade 1	877.63	904.56	879.15	1091.36	1133.51	1141.61
Grade 2	212.04	240.97	238.43	291.99	315.25	310.01
All	3032.89	3063.92	3042.84	3711.32	3844.37	3919.62

The revenue expenditure of all TPs in Tamil Nadu increased from Rs. 1627.11 crore in 2015-16 to Rs. 2271.88 crore in 2020-21, registering about 6.6 percent annual growth rate (Table 4.10). During the same period, the average growth of revenue expenditure was 9.4 percent in special grade TPs, 6 percent in selection grade TPs, 5.8 percent in grade 1 TPs and 5.9 percent in grade 2 TPs.

Table 4.10: Grade-wise Revenue Expenditures of TPs (Rs. Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	321.24	323.78	340.67	431.40	445.61	494.01
Selection	690.78	688.36	737.59	869.34	918.32	913.40
Grade 1	497.01	520.44	532.85	628.24	642.17	654.48
Grade 2	118.08	120.27	130.34	152.88	160.76	155.99
All	1627.11	1652.84	1741.46	2081.86	2166.85	2217.88

It is a well-known fact that if income exceeds total expenditures, the town panchayat gets surplus income and if expenditures exceed income, it gets deficit. Table 4.11 shows that in 2015-16, the aggregate deficit of all TPs in Tamil Nadu was -Rs. 147.09 crore. But in the next 4 years, the overall budget of TPs showed surplus. In 2020-21 again it showed deficit of –Rs. 54.19 crore. It is observed that in 2015-16, aggregate budget of all grade type TPs showed deficit while the grade 2 TPs showed surplus. In 2016-17, the aggregate budget of special grade and grade 2 TPs showed deficit while budgets of other TPs showed surplus. In 2017-18 and 2018-19, aggregate budget of all 4 grade type TPs showed surplus. In 2019-20, only grade 2 TPs showed deficit while in 2020-21, only special grade TPs showed surplus.

Table 4.11: Grade Wise Surplus/Deficit of TPs in Tamil Nadu (Rs.Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	-53.41	-17.09	51.60	123.48	17.53	49.85
Selection	-71.64	54.34	113.58	254.79	22.20	-61.98
Grade 1	-25.82	59.03	118.45	158.33	48.96	-25.91
Grade 2	3.78	-1.41	37.63	30.13	-5.59	-16.15
All	-147.09	94.88	321.25	566.73	83.10	-54.19

Table 4.12 shows the details of number of TPs showing surplus and deficit during 2015-16 to 2020-21. In 2015-16, 290 TPs recorded deficit while 238 showed surplus. In 2016-17, 349 TPs registered surplus account while 179 registered deficit account. In 2017-18, 374 TPs had surplus and only 142 had deficit. In 2019-20, 241 TPs had deficit and 287 had surplus. But in 2020-21, 302 had deficit and only 226 TPs had surplus.

Table 4.12: Number of Town Panchayats Showing Surplus/Deficit in Tamil Nadu

Grades	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Deficit						
Special	45	24	22	14	25	27
Selection	106	66	54	48	83	120
Grade 1	111	66	61	62	101	117
Grade 2	28	23	17	18	32	38
Total	290	179	154	142	241	302
Surplus						
Special	20	41	43	51	40	38
Selection	95	135	147	153	118	81
Grade 1	89	134	139	138	99	83
Grade 2	34	39	45	44	30	24
Total	238	349	374	386	287	226
Overall Total	528	528	528	528	528	528

4.5 Own Revenue and Transfers of TPs in Tamil Nadu

The own revenue of TPs comprises own tax and own non tax revenues. The total own revenue of all 528 TPs was Rs. 686 crore in 2015-16, constituting 43.83 percent of total revenues (Table 4.13). It increased to Rs. 1171.30 crore in 2020-21, accounting for 57.68 percent of the total revenues. During 2015-16 to 2020-21, it grew at an annual rate of 13.1 percent as against the GSDP growth of 10.12 percent. Thus, the own revenue buoyancy of TPs was 1.3. Grade wise average growth rates indicate that the own revenue buoyancy was

1.52 in special grade TPs, 1.2 in selection grade TPs, 1.24 in grade 1 TPs and 1.34 in grade 2 TPs.

Table 4.13: Grade wise Own Revenues of Town Panchayats in Tamil Nadu (Rs Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	179.67	212.35	206.48	323.15	300.90	336.11
Selection	306.59	362.71	336.21	517.87	497.23	495.08
Grade 1	165.17	200.38	204.88	292.25	269.74	281.26
Grade 2	34.88	45.51	41.42	63.64	56.88	58.85
All	686.31	820.95	788.99	1196.91	1124.75	1171.30

The total transfers to TPs were Rs.878.47 crore in 2015-16, accounting for 56.1 percent of total revenues of TPs (Table 4.14). They increased to Rs. 1160.05 crore in 2017-18, accounting for 59.5 percent of total revenues of TPs. After that year, they continuously declined to Rs. 859.50 crore. Its share in total revenues significantly declined to 42. 3 percent. A similar trend is observed for selection grade TPs, grade 1 TPs and grade 2 TPs. In the case of special grade TPs, the transfers increased from Rs. 162.94 crore in 2015-16 and increased to Rs. 213.42 crore in 2017-18. Then it declined to 203.42 crore in 2018-19 and further to 170.74 crore in 2019-20. But in 2020-21, it increased to Rs. 194.82 crore.

Table 4.14: Grade wise Transfers to Town Panchayats in Tamil Nadu (Rs Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	162.94	186.34	213.93	203.42	170.74	194.82
Selection	363.79	362.12	489.46	463.64	368.56	341.83
Grade 1	278.99	286.74	354.77	370.24	298.13	257.11
Grade 2	72.76	75.40	101.89	97.82	82.64	65.74
All	878.47	910.61	1160.05	1135.12	920.08	859.50

As the share of own revenue in the total revenue varies in individual town panchayat, Table 4.15 shows the distribution of TPs based on own revenue as percentage of total revenues during 2015-16 to 2020-21. It is interesting to note that the number of TPs with more than 50 percent of own revenue increased from 119 in 2015-16 to 313 in 2020-21. That is, in 22.5 percent of TPs the share of own revenue exceeded 50 percent in 2015-16 and in 59.3 percent of TPs in 2020-21, it exceeded 50 percent.

Table 4.15: Distribution of TPs based on Own Revenue as Percentage of Total Revenues

Range %	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
0-20	26	18	46	10	6	4
20-30	93	85	133	50	41	22
30-40	151	107	157	103	89	63
40-50	139	158	106	148	125	126
50-60	82	113	51	116	134	137
60-70	25	29	26	72	86	106
70-80	11	15	4	25	36	47
Above 80	1	3	5	4	11	23

4.6 Impact of Transfers on Revenues and Expenditures of TPs in Tamil Nadu

Public economics literature argues that as regional (such as local body) Governments may differ in their fiscal capacity or ability to raise revenues, the rich jurisdictions are usually better able to finance public service provision than the poorer ones. On the expenditure side, the jurisdictions may also differ in their spending needs. Even ULBs, with same fiscal capacity, may differ in the cost of providing a standard bundle of public services due to differences in needs arising due to various factors like demographic profiles, geographical and climatic conditions, etc. Under such circumstances, the expenditure needs differ across ULBs. This situation may prevent them to provide a comparable minimum standard of public services across the State. In such case, transfers are important policy instruments to address such issues. Further it is argued that most local Governments will distribute the transfers as lower taxes and low fees, and this will crowd out local spending. This is popularly known as "Disincentive Effect". Therefore, the question is whether the existing transfers system has Incentive or Disincentive effect on town Panchayat' s expenditures and own revenues in Tamil Nadu?

To answer the above question, Table 4.16 reports the simple correlation coefficients between transfers and revenues and expenditures during 2015-16 to 2020-21. These coefficients were computed using the data for all 528 TPs on transfers, own revenue, total revenue, revenue expenditure and total expenditure. In all six years, the transfers to TPs are positively correlated to own revenue, total revenue, revenue expenditure and total

expenditure. The positive correlation of transfers with income and expenditures indicate that higher the transfers, higher is the income (and revenues) and (total and revenue) expenditures. These results highlight that there is an incentive effect of transfers on expenditures and there is a crowing-in effect of transfers on revenues of TPs in Tamil Nadu.

Table 4.16: Correlation of Transfers with Other Fiscal Indicators

Variables	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Own Revenue	0.615	0.544	0.344	0.531	0.517	0.350
Total Revenue	0.860	0.807	0.807	0.790	0.748	0.663
Revenue Expenditure	0.648	0.622	0.430	0.575	0.574	0.504
Total Expenditure	0.628	0.563	0.406	0.522	0.462	0.408

4.7 Projections of Income and Expenditures of TPs in Tamil Nadu

In this section, we present the grade wise projected income, expenditure, etc of TPs using average growth of respective fiscal variable during 2015-16 to 2020-21. The implicit assumption is that the fiscal variables in each TP will grow during 2021-22 to 2026-27 at the same average rate recorded in the past years from 2015-16 to 2020-21. Table 4.17 shows the grade wise projected own revenues of TPs. The own revenues of all TPs is expected to be Rs. 2274.45 crore in 2021-22 and will increase continuously to Rs. 3289.33 crore in 2026-27. During 2021-22 to 2026-27, the projected own revenues would increase from Rs. 554.20 crore to Rs. 962.74 crore in special grade TPs; from Rs. 957.02 crore to Rs. 1353.13 crore in selection grade TPs; from Rs. 615.37 crore to Rs. 789.95 crore in grade 1 TPs; and from Rs.147.86 crore to Rs. 183.51 crore in grade 2 TPs.

Table 4.17: Grade wise Projected Own Revenues from 2021-22 to 2026-27 (Rs. Crore)

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Special	554.20	607.52	671.56	749.20	844.44	962.74
Selection	957.02	1013.93	1080.05	1157.07	1247.18	1353.13
Grade 1	615.37	643.31	674.40	708.95	747.33	789.95
Grade 2	147.86	153.20	159.36	166.42	174.44	183.51
All	2274.45	2417.96	2585.37	2781.65	3013.38	3289.33

Table 4.18 shows the grade wise projected total revenues of TPs during 2021-22 to 2026-27. It is projected that the total revenues of all TPs would increase to Rs. 5960.79 crore in 2026-27. In the case of special grade TPs, they would increase to Rs. 2600.93 crore, while

in the case of selection grade they would reach Rs. 2111.05 crore. The total revenues would increase to Rs.1040.94 crore in grade 1 TPs and Rs. 207.94 crore in grade 2 TPs.

Table 4.18: Grade wise Projected Total Revenues from 2021-22 to 2026-27 (Rs. Crore)

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Special	627.52	762.38	959.40	1263.20	1757.34	2600.93
Selection	925.66	1037.31	1182.74	1381.17	1667.98	2111.05
Grade 1	586.07	642.82	711.45	796.07	902.80	1040.87
Grade 2	134.35	145.44	158.08	172.51	189.01	207.94
All	2273.60	2587.94	3011.66	3612.94	4517.14	5960.79

Table 4.19 highlights that the total revenue expenditures all TPs in Tamil Nadu would increase to Rs. 5668.69 crore in 2026-27. For special grade TPs, selection grade TPs, grade 1 TPs and grade 2 TPs, the revenue expenditures are projected to reach Rs. 1772.88 crore, Rs. 1873.89 crore, 1495.35 crore and Rs. 526.57 crore in 2026-27 respectively.

Table 4.19: Grade wise Projected Revenue Expenditures from 2021-22 to 2026-27 (Rs. Crore)

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Special	582.37	698.01	852.31	1062.55	1355.44	1772.88
Selection	1014.66	1133.25	1272.97	1438.61	1636.30	1873.89
Grade 1	734.54	830.94	948.09	1091.95	1270.63	1495.35
Grade 2	176.52	203.56	241.12	296.48	383.16	526.57
All	2508.08	2865.77	3314.50	3889.59	4645.52	5668.69

The projected figures in Tables 4.20 indicate that: (i) the total income of all TPs will increase to Rs. 11279.94 crore and total expenditures will reach Rs. 15542 crore in 2026-27and the overall budget for TPs will show a deficit of Rs. 4262.45 crore. (ii) As aggregate income would exceed aggregate expenditures of special grade TPs in 2026-27, the overall account would show surplus (Rs. 361.31 crore) for them in that year. (iii) But in other grade categories, the overall account would show deficit as their aggregate income would fall short of their respective aggregate expenditures. (iv). In 2026-27, the overall deficit for grade 1 TPs would be -Rs. 1363.32 crore and for grade 2 TPs would be -Rs. 2876.54 crore.

Table 4.20: Grade wise Projected Income and Expenditures from 2021-22 to 2026-27

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Total Income (Rs. Crore)						
Special	1041.21	1241.79	1501.64	1842.65	2296.17	2907.58
Selection	1782.27	2047.92	2387.19	2827.36	3408.56	4190.76
Grade 1	1272.71	1474.42	1739.27	2095.84	2589.51	3293.96
Grade 2	338.85	396.54	471.70	571.22	705.04	887.64
All	4435.04	5160.67	6099.81	7337.08	8999.28	11279.9
Total Expenditures (Rs.Crore)						
Special	962.84	1127.11	1341.12	1625.37	2011.04	2546.27
Selection	1866.85	2162.78	2542.91	3038.32	3693.83	4574.65
Grade 1	1330.02	1577.97	1918.35	2416.88	3217.40	4657.28
Grade 2	380.60	496.31	704.58	1110.74	1951.65	3764.18
All	4540.32	5364.16	6506.95	8191.31	10873.92	15542.39
Overall Deficit (Rs.Crore)						
Special	78.37	114.68	160.52	217.28	285.13	361.31
Selection	-84.58	-114.86	-155.72	-210.96	-285.27	-383.89
Grade 1	-57.31	-103.55	-179.08	-321.04	-627.89	-1363.32
Grade 2	-41.75	-99.77	-232.88	-539.52	-1246.61	-2876.54
All	-105.28	-203.49	-407.14	-854.23	-1874.64	-4262.45

Finally, Table 4.21 shows that average income of 523 TPs during 2015-16 to 2020-21 exceeded Rs. 200 lakh criteria. Even if we consider average revenue, in 444 TPs, it exceeded Rs. 200 lakh limit. If we consider average own revenue, in 158 TPs, it exceeded Rs. 200 lakh limit and in 202 TPs, it reached Rs. 100-200 lakh category, in 140 TPs it reached Rs. 50-100 lakh range. The results indicate that these TPs need to be upgraded or Government needs to alter their income criteria.

Table 4.21: Number of TPs based on their Average Income during 2015-16 to 2020-21

Grade	Average Annual Income	No, of TPs	No. of TPs based on Average		
			Income	Revenues	Own Revenues
Special	> Rs. 200 lakh	65	523	444	158
Selection	Rs. 100 lakh to Rs. 200 lakh	201	5	80	202
Grade 1	Rs. 50 lakh to Rs. 100 lakh	200	0	4	140
Grade 2	< Rs. 50 lakh	62	0	0	28
	Total	528	528	528	528

4.8 Concluding Remarks

This Chapter has analyzed the financial status of town panchayats in Tamil Nadu and their projected income and expenditures. The results indicate that:

(i) There are 528 TPs in Tamil Nadu which spread over about 7125 sq. km area. The total population of all TPs was 94.27 lakhs in 2020-21 and it is expected to increase to 1.05 crore in 2025-26.

(ii) Since the average population per TP in special grade category was 31353 in 2020-21 and in 60 TPs the population already exceeded 30,000. It is essential to either up-grade them based on population norms or revise the population norm. Income of many TPs already increased and so these TPs need to be upgraded or income norm need to be revised.

(iii) While aggregate income of all TPs increased from Rs. 2886 crore in 2015-16 to Rs. 4278 in 2018-19 and then it declined to Rs. 3865 crore in 2020-21 (due to pandemic effect), the total expenditures continuously increased from Rs. 3033 crore to Rs. 3920 crore

(iv) The overall budget of TPs showed a surplus of Rs. 567 crore in 2018-19, it showed a deficit of Rs. 54 crore in 2020-21. In 2020-21, only the overall account for special grade TPs showed surplus while others showed deficit. As per the individual account, 302 TPs incurred deficit in 2020-21 and 226 showed surplus. Thus, in about 57 percent of TPs in Tamil Nadu, there is a mismatch between growing expenditures and deteriorating finances.

v) Since the total income of all TPs grew at only 6.67 percent against the GSDP (nominal) growth of 10.12 percent, the income buoyancy was only 0. 659. This is the major concern.

(vi) During 2015-16 to 2020-21, the revenue buoyancy for all TPs was 0.59. It was 0.97 for special grade TPs, 0.51 for selection grade TPs, 0.44 for grade 1 TPs and 0.38 for grade 2 TPs. The revenue buoyancy of selection grade, grade 1 and grade 2 TPs should increase.

(vi) The total expenditure of all TPs grew at 5.57 percent during 2015-16 to 2020-21. However, the revenue expenditure grew at 6.6 percent.

(vii) The total own revenues of all TPs was Rs. 1171.3 crore, accounting for 57.68 percent of total revenues. During 2015-16 to 2020-21, it grew at an annual rate of 13.1 percent and the own revenue buoyancy was 1.3. Interestingly, the number of TPs with more than 50 percent of own revenue increased from 119 in 2015-16 to 313 in 2020-21.

(viii) The share of transfers in total revenues was 56.1 percent in 2015-16 and it declined to 42.3 percent.

(ix) As transfers are positively correlated with income and expenditures of TPs, there is an incentive effect of transfers on expenditures and a crowding-in effect on revenues of TPs.

(x) It is projected that own revenues of TPs would reach Rs. 3289.332 crore in 2026-27; the total revenues would increase to Rs. 5960.79 crore; total income would increase to Rs. 11279.9 crore; revenue expenditure would rise to Rs. 5668.69 crore and total expenditure to Rs. 15542.39 crore; and the overall deficit would increase to Rs. 4262.45 crore.

Chapter 5

PERFORMANCE OF PROPERTY TAX OF TOWN PANCHAYATS IN TAMIL NADU

5.1 Introduction

Among the taxes, the property tax is the major own tax source of revenues for urban local bodies including the town panchayats. This Chapter reviews the trend of property tax revenues of TPs in Tamil Nadu during 2015-16 to 2020-21 and various aspects of property tax including tax rate, number of assessments, exempted properties and components of property tax etc.

5.2 Property Tax Rate

During 2016-16 to 2020-21, the property tax rate remained the same in each town panchayat, but vary slightly across them. The average rate was 11.5 percent and minimum and maximum rate ranged between 1 percent and 61 percent (Table 5.1). Grade wise rate analysis indicate that the selection grade TPs had the highest average rate of 12 percent followed by special grade TPs (11.8 percent), grade 1 TPs (11.3 percent) and grade 2 TPs (10.5 percent). Thus, the rate structure of property taxes varied significantly among TPs.

Table 5.1: Grade Wise Property Tax Rate of TPs (Average, Minimum and Maximum)

Grade	Average Rate	Maximum Rate	Minimum Rate
Special Grade	11.8	28	5
Selection Grade	12.0	61	5
Grade 1	11.3	35	1
Grade2	10.5	30	4
All	11.5	61	1

5.3 Property Tax Assessments

There are various types of assessments on which the property tax is levied. They include: (i) residential; (ii) commercial, (iii) industrial, (iv) State Government properties, (v) public sector undertakings, (vi) Central Government properties including railway properties, (vii) charitable and religious institutions, (viii) educational institutions, (ix) monuments of tourist attraction, and (x) others including anganvadi, library, ration shops, etc.

Table 5.2 shows the grade wise total property tax assessments of TPs in Tamil Nadu. The total number of assessments of all TPs was 25.37 lakh in 2015-16 and increased to 28.02

lakh in 2020-21. In 2020-21, the special grade TPs had 20 percent of total assessments, selection grade TPs had 43 percent, grade 1 TPs had 30 percent and grade 2 TPs had only 7 percent. The number of assessments grew at an average rate of 3.1 percent in special grade TPs, 1.9 percent in both selection and grade 1 TPs, and 1.5 percent in grade 2 TPs. The overall growth rate was 2 percent.

Table 5.2: Grade Wise Property Tax Assessments of TPs

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	499598	514807	531799	547699	657812	567353
Selection	1086105	1109418	1134696	1154026	1170790	1192939
Grade 1	768109	782631	800977	814590	827607	843569
Grade 2	183684	186409	189913	192163	194587	197730
All	2537496	2593265	2657385	2708478	2850796	2801591

5.4 Property Tax Demand and Collection

Another issue relating to property tax is the level of inefficiency that exists in the implementation and enforcement of this tax. Generally, there was a gap between tax demanded and tax collected. In 2015-16 the demand was Rs. 169.93 crore, but the collection was only Rs. 115.78 crore (Table 5.3). This led to the collection efficiency of 74.42 percent, i.e., the collection inefficiency of 25.52 percent. This means that 25.52 percent of demand in that year was either under dispute or not collected properly. This is a major concern. Since the collection rate determines the revenue performance of property tax, TPs should improve their collection efficiency to 100 percent. With 100 percent efficiency, they could have obtained about 25 percent additional revenues. However, it noted that the collection efficiency of all TPs increased to 79.22 percent in 2017-18 and then it declined to 71.98 percent in 2019-20. But in 2020-21 it again increased significantly to 85.19 percent. However, he average efficiency during 2015-16 to 2020-21 was 76.76 percent. TPs may allow the property tax payers to pay the property tax in installments like bi-monthly electricity bill payments. This will reduce the tax burden and improve the collection efficiency of TPs.

Table 5.3: Grade Wise Property Tax Demand and Collection Efficiency

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Demand (Rs. Crore)						
Special	53.96	58.75	62.12	82.78	79.43	81.46
Selection	80.60	85.24	90.43	128.09	118.23	109.73
Grade 1	30.00	31.77	33.95	52.98	47.16	45.52
Grade 2	5.36	5.48	5.89	9.09	8.01	7.78
All	169.93	181.24	192.39	272.94	252.82	244.49
Collection (Rs. Crore)						
Special	34.62	38.72	43.54	55.42	49.79	53.87
Selection	50.99	53.83	59.54	82.57	76.15	70.34
Grade 1	25.58	27.28	29.37	43.00	37.96	38.53
Grade 2	4.59	4.70	5.13	7.71	6.62	6.70
All	115.78	124.53	137.57	188.69	170.52	169.44
Average Collection Efficiency (Percentage)*						
Special	76.42	77.11	80.22	74.49	72.63	86.06
Selection	75.57	76.33	79.42	74.07	72.28	85.67
Grade 1	75.43	76.73	79.81	74.15	72.73	86.00
Grade 2	74.76	76.17	79.35	73.55	72.07	85.39
All	74.48	76.46	79.22	73.25	71.98	85.19

*Based on individual TP's collection efficiency

5.5 Property Tax Revenues

Table 5.4 shows the aggregate amounts of property tax revenues of TPs in different grade categories in Tamil Nadu during 2015-16 to 2020-21. The total property tax revenues of all TPs amounted to Rs. 126.46 crore in 2015-16 and increased to Rs. 223.45 crore in 2018-19. But in the next two years they declined to Rs. 186.90 crore and Rs. 178.52 crore respectively. This fall might be due to the impact of covid-19 pandemic. However, it is noted that the property tax revenues registered about 10 per cent annual growth which is closer to the annual GSDP (nominal) growth of 10.12 percent. This means the average tax buoyancy is closer to 1. The tax buoyancy was 1.1 for both special grade and grade 1 TPs. It was 0.9 for selection grade TPs and 1.3 for grade 2 TPs.

Table 5.4: Grade Wise Property Tax Revenues (Rs. Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Special	37.25	41.11	43.25	63.07	53.54	54.15
Selection	57.92	65.39	64.94	102.58	86.55	77.92
Grade 1	26.54	28.19	30.60	48.98	39.62	38.66
Grade 2	4.75	5.08	5.49	8.82	7.20	7.79
All	126.46	139.77	144.28	223.45	186.90	178.52

5.6 Components of Property Tax Revenues

Table 5.5 shows property tax revenue components –general purpose tax, tax on residential units, tax on commercial properties, and industrial units. In the case of all TPs, the general purpose tax accounted for 32.8 percent of total property tax revenues in 2015-16, residential tax accounted for 50.04 percent, commercial components accounted for 11.4 percent and industrial components accounted for 3.95 percent. Their shares remained more or less the same with minor variation in different years. The water supply and drainage tax and education tax accounted a meagre share of the total property tax (not shown).

5.7 Exempted Properties from Property Tax

Exemption from local property tax is a common feature worldwide. Basic reasons for granting exemptions are social justice, high administrative and collection cost particularly from low tax yielding properties, and properties that provide direct or indirect services having characteristics of a merit good or public good. Studies indicate that exempted properties in India accounts for approximately 10 percent of the total urban properties and about 11 percent of assessed properties.

In town panchayats in Tamil Nadu, exempted properties include charitable and religious institutions, educational institutions, and monuments of tourist attractions, ration shops, anganvadis and libraries. As on 31.03.2020, there were 2337 charitable and religious institutions, 1784 educational institutions, 25 monuments of tourist attractions and 3070 other properties that were exempted in all TPs in Tamil Nadu (not shown).

Table 5.5: Components of Property Tax Revenues (Rs. Crore)

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
	Rs. Crore						As Percentage of Ttoal Property Tax					
General Purpose Tax												
Special	14.72	16.24	17.23	26.65	22.59	22.62	39.51	39.50	39.85	42.26	42.20	38.47
Selection	18.55	20.59	20.93	35.01	29.21	24.24	32.03	31.48	32.22	34.13	33.75	31.11
Grade 1	6.70	7.22	7.75	12.75	10.12	9.74	25.24	25.60	25.34	26.03	25.54	25.19
Grade2	1.18	1.26	1.33	2.20	1.70	1.60	24.91	24.81	24.27	24.91	23.57	20.60
All	41.15	45.30	47.25	76.61	63.63	58.20	32.54	32.41	32.75	34.29	34.04	31.77
Residential												
Special	16.06	16.87	18.26	26.25	22.07	26.66	43.11	41.05	42.22	41.62	41.23	45.34
Selection	29.35	34.46	32.54	50.15	42.27	38.83	50.67	52.69	50.11	48.89	48.84	49.84
Grade 1	15.04	15.87	17.30	27.04	22.12	21.83	56.65	56.31	56.54	55.20	55.84	56.46
Grade2	2.83	3.04	3.27	5.18	4.26	4.94	59.58	59.92	59.60	58.77	59.10	63.43
All	63.28	70.25	71.37	108.62	90.73	92.26	50.04	50.26	49.47	48.61	48.54	50.37
Commercial												
Special	4.81	5.05	5.36	8.21	6.69	6.77	12.92	12.28	12.38	13.02	12.49	11.51
Selection	6.06	6.33	6.99	10.80	9.03	8.48	10.47	9.68	10.77	10.53	10.43	10.88
Grade 1	3.03	3.27	3.50	5.92	4.51	4.34	11.43	11.58	11.44	12.09	11.37	11.23
Grade2	0.56	0.60	0.67	1.08	0.86	0.85	11.74	11.74	12.28	12.21	11.90	10.93
All	14.47	15.24	16.52	26.01	21.08	20.44	11.44	10.90	11.45	11.64	11.28	11.16
Industrial												
Special	1.62	2.89	2.34	1.89	2.10	2.66	4.34	7.04	5.42	2.99	3.91	4.52
Selection	2.07	2.17	2.43	3.84	3.19	2.60	3.57	3.31	3.75	3.74	3.68	3.34
Grade 1	1.24	1.27	1.45	2.34	1.81	1.60	4.68	4.50	4.73	4.78	4.57	4.13
Grade2	0.07	0.07	0.07	0.13	0.12	0.09	1.41	1.34	1.36	1.49	1.66	1.12
All	4.99	6.40	6.30	8.20	7.21	6.94	3.95	4.58	4.36	3.67	3.86	3.79

Table 5.6 shows the details of grade wise exempted properties and their assessments in TPs in Tamil Nadu in 2015 and 2020. In 2019-20, the total number of assessments in TPs of Tamil Nadu was 28.5 lakh. The exempted properties are less in numbers and account for only 0.25 percent of total assessments. However, the revenue loss from exempted properties was estimated at Rs. 4.18 crore. It is observed that in selection grade TPs, higher numbers of properties (4409) were exempted.

Table 5.6: Exempted Properties from Property Tax of TPs and their Demand

Grade	2015	2020	2015	2020
	Exempted Properties		Assessments (Rs. Crore)	
Special	288	291	0.24	0.40
Selection	4194	4409	2.31	3.07
Grade 1	1900	1781	0.49	0.59
Grade 2	725	722	0.09	0.09
All	7120	7216	3.17	4.18

5.8 Projection of Property Tax Revenues and Assessments

Table 5.7 present the grade wise projected property tax revenues of TPs using 5-year average growth of property tax revenue in each TP during 2015-16 to 2020-21. The aggregate property tax revenues of all TPs would increase to Rs. 688 crore in 2026-27. The property tax revenues would increase to Rs. 305.52 crore in selection grade TPs, to 198.09 crore in grade 2 TPs, Rs. 105.69 crore in special grade TPs and Rs. 79 crore in grade 1 TPs in 2026-27.

Table 5.7: Grade wise Projected Property Tax Revenues of TPs (Rs.Crore)

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Special	60.23	67.13	74.96	83.88	94.05	105.69
Selection	88.00	100.94	119.07	147.75	199.67	305.52
Grade 1	43.28	48.56	54.62	61.59	69.65	79.00
Grade 2	9.76	13.52	21.61	40.39	85.85	198.09
All	201.28	230.15	270.26	333.61	449.22	688.30

Since 2019-20 and 2020-21are pandemic affected years, we also use three years average growth rate (i.e., excluding these two years growth rates) of each TP to project the property tax revenues during 2021-22 to 2026-27. In this alternative scenario, the property tax revenues of all TPs would increase to Rs. 1925.73 crore (Table 5.8).

Table 5.8: Grade wise Projected Property Tax Revenues of TPs Using 3-Year Average Growth Rate (Rs.Crore)

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Special	71.77	87.89	107.95	132.97	164.20	203.26
Selection	97.95	126.94	176.48	284.39	580.79	1522.82
Grade 1	48.62	61.49	78.23	100.19	129.31	168.35
Grade 2	9.76	12.25	15.43	19.48	24.66	31.30
All	228.10	288.57	378.09	537.03	898.95	1925.73

Table 5.9 presents the grade wise projected assessments of property tax using 5 years average growth rate. It is expected that the total number of assessments would increase from 28.02 lakhs in 2020-21 to 77.87 lakhs in 2026-27.

Table 5.9: Grade wise Projected Property Tax Assessments in TPs (Rs.Crore)

Grade	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
Special	604950	679523	849956	1272937	2367829	5261393
Selection	1217318	1242575	1268780	1296012	1324365	1353946
Grade 1	860425	877825	895794	914362	933558	953415
Grade 2	200888	204148	207516	210996	214594	218318
All	2883582	3004072	3222046	3694307	4840347	7787073

5.9 Concluding Remarks

This chapter has analyzed the performance of property tax of Town Panchayats from 2015-16 to 2020-21. Our analyses indicate that:

(i) The property tax rate was kept constant in each town panchayat over the years. However, the rate varied significantly from 1 percent to 61 percent with average rate of 11.5 percent.

(ii) The total number of assessments of property tax increased from 25.37 lakh in 2015-16 to 28.02 lakh in 2020-21. The number of assessments grew at average rate of 3.1 percent in special grade TPs, 1.9 percent in both selection and grade 1 TPs, and 1.5 percent in grade 2 TPs. The overall growth rate was 2 percent.

(iii) The overall property tax collection efficiency was 74.48 percent in 2015-16 and it increased to 85.19 percent in 2020-21. TPs should aim to achieve 100 percent efficiency.

(iv) The total property tax revenues of all TPs amounted to Rs. 126.46 crore in 2015-16 and increased to Rs. 223.45 crore in 2018-19 and then declined to Rs. 178.52 crore in 2020-21. However, the property tax revenues registered about 10 percent annual growth and average tax buoyancy was closer to 1. The tax buoyancy was 1.1 for both special grade and grade 1 TPs. It was 0.9 for selection grade TPs and 1.3 for grade 2 TPs.

(v) The general purpose tax accounted for about 32.8 percent of total property tax revenues, residential tax accounted for 50.04 percent, commercial components accounted for 11.4 percent and industrial components accounted for 3.95 percent.

(vi) As on 31.03.2020, there were 2337 charitable and religious institutions, 1784 educational institutions, 25 monuments of tourist attractions and 3070 other properties that were exempted in all TPs. The revenue loss from these exempted properties was estimated at Rs. 4.18 crore.

(vii) The aggregate property tax revenues of all TPs would increase to Rs. 688 crore in 2026-27 using 5-year average growth rate. Using three-year average rate (excluding growth rates during pandemic years), they would increase to Rs. 1925.73 crore.

(viii) Total number of assessments would increase from 28.02 lakh in 2020-21 to 77.87 lakh in 2026-27.

Chapter 6
UNTAPPED PROPERTY TAX POTENTIALS

6.1 Introduction

Property tax collections form the bedrock of revenues for local bodies. The Urban Local Bodies do not have any direct powers of taxation nor do they have the power to fix the rates of taxes. It is the entry number 49 (Taxes on lands and buildings) in the State List of the Seventh Schedule of the Constitution empowers the legislature of a State to authorize a Urban Local Body to levy, collect and appropriate taxes, duties, tolls and fees in accordance with such procedure and subject to such limits. It is a legislative function that requires a resolution to be passed by the approval council or the authority specifying the rate of tax and the date from which the tax shall be levied through a public a notice declaring its intention

The low property tax collection is a common problem of all States in India including Tamil Nadu. Despite the fact that three decades have passed since formalization of third tier governance (74th Constitutional amendment, 1992), the property tax collection as a percentage of GDP in India is only 0.2 percent. The OECD, BRICS account for 1.1 percent (5 times higher than that for India), and developed countries (Canada, the UK and the US) account for 3.3 percent of their GDP (Bandyopadhyay, 2013).

The Honorable Finance Minister of Tamil Nadu also stressed the low property tax collection in the State in the "White Paper" presented in August 9, 2021. The Fifth State Finance Commission in its report mentioned "consistent improvement" in the collection of the property tax in tandem with the growth rate of the Gross State Domestic Product (GSDP). The Commission had fixed a target of achieving of 0.6 percent of the GSDP as property tax for the year 2021-22. This has now been reduced by the State Government to 0.25 percent.

6.2 Reasons for Low Property Tax Revenues

A large potential of property tax collection is untapped and unrealized due to the following reasons:

No Revision on the Property Tax Rate for a Long Time

The property tax revision has not taken place in the last 13 years. The last revision was done in 2008. Despite the fact that the laws of the Urban local bodies empowering the municipal corporations to fix the rate of taxation with the range of minimum 15.5 percent and maximum of 35.5 percent maximum every five years.

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What is the case in Tamil Nadu?

The Government of Tamil Nadu in its GOs (150 & 110) dated 12.11.2007 and 23.06.2008 issued general guidelines to Town Panchayats to carry out general revision of property tax with effect from 01.04.2008 as per the existing statutory provisions in the relevant Urban Local Bodies Act.

Again on 19.07.2018, the GOTN issued orders to revise Property tax with effect from 01.04.2018 and prescribed the following rate of revision:

Sl. No.	Description	Proposed Revision of Property Tax
1	Residential Buildings	Not more than 50 percent
2	Rented Residential Buildings	Not more than 100 percent
3	Non - Residential Buildings	Not more than 100 percent

This was amended on the recommendations of the Commissioner of Municipal Administration and Director of Town Panchayats agreed to tax all Residential Buildings including the rental buildings, providing a revision not more than 50 percent. Orders were also issued for Re-measurement of properties in the year 2017-18 to identify under assessed buildings and buildings with change in usages and revised Property Tax taking into account of the actual measurement of the buildings and period of construction with imposition of penal action and taxes.

Representation received from the Residential Welfare Associations, Traders Association and from the political parties highlighted that Property tax hike has been multi-folded causing severe financial hardships. Many Commercial Associations have also represented to consider the Economic Slowdown and reduce 100 percent tax on Non Residential buildings. The Honorable Minister for Municipal Administration on 08.07.2019 in the floor of the assembly assured that the reduction of property tax will be considered. Accordingly the Commissioner of Municipal Administration, the Commissioner, Greater Chennai Corporation and the Director of Town Panchayat requested the Government to set up a committee to look into all issues relating to the General revision of Property Tax, in all ULBs and requested Government to withhold the General revision till the receipt of the Committee report.

The Government considered the above request and set up a committee with the Principal Secretary to Government, Finance (Expenditure) as Chairman and the Commissioner of Municpal Administration, Director of Town Panchayats and the Commissioner Greater Chennai Corporation as members.

The GOTN, despite the order of the Madras High Court on the general revision of the tax with effect from April 1, 2018, issued a GO (G.O (MS) No.150) on 19.11.2019 to withhold the general revision till the receipt of the report by the committee. As on date, the committee's report is awaited, and the revision has not been given any effect so for. Currently the average rate of property tax of TPs is only 11.5 percent.

Incomplete Registers

The property records at the ULBs and Town panchayats are not maintained properly. The details of many properties are missing in the registers. There is a need for computerized registration of property and to integrate them with the master data in the District/ State Head Quarters. This will avoid tampering of town panchayat records. Research studies have shown that computerized registration systems have reduced transaction costs for owners.

States that have implemented Computerized Registration of Property at the Town Panchayat Level are:

(i) Karnataka - AASTHI project —a GIS-based property tax information system with unique IDs.

(ii) Pune Municipal Corporation - capital value-based system where increasing market value of properties was considered for tax assessment

(iii) Ranchi Nagar Nigam - In 2014, entered into an agreement with a private agency for providing managed services for collection of tax and other property charges within its jurisdiction.

Initiatives like Online helpline, chat, SMS and telephonic services for grievance redressal led to substantial increase in collection of property tax revenues.

Policy Inadequacy and Ineffective Administration

Another big challenge is the lack of accurate property tax rolls in the jurisdiction of urban local bodies (ULBs).

Need to streamline the methodology of property valuation to yield regular and realistic updates of values that are closer to market value. This may help to realize greater revenues from property registrations. There are many ways by which States can cross-check the wedge between market prices of properties and their fair values. One useful source can be the Residex of the National Housing Bank—an urban housing price index computed for housing properties in 50 cities across India that makes use of valuation data collected from primary lending institutions and data collected through market survey for under-construction properties, apart from registration data collected from official agencies.

Another cross-check can be data from private real estate portals present in States with buoyant property transactions. These portals give differentiated price quotations for different kinds of properties at different locations.

GST Implementation

The GST implementation has taken away some tax instruments (entertainment tax, entry tax, stamp duty, royalty on minerals, land revenue and cess on land revenue, etc) traditionally available to local bodies. There is a need to compensate the local bodies for these taxes.

In-efficiency in Implementation and Enforcement

The level of inefficiency that exists in the implementation and enforcement of this tax matters. Generally, there was a gap between tax demanded and tax collected. The collection efficiency of TPs in the case of property tax ranged between 75 percent and 85 percent.

Exempted Properties

Exemption from property tax is another reason for low revenues. There were 2337 charitable and religious institutions, 1784 educational institutions, 25 monuments of tourist attractions and 3070 other properties that were exempted in all TPs in Tamil Nadu in 2020. There was a revenue loss from these properties

6.3 Recommendations of the Union Finance Commissions to Augment the Property Tax in India

(i) The 13th Finance Commission advocated setting up of the "Property Tax Boards" – so far only a few have come up.

(ii) The 14th Finance Commission has underlined that "the potential for collection of property tax has not been fully tapped. The Commission recommended reforms in property tax regime by giving powers to panchayats and municipalities to levy the tax on plinth basis with a provision for periodic revision and minimizing grant of exemptions. The tax levied on annual rental value basis lead to lower buoyancy. The study of 478 municipalities showed that the revenue from property tax has risen from Rs 5,555 crore in 2007-08 to Rs 10,192 crore in 2012-13. The per capita revenue from property tax varied from Rs. 42 to Rs 1,677 across States

(iii) The 15th Finance Commission recommended that the ULBs need to fulfill the following entry-level additional mandatory conditions to be eligible for its grants:

"fixation and operationalisation of minimum floor rate" for property tax in 2021-22 to receive grants from 2022-23; and

"Timely placing" of audited accounts in the public domain.

6.4 Government of India's Initiative to Tap the Untapped Property Tax

The Ministry of Housing and Urban Affairs is reviewing the municipal legislations of all States and identifying best practices and making a toolkit consisting of such laws, procedures and on-ground activities. At the same time, State Governments need to play an active role to adopt such practices and adapt them suitably to realize this untapped and unrealized revenue source.

6.5 Concluding Remarks

This has identified the untapped property tax potentials of town panchayats. The following are the reasons for low performance of property tax: (i) no revision of property tax rate for many years; (ii) despite Government issued an order on 2018 to revise the property tax up to 50 percent for residential building and up to 100 percent in the case of others, the decision is bending (currently the average rate is 11.5 percent); (iii) details of many properties are recorded properly; (iv) no proper methodology of property ; (v) the GST implementation has taken away some taxes of local bodies; (vi) the collection efficiency is low in the case of property tax; (vii) there are many properties which are exempted from property tax net.

Government of Tamil Nadu should immediately undertake the following steps to tap the large potential of untapped Property Tax: (i) Strictly adhere the Fifteenth Finance

Commission recommendation on releasing the grant only to those TPs that have shown improvement in property tax collection; and (ii) Put pressure on the Property Tax Committee to submit its report and implement all recommendations on property tax revision.

Chapter 7

TRACKING UNTAPPED PROPERTY TAX POTENTIALS

7.1 Introduction

In the previous Chapter, we have discussed about untapped property tax potentials of TPs in Tamil Nadu. We have seen various reasons for low property tax revenues of TPs. This Chapter attempts to suggest various ways to tap or tracking the untapped property tax potentials of TPs in Tamil Nadu. Specifically, it attempts to estimate the potential property taxes under alternative scenarios and suggest how to realize that potential. The recommendations and/or policy suggestions provided in this Chapter may be considered as a complete solution and operating plan for all TPs to increase their property tax potentials in Tamil Nadu.

7.2 Normative Approach to Realize the Tax Potentials

The aggregate budget of town panchayats in Tamil Nadu indicates that during 2015-16 to 2020-21, the total expenditure grew at 5.56 percent and revenue expenditure grew at 6.6 percent. At the same period, revenues increased at 6 percent and own revenues at 13 percent and property tax revenues at 10.05 percent. But the real issue is the magnitude of own revenue and property tax revenue. In all the latest 6 years, the own revenue as percentage of revenue expenditure ranged between 42.2 percent to 57.49 percent and the property tax revenue as percentage of revenue expenditure ranged only between 7.77 percent to 10.73 percent. As a result, the town panchayats have no choice but to rely on transfers (assigned revenues and grants) even for meeting the recurring expenditures.

In order to become self-reliant, the own revenues of TPs particularly their property tax revenues should increase. The main objective of this Chapter is to estimate the revenue potential of the property tax of TPs in Tamil Nadu. A restatement of this objective is "what is a reasonable expectation for revenue mobilization from the property tax". Revenue potential is in fact a relative term, representing a gap between the current level of revenues and the revenues that would be generated under optimal or normative considerations. There are several models for estimating the tax potential. In this study, we consider the following five ways to tap the untapped potentials of property tax of TPs in TN:

(i) Revenue Mobilization through Rate Revisions

(ii) Additional Revenues through Improved collection Efficiency

(iii) Additional Revenues from Exempted Properties

(iv) Raising Revenues based on Recommendation of Fifth State Finance Commission

(v) Realizing Full Tax Potentials measured using the Frontier Approach.

7.3 Revenue Mobilization through Rate Revisions

As discussed in Section 6.2, the property tax revision has not taken place in the last 13 years. Although Government G.Os (150 and 110) provided the guidelines that rate should not exceed 50 percent for residential building and should not exceed 100 percent for other buildings and Madras High Court issued order for general revision of property tax, the revision has not yet been done. Currently the average rate of property tax is only 11.5 percent and productivity of property tax is poor. The total property tax revenue from all 528 TPs in Tamil Nadu was only Rs. 178.52 crore in 2020-21 (Table 7.1).

Higher rates would have brought higher yield. In Table 7.1 we have given grade wise projected property tax yields using higher rates in four alternative scenarios during 2015-16 to 2020-21. Since we have data only on town panchayat (TP) wise property tax revenues and property tax rate, we have projected property tax yield in each TP using the following formula:

Projected Property Tax Revenue = Actual Property Tax Revenue x (Proposed Rate/Actual Rate).

That is, the projected property tax revenue for each TP is the revenue yield if the TP uses proposed (higher) rate instead of actual rate. For instance, in Scenriao-1, 20 percent rate is proposed instead of given actual rate. If all TPs in Tamil Nadu apply 20 percent rate instead of actual rate, the property tax yield would have been Rs. 343.73 crore in 2020-21 instead of actual yield of Rs. 178.52 crore (Table 7.1). That is, the revenue yield from property tax would have been almost doubled.

If all TPs apply the rate of 30 percent in Scenario-2, 40 percent in Scenario-3 and 50 percent in Scenario-4, the total yield in 2020-21 would have increased to Rs. 515.61 crore, Rs. 687.48 crore and Rs. 892.60 crore respectively.

These are a few indicative Scenarios. One can also work out other Scenarios with some other higher rates. The fact of the matter is that since revision is pending for more than 13 years, the Government needs to consider higher rate revision immediately. The periodic

revision of rate and use of updated market value of property would definitely bring high property tax yield to TPs in Tamil Nadu so that they can be more self-reliant.

Table 7.1: Property Tax Revenue Projection using Higher Tax Rates

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
With Actual Rate						
Special	37.25	41.11	43.25	63.07	53.54	54.15
Selection	57.92	65.39	64.94	102.58	86.55	77.92
Grade 1	26.54	28.19	30.60	48.98	39.62	38.66
Grade 2	4.75	5.08	5.49	8.82	7.20	7.79
All	126.46	139.77	144.28	223.45	186.90	178.52
Scenario-1: With 20 Percent Instead of Actual Rate						
Special	70.39	77.10	81.73	119.63	101.85	102.49
Selection	103.98	117.69	117.04	185.50	154.52	142.38
Grade 1	56.72	60.33	65.44	104.76	84.74	82.48
Grade 2	10.10	10.80	11.65	18.86	15.25	16.39
All	241.18	265.92	275.86	428.75	356.37	343.74
Scenario-2: With 30 Percent Instead of Actual Rate						
Special	105.58	115.65	122.59	179.45	152.78	153.74
Selection	155.97	176.53	175.56	278.25	231.78	213.57
Grade 1	85.08	90.50	98.16	157.14	127.11	123.72
Grade 2	15.15	16.20	17.48	28.29	22.88	24.58
All	361.77	398.88	413.79	643.13	534.56	515.61
Scenario-3: With 40 Percent Instead of Actual Rate						
Special	140.77	154.20	163.46	239.26	203.71	204.99
Selection	207.96	235.37	234.08	371.00	309.04	284.76
Grade 1	113.44	120.67	130.87	209.52	169.48	164.96
Grade 2	20.20	21.60	23.30	37.72	30.51	32.77
All	482.36	531.85	551.72	857.50	712.74	687.48
Scenario-4: With 50 Percent Instead of Actual Rate						
Special	175.96	205.54	216.24	315.36	267.68	270.73
Selection	259.95	326.96	324.72	512.92	432.73	389.58
Grade 1	141.79	140.96	152.98	244.91	198.08	193.31
Grade 2	25.25	25.41	27.43	44.08	36.02	38.97
All	602.95	698.86	721.38	1117.26	934.51	892.60

7.4 Additional Revenues through Improved Collection Efficiency

Property tax yield comprises (i) current tax collection and (ii) arrears. In fact the yield (collection) is always less than the demand raised by the TP in every year. As discussed in Section 5.4 in Chapter 5, the average property collection efficiency of TPs in Tamil Nadu

was 76.76 percent during 2015-16 to 2020-21. If all TPs would have improved their collection efficiency to 100 percent, they would have obtained the total property tax revenue of Rs. 1307.94 crore in six years instead of the actual yield of Rs. 999.38 crore. Please note that this yield is with actual low rate without revision for many years. Suppose that the rate would have been 50 percent as in Table 7.1, with improved collection efficiency, the total yield in 6 years would have been Rs. 6471.27 crore instead of Rs. 4967.56 crore.

7.5 Additional Revenues from Exempted Properties

In Table 5.6 in Chapter 5, we have shown that the total exempted properties increased from 7120 in 2015 to 7216 in 2020. During the same periods, the assessment from these exempted properties increased from Rs.3.17 crore to Rs. 4.18 crore. These are revenue losses to the TPs. This may not be the exhaustive list of exempted properties. There may be many more properties that are not on the tax roll of TPs. Further with revised rates, the yield from them would increase significantly.

7.6 Raising Revenues Based on Recommendations of Fifth State Finance Commission

In order for ULBs to become self reliant, the Fifth State Finance Commission recommended that the property tax yield of ULBs in Tamil Nadu should reach 0.6 percent of GSDP in 2021-22. With current trend, we have projected that the property tax yield of all TPS in Tamil Nadu would increase to Rs. 201.28 crore (in Scenario-1) in 2021-22 (using 5 year average growth rate) and to Rs. 228.10 crore (using year average growth rate) in Scenario-2 in Tables 5.7 and 5.8. The question now is: how much of property tax yield to be raised by TPs to meet the target set by the Fifth State Finance Commission?.

To calculate this amount, we have used the following procedure:

(i) From the budget Speech of Finance Minister, the implicit amount of GSDP of Tamil Nadu for the year 2021-22 is calculated at Rs. 21.37 lakh crore.

(ii) 0.6 percent of GSDP amounts to Rs. 12824.41 crore. This should be the property tax revenue to be raised by all ULBs in Tamil Nadu in 2021-22.

(iii) From Table 3.2, it is observed that in the total property tax revenues of ULBs in Tamil Nadu during 2011-12 to 2017-18, the average share of property tax revenue of TPs was approximately 10 percent. Therefore, all TPS in Tamil Nadu should raise Rs. 1282.44 crore as property tax yield in 2021-22.

To reach this target amount of Rs. 1282.44 crore, our projection amount should increase by 6.37 times in Scenario-1 and 5.62 times in Scenario-2. This could be possible only when increase the tax rate to about 60 percent.

7.7 Realizing Full Property Tax Potentials Measured Using Frontier Approach

The question that often arises is whether there is any scope for an increase in the level of property taxation of town panchayat (TP) for the mobilization of resources to finance a development program or for other purposes. A relevant consideration in answering this question is how the tax effort of a TP compares with that of other TPs in similar circumstances.

Tax effort is measured by relating actual tax collections to some indicator of taxable capacity. Traditionally, total income is considered as a proper indictor of taxable capacity and the tax effort is measured by the ratio of tax revenue to income. However, there is a limitation in this approach. These ratios do not take account of certain economic and non-economic factors which may be especially important in evaluating the tax effort.

Therefore, in addition to the aggregate income, the denominator in the tax ratio, other factors affect the taxable capacity. One of the most important factors is the level of economic development. The economic development is usually accompanied by higher rate of literacy, low percentage of reserved population or poor population, etc. It is noticed that the economic development has many dimensions and cannot be measured precisely either by a single variable or by a simple combination of variables.

There is another point to be noticed. The question of how much revenue a TP could raise is distinctly different from asking how much tax revenue it should raise. The former can be estimated through empirical investigation. The magnitude of the latter is a much deeper question, and the answer to which will depend on a variety of political and technical factors – such as the preferences of the population, the efficiency costs and equity implications of taxation, and the efficiency with which public funds can be spent, that are very difficult to estimate.

The frontier analysis, the empirical approach, is widely used method to measure the tax potential (often it is used interchangeably with the term tax capacity) and tax effort. We define the tax potential as the maximum amount of property tax revenue a town panchayat could reasonably raise at a given point of time, conditional on its prevailing characteristics.

Tax potential is inherently unobservable – but can be estimated empirically. The extent, to which estimation can capture the true underlying determinants, precisely how determinants enter into estimation, and the precise interpretation of the resulting estimates for tax potential, are important issues.

The tax effort is the extent to which the actual tax revenue reaches the estimated capacity, and it is expressed here as a proportion. Such effort reflects a) policy choices and b) inefficiency in policy enforcement. Policy choices are expressed in tax rates and bases, and any exemptions. These policy choices reflect a variety of factors, including public preferences for the size of local government. Inefficiency in enforcement encompasses issues of tax administration, taxpayer compliance, and interactions between the two. As suggested by Alfirman (2003), effort is thus best considered as 'unused tax potential', and represents a composite measure of policy and enforcement factors. The advantage of the frontier approach is that it suggests how much property tax revenue is raised with given resources (i.e., without any additional resources) by following best practices employed by similar units in the sample.

Broadly two frontier approaches are available: the data envelopment approach (DEA) and the stochastic frontier approach (SFA). The DEA method, developed by Farrell (1957) considers that the actual tax revenue (output), R is less than or equal to the potential revenue, $R^*(=f(.))$, i.e, $R \leq R^*$. The revenue gap is: $u=R^*-R$ and is modified due to non-linear relationship as $R= f(.)e^{-u}$. The advantage of this form is that it directly measures the tax effort or efficiency, given by $e^{-u} = R/R^*$ (the ratio between actual and potential revenue). The SFA approach for cross section data considers that the potential output is not deterministic, but stochastic due to random factors which would also affect the yield and so $R = f(.)e^{-u} e^v = f(.) e^\varepsilon$, where v is regular stochastic error term and ε is the composite error term (=v-u). Schmidt and Sickles (1984) introduced the penal data version of SFA.

A simpler version of DEA is the Corrected Ordinary Least Square (COLS) method. It is a simple regression model. After estimating the property tax revenue regression equation, the highest (positive) residual can be added with predicted (or estimated) value of property tax variable to get the potential property tax revenue for each sample TP. Then the ratio between actual property tax revenue and potential revenue will provide the estimates of tax efficiency or tax effort.

Following example will illustrate this approach clearly. We assume that the tax yield (Y) depends on only explanatory variable (X), namely the tax base. Suppose that we have data on these variables collected from various TPs in a year and plot them (as scatter points-

*) in a two dimensional graph as shown in Figure 7.1. Let our regression equation is $Y_i = \alpha + \beta X_i + u_i$. Using the Ordinary Least Square Method, the regression is estimated as: $\widehat{Y_t} = \widehat{\alpha} + \widehat{\beta}X$. This estimated regression line is a straight line as shown in Figure 7.1 with its intercept, $\widehat{\alpha}$ and slope, $\widehat{\beta}$. This is basically an average line, showing the average relationship between tax yield and tax base. Below and above, we can see the actual scatter points. The distance from the scatter point to the avergress regression line is called the residual (u) or error. It is positive if the scatter lies above the line and negative it lies below the line. As per this approach, the frontier or potential line is obtained by shifting the regression line parallel to the highest positive error (in Figure, it is u_i).

Figure 7.1: Regression and Frontier Lines
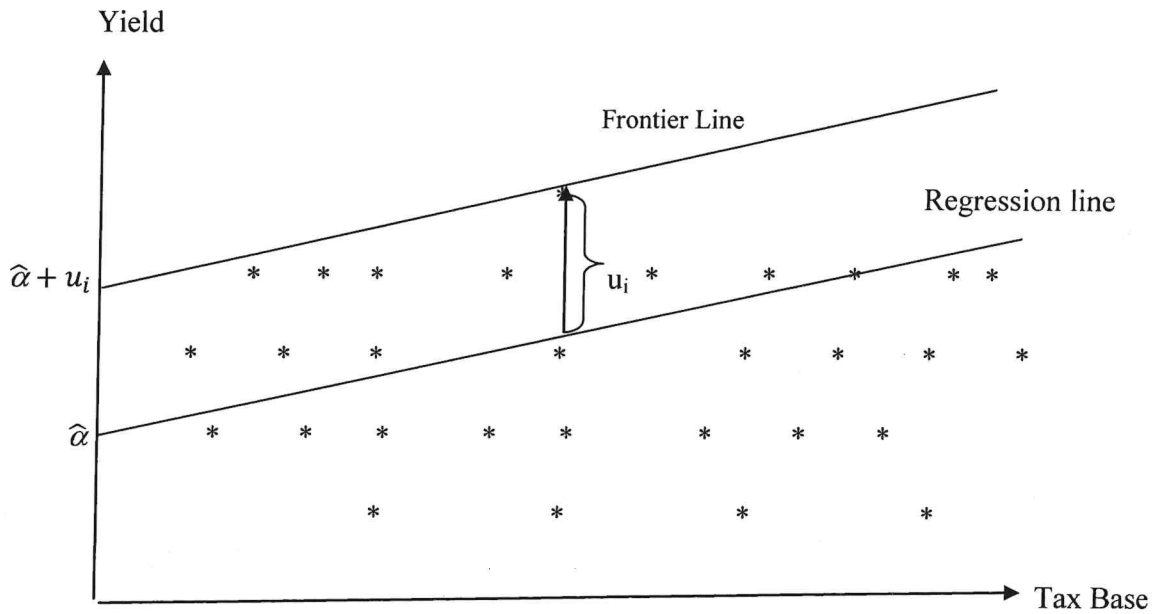
It is observed that because of the shifting the slope is not changing and only the intercept shifts from $\widehat{\alpha}$ to $\widehat{\alpha} + u_i$. With new intercept, the frontier or bench mark line equation is: $\widehat{Y_t^*} = u_i + \widehat{\alpha} + \widehat{\beta}X_i$. For each TP, the potential or frontier yield is calculated using this equation for its given value of X (=tax base). In this example, only one X variable (tax base) is used. This procedure is used the same way even if we have more than one X variable.

In our case, our objective is to measure the potential property tax yield for TPs in Tamil Nadu using the above frontier (corrected OLS) approach. We have data on property tax revenues for 528 TPs in Tamil Nadu during 2015-16 to 2020-21 (6 years). Since these TPs vary by their characteristics income and population etc, we consider 4 types of TPs separately based on their grade categories (special, selection, grade 1 and grade 2) in each year. The

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major problem is that we don't have income data for each TP. Therefore we are unable to use Tax-Income ratio as dependable variable. Instead we use log of property tax revenue as the dependent variable.

Based on data availability, we have considered the following explanatory variables:

(i)   Log of Property Tax rate;

(ii)   Log of total Expenditure of TP;

(iii)   Log of number of assessments (which include all types of assessments-residential, commercial, industrial etc)

(iv)   Literacy rate in Per cent

(v)   Percentage of SC/ST population.

Thus, the regression model to be estimated is:

Log of Property Tax Revenue = β_0 +β_1 Log of Property Tax Rate + β_2 Log of Total Expenditure + β_3 Log of Number of Assessments +β_4 Literacy Rate + β_5 Percentage of SC/ST population + u_i

The estimated regression results are shown in Tables 7.2-7.5. It is noted that we have data for 6 years and 4 grade categories, 24 equations are estimated separately. For instance, Table 7.2 shows the results for six years for special grade TPs. Using the results for each year, the potential tax revenue for each special grade TP is calculated and the ratio between actual property tax revenue and potential revenue is called tax efficiency or tax effort.

In Table 7.2, as expected, government expenditure is positively and significantly related to property tax revenues of special grade TPs in Tamil Nadu in all six years. As expected the literacy rate has a positive association with property tax revenue in all years, but is is significant only in there years-2017-18, 2018-29 and 2019-20. As expected, the assessment has positive impact and percent of SC/ST population has negative effect, but their coefficients are not significant in all the years. The results also indicate that the property tax revenues increase with increase in total expenditures and increase in literacy. From the results of these regressions, the highest positive residual in each is identified and added with intercept to shift the regression lines to their frontier levels and then the potential yield for each special grade TP and its tax efficiency for six years are calculated and are shown in Appendix 7A.

Table 7.2: Regression Estimation Results of Property Tax Revenue Equations for Special Grade TPs

Variables	2015-16 Coefficients	2016-17 Coefficients	2017-18 Coefficients	2018-19 Coefficients	2019-20 Coefficients	2020-21 Coefficients
Log of Rate of Property Tax	0.1152	0.1373	-0.0005	0.0291	-0.0525	0.1152
	(0.490)	(0.564)	(-0.002)	(0.133)	(-0.208)	(0.453)
Log of Assessments	0.1138	0.1086	0.0705	0.2366	0.0481	0.2024
	(0.723)	(0.626)	(0.375)	(1.299)	(0.287)	(0.961)
Log of Public Expenditure	0.7134	0.7117	0.8296	0.6736	0.6579	0.5327
	(3.923)	(3.989)	(4.846)	(4.283)	(3.529)	(3.067)
% SC/ST Population	-0.0065	-0.0099	-0.0095	-0.0029	-0.0140	-0.0093
	(-0.641)	(-0.931)	(-0.929)	(-0.289)	(-1.259)	(-0.825)
% Literacy Rate	0.0164	0.0176	0.0259	0.0251	0.0259	0.0224
	(1.089)	(1.161)	(1.896)	(1.927)	(1.756)	(1.540)
Intercept	-0.3243	-0.2903	-2.4631	-0.9526	1.1509	1.8396
	(-0.098)	(-0.085)	(-0.733)	(-0.294)	(0.299)	(0.499)
R Squared	0.3473	0.3392	0.4044	0.3777	0.2904	0.2819
F	6.2784	6.0569	8.0108	7.1613	4.8292	4.6331

t- values are in the parentheses.

Results in Table 7.3 for Selection grade TPs show that Property tax rate was positively related to property tax revenues of selection grade TPs in all six equations. But it was significant at 5 percent level in four years except in 2016-17 and 2018-19. In these two years also it was significant at 10 percent level of significance. Both public expenditure and literacy are positively and significantly associated with property tax revenues in all six equations. The assessments have positive impact on property tax yield in all case and statistically significant in all cases except in equation 2. As expected, percentage of SC/ST population is having negative effect on property tax revenues in all cases and significant in all except in fourth equation. These results in general indicate that the property tax revenues of selection grade TPs increase with increase in tax rate, increase in total expenditures, increase in assessments, increase in literacy and decrease in SC/ST population.

Table 7.3: Regression Estimation Results of Property Tax Revenue Equations for Selection Grade TPs

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Variables	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
Log of Rate of Property Tax	0.2439	0.2211	0.2254	0.1952	0.2702	0.2949
	(2.277)	(1.820)	(2.083)	(1.707)	(2.257)	(2.535)
Log of Assessments	0.2942	0.0966	0.2835	0.1681	0.2502	0.2349
	(3.638)	(1.130)	(3.425)	(2.181)	(2.924)	(2.968)
Log of Public Expenditure	0.4805	0.5032	0.4714	0.5067	0.5001	0.4535
	(6.077)	(5.660)	(5.874)	(6.043)	(5.193)	(5.060)
% SC/ST Population	-0.0059	-0.0081	-0.0061	-0.0043	-0.0066	-0.0066
	(-2.083)	(-2.598)	(-2.249)	(-1.557)	(-2.354)	(-2.528)
% Literacy Rate	0.0189	0.0166	0.0235	0.0255	0.0200	0.0170
	(3.557)	(2.836)	(4.549)	(4.769)	(3.664)	(3.259)
	1.4705	3.1120	1.4580	2.0140	1.4933	2.6362
Intercept	(1.019)	(1.941)	(0.988)	(1.296)	(0.865)	(1.601)
R Squared	0.3696	0.2746	0.3749	0.3263	0.3268	0.3082
F	22.8668	14.7619	23.3909	18.8919	18.9329	17.3784

t- values are in the parentheses.

Results in Table 7.4 show that public expenditure, assessments and literacy rate are positively and significantly related to property tax yields of Grade 1 TPs in Tamil Nadu. Although tax rate has a positive effect and percent of SC/ST population has a negative effect on property tax yields, these effects are not statistically significant.

Table 7.4: Regression Estimation Results of Property Tax Revenue Equations for Grade 1 TPs

Variables	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
Log of Rate of Property Tax	0.0847	0.0665	0.0897	0.0702	0.0837	0.0957
	(1.080)	(0.862)	(1.148)	(0.827)	(1.007)	(1.186)
Log of Assessments	0.7303	0.6934	0.7473	0.7163	0.7878	0.7498
	(6.587)	(6.275)	(6.833)	(5.587)	(6.332)	(6.758)
Log of Public Expenditure	0.1867	0.2540	0.2380	0.2864	0.2722	0.3396
	(2.078)	(2.856)	(2.423)	(2.621)	(2.428)	(3.594)
% SC/ST Population	0.0003	-0.0004	-0.0012	-0.0014	-0.0024	-0.0018
	(0.106)	(-0.151)	(-0.413)	(-0.419)	(-0.752)	(-0.601)
% Literacy Rate	0.0145	0.0138	0.0156	0.0180	0.0160	0.0106
	(2.986)	(2.938)	(3.329)	(3.492)	(3.191)	(2.197)
	3.2732	2.5371	2.2390	1.8567	1.4227	0.9302
Intercept	(2.504)	(1.964)	(1.493)	(1.150)	(0.866)	(0.635)
R Squared	0.4180	0.4346	0.4375	0.4177	0.4505	0.4571
F	27.8691	29.8204	30.1723	27.8378	31.8121	32.6650

t- values are in the parentheses.

Table 7.5 shows that the assessments are positively and significantly related to property tax revenues of Grade 2 TPs in all cases. Although the rate has positive impact, it is not significant in all 6 cases. The government expenditure has negative effect in two cases and positive effect in the remaining cases. But these effects are not significant in all cases except in second equation where it is significant at 10 percent level. As expected the literacy is positively related to property tax yields but it is significant only in first three cases. As expected the percent of SC/ST has a negative effect in all cases but it is not significant in all cases.

Table 7.5: Regression Estimation Results of Property Tax Revenue Equations for Grade 2 TPs

Year	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Variables	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients	Coefficients
Log of Rate of Property Tax	0.1961	0.1938	0.1895	0.1470	0.2458	0.2937
	(1.160)	(1.158)	(1.120)	(0.814)	(1.346)	(1.450)
Log of Assessments	0.7467	0.6659	0.6939	0.8701	0.9421	0.7227
	(3.148)	(3.347)	(3.288)	(3.692)	(3.782)	(2.691)
Log of Public Expenditure	0.1065	0.2394	0.2457	-0.1158	-0.1320	0.1913
	(0.645)	(1.903)	(1.434)	(-0.634)	(-0.712)	(1.048)
% SC/ST Population	-0.0056	-0.0066	-0.0063	-0.0072	-0.0050	-0.0050
	(-1.286)	(-1.559)	(-1.476)	(-1.673)	(-1.136)	(-1.079)
% Literacy Rate	0.0136	0.0146	0.0153	0.0115	0.0138	0.0096
	(1.981)	(2.129)	(2.184)	(1.497)	(1.783)	(1.134)
Intercept	4.1818	2.4964	2.1668	7.9321	6.9650	3.2916
	(1.990)	(1.266)	(0.882)	(2.954)	(2.679)	(1.268)
R Squared	0.4783	0.5072	0.4986	0.4422	0.4584	0.3865
F	10.2669	11.5267	11.1360	8.8797	9.4780	7.0559

t- values are in the parentheses.

Table 7.6 shows the grade wise and year wise average tax effort/efficiency and aggregate potential property tax revenues. The average tax efficiency varied widely across grades and years. For instances, in the case of special grade TPs, the average efficiency ranged between 18.19 percent and 38.88 percent. This means that the special grade TPs on an average realized only 18.19 to 38.88 percent potentials across the six years. That is, 61.12 - 81.81 percent of potentials are not yet realized. For selection grade TPs, the average efficiency ranged between 7.86 percent and 27.79 percent. For grade 1 TPs, it varied from 25.56 percent to 34.3 percent and for grade 2 TPs, the average efficiency varied from 14.69 percent to 21.47 percent across years. These results indicate that huge property tax potentials are not yet realized fully or properly.

Table 7.6: Grade Wise Average Tax Efficiency and Potential Property Tax Revenues from 2015-16 to 2020-21

Grade	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
Average Tax Efficiency (Percent)						
Special	38.88	22.11	18.19	28.68	37.49	24.05
Selection	21.76	7.86	21.79	14.95	13.65	20.83
Grade 1	32.00	32.26	34.30	30.83	27.23	25.56
Grade 2	20.86	21.01	21.47	19.18	17.58	14.69
Potential Property Tax Revenue (Rs.Crore)						
Special	97.51	188.63	244.81	224.11	143.63	229.86
Selection	263.23	834.49	295.67	680.03	622.44	376.60
Grade 1	84.02	88.43	90.12	161.31	147.69	153.18
Grade 2	23.16	24.59	25.92	46.54	41.74	54.51
All	467.91	1136.15	656.53	1112.00	955.49	814.15

Table 7.6 also provides grade wise property tax revenue potentials from 2015-16 to 2020-21. It indicates that if all TPs would have realized their full potentials, the aggregate property tax revenues in six years would have been Rs.5142.235 crore instead of the realized amount of Rs. 999.38 crore. It is noted that the potential amount could have been realized following the best practice of TP in each category in each year with given resources and policy, that is without any additional resource or any policy change. If all TPs would have applied 20 percent rate, the potential revenues could have been doubled. For 30 percent rate, it would have been tripled and for 50% rate, this would have been more than Rs. 25,000 crore. Appendix 7A provides the details of tax effort and potential revenues for all 528 TPs in Tamil Nadu over six years.

7.8 Concluding Remarks

This Chapter has suggested the following five normative ways to tap the untapped revenue potentials of property tax of town panchayats in Tamil Nadu: (i) Revenue mobilization through Rate Revision; (ii) Additional Revenues through improved collection efficiency; (iii) Additional revenues from exempted properties; (iv) Raising revenues based on Recommendation of Fifth State Finance Commission and (v) Realizing full tax potentials measured using the frontier approach. Based on these normative approaches, the following findings are shown as:

(i) If all TPs in Tamil Nadu applied 20 percent rate instead of actual rate, the property tax yield would have been Rs. 343.73 crore in 2020-21 instead of actual yield of Rs. 178.52 crore. Similarly applying 30 percent, 40 percent and 50 percent rate would have increased the yield to Rs. 515.61 crore, Rs. 687.48 crore and Rs. 892.60 crore. Since property tax rate revision is pending for many years and higher rate will bring more revenues, the Government needs to consider higher rate revision. The periodic revision of rate and use of updated market value of property would definitely bring high property tax yield to TPs in Tamil Nadu so that they can be more self-reliant.

(ii) Since the average property collection efficiency of TPs in Tamil Nadu was 76.76 percent during 2015-16 to 2020-21, they need to improve their collection efficiency to 100 percent. If they had 100 percent collection efficiency, their property tax revenues would have been Rs. 1307.94 crore in six years instead of the actual yield of Rs. 999.38 crore. If the rate would have been 50 percent, the total yield in 6 years would have been Rs. 6471.27 crore.

(iii) From 2015-16 to 2020-21, the assessment from the exempted properties increased from Rs.3.17 crore to Rs. 4.18 crore. However, there could be many more properties that are not in tax roll. Further, rate revision will bring more revenues.

(iv) To meet the property tax revenue target of 0.6 percent of GSDP for ULBs in 2021-22 as recommended by the Fifth State Finance commission, the TPs should raise Rs. 1284.44 crore instead of the projected amount of Rs. 201.28 crore with current trend. This could be possible only if 60 percent rate is applied.

(v) The frontier approach shows that for special grade TPs, the average tax efficiency ranged between 18.19 percent and 38.88 percent over six years; for selection grade TPs, it ranged between 7.86 percent and 27.79 percent; for grade 1 TPs, it varied from 25.56 percent to 34.3 percent and for grade 2 TPs, the average efficiency varied from 14.69 percent to 21.47 percent. These results indicate that huge property tax potentials are not yet realized fully.

(vi) If all TPs would have realized their full potentials, the aggregate property tax revenues in six years would have been Rs.5183.75 crore instead of realized amount of Rs. 999.38 crore. If all TPs would have levied 50 percent rate, this would have been more than Rs. 25,000 crore.

Chapter 8

RECOMMENTATIONS OF FINANCE COMMISSION OF INDIA AND LAND BASED INSTRUMENTS TO AUGMENT PROPERTY TAX

8.1 Introduction

In the previous Chapter, we have discussed about the ways to tap the untapped property tax potentials of town panchayats (TPs) in Tamil Nadu. This Chapter discusses on the recommendations of various Finance Commission of India for local bodies to augment their resources, particularly property tax revenues and the use of land based instruments to augment property tax.

8.2 Recommendations of Finance Commission of India

Tenth Finance Commission

Based on the 72nd and 73rd Constitutional amendments, the Tenth Finance Commission recommendated measures to augment the consolidated funds of the States for use by local bodies. It pointed out that it could recommend such measures only after ascertaining the need for these funds, and the primary basis for this would have to be the SFCs' reports which were not available at that point of time. Therefore, it recommended ad hoc grants:

(i) A grant of Rs. 100 per capita for rural population, as per the 1971 Census, to PRIs. This added up to a total of Rs. 4380.93 crore.

(ii) A grant amounted to Rs. 1000 crore to urban local bodies (ULBs).

Eleventh Finance Commission

(i) Recommended a grant of Rs. 8000 crore for PRIs and Rs. 2000 crore for ULBs for the five-year period starting 2000-01.

(ii) States could adopt measures to augment their consolidated funds so as to supplement the resources of the panchayats and municipalities. These measures could include: a) Imposition

of taxes on land/farm income, (b) Surcharge/cess on State taxes, and (c) Levy of professional taxes.

(iii) Suggestion for improvement in efficiency of collection of property/house tax as well as assignment of a suitable tax (with buoyant revenues) in lieu of octroi which was abolished.

(iv) Levy and periodic revision of user charges.

(v) Enactment of legislation to clearly delineate the functions of all three tiers of the PRIs; integration of the district rural development agencies and urban development agencies with the PRIs/ULBs; and a review of the Constitutional provision mandating States having a population of more than 20 lakh to have a three-tier Panchayati Raj system.

Twelfth Finance Commission

(i) Recommended a sum of Rs. 20,000 crore for the PRIs and Rs. 5,000 crore for ULBs for the five-year period starting 2005-06.

(ii) Identified 14 best practices which local bodies could usefully adopt including enhancing taxation powers, levy of user charges, setting up of SFCs in a timely manner, and regular maintenance of accounts and audit.

(iii) High priority to be given to creation of a data base, and the maintenance of accounts using modern technology and management systems.

Thirteenth Finance Commission

(i) State Governments must put in place a system to electronically transfer local body grants provided by the Commission to the respective local bodies within five days of their receipt from the Central Government.

(ii) All local bodies should be fully enabled to levy property tax (including tax for all types of residential and commercial properties) and any hindrances in this regard must be removed. Self-certification by the State Government will demonstrate compliance with this condition.

(iii) State Governments must put in place a State Level Property Tax Board. This will assist all municipalities and municipal corporations in the State to put in place an independent and transparent procedure for assessing property tax. The Board (a) shall enumerate all properties within the jurisdiction of the municipalities and corporations; (b) shall review the present

property tax system and make suggestions for a suitable basis for assessment and valuation of properties; and (c) shall make recommendations on modalities for periodic revisions.

(iv) Lack of resources often results in local bodies diluting the quality of services provided by them. State Governments must gradually put in place standards for delivery of all essential services provided by local bodies. State Governments must notify or order all the municipal corporations and municipalities to notify by the end of a fiscal year (31 March) the service standards for the four service sectors - water supply, sewerage, storm water drainage, and solid waste management - proposed to be achieved by them by the end of the succeeding fiscal year.

Fourteenth Finance Commission

(i) Local bodies should spend the grants only on the basic services as per the functions assigned to them under relevant legislations

(ii) The books of accounts prepared by the local bodies should distinctly capture income on account of own taxes and non-taxes, assigned taxes, devolution and grants from the State, grants from the Finance Commission, and grants for any agency functions assigned by the Union and State Governments.

(iii) Distribution of grants to the States using 2011 population data with a weight of 90 percent and area with a weight of 10 percent. The grant to each State will be divided into two - a grant to duly constituted gram panchayats and a grant to duly constituted municipalities; these will be based on urban and rural population of that State as given by the data in Census 2011.

(iv) Total size of the grant will be Rs. 2,87,436 crore for the period 2015-20, constituting an assistance of Rs. 488 per capita per annum at an aggregate level. Of this, the grant recommended to panchayats is Rs. 2,00,292 crore and that to municipalities is Rs. 87,144 crore.

(v) It recommended grants in two parts - a basic grant and a performance grant for duly constituted gram panchayats and municipalities. In the case of gram panchayats, 90 percent of the grant will be the basic grant and 10 percent will be the performance grant. In the case of municipalities, the division between basic and performance grant will be on an 80:20 basis.

(vi) The grants recommended by FC shall be released in two installments each year - in June and October. This will enable timely flows to local bodies during the year, enabling them to plan and execute better services. It recommended that 50 percent of the basic grant for the year be released to the State as the first installment for the year. The remaining basic grant and the full performance grant for the year may be released as the second installment in the year. The States should release the grants to the gram panchayats and municipalities within fifteen days of it being credited to their account by the Union Government.

(vii) Existing rules be reviewed and amplified to facilitate the levy of property tax, and the granting of exemptions be minimized. The assessment of properties may be done every four or five years, and the urban local bodies should introduce the system of self-assessment. It recommended that action be taken by the States to share information regarding property tax among the municipalities, State and Union Governments.

(viii) Levy of vacant land tax by peri-urban panchayats be considered. In addition, a part of land conversion charges can be shared by State Governments with municipalities and panchayats.

Fifteenth Finance Commission

(i) Total size of the grant to local governments should be Rs. 4,36,361 crore for the period 2021-26. It favoured a fixed amount rather than a proportion of the divisible pool of taxes to ensure greater predictability of the quantum and timing of grants fund flow.

(ii) Of these total grants, Rs. 8,000 crore are performance-based grants for incubation of new cities and Rs. 450 crore is allocated for shared municipal services. A sum of Rs. 2,36,805 crore is earmarked for rural local bodies, Rs. 1,21,055 crore for urban local bodies and Rs. 70,051 crore for health grants through local governments.

(iii) States must constitute SFCs, act upon their recommendations, and lay down the explanatory memorandum to the action taken thereon before the State legislature on or before March 2024. After this date, no grants should be released to a State that has not complied with the Constitutional provisions in respect of the SFC and these conditions.

(iv) Urban local bodies have been categorized into two groups as based on the population, and different norms have been used for flow of grants to each, based on their specific needs and aspirations. For cities with million plus population (Million-Plus cities), 100 percent of

the grants are performance-linked through the Million-Plus Cities Challenge Fund (MCF). Basic grants are proposed only for cities/towns having a population of less than a million. Category I cities (urban agglomerations with a population of more than one million) will be treated as a single unit for monitoring the performance indicators of ambient air quality and service level benchmarks. One-third of the total MCF of each city is earmarked for achieving ambient air quality. The balance two-third of the city-wise MCF is earmarked for achieving service level benchmarks for drinking water (including rainwater harvesting and recycling) and solid waste management. For drinking water (including rainwater harvesting and recycling) and sanitation and solid waste management criteria under service level benchmarks, the Ministry of Housing and Urban Administration (MoHUA) shall act as the nodal ministry for determining the eligible urban local bodies.

(v) State Governments, while deciding the share of basic grant among various urban local bodies in cities other than Million-Plus cities, shall also make allotment of grants (only under basic grants) on a per capita basis for the Cantonment Boards falling within the State.

(vi) A sum of Rs. 8,000 crore is recommended to be given to the States as grants for incubation of new cities and Rs. 450 crore for facilitating shared municipal services.

(vii) Since the ceiling for profession tax has not been revised for the last three decades, it is time that the relevant amendment to the Constitution is carried out on a priority basis.

The 15th Finance Commission has recommended a much lower share of untied local body grants than recommended by the Thirteenth and Fourteenth Finance Commissions. In the case of Tamil Nadu, the share of untied grants was 35.7 per cent of aggregate local body grants meant for Tamil Nadu (excluding those for health). The share of the untied grants would increase to 46.5 per cent. The details of (tied and untied) grants to urban local bodies allocated by the Centre as per the recommendations of Fifteenth Finance Commission are given in Table 8.1.

Table 8.1: Tied and Untied Grants Allotted to ULBs (Rs. Crore)

Year	Tied Grants	Untied Grants
2020-21	269.23	269.24
2021-22	166.09	110.73
2022-23	172.05	114.7
2023-24	181.9	121.27
2024-25	192.69	128.46
2025-26	196.41	130.94
Total	1178.37	875.34

8.3 Land Based Instrument to Augment Untapped Property Tax Potentials

Land, like labour and Capital, is a factor of Production. Economic Theories (Ricardian Theory of Rent, Modern Theory of Rent and the Marginal Productivity Theory of Distribution) have established the fact that land has the potential to augment future revenues.

The use of land as a source of financing urban infrastructure can be a very useful supplementary mechanism. At a time when government budgets are hard pressed and large scale borrowings are hard to come by, land-based financing could be an important option for local infrastructure finance. By leveraging the sensitivity of land values to urban economic growth and the principle that benefits of infrastructure are capitalized into land values, land-based financing instruments have come to play a key role in complementing other sources of capital finance.

The scale of land-based financing is also much larger in magnitude when compared to other sources of urban capital finance. Further, mobilizing finance from land transactions strengthens efficiency of urban land markets and rationalizes the pattern of urban development by sending out price signals to the market.

However, its role as an instrument of capital finance is restricted due to the following reasons:

(i) It is not a permanent and recurring source of revenue as land sales cannot continue indefinitely. So revenues from land financing should ideally not to be used to finance operating expenses and must be directed only to the capital budget.

(ii) Volatility inherent in land markets could simply reflect an asset bubble and world - wide economic conditions. Thus extrapolating past trends to prepare future investments plans could be risky.

(iii) The magnitude of revenues raised from land financing breeds the risks of favoritism, corruption and abuse of Government power if land-based transactions lack transparency and accountability.

(iv) It has been less frequently employed to finance investments in existing basic infrastructure services such as repair or upgrading water supply, waste – water collection or solid waste removal. The fact that water supply and other basic services agencies do not own excess land that can be sold or developed explains the lack of land-based financing in these areas

8.4 Normative Approach to Realize the Land Tax Potentials

In his book "The Wealth of Nations (1776)", Adam Smith (father of economics) argued that taxation should follow the four principles of fairness, certainty, convenience and efficiency. The normative approach to realize the tax potentials from land should be focused on the above four principles. Unfortunately, the ownership of land and the development rights caught between two extreme notions on the use of land as an instrument to mobilise resources. The first notion says that *"Individual land owner has no right to land rent and that can be fully taxed for community benefit"* (George, 1879). The second notion implies that *"development rights are owned by the State and can be taxed on allocation of individual land owner"* (Uthwatt Report).

The macroeconomic ethos also seems to commit to the notion of private property in land. Ownership of land and ownership of development rights have not yet been legally dissociated. So it is necessary to borne in mind that the notion of property rights in land (both in legal and economic sense) has to be clearly understood while designing land based fiscal tools.

In the present Indian context, though ownership of property is no longer a fundamental right, evolution of law seems to support that the State can compulsorily acquire land only for clearly defined public purpose and by paying fare and just compensation.

8.5 Land Based Fiscal Tools in India

The most commonly used land based fiscal tools currently in practice in various Indian States are:

(i) Land Value Increment Tax (LVIT)

(ii) Development Charge – Area based and Value based

(iii) Transfer of Development Rights (TDR)

(iv) Impact fees and Fees for regularization of unauthorized developments

Land Value Increment Tax (LVIT)

It is also known as betterment levy on the increase in the value of the land on account of implementation of improvement scheme or town planning scheme or specific project.

Example – Ponneri, a selection grade town panchayat in Tiruvallur District, located 37 kms from Chennai has the potential to tap additional resources by making use of the Land Based Fiscal tool LVIT. The land value in Ponneri has increased due to the fact that Ponneri is one of 100 TPs selected by the Government of India to upgrade as smart city. Besides this, the outer inner ring road laid by the State Government added further value to the land. Many Japanese Companies preferred to have their factories in Ponneri. The property tax for the year 2017-18 (latest data available in the website) accounted 13 percent (Rs.0.82 crore) of the total revenue (Rs.6.26 crore) of the TP. This was a 3 percent increase over 2016 -17. So Ponneri has the potential to tap additional resources by making use of the Land based instrument of LVIT.

Development Charges (Area and Value based)

They are onetime charges on area of land and /or buildings at the time of granting development permission. A similar onetime charge is collected on the value of the land.

Transfer of Development Rights

It is an indirect fiscal tool as a substitute for monetary compensation in case of acquisition of land for public purpose or as an incentive to achieve planning objectives.

Impact Fees and Fees for Regularization of Unauthorised Development

These fees are evaluated on the basis of the following six basic parameters: (i) Tax base, (ii) Efficiency, (iii) Equity, (iv) Adequacy, (v) Manageability and (vi) Legal Feasibility.

8.6 Land Based Instruments and Improved Collection Efficiency

An important question is that whether the land based fiscal instruments could improve the collection efficiency of the Town Panchayats. Unfortunately, the data about the revenue earned through the land based fiscal instruments are not readily available in the public domain. Moreover to access the fiscal efficacy of these instruments, it is also necessary to understand the proportion of such earnings to total budget size and to the proposed capital expenditure. This cannot be rigorously analyzed for want of systematic data.

However, Reddy (2010) in his study shows that all the ULBs and UDAs (Urban Development Authorities) in Andhra Pradesh and Maharashtra earned substantial revenue through the land based fiscal instruments. In Andhra Pradesh, the revenue earned through Land Based Fiscal Instruments was Rs. 311 crore in 2009-10 and Rs.227 crore in 2010-11 (Table 8.2).

Table 8.2: Revenue Earned from Land Based Fiscal Instruments in Andhra Pradesh (Rs. Crore)

Fiscal Instrument	Revenue Earned in the ULBs & UDAs	
	2009-10	2010-11
Building permit fee	72.42	56.59
Development Charges	79	52.25
Betterment Charges	74.75	55.8
Impact fees	41.08	24.18
Other Tools	43.75	38.18
Total	311	227

Moreover, the Development Charges in the Income of Hyderabad Metropolitan Authority (HMDA) constituted major share of the income ranging from 44 percent to 79 percent of the total income (Table 8.3).

Table 8.3: Development Charges in Hyderabad Metropolitan Authority (Rs. Crore)

Particulars	2006-07	2007-08	2008-09	2009-10
Development Charges	51.48	131.98	273.28	167.4
Other Receipts	64.22	60.33	73.35	91.44
Total Income	115.7	192.31	346.63	258.84
Develont. Charge as a % of Total Income	44%	69%	79%	65%

In Municipal Corporation of Greater Mumbai (MCGM), the total revenue accruing from Land based Fiscal instrument was estimated to be Rs. 2870 crore in 2012-13 (Table 8.4). This included value based development charges, premium for granting 0.33 FSI, premium for 35 percent extra FSI that was earlier treated as free of FSI, and premium for treating areas of staircases, passages as free of FSI.

Table 8.4: Income from Land Based Fiscal Instruments in MCGM (Rs.Crore)

Land Based Fiscal Instrument	2009-10	2010-11	2011-12	2012-13 (RE)	2013 – 14 (BE)
Development Charges	132.78	225.14	306.85	307.63	317.63
Premium for Addl.0.33 FSI	28.14	0.01	229.85	275	325
Compensatory Fungible FSI	-			910	915
Other Premium Charges	646.05			1005.47	1005.47
Miscellaneous Fees, Fines & Charges	320.46			372.33	384.31
Total	1127.43	1424.05	1480.88	2870.43	2947.41

From the above examples, it is clear that the Land Based Fiscal Instruments improves the collection efficiency.

8.7 Land Based Instrument Models Used to Mobilize Additional Resources

There are four generic Land based instrument Models that have been used in India to mobilize additional resources to the ULBs. They are:

Large – Scale Bulk Land Acquisition

Under this model the regulatory authorities acquire large area of land, develop and dispose of land and the gain from the land value accruing to the development authorities.

Example: The Delhi Development Authority (DDA) and the City and Industrial Development Corporation of Maharashtra - in case of Navi Mumbai (CIDCO) used this model. In this model, the land was acquired in 1960s and 1970s (prior to the amendment of Land Acquisition Act in 1984). The land was developed and disposed over a long period of time with entire land value gain accruing to the development authorities.

Sharing of Land

Under this model, the land development authorities acquire land with a clear indication that certain percentage of the land returned to the land owners. The prime plots (Corner plots) are auctioned to get substantial revenues to the development authorities.

Example: Bangalore Development Authority (BDA) used this model and handed over 40 percent of the land to the land owners. Indore Development Authority (IDA) – using the provision of Madhya Pradesh (1973) acquires and dispose of land for raising finances.

Town Planning Scheme

Under this model, assemble land and appropriate 40 to 50 percent of the land for public purposes including up to 15 percent for sale by the development authority that forms substantial revenue to them.

Example: Ahmedabad Urban Development Authority (AUDA) releasing the difficulties of large scale land acquisition adopted this model that emerges as an important source of revenues to them.

Development Scheme

Apart from the development authorities, Housing Boards and Industrial development corporations also use acquisition of land for their development objectives

Example: Tamil Nadu Housing Board (TNHB) in the early 1970s following the World Trade Fair in 1968 in Chennai acquired 5 km^2 (2 sq ml) area of a suburban village "Naduvakkarai" named it as Anna Nagar. The TNHB developed residential plots, apartments, commercial complexes, wide roads, school zones, bus terminals, and large parks and made substantial revenue.

Difficulties in using the above Models

Acquiring land as an instrument in gaining revenue is increasingly coming under stress and expensive. Moreover, ULBs have very little access in such ways of acquiring and using part of the land for remunerative purpose. So the question is: what is the alternative available to ULBs to use land as an instrument to gain revenue for its development activities?

The answer is: Make use of land assets built over a long period of time in the PPP (Public – Private Partnership) format (Simply conditional leasing of land) to build assets for public purposes and services (Hospitals, Markets, Public Parking).

8.8 Concluding Remarks

This Chapter has reviewed the recommendations of various Finance Commissions of India for local bodies to augment their resources particularly property tax revenues. It also discussed the land base instruments to augment Property tax. Following important points emerged:

(i) The Eleventh Finance Commission suggested for improvement in the efficiency of collection of property tax/house tax and assignment of suitable tax in lieu of octroi which was abolished. It also suggested for periodic revision of user charges

(ii) Twelfth Finance Commission suggested enhancing tax powers of local bodies, and levy of user charges

(iii) Thirteenth Finance Commission recommended that all local bodies should be fully enabled to levy property tax on all types of residential and commercial properties and the establishment of a State Level Property Tax Board which would enumerate all properties within jurisdiction of ULB and make suggestions for suitable basis for assessment and valuation of properties and make recommendations on modalities for periodic revisions.

(iv) Fourteenth Finance Commission recommended grants in two parts: (a) 90 percent grant will be the basic grant and 10 percent as performance grant for rural bodies and (b) for urban bodies, the division between basic and performance is 80:20 basis. It also recommended that assessment of properties must be done every four or five years and urban bodies should introduce the system of self assessment.

(v) Fifteenth Finance Commission recommended for fixing the ceiling for profession tax.It suggested for a much lower share of untied local body grants. For Tamil Nadu, the share of

untied grant was 35.7 percent of aggregate local body grant allotted to Tamil Nadu. At the same time, the untied grant was increased to 46.7 percent.

(vi) While the use of land as a source of financing urban infrastructure can be a very useful supplementary mechanism and the scale of land based financing is also much larger in scale, it cannot be a permanent and recurring source of revenue as land sales cannot continue indefinitely. This may breed the risk of favouritism, corruption and abuse of Government power.

(v) Land value increment tax, Development charges (area based and value based). Transfer of development rights and impact fees and fees for regularization of unauthorized development are most commonly used land based fiscal tools in India.

(vi) Studies indicate that all ULBs and UDAs in Andhra Pradesh and Maharashtra earned substantial revenue through the land based fiscal instruments.

(vii) Large scale bulk land acquisition, sharing of land, town planning scheme and development scheme are land based instrument model used by ULBs in India.

Given these, the first step for the ULBs and Town Panchayats is to update their data base on the properties in their location. This has not been done due to non-availability of sufficient manpower to undertake the survey of the properties in their respective areas and due to political interference and the power of the influential people to prevent ULBs and TPs for such a move. Now, the latest technology is available to identify the properties that are not recorded in the Town panchayats records.

Many ULBs do not have accountability of the land they own. Using GIS based technology, every ULBs can undertake a GIS based inventory of lands owned by it. The inventory should cover Tenure (if leased, lease period, covenants, lease rent etc), current use, if built constructed area and consumed FSI, permissible built-up area at permissible FSI, assessed value of land etc. Based on such inventory, vacant lands, plots with obsolete use and plots with underutilized FSI could be identified. This in turn should provide the basis for using ULB lands for generating additional financial resources.

Further the TPs would consider for integrating an element of revenue flows of the Town Panchayats into their infrastructure plans. This will provide cash flows to service the debt/capital also the surpluses any to redeploy. So there is a direct stake for the Town

panchayats successful in income terms rather than capital value terms (that creates bubbles). The TPs should take up an equity stake in commercial developments based on land price at the time of transfer to developers. Downstream sales will thus contribute earnings to the TPs. Finally, the TPs can charge a small fee for the specific area based taxes for newer developments such as Road, water/sewage and electricity footprint etc that will contribute a steady income to the TPs. As a result, all the properties in that area benefits in terms of price rise etc.

Chapter 9

SUMMARY OF FINDINGS AND CONCLUSIONS

9.1 Introduction

Although the 73rd and 74th Amendments of Constitution Act 1992 accorded the statutory status to local bodies in the country, they are not yet the institutions of self reliant. They are unable to generate revenue on their own to meet even their recurring expenditures and rely heavily on higher levels of Government for resources, acting as agents for the implementation of higher level Government projects. Implementation of GST in 2017 affected further the municipal finances as it has subsumed local taxes such as octroi, entry tax, advertisement tax etc. While the property tax is an important urban local tax in the country, the productivity and performance of the property tax is in general very poor due to the fact that the autonomy of urban local Governments in formulating property tax policy, or designing the system is severely restricted. Increased urbanization would also give more pressure on municipal services and urban infrastructure in States like Tamil Nadu which is the most urbanized State in the country. As the property tax has the potential to improve the finances of urban local bodies, this study has attempted to track the untapped property tax potential in urban local bodies in Tamil Nadu with special focus on Town Panchayats. Utilizing the town panchayat wise data on population, area, income and expenditures, property tax revenues, and its components, collection and demand, exempted properties from 2015-16 to 2020-21, provided by the Sixth State Finance Commission and other secondary data available in public domain, this study has analyzed the trends in various fiscal indicators and their growths over the years, concentrating more on demand and collection efficiency of property tax, the trends in property tax assessments and revenue components, exempted properties etc. Based on the analyses, it has identified various untapped property tax potentials of town panchayats in Tamil Nadu, it has projected many parameters including population, revenue components, expenditures etc till 2026-27, and provided policy suggestions to augment property tax revenues.

9.2 Summary of Major Findings and Policy Suggestions

A. State Economy

(1) Tamil Nadu economy grew at an average rate of 6.42 percent from 2015-16 to 2020-21 and the COVID-19 pandemic affected its growth in the last two years.

(2) The secondary sector grew at 8.15 percent while the primary and the tertiary sectors grew at 5.38 percent and 4.85 percent respectively. Slow down in the growth of service sector is the major concern.

(3) Tamil Nadu ranked 6th in per capita income (with Rs. 2.13 lakh) among major Indian States in 2019-20. Wide income inequality exists among districts in the State. The top district Thiruvallur's per capita income of Rs. 2.96 lakh was about 3.14 times higher than the per capita income of poorest district Thiruvarur of Rs. 94290 in 2017-18.

(4) The State compares well with other Indian States in poverty reduction. It ranks first in the SDG index Goal 1 (No poverty) released by NITI Aayog. However, its labor participation rate has been steadily declining from 61.1 percent in September 2016 to 43.9 percent in March 2020.

B. State Government Finances

(5) The key fiscal parameters-revenue deficit, fiscal deficit and public debt relative to GSDP have been kept as per the norms of FRBM legislation for many years. However, in 2017-18 and 2018-19, its revenue deficit exceeded 1 percent of GSDP. Due to pandemic, the revenue deficit-GSDP ratio increased to 1.94 percent in 2019-20 and further to 3.4 percent in 2020-21RE. This is the concern as part of net borrowed amounts is used to meet the revenue expenses.

(6). Due to pandemic, the fiscal deficit-GSDP ratio also increased to 3.24% in 2019-20 and 4.99% in 2020-21RE. The outstanding liabilities of the State would be about Rs.485503 crore (25% of GSDP) in 2020-21 RE. While this is within the debt path set by the 15th Finance Commission, it seems to be unsustainable as the New FRBM committee suggested only 20 percent level for Indian States.

(7) From 2015-16 to 2020-21, the revenue receipts grew only at 7.16 percent whereas the revenue expenditure grew at 11.93 percent. Own tax revenue grew only at 6.52 percent and almost all major taxes also grew at a lower rate than the (nominal) GSDP growth of 10.12 percent. Therefore, own tax buoyancy is less than one. This is a major concern.

(8) The 15th FC also has reduced the Tamil Nadu's share in Central transfers

C. Financial Status of ULBs in Tamil Nadu

(9) Currently there are 15 municipal corporations, 121 municipalities and 528 town Panchayats in Tamil Nadu, i.e. a total of 664 ULBs.

(10) From 2011-12 to 2016-17, the total expenditure of all ULBs increased from Rs. 4780 crore to Rs. 13301 crore while the total income increased from Rs. 6373 crore to Rs. 12677 crore

(11) During 2011-12 to 2016-17, own revenues of ULBs increased from Rs. 2148 crore to Rs. 3776 crore and transfers from Rs. 4000 crore to Rs. 6937 crore. Thus, the share of transfers in total revenues declined from 62.76 percent to 54.72 percent.

(12) From 2011-12 to 2017-18, property tax revenues of ULBs increased from Rs.971.7 crore to Rs. 1827.5 crore. The average growth of property tax revenue was 12.51 percent in municipal corporations, 9.36 percent in municipalities and only 7.65 percent in town panchayats. So its buoyancy was 1.06 for municipal corporations, 0.79 for municipalities and only 0.65 for town panchayats. Low buoyancies in both municipalities and town panchayats are major concern.

(13) Property tax-GSDP ratio of all ULBs ranged between 0.12 and 0.133 as against the target of 0. 6 percent in 2021-22, suggested by Fifth State Finance Commission.

(14) Interstate comparison reveals that the share of own revenues in total revenues of all ULBS in Tamil Nadu was 16.4 percent in 2017-18 while it was 66.6 percent in Punjab. Per capita property tax revenue for all ULBs in Tamil Nadu was only Rs. 487 and it was Rs. 1942 in Gujarat and Rs. 1512 in Maharashtra. It seems that this tax has the potential to bring more revenues to ULBs in Tamil Nadu.

D Financial Status of Town Panchayats in Tamil Nadu

(15) There are 528 TPs in Tamil Nadu which spread over about 7125 sq. km area. The total population of all TPs was 94.27 lakhs in 2020-21 and it is expected to increase to 1.05 crore in 2025-26.

(16) In 60 TPs, the population already exceeded 30,000. It is essential to either up-grade them based on population norms or revise the population norm. Income of many TPs also already

increased significantly and so these TPs need to be upgraded or income norm need to be revised.

(17) While aggregate income of all TPs increased from Rs. 2886 crore in 2015-16 to Rs. 4278 in 2018-19 and then it declined to Rs. 3865 crore in 2020-21 (due to pandemic effect), the total expenditures continuously increased from Rs. 3033 crore to Rs. 3920 crore

(18) The overall budget of TPs showed a surplus of Rs. 567 crore in 2018-19, but it showed a deficit of Rs. 54 crore in 2020-21. In 2020-21, only the overall account for special grade TPs showed surplus while others showed deficit. 302 TPs incurred deficit in 2020-21 and 226 showed surplus. Thus, in about 57 percent of TPs in Tamil Nadu, there is a mismatch between growing expenditures and deteriorating finances.

(19) Since the total income of all TPs grew at only 6.67 percent, the income buoyancy was only 0.659. This is the major concern.

(20) During 2015-16 to 2020-21, the revenue buoyancy for all TPs was 0.59. It was 0.97 for special grade TPs, 0.51 for selection grade TPs, 0.44 for grade 1 TPs and 0.38 for grade 2 TPs. The revenue buoyancy of selection grade, grade 1 and grade 2 TPs should increase.

(21) The total expenditure of all TPs grew at 5.57 percent during 2015-16 to 2020-21. However, the revenue expenditure grew at 6.6 percent.

(22) The total own revenues of all TPs was Rs. 1171 crore, accounting for 57.68 percent of total revenues. During 2015-16 to 2020-21, it grew at an annual rate of 13.1 percent and the own revenue buoyancy was 1.3. Interestingly, the number of TPs with more than 50 percent of own revenue increased from 119 in 2015-16 to 313 in 2020-21.

(23) The share of transfers in total revenues was 56.1 percent in 2015-16 and it declined to 42.3 percent in 2020-21.

(24) As transfers are positively correlated with income and expenditures of TPs, there is an incentive effect of transfers on expenditures and a crowding-in effect on revenues of TPs.

(25) It is projected that own revenues of TPs would reach Rs. 3289.33 crore in 2026-27; the total revenues would increase to Rs. 5961 crore; total income would increase to Rs. 11280 crore; revenue expenditure would rise to Rs. 5669 crore and total expenditure to Rs. 15542 crore; and the overall deficit would increase to Rs. 4262 crore.

E. Performance of Property Tax of TPs in Tamil Nadu

(26) The property tax rate was kept constant in each town panchayat over the years. However, the rate varied significantly from 1 percent to 61 percent with average rate of 11.5 percent.

(27) The total number of assessments of property tax increased from 25.37 lakhs in 2015-16 to 28.02 lakhs in 2020-21. The number of assessments grew at average rate of 3.1 percent in special grade TPs, 1.9 percent in both selection and grade 1 TPs, and 1.5 percent in grade 2 TPs. The overall growth rate was only 2 percent.

(28) The overall property tax collection efficiency was 74.48 percent in 2015-16 and it increased to 85.19 percent in 2020-21. The average efficiency was 76.76 percent. TPs should aim to achieve 100 percent efficiency.

(29) The total property tax revenues of all TPs amounted to Rs. 126.46 crore in 2015-16 and increased to Rs. 223.45 crore in 2018-19 and then declined to Rs. 178.52 crore in 2020-21. However, the property tax revenues registered about 10 per cent annual growth and average tax buoyancy was is closer to 1. The tax buoyancy was 1.1 for both special grade and grade 1 TPs. It was 0.9 for selection grade TPs and 1.3 for grade 2 TPs.

(30) The general purpose tax accounted for about 32.8 percent of total property tax revenues, residential tax accounted for 50.04 percent, commercial components accounted for 11.4 percent and industrial components accounted for 3.95 percent.

(31) As on 31.03.2020, there were 2337 charitable and religious institutions, 1784 educational institutions, 25 monuments of tourist attractions and 3070 other properties that were exempted in all TPs. The revenue loss from these exempted properties was estimated at Rs. 4.18 crore. This lis may not be exhaustive one.

(32) The aggregate property tax revenues of all TPs would increase to Rs. 688 crore in 2026-27 using 5-year average growth rate. Using three-year average rate (excluding growth rates during pandemic years), they would increase to Rs. 1925.73 crore.

(33) Total number of assessments would increase from 28.02 lakh in 2020-21 to 77.87 lakh in 2026-27.

F. Normative Ways to Tap the Untapped Property Tax Potentials

(34) There are various reasons for low performance of property tax (a) While the State Government issued an order on 19.07.2018 to revise property tax rate with effect from April 1, 2018 (it allows up to 50 percent rate for residential buildings and up to 100 percent for others) the revision is bending as the Government is still waiting for the report from the Property tax committee. Currently the average rate in TPs is 11.5 percent; (b) Property records are not maintained properly; (c) lack of accurate property tax rolls; (d) no proper methodology for evaluating and updating property values that should be closer to market value; (e) there is a wedge between tax demanded and tax collected; (f) loss of revenues due to exempted properties; etc.

(35) **Revenue Mobilization through Rate Revision**: If all TPs in Tamil Nadu had applied 20 percent rate instead of actual rate, the property tax yield would have been doubled to Rs. 343.73 crore in 2020-21 instead of th actual yield of Rs. 178.52 crore. Similarly applying 30 percent, 40 percent and 50 percent rate would have increased the yield to Rs. 515.61 crore, Rs. 687.48 crore and Rs. 892.60 crore. Since property tax rate revision is pending for many years and higher rate will bring more revenues, the Government needs to consider higher rate revision. The periodic revision of rate and use of updated market value of property would definitely bring high property tax yield to TPs in Tamil Nadu so that they can be more self-reliant.

(36) **Additional Revenues through Improved Collection Efficiency**: Since the average property collection efficiency of TPs in Tamil Nadu was 76.76 percent during 2015-16 to 2020-21, they need to improve their collection efficiency to 100 percent. If they had 100 percent collection efficiency, their property tax revenues would have been Rs. 1307.94 crore in six years instead of the actual yield of Rs. 999.38 crore. If the rate would have been 50 percent, the total yield in 6 years would have been Rs. 6471.27 crore.

(37) **Additional Revenues from Exempted Properties**: From 2015-16 to 2020-21, the assessment from the exempted properties increased from Rs.3.17 crore to Rs. 4.18 crore. However, there could be many more properties that are not in tax roll. Further, rate revision and updating property valuation will bring more revenues.

(38) **Raising Revenues based on Recommendation of Fifth State Finance Commission:** To meet the property tax revenue target of 0.6 percent of GSDP for ULBs in 2021-22 as

recommended by the Fifth State Finance Commission, the TPs should raise Rs. 1284.44 crore instead of the projected amount of Rs. 201.28 crore with current trend. This could be possible only if all TPs levy 60 percent rate.

(39) **Realizing Full Tax Potentials Measured Using the Frontier Approach**: The frontier approach shows that for special grade TPs, the average tax efficiency ranged between 18.19 percent and 38.88 percent over six years; for selection grade TPs, it ranged between 7.86 percent and 27.79 percent; for grade 1 TPs, it varied from 25.56 percent to 34.3 percent and for grade 2 TPs, the average efficiency varied from 14.69 percent to 21.47 percent. These results indicate that huge property tax potentials are not yet realized fully. If all TPs would have realized their full potentials, the aggregate property tax revenues in six years would have been Rs.5184 crore instead of realized amount of Rs. 999 crore. If all TPs would have levied 50 percent rate, this would have been more than Rs. 25,000 crore.

G. Use of Land Based Instruments to Augment Property Tax Revenues

(40) While the use of land as a source of financing urban infrastructure can be a very useful supplementary mechanism and the scale of land based financing is also much larger in scale, it cannot be a permanent and recurring source of revenue as land sales cannot continue indefinitely. This may breed the risk of favouritism, corruption and abuse of Government power.

(41) Land value increment tax, Development charges (area based and value based), Transfer of development rights and impact fees and fees for regularization of unauthorized development are most commonly used land based fiscal tools in India.

(42) Studies indicate that all ULBs and UDAs in Andhra Pradesh and Maharashtra earned substantial revenue through the land based fiscal instruments.

(43) Large scale bulk land acquisition, sharing of land, town planning scheme and development scheme are land based instrument model used by ULBs in India.

(44) There is a need to update the data base on the properties in their location using the latest technology available to identify the properties that are not recorded in their records.

(45) Many local bodies do not have accountability of the land they own. Using GIS based technology, they can undertake a GIS based inventory of lands owned by it. The inventory should cover Tenure (if leased, lease period, covenants, lease rent etc), current use, if built

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constructed area and consumed FSI, permissible built-up area at permissible FSI, assessed value of land etc. Based on such inventory, vacant lands, plots with obsolete use and plots with underutilized FSI could be identified. This in turn should provide the basis for using their lands for generating additional financial resources.

(46) Further there is a need to integrate an element of revenue flows of the Town Panchayats into their infrastructure plans. This will provide cash flows to service the debt/capital also the surpluses any to redeploy. So there is a direct stake for the Town panchayats successful in income terms rather than capital value terms (that creates bubbles). The TPs should take up an equity stake in commercial developments based on land price at the time of transfer to developers. Downstream sales will thus contribute earnings to the TPs. Finally, the TPs can charge a small fee for the specific area based taxes for newer developments such as Road, water/sewage and electricity footprint etc that will contribute a steady income to the TPs. As a result, all the properties in that area benefits in terms of price rise etc.

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(in Rs. Lakhs)

District / TPs	Grade	2015-16		2016-17		2017-18		2018-19		2019-20		2020-21	
		Potential Property Tax	Tax Efficiency (%)	Potential Property Tax	Tax Efficiency (%)	Potential Property Tax	Tax Efficiency (%)	Potential Property Tax	Tax Efficiency (%)	Potential Property Tax	Tax Efficiency (%)	Potential Property Tax	Tax Efficiency (%)
Ariyalur													
Udayarpalayam	3	39.97	23.50	45.27	21.80	44.90	22.89	78.46	17.17	73.20	18.04	83.22	16.33
Varadarajanpettai	4	33.30	16.91	34.25	17.73	38.73	17.02	63.60	16.14	55.07	14.94	76.28	11.14
Chengalpet													
Acharapakkam	3	34.74	24.19	40.48	20.52	32.15	32.15	55.22	28.04	48.40	28.07	49.10	26.26
Chitlapakkam	1	245.91	92.75	441.76	54.31	657.30	37.63	561.02	58.20	305.05	95.55	410.23	70.05
Edakalinadu	4	75.94	13.65	87.32	11.97	101.34	11.35	118.08	9.13	116.46	14.20	196.96	8.82
Karunguzhi	3	35.87	52.28	44.32	43.98	42.57	55.81	68.00	45.83	56.59	47.52	58.96	41.90
Madambakkam	1	251.12	30.79	540.29	16.31	378.38	25.98	394.91	31.84	279.44	45.97	528.12	25.54
Mamallapuram	1	106.84	98.90	179.85	52.44	310.99	36.53	193.64	57.44	189.91	47.67	288.54	38.35
Nandivaram-Guduvanch	1	237.37	48.07	400.37	30.98	569.92	26.14	583.30	32.73	232.07	75.25	350.55	42.51
Peerkankaranai	2	305.99	17.60	770.55	9.46	281.60	25.53	544.68	13.20	598.97	15.22	335.33	24.68
Perungalathur	1	313.99	40.10	685.21	27.43	855.18	23.44	628.00	45.52	436.12	62.55	737.13	32.83
Thiruneermalai	1	209.65	27.12	258.83	22.92	340.67	18.08	345.24	24.76	173.62	48.93	283.39	27.93
Thiruporur	1	104.02	77.18	241.26	36.01	253.67	36.64	367.87	38.54	229.28	58.23	246.59	43.13
Tirukalukundram	1	107.38	41.80	209.65	22.21	248.90	18.99	295.01	20.00	232.15	26.68	341.32	16.01
Coimbatore													
Alanthurai	4	23.00	100.00	27.16	100.00	27.11	100.00	44.29	100.00	39.00	100.00	56.12	76.39
Anaimalai	2	40.84	79.45	297.84	100.00	56.47	68.65	137.34	44.58	84.68	57.81	57.18	77.59
Annur	1	143.48	45.48	237.12	29.13	364.62	21.54	282.37	46.34	192.10	50.11	332.29	31.98
Chettipalayam	3	38.05	51.24	42.73	56.29	44.76	61.70	81.75	50.57	72.24	54.71	83.70	49.30
Dhaliyur	1	123.25	29.54	196.32	20.49	297.91	15.70	251.73	25.25	136.26	43.44	208.87	26.33
Ettimadai	3	29.96	83.79	33.50	91.92	33.56	100.00	62.47	94.65	50.75	100.00	50.75	100.00
Gudalur	1	195.28	52.34	490.19	22.49	425.52	27.64	360.08	50.78	395.83	34.91	559.45	24.25
Idikarai	3	42.24	63.44	48.47	64.22	56.18	84.32	101.07	64.42	94.18	72.05	119.93	60.98
Irugur	1	147.53	65.25	346.01	29.89	476.97	22.27	401.32	43.72	218.49	66.17	523.65	37.24
Kannampalayam	2	205.76	56.79	573.58	22.09	192.96	74.31	575.63	42.42	369.55	46.25	239.23	70.72

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Karamadai	2	320.89	27.98	863.91	11.40	329.90	30.83	748.08	25.81	737.89	27.21	431.80	32.98
Karumathampatti	1	266.84	26.15	624.93	12.41	459.24	17.75	365.10	32.71	260.38	45.27	529.72	22.34
Kinathukadavu	2	104.48	38.98	321.11	13.37	89.68	51.56	249.22	34.09	218.30	26.03	142.26	70.29
Kottur	1	150.72	44.92	190.20	38.10	284.54	27.03	188.75	62.09	131.67	67.91	264.72	32.00
Madukkarai	1	139.39	63.25	321.78	31.78	444.98	25.41	547.09	31.70	266.14	54.39	450.81	31.42
Mopperipalayam	3	42.47	92.50	52.22	80.59	45.51	99.22	87.20	91.68	72.42	92.88	106.52	53.01
Narasimhanaickenpala	1	127.30	53.65	284.50	25.92	396.75	20.68	299.10	44.55	240.95	45.60	366.46	25.65
Odaiyakulam	3	35.05	29.84	36.80	30.59	37.68	32.13	66.29	27.06	60.73	23.34	61.95	22.97
Othakalmandapam	2	106.70	36.45	373.40	11.04	124.83	52.85	309.25	38.57	287.05	33.40	189.77	47.77
Pallapalayam	2	123.89	88.88	325.34	35.45	159.57	75.09	286.23	65.64	211.77	69.79	133.66	100.00
Periya Negamam	3	31.81	32.15	30.67	37.18	29.65	83.47	47.90	87.96	51.01	56.52	50.41	57.92
Periyanaickenpalayam	1	175.14	44.91	375.39	22.33	532.21	16.01	389.99	37.01	259.75	43.90	409.88	25.34
Perur	3	28.99	57.93	29.47	59.28	28.13	64.34	61.41	47.33	49.85	61.01	72.97	29.82
Pooluvapatti	2	100.10	13.60	299.92	35.33	94.37	15.88	223.94	10.85	190.56	11.16	96.37	21.16
Samathur	3	17.43	62.29	20.48	58.73	19.49	62.50	41.04	52.50	30.70	44.80	26.60	50.98
Sarcarsanakulam	2	153.41	39.93	495.72	14.72	258.96	31.90	564.76	21.50	444.37	26.04	280.26	44.24
Sirumugai	2	144.97	34.23	342.76	15.00	112.25	47.22	218.63	19.43	245.15	14.35	142.96	27.07
Suleeswaranpatti	3	54.38	45.73	51.35	53.94	58.12	52.40	96.28	49.54	102.15	38.33	75.21	54.60
Sulur	1	146.98	56.47	281.19	30.86	596.95	15.19	356.60	41.86	229.97	55.69	383.06	29.88
Thenkarai	4	24.05	19.44	25.40	19.40	29.44	18.40	45.82	16.85	38.15	15.61	67.02	11.80
Thirumalayampalayam	3	37.36	48.31	41.38	45.45	40.71	49.45	66.98	47.12	56.85	44.10	72.26	48.44
Thondamuthur	3	47.31	46.20	54.57	43.22	69.44	35.09	93.09	43.37	85.53	38.33	87.40	36.30
Vedapatti	3	44.70	60.38	50.12	72.84	47.00	84.47	98.84	57.29	69.79	67.99	81.28	57.02
Veerapandi	2	172.06	24.60	573.35	8.25	210.57	24.64	510.36	15.32	455.51	15.03	300.84	23.15
Vellalur	1	190.50	46.62	361.09	25.38	557.27	19.08	583.39	25.38	221.96	75.00	475.62	34.33
Vettaikaranpudur	2	82.98	22.09	331.15	5.75	93.57	22.06	204.66	14.69	177.77	13.04	163.13	13.65
Zamin Uthukuli	1	89.24	43.41	185.05	22.48	412.40	10.59	325.78	19.08	138.17	37.57	218.18	24.26
Cuddalore													
Annamalai Nagar	1	124.62	19.74	147.52	16.76	236.31	10.46	236.82	19.96	148.06	23.98	356.42	9.46
Bhuvanagiri	2	127.69	15.98	399.85	5.30	149.06	14.92	251.55	14.07	350.97	7.11	153.45	15.97
Gangaikondan	2	74.39	20.11	280.70	5.45	88.95	17.99	215.68	11.54	181.15	9.96	109.65	15.51
Kattumannarkoil	2	174.34	15.67	529.45	5.34	186.41	15.76	411.04	11.52	310.97	10.94	217.53	15.67

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Place		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12
Killai	4	40.24	12.38	43.63	12.57	47.01	11.82	65.64	12.64	59.39	10.88	96.77	6.76
Kurinjipadi	2	173.47	18.26	513.55	6.35	181.72	18.99	339.24	17.51	363.90	10.97	237.29	16.64
Lalpet	3	40.44	80.35	39.58	85.59	39.48	88.11	78.34	71.04	64.61	65.07	72.73	45.21
Mangalampet	3	36.66	40.32	40.64	37.58	39.93	39.32	67.45	41.47	64.51	29.96	62.12	31.20
Melpattampakkam	3	22.26	20.71	21.86	22.85	21.50	25.53	42.57	21.97	38.80	17.37	38.91	17.96
Parangipettai	2	230.45	11.97	728.09	4.08	280.80	12.52	426.53	11.28	530.26	6.57	278.38	12.64
Pennadam	2	165.37	12.26	672.09	2.39	220.81	7.88	478.87	5.40	434.50	6.99	235.82	11.20
Sethiathoppu	2	73.97	31.13	236.34	9.75	69.97	33.75	190.07	22.19	166.59	16.07	111.91	23.02
Srimushnam	2	104.17	11.15	391.82	3.19	122.10	10.94	265.70	7.90	311.71	4.94	174.34	8.82
Thittakudi	2	226.85	25.00	873.00	4.43	299.32	14.07	629.95	8.48	655.61	8.46	244.25	23.28
Thorapadi	3	20.55	35.69	22.03	34.53	22.54	36.14	40.84	31.95	36.64	32.73	32.91	29.56
Vadalur	2	118.09	38.47	323.10	14.88	98.70	51.08	200.90	41.49	241.96	25.60	148.18	40.15
Dharmapuri													
B.Mallapuram	3	26.50	50.23	25.87	53.44	24.60	56.81	59.29	66.10	55.31	47.96	57.64	43.54
Harur	2	203.70	20.88	441.41	13.30	203.27	33.39	410.92	12.20	433.91	14.31	362.08	18.84
Kadathur	2	96.84	13.02	470.75	2.80	142.17	9.67	295.98	7.41	265.88	6.03	166.10	9.61
Kambainallur	3	34.23	28.82	35.74	29.23	36.32	29.67	63.58	25.23	58.29	19.37	62.40	19.67
Kariamangalam	2	108.77	20.00	311.27	7.59	118.99	21.96	322.72	12.62	288.55	10.60	163.42	19.21
Marandahalli	2	108.54	13.85	390.97	3.93	132.45	11.82	266.14	9.65	252.04	7.21	167.09	10.55
Palakkodu	2	207.70	12.44	799.59	3.35	283.68	9.89	589.04	7.71	574.56	5.53	276.64	11.59
Papparapatti	2	105.16	10.42	320.74	3.68	130.29	9.25	223.34	4.88	240.98	11.53	153.77	10.41
Pappireddipatti	2	65.44	21.03	198.66	7.31	71.67	21.58	133.43	18.73	116.48	16.01	121.12	15.07
Pennagaram	2	91.84	18.85	278.82	4.51	96.90	15.70	210.69	7.58	195.75	17.41	215.91	19.89
Dindigul													
Agaram	3	42.87	100.00	51.10	84.63	60.04	77.81	99.44	81.79	84.59	79.34	89.71	53.76
Ammainaickanur	2	109.27	19.33	476.62	4.66	151.26	15.25	383.71	10.12	320.14	9.37	170.35	16.11
Ayakudi	2	121.19	9.02	363.86	3.09	161.24	8.13	416.96	4.88	351.74	4.51	196.23	8.54
Ayyalur	3	34.94	18.38	37.20	22.21	38.93	23.82	90.96	16.20	69.78	17.81	64.09	20.51
Ayyampalayam	2	84.93	10.31	248.38	3.68	96.33	10.05	202.93	7.76	180.14	7.13	133.35	9.07
Balasamudram	2	129.86	4.22	379.13	1.54	109.58	5.75	329.36	3.37	243.84	3.46	180.35	4.12
Batlagundu	1	118.85	38.34	233.47	20.36	356.68	14.44	322.15	28.64	210.55	32.06	347.04	18.60
Chinnalapatti	1	167.58	38.28	387.85	17.54	415.02	17.13	403.63	27.13	239.90	36.62	442.13	21.85

Eriodu	4	35.80	19.03	34.32	20.96	40.56	19.56	70.86	12.12	61.63	15.05	79.96	11.83
Kannivadi	3	32.00	18.85	30.84	20.62	36.28	19.62	61.44	17.85	53.50	15.72	61.16	12.88
Keeranur	3	22.33	20.05	23.08	22.00	22.74	24.01	42.22	20.12	30.85	23.15	44.16	15.43
Natham	2	168.91	17.58	590.15	5.37	238.37	15.67	436.78	13.67	358.79	12.35	192.97	22.86
Neikkarapatti	2	79.09	19.31	285.74	4.71	96.07	14.81	220.35	8.64	182.98	8.57	120.88	13.65
Nilakkottai	2	167.46	29.59	464.18	11.15	236.08	22.68	501.68	18.71	451.66	17.26	295.43	26.49
Palayam	2	87.33	31.82	258.30	10.98	106.32	27.86	242.08	20.81	190.51	19.23	140.94	25.28
Pannaikadu	2	87.82	10.49	260.42	3.71	91.47	11.33	263.62	4.06	187.34	5.94	114.37	10.39
Pattiveeranpatti	2	91.73	18.14	330.67	5.37	97.33	19.04	199.45	14.81	202.13	12.76	157.53	15.04
Sevugampatti	3	47.15	38.55	44.39	46.68	49.60	46.34	78.97	48.14	83.78	38.79	83.52	37.05
Sithayankottai	2	92.12	15.03	339.07	4.28	121.40	12.63	270.51	9.84	248.55	7.79	152.95	12.41
Sriramapuram	3	27.98	20.25	26.64	22.14	26.48	23.84	47.69	22.12	42.92	20.76	40.65	20.31
Thadikombu	3	41.86	31.66	47.23	30.23	53.86	29.89	93.76	27.97	89.53	26.44	90.26	23.39
Vadamadurai	3	61.10	49.49	74.10	42.24	74.15	44.59	144.12	39.38	133.02	28.38	112.31	33.57
Vedasandur	2	137.21	21.24	455.25	6.50	150.05	20.91	430.63	11.81	344.98	10.57	183.14	19.65

Erode

Annmapettai	4	28.87	23.71	27.82	26.08	31.88	24.20	64.86	21.26	54.07	19.14	74.78	14.08
Anthiyur	2	153.24	28.17	419.68	10.94	167.33	28.68	429.37	18.75	411.09	14.13	249.75	23.23
Appakudal	2	68.75	27.90	240.82	8.10	88.87	22.32	172.78	21.70	172.29	12.23	129.86	16.50
Arachalur	3	34.28	20.52	36.87	19.52	42.87	18.00	66.89	18.31	61.55	16.30	65.25	14.70
Ariyappampalayam	3	41.26	56.28	41.39	60.24	42.47	59.20	76.22	56.40	70.89	35.97	86.34	29.38
Athani	3	23.25	29.45	25.67	28.25	23.17	33.19	43.22	26.97	40.27	21.76	44.64	20.74
Avalpoondurai	3	37.14	37.96	41.34	35.79	42.37	36.24	74.56	33.42	66.13	27.32	73.03	24.10
Bhavanisagar	2	83.60	33.29	301.61	10.04	115.76	27.59	260.30	21.76	253.66	18.24	165.77	26.03
Chennasamudram	3	25.81	23.23	28.21	22.97	24.24	28.23	44.78	24.83	43.83	21.95	45.18	21.12
Chemmimalai	2	132.07	23.79	428.70	7.95	158.44	22.43	291.34	19.20	311.93	14.39	149.39	28.09
Chithode	2	73.04	16.12	287.64	4.29	82.14	15.58	166.65	12.52	162.43	10.49	110.34	16.86
Elathur	4	26.81	15.54	28.77	14.93	28.69	15.69	55.12	12.22	47.77	10.55	74.82	6.90
Jambai	3	34.74	20.79	38.12	20.21	41.31	20.21	71.13	17.77	68.89	17.33	77.25	17.48
Kanjikoil	3	34.39	31.85	40.29	27.77	38.12	30.41	63.76	29.19	63.47	21.53	58.90	22.46
Karumandi Chellipala	2	191.35	31.52	641.06	10.12	201.21	33.35	463.46	22.00	472.57	16.68	294.67	27.08
Kasipalayam(G)	3	25.45	38.75	27.74	36.51	24.78	41.44	43.56	23.84	41.20	27.63	44.61	26.08

Kembainaickenpalayam	4	28.75	14.95	25.36	17.33	30.45	14.94	59.57	11.93	50.10	9.32	71.18	7.75
Kilampadi	4	21.88	29.63	20.35	33.69	23.18	31.78	46.63	28.35	37.11	22.52	49.64	17.06
Kodumudi	2	122.20	21.37	456.22	6.11	153.80	19.43	284.57	16.69	284.01	12.43	157.58	22.32
Kolappalur	3	31.45	87.79	28.10	100.00	32.25	87.54	51.01	100.00	51.22	62.45	51.51	63.04
Kollankoil	3	25.93	15.59	27.02	16.05	25.18	17.98	39.85	18.89	38.19	12.40	35.99	18.09
Kuhalur	2	51.54	18.86	180.38	5.55	74.46	14.45	220.99	8.32	169.85	7.86	97.95	13.61
Lakkampatti	2	91.12	20.66	242.60	8.01	101.63	20.87	363.16	9.30	263.79	10.51	170.52	16.39
Modakurichi	3	28.99	36.13	28.42	39.67	32.10	37.07	54.63	40.38	46.60	36.30	60.18	28.28
Nallampatti	3	12.64	20.28	12.72	20.86	12.32	22.38	21.47	20.13	16.31	20.61	20.80	18.46
Nambiyur	2	108.71	33.76	337.50	11.50	123.20	32.88	350.07	19.47	301.63	17.09	250.57	19.42
Nasiyanur	3	31.70	48.07	32.67	49.90	30.47	66.14	80.29	71.00	74.76	44.54	70.69	50.39
Nerunjipettai	3	16.10	45.29	17.14	43.70	18.74	41.41	33.11	37.57	27.81	30.75	28.16	30.96
Olagadam	4	30.08	15.78	31.13	17.46	33.18	20.18	66.36	16.20	57.57	15.87	77.74	10.77
P.Mettupalayam	3	27.03	18.02	27.78	18.27	27.72	18.81	51.88	14.93	45.22	12.34	40.95	13.59
Pallapalayam	3	18.21	49.53	18.61	51.06	19.75	49.67	32.78	52.82	30.81	42.00	27.76	38.54
Pasur	3	11.88	14.43	12.39	15.36	11.47	16.99	18.90	14.52	17.13	12.86	17.64	13.34
Periyakodiveri	2	67.95	17.39	258.13	4.81	71.95	19.53	150.45	14.88	187.14	8.82	103.33	16.01
Perundurai	1	237.77	42.15	426.33	24.88	534.54	20.89	700.45	25.45	341.43	46.04	679.39	21.65
Pethampalayam	4	21.85	21.75	23.85	20.51	24.40	21.03	46.70	17.82	40.62	15.93	56.39	11.00
Salangapalayam	3	37.06	39.80	39.08	39.23	43.21	36.58	70.24	34.21	66.27	25.77	87.56	20.17
Sivagiri	2	111.47	12.78	397.82	7.37	131.67	12.39	291.18	6.29	271.09	7.50	173.09	14.11
Unjalur	4	13.67	14.31	14.98	13.61	14.64	14.88	33.26	10.67	27.17	8.35	30.76	8.40
Vadugapatti	4	26.77	16.82	27.39	17.15	28.30	17.46	53.72	13.81	45.71	12.17	57.60	9.97
Vaniputhur	2	75.16	18.16	301.81	4.86	82.67	18.50	186.61	12.96	175.40	11.32	110.89	18.44
Vellottamparappu	3	26.14	15.50	27.43	15.30	28.64	15.35	41.96	15.72	38.95	12.14	45.58	10.33
Vengampudur	2	56.64	8.40	187.97	2.61	60.34	8.45	157.52	5.03	147.83	3.81	96.13	5.89
Kallakkurichi													
Chinnasalem	1	117.46	32.16	198.92	19.17	238.55	16.45	234.30	28.07	143.54	33.36	242.08	22.75
Manalurpettai	3	27.70	33.19	28.21	34.94	28.94	37.37	54.94	32.38	48.82	26.97	48.82	26.46
Sangarapuram	2	109.98	15.33	370.24	4.93	102.76	18.77	300.11	4.60	266.98	10.95	168.10	14.22
Thirukoilur	2	189.05	29.05	626.85	9.32	308.37	20.12	440.85	21.33	399.34	16.61	295.05	21.07
Thiyadurugam	2	109.24	17.01	337.11	5.91	108.30	19.57	285.02	10.95	242.56	9.51	172.38	17.36

Ulundurpet	1	121.77	32.05	205.27	19.46	506.85	8.08	389.44	17.19	336.45	12.85	399.82	10.49
Vadakkanandal	2	142.71	22.76	353.53	9.26	112.92	29.12	288.86	20.75	237.95	14.15	164.83	20.47
Kancheepuram													
Kundrathur	1	263.67	17.74	435.97	12.31	427.91	13.56	489.55	15.87	298.46	27.35	607.55	14.11
Mangadu	1	233.38	29.17	289.06	27.28	472.68	18.28	539.57	20.82	264.67	40.00	373.71	29.74
Sriperumbudur	1	147.34	99.53	417.64	37.94	857.76	19.47	454.96	50.83	301.62	65.95	329.70	56.91
Uthiramerur	1	122.84	18.94	192.92	12.48	408.12	6.10	299.97	11.43	189.05	14.80	298.59	9.84
Walajabad	2	95.37	16.03	352.96	4.41	126.63	13.10	273.59	6.07	222.71	10.37	135.87	15.53
Kanniyakumari													
Agastheeswaram	3	41.61	18.51	46.66	18.34	43.74	22.56	81.34	22.93	69.45	22.10	69.52	24.36
Alur	3	68.20	32.60	75.14	32.03	71.47	37.35	124.37	38.22	122.75	31.18	128.96	24.28
Anjugramam	3	57.00	37.58	51.77	44.05	47.48	57.29	100.66	44.44	81.64	47.45	93.77	41.70
Aralvaimozhi	2	163.58	17.44	453.99	6.55	183.46	16.92	394.08	12.07	342.16	17.59	214.09	18.24
Arumanai	3	59.84	18.60	58.38	21.56	61.64	22.44	101.48	23.93	94.75	22.46	118.21	19.15
Athur	4	70.74	12.61	78.61	12.37	79.53	13.38	136.00	12.38	138.65	9.77	180.35	7.35
Azhagappapuram	3	44.35	30.02	50.18	28.37	47.10	32.75	83.65	29.23	69.21	32.50	79.51	29.18
Azhagiapandiapuram	4	58.59	16.83	62.07	17.38	62.69	18.33	116.81	19.97	102.12	15.01	116.33	13.09
Bhoothapandi	3	69.78	19.72	66.35	21.81	74.07	20.67	133.72	15.69	108.35	19.68	106.89	16.34
Edaikodu	3	86.48	24.63	96.01	23.15	93.38	25.04	165.47	21.85	147.74	19.53	156.05	17.51
Eraniel	4	63.12	21.76	64.10	23.32	73.65	21.71	129.12	19.96	123.38	17.56	140.28	13.95
Ezhudesam	3	88.81	28.30	91.49	29.59	83.15	35.21	155.30	29.20	146.60	26.06	172.27	20.71
Ganapathipuram	3	52.81	15.84	60.72	15.17	59.31	20.10	112.66	15.53	99.05	14.81	104.08	13.56
Kadayal	3	74.20	21.07	83.33	21.18	69.40	27.62	120.61	23.55	116.06	19.63	117.13	18.16
Kaliyakkavilai	2	78.47	26.95	301.46	7.48	83.51	29.04	148.29	26.49	126.08	25.62	89.93	37.98
Kallukuttam	3	61.59	36.57	60.96	40.50	78.18	34.32	144.89	28.22	144.31	22.87	160.33	20.88
Kanniyakumari	1	260.07	26.18	532.48	12.51	546.26	12.75	500.78	14.19	525.07	12.19	560.00	14.73
Kappiyarai	4	76.85	16.75	82.06	16.90	80.91	18.24	158.02	13.12	134.09	14.71	165.79	10.49
Karungal	2	157.79	15.00	445.41	6.22	150.53	24.82	519.62	9.68	408.98	8.97	353.55	11.42
Kilkulam	4	74.67	15.92	79.60	16.38	86.11	16.62	159.95	13.18	142.03	13.07	165.75	10.49
Killiyur	3	76.13	25.91	92.22	22.97	73.71	30.89	129.40	27.67	133.51	24.10	128.28	24.91
Kollankodu	3	99.03	36.43	116.65	24.50	112.82	24.69	192.39	18.83	213.99	20.13	205.33	18.44
Kothainallur	3	65.43	18.94	57.06	23.27	60.51	23.01	109.21	19.48	89.02	17.70	103.87	17.89

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		47.73	25.45	55.60	22.77	47.38	28.27	79.51	28.76	69.78	28.28	72.46	23.27
Kottaram	3	47.73	25.45	55.60	22.77	47.38	28.27	79.51	28.76	69.78	28.28	72.46	23.27
Kulasekarapuram	2	174.25	26.26	657.96	7.14	177.40	30.22	413.16	21.23	418.54	13.40	271.49	20.87
Kumarapuram	3	56.05	23.00	56.93	25.07	55.08	27.96	91.69	25.93	89.32	23.25	82.06	23.26
Manavalakurichi	2	139.93	13.83	438.26	4.57	136.99	15.50	317.48	12.09	289.98	11.87	186.84	13.15
Mandaikadu	4	68.41	24.46	79.88	22.35	75.49	26.11	142.02	23.65	139.60	21.53	172.40	18.58
Marungur	4	55.27	16.37	59.00	16.80	59.83	23.35	114.05	18.77	95.21	16.03	115.76	13.34
Mayiladi	3	44.53	19.71	45.30	20.66	46.29	21.19	83.19	19.62	76.47	19.48	70.47	18.54
Mulagumudu	3	79.04	27.30	75.38	30.65	67.27	38.22	128.01	40.39	120.48	38.42	126.91	30.09
Nallur	3	65.62	57.43	73.60	53.54	68.44	61.64	124.14	50.32	126.68	45.83	124.40	60.89
Neiyyur	4	63.74	27.45	67.39	27.42	67.34	29.02	126.03	25.44	117.91	18.86	138.56	17.95
Pacode	3	94.80	10.67	78.57	14.00	89.20	14.45	146.18	13.88	154.58	12.26	169.67	10.10
Palapallam	3	66.59	21.51	72.54	21.76	73.89	22.91	125.08	22.48	112.30	20.94	118.11	17.46
Pazhugal	3	60.22	59.07	67.71	55.44	67.81	64.56	132.08	56.50	119.01	64.15	110.49	52.84
Ponmani	2	182.86	6.41	875.73	1.42	231.04	5.73	496.22	4.12	352.21	4.90	231.60	7.06
Pudukadai	2	109.12	14.83	369.53	4.55	112.07	17.19	295.91	10.16	227.02	9.08	113.93	21.19
Puthalam	4	60.62	22.99	62.03	24.09	68.31	22.77	119.88	27.08	111.20	19.35	130.99	14.05
Reethapuram	3	75.03	25.21	74.30	27.88	84.61	27.92	148.28	24.52	128.06	26.64	124.85	23.17
Suchindram	2	147.00	14.34	488.10	4.59	131.35	18.05	359.43	10.43	363.62	8.04	209.79	14.90
Thalakudi	4	41.85	15.76	40.15	17.78	44.64	16.95	86.03	14.00	73.93	13.40	80.84	11.38
Thengampudur	3	52.56	16.81	57.08	16.17	60.94	15.98	96.07	15.76	83.21	18.30	128.18	12.22
Thenthamaraikulam	4	59.64	27.49	62.84	27.62	63.19	28.93	116.03	26.98	106.31	27.05	113.59	21.69
Therur	4	38.13	18.91	39.71	19.70	44.48	19.16	72.07	18.89	67.82	15.33	86.27	12.86
Thingalnagar	2	206.40	9.07	677.50	3.18	238.69	9.59	539.95	6.68	527.55	6.11	254.50	11.01
Thiruparappu	2	170.25	13.52	578.61	4.34	170.09	15.47	379.69	10.53	345.60	9.66	241.21	13.08
Thiruvattaru	3	59.13	24.55	65.26	22.96	66.40	24.50	119.68	19.11	101.43	18.29	103.12	20.13
Thiruvithankodu	3	69.73	37.41	70.87	39.48	70.94	41.41	139.59	32.06	139.18	23.41	141.27	26.54
Unnamalaikadai	3	88.77	39.24	98.38	38.75	80.09	50.80	136.15	47.51	140.83	38.75	137.95	34.90
Valvaithankoshtam	3	72.29	24.74	74.50	25.73	74.11	28.37	131.14	27.10	120.20	24.44	128.53	20.05
Vellimalai	4	60.77	25.19	68.34	25.00	67.64	27.29	117.10	25.34	112.06	23.90	147.46	18.12
Verkilambi	3	65.40	34.81	68.35	35.97	68.91	41.88	135.46	31.56	140.15	28.97	117.18	28.80
Vilavur	3	57.61	23.55	58.20	25.40	61.99	25.69	117.00	20.23	94.93	20.45	98.52	21.28
Villukuri	3	69.84	19.61	67.17	21.56	71.24	21.37	130.03	19.14	122.18	16.82	105.54	17.81

Karur

Aravakurichi	1	87.67	22.51	145.24	14.02	235.18	9.82	232.29	17.00	144.26	29.85	259.99	18.72
Krishnarayapuram	4	38.22	18.96	39.58	19.95	43.36	21.35	83.98	16.60	74.92	14.80	95.33	11.59
Marudur	3	35.25	9.66	30.99	11.18	30.55	13.32	51.57	12.41	44.23	14.68	40.42	12.85
Nangavaram	3	46.83	23.44	50.15	22.97	45.85	26.78	84.19	22.13	77.01	24.60	86.21	22.37
P.J.Cholapuram	4	21.49	12.34	25.61	10.95	26.86	11.90	42.73	11.50	34.52	12.14	50.39	9.56
Pallapatti	2	349.96	14.34	1076.72	4.99	399.89	14.52	888.24	5.65	871.88	10.96	441.14	16.65
Puliyur	2	87.86	23.21	234.40	10.82	91.65	28.34	247.66	21.11	198.18	19.10	132.84	24.04
Punjai Thottakurichi	3	31.11	15.98	28.07	18.43	32.54	17.81	59.95	15.83	54.41	13.01	46.77	15.88
Punjaipugalur	2	289.73	100.00	781.35	48.34	284.00	100.00	512.53	100.00	546.34	100.00	315.67	44.73
TNPL Pugalur	1	124.12	85.95	232.79	100.00	174.04	100.00	133.88	73.68	138.56	100.00	191.83	100.0
Uppidamangalam	3	38.46	31.24	41.72	30.13	38.89	38.43	68.57	35.54	69.26	28.73	70.13	28.70

Krishnagiri

Bargur	2	148.03	24.30	564.54	6.71	204.73	19.33	441.30	14.91	417.06	11.85	205.36	25.32
Denkanikottai	2	200.79	8.97	696.16	2.87	228.92	8.40	515.87	4.68	462.87	6.76	272.75	8.93
Kaveripattinam	2	170.68	15.28	442.61	5.89	171.92	15.97	346.14	10.40	316.45	10.62	123.24	3.95
Kelamangalam	2	78.98	14.64	266.96	4.59	76.69	16.97	191.84	12.65	162.89	10.52	105.32	16.80
Nagojanahalli	4	30.21	14.14	33.97	13.34	31.53	15.70	62.27	12.23	54.14	10.16	72.68	7.57
Uthangarai	2	157.20	54.37	429.72	20.87	272.13	34.98	355.36	36.11	457.21	22.89	261.54	41.18

Madurai

A.Vellalapatti	3	23.97	12.69	25.29	12.43	25.93	12.46	40.50	12.26	41.09	8.47	36.71	10.67
Alanganallur	2	94.11	12.77	308.88	4.14	125.52	11.26	286.65	7.64	308.54	6.18	169.73	11.37
Elumalai	3	43.33	35.68	49.65	33.68	47.03	37.59	90.59	32.49	85.76	26.35	98.15	23.27
Palamedu	3	40.45	17.79	37.01	20.32	40.41	19.67	80.09	15.97	78.44	13.57	74.43	14.44
Paravai	2	179.58	21.18	528.82	7.74	217.88	20.69	600.30	13.25	453.45	15.18	282.86	21.24
Peraiyur	3	43.69	44.39	46.04	44.06	50.75	41.38	102.34	33.49	97.03	26.39	74.78	32.29
Sholavandan	2	144.64	22.64	454.90	7.50	161.25	21.83	367.81	14.99	324.93	12.37	189.69	21.64
T.Kallupatti	3	44.76	44.81	51.27	42.08	54.10	41.98	98.73	34.22	96.96	28.52	101.77	28.69
Vadipatti	2	173.30	24.34	427.61	10.19	201.54	23.63	490.39	14.28	484.16	11.02	251.35	21.33

Mayiladuthurai

Kuthalam	2	137.49	31.67	490.16	9.43	164.48	29.16	442.42	17.78	372.53	14.69	240.77	23.09
Manalmedu	3	33.49	23.24	34.36	23.14	30.87	27.21	67.46	26.16	57.92	21.48	58.39	20.83

Tharangambadi	2	150.68	20.87	509.34	6.43	172.99	19.73	375.73	14.31	428.00	8.83	270.51	13.85
Vaitheeswarankoil	3	31.69	50.95	32.73	55.83	34.30	57.42	66.88	49.33	58.76	38.84	51.64	42.68
Nagapattinam													
Kilvelur	3	34.57	53.47	34.90	56.16	41.49	49.96	70.21	50.96	63.37	40.63	62.15	39.36
Thalainayar	3	48.28	19.17	57.87	17.08	53.22	19.98	112.16	16.37	107.78	12.97	94.21	13.64
Thittacheri	3	28.19	38.40	27.92	42.15	30.94	40.09	62.73	29.72	46.09	29.54	56.02	26.05
Velankanni	1	129.75	48.97	305.28	22.06	592.22	11.87	548.89	22.70	269.39	29.41	289.76	26.92
Namakkal													
Alampalayam	2	123.98	28.39	398.37	8.84	134.22	26.78	414.33	15.03	329.21	14.58	217.82	18.46
Athanur	3	23.09	74.42	27.96	66.30	26.40	71.78	49.00	71.62	42.11	54.09	40.24	68.34
Erumaipatti	3	40.53	22.86	46.72	22.26	42.72	25.21	82.84	13.67	80.07	18.14	84.31	19.61
Kalappanaickenpatti	3	36.01	18.47	38.96	18.18	37.41	19.85	68.13	17.57	60.08	15.66	68.75	13.87
Mallasamudram	1	80.00	10.82	165.76	7.67	179.07	8.46	187.08	10.82	130.68	8.79	203.38	8.84
Mohanur	2	99.94	17.91	466.72	4.02	107.80	18.51	308.94	6.54	253.47	9.85	146.22	17.22
Namagiripettai	2	108.06	14.53	258.42	6.36	127.18	13.47	308.90	9.42	249.02	8.88	165.49	11.29
Padaiveedu	2	79.52	32.40	240.61	11.38	85.93	32.26	212.42	25.10	177.62	18.04	125.37	30.47
Pandamangalam	2	69.42	6.88	260.04	1.98	68.82	7.83	178.47	5.23	142.42	4.69	104.44	6.33
Paramathi	2	99.86	12.17	376.28	3.19	107.43	12.30	258.82	7.78	198.53	32.25	152.06	10.62
Pattinam	3	26.82	13.37	27.15	14.16	28.71	14.31	46.36	9.25	37.82	12.01	50.48	9.81
Pillanallur	3	37.93	32.81	38.69	34.53	39.30	35.67	68.92	24.22	65.32	26.48	78.87	22.07
Pothanur	2	129.98	13.45	582.04	3.18	122.89	16.17	272.35	12.04	438.70	5.76	212.37	12.45
R.Pudupatti	4	24.38	19.18	22.49	21.53	23.90	21.12	40.93	18.26	38.60	13.61	51.41	10.53
Seerapalli	3	44.41	22.23	46.95	21.82	46.31	22.79	81.57	18.69	64.46	21.93	68.66	17.68
Senthamangalam	2	113.89	13.16	374.54	4.31	142.41	11.50	285.26	9.11	275.31	4.29	192.87	10.04
Velur	2	170.98	20.47	611.02	5.87	181.09	20.07	363.52	10.86	379.94	9.28	265.34	20.07
Venkarai	3	28.18	19.65	32.62	17.86	32.23	18.68	51.58	12.48	45.72	14.32	44.83	15.04
Vennanthur	3	41.52	35.79	49.98	30.38	51.18	30.14	84.30	27.79	81.90	20.64	94.35	18.71
Perambalur													
Arumbavur	4	40.44	17.58	44.32	17.43	47.47	17.19	77.85	16.76	74.79	12.39	105.34	12.48
Kurumbalur	4	44.15	20.68	48.25	20.32	40.85	25.38	77.45	19.15	73.20	16.06	96.85	12.66
Labbaikudikadu	3	41.81	29.35	45.44	28.27	47.51	28.07	84.00	23.85	75.27	19.34	68.53	20.63
Poolambadi	4	33.15	16.60	36.53	16.51	34.29	19.37	61.86	15.83	57.25	16.06	73.10	100.00

Pudukkottai

Alangudi	2	195.22	35.77	574.43	12.38	231.79	33.49	597.07	17.11	502.31	24.75	175.29	67.66
Annavasal	3	39.13	26.97	39.93	28.31	41.56	28.71	75.30	25.16	74.90	18.83	48.21	29.13
Arinalam	3	33.06	37.21	34.77	35.66	37.80	33.28	65.95	33.91	69.54	24.75	56.93	27.27
Iluppur	2	93.07	18.76	287.35	6.26	96.58	20.60	222.15	10.87	204.26	13.08	132.85	17.86
Karambakkudi	2	120.43	19.86	384.12	5.72	130.31	30.99	339.45	11.87	280.12	17.01	121.84	39.81
Keeramangalam	3	42.23	22.33	44.04	22.74	42.42	27.64	86.28	18.91	67.63	20.24	65.46	22.48
Keeranur	2	87.08	39.70	322.19	12.50	109.79	39.55	260.97	25.08	238.51	22.28	147.06	36.86
Ponnamaravathi	2	159.85	20.92	403.66	8.44	171.21	21.22	372.07	17.34	368.23	12.13	241.12	16.98

Ramanathapuram

Abiramam	3	34.45	28.45	35.98	28.62	35.59	31.02	61.01	27.26	55.12	20.53	53.96	20.68
Kamuthi	1	90.53	25.02	156.48	15.62	165.46	16.36	178.88	27.03	122.66	26.97	160.77	20.24
Mandapam	3	57.04	28.50	56.91	30.66	60.37	32.17	110.68	25.58	96.61	24.81	95.67	24.41
Mudukulathur	3	57.19	42.90	63.60	41.69	64.25	45.28	118.73	43.80	113.53	32.90	116.62	36.87
RS Mangalam	3	58.50	35.54	64.02	34.04	65.19	36.88	119.89	34.99	108.92	26.60	102.39	26.65
Sayalgudi	4	55.97	40.11	60.28	39.99	61.18	44.32	126.86	37.19	111.84	30.30	129.16	25.78
Thondi	3	62.44	36.53	69.74	32.43	73.10	35.14	142.49	33.80	133.18	27.70	117.76	29.99

Ranipet

Ammoor	3	34.73	42.51	33.66	45.36	37.95	41.04	62.49	43.07	61.62	25.95	60.09	27.32
Kalavai	2	87.74	15.05	227.94	5.91	79.00	17.48	200.16	11.59	216.43	7.84	103.30	14.69
Kaveripakkam	2	105.36	17.36	395.09	4.80	130.37	15.06	307.04	10.17	322.22	6.29	194.87	10.58
Nemili	2	96.49	10.02	308.19	3.28	142.10	7.93	334.33	5.52	241.36	7.03	195.07	9.12
Panapakkam	3	44.67	33.66	47.54	31.98	51.61	30.47	94.22	27.29	78.91	24.46	84.09	23.37
Sholingur	2	278.90	17.88	797.71	6.41	294.19	18.17	628.36	13.53	635.42	10.29	379.28	15.99
Thakkolam	3	35.05	31.22	36.34	31.72	35.44	33.79	61.51	30.90	56.69	26.48	66.56	20.05
Timiri	1	95.50	15.45	165.99	9.28	172.38	9.37	194.44	14.68	130.82	18.05	203.79	10.33
Vilapakkam	3	25.14	33.00	24.47	35.58	22.26	39.48	38.33	52.26	31.56	62.30	36.00	57.23

Salem

Arasiramani	4	48.95	8.72	47.88	9.20	55.85	8.12	101.90	8.50	91.61	6.29	117.08	4.47
Attayampatti	2	81.55	11.75	288.23	3.39	90.66	11.10	229.07	6.76	221.51	4.91	133.49	9.08
Ayothiapattinam	2	83.25	16.18	318.21	4.41	99.27	15.34	261.85	6.28	216.56	11.60	152.15	15.63
Belur	3	28.77	19.04	29.00	20.17	28.78	20.71	50.11	19.97	38.73	20.28	53.69	14.52

Place													
Edaganasalai	3	97.04	23.07	103.79	22.60	121.02	20.58	212.48	13.37	196.26	17.99	188.97	16.47
Elampillai	3	45.47	36.13	41.60	41.53	48.89	36.92	87.18	23.56	78.79	36.85	67.27	39.07
Ethapur	3	32.92	18.84	33.08	19.49	36.29	18.11	64.73	16.39	57.56	15.94	64.96	12.08
Gangavalli	3	35.45	29.37	38.88	29.52	40.25	29.56	78.23	24.00	71.23	23.02	77.27	22.17
Jalakandapuram	2	120.15	22.36	351.91	8.12	147.73	19.98	273.66	17.47	312.93	11.18	173.62	19.44
Kadayampatti	3	27.64	20.75	24.89	22.99	30.58	20.18	43.76	20.99	43.56	13.95	45.37	17.27
Kannankurichi	2	119.25	22.75	317.65	9.30	129.98	26.06	330.68	13.84	330.56	7.36	171.66	29.85
Karuppur	3	34.70	34.59	33.77	29.92	36.30	31.16	62.98	15.99	52.75	38.67	62.46	34.28
Keeripatti	3	24.57	13.14	26.03	12.63	28.45	12.75	50.79	13.56	44.75	13.72	56.03	10.05
Kolathur	1	65.17	29.45	125.86	16.57	168.39	12.95	124.91	28.30	83.64	32.46	151.64	17.28
Konganapuram	2	82.47	12.42	211.84	5.03	76.81	15.49	188.60	10.93	190.99	8.30	103.40	12.69
Mallur	3	32.60	30.16	35.17	29.02	36.64	28.70	53.00	14.70	49.60	38.75	52.42	22.72
Mecheri	1	102.23	27.26	190.02	15.42	375.35	8.18	240.04	12.85	195.84	30.86	334.59	14.28
Nangavalli	4	41.49	22.09	43.10	22.54	51.58	20.91	86.76	16.02	77.33	19.02	109.34	12.67
Omalur	2	117.38	29.72	437.69	7.92	153.31	23.33	356.13	17.20	348.47	10.98	195.19	19.99
P.N.Patti	2	154.61	49.00	517.64	13.54	164.62	43.83	402.69	26.06	403.84	95.58	237.24	44.55
Panaimarathupatti	3	34.50	17.66	30.20	21.14	34.54	18.32	61.34	14.43	57.62	13.59	56.38	19.19
Pethanaickenpalayam	2	112.72	10.88	320.51	3.99	107.39	13.19	243.56	8.79	234.22	6.46	140.08	11.50
Poolampatti	4	35.64	12.69	34.77	13.12	39.48	11.92	69.73	10.97	62.85	7.32	93.37	5.88
Sankari	1	129.83	36.77	204.72	19.78	288.89	17.72	319.78	16.22	173.38	37.37	399.61	23.87
Sentharapatti	1	48.99	13.49	137.30	5.07	109.96	6.49	156.67	7.63	80.59	11.39	107.68	8.26
Thammampatti	1	167.12	12.77	275.69	8.03	201.17	11.18	283.28	14.27	160.30	17.34	265.42	8.98
Tharamangalam	2	122.81	15.10	382.52	5.04	128.12	16.51	256.14	8.03	276.05	9.85	180.46	15.83
Thedavur	3	22.54	18.91	28.78	15.93	26.48	18.91	49.51	16.07	50.18	12.64	47.15	13.65
Thevur	3	23.39	17.78	24.29	21.67	24.23	22.72	41.98	20.64	39.63	16.14	42.45	17.47
Vanavasi	4	30.74	19.44	30.12	20.94	36.43	19.18	64.90	13.68	54.64	22.22	82.46	13.01
Vazhapadi	2	136.22	20.26	338.66	8.40	148.38	19.75	342.23	11.80	284.41	10.04	207.07	15.68
Veeraganur	3	34.43	30.82	36.39	31.60	35.33	33.94	69.52	26.89	60.93	16.46	62.03	25.68
Veerakkalpudur	2	149.35	41.17	409.53	15.71	154.04	41.31	371.21	30.88	350.29	19.20	221.20	30.26
Sivaganga													
Ilayangudi	2	191.13	15.92	495.14	6.55	200.90	19.26	371.85	15.55	426.62	10.43	301.15	8.60
Kanadukathan	3	26.50	44.44	26.97	47.02	29.44	45.74	47.40	48.75	45.79	36.20	60.02	25.59

Kandanur	3	30.25	16.67	33.90	15.79	30.79	18.45	51.69	17.80	42.88	16.76	56.49	11.82
Kottaiyur	3	90.27	27.32	86.49	31.26	78.07	37.89	193.20	25.26	202.47	20.14	201.37	18.33
Manamadurai	2	200.38	21.98	472.48	9.77	221.34	22.07	421.49	19.65	372.15	15.83	236.23	24.17
Nattarasankottai	3	24.42	21.42	27.61	20.45	26.27	24.12	49.16	20.98	36.12	22.49	39.71	19.34
Nerkuppai	4	26.47	19.42	25.37	21.18	27.49	20.63	55.30	16.06	48.33	14.01	65.76	9.88
Pallathur	3	40.76	30.50	42.71	31.60	40.98	35.20	92.37	25.98	76.65	25.57	81.75	21.79
Puduvayal	3	47.32	26.88	52.19	26.31	52.37	27.97	95.93	27.56	81.13	17.25	96.20	17.40
Singampuneri	2	180.54	17.28	476.67	6.91	157.75	22.33	504.71	11.88	382.95	11.62	232.81	17.65
Thirupuvanam	2	108.01	19.26	357.19	6.55	173.76	14.09	336.46	12.30	313.41	9.53	252.32	12.03
Tirupathur	2	201.40	21.13	561.79	8.19	200.08	25.03	520.77	15.91	536.34	11.81	334.00	17.12

Tenkasi

Achampudur	3	39.31	13.22	47.69	12.08	49.77	16.27	98.34	12.54	85.92	11.91	95.77	11.85
Alangulam	1	115.72	32.07	225.86	17.89	280.57	15.74	365.73	19.27	189.83	29.17	372.60	14.72
Alwarkurichi	3	48.04	14.72	50.00	15.04	50.34	15.75	94.25	13.34	95.23	8.78	75.36	12.65
Aygudi	2	93.77	8.74	336.59	2.54	110.52	8.37	207.79	7.01	268.38	3.95	156.27	6.86
Courtalam	1	68.92	100.00	130.49	55.16	178.69	42.14	131.25	100.00	98.43	91.08	151.20	68.34
Ilanji	3	36.89	35.76	42.45	35.31	42.32	38.63	90.18	27.82	74.84	25.32	78.17	25.40
Keezhapavur	2	133.50	8.89	391.45	3.27	200.05	6.65	483.13	5.18	377.19	4.76	212.92	7.95
Melagaram	3	63.98	39.57	66.20	40.19	66.05	42.68	117.76	35.80	105.20	30.81	91.61	34.56
Panboli	4	33.94	12.55	34.74	13.03	37.14	13.24	71.10	12.15	59.11	11.84	75.18	9.30
Pudur(S)	3	41.76	13.52	50.42	12.10	46.37	15.05	98.41	10.57	81.10	10.67	90.67	9.46
Rayagiri	3	41.71	12.52	43.64	13.77	50.97	13.53	87.43	12.03	74.14	9.84	73.45	4.97
Sambavar Vadagarai	3	65.11	16.74	61.47	18.62	67.26	17.85	123.49	16.01	123.58	11.87	121.75	12.07
Sivagiri	2	125.01	11.32	313.02	4.83	114.46	14.02	361.31	6.39	300.22	6.06	223.18	8.31
Sundarapandiapuram	4	32.07	11.47	31.86	12.31	35.94	11.30	67.60	10.76	57.27	8.00	78.74	8.52
Surandai	2	218.65	18.50	443.44	9.75	225.07	20.26	428.27	17.95	530.29	10.51	251.76	21.98
Thiruvenkatam	4	39.29	25.29	58.87	17.73	60.51	18.38	78.89	24.05	60.98	21.91	122.60	11.41
Vadakarai Keezhpadug	3	55.70	17.08	62.56	16.40	62.85	17.86	130.87	12.72	120.11	10.68	111.83	12.36
Vasudevanallur	3	59.30	20.04	64.30	19.30	64.11	20.43	113.00	17.57	127.28	12.95	112.73	14.90

Thanjavur

Adiramapattinam	2	176.10	22.38	552.43	7.56	218.29	19.72	509.23	12.61	484.44	9.71	234.02	20.41
Aduthurai	2	111.85	14.00	392.74	4.21	112.78	15.10	315.59	8.68	233.75	8.20	172.38	10.97

Ammapettai	2	107.68	16.89	393.44	4.85	108.55	17.95	361.25	7.38	313.34	7.38	199.68	11.05
Ayyampettai	2	131.93	21.99	391.88	7.88	156.12	20.62	414.49	12.18	457.58	8.43	254.34	15.43
Cholapuram	4	30.75	33.09	35.98	30.33	37.95	29.76	65.10	26.32	60.08	20.45	68.81	17.76
Dharasuram	3	46.19	39.71	45.70	41.65	49.74	38.37	84.00	35.54	70.92	27.94	78.54	24.87
Madukkur	2	130.72	23.45	431.02	7.65	153.88	21.82	353.01	15.29	382.93	9.23	192.43	21.11
Melathiruppanthuruth	4	30.30	17.84	30.88	18.26	32.09	18.32	60.50	15.51	55.42	12.56	71.52	9.59
Melattur	3	23.99	13.38	27.54	12.18	24.90	18.60	46.62	13.26	35.34	15.22	40.36	15.11
Orathanadu	2	270.69	7.90	638.86	4.50	162.46	19.56	317.91	15.36	252.19	16.13	143.43	29.71
Papanasam	2	112.58	32.96	508.26	7.67	166.36	24.64	328.02	19.77	312.13	15.42	205.03	23.01
Peravurani	2	231.54	17.51	653.41	6.46	205.53	21.55	519.77	14.47	442.30	12.28	224.52	24.03
Perumagalur	4	23.52	8.36	27.56	7.36	24.22	8.98	43.61	11.29	37.08	13.38	53.87	9.39
Swamimalai	3	29.98	59.79	32.94	56.80	33.69	60.17	65.52	49.50	66.13	37.41	63.15	39.23
Thirukkattupalli	2	101.70	18.81	339.32	6.09	111.04	19.57	233.32	14.35	210.26	11.47	145.62	16.57
Thirunageswaram	3	49.21	45.22	45.40	51.52	53.42	48.14	99.26	40.29	95.42	32.24	107.09	28.45
Thiruppanandal	3	31.72	41.64	34.52	40.79	37.88	38.74	62.63	38.50	51.69	30.00	64.35	24.27
Thirupuvanam	3	36.69	46.95	34.07	51.38	38.37	46.53	65.57	44.37	56.54	32.97	72.69	25.77
Thiruvaiyaru	2	124.28	21.25	386.04	7.18	143.73	20.44	367.52	13.47	352.24	10.44	325.39	11.37
Thiruvidaimarudur	3	45.65	53.11	50.40	50.78	45.89	59.80	84.44	47.73	79.21	46.12	82.43	44.99
Vallam	2	171.85	13.74	645.56	3.99	179.25	15.14	732.77	6.09	458.47	6.55	197.85	15.41
Veppathur	4	25.81	19.84	32.30	16.22	28.90	18.72	52.78	17.13	55.06	21.42	72.94	13.64
The Nilgiris													
Adikaratti	2	80.29	15.94	312.37	4.39	93.87	15.41	218.85	14.31	220.80	8.08	125.13	15.15
Bikketti	2	67.94	18.68	208.20	6.14	72.90	17.73	205.53	13.20	199.85	7.11	124.83	12.20
Devarshola	2	222.29	19.15	581.60	7.51	213.08	22.98	527.89	15.06	526.56	10.57	227.43	24.99
Huligal	2	56.81	18.75	162.26	6.74	51.76	21.87	156.96	14.79	100.28	17.46	62.18	28.89
Jagathala	2	60.31	59.67	204.38	19.28	68.12	60.00	176.77	41.12	192.98	31.52	128.99	49.92
Kethi	2	116.52	36.11	565.48	7.80	229.37	20.28	602.02	15.28	373.72	15.03	280.25	22.30
Kilkunda	2	81.68	20.50	326.44	5.54	97.51	20.14	257.55	15.14	189.16	13.13	115.28	19.17
Kotagiri	1	327.11	17.56	571.89	10.53	880.86	7.29	753.54	14.00	432.65	23.28	524.13	13.88
Naduvattam	2	64.31	17.22	128.29	8.80	44.08	25.77	163.35	9.72	115.57	8.32	52.77	18.71
OValley	3	92.55	13.00	82.76	14.53	92.73	14.15	153.91	14.45	142.88	8.89	124.02	10.45
Sholur	3	31.57	63.74	34.06	59.30	30.82	65.90	53.26	57.99	45.62	37.95	55.90	32.52

Theni

Andipatti	2	196.12	28.17	837.10	6.87	260.67	23.41	760.78	13.24	514.05	14.57	276.59	25.84
B.Meenakshipuram	4	17.30	12.30	18.75	12.38	17.24	16.73	32.20	14.04	30.95	13.88	41.02	9.21
Boothipuram	4	37.08	20.55	41.88	19.95	36.35	24.25	71.27	19.01	60.76	19.03	59.28	19.50
Devadanapatti	3	42.56	19.66	41.10	20.80	53.32	16.45	69.06	19.37	65.09	15.41	84.73	11.18
Ganguvarpatti	3	31.08	20.27	31.90	20.91	30.25	23.23	49.42	21.88	45.94	17.64	53.54	15.74
Hanumanthampatti	3	27.76	25.28	35.56	19.48	37.94	19.35	60.08	20.24	48.52	17.66	51.96	15.71
Highways	2	30.30	37.85	122.36	9.37	36.78	31.18	78.92	27.05	63.59	18.03	37.54	30.54
Kamayagoundanpatti	2	90.36	11.00	334.77	3.12	100.21	11.14	273.65	6.05	281.03	5.06	136.58	9.98
Kombai	2	74.56	86.75	263.01	22.63	105.87	63.65	256.87	30.81	237.28	32.30	129.13	58.98
Kuchanur	3	22.24	17.58	24.48	16.66	23.44	19.65	37.42	21.41	43.69	12.69	35.30	15.81
Markayankottai	4	17.77	19.50	16.85	21.74	20.90	21.57	29.90	21.60	29.41	17.87	40.49	11.75
Melachokkanathapuram	3	48.24	39.52	54.86	38.31	51.92	45.37	88.41	41.25	84.77	40.42	107.67	36.87
Odaipatti	3	49.16	20.51	50.91	20.71	46.18	23.61	94.20	17.44	72.80	18.17	72.61	19.14
Palani Chettipatti	2	118.07	32.74	414.97	9.94	158.68	27.95	341.40	21.04	356.60	16.43	153.64	88.67
Pannaipuram	3	25.43	24.37	23.91	27.13	22.59	31.87	41.32	28.25	38.95	24.79	40.62	24.08
Pudupatti	2	72.44	11.97	322.33	2.80	109.59	8.84	245.67	5.88	226.91	5.35	160.22	7.27
Thamaraikulam	2	73.09	9.44	326.46	2.15	92.01	7.92	206.63	6.96	200.88	5.76	140.98	8.05
Thenkarai	2	97.53	14.65	275.83	5.43	94.17	16.63	237.53	11.39	221.22	8.57	133.47	18.15
Thevaram	2	91.25	14.10	320.65	4.22	106.68	13.41	231.92	9.69	205.26	8.47	131.58	12.01
Uthanapalayam	2	170.93	18.77	481.13	7.02	198.73	18.17	359.51	15.08	477.24	9.33	251.98	16.89
Vadugapatti	2	69.06	16.45	320.75	3.57	91.08	13.21	233.04	8.14	201.85	7.12	106.58	12.43
Veerapandi	2	113.84	29.18	343.18	10.22	121.30	30.59	268.48	24.78	234.44	25.11	175.73	24.82

Thiruvarur

Koradacheri	3	30.96	20.53	31.65	22.05	30.70	24.25	49.35	24.35	46.28	18.75	45.82	18.94
Kudavasal	2	111.94	28.00	413.92	8.52	118.09	32.01	310.64	16.26	273.32	15.44	132.15	31.76
Muthupet	2	74.00	42.81	286.41	11.53	69.97	53.21	201.51	27.24	157.26	27.05	81.65	49.97
Nannilam	2	128.59	16.25	384.13	5.63	147.10	15.37	406.84	9.11	332.58	8.04	142.08	19.60
Needamangalam	3	37.64	38.50	42.95	35.24	45.67	34.93	82.61	31.00	74.99	23.62	71.33	24.34
Peralam	3	26.22	33.91	32.23	28.90	28.62	34.68	43.81	35.57	43.04	24.48	40.57	26.04
Valangaiman	2	99.06	17.09	372.33	4.80	105.93	17.69	253.35	11.31	216.52	9.69	140.66	17.77

Thoothukkudi

Alwarthirunagiri	3	40.02	13.90	34.40	16.82	45.59	13.29	74.78	13.75	65.67	10.28	57.09	10.56
Arumuganeri	1	159.96	12.92	275.38	7.85	317.03	7.17	290.06	12.66	171.66	15.32	265.48	9.88
Athur	2	107.11	9.33	289.28	3.65	93.14	12.01	191.14	9.00	223.21	5.71	124.67	10.75
Eral	2	102.77	13.05	293.57	4.72	126.29	11.50	293.67	8.35	243.76	6.61	136.68	11.98
Ettayapuram	2	102.39	12.93	362.42	4.00	140.46	11.96	302.72	9.18	238.80	7.95	183.36	11.12
Kadambur	3	18.56	26.73	17.57	29.55	17.10	31.59	30.35	29.11	27.54	23.26	29.70	20.11
Kalugumalai	2	114.85	14.27	258.62	6.55	120.68	14.87	257.96	11.77	193.28	10.51	161.63	13.39
Kanam	4	22.51	10.48	21.25	11.90	26.02	10.66	55.50	8.26	49.32	9.79	49.84	10.47
Kayatharu	3	45.30	24.56	53.40	21.83	59.00	20.80	104.48	19.50	87.57	15.30	104.92	13.64
Nazerath	2	149.47	13.04	449.79	4.52	141.61	14.92	313.53	10.47	285.24	8.85	195.77	12.51
Perungulam	4	38.31	10.99	35.18	12.90	41.31	12.12	82.76	10.46	75.68	9.74	95.48	9.15
Sathankulam	2	134.31	14.22	478.76	4.19	170.44	12.29	360.89	9.60	327.92	7.53	189.41	12.71
Sayapuram	2	118.92	7.31	364.62	2.48	129.89	7.15	242.96	5.80	253.82	4.04	132.61	7.71
Srivaikuntam	2	138.01	7.37	318.62	3.32	152.11	7.15	276.53	7.08	255.62	5.50	196.53	13.03
Thenthiruperai	4	30.27	9.45	25.48	11.53	31.13	9.82	61.55	7.66	56.48	6.06	59.50	5.88
Tiruchendur	1	234.19	20.62	347.04	14.72	431.65	12.27	341.40	25.98	258.79	23.39	365.47	17.85
Udangudi	2	187.81	14.65	538.85	5.70	149.27	21.54	310.86	15.69	332.80	10.08	213.91	15.67
V.Pudur	3	37.01	19.65	37.26	20.43	41.75	19.97	67.82	20.10	62.16	16.03	61.41	16.46
Vilathikulam	2	148.57	16.95	386.92	6.92	162.44	17.44	373.12	11.94	270.68	11.73	242.12	13.85
Tiruchirappalli													
Balakrishnampatti	3	25.94	37.30	25.90	37.96	27.82	37.24	44.75	36.15	44.37	26.00	50.71	23.40
Kallakudi	2	111.92	39.93	394.76	11.66	132.82	39.95	321.44	30.57	242.83	37.56	147.71	44.82
Kattuputhur	2	60.61	15.79	215.27	4.85	80.97	15.23	163.63	12.48	207.60	9.66	112.32	13.44
Koothappar	3	40.42	21.78	50.38	20.05	49.87	22.53	77.39	19.54	61.83	32.19	60.58	28.16
Lalgudi	2	200.64	20.53	433.10	10.13	210.26	21.93	463.48	17.16	490.71	12.55	229.95	26.30
Manachanallur	2	178.74	48.44	444.75	20.56	197.09	48.46	430.82	34.78	364.81	29.95	194.04	55.24
Mettupalayam	3	36.36	20.53	39.87	19.22	40.35	19.90	37.09	34.63	63.08	16.14	52.84	19.22
Musiri	2	290.99	18.24	633.56	8.80	363.25	16.60	464.51	20.58	560.11	13.28	290.56	23.54
Ponnampatti	3	38.45	36.59	40.59	37.62	45.43	35.44	77.42	32.62	57.47	38.12	62.94	29.16
Poovalur	3	31.28	36.27	33.76	35.66	34.13	37.63	58.69	37.96	49.91	34.70	57.02	27.79
Pullampadi	3	38.43	27.15	44.58	24.66	47.46	37.72	74.29	25.82	66.20	23.70	61.49	32.89
S. Kannanur	1	94.23	30.38	163.28	18.80	229.13	14.18	288.32	21.25	274.31	18.77	360.20	13.25

Sirugamani	2	110.20	15.03	277.96	6.06	89.43	19.45	275.08	11.36	194.29	13.82	126.09	15.77
Thathaiyangarpet	3	47.80	27.23	52.55	25.35	50.33	27.68	85.16	26.08	86.90	20.05	99.17	15.71
Thottiyam	2	86.11	16.03	279.71	5.24	135.45	12.36	268.79	9.73	194.57	10.35	143.24	13.63
Uppiliapuram	3	28.18	38.25	26.99	41.89	27.80	42.59	43.21	43.45	42.64	32.93	49.18	28.20
Tirunelveli													
Cheranmadevi	2	118.32	9.19	319.98	3.60	136.40	8.93	364.92	5.34	273.70	5.32	191.96	7.33
Eruvadi	1	164.49	8.20	384.65	3.73	347.52	4.68	203.51	11.82	255.06	7.51	343.42	5.52
Gopalasamudram	3	42.91	13.57	50.57	11.95	42.82	16.26	77.15	13.41	72.49	10.70	58.98	13.00
Kalakkad	1	126.67	19.59	268.69	9.62	255.22	10.52	287.47	15.43	214.36	13.84	492.98	6.41
Kalladaikurichi	1	122.72	16.18	237.11	8.81	338.51	6.68	293.51	12.42	197.79	12.36	371.59	6.80
Manimutharu	1	98.26	29.53	260.94	11.15	264.59	11.15	219.82	24.46	129.80	23.02	260.73	14.58
Melaseval	3	37.02	12.23	34.31	13.85	37.87	13.37	74.17	9.82	66.38	8.85	57.06	10.55
Moolakaraipatti	2	95.93	8.02	354.77	2.26	113.84	7.37	206.60	6.77	267.46	3.38	142.81	6.54
Mukkudal	2	149.26	7.29	397.44	2.88	154.37	7.80	357.72	5.98	308.57	4.77	216.35	6.73
Nanguneri	3	24.63	20.56	23.40	23.23	25.46	24.47	38.67	26.88	41.01	18.99	52.97	14.54
Naranammalpuram	2	104.83	10.23	296.29	3.78	126.90	8.92	243.35	10.02	243.65	6.08	150.08	8.09
Panagudi	1	159.94	19.09	246.15	13.16	351.41	9.89	333.49	16.12	206.04	20.41	329.14	12.95
Pathamadai	1	69.79	10.91	220.38	3.55	202.55	4.01	206.02	6.64	174.88	5.66	293.33	3.20
Sankarnagar	1	120.52	41.75	525.08	9.79	538.39	9.78	515.12	14.97	266.07	26.15	515.67	11.35
Thirukarungudi	2	115.82	4.26	373.81	1.45	97.38	5.91	222.39	3.71	216.84	3.09	113.62	6.07
Thisayanvilai	1	147.83	17.61	191.60	14.23	285.71	9.57	313.57	13.79	230.63	14.44	339.27	9.97
Vadakkuvalliyur	1	109.03	53.67	208.33	29.66	259.19	24.98	330.07	33.00	128.59	63.11	248.43	33.01
Veeravanallur	2	114.82	9.35	336.03	3.34	153.85	7.64	261.08	7.66	291.72	4.71	156.77	8.49
Tirupathur													
Alangayam	1	31.30	65.03	76.57	27.00	71.92	30.29	89.10	34.50	54.90	47.72	104.11	22.20
Natrampalli	2	80.61	21.03	277.63	6.76	87.68	22.62	184.13	16.68	143.55	16.78	93.22	29.36
Uthayendram	3	35.34	26.50	32.02	30.31	37.36	26.95	64.88	25.39	56.48	21.94	67.93	15.29
Tiruppur													
Avanashi	1	194.47	59.32	515.16	22.96	502.83	24.30	469.46	44.23	284.32	50.38	394.66	48.40
Chinnakkampalayam	4	25.35	19.50	34.39	14.67	30.42	17.76	54.91	13.93	45.87	18.52	71.24	11.63
Dhali	4	27.12	21.96	30.63	19.64	27.49	22.56	52.52	18.47	47.09	17.64	62.94	13.25
Kaniyur	3	20.31	18.88	20.32	20.68	21.60	20.45	33.56	6.66	28.88	7.16	31.74	6.70

Kannivadi	2	42.86	25.97	197.73	5.70	50.12	23.23	125.59	16.87	109.26	11.27	76.03	15.55
Kolathupalayam	2	91.18	27.87	316.71	8.20	114.15	23.72	246.62	18.12	183.12	18.57	166.60	19.69
Komaralingam	3	39.72	25.49	41.62	25.37	35.64	30.48	71.64	22.80	54.11	22.33	61.28	20.02
Kunnathur	2	109.75	18.36	403.31	5.40	99.48	23.36	294.43	12.68	246.25	11.24	160.94	17.27
Madathukulam	2	107.66	40.06	362.99	12.12	111.78	40.06	327.47	23.85	223.40	25.01	151.33	32.83
Mulanur	2	96.72	17.88	372.60	5.07	144.73	13.71	259.15	12.56	247.55	9.32	129.62	16.71
Muthur	3	41.35	44.11	44.98	43.70	50.46	41.32	83.70	41.33	69.04	34.73	84.92	28.42
Rudravathi	3	26.21	24.78	30.20	22.65	27.03	26.68	41.18	29.11	40.20	24.35	39.70	25.11
Samalapuram	3	55.26	53.79	59.58	53.42	63.48	53.09	108.57	55.53	113.57	43.36	130.13	32.57
Sankaramanallur	4	31.12	55.62	35.34	49.72	37.99	46.99	60.94	53.06	56.84	43.07	87.21	21.05
Thirumuruganpoondi	1	142.65	68.02	277.40	38.01	292.60	38.43	334.46	49.64	256.43	50.50	384.51	36.56
Uthukuli	2	97.91	28.72	348.84	8.71	113.35	29.14	279.05	19.71	288.20	15.65	173.66	26.63
Tiruvallur												
Arani	3	37.02	32.16	37.30	31.78	36.60	34.62	73.88	27.17	59.21	24.52	56.05	29.95
Gummidipoondi	2	183.53	33.04	562.02	11.54	191.30	35.88	452.13	25.94	430.82	23.24	323.69	33.98
Minjur	2	269.52	17.18	700.60	6.93	239.74	20.71	508.27	15.27	624.57	13.09	296.82	19.10
Naravarikuppam	2	142.77	41.99	467.20	12.75	190.51	34.66	435.71	27.27	329.98	24.58	203.82	36.08
Pallipattu	3	40.68	27.68	42.29	28.44	41.91	29.35	81.08	26.11	64.38	24.18	59.61	26.45
Ponneri	2	187.88	40.32	518.44	15.08	172.62	47.49	824.68	16.21	400.49	24.17	255.97	39.62
Pothatturpettai	3	64.27	13.83	63.52	14.86	74.71	13.11	127.77	11.84	112.13	12.75	113.77	13.11
Thirumazhisai	2	202.12	28.64	625.62	10.27	150.23	49.14	425.17	31.65	395.28	24.53	215.85	41.52
Thirunindravur	1	180.59	38.00	287.69	24.91	563.20	13.20	488.37	24.96	228.63	41.42	502.08	18.68
Uthukkottai	2	104.12	25.67	425.86	6.48	149.26	18.84	369.53	14.28	290.26	15.20	186.78	19.95
Tiruvannamalai												
Chengam	2	157.44	22.30	703.05	5.10	213.07	17.09	423.64	14.14	505.98	8.71	201.52	21.87
Chetpet	1	142.24	18.79	242.21	11.53	429.61	7.54	345.33	15.32	260.02	15.12	380.07	13.57
Desur	4	26.01	34.28	27.49	37.10	31.36	38.55	52.64	33.70	49.22	33.93	67.23	24.31
Kalambur	2	128.36	14.31	390.32	4.91	139.47	14.70	232.48	14.66	278.22	8.44	174.94	12.84
Kannamangalam	3	28.69	44.06	25.76	50.77	30.85	44.31	47.52	53.52	42.39	43.03	41.20	39.50
Kilpennathur	3	40.00	36.89	40.82	36.88	42.17	44.98	73.56	38.38	67.16	28.80	69.50	29.22
Peranamallur	4	20.81	26.97	23.03	25.17	24.77	24.79	46.44	21.23	39.41	18.85	51.24	13.67
Polur	1	128.28	42.91	327.01	17.07	278.82	19.38	250.02	36.60	197.00	30.35	354.28	16.43

Pudupalayam	4	29.35	33.28	26.08	38.28	30.49	33.45	58.81	30.90	51.95	24.17	69.43	16.92
Vettavalam	3	39.70	32.40	40.76	29.19	45.20	26.70	69.96	35.15	72.11	22.58	60.63	26.02

Vellore

Odugathur	3	31.36	20.99	31.32	21.60	35.20	19.79	61.40	18.35	55.83	14.30	58.05	9.53
Pallikonda	2	212.13	14.24	828.04	3.73	266.00	11.73	477.93	11.23	432.92	9.10	258.95	16.74
Pennathur	3	30.29	40.55	27.48	46.52	27.54	48.08	59.65	34.62	43.98	38.19	58.28	29.17
Thiruvalam	3	26.10	78.30	27.20	75.93	30.63	68.77	49.17	68.49	46.81	72.28	46.10	68.48

Viluppuram

Ananthapuram	4	22.48	19.97	22.96	20.69	23.98	21.19	44.03	22.34	36.39	19.82	53.98	13.18
Aragandanallur	3	18.95	25.67	19.78	27.76	19.72	30.07	37.61	23.49	28.37	23.91	27.43	36.16
Gingee	1	153.18	35.80	207.15	27.46	359.27	16.44	338.35	28.76	224.22	28.71	246.55	25.56
Kottakuppam	1	150.35	17.77	249.37	11.35	295.04	10.35	331.36	14.05	229.99	16.72	329.56	11.24
Marakkanam	3	47.83	45.54	52.07	47.51	50.80	53.40	92.46	50.02	78.89	43.78	105.12	30.77
Thiruvennai Nallur	3	28.98	23.21	26.91	25.80	29.53	24.45	54.64	20.05	46.62	17.44	54.70	14.76
Valavanur	2	176.47	5.48	439.67	2.25	156.86	6.46	441.36	3.60	368.86	2.86	218.09	4.86
Vikkiravandi	2	94.12	12.33	213.13	5.62	79.69	14.96	266.11	7.51	198.95	6.88	184.41	7.09

Virudhunagar

Chettiarpatti	3	57.42	51.13	57.63	52.60	58.05	54.26	109.73	48.96	106.29	34.92	126.03	29.93
Kariapatti	3	74.89	28.65	74.72	30.47	82.40	30.08	147.98	25.76	141.52	21.96	143.25	22.68
Mallankinaru	3	45.01	25.37	43.44	26.97	45.38	26.89	85.42	24.56	72.18	18.83	76.10	17.92
Mamsapuram	3	59.41	29.63	68.58	26.77	68.60	28.15	119.82	25.59	115.21	18.74	112.52	18.83
S.Kodikulam	4	33.59	12.59	32.87	13.25	36.53	12.32	74.71	9.40	64.97	7.78	78.79	6.39
Seithur	2	113.03	18.94	344.47	6.64	138.26	18.02	359.38	10.96	310.91	8.84	199.44	13.99
Sundarapandiam	3	26.08	23.16	26.78	23.29	27.14	23.82	51.06	21.77	43.16	17.90	39.71	17.68
V.Pudupatti	4	26.09	19.26	25.17	20.90	26.69	22.20	56.46	17.53	46.99	15.53	57.16	12.42
Vathirairuppu	2	96.54	16.86	398.24	4.16	108.87	15.74	282.77	9.51	243.27	7.94	151.20	12.65