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An Overview of State Finance of Kerala from 2001-02 to 2023-24

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ABSTRACT

It is of the utmost importance that state governments maintain fiscal discipline, not only for the sake of macroeconomic stability, but also to ensure adequate funding of essential social and economic services and to lay the groundwork for economic expansion over the long term. However, the fiscal situation of Indian states is challenged by a number of structural flaws, including high budgetary deficits and debt, an unhealthy expenditure pattern, a limited resource base, and the adoption of populist fiscal measures. Kerala's public finances suffer from persistently high levels of fiscal and revenue deficits, low levels of public investment in capital projects, increased use of borrowed money to pay for revenue expenditures, mounting debt liabilities, a heavier burden of interest payments, and declining efforts to raise revenue on their own. This paper tries to analyse the trend and pattern of important components of state finance from the fiscal year 2001-02 to the current fiscal year.

Keywords: Public finance; Public expenditure; Public revenue; Fiscal Deficit; Public Debt.

1.0 Introduction

Government finances influence economic development in several ways (World Bank, 1988). First, governmental income, spending, and budget deficit have an impact on the economy's consumption, savings, and investment patterns as well as the distribution of income and wealth. Second, in order to prevent balance of payments crises, foreign debt crises, and extended recessions, cautious fiscal policy is also required.

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Thirdly, the magnitude of fiscal deficits affects both internal macroeconomic imbalances (real interest rates, private investment, and inflation) as well as foreign macroeconomic imbalances (current account deficits, capital flight, and external loans). Fourthly, the fiscal implications of policies like financial liberalisation, currency depreciation, pricing deregulation, and trade reform are crucial factors in determining their effectiveness. Fifth, the government's chosen technique of revenue mobilisation can have a big impact on how effective the economy is. For instance, relying on ad hoc income mobilisation strategies leads to complex and unfavourable revenue structures, which hinders economic development. Finally, more budgetary spending on productive capital assets is a sign of high-quality government spending and can have a favourable impact on a nation's economic growth.

Central, state, and local governments make up India's federal system of governance. Both the federal government and state governments have budgetary and revenue obligations. The following major responsibilities are delegated to the centre in consideration of macroeconomic stability, scale economies, and national importance: currency, foreign exchange, insurance, stock exchanges, defence, external affairs, railways, posts, and telecommunication, national highways, shipping and air transport, and atomic energy. Public order, police, health, assistance to the disabled and unemployed, agriculture, irrigation, land rights, fisheries, water supply/storage, trade, and commerce within the state, and cooperative societies are among the key responsibilities entrusted to the states.

All other matters which are neither in the central list nor the state list, includes in concurrent list which are managed by both the governments. In this framework of economic governance, maintenance of fiscal discipline at the state-level is significant due to the following three major reasons. First, smart fiscal management is required at both the central and state government levels to guarantee India's macroeconomic stability. Even at the lowest level of governance, fiscal irresponsibility can lead to macroeconomic instability. Second, the primary responsibility for funding fundamental social and economic services like education, health, sanitation, agriculture, irrigation, and transportation is in the hands of the state governments in accordance with the Constitution's allocation of expenditure/functional responsibilities between the centre and the states.

Given that state governments account for over 60 per cent of all public expenditures in India, it is possible to assess the significance of the states in the management of public spending in that country. As a result, it is crucial for the states to have enough money to invest adequately in the nation's physical infrastructure and human resources. Third, all states must develop to their full potential for India to continuously

attain a greater economic growth rate over a longer period. Moreover, the private investment both from internal and external sources of economy goes to those states which maintains a healthy fiscal condition. (Ahluwalia, 2000; Bagchi, 2006).

Kerala is not an exception to this general pattern. Multiple fractures have been identified in Kerala's fiscal structure (George & Krishnakumar, 2012). They primarily consist of continuing high levels of fiscal and revenue deficits, low levels of public investment in capital projects, increased use of borrowed money to pay for revenue expenditures, growing debt obligations, a heavier weight of interest payments, and declining efforts to raise revenue on one's own. The state administration recently released a White Paper on state finance to emphasise the state's dangerous financial status, which warned that Kerala is on the verge of a financial disaster due to a failure both on expenditure management and resource mobilisation. Strong economic performance and strong measures of human development coexist in Kerala's current economic situation. Kerala has a low rate of population growth, a favourable sex ratio, high levels of literacy (particularly female literacy), high life expectancy, high standards of healthcare, a low rate of infant mortality and death, a low rate of fertility, and a low level of poverty when compared to all of India's levels. Due to the state's social welfare programmes, the high level of public investment in the social sector, and the significant amounts of remittances received from Keralites working outside of Kerala, mainly in the Middle Eastern countries, all of these achievements were made possible.

Between 1956 and 1990, when the state adopted overly interventionist economic policies and turned down private investment, Kerala's economy stayed in a low-growth, backward stage. The amount of investment was insufficient to break the cycle of slow development, outdated technology, and low levels of productivity across all industries. But since 1991, when liberalised policies were put into place and private investment was encouraged, the state's economy has experienced better rates of investment, technological advancement, and growth. During the post-liberalization era, the state experienced significant urbanisation, the growth of motor transportation, technological advancement in every area, which reduced poverty and increased consumption levels. Substantial-scale migration to the Gulf, substantial amounts of remittances received and spent there, and an increase in consumption all led to an increase in demand for goods and services and an expansion of economic activity.

2.0 Review of Literature

Bajpai & Sachs (1999) found out that states continue to have huge revenue deficits, which make up a sizable portion of their overall fiscal deficits. The three main

intergovernmental fiscal transfer mechanisms have led to an ineffective transfer process that has created state bureaucracy, catered to a wide range of interest groups, and disconnected state plan requirements from real transfers.

Rao (2002) on his study related to state finances concludes that, states' own tax revenues have steadily declined, their resources have been severely depleted by losses from public companies, and there have been several implicit and explicit transfers and subsidies. Effective fiscal reform measures must be implemented immediately in order to prevent serious issues brought on by excessive borrowing. Increasing financial support for social programmes and physical infrastructure is only possible if the revenue-to-GDP ratio can stop declining.

Singh (2006) states that India's state finances have significantly worsened over the last ten years and need immediate care. Since states also have significant off-budget liabilities, the issue is sometimes greater than budget deficits suggest. They have argued that the government institutions that have lagged in updating India's market economy are largely to blame for the issue, if not entirely. As a result, comprehensive, systemic reforms are needed to address the issues with state finances.

Rangarajan & Srivastava (2005) discus the theoretical perspectives on fiscal deficit and public debt including Ricardian, Keynesian and Neoclassical views. They also analyse the issues regarding the debt and fiscal deficit in Indian context. In order to analyse debt-deficit sustainability issues and make an appropriate decision about the medium- and short-term fiscal policy stance, this study looks at the long-term profile of the fiscal deficit and debt relative to GDP in India. It is argued that recent growth has been negatively impacted by significant structural primary deficits and interest payments relative to GDP. The overall debt-to-GDP ratio must be reduced from its current level, which exceeds 80% of GDP, without a doubt.

Kaur *et al.*, (2014) have tried to assess the viability of India's public debt and investigate the connection between public debt and growth in the context of India. The debt position in India is sustainable over the long term, according to the sustainability study, which is based on empirical assessment of intertemporal budget constraint and fiscal policy response function at the level of the general government from 1980–1981 to 2012–2013. The empirical findings also show that public debt and growth in India have a statistically significant non-linear connection, suggesting that larger levels of public debt have a detrimental effect on economic growth.

Reserve Bank of India (2016) observes that while the application of fiscal responsibility and budget management (FRBM) guidelines has helped to enhance the quality of sub-national expenditures, there is still much room for improvement. In 2013–14, states' consolidated revenue account turned into a deficit for the first time in three

years, worsening their budgetary situation. The fiscal situation of the States deteriorated significantly in 2014–15 (RE) as the ratio of GFD and PD to GDP rose.

Renjith & Shanmugam (2018) uses the Bohn framework to assess the public debt sustainability issue of 20 significant Indian states using panel data from 2005–2006 to 2014–2015. It uses the penalised spline (p-spline) method along with standard panel data estimate techniques. The findings show that state governments' primary balances respond favourably to high levels of public debt, proving that debt policies are effective at preserving the overall level of debt in Indian states. Das (2013) examines the estimate of government of India that Kerala, Punjab, and West Bengal are fiscally unsound at the level of general category states and evaluates their long-term sustainability and stability along the debt-deficit spiral. It considers their most recent monetary performance to be dangerous, particularly in the revenue account.

Paramban (2017) studies about the public debt solvency in Kerala using the data from 1981 to 2013-14. Indicator-based analysis and empirical exercises are used in this study to analyse the sustainability of Kerala's expanding public debt as well as its growth. The examination of debt sustainability that was undertaken in this research reveals weak sustainability for the time period in the state's overall debt position. This illustrates the extent of the rising debt burden and the need for prudent financial management.

George & Krishnakumar (2018) makes an effort to examine the Kerala government's financial situation during the previous 23 years, including the current fiscal year. During that time, the nation underwent economic reforms that were characterised by liberalisation, privatisation, and globalisation. Reforms called for fiscal restraint with a focus on keeping budget deficits of all stripes under control. In the study, the time period saw the reversal of the Indian and State economies, the appointment of five finance commissions, the adoption of four five-year plans, and the start of the 12th Plan. The Left Democratic Front (LDF) and United Democratic Front (UDF) alternated five times as state governments during this period. The study points out that the growing conditions of Union Finance Commissions and the proliferation of centrally sponsored schemes further restrict the state's flexibility with regard to its budgetary operations. As a result, Kerala's financial management has the unenviable task of guiding the state between the hard surface of fiscal prudence and the rock of domestic political imperatives.

3.0 Objectives

- To analyse the trend and growth rate of GSDP of Kerala from 2001-02 to 2023-24;
- To examine the components of revenue receipts of Kerala and its pattern from 2001-02 to 2023-24;

- To analyse the expenditure profile of Kerala and its growth pattern from 2001-02 to 2023-24;
- To ascertain the trend and pattern of public debt of Kerala and its sustainability from 2001-02 to 2023-24.

4.0 Sources of Data and Methodology

The paper is based on secondary data collected from various sources. Time series data related to Kerala finance are collected from different sources such as RBI handbook on state finances, Budgets and Economic reviews of various years published by Kerala Finance Department, White papers on state finances issued by the government of Kerala in 2001, 2011 and 2016 and reports of Kerala Public Expenditure Review Committee (KPERC) of various years. Data are represented in tabular and graphical formats and analysed using different statistical tools such as AAGR, CAGR and other ratios. Debt sustainability is studied using indicator-based analysis which include ratios of total public debt, revenue deficit and fiscal deficit with their respective GSDP from the year 2001-02 to 2023-24.

5.0 Gross State Domestic Product

Gross state domestic product (GSDP) is a measure of the total economic output or value of all goods and services produced within a state's geographical boundaries during a specific period. In the case of Kerala, GSDP refers to the economic output generated by the state of Kerala in India. The GSDP of Kerala is influenced by various factors such as agricultural productivity, industrial growth, service sector contributions, government policies, and external factors like national and international economic trends. The GSDP figures which are typically calculated annually serves as an important indicator of the state's economic performance and growth. Kerala's GSDP has been steadily increasing over the years.

Table 1 shows the GSDP of Kerala each year from the period from 2001-02 to 2023-24 and its growth rates is depicted in Figure 1. After the year 2001-02 which registered 7.24 per cent of growth compared to previous year, Kerala economy showed the double-digit growth rate from the period 2002-03 by constituting 11.51 percent of growth in GSDP compared to previous year. There after the GSDP of Kerala has increased subsequently even showing an increase of 23.4 percent in the year 2004-05. A huge increase in the share of service sector was the reason for this. But the economy could not

keep this pace of increase in GSDP throughout the subsequent years as it got trembled by the decreasing share of primary and secondary sectors to the state income.

Years	GSDP (Cr)	Growth Rate
2001-02	93839	7.24
2002-03	104643	11.51
2003-04	116448	11.28
2004-05	143623	23.34
2005-06	164791	14.74
2006-07	185194	12.38
2007-08	210912	13.89
2008-09	242077	14.78
2009-10	277356	14.57
2010-11	324512	17.00
2011-12	364048	12.18
2012-13	412313	13.26
2013-14	465041	12.79
2014-15	512564	10.22
2015-16	561994	9.64
2016-17	634886	12.97
2017-18	701577	10.50
2018-19	781653	11.41
2019-20	812935	4.00
2020-21	771009	-5.16
2021-22	906920	17.63
2022-23 R.E	1017873	12.23
2023-24 B.E	1132194	11.23
	CAGR	0.11

Table 1: GSDP of Kerala (2010-11 Base Year)

Source: RBI Handbook on State Finance (various years)

The situation got worse after the effect of world slowdown of economy in 2008. Since the 1930s Great Depression, the 2008 financial crisis is regarded as the worst global financial disaster. Due to India's economy's integration with the global economy, both the national and state economies were severely impacted by the crisis. The state saw a reasonably high pace of growth over the first ten years of the twenty-first century up to the year of the global financial crisis in 2008.



Figure 1: Growth Rate of GSDP

Source: RBI Handbook on State Finances (various years)

After the period of 2010-11 registering an increase in growth rate of GSDP by 17 percent, it further started to decline. The rate of change in GSDP in 2015-16 approached to 9.64 percent compared to previous year. In the period of 2018-19, the GSDP has increased 11.41 per cent compared to 2017-18, where after the Kerala economy got major setbacks because of some natural calamities and pandemics. In 2019-20 the Kerala economy registered only 4 per cent increase in the GSDP because of massive flood havoc in different parts of the state and because of the outbreak of Covid pandemic. But the effect of pandemic added more salts into the injuries of Kerala economy as the state registered a negative growth rate first time in the century. The GSDP has decreased by 5.16 per cent in 2020-21 compared to the previous year. After all the state has riskily managed the worst situation and the economy is still trying to get a steady growth path by registering 12.23 and 11.23 per cent increase in GSDP in the years 2022-23 and 2023-24(Budget Estimate).

However, for the last 23 years the gross state domestic product (GSDP) of Kerala has witnessed significant changes and trends. Here is an overview of some key observations regarding the GSDP of Kerala:

• *Inconsistently increasing growth:* Kerala has failed to maintain a steady growth trajectory in terms of its GSDP over the years. The state has experienced inconsistent

economic expansion at a relatively moderate pace compared to some other Indian states.

- *Service sector dominance:* The service sector has emerged as the primary contributor to Kerala's GSDP. Industries such as tourism, information technology, healthcare, finance, and professional services have played a crucial role in driving economic growth and employment opportunities.
- *Remittances:* Kerala has a large diaspora spread across various countries, especially in the Middle East. Remittances from expatriates form a significant portion of the state's economy. The inflow of remittances has positively impacted Kerala's GSDP and contributed to increased consumption and investment.
- *Agricultural challenges:* Despite being known for its agricultural activities, the contribution of the agricultural sector to Kerala's GSDP has witnessed a decline. Factors such as land scarcity, environmental issues, and a shift in focus towards other sectors have affected agricultural productivity and growth.
- *Human development:* Kerala has consistently invested in human development indicators such as education and healthcare. The state's high literacy rate and quality healthcare services have played a pivotal role in the overall socio-economic development, leading to an improved standard of living for its population.
- *Emphasis on social welfare:* Kerala has been recognized for its social welfare programs and initiatives aimed at reducing income inequality and ensuring social security. These efforts have contributed to the overall well-being of the population but may have placed some burden on the state's finances.
- *Emerging industries:* Over the years, Kerala has witnessed the emergence of new industries and sectors, including information technology, biotechnology, and renewable energy. These sectors hold great potential for future growth and employment generation, diversifying the state's economic landscape.

6.0 Revenue Receipts

Revenue receipts refer to the income or funds generated by the government through various sources during a specific period. These receipts are an essential component of the government's income and play a crucial role in financing its expenditures and meeting its financial obligations. There are three main avenues from which the state's consolidated fund receives its revenue. They are:

- State Own Tax Revenue
- State Own Non-Tax Revenue
- Central Transfers (Tax shares and Grants)

Table 2 shows the total revenue receipts of the state and above-mentioned components from the period 2001-02 to the current fiscal year. State own tax revenue (SOTR), which has accounted for an average of 62 percent of Kerala's overall revenue receipts during the past 23 years, makes up the lion's share of the state's income.

	State R	Own evenu	a Tax 1e	State Tax	e Own N x Reven	lon- ue	C	entral G Fransfei	ovt rs			
Year	Amount	Per cent of TRR	Annual Growth Rate	Amount	Per cent of TRR	Annual Growth Rate	Amount	Per cent of TRR	Annual Growth Rate	Total Revenue Receipts	Annual Growth Rate	
2001-02	5923	65.4	1	543	6.0		2590	28.6		9056		
2002-03	7302	68.6	23.3	681	6.4	25.4	2654	24.9	2.5	10638	17.5	
2003-04	8089	68.5	10.8	807	6.8	18.5	2920	24.7	10.0	11815	11.1	
2004-05	8964	66.4	10.8	819	6.1	1.5	3718	27.5	27.3	13500	14.3	
2005-06	9780	63.9	9.1	937	6.1	14.4	4578	29.9	23.1	15294	13.3	
2006-07	11942	65.7	22.1	938	5.2	0.1	5307	29.2	15.9	18187	18.9	
2007-08	13669	64.8	14.5	1209	5.7	28.9	6228	29.5	17.4	21107	16.1	
2008-09	15990	65.2	17.0	1559	6.4	28.9	6963	28.4	11.8	24512	16.1	
2009-10	17625	67.5	10.2	1852	7.1	18.8	6632	25.4	-4.8	26109	6.5	
2010-11	21722	70.1	23.2	1931	6.2	4.3	7338	23.7	10.6	30991	18.7	
2011-12	25719	67.7	18.4	2592	6.8	34.2	9700	25.5	32.2	38010	22.6	
2012-13	30077	68.1	16.9	4199	9.5	62.0	9862	22.3	1.7	44137	16.1	
2013-14	31995	65.1	6.4	5575	11.3	32.8	11607	23.6	17.7	49177	11.4	
2014-15	35233	60.8	10.1	7284	12.6	30.7	15434	26.6	33.0	57950	17.8	
2015-16	38995	56.5	10.7	8425	12.2	15.7	21612	31.3	40.0	69033	19.1	
2016-17	42176	55.8	8.2	9700	12.8	15.1	23735	31.4	9.8	75612	9.5	
2017-18	46460	56.0	10.2	11200	13.5	15.5	25361	30.5	6.9	83020	9.8	
2018-19	50644	54.5	9.0	11783	12.7	5.2	30427	32.8	20.0	92854	11.8	
2019-20	50323	55.8	-0.6	12265	13.6	4.1	27636	30.6	-9.2	90225	-2.8	
2020-21	47661	48.8	-5.3	7327	7.5	-40.3	42629	43.7	54.3	97617	8.2	
2021-22	58340	50.0	22.4	10462	9.0	42.8	47837	41.0	12.2	116640	19.5	
2022-23	70188	54.3	20.3	15354	11.9	46.8	43724	33.8	-8.6	129268	10.8	
R.E	. 0100		-0.0					22.0	0.0	12/200		
2023-24 B.E	81039	59.8	15.5	17089	12.6	11.3	37291	27.5	-14.7	135419	4.8	
AA	GR		12.9			18.9			14.1		13.2	

 Table 2: Total Revenue Receipts and its Components (in Crores)

Source: Compiled by the author from different sources

Most of the Kerala's state own non-tax revenue comes from lotteries and services provided by government agencies, and it makes up, on average, roughly 9 per cent of all revenue receipts. The allocations on account of central schemes and the awards made by the Finance Commission, which together make up 29 per cent of the revenue receipts, determine the state's share of central levies and subsidies from the federal government.

As per the data given in Table 2, the rate of growth of state own tax revenue (SOTR) increased from 1 per cent in 2001-02 to 10.2 per cent in 2009-2010. Between 2001-2002 and 2010-2011, it first increased to 23.3 per cent in 2002-2003. Then, in 2006–07, it was 22.1 per cent due to the implementation of the VAT and the subsequent increase in tax revenues accrued to the government. State-owned tax revenue increased at a rate of 10.8 per cent over the years 2003–2004 and 2005–2006. In 2007–2008, it increased to 14.5 per cent, and in 2008–2009, it reached 17 per cent. However, it decreased to 10.2 per cent in 2009–2010. These numbers make it clear that the SOTR growth rate of 20 to 23 per cent, which was observed four times over the course of the last 23 years, is difficult to maintain over the long term. These numbers suggest that the States' own tax revenue saw an average annual growth rate (AAGR) of 12.9 per cent throughout the course of the period. While the percentage of the overall receipts from the revenue collected by the State itself decreased from 70 per cent in 2010-11 to 59.8 per cent in current fiscal year, the state registered negative growth rate in terms of SOTR in the consecutive years of 2019-20 and 2020-21.



Figure 2: SOTR and SONTR as % of Total Revenue Receipts

Source: Compiled by the author from different sources

Figure 2 also shows percentage share of state own non-tax revenue (SONTR) in total revenue receipts. It was increased by an average of 18.9 per cent from 2001-02 to the current fiscal year. It shows that the share of SONTR in 2001-02 was 6 per cent of the total revenue receipts and it has managed to keep more or less same share of SONTR up to 2011-12 and thereafter its share has increased to 9.5 per cent in 2012-13 and 13.6 per cent in 2019-20 respectively. But it constituted only 7.5 and 9.5 per cent in the subsequent years of 2020-21 and 2021-22. It also registered a low annual growth rate of 5.2 per cent and 4.1 per cent in the years of 2018-19 and 2019-20 respectively. Because of the massive outbreak of covid19, it has decreased by 40 percent in 2020-21 compared to the previous year.



Figure 3: Central Transfers

Source: Compiled by the author from different sources

Central transfer is the item which constitutes most to the total revenue receipts after the state own tax revenue. Analysing Figure 3, it has increased on an average rate of 14.1 per cent annually since 2001-02. In 2004-05 and 2005-06, the percentage of central taxes had significantly increased at rates of 27.34 per cent and 23.14 per cent, respectively from 2.5 per cent growth of 2002-03. This was due to the recommendations made by the 12th Finance Commission, and the State stood to gain as a result of the growth of the divisible pool of funds. However, the central share of taxes fell in the fiscal years 2008–

09, 2009–10, as well as the following year. This loss was likely caused by the economic slowdown, which worsened in the fiscal year 2010–11, when the growth rate increased to 20.36 per cent from -4.8 per cent. As a result of the recommendations of the Fourteenth Finance Commission, the central tax share increased by a remarkable 60% in 2016.

As can be seen from the Table 2, grants from the Government of India also saw an increase. Compared to the prior year, the total sum through the Government of India increased by 40% in 2015–16. In the 2015–2016 fiscal year, 32 per cent of the state's total revenue receipts came from the Government of India. Government of India receipts now make up a higher percentage of total revenue receipts than they ever had in this century. Although the State was certainly lucky to get this additional share due to the grant for the revenue deficiency of Rs. 4640 crore, it is quite concerning that the current fiscal crisis persists despite this sizeable additional sum coming into the State's accounts. But after that the central transfers showed an annual increase of 9.8 per cent and 6.9 per cent only in the subsequent years. In 2018-19, it further increased at annual rate of 20 per cent where after the economy accounted 9.2 per cent of negative growth in the share of central transfers compared to previous year. After recording an all-time high of 43.7 per cent share in total revenue receipts in 2020-2, the state finance shows the negative annual growth rate in the share of central transfers in the last two fiscal years shows the negative annual growth rate in the last two fiscal years

7.0 Capital Receipts

The term "capital receipts" refers to a variety of capital inflows, including proceeds from divestments, loan and advance recoveries, debt inflows from internal sources (market loans, borrowings from financial institutions/commercial banks, and loans and advances from the GoI), and other capital inflows. Capital receipts constitutes the remaining part of state's total revenue after the revenue receipts. This part of revenue includes the type of revenues which makes liabilities to the government. It consists of amount collected through recovery of loans and advances given by the state, borrowings from both internal and external sources, other liabilities and other receipts which are not included in the revenue receipts.

Table 3 shows the actual amount of capital receipts, its percentage share related to GSDP and total revenue and its annual growth for the last 23 years. As depicted in the Figure 4 capital receipts constitutes an average of 25 per cent share in the Total Receipts for this period. It has maintained a more or less consistent share in the total receipts throughout the period. When we compare to the GSDP for each corresponding years, the state has managed to keep an average of 3.6 percent for the last two decades. But the

annual growth rate of the capital receipts shows ups and downs as it varied year to year according to the revenue deficits and debt requirement of the state economy.

From 2002-03, registering an increase of 57.7 percent than the previous year, it decreased by 15.52 per cent and 6.35 per cent in 2004-05 and 2005-06 respectively, and marked an all-time high rate of increase of 79.2 per cent in 2006-07. It further showed negative growth rates in the fiscal years of 2007-08, 2010-11, 2015-16, 2019-20 and 2022-23. For the current fiscal year, the budget estimate shows that the capital receipt is increasing by 8.6 per cent than the previous fiscal year.

Year	Capital Receipts	% of Total Receipts	% of GSDP	Annual Growth Rate
2001-02	3164	25.89	3.37	
2002-03	4990	31.93	4.77	57.71
2003-04	5540	31.92	4.76	11.02
2004-05	4680	25.74	3.26	-15.52
2005-06	4383	22.27	2.66	-6.35
2006-07	7858	30.17	4.24	79.28
2007-08	6154	22.59	2.92	-21.68
2008-09	6232	20.27	2.57	1.27
2009-10	8000	23.45	2.88	28.37
2010-11	7807	20.12	2.41	-2.41
2011-12	12284	24.42	3.37	57.35
2012-13	15685	26.22	3.80	27.69
2013-14	17050	25.74	3.67	8.70
2014-15	18719	24.42	3.65	9.79
2015-16	17965	20.65	3.20	-4.03
2016-17	26763	26.14	4.22	48.97
2017-18	27221	24.69	3.88	1.71
2018-19	27242	22.68	3.49	0.08
2019-20	24160	21.12	2.97	-11.31
2020-21	41268	29.71	5.35	70.81
2021-22	46585	28.54	5.14	12.88
2022-23 R.E	37451	22.46	3.68	-19.61
2023-24 B.E	40670	23.10	3.59	8.60
			AAGR	15.61

Table 3: Capital Receipts of the State (in Crores)

Source: Compiled by the author from different sources



Figure 4: Capital Receipts of the State

Source: Compiled by the author from different sources

8.0 Expenditure Profile

Public expenditure can be divided into two categories: revenue expenditure and capital expenditure. Revenue expenditures are costs related to how the government runs on a daily basis. Examples include costs associated with the salaries and wages of government personnel, purchases made by the government for its own use, interest payments, grants given to SNGs and non-profit organisations, pension subsidies, and military expenditures (apart from costs associated with military sites). Capital expenditures are costs incurred for the creation of assets. It also includes facilities supporting the growth of private businesses, grants for capital formation, investments in shares of government concerns, and loans provided by the national government to SNGs for the purpose of capital formation. Fixed capital formation includes spending on items like public buildings, infrastructure, and military installations, excluding weapons.

Table 4 shows different components of total expenditure and its amount, share related to GSDP and Total Expenditure and their annual growth rates for the last 23 years. The rate of growth in total revenue expenditures was 27.9 percent in 2002-03 and 8.5 per cent in 2005-2006, rose to 13 per cent in the next year, and peaked at 23.8 per cent in 2007-2008. But in 2008-09, it decreased to 13.4 per cent, and the year after that, in 2009-10, it fell even more, to 10.2 per cent. In 2011-12 the total expenditure has increased by an all-

time high growth rate of 31.2 per cent. After registering a high annual growth rate of 21.4 per cent in 2020-21, the growth rate has decreased to 2.1 per cent and 5.6 per cent in 2022-23 and 2023-24 respectively. However the total expenditure has managed to increase at an average growth of 13.3 per cent annually.

	Reven	ue E	xpendit	ure	Capi	tal E	xpendi	ture	Loa	n Dis	sbursen	nents	Total I	Expendi	iture
Year	Amount	% of GSDP	% of Total Expenditure	Annual Growth Rate	Amount	% of GSDP	% of Total Expenditure	Annual Growth Rate	Amount	% of GSDP	% of Total Expenditure	Annual Growth Rate	Amount	% of GSDP	Annual Growth Rate
2001-02	11662	12.4	95.4		558	0.6	4.6		159	0.2	1.3		12220	13.0	
2002-03	14756	14.1	94.4	26.5	699	0.7	4.5	25.3	173	0.2	1.1	8.8	15628	14.9	27.9
2003-04	15496	13.3	89.3	5.0	640	0.5	3.7	-8.4	1219	1.0	7.0	604.6	17355	14.9	11.1
2004-05	17169	12.0	95.6	10.8	682	0.5	3.8	6.6	101	0.1	0.6	-91.7	17952	12.5	3.4
2005-06	18424	11.2	94.6	7.3	817	0.5	4.2	19.8	236	0.1	1.2	133.7	19477	11.8	8.5
2006-07	20825	11.2	94.6	13.0	903	0.5	4.1	10.5	283	0.2	1.3	19.9	22011	11.9	13.0
2007-08	24892	11.8	91.3	19.5	1475	0.7	5.4	63.3	893	0.4	3.3	215.5	27260	12.9	23.8
2008-09	28224	11.7	91.3	13.4	1696	0.7	5.5	15.0	984	0.4	3.2	10.2	30904	12.8	13.4
2009-10	31132	11.2	91.4	10.3	2059	0.7	6.0	21.4	877	0.3	2.6	-10.9	34068	12.3	10.2
2010-11	34665	10.7	89.4	11.3	3364	1.0	8.7	63.4	762	0.2	2.0	-13.1	38791	12.0	13.9
2011-12	46045	12.6	90.5	32.8	3853	1.1	7.6	14.5	999	0.3	2.0	31.1	50896	14.0	31.2
2012-13	53489	13.0	90.3	16.2	4603	1.1	7.8	19.5	1136	0.3	1.9	13.7	59228	14.4	16.4
2013-14	60486	13.0	91.3	13.1	4294	0.9	6.5	-6.7	1464	0.3	2.2	28.9	66244	14.2	11.8
2014-15	71746	14.0	93.5	18.6	4255	0.8	5.5	-0.9	743	0.1	1.0	-49.2	76744	15.0	15.9
2015-16	78689	14.0	90.4	9.7	7500	1.3	8.6	76.3	842	0.1	1.0	13.3	87032	15.5	13.4
2016-17	91096	14.3	89.0	15.8	10126	1.6	9.9	35.0	1160	0.2	1.1	37.8	102383	16.1	17.6
2017-18	99948	14.2	90.7	9.7	8749	1.2	7.9	-13.6	1541	0.2	1.4	32.8	110238	15.7	7.7
2018-19	110316	14.1	91.9	10.4	7431	1.0	6.2	-15.1	2323	0.3	1.9	50.7	120070	15.4	8.9
2019-20	104720	12.9	91.6	-5.1	8455	1.0	7.4	13.8	1210	0.1	1.1	-47.9	114385	14.1	-4.7
2020-21	123446	16.0	88.9	17.9	12890	1.7	9.3	52.5	2549	0.3	1.8	110.6	138884	18.0	21.4
2021-22	146180	16.1	89.6	18.4	14192	1.6	8.7	10.1	2854	0.3	1.7	12.0	163225	18.0	17.5
2022-23 R.E	149004	14.6	89.4	1.9	14894	1.5	8.9	4.9	2642	0.3	1.6	-7.4	166719	16.4	2.1
2023-24 B.E	146760	13.0	83.3	-1.5	14605	1.3	8.3	-1.9	2123	0.2	1.2	-19.7	176089	15.6	5.6
			AAGR	12.5			AAGR	18.4			AAGR	49.3		AAGR	13.2

Table 4: Total Expenditure and its Components (in Crores)

Source: Compiled by the author from different sources

Total expenditure comprises of revenue expenditure and capital expenditure. The first is the revenue expenditure, which has been steadily rising and is now more than tax receipts and inflation. Salaries, interest payments, and pensions make up most state revenue expenditures. The remaining portion is divided between various plan and non-plan expenses (including those categorised as development non-development items). From the Figure 5, it will be interesting to observe the pattern in the state's revenue and expenditure during the past 23 years as the revenue expenditure constitutes a lion's share in the total expenditure as it accounts more than 80 per cent in each year. In 2001-02, 95.4 per cent of the total expenditure came from revenue expenditure where after it started gradually decreasing in the subsequent years and in 2023-24, the budget estimates of revenue expenditure and non-plan-oriented pattern of spending by the economy is the biggest problem that makes the state economy in enigmas for a long period.





Source: Compiled by the author from different sources

Controlling unnecessary or deferrable expenses is one of the indicators of a government's ability to manage public spending effectively. The non-plan revenue

expenditure (NPRE) is an acceptable metric used for this purpose. Salaries, interest, and pension (SIP), three of NPRE's components, are committed obligations. SIP can only be managed over the long term and is unquestionably not receptive to immediate control techniques. Salaries are mostly the responsibility of the workers who have been hired by the government over the course of many years. While pensions, like salaries, are correlated with historical government staffing, interest payments are dependent on the government's past borrowing and credit history. A large portion of this is historical and has historical roots.

On the other hand, capital expenditure constitutes an average of 6.7 percent share to the total expenditure throughout the last two decades which shows the knife edge situation of Kerala economy. It has did not exceeded above 2 per cent of GSDP in the new millennium. The capital expenditure which needs to be taken with utmost importance by the state government is lagging with an inconsistent and slow annual growth. Most economists believe that Kerala requires a significant infusion of capital if it is to continue to exist as a state dedicated to upholding the standard of living of its residents. As a result, the budget's capital expenditure is an extremely important metric that provides insight into the effectiveness of public spending.

The annual growth rate peaked at average of 34.7 per cent between 2006 and 2011, after which it averaged 10.2 per cent between 2001 and 2006 and 20.5 per cent between 2011 and 2016. But from 2016-17 to present fiscal year, it has shown only 10.7 per cent increase in capital expenditure. Kerala may have been among the states with the best public infrastructure if it had been able to carry over the same rate of growth in capital expenditure from 2006 to 2011 into the future. However, it was not to be. Therefore, a major impact of the budgetary crisis has been felt on the state's capital expenditure. It suggests that we will now have to wait longer to catch up to more developed nations and that the endeavour will now be more expensive. This further emphasises the necessity of developing clever and logical short cuts to make up ground lost in the State's capital expenditure.

9.0 Revenue Deficit

Revenue deficit is simply the difference between revenue receipts and revenue expenditure of the state government. It shows the inability of the economy to gather the appropriate revenue. For a better economic condition, it must be zero in the long run. But in the case of Kerala finance, while capital expenditure has been far outweighed by the revenue expenditure, a good portion of resources has been mobilized through the borrowings, which were affected at a rising rate of interest.

Implications of high revenue deficit on state economy:

- *Fiscal stress:* A persistent revenue deficit puts a strain on the state's finances, limiting its ability to fund essential services and developmental initiatives. It may lead to a reliance on borrowing, increasing public debt.
- *Reduced investment:* Revenue deficits can hinder public investments in infrastructure, healthcare, education, and other critical sectors, impacting the overall development of the state.
- *Inflationary pressure:* Financing revenue deficits through borrowing or printing money can contribute to inflationary pressures in the economy.

Year	Revenue Deficit (cr)	per cent of GSDP	per cent of Revenue Receipts
2001-02	2606	2.8	28.8
2002-03	4122	3.9	38.7
2003-04	3680	3.2	31.1
2004-05	3669	2.6	27.2
2005-06	3129	1.9	20.5
2006-07	2637	1.4	14.5
2007-08	3785	1.8	17.9
2008-09	3712	1.5	15.1
2009-10	5023	1.8	19.2
2010-11	3674	1.1	11.9
2011-12	8034	2.2	21.1
2012-13	9351	2.3	21.2
2013-14	11309	2.4	23.0
2014-15	13796	2.7	23.8
2015-16	9657	1.7	14.0
2016-17	15485	2.4	20.5
2017-18	16928	2.4	20.4
2018-19	17462	2.2	18.8
2019-20	14495	1.8	16.1
2020-21	20063	2.6	20.6
2021-22	20800	2.3	17.8
2022-23 R.E	19915	2.0	15.4
2023-24 B.E	23942	2.1	17.7

Table 5: Revenue Deficit of the State

Source: Compiled by the author from different sources

Table 5 shows the revenue deficit of the state and its percentage to GSDP and revenue receipts. In 2001-02, the Revenue deficit accounted an amount of 2606 crores which makes 2.8 per cent of the GSDP and 28.8 per cent of the total revenue receipts. It showed a decrease in the subsequent years and reached 1 per cent of GSDP in 2010-11. During this period, Kerala experienced a persistent revenue deficit. The deficit was primarily due to a higher growth rate of revenue expenditure compared to revenue receipts. Factors contributing to the revenue deficit included increased government spending on social welfare programs, public sector wages, and infrastructure development. After 2011-12 the revenue deficit of 2.2 per cent in 2011-12. The COVID-19 pandemic severely impacted Kerala's revenue. The state's tourism sector, a significant revenue source, was hit hard by travel restrictions and lockdowns. Reduced economic activity resulted in decreased tax collections, leading to a significant increase in the revenue deficit during this period. This plight has led the state finance to accumulation of more revenue deficit than in the past.

10.0 Fiscal Deficit

Fiscal deficit refers to the excess of total expenditure over total revenue (excluding borrowings) in each period. The amount of borrowing necessary to cover the deficit is shown by the Gross fiscal deficit (GFD). Persistent fiscal deficits lead to increased borrowing, thereby increases the state's public debt burden. The 13th finance commission fixed a fiscal target of 3 per cent of GSDP while it was raised by the subsequent 14th and 15th Finance Commission to 3.5 per cent of GSDP.

Implications of high fiscal deficit on the state economy:

- *Debt burden:* Persistent fiscal deficits lead to increased borrowing, thereby increasing the state's public debt burden. Higher debt levels can limit the government's capacity to fund developmental projects and result in increased interest payments.
- *Crowding out effect:* Large fiscal deficits may lead to a crowding out effect, where the government's increased borrowing competes with private investment, potentially reducing overall investment in the economy.
- *Financial instability:* A high fiscal deficit can impact the overall financial instability of the state and strain its ability to meet financial obligations in a timely manner.

Table 6 shows the amount of fiscal deficit of the state, its per cent related to GSDP and the annual rate of change for the last 23 years. From 3.5 per cent in 2001-02, the fiscal deficit increased to 4.8 per cent of GSDP in 2002-03 and 2003-04. Thereafter it started to decline and reached to 2.4 per cent in 2010-11. Over the 2011–16 period, the fiscal deficit

rose to above 3.5 per cent of GSDP. From Rs. 7730 crores in 2010–11 to Rs. 17818 crores in 2015–16, GFD has grown consistently. The 13th Finance Commission's recommended level of 3 per cent of GSDP for the GFD has not been maintained by the State.

Years	Fiscal Deficit	per cent of GSDP	Annual Rate of change
2001-02	3269	3.5	
2002-03	4990	4.8	52.65
2003-04	5539	4.8	11.00
2004-05	4452	3.1	-19.62
2005-06	4182	2.5	-6.06
2006-07	3822	2.1	-8.61
2007-08	6100	2.9	59.60
2008-09	6346	2.6	4.03
2009-10	7872	2.8	24.05
2010-11	7730	2.4	-1.80
2011-12	12815	3.5	65.78
2012-13	15002	3.6	17.07
2013-14	16944	3.6	12.94
2014-15	18642	3.6	10.02
2015-16	17818	3.2	-4.42
2016-17	26448	4.2	48.43
2017-18	26837	3.8	1.47
2018-19	26958	3.4	0.45
2019-20	23837	2.9	-11.58
2020-21	35204	4.6	47.69
2021-22	37306	4.1	5.97
2022-23 R.E	36764	3.6	-1.45
2023-24 B.E	39662	3.5	7.88

Table 6: Fiscal Deficit of the State

Source: Compiled by the author from different sources

The state could manage the fiscal deficit target set by respective finance commission only twice in the years of 2018-19 and 20119-20. But thereafter it further increased and reached 4.6 per cent of GSDP in 2020-21 resulting an alarming fiscal crisis of the state economy. However, the budget estimates of the current fiscal year show a fiscal deficit of 3.5 per cent which is expected to be achieved by the end of the fiscal year. But the revised and actual estimates should be higher than this budget estimate as the borrowing requirement of the state is increasing. The State is extremely concerned about the rising revenue and fiscal deficits, which demonstrate a fiscal imbalance. Extreme financial shortages have resulted from the high level of the fiscal deficit and the use of all

borrowing made possible by the Kerala Fiscal Responsibility Act for NPRE, which includes the building of bridges, roads, and other significant infrastructure projects.

11.0 Public Debt

Public debt refers to the accumulated financial liabilities incurred by the government. Like any other government, Kerala raises funds through borrowing to finance its infrastructure development, social welfare programs, and other expenditures. The public debt of Kerala comprises both internal debt and external debt. Internal debt refers to the funds borrowed from domestic sources such as banks, financial institutions, and the general public through the issuance of government securities like bonds and treasury bills. External debt, on the other hand, refers to funds borrowed from international sources like multilateral institutions or foreign governments.

Year	Debt Outstanding	per cent of GSDP	Annual Rate of Change
2001-02	26951	28.7	
2002-03	31060	29.7	15.25
2003-04	37452	32.2	20.58
2004-05	41878	29.2	11.82
2005-06	45929	27.9	9.67
2006-07	49875	26.9	8.59
2007-08	55410	26.3	11.10
2008-09	63270	26.1	14.19
2009-10	70969	25.6	12.17
2010-11	78673	24.2	10.86
2011-12	89418	24.6	13.66
2012-13	103561	25.1	15.82
2013-14	119009	25.6	14.92
2014-15	135440	26.4	13.81
2015-16	157370	28.0	16.19
2016-17	186454	29.4	18.48
2017-18	210762	30.0	13.04
2018-19	235631	30.1	11.80
2019-20	260311	32.0	10.47
2020-21	296901	38.5	14.06
2021-22	335641	37.0	13.05
2022-23 R.E	370342	36.4	10.34
2023-24 B.E	408164	36.1	10.21

Table 7: Outstanding Liabilities of the State

Source: Compiled by author from different sources

Table 7 shows the outstanding liabilities of the state government and its share as percentage of GSDP with the annual rate of change. The public debt of Kerala has increased over the past 23 years due to various factors such as rising expenditure requirements, infrastructure development projects, and revenue shortfalls. The rate of debt increase throughout the years has been fluctuating, ranging from 15.25 percent in 2002-03, 9.67 per cent in 2005–2006 and 8.59 per cent in 2006–2007 to 11.10 per cent, 14.19 per cent, and 12.17 per cent in the corresponding years of 2007–2008, 2008–2009, and 2009–2010. Despite the debt's propensity to decline in 2005–2006 and 2006–2007, it has showed a tendency to increase in 2007-2008, 2008-2009, and 2009-2010. As indicated in Table 7, the total debt of the State has been going up, particularly during the last 10 years. It stood at 335641 crores by the end of 2021-22 against 89418 crores in 2011-12. This would be reaching the level more than the budget estimates of 408164 crore in 2023-24. A debt-GSDP ratio shows how much an economy owes in debt and how much it produces to service that debt. If expressed as a percentage, it can also be understood as the number of years required to repay the debt if the entire GDP has been set aside for debt repayment. If the debt-to-GDP ratio rises above some safe thresholds, it becomes unsustainable and will put an excessive load on future debt servicing.



Figure 6: Debt-to- GSDP Ratio

Source: Compiled by the author from different sources

Figure 6 shows the Debt-GSDP ratio of the state from 2001-02 to the current fiscal year of 2023-24. After the high debt burden faced in the 1999-00 fiscal year, the Debt-GSDP ratio stood at 28.7 per cent meanwhile it increased to 32.2 per cent in 2003-04. But after the 2003-04, the ratio of debt compared to GSDP starts decreasing even below 25 per cent in 2010-11 and 2011-12. But thereafter the state economy started accumulating the debt and it reached the level of 30 per cent in 2017-18 which shows the distress of state finance. The debt-GSDP ratio never went down in the past five years as it increased to an all-time high of 38 per cent in 2020-21. When the debt-GSDP ratio is going above 35 per cent it reflects the dangerous position of the state finance and state must adapt immediate fiscal consolidation measures to lower the debt burden. But for the last 4 years the ratio lies above 35 per cent which indicates the financial distress of the state.

However, the state government should carefully manage its debt through prudent fiscal policies and borrowing practices to ensure the sustainability of debt repayment. Efforts are made to maintain the debt-to-GSDP ratio within manageable limits to avoid excessive financial burden on future generations. The government should also focus on improving revenue generation and reducing non-productive expenditure to control the growth of public debt. Kerala has been proactive in seeking assistance from central government schemes and international funding agencies to meet its developmental needs and reduce dependency on debt. The state government must explore avenues for revenue diversification, including attracting investments and promoting sectors such as tourism and IT, to strengthen its financial position and manage its debt effectively. Overall, as the public debt of Kerala is a crucial aspect of the state's financial management, the government should strive to strike a balance between borrowing for development and maintaining fiscal sustainability.

12.0 Summary and Findings

Over time, Kerala's total income as a share of state GSDP showed a downward trend. Own tax revenues, own non-tax revenues, and central transfers all experienced significant declines as a percentage of GSDP during the phase of accelerated economic growth compared to the phase of moderate economic growth. This finding implies that, in contrast to the economic growth and expansion of the state's tax base, the GSDP, Kerala's state revenue performance has not improved. This warrants great worry. Kerala experienced the highest decrease in total revenues and own tax collections during the phase of fast economic growth among comparable states as a proportion of GSDP. In Kerala, revenue expenditure makes up the lion's share of public spending. Over time, the proportion of capital expenditures and expenditure has decreased. Additionally, Kerala's

percentage of capital expenditure decreased over time. The main cause of Kerala's increased proportion of revenue expenditure has been the state's stronger commitment to spending on salaries, pensions, and interest payments. Significantly, among the comparable states, Kerala now has the greatest pay and pension load as a percentage of revenue spending. Due to reductions in both revenue spending and capital investment and outlay, the overall public expenditure in Kerala has decreased over time as a percentage of state GDP.

Above all the outstanding liabilities of the state government has shown an accumulated increase over years. Low revenue receipts on account of total receipts have led the government to find the source through borrowing from both internal and external sources. The public debt over the years could not maintain a healthy share related to gross state domestic Product of Kerala as the debt-to-GSDP ratio went on increasing. Kerala has failed to maintain its fiscal deficit according to the targets set by appropriate finance commissions. And in last 4 years the debt-GSDP ratio crossed the level of 35 per cent which shows the ruined fiscal condition of the state.

References

Ahluwalia, M. S. (2000, May). Economic performance of states in post-reforms period. *Economic and Political Weekly*, *35*(19), 1637-1648.

Bagchi, A. (2006). India's fiscal management post-liberalisation. *Economic and Political Weekly*, *41*(39), 4117-4121.

Bajpai, N. & Sachs, J. D. (1999). The state of state government finances in India. Retrieved from https://www.researchgate.net/publication/5065878_The_State_of_State_Government_Finances_in_India

Das, N. (2013). Subnational-level fiscal health: Stability and sustainability implications for Kerala, Punjab, and West Bengal. Institute of Economic Growth, University of Delhi.

George, K. K. & Krishnakumar, K. K. (2012). Trends in Kerala State Finances-1991-92 to 2012-13: A study in the backdrop of economic reforms in India. (*Working Paper No.28*) *Centre for Socio-Economic & Environmental Studies*.

George, K. K. & Krishnakumar, K. K. (2018). Centre-state relations, finance commissions and Kerala's fiscal crisis. Working Papers id: 12518. Retrieved from https://ideas.rep ec.org/p/ess/wpaper/id12518.html.

Kaur, B., Mukherjee, A., Kumar, N., & Ekka, A. P. (2014). Debt Sustainability at the State Level in India. *RBI Working Paper Series No.* 07.

Paramban, S. T. (2017). Political economy of public debt: An analysis on debt sustainability of Kerala. *Journal of Economic Policy and Research*, *12*(2/1), 77-87.

Rangarajan, C. & Srivastava, D. K. (2005). Fiscal deficits and government debt: Implications for growth and stabilisation. *Economic and Political Weekly*, 40(27), 2919-2934.

Rao, M. G. (2002). State finances in India: Issues and challenges. *Economic and Political Weekly*, *37*(31), 3261-3271.

Renjith, P. S. & Shanmugam, K. R. (2018). Debt sustainability: Empirical evidence from Indian states. *Public Finance & Management*, *18*(2), 168-191.

Reserve Bank of India (2016). *Handbook of Statistics on Indian States*. Mumbai: Reserve Bank of India.

Singh, N. (2006). *State Finances in India: A case for systemic reform*. MPRA Paper No. 1281.

World Bank (1988). World Development Report 1988. New York: Oxford University Press.